

# Miniature Circuit Breakers



|      |                                                                                      |  |
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## For further technical product information:

Service&Support Portal:

[www.siemens.com/lowvoltage/technical-support](http://www.siemens.com/lowvoltage/technical-support)

→ Product List:  
Technical specifications

→ Entry List:  
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# Miniature Circuit Breakers

## Introduction

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### Overview

| Devices                                                                             | Page                 | Application                                                                                                                                                                                                               | Standards                                                          | Used in                   |                       |          |
|-------------------------------------------------------------------------------------|----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------|---------------------------|-----------------------|----------|
|                                                                                     |                      |                                                                                                                                                                                                                           |                                                                    | Non-residential buildings | Residential buildings | Industry |
|    | <a href="#">3/4</a>  | For all 0.3 to 63 A applications with B and C tripping characteristics with a rated breaking capacity of 4500 A and 6000 A acc. to EN 60898-1.                                                                            | EN 60898-1                                                         | ✓                         | ✓                     | --       |
|    | <a href="#">3/10</a> | For all applications from 0.3 to 125 A with a rated breaking capacity of 10000 A and 15000 A acc. to EN 60898-1. Applications for universal current from 0.3 to 63 A, Version 25 kA, acc. to EN 60947-2.                  | EN 60898-1/-2<br>EN 60947-2<br>UL 1077<br>CSA 22.2<br>GB 10963.1/2 | --                        | ✓                     | ✓        |
|   | <a href="#">3/26</a> | For socket outlet and lighting circuits in all building installations.<br><br>The plug-in terminals offer easy front connection for manual insertion of conductors, which considerably reduces mounting times.            | EN 60898-1                                                         | ✓                         | ✓                     | --       |
|  | <a href="#">3/29</a> | For socket outlet and lighting circuits in all building installations where a switchable neutral conductor is required.<br><br>The miniature circuit breaker 1+N saves space in the distribution board.                   | EN 60898-1                                                         | ✓                         | ✓                     | ✓        |
|  | <a href="#">3/33</a> | Auxiliary switches, fault signal contacts, shunt trips, undervoltage releases for higher system availability, RC units for personal safety and remote controlled mechanisms for remote switching.                         |                                                                    | ✓                         | --                    | ✓        |
|  | <a href="#">3/41</a> | Busbars in 10 mm <sup>2</sup> and 16 mm <sup>2</sup> save space in the distribution board and time during mounting. Busbars in 18 mm <sup>2</sup> and 25 mm <sup>2</sup> acc. to UL 508 and CSA.                          | UL 508                                                             | ✓                         | ✓                     | ✓        |
|  | <a href="#">3/61</a> | Miniature circuit breakers can be used as "branch circuit protection" and are approved for the connection type "same polarity" and "opposite polarity" in the characteristics B, C and D acc. to UL489, from 0.3 to 63 A. | UL 489                                                             | ✓                         | ✓                     | ✓        |

| Devices                                                                           | Page | Application                                                                                                                                                                      | Standards       | Used in                   |                       |          |
|-----------------------------------------------------------------------------------|------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|---------------------------|-----------------------|----------|
|                                                                                   |      |                                                                                                                                                                                  |                 | Non-residential buildings | Residential buildings | Industry |
|  | 3/70 | Voltage-independent selective main miniature circuit breakers (SHU) in the precounter area support downstream miniature circuit breakers by providing better current limitation. | DIN VDE 0641-21 | ✓                         | ✓                     | -        |

# Miniature Circuit Breakers

## 5SL Miniature Circuit Breakers

### Introduction

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#### Overview

The new 5SL miniature circuit breaker is intended for use up to 6 kA. These devices have system features that are characteristic of all Siemens miniature circuit breakers.

The 5SL miniature circuit breakers can be used as main switches for the disconnection or isolation of installations. They are also suitable for the quick and easy mounting of additional components, such as auxiliary switches and fault signal contacts.

To facilitate cable entry, the devices are equipped with rectangular terminals for the accommodation of pin busbars with cables up to 35 mm<sup>2</sup>. The rated current range is between 0.3 and 63 A. The 5SL miniature circuit breakers are available in characteristics B and C.

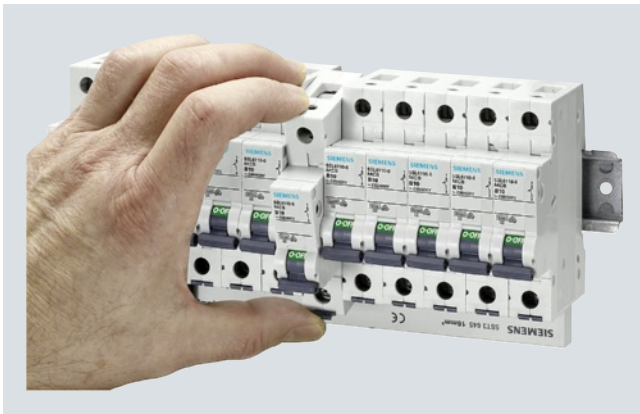
#### Benefits



- Effective touch protection when grasping and manually operating the latching slide with latch-down option.



- Easy-to-mount busbar assembly
- Consistent bus mounting concept throughout the Siemens miniature circuit breaker range.



- Individual devices can be removed from the bus-mounted assembly without the use of tools.



- The 5SL miniature circuit breakers are ideal for the quick and easy mounting of auxiliary switches and fault signal contacts.

# Miniature Circuit Breakers

## 5SL Miniature Circuit Breakers

### Introduction

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#### Technical specifications

|                                                                           |                        |       | 5SL3                                              | 5SL6 |
|---------------------------------------------------------------------------|------------------------|-------|---------------------------------------------------|------|
| <b>Standards</b>                                                          |                        |       | EN 60898-1                                        |      |
| <b>Approvals</b>                                                          |                        |       | <a href="#">See appendix, chapter 20</a>          |      |
| <b>Tripping characteristic</b>                                            |                        |       | B, C                                              |      |
| <b>Rated voltage <math>U_n</math></b>                                     | V AC                   |       | 230/400                                           |      |
| <b>Operational voltage</b>                                                |                        |       |                                                   |      |
| • Min.                                                                    | V AC/DC per pole       |       | 24                                                |      |
| • Max.                                                                    | V AC<br>V<br>DC/pole   |       | 250/440<br>60 <sup>1)</sup>                       |      |
| <b>Rated making and breaking capacity <math>I_{cn}</math></b>             | Acc. to EN 60898-1     | kA AC | 4.5                                               | 6    |
| <b>Insulation coordination</b>                                            |                        |       |                                                   |      |
| • Rated insulation voltage<br>• Pollution degree for overvoltage category | V AC                   |       | 250/440<br>2/III                                  |      |
| <b>Touch protection</b>                                                   | Acc. to EN 50274       |       | Yes                                               |      |
| <b>Handle end position, sealable</b>                                      |                        |       | Yes                                               |      |
| <b>Degree of protection</b>                                               |                        |       | IP20, with connected conductors                   |      |
| <b>CFC and silicone-free</b>                                              |                        |       | Yes                                               |      |
| <b>Conductor cross-sections</b>                                           |                        |       |                                                   |      |
| • 1-wire                                                                  |                        |       |                                                   |      |
| - Solid ( $\leq 10 \text{ mm}^2$ ) / stranded ( $\geq 16 \text{ mm}^2$ )  | mm <sup>2</sup>        |       | 0.75 ... 35                                       |      |
| - Finely stranded with non-insulated end sleeve                           | mm <sup>2</sup>        |       | 0.75 ... 25                                       |      |
| - Finely stranded with insulated end sleeve                               | mm <sup>2</sup>        |       | 0.75 ... 25                                       |      |
| - Solid and stranded                                                      |                        |       |                                                   |      |
| • 2-wire, same cross-section                                              |                        |       |                                                   |      |
| - Solid ( $\leq 10 \text{ mm}^2$ ) / stranded ( $\geq 16 \text{ mm}^2$ )  | mm <sup>2</sup>        |       | 0.75 ... 10                                       |      |
| - Finely stranded with non-insulated end sleeve                           | mm <sup>2</sup>        |       | 0.75 ... 4                                        |      |
| - Finely stranded with insulated end sleeve                               | mm <sup>2</sup>        |       | 0.75 ... 4                                        |      |
| • 1-wire + busbar (pin thickness 1.5 mm)                                  |                        |       |                                                   |      |
| - Solid ( $\leq 10 \text{ mm}^2$ ) / stranded ( $\geq 16 \text{ mm}^2$ )  | mm <sup>2</sup>        |       | 10 ... 25                                         |      |
| - Finely stranded with non-insulated end sleeve                           | mm <sup>2</sup>        |       | 6 ... 25                                          |      |
| <b>Terminals</b>                                                          | ±screw (Pozidriv)      |       | 2                                                 |      |
| • Terminal tightening torque                                              | Nm                     |       | 2.5 ... 3                                         |      |
| <b>Mounting position</b>                                                  |                        |       | Any                                               |      |
| <b>Service life, on average, with rated load</b>                          |                        |       | 20000 actuations                                  |      |
| <b>Storage temperature</b>                                                | °C                     |       | -40 ... +75                                       |      |
| <b>Ambient temperature</b>                                                | °C                     |       | -25 ... +45, occasionally +55, max. 95 % humidity |      |
| <b>Resistance to climate</b>                                              | Acc. to IEC 60068-2-30 |       | 6 cycles                                          |      |

<sup>1)</sup> The operational voltage 60 V DC/pole takes into account a battery charging voltage with a peak value of 72 V.



# Miniature Circuit Breakers

## 5SL Miniature Circuit Breakers

### 5SL3, 4 500 A

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#### Overview

The 5SL miniature circuit breakers are particularly suitable for the demands of 4.5 kA and 6 kA applications in infrastructure, such as residential buildings and small commercial buildings.

#### Selection and ordering data

| <div>4 500</div> <div>3</div>                                                       | $I_n$              | Mounting width   | DT         | Characteristic B |              |    | DT         | Characteristic C |              |        | PU (UNIT, SET, M) | PS*/ P. unit | PG    | Weight per PU approx. |
|-------------------------------------------------------------------------------------|--------------------|------------------|------------|------------------|--------------|----|------------|------------------|--------------|--------|-------------------|--------------|-------|-----------------------|
|                                                                                     |                    |                  |            | Order No.        | Price per PU | PG |            | Order No.        | Price per PU | PG     |                   |              |       |                       |
|                                                                                     | A                  | MW <sup>1)</sup> |            |                  |              |    |            |                  |              |        |                   |              |       | kg                    |
|    | <b>MCBs 4500 A</b> |                  |            |                  |              |    |            |                  |              |        |                   |              |       |                       |
|                                                                                     | 1P, 230/400 V AC   |                  |            |                  |              |    |            |                  |              |        |                   |              |       |                       |
|                                                                                     | 0.3                | 1                | --         |                  |              |    |            | 5SL3 114-7       |              | 1      | 1 unit            | 019          | 0.165 |                       |
|                                                                                     | 0.5                |                  | --         |                  |              |    |            | 5SL3 105-7       |              | 1      | 1 unit            | 019          | 0.165 |                       |
|                                                                                     | 1                  |                  | --         |                  |              |    |            | 5SL3 101-7       |              | 1      | 1 unit            | 019          | 0.165 |                       |
|                                                                                     | 1.6                |                  | --         |                  |              |    |            | 5SL3 115-7       |              | 1      | 1 unit            | 019          | 0.165 |                       |
|                                                                                     | 2                  |                  | --         |                  |              |    |            | 5SL3 102-7       |              | 1      | 1 unit            | 019          | 0.165 |                       |
|                                                                                     | 3                  |                  | --         |                  |              |    |            | 5SL3 103-7       |              | 1      | 1 unit            | 019          | 0.165 |                       |
|                                                                                     | 4                  |                  | --         |                  |              |    |            | 5SL3 104-7       |              | 1      | 1 unit            | 019          | 0.165 |                       |
|                                                                                     | 6                  |                  | 5SL3 106-6 |                  | 019          |    |            | 5SL3 106-7       |              | 1      | 1 unit            | 019          | 0.165 |                       |
|                                                                                     | 8                  |                  | --         |                  |              |    |            | 5SL3 108-7       |              | 1      | 1 unit            | 019          | 0.165 |                       |
|                                                                                     | 10                 |                  | 5SL3 110-6 |                  | 019          |    |            | 5SL3 110-7       |              | 1      | 1 unit            | 019          | 0.165 |                       |
|                                                                                     | 13                 |                  | 5SL3 113-6 |                  | 019          |    |            | 5SL3 113-7       |              | 1      | 1 unit            | 019          | 0.165 |                       |
|                                                                                     | 16                 |                  | 5SL3 116-6 |                  | 019          |    |            | 5SL3 116-7       |              | 1      | 1 unit            | 019          | 0.165 |                       |
|                                                                                     | 20                 |                  | 5SL3 120-6 |                  | 019          |    |            | 5SL3 120-7       |              | 1      | 1 unit            | 019          | 0.165 |                       |
|                                                                                     | 25                 |                  | 5SL3 125-6 |                  | 019          |    |            | 5SL3 125-7       |              | 1      | 1 unit            | 019          | 0.165 |                       |
| 32                                                                                  |                    | 5SL3 132-6       |            | 019              |              |    | 5SL3 132-7 |                  | 1            | 1 unit | 019               | 0.165        |       |                       |
| 40                                                                                  |                    | 5SL3 140-6       |            | 019              |              |    | 5SL3 140-7 |                  | 1            | 1 unit | 019               | 0.165        |       |                       |
| 50                                                                                  |                    | 5SL3 150-6       |            | 019              |              |    | 5SL3 150-7 |                  | 1            | 1 unit | 019               | 0.165        |       |                       |
| 63                                                                                  |                    | 5SL3 163-6       |            | 019              |              |    | 5SL3 163-7 |                  | 1            | 1 unit | 019               | 0.165        |       |                       |
|  | 1P+N, 230 V AC     |                  |            |                  |              |    |            |                  |              |        |                   |              |       |                       |
|                                                                                     | 0.3                | 2                | --         |                  |              |    |            | 5SL3 514-7       |              | 1      | 1 unit            | 019          | 0.330 |                       |
|                                                                                     | 0.5                |                  | --         |                  |              |    |            | 5SL3 505-7       |              | 1      | 1 unit            | 019          | 0.330 |                       |
|                                                                                     | 1                  |                  | --         |                  |              |    |            | 5SL3 501-7       |              | 1      | 1 unit            | 019          | 0.330 |                       |
|                                                                                     | 1.6                |                  | --         |                  |              |    |            | 5SL3 515-7       |              | 1      | 1 unit            | 019          | 0.330 |                       |
|                                                                                     | 2                  |                  | --         |                  |              |    |            | 5SL3 502-7       |              | 1      | 1 unit            | 019          | 0.330 |                       |
|                                                                                     | 3                  |                  | --         |                  |              |    |            | 5SL3 503-7       |              | 1      | 1 unit            | 019          | 0.330 |                       |
|                                                                                     | 4                  |                  | --         |                  |              |    |            | 5SL3 504-7       |              | 1      | 1 unit            | 019          | 0.330 |                       |
|                                                                                     | 6                  |                  | 5SL3 506-6 |                  | 019          |    |            | 5SL3 506-7       |              | 1      | 1 unit            | 019          | 0.330 |                       |
|                                                                                     | 8                  |                  | --         |                  |              |    |            | 5SL3 508-7       |              | 1      | 1 unit            | 019          | 0.330 |                       |
|                                                                                     | 10                 |                  | 5SL3 510-6 |                  | 019          |    |            | 5SL3 510-7       |              | 1      | 1/6 units         | 019          | 0.330 |                       |
|                                                                                     | 13                 |                  | 5SL3 513-6 |                  | 019          |    |            | 5SL3 513-7       |              | 1      | 1 unit            | 019          | 0.330 |                       |
|                                                                                     | 16                 |                  | 5SL3 516-6 |                  | 019          |    |            | 5SL3 516-7       |              | 1      | 1/6 units         | 019          | 0.330 |                       |
|                                                                                     | 20                 |                  | 5SL3 520-6 |                  | 019          |    |            | 5SL3 520-7       |              | 1      | 1 unit            | 019          | 0.330 |                       |
|                                                                                     | 25                 |                  | 5SL3 525-6 |                  | 019          |    |            | 5SL3 525-7       |              | 1      | 1 unit            | 019          | 0.330 |                       |
|                                                                                     | 32                 |                  | 5SL3 532-6 |                  | 019          |    |            | 5SL3 532-7       |              | 1      | 1 unit            | 019          | 0.330 |                       |
| 40                                                                                  |                    | 5SL3 540-6       |            | 019              |              |    | 5SL3 540-7 |                  | 1            | 1 unit | 019               | 0.330        |       |                       |
| 50                                                                                  |                    | 5SL3 550-6       |            | 019              |              |    | 5SL3 550-7 |                  | 1            | 1 unit | 019               | 0.330        |       |                       |
| 63                                                                                  |                    | 5SL3 563-6       |            | 019              |              |    | 5SL3 563-7 |                  | 1            | 1 unit | 019               | 0.330        |       |                       |
|  | 2P, 400 V AC       |                  |            |                  |              |    |            |                  |              |        |                   |              |       |                       |
|                                                                                     | 0.3                | 2                | --         |                  |              |    |            | 5SL3 214-7       |              | 1      | 1 unit            | 019          | 0.330 |                       |
|                                                                                     | 0.5                |                  | --         |                  |              |    |            | 5SL3 205-7       |              | 1      | 1 unit            | 019          | 0.330 |                       |
|                                                                                     | 1                  |                  | --         |                  |              |    |            | 5SL3 201-7       |              | 1      | 1 unit            | 019          | 0.330 |                       |
|                                                                                     | 1.6                |                  | --         |                  |              |    |            | 5SL3 215-7       |              | 1      | 1 unit            | 019          | 0.330 |                       |
|                                                                                     | 2                  |                  | --         |                  |              |    |            | 5SL3 202-7       |              | 1      | 1 unit            | 019          | 0.330 |                       |
|                                                                                     | 3                  |                  | --         |                  |              |    |            | 5SL3 203-7       |              | 1      | 1 unit            | 019          | 0.330 |                       |
|                                                                                     | 4                  |                  | --         |                  |              |    |            | 5SL3 204-7       |              | 1      | 1 unit            | 019          | 0.330 |                       |
|                                                                                     | 6                  |                  | 5SL3 206-6 |                  | 019          |    |            | 5SL3 206-7       |              | 1      | 1 unit            | 019          | 0.330 |                       |
|                                                                                     | 8                  |                  | --         |                  |              |    |            | 5SL3 208-7       |              | 1      | 1 unit            | 019          | 0.330 |                       |
|                                                                                     | 10                 |                  | 5SL3 210-6 |                  | 019          |    |            | 5SL3 210-7       |              | 1      | 1 unit            | 019          | 0.330 |                       |
|                                                                                     | 13                 |                  | 5SL3 213-6 |                  | 019          |    |            | 5SL3 213-7       |              | 1      | 1 unit            | 019          | 0.330 |                       |
|                                                                                     | 16                 |                  | 5SL3 216-6 |                  | 019          |    |            | 5SL3 216-7       |              | 1      | 1 unit            | 019          | 0.330 |                       |
|                                                                                     | 20                 |                  | 5SL3 220-6 |                  | 019          |    |            | 5SL3 220-7       |              | 1      | 1 unit            | 019          | 0.330 |                       |
|                                                                                     | 25                 |                  | 5SL3 225-6 |                  | 019          |    |            | 5SL3 225-7       |              | 1      | 1 unit            | 019          | 0.330 |                       |
|                                                                                     | 32                 |                  | 5SL3 232-6 |                  | 019          |    |            | 5SL3 232-7       |              | 1      | 1 unit            | 019          | 0.330 |                       |
| 40                                                                                  |                    | 5SL3 240-6       |            | 019              |              |    | 5SL3 240-7 |                  | 1            | 1 unit | 019               | 0.330        |       |                       |
| 50                                                                                  |                    | 5SL3 250-6       |            | 019              |              |    | 5SL3 250-7 |                  | 1            | 1 unit | 019               | 0.330        |       |                       |
| 63                                                                                  |                    | 5SL3 263-6       |            | 019              |              |    | 5SL3 263-7 |                  | 1            | 1 unit | 019               | 0.330        |       |                       |

<sup>1)</sup> 1 MW (modular width) = 18 mm.



# Miniature Circuit Breakers

## 5SL Miniature Circuit Breakers

5SL3, 4 500 A

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| 4 500                                                                               |                    | $I_n$ | Mounting width   | DT         | Characteristic B |              |            | Characteristic C |           |              | PU (UNIT, SET, M) | PS*/ P. unit | PG    | Weight per PU approx. |
|-------------------------------------------------------------------------------------|--------------------|-------|------------------|------------|------------------|--------------|------------|------------------|-----------|--------------|-------------------|--------------|-------|-----------------------|
| 3                                                                                   |                    |       |                  |            | Order No.        | Price per PU | PG         | DT               | Order No. | Price per PU |                   |              |       |                       |
|                                                                                     |                    | A     | MW <sup>1)</sup> |            |                  |              |            |                  |           |              |                   |              | kg    |                       |
|    | <b>MCBs 4500 A</b> |       |                  |            |                  |              |            |                  |           |              |                   |              |       |                       |
|                                                                                     | 3P, 400 V AC       |       |                  |            |                  |              |            |                  |           |              |                   |              |       |                       |
|                                                                                     | 1                  |       |                  | --         |                  |              |            | 5SL3 301-7       |           | 1            | 1 unit            | 019          | 0.465 |                       |
|                                                                                     | 2                  |       |                  | --         |                  |              |            | 5SL3 302-7       |           | 1            | 1 unit            | 019          | 0.465 |                       |
|                                                                                     | 3                  |       |                  | --         |                  |              |            | 5SL3 303-7       |           | 1            | 1 unit            | 019          | 0.465 |                       |
|                                                                                     | 4                  |       |                  | --         |                  |              |            | 5SL3 304-7       |           | 1            | 1 unit            | 019          | 0.465 |                       |
|                                                                                     | 6                  |       |                  | 5SL3 306-6 |                  | 019          |            | 5SL3 306-7       |           | 1            | 1 unit            | 019          | 0.465 |                       |
|                                                                                     | 10                 |       |                  | 5SL3 310-6 |                  | 019          |            | 5SL3 310-7       |           | 1            | 1 unit            | 019          | 0.465 |                       |
|                                                                                     | 16                 |       |                  | 5SL3 316-6 |                  | 019          |            | 5SL3 316-7       |           | 1            | 1 unit            | 019          | 0.465 |                       |
|                                                                                     | 20                 |       |                  | 5SL3 320-6 |                  | 019          |            | 5SL3 320-7       |           | 1            | 1 unit            | 019          | 0.465 |                       |
|                                                                                     | 25                 |       |                  | 5SL3 325-6 |                  | 019          |            | 5SL3 325-7       |           | 1            | 1 unit            | 019          | 0.465 |                       |
|                                                                                     | 32                 |       |                  | 5SL3 332-6 |                  | 019          |            | 5SL3 332-7       |           | 1            | 1 unit            | 019          | 0.465 |                       |
|                                                                                     | 40                 |       |                  | 5SL3 340-6 |                  | 019          |            | 5SL3 340-7       |           | 1            | 1 unit            | 019          | 0.465 |                       |
|                                                                                     | 50                 |       |                  | 5SL3 350-6 |                  | 019          |            | 5SL3 350-7       |           | 1            | 1 unit            | 019          | 0.465 |                       |
| 63                                                                                  |                    |       | 5SL3 363-6       |            | 019              |              | 5SL3 363-7 |                  | 1         | 1 unit       | 019               | 0.465        |       |                       |
|    | 3P+N, 400 V AC     |       |                  |            |                  |              |            |                  |           |              |                   |              |       |                       |
|                                                                                     | 1                  |       |                  | --         |                  |              |            | 5SL3 601-7       |           | 1            | 1 unit            | 019          | 0.660 |                       |
|                                                                                     | 2                  |       |                  | --         |                  |              |            | 5SL3 602-7       |           | 1            | 1 unit            | 019          | 0.660 |                       |
|                                                                                     | 3                  |       |                  | --         |                  |              |            | 5SL3 603-7       |           | 1            | 1 unit            | 019          | 0.660 |                       |
|                                                                                     | 4                  |       |                  | --         |                  |              |            | 5SL3 604-7       |           | 1            | 1 unit            | 019          | 0.660 |                       |
|                                                                                     | 6                  |       |                  | 5SL3 606-6 |                  | 019          |            | 5SL3 606-7       |           | 1            | 1 unit            | 019          | 0.660 |                       |
|                                                                                     | 8                  |       |                  | --         |                  |              |            | 5SL3 608-7       |           | 1            | 1 unit            | 019          | 0.660 |                       |
|                                                                                     | 10                 |       |                  | 5SL3 610-6 |                  | 019          |            | 5SL3 610-7       |           | 1            | 1 unit            | 019          | 0.660 |                       |
|                                                                                     | 13                 |       |                  | 5SL3 613-6 |                  | 019          |            | 5SL3 613-7       |           | 1            | 1 unit            | 019          | 0.660 |                       |
|                                                                                     | 16                 |       |                  | 5SL3 616-6 |                  | 019          |            | 5SL3 616-7       |           | 1            | 1 unit            | 019          | 0.660 |                       |
|                                                                                     | 20                 |       |                  | 5SL3 620-6 |                  | 019          |            | 5SL3 620-7       |           | 1            | 1 unit            | 019          | 0.660 |                       |
|                                                                                     | 25                 |       |                  | 5SL3 625-6 |                  | 019          |            | 5SL3 625-7       |           | 1            | 1 unit            | 019          | 0.660 |                       |
|                                                                                     | 32                 |       |                  | 5SL3 632-6 |                  | 019          |            | 5SL3 632-7       |           | 1            | 1 unit            | 019          | 0.660 |                       |
|                                                                                     | 40                 |       |                  | 5SL3 640-6 |                  | 019          |            | 5SL3 640-7       |           | 1            | 1 unit            | 019          | 0.660 |                       |
|                                                                                     | 50                 |       |                  | 5SL3 650-6 |                  | 019          |            | 5SL3 650-7       |           | 1            | 1 unit            | 019          | 0.660 |                       |
|                                                                                     | 63                 |       |                  | 5SL3 663-6 |                  | 019          |            | 5SL3 663-7       |           | 1            | 1 unit            | 019          | 0.660 |                       |
|  | 4P, 400 V AC       |       |                  |            |                  |              |            |                  |           |              |                   |              |       |                       |
|                                                                                     | 1                  |       |                  | --         |                  |              |            | 5SL3 401-7       |           | 1            | 1 unit            | 019          | 0.660 |                       |
|                                                                                     | 2                  |       |                  | --         |                  |              |            | 5SL3 402-7       |           | 1            | 1 unit            | 019          | 0.660 |                       |
|                                                                                     | 3                  |       |                  | --         |                  |              |            | 5SL3 403-7       |           | 1            | 1 unit            | 019          | 0.660 |                       |
|                                                                                     | 4                  |       |                  | --         |                  |              |            | 5SL3 404-7       |           | 1            | 1 unit            | 019          | 0.660 |                       |
|                                                                                     | 6                  |       |                  | --         |                  |              |            | 5SL3 406-7       |           | 1            | 1 unit            | 019          | 0.660 |                       |
|                                                                                     | 10                 |       |                  | --         |                  |              |            | 5SL3 410-7       |           | 1            | 1 unit            | 019          | 0.660 |                       |
|                                                                                     | 13                 |       |                  | --         |                  |              |            | 5SL3 413-7       |           | 1            | 1 unit            | 019          | 0.660 |                       |
|                                                                                     | 16                 |       |                  | --         |                  |              |            | 5SL3 416-7       |           | 1            | 1 unit            | 019          | 0.660 |                       |
|                                                                                     | 20                 |       |                  | --         |                  |              |            | 5SL3 420-7       |           | 1            | 1 unit            | 019          | 0.660 |                       |
|                                                                                     | 25                 |       |                  | --         |                  |              |            | 5SL3 425-7       |           | 1            | 1 unit            | 019          | 0.660 |                       |
|                                                                                     | 32                 |       |                  | --         |                  |              |            | 5SL3 432-7       |           | 1            | 1 unit            | 019          | 0.660 |                       |
|                                                                                     | 40                 |       |                  | --         |                  |              |            | 5SL3 440-7       |           | 1            | 1 unit            | 019          | 0.660 |                       |
|                                                                                     | 50                 |       |                  | --         |                  |              |            | 5SL3 450-7       |           | 1            | 1 unit            | 019          | 0.660 |                       |
|                                                                                     | 63                 |       |                  | --         |                  |              |            | 5SL3 463-7       |           | 1            | 1 unit            | 019          | 0.660 |                       |

<sup>1)</sup> 1 MW (modular width) = 18 mm.

# Miniature Circuit Breakers

## 5SL Miniature Circuit Breakers

5SL6, 6 000 A

3

## Selection and ordering data

| 6 000<br>3                                                                          | $I_n$            | Mounting width   | DT         | Characteristic B |              | PG  | DT | Characteristic C |              | PU (UNIT, SET, M) | PS/<br>P. unit | PG  | Weight per PU approx. |
|-------------------------------------------------------------------------------------|------------------|------------------|------------|------------------|--------------|-----|----|------------------|--------------|-------------------|----------------|-----|-----------------------|
|                                                                                     |                  |                  |            | Order No.        | Price per PU |     |    | Order No.        | Price per PU |                   |                |     |                       |
|                                                                                     | A                | MW <sup>1)</sup> |            |                  |              |     |    |                  |              |                   |                |     | kg                    |
| <b>MCBs 6000 A</b>                                                                  |                  |                  |            |                  |              |     |    |                  |              |                   |                |     |                       |
|    | 1P, 230/400 V AC |                  |            |                  |              |     |    |                  |              |                   |                |     |                       |
|                                                                                     | 0.3              | 1                | --         |                  |              |     |    | 5SL6 114-7       |              | 1                 | 1 unit         | 001 | 0.165                 |
|                                                                                     | 0.5              |                  | --         |                  |              |     |    | 5SL6 105-7       |              | 1                 | 1/12 units     | 001 | 0.165                 |
|                                                                                     | 1                |                  | --         |                  |              |     |    | 5SL6 101-7       |              | 1                 | 1/12 units     | 001 | 0.165                 |
|                                                                                     | 1.6              |                  | --         |                  |              |     |    | 5SL6 115-7       |              | 1                 | 1 unit         | 001 | 0.165                 |
|                                                                                     | 2                |                  | --         |                  |              |     |    | 5SL6 102-7       |              | 1                 | 1/12 units     | 001 | 0.165                 |
|                                                                                     | 3                |                  | --         |                  |              |     |    | 5SL6 103-7       |              | 1                 | 1/12 units     | 001 | 0.165                 |
|                                                                                     | 4                |                  | --         |                  |              |     |    | 5SL6 104-7       |              | 1                 | 1/12 units     | 001 | 0.165                 |
|                                                                                     | 6                |                  | 5SL6 106-6 |                  |              | 001 |    | 5SL6 106-7       |              | 1                 | 1/12 units     | 001 | 0.165                 |
|                                                                                     | 8                |                  | --         |                  |              |     |    | 5SL6 108-7       |              | 1                 | 1/12 units     | 001 | 0.165                 |
|                                                                                     | 10               |                  | 5SL6 110-6 |                  |              | 001 |    | 5SL6 110-7       |              | 1                 | 1/12 units     | 001 | 0.165                 |
|                                                                                     | 13               |                  | 5SL6 113-6 |                  |              | 001 |    | 5SL6 113-7       |              | 1                 | 1/12 units     | 001 | 0.165                 |
|                                                                                     | 16               |                  | 5SL6 116-6 |                  |              | 001 |    | 5SL6 116-7       |              | 1                 | 1/12 units     | 001 | 0.165                 |
|                                                                                     | 20               |                  | 5SL6 120-6 |                  |              | 001 |    | 5SL6 120-7       |              | 1                 | 1/12 units     | 001 | 0.165                 |
|                                                                                     | 25               |                  | 5SL6 125-6 |                  |              | 001 |    | 5SL6 125-7       |              | 1                 | 1/12 units     | 001 | 0.120                 |
|                                                                                     | 32               |                  | 5SL6 132-6 |                  |              | 001 |    | 5SL6 132-7       |              | 1                 | 1/12 units     | 001 | 0.165                 |
|                                                                                     | 40               |                  | 5SL6 140-6 |                  |              | 001 |    | 5SL6 140-7       |              | 1                 | 1/12 units     | 001 | 0.165                 |
|                                                                                     | 50               |                  | 5SL6 150-6 |                  |              | 001 |    | 5SL6 150-7       |              | 1                 | 1/12 units     | 001 | 0.165                 |
|                                                                                     | 63               |                  | 5SL6 163-6 |                  |              | 001 |    | 5SL6 163-7       |              | 1                 | 1/12 units     | 001 | 0.165                 |
|   | 1P+N, 230 V AC   |                  |            |                  |              |     |    |                  |              |                   |                |     |                       |
|                                                                                     | 0.3              | 2                | --         |                  |              |     |    | 5SL6 514-7       |              | 1                 | 1 unit         | 001 | 0.330                 |
|                                                                                     | 0.5              |                  | --         |                  |              |     |    | 5SL6 505-7       |              | 1                 | 1 unit         | 001 | 0.330                 |
|                                                                                     | 1                |                  | --         |                  |              |     |    | 5SL6 501-7       |              | 1                 | 1 unit         | 001 | 0.330                 |
|                                                                                     | 1.6              |                  | --         |                  |              |     |    | 5SL6 515-7       |              | 1                 | 1 unit         | 001 | 0.330                 |
|                                                                                     | 2                |                  | --         |                  |              |     |    | 5SL6 502-7       |              | 1                 | 1 unit         | 001 | 0.330                 |
|                                                                                     | 3                |                  | --         |                  |              |     |    | 5SL6 503-7       |              | 1                 | 1 unit         | 001 | 0.330                 |
|                                                                                     | 4                |                  | --         |                  |              |     |    | 5SL6 504-7       |              | 1                 | 1 unit         | 001 | 0.330                 |
|                                                                                     | 6                |                  | 5SL6 506-6 |                  |              | 001 |    | 5SL6 506-7       |              | 1                 | 1/6 units      | 001 | 0.330                 |
|                                                                                     | 8                |                  | --         |                  |              |     |    | 5SL6 508-7       |              | 1                 | 1 unit         | 001 | 0.330                 |
|                                                                                     | 10               |                  | 5SL6 510-6 |                  |              | 001 |    | 5SL6 510-7       |              | 1                 | 1/6 units      | 001 | 0.330                 |
|                                                                                     | 13               |                  | 5SL6 513-6 |                  |              | 001 |    | 5SL6 513-7       |              | 1                 | 1/6 units      | 001 | 0.330                 |
|                                                                                     | 16               |                  | 5SL6 516-6 |                  |              | 001 |    | 5SL6 516-7       |              | 1                 | 1/6 units      | 001 | 0.330                 |
|                                                                                     | 20               |                  | 5SL6 520-6 |                  |              | 001 |    | 5SL6 520-7       |              | 1                 | 1 unit         | 001 | 0.330                 |
|                                                                                     | 25               |                  | 5SL6 525-6 |                  |              | 001 |    | 5SL6 525-7       |              | 1                 | 1 unit         | 001 | 0.330                 |
|                                                                                     | 32               |                  | 5SL6 532-6 |                  |              | 001 |    | 5SL6 532-7       |              | 1                 | 1 unit         | 001 | 0.330                 |
|                                                                                     | 40               |                  | 5SL6 540-6 |                  |              | 001 |    | 5SL6 540-7       |              | 1                 | 1 unit         | 001 | 0.330                 |
|                                                                                     | 50               |                  | 5SL6 550-6 |                  |              | 001 |    | 5SL6 550-7       |              | 1                 | 1 unit         | 001 | 0.330                 |
|                                                                                     | 63               |                  | 5SL6 563-6 |                  |              | 001 |    | 5SL6 563-7       |              | 1                 | 1 unit         | 001 | 0.330                 |
|  | 2P, 400 V AC     |                  |            |                  |              |     |    |                  |              |                   |                |     |                       |
|                                                                                     | 0.3              | 2                | --         |                  |              |     |    | 5SL6 214-7       |              | 1                 | 1 unit         | 001 | 0.330                 |
|                                                                                     | 0.5              |                  | --         |                  |              |     |    | 5SL6 205-7       |              | 1                 | 1 unit         | 001 | 0.330                 |
|                                                                                     | 1                |                  | --         |                  |              |     |    | 5SL6 201-7       |              | 1                 | 1/6 units      | 001 | 0.330                 |
|                                                                                     | 1.6              |                  | --         |                  |              |     |    | 5SL6 215-7       |              | 1                 | 1 unit         | 001 | 0.330                 |
|                                                                                     | 2                |                  | --         |                  |              |     |    | 5SL6 202-7       |              | 1                 | 1/6 units      | 001 | 0.330                 |
|                                                                                     | 3                |                  | --         |                  |              |     |    | 5SL6 203-7       |              | 1                 | 1/6 units      | 001 | 0.330                 |
|                                                                                     | 4                |                  | --         |                  |              |     |    | 5SL6 204-7       |              | 1                 | 1/6 units      | 001 | 0.330                 |
|                                                                                     | 6                |                  | 5SL6 206-6 |                  |              | 001 |    | 5SL6 206-7       |              | 1                 | 1/6 units      | 001 | 0.330                 |
|                                                                                     | 8                |                  | --         |                  |              |     |    | 5SL6 208-7       |              | 1                 | 1 unit         | 001 | 0.330                 |
|                                                                                     | 10               |                  | 5SL6 210-6 |                  |              | 001 |    | 5SL6 210-7       |              | 1                 | 1/6 units      | 001 | 0.330                 |
|                                                                                     | 13               |                  | 5SL6 213-6 |                  |              | 001 |    | 5SL6 213-7       |              | 1                 | 1 unit         | 001 | 0.330                 |
|                                                                                     | 16               |                  | 5SL6 216-6 |                  |              | 001 |    | 5SL6 216-7       |              | 1                 | 1/6 units      | 001 | 0.330                 |
|                                                                                     | 20               |                  | 5SL6 220-6 |                  |              | 001 |    | 5SL6 220-7       |              | 1                 | 1/6 units      | 001 | 0.330                 |
|                                                                                     | 25               |                  | 5SL6 225-6 |                  |              | 001 |    | 5SL6 225-7       |              | 1                 | 1/6 units      | 001 | 0.240                 |
|                                                                                     | 32               |                  | 5SL6 232-6 |                  |              | 001 |    | 5SL6 232-7       |              | 1                 | 1/6 units      | 001 | 0.330                 |
|                                                                                     | 40               |                  | 5SL6 240-6 |                  |              | 001 |    | 5SL6 240-7       |              | 1                 | 1/6 units      | 001 | 0.330                 |
|                                                                                     | 50               |                  | 5SL6 250-6 |                  |              | 001 |    | 5SL6 250-7       |              | 1                 | 1/6 units      | 001 | 0.330                 |
|                                                                                     | 63               |                  | 5SL6 263-6 |                  |              | 001 |    | 5SL6 263-7       |              | 1                 | 1/6 units      | 001 | 0.330                 |

1) 1 MW (modular width) = 18 mm.



# Miniature Circuit Breakers

## 5SL Miniature Circuit Breakers

5SL6, 6 000 A

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| 6 000                                                                               |                    | I <sub>n</sub>   | Mounting width | DT  | Characteristic B |              |            | Characteristic C |              |           | PU (UNIT, SET, M) | PS*/ P. unit | PG | Weight per PU approx. |
|-------------------------------------------------------------------------------------|--------------------|------------------|----------------|-----|------------------|--------------|------------|------------------|--------------|-----------|-------------------|--------------|----|-----------------------|
| 3                                                                                   |                    |                  |                |     | Order No.        | Price per PU | PG DT      | Order No.        | Price per PU |           |                   |              |    |                       |
| A                                                                                   |                    | MW <sup>1)</sup> | kg             |     |                  |              |            |                  |              |           |                   |              |    |                       |
|    | <b>MCBs 6000 A</b> |                  |                |     |                  |              |            |                  |              |           |                   |              |    |                       |
|                                                                                     | 3P, 400 V AC       |                  |                |     |                  |              |            |                  |              |           |                   |              |    |                       |
|                                                                                     | 0.3                | 3                | --             |     |                  |              | 5SL6 314-7 |                  | 1            | 1 unit    | 001               | 0.465        |    |                       |
|                                                                                     | 0.5                |                  | --             |     |                  |              | 5SL6 305-7 |                  | 1            | 1 unit    | 001               | 0.465        |    |                       |
|                                                                                     | 1                  |                  | --             |     |                  |              | 5SL6 301-7 |                  | 1            | 1 unit    | 001               | 0.465        |    |                       |
|                                                                                     | 1.6                |                  | --             |     |                  |              | 5SL6 315-7 |                  | 1            | 1 unit    | 001               | 0.465        |    |                       |
|                                                                                     | 2                  |                  | --             |     |                  |              | 5SL6 302-7 |                  | 1            | 1/4 units | 001               | 0.465        |    |                       |
|                                                                                     | 3                  |                  | --             |     |                  |              | 5SL6 303-7 |                  | 1            | 1 unit    | 001               | 0.465        |    |                       |
|                                                                                     | 4                  |                  | --             |     |                  |              | 5SL6 304-7 |                  | 1            | 1/4 units | 001               | 0.465        |    |                       |
|                                                                                     | 6                  |                  | 5SL6 306-6     |     | 001              |              | 5SL6 306-7 |                  | 1            | 1/4 units | 001               | 0.465        |    |                       |
|                                                                                     | 8                  |                  | --             |     |                  |              | 5SL6 308-7 |                  | 1            | 1 unit    | 001               | 0.465        |    |                       |
|                                                                                     | 10                 |                  | 5SL6 310-6     |     | 001              |              | 5SL6 310-7 |                  | 1            | 1/4 units | 001               | 0.465        |    |                       |
|                                                                                     | 13                 |                  | 5SL6 313-6     |     | 001              |              | 5SL6 313-7 |                  | 1            | 1 unit    | 001               | 0.465        |    |                       |
|                                                                                     | 16                 |                  | 5SL6 316-6     |     | 001              |              | 5SL6 316-7 |                  | 1            | 1/4 units | 001               | 0.360        |    |                       |
|                                                                                     | 20                 |                  | 5SL6 320-6     |     | 001              |              | 5SL6 320-7 |                  | 1            | 1/4 units | 001               | 0.465        |    |                       |
|                                                                                     | 25                 |                  | 5SL6 325-6     |     | 001              |              | 5SL6 325-7 |                  | 1            | 1/4 units | 001               | 0.465        |    |                       |
| 32                                                                                  |                    | 5SL6 332-6       |                | 001 |                  | 5SL6 332-7   |            | 1                | 1/4 units    | 001       | 0.465             |              |    |                       |
| 40                                                                                  |                    | 5SL6 340-6       |                | 001 |                  | 5SL6 340-7   |            | 1                | 1/4 units    | 001       | 0.465             |              |    |                       |
| 50                                                                                  |                    | 5SL6 350-6       |                | 001 |                  | 5SL6 350-7   |            | 1                | 1/4 units    | 001       | 0.465             |              |    |                       |
| 63                                                                                  |                    | 5SL6 363-6       |                | 001 |                  | 5SL6 363-7   |            | 1                | 1/4 units    | 001       | 0.465             |              |    |                       |
|   | 3P+N, 400 V AC     |                  |                |     |                  |              |            |                  |              |           |                   |              |    |                       |
|                                                                                     | 0.3                | 4                | --             |     |                  |              | 5SL6 614-7 |                  | 1            | 1 unit    | 001               | 0.660        |    |                       |
|                                                                                     | 0.5                |                  | --             |     |                  |              | 5SL6 605-7 |                  | 1            | 1 unit    | 001               | 0.660        |    |                       |
|                                                                                     | 1                  |                  | --             |     |                  |              | 5SL6 601-7 |                  | 1            | 1 unit    | 001               | 0.660        |    |                       |
|                                                                                     | 1.6                |                  | --             |     |                  |              | 5SL6 615-7 |                  | 1            | 1 unit    | 001               | 0.660        |    |                       |
|                                                                                     | 2                  |                  | --             |     |                  |              | 5SL6 602-7 |                  | 1            | 1 unit    | 001               | 0.660        |    |                       |
|                                                                                     | 3                  |                  | --             |     |                  |              | 5SL6 603-7 |                  | 1            | 1 unit    | 001               | 0.660        |    |                       |
|                                                                                     | 4                  |                  | --             |     |                  |              | 5SL6 604-7 |                  | 1            | 1 unit    | 001               | 0.660        |    |                       |
|                                                                                     | 6                  |                  | 5SL6 606-6     |     | 001              |              | 5SL6 606-7 |                  | 1            | 1 unit    | 001               | 0.660        |    |                       |
|                                                                                     | 8                  |                  | --             |     |                  |              | 5SL6 608-7 |                  | 1            | 1 unit    | 001               | 0.660        |    |                       |
|                                                                                     | 10                 |                  | 5SL6 610-6     |     | 001              |              | 5SL6 610-7 |                  | 1            | 1 unit    | 001               | 0.660        |    |                       |
|                                                                                     | 13                 |                  | 5SL6 613-6     |     | 001              |              | 5SL6 613-7 |                  | 1            | 1/3 units | 001               | 0.660        |    |                       |
|                                                                                     | 16                 |                  | 5SL6 616-6     |     | 001              |              | 5SL6 616-7 |                  | 1            | 1/3 units | 001               | 0.660        |    |                       |
|                                                                                     | 20                 |                  | 5SL6 620-6     |     | 001              |              | 5SL6 620-7 |                  | 1            | 1 unit    | 001               | 0.660        |    |                       |
|                                                                                     | 25                 |                  | 5SL6 625-6     |     | 001              |              | 5SL6 625-7 |                  | 1            | 1 unit    | 001               | 0.660        |    |                       |
|                                                                                     | 32                 |                  | 5SL6 632-6     |     | 001              |              | 5SL6 632-7 |                  | 1            | 1 unit    | 001               | 0.660        |    |                       |
| 40                                                                                  |                    | 5SL6 640-6       |                | 001 |                  | 5SL6 640-7   |            | 1                | 1 unit       | 001       | 0.660             |              |    |                       |
| 50                                                                                  |                    | 5SL6 650-6       |                | 001 |                  | 5SL6 650-7   |            | 1                | 1 unit       | 001       | 0.660             |              |    |                       |
| 63                                                                                  |                    | 5SL6 663-6       |                | 001 |                  | 5SL6 663-7   |            | 1                | 1 unit       | 001       | 0.660             |              |    |                       |
|  | 4P, 400 V AC       |                  |                |     |                  |              |            |                  |              |           |                   |              |    |                       |
|                                                                                     | 0.3                | 4                | --             |     |                  |              | 5SL6 414-7 |                  | 1            | 1 unit    | 001               | 0.660        |    |                       |
|                                                                                     | 0.5                |                  | --             |     |                  |              | 5SL6 405-7 |                  | 1            | 1 unit    | 001               | 0.660        |    |                       |
|                                                                                     | 1                  |                  | --             |     |                  |              | 5SL6 401-7 |                  | 1            | 1 unit    | 001               | 0.660        |    |                       |
|                                                                                     | 1.6                |                  | --             |     |                  |              | 5SL6 415-7 |                  | 1            | 1 unit    | 001               | 0.660        |    |                       |
|                                                                                     | 2                  |                  | --             |     |                  |              | 5SL6 402-7 |                  | 1            | 1 unit    | 001               | 0.660        |    |                       |
|                                                                                     | 3                  |                  | --             |     |                  |              | 5SL6 403-7 |                  | 1            | 1 unit    | 001               | 0.660        |    |                       |
|                                                                                     | 4                  |                  | --             |     |                  |              | 5SL6 404-7 |                  | 1            | 1 unit    | 001               | 0.660        |    |                       |
|                                                                                     | 6                  |                  | 5SL6 406-6     |     | 001              |              | 5SL6 406-7 |                  | 1            | 1 unit    | 001               | 0.660        |    |                       |
|                                                                                     | 8                  |                  | --             |     |                  |              | 5SL6 408-7 |                  | 1            | 1 unit    | 001               | 0.660        |    |                       |
|                                                                                     | 10                 |                  | 5SL6 410-6     |     | 001              |              | 5SL6 410-7 |                  | 1            | 1/3 units | 001               | 0.660        |    |                       |
|                                                                                     | 13                 |                  | 5SL6 413-6     |     | 001              |              | 5SL6 413-7 |                  | 1            | 1 unit    | 001               | 0.660        |    |                       |
|                                                                                     | 16                 |                  | 5SL6 416-6     |     | 001              |              | 5SL6 416-7 |                  | 1            | 1/3 units | 001               | 0.660        |    |                       |
|                                                                                     | 20                 |                  | 5SL6 420-6     |     | 001              |              | 5SL6 420-7 |                  | 1            | 1/3 units | 001               | 0.660        |    |                       |
|                                                                                     | 25                 |                  | 5SL6 425-6     |     | 001              |              | 5SL6 425-7 |                  | 1            | 1/3 units | 001               | 0.660        |    |                       |
|                                                                                     | 32                 |                  | 5SL6 432-6     |     | 001              |              | 5SL6 432-7 |                  | 1            | 1/3 units | 001               | 0.660        |    |                       |
| 40                                                                                  |                    | 5SL6 440-6       |                | 001 |                  | 5SL6 440-7   |            | 1                | 1/3 units    | 001       | 0.660             |              |    |                       |
| 50                                                                                  |                    | 5SL6 450-6       |                | 001 |                  | 5SL6 450-7   |            | 1                | 1 unit       | 001       | 0.660             |              |    |                       |
| 63                                                                                  |                    | 5SL6 463-6       |                | 001 |                  | 5SL6 463-7   |            | 1                | 1/3 units    | 001       | 0.660             |              |    |                       |

1) 1 MW (modular width) = 18 mm.

# Miniature Circuit Breakers

## 5SY and 5SP Miniature Circuit Breakers

### Introduction

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#### Overview

MCBs are used to protect systems and installations in buildings and for industrial applications. The devices can be used as main control switches for the disconnection or isolation of installations.

Used in industrial applications and plant engineering, miniature circuit breakers can be supplemented with additional components, such as auxiliary switches, fault signal contacts, shunt trips, undervoltage releases, remote controlled mechanisms and RC units.

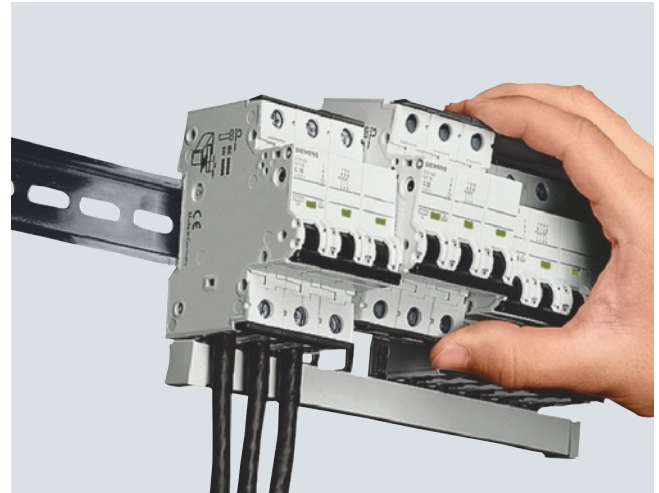
The devices are approved for worldwide use according to IEC standards for power supply systems up to 250/440 V AC. 72 V DC per pole is permitted in DC systems.

For North America, there is an additional approval according to UL 1077 for use as "supplementary protectors" in systems up to 480Y/277 V AC. For use in ship building, the devices also have numerous certifications according to shipping classifications; BV, DNV, GL and LRS. References to this [can be found in the appendix, chapter 20](#).

#### Benefits



- Optional top or bottom infeed as the terminals are identical
- Clear and visible conductor connection in front of the rear busbar facilitates controls
- The conductor is easily inserted into the terminal thanks to the large and easily accessible wiring space.



- Quick and easy manual removal of MCBs from the busbar assembly, for example if connections need to be changed
- Time-saving replacement of parts as busbars no longer need to be freed from adjacent devices.



- Duplicate terminal clamps allow 2 conductors with different cross-sections (cross-section combinations upon request) to be fitted.



- The 5SY miniature circuit breakers are ideal for the quick and easy mounting of auxiliary switches and fault signal contacts. Captive metal brackets on the additional components ensure the quick and easy mounting of devices on the miniature circuit breakers without the need for tools.

# Miniature Circuit Breakers

## 5SY and 5SP Miniature Circuit Breakers

### Introduction

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#### Technical specifications

|                                                                       |                           | 5SY6                                                                                | 5SY4                      | 5SY5                                     | 5SY7                      | 5SY8                    | 5SP4                      |
|-----------------------------------------------------------------------|---------------------------|-------------------------------------------------------------------------------------|---------------------------|------------------------------------------|---------------------------|-------------------------|---------------------------|
| <b>Standards</b>                                                      |                           | EN 60898-1;<br>EN 60947-2                                                           | EN 60898-1;<br>EN 60947-2 | EN 60898-2                               | EN 60898-1;<br>EN 60947-2 | EN 60947-2              | EN 60898-1;<br>EN 60947-2 |
| <b>Approvals</b>                                                      |                           | See appendix, chapter 20                                                            |                           |                                          |                           |                         |                           |
| <b>Rated voltage <math>U_n</math></b>                                 | V AC<br>V DC              | 230/400<br>--                                                                       | 230/400<br>--             | 230/400<br>220/440/<br>880 <sup>5)</sup> | 230/400<br>--             | 230/400<br>--           | 230/400<br>--             |
| <b>Operational voltage</b>                                            |                           |                                                                                     |                           |                                          |                           |                         |                           |
|                                                                       | Min. V AC/DC/pole         | 24                                                                                  | 24                        | 24                                       | 24                        | 24                      | 24                        |
| Acc. to EN 60898-1/-2 and EN 60947-2                                  | Max. V DC/pole            | 72                                                                                  | 72 <sup>4)</sup>          | 250                                      | 72 <sup>4)</sup>          | 72 <sup>4)</sup>        | 72                        |
|                                                                       | Max. V AC                 | 250/440                                                                             | 250/440                   | 250/440                                  | 250/440                   | 250/440                 | 250/440                   |
| Acc. to UL 1077 and CSA C22.2 No.235                                  | Max. V AC                 | 480Y/277                                                                            | 480Y/277                  | --                                       | 480Y/277                  | 480Y/277                | 480Y/277                  |
| <b>Breaking capacity<sup>1)</sup></b>                                 |                           |                                                                                     |                           |                                          |                           |                         |                           |
| • $I_{cn}$ acc. to IEC/EN 60898-1                                     | kA AC                     | 6                                                                                   | 10                        | 10                                       | 15                        | --                      | 10                        |
| • $I_{cn}$ acc. to IEC/EN 60898-2                                     | kA DC                     | 10                                                                                  | 10                        | 10                                       | 15                        | --                      | 10                        |
| • $I_{cu}$ acc. to IEC/EN 60947-2                                     | kA AC                     | 30 ... 10 <sup>1)</sup>                                                             | 35 ... 10 <sup>1)</sup>   | 35 ... 10 <sup>1)</sup>                  | 50 ... 15 <sup>1)</sup>   | 70 ... 20 <sup>1)</sup> | 10                        |
|                                                                       | kA DC                     | 15                                                                                  | 15                        | 15                                       | 15                        | 15                      | 15                        |
| • Acc. to UL1077 and CSA C22.2 No.235                                 | kA AC                     | 5                                                                                   | 5                         | --                                       | 5                         | 5                       | 5                         |
| <b>Insulation coordination</b>                                        |                           |                                                                                     |                           |                                          |                           |                         |                           |
| • Rated insulation voltage                                            | V AC<br>V DC/pole         | 250/440<br>--                                                                       | --                        | 250                                      | --                        | --                      | --                        |
| <b>Pollution degree for overvoltage category</b>                      |                           | 3/III <sup>3)</sup>                                                                 |                           |                                          |                           |                         |                           |
| <b>Touch protection</b>                                               | Acc. to EN 50274          | Yes                                                                                 |                           |                                          |                           |                         |                           |
| <b>Main switch characteristics</b>                                    | Acc. to EN 60204          | Yes                                                                                 |                           |                                          |                           |                         |                           |
| <b>Handle end position, sealable</b>                                  |                           | Yes                                                                                 |                           |                                          |                           |                         |                           |
| <b>Degree of protection</b>                                           | Acc. to EN 60529          | IP20 with connected conductors,<br>IP40 in the handle range with distribution cover |                           |                                          |                           |                         |                           |
| <b>CFC and silicone-free</b>                                          |                           | Yes                                                                                 |                           |                                          |                           |                         |                           |
| <b>Mounting</b>                                                       |                           |                                                                                     |                           |                                          |                           |                         |                           |
| • Snap-on fixing system                                               |                           | Yes                                                                                 |                           |                                          |                           |                         |                           |
| • Standard mounting rail and screw fixing                             |                           | --                                                                                  |                           |                                          |                           |                         |                           |
| <b>Terminals</b>                                                      | ±screw (Pozidriv)         | 2                                                                                   |                           |                                          |                           |                         |                           |
| • Tunnel terminals at both ends                                       |                           | --                                                                                  |                           |                                          |                           |                         |                           |
| • Combined terminals at both ends                                     |                           | Yes                                                                                 |                           |                                          |                           |                         |                           |
| • Terminal tightening torque                                          | Nm<br>lb.in               | 2.5 ... 3<br>22 ... 26                                                              |                           |                                          |                           |                         |                           |
| <b>Conductor cross-sections</b>                                       |                           |                                                                                     |                           |                                          |                           |                         |                           |
| • Solid and stranded                                                  | mm <sup>2</sup>           | 0.75 ... 35                                                                         |                           |                                          |                           |                         |                           |
| • Finely stranded, with end sleeve                                    | mm <sup>2</sup>           | 0.75 ... 25                                                                         |                           |                                          |                           |                         |                           |
| • AWG conductors<br>(Cu 60/75 °C $I_n \leq 40$ A; 60 °C $I_n > 40$ A) | AWG                       | 14 ... 4                                                                            |                           |                                          |                           |                         |                           |
| <b>Mains connection</b>                                               |                           |                                                                                     |                           |                                          |                           |                         |                           |
| • AC                                                                  |                           | Any                                                                                 |                           |                                          |                           |                         |                           |
| • DC                                                                  |                           | Any                                                                                 |                           |                                          |                           |                         |                           |
| <b>Mounting position</b>                                              |                           | Any                                                                                 |                           |                                          |                           |                         |                           |
| <b>Service life</b>                                                   |                           | 20000                                                                               |                           |                                          |                           |                         |                           |
| On average, with rated load                                           | Actuations<br>Actuations  | 10000 for 5SY5 at 40 A, 50 A and 63 A                                               |                           |                                          |                           |                         |                           |
| <b>Ambient temperature</b>                                            | °C                        | -25 ... +55, max. 95 % humidity                                                     |                           |                                          |                           |                         |                           |
| <b>Storage temperature</b>                                            | °C                        | -40 ... +75                                                                         |                           |                                          |                           |                         |                           |
| <b>Resistance to climate</b>                                          | Acc. to<br>IEC 60068-2-30 | 6 cycles                                                                            |                           |                                          |                           |                         |                           |
| <b>Shock</b>                                                          | Acc. to<br>IEC 60068-2-27 | m/s <sup>2</sup><br>150 at 11 ms half-sine                                          |                           |                                          |                           |                         |                           |
| <b>Resistance to vibrations</b>                                       | Acc. to<br>IEC 60068-2-6  | m/s <sup>2</sup><br>50 at 25 ... 150 Hz and 60 at 35 Hz (4 sec)                     |                           |                                          |                           |                         |                           |

<sup>1)</sup> For further information see Configuration Manual 10/2011 "Miniature circuit breakers" at: [www.siemens.com/lowvoltage/manuals](http://www.siemens.com/lowvoltage/manuals).

<sup>2)</sup> Ensure compliance with the specified polarity when connecting DC.

<sup>3)</sup> 5SY5 4.. 4-pole, degree of pollution 2 at overvoltage category III.

<sup>4)</sup> Not characteristic D 0.3 A

<sup>5)</sup> 5SY5 4.. 4-pole 880 V is not a standardized voltage acc. to EN 60898-1, suitable for max. 1000 V DC, if the four poles are connected in series.



# Miniature Circuit Breakers

## 5SY and 5SP Miniature Circuit Breakers

5SY6, 6 000 A, discontinued range

3

### Selection and ordering data

| 6 000<br>3         | $I_n$            | Mounting<br>width | DT | Characteristic B  |                 | PG  | DT | Characteristic C  |                 | PU<br>(UNIT,<br>SET, M) | PS*/<br>P. unit | PG  | Weight<br>per PU<br>approx. |
|--------------------|------------------|-------------------|----|-------------------|-----------------|-----|----|-------------------|-----------------|-------------------------|-----------------|-----|-----------------------------|
|                    |                  |                   |    | Order No.         | Price<br>per PU |     |    | Order No.         | Price<br>per PU |                         |                 |     |                             |
|                    | A                | MW <sup>1)</sup>  |    |                   |                 |     |    |                   |                 |                         |                 |     | kg                          |
| <b>MCBs 6000 A</b> |                  |                   |    |                   |                 |     |    |                   |                 |                         |                 |     |                             |
|                    | 1P, 230/400 V AC |                   |    |                   |                 |     |    |                   |                 |                         |                 |     |                             |
|                    | 0.3              | 1                 |    | --                |                 |     |    | <b>5SY6 114-7</b> |                 | 1                       | 1 unit          | 001 | 0.167                       |
|                    | 0.5              |                   |    | --                |                 |     |    | <b>5SY6 105-7</b> |                 | 1                       | 1/12 units      | 001 | 0.165                       |
|                    | 1                |                   |    | --                |                 |     |    | <b>5SY6 101-7</b> |                 | 1                       | 1/12 units      | 001 | 0.164                       |
|                    | 1.6              |                   |    | --                |                 |     |    | <b>5SY6 115-7</b> |                 | 1                       | 1 unit          | 001 | 0.162                       |
|                    | 2                |                   |    | <b>5SY6 102-6</b> |                 | 001 | ▶  | <b>5SY6 102-7</b> |                 | 1                       | 1/12 units      | 001 | 0.153                       |
|                    | 3                |                   |    | --                |                 |     |    | <b>5SY6 103-7</b> |                 | 1                       | 1/12 units      | 001 | 0.145                       |
|                    | 4                |                   |    | <b>5SY6 104-6</b> |                 | 001 | ▶  | <b>5SY6 104-7</b> |                 | 1                       | 1/12 units      | 001 | 0.160                       |
|                    | 6                |                   | ▶  | <b>5SY6 106-6</b> |                 | 001 | ▶  | <b>5SY6 106-7</b> |                 | 1                       | 1/12 units      | 001 | 0.160                       |
|                    | 8                |                   |    | --                |                 |     |    | <b>5SY6 108-7</b> |                 | 1                       | 1/12 units      | 001 | 0.158                       |
|                    | 10               |                   | ▶  | <b>5SY6 110-6</b> |                 | 001 | ▶  | <b>5SY6 110-7</b> |                 | 1                       | 1/12 units      | 001 | 0.158                       |
|                    | 13               |                   |    | <b>5SY6 113-6</b> |                 | 001 |    | <b>5SY6 113-7</b> |                 | 1                       | 1/12 units      | 001 | 0.148                       |
|                    | 16               |                   | ▶  | <b>5SY6 116-6</b> |                 | 001 | ▶  | <b>5SY6 116-7</b> |                 | 1                       | 1/12 units      | 001 | 0.158                       |
|                    | 20               |                   |    | <b>5SY6 120-6</b> |                 | 001 |    | <b>5SY6 120-7</b> |                 | 1                       | 1/12 units      | 001 | 0.162                       |
|                    | 25               |                   |    | <b>5SY6 125-6</b> |                 | 001 |    | <b>5SY6 125-7</b> |                 | 1                       | 1/12 units      | 001 | 0.163                       |
|                    | 32               |                   |    | <b>5SY6 132-6</b> |                 | 001 |    | <b>5SY6 132-7</b> |                 | 1                       | 1/12 units      | 001 | 0.149                       |
|                    | 40               |                   |    | <b>5SY6 140-6</b> |                 | 001 |    | <b>5SY6 140-7</b> |                 | 1                       | 1/12 units      | 001 | 0.150                       |
|                    | 50               |                   |    | <b>5SY6 150-6</b> |                 | 001 |    | <b>5SY6 150-7</b> |                 | 1                       | 1/12 units      | 001 | 0.168                       |
|                    | 63               |                   |    | <b>5SY6 163-6</b> |                 | 001 |    | <b>5SY6 163-7</b> |                 | 1                       | 1/12 units      | 001 | 0.172                       |
|                    | 1P+N, 230 V AC   |                   |    |                   |                 |     |    |                   |                 |                         |                 |     |                             |
|                    | 0.3              | 2                 |    | --                |                 |     |    | <b>5SY6 514-7</b> |                 | 1                       | 1 unit          | 001 | 0.328                       |
|                    | 0.5              |                   |    | --                |                 |     |    | <b>5SY6 505-7</b> |                 | 1                       | 1 unit          | 001 | 0.325                       |
|                    | 1                |                   |    | --                |                 |     |    | <b>5SY6 501-7</b> |                 | 1                       | 1 unit          | 001 | 0.321                       |
|                    | 1.6              |                   |    | --                |                 |     |    | <b>5SY6 515-7</b> |                 | 1                       | 1 unit          | 001 | 0.318                       |
|                    | 2                |                   |    | <b>5SY6 506-6</b> |                 | 001 |    | <b>5SY6 502-7</b> |                 | 1                       | 1 unit          | 001 | 0.324                       |
|                    | 3                |                   |    | --                |                 |     |    | <b>5SY6 503-7</b> |                 | 1                       | 1 unit          | 001 | 0.314                       |
|                    | 4                |                   |    | <b>5SY6 510-6</b> |                 | 001 |    | <b>5SY6 504-7</b> |                 | 1                       | 1 unit          | 001 | 0.314                       |
|                    | 6                |                   |    | <b>5SY6 513-6</b> |                 | 001 |    | <b>5SY6 506-7</b> |                 | 1                       | 1/6 units       | 001 | 0.310                       |
|                    | 8                |                   |    | --                |                 |     |    | <b>5SY6 508-7</b> |                 | 1                       | 1 unit          | 001 | 0.310                       |
|                    | 10               |                   |    | <b>5SY6 510-6</b> |                 | 001 |    | <b>5SY6 510-7</b> |                 | 1                       | 1/6 units       | 001 | 0.301                       |
|                    | 13               |                   |    | <b>5SY6 513-6</b> |                 | 001 |    | <b>5SY6 513-7</b> |                 | 1                       | 1/6 units       | 001 | 0.320                       |
|                    | 16               |                   |    | <b>5SY6 516-6</b> |                 | 001 |    | <b>5SY6 516-7</b> |                 | 1                       | 1/6 units       | 001 | 0.302                       |
|                    | 20               |                   |    | <b>5SY6 520-6</b> |                 | 001 |    | <b>5SY6 520-7</b> |                 | 1                       | 1 unit          | 001 | 0.316                       |
|                    | 25               |                   |    | <b>5SY6 525-6</b> |                 | 001 |    | <b>5SY6 525-7</b> |                 | 1                       | 1 unit          | 001 | 0.318                       |
|                    | 32               |                   |    | <b>5SY6 532-6</b> |                 | 001 |    | <b>5SY6 532-7</b> |                 | 1                       | 1 unit          | 001 | 0.319                       |
|                    | 40               |                   |    | <b>5SY6 540-6</b> |                 | 001 |    | <b>5SY6 540-7</b> |                 | 1                       | 1 unit          | 001 | 0.318                       |
|                    | 50               |                   |    | <b>5SY6 550-6</b> |                 | 001 |    | <b>5SY6 550-7</b> |                 | 1                       | 1 unit          | 001 | 0.323                       |
|                    | 63               |                   |    | <b>5SY6 563-6</b> |                 | 001 |    | <b>5SY6 563-7</b> |                 | 1                       | 1 unit          | 001 | 0.343                       |
|                    | 2P, 400 V AC     |                   |    |                   |                 |     |    |                   |                 |                         |                 |     |                             |
|                    | 0.3              | 2                 |    | --                |                 |     |    | <b>5SY6 214-7</b> |                 | 1                       | 1 unit          | 001 | 0.328                       |
|                    | 0.5              |                   |    | --                |                 |     |    | <b>5SY6 205-7</b> |                 | 1                       | 1 unit          | 001 | 0.324                       |
|                    | 1                |                   |    | --                |                 |     |    | <b>5SY6 201-7</b> |                 | 1                       | 1/6 units       | 001 | 0.302                       |
|                    | 1.6              |                   |    | --                |                 |     |    | <b>5SY6 215-7</b> |                 | 1                       | 1 unit          | 001 | 0.317                       |
|                    | 2                |                   |    | --                |                 |     | ▶  | <b>5SY6 202-7</b> |                 | 1                       | 1/6 units       | 001 | 0.324                       |
|                    | 3                |                   |    | --                |                 |     |    | <b>5SY6 203-7</b> |                 | 1                       | 1/6 units       | 001 | 0.320                       |
|                    | 4                |                   |    | --                |                 |     | ▶  | <b>5SY6 204-7</b> |                 | 1                       | 1/6 units       | 001 | 0.300                       |
|                    | 6                |                   |    | <b>5SY6 206-6</b> |                 | 001 | ▶  | <b>5SY6 206-7</b> |                 | 1                       | 1/6 units       | 001 | 0.292                       |
|                    | 8                |                   |    | --                |                 |     |    | <b>5SY6 208-7</b> |                 | 1                       | 1 unit          | 001 | 0.309                       |
|                    | 10               |                   |    | <b>5SY6 210-6</b> |                 | 001 | ▶  | <b>5SY6 210-7</b> |                 | 1                       | 1/6 units       | 001 | 0.310                       |
|                    | 13               |                   |    | <b>5SY6 213-6</b> |                 | 001 |    | <b>5SY6 213-7</b> |                 | 1                       | 1 unit          | 001 | 0.318                       |
|                    | 16               |                   |    | <b>5SY6 216-6</b> |                 | 001 | ▶  | <b>5SY6 216-7</b> |                 | 1                       | 1/6 units       | 001 | 0.291                       |
|                    | 20               |                   |    | <b>5SY6 220-6</b> |                 | 001 |    | <b>5SY6 220-7</b> |                 | 1                       | 1/6 units       | 001 | 0.300                       |
|                    | 25               |                   |    | <b>5SY6 225-6</b> |                 | 001 |    | <b>5SY6 225-7</b> |                 | 1                       | 1/6 units       | 001 | 0.308                       |
|                    | 32               |                   |    | <b>5SY6 232-6</b> |                 | 001 |    | <b>5SY6 232-7</b> |                 | 1                       | 1/6 units       | 001 | 0.318                       |
|                    | 40               |                   |    | <b>5SY6 240-6</b> |                 | 001 |    | <b>5SY6 240-7</b> |                 | 1                       | 1 unit          | 001 | 0.318                       |
|                    | 50               |                   |    | <b>5SY6 250-6</b> |                 | 001 |    | <b>5SY6 250-7</b> |                 | 1                       | 1 unit          | 001 | 0.330                       |
|                    | 63               |                   |    | <b>5SY6 263-6</b> |                 | 001 |    | <b>5SY6 263-7</b> |                 | 1                       | 1 unit          | 001 | 0.340                       |

<sup>1)</sup> 1 MW (modular width) = 18 mm.



# Miniature Circuit Breakers

## 5SY and 5SP Miniature Circuit Breakers

**5SY6, 6 000 A, discontinued range**
**3**

| 6 000<br>3         | $I_n$          | Mounting width   | DT | Characteristic B |              | PG  | DT | Characteristic C |              | PU (UNIT, SET, M) | PS*/ P. unit | PG  | Weight per PU approx. kg |
|--------------------|----------------|------------------|----|------------------|--------------|-----|----|------------------|--------------|-------------------|--------------|-----|--------------------------|
|                    |                |                  |    | Order No.        | Price per PU |     |    | Order No.        | Price per PU |                   |              |     |                          |
|                    | A              | MW <sup>1)</sup> |    |                  |              |     |    |                  |              |                   |              |     |                          |
| <b>MCBs 6000 A</b> |                |                  |    |                  |              |     |    |                  |              |                   |              |     |                          |
|                    | 3P, 400 V AC   |                  |    |                  |              |     |    |                  |              |                   |              |     |                          |
|                    | 0.3            | 3                |    | --               |              |     |    | 5SY6 314-7       |              | 1                 | 1 unit       | 001 | 0.489                    |
|                    | 0.5            |                  |    | --               |              |     |    | 5SY6 305-7       |              | 1                 | 1 unit       | 001 | 0.481                    |
|                    | 1              |                  |    | --               |              |     |    | 5SY6 301-7       |              | 1                 | 1 unit       | 001 | 0.473                    |
|                    | 1.6            |                  |    | --               |              |     |    | 5SY6 315-7       |              | 1                 | 1 unit       | 001 | 0.471                    |
|                    | 2              |                  |    | --               |              |     |    | 5SY6 302-7       |              | 1                 | 1/4 units    | 001 | 0.480                    |
|                    | 3              |                  |    | --               |              |     |    | 5SY6 303-7       |              | 1                 | 1 unit       | 001 | 0.465                    |
|                    | 4              |                  |    | --               |              |     |    | 5SY6 304-7       |              | 1                 | 1/4 units    | 001 | 0.458                    |
|                    | 6              |                  |    | 5SY6 306-6       |              | 001 | ▶  | 5SY6 306-7       |              | 1                 | 1/4 units    | 001 | 0.435                    |
|                    | 8              |                  |    | --               |              |     |    | 5SY6 308-7       |              | 1                 | 1 unit       | 001 | 0.461                    |
|                    | 10             |                  |    | 5SY6 310-6       |              | 001 | ▶  | 5SY6 310-7       |              | 1                 | 1/4 units    | 001 | 0.443                    |
|                    | 13             |                  |    | 5SY6 313-6       |              | 001 | ▶  | 5SY6 313-7       |              | 1                 | 1 unit       | 001 | 0.471                    |
|                    | 16             |                  | ▶  | 5SY6 316-6       |              | 001 | ▶  | 5SY6 316-7       |              | 1                 | 1/4 units    | 001 | 0.437                    |
|                    | 20             |                  |    | 5SY6 320-6       |              | 001 |    | 5SY6 320-7       |              | 1                 | 1/4 units    | 001 | 0.455                    |
|                    | 25             |                  |    | 5SY6 325-6       |              | 001 |    | 5SY6 325-7       |              | 1                 | 1/4 units    | 001 | 0.464                    |
|                    | 32             |                  |    | 5SY6 332-6       |              | 001 | ▶  | 5SY6 332-7       |              | 1                 | 1/4 units    | 001 | 0.459                    |
|                    | 40             |                  |    | 5SY6 340-6       |              | 001 |    | 5SY6 340-7       |              | 1                 | 1/4 units    | 001 | 0.472                    |
|                    | 50             |                  |    | 5SY6 350-6       |              | 001 |    | 5SY6 350-7       |              | 1                 | 1/4 units    | 001 | 0.489                    |
|                    | 63             |                  |    | 5SY6 363-6       |              | 001 |    | 5SY6 363-7       |              | 1                 | 1/4 units    | 001 | 0.488                    |
|                    | 3P+N, 400 V AC |                  |    |                  |              |     |    |                  |              |                   |              |     |                          |
|                    | 0.3            | 4                |    | --               |              |     |    | 5SY6 614-7       |              | 1                 | 1 unit       | 001 | 0.631                    |
|                    | 0.5            |                  |    | --               |              |     |    | 5SY6 605-7       |              | 1                 | 1 unit       | 001 | 0.643                    |
|                    | 1              |                  |    | --               |              |     |    | 5SY6 601-7       |              | 1                 | 1 unit       | 001 | 0.623                    |
|                    | 1.6            |                  |    | --               |              |     |    | 5SY6 615-7       |              | 1                 | 1 unit       | 001 | 0.631                    |
|                    | 2              |                  |    | --               |              |     |    | 5SY6 602-7       |              | 1                 | 1 unit       | 001 | 0.632                    |
|                    | 3              |                  |    | --               |              |     |    | 5SY6 603-7       |              | 1                 | 1 unit       | 001 | 0.590                    |
|                    | 4              |                  |    | --               |              |     |    | 5SY6 604-7       |              | 1                 | 1 unit       | 001 | 0.620                    |
|                    | 6              |                  |    | 5SY6 606-6       |              | 001 |    | 5SY6 606-7       |              | 1                 | 1 unit       | 001 | 0.609                    |
|                    | 8              |                  |    | --               |              |     |    | 5SY6 608-7       |              | 1                 | 1 unit       | 001 | 0.607                    |
|                    | 10             |                  |    | 5SY6 610-6       |              | 001 |    | 5SY6 610-7       |              | 1                 | 1 unit       | 001 | 0.611                    |
|                    | 13             |                  |    | 5SY6 613-6       |              | 001 |    | 5SY6 613-7       |              | 1                 | 1/3 units    | 001 | 0.630                    |
|                    | 16             |                  |    | 5SY6 616-6       |              | 001 |    | 5SY6 616-7       |              | 1                 | 1/3 units    | 001 | 0.613                    |
|                    | 20             |                  |    | 5SY6 620-6       |              | 001 |    | 5SY6 620-7       |              | 1                 | 1 unit       | 001 | 0.623                    |
|                    | 25             |                  |    | 5SY6 625-6       |              | 001 |    | 5SY6 625-7       |              | 1                 | 1 unit       | 001 | 0.622                    |
|                    | 32             |                  |    | 5SY6 632-6       |              | 001 |    | 5SY6 632-7       |              | 1                 | 1 unit       | 001 | 0.628                    |
|                    | 40             |                  |    | 5SY6 640-6       |              | 001 |    | 5SY6 640-7       |              | 1                 | 1 unit       | 001 | 0.629                    |
|                    | 50             |                  |    | 5SY6 650-6       |              | 001 |    | 5SY6 650-7       |              | 1                 | 1 unit       | 001 | 0.655                    |
|                    | 63             |                  |    | 5SY6 663-6       |              | 001 |    | 5SY6 663-7       |              | 1                 | 1 unit       | 001 | 0.671                    |
|                    | 4P, 400 V AC   |                  |    |                  |              |     |    |                  |              |                   |              |     |                          |
|                    | 0.3            | 4                |    | --               |              |     |    | 5SY6 414-7       |              | 1                 | 1 unit       | 001 | 0.640                    |
|                    | 0.5            |                  |    | --               |              |     |    | 5SY6 405-7       |              | 1                 | 1 unit       | 001 | 0.641                    |
|                    | 1              |                  |    | --               |              |     |    | 5SY6 401-7       |              | 1                 | 1 unit       | 001 | 0.634                    |
|                    | 1.6            |                  |    | --               |              |     |    | 5SY6 415-7       |              | 1                 | 1 unit       | 001 | 0.620                    |
|                    | 2              |                  |    | --               |              |     |    | 5SY6 402-7       |              | 1                 | 1 unit       | 001 | 0.642                    |
|                    | 3              |                  |    | --               |              |     |    | 5SY6 403-7       |              | 1                 | 1 unit       | 001 | 0.625                    |
|                    | 4              |                  |    | --               |              |     |    | 5SY6 404-7       |              | 1                 | 1 unit       | 001 | 0.615                    |
|                    | 6              |                  |    | 5SY6 406-6       |              | 001 |    | 5SY6 406-7       |              | 1                 | 1 unit       | 001 | 0.612                    |
|                    | 8              |                  |    | --               |              |     |    | 5SY6 408-7       |              | 1                 | 1 unit       | 001 | 0.605                    |
|                    | 10             |                  |    | 5SY6 410-6       |              | 001 |    | 5SY6 410-7       |              | 1                 | 1/3 units    | 001 | 0.603                    |
|                    | 13             |                  |    | 5SY6 413-6       |              | 001 |    | 5SY6 413-7       |              | 1                 | 1 unit       | 001 | 0.628                    |
|                    | 16             |                  |    | 5SY6 416-6       |              | 001 |    | 5SY6 416-7       |              | 1                 | 1/3 units    | 001 | 0.620                    |
|                    | 20             |                  |    | 5SY6 420-6       |              | 001 |    | 5SY6 420-7       |              | 1                 | 1/3 units    | 001 | 0.598                    |
|                    | 25             |                  |    | 5SY6 425-6       |              | 001 |    | 5SY6 425-7       |              | 1                 | 1/3 units    | 001 | 0.625                    |
|                    | 32             |                  |    | 5SY6 432-6       |              | 001 |    | 5SY6 432-7       |              | 1                 | 1/3 units    | 001 | 0.627                    |
|                    | 40             |                  |    | 5SY6 440-6       |              | 001 |    | 5SY6 440-7       |              | 1                 | 1/3 units    | 001 | 0.628                    |
|                    | 50             |                  |    | 5SY6 450-6       |              | 001 |    | 5SY6 450-7       |              | 1                 | 1 unit       | 001 | 0.651                    |
|                    | 63             |                  |    | 5SY6 463-6       |              | 001 |    | 5SY6 463-7       |              | 1                 | 1/3 units    | 001 | 0.673                    |

<sup>1)</sup> 1 MW (modular width) = 18 mm.



# Miniature Circuit Breakers

## 5SY and 5SP Miniature Circuit Breakers

**5SY4, 10 000 A**
**3**
**Selection and ordering data**

| 10 000<br>3                                                                         | $I_n$               | Mounting<br>width | DT | Characteristic A  |                 |                   | DT                | Characteristic B |                 |            | PU<br>(UNIT,<br>SET,<br>M) | PS*/<br>P. unit | PG    | Weight<br>per PU<br>approx. |
|-------------------------------------------------------------------------------------|---------------------|-------------------|----|-------------------|-----------------|-------------------|-------------------|------------------|-----------------|------------|----------------------------|-----------------|-------|-----------------------------|
|                                                                                     | A                   | MW <sup>1)</sup>  |    | Order No.         | Price<br>per PU |                   |                   | Order No.        | Price<br>per PU |            |                            |                 |       | kg                          |
|    | <b>MCBs 10000 A</b> |                   |    |                   |                 |                   |                   |                  |                 |            |                            |                 |       |                             |
|                                                                                     | 1P, 230/400 V AC    |                   |    |                   |                 |                   |                   |                  |                 |            |                            |                 |       |                             |
|                                                                                     | 0.5                 | 1                 |    | <b>5SY4 105-5</b> |                 | 002               | --                |                  |                 | 1          | 1 unit                     |                 |       | 0.165                       |
|                                                                                     | 1                   |                   |    | <b>5SY4 101-5</b> |                 | 002               | --                |                  |                 | 1          | 1 unit                     |                 |       | 0.167                       |
|                                                                                     | 1.6                 |                   |    | <b>5SY4 115-5</b> |                 | 002               | --                |                  |                 | 1          | 1 unit                     |                 |       | 0.165                       |
|                                                                                     | 2                   |                   |    | <b>5SY4 102-5</b> |                 | 002               | <b>5SY4 102-6</b> |                  | 1               | 1 unit     | 002                        |                 |       | 0.166                       |
|                                                                                     | 3                   |                   |    | <b>5SY4 103-5</b> |                 | 002               | --                |                  |                 | 1          | 1 unit                     |                 |       | 0.168                       |
|                                                                                     | 4                   |                   |    | <b>5SY4 104-5</b> |                 | 002               | <b>5SY4 104-6</b> |                  | 1               | 1/12 units | 002                        |                 |       | 0.152                       |
|                                                                                     | 6                   |                   |    | <b>5SY4 106-5</b> |                 | 002 ▶             | <b>5SY4 106-6</b> |                  | 1               | 1/12 units | 002                        |                 |       | 0.147                       |
|                                                                                     | 8                   |                   |    | <b>5SY4 108-5</b> |                 | 002               | --                |                  |                 | 1          | 1 unit                     |                 |       | 0.162                       |
|                                                                                     | 10                  |                   |    | <b>5SY4 110-5</b> |                 | 002 ▶             | <b>5SY4 110-6</b> |                  | 1               | 1/12 units | 002                        |                 |       | 0.146                       |
|                                                                                     | 13                  |                   |    | <b>5SY4 113-5</b> |                 | 002               | <b>5SY4 113-6</b> |                  | 1               | 1 unit     | 002                        |                 |       | 0.161                       |
|                                                                                     | 16                  |                   |    | <b>5SY4 116-5</b> |                 | 002 ▶             | <b>5SY4 116-6</b> |                  | 1               | 1/12 units | 002                        |                 |       | 0.154                       |
|                                                                                     | 20                  |                   |    | <b>5SY4 120-5</b> |                 | 002               | <b>5SY4 120-6</b> |                  | 1               | 1 unit     | 002                        |                 |       | 0.160                       |
|                                                                                     | 25                  |                   |    | <b>5SY4 125-5</b> |                 | 002               | <b>5SY4 125-6</b> |                  | 1               | 1 unit     | 002                        |                 |       | 0.163                       |
|                                                                                     | 32                  |                   |    | <b>5SY4 132-5</b> |                 | 002               | <b>5SY4 132-6</b> |                  | 1               | 1 unit     | 002                        |                 |       | 0.165                       |
|                                                                                     | 40                  |                   |    | <b>5SY4 140-5</b> |                 | 002               | <b>5SY4 140-6</b> |                  | 1               | 1 unit     | 002                        |                 |       | 0.164                       |
|                                                                                     | 50                  |                   |    | <b>5SY4 150-5</b> |                 | 002               | <b>5SY4 150-6</b> |                  | 1               | 1 unit     | 002                        |                 |       | 0.168                       |
|                                                                                     | 63                  |                   |    | <b>5SY4 163-5</b> |                 | 002               | <b>5SY4 163-6</b> |                  | 1               | 1 unit     | 002                        |                 |       | 0.173                       |
| 80                                                                                  |                     |                   | -- |                   |                 | <b>5SY4 180-6</b> |                   | 1                | 1 unit          | 002        |                            |                 | 0.159 |                             |
|   | 1P+N, 230 V AC      |                   |    |                   |                 |                   |                   |                  |                 |            |                            |                 |       |                             |
|                                                                                     | 1                   | 2                 |    | <b>5SY4 501-5</b> |                 | 002               | --                |                  |                 | 1          | 1 unit                     |                 |       | 0.330                       |
|                                                                                     | 1.6                 |                   |    | <b>5SY4 515-5</b> |                 | 002               | --                |                  |                 | 1          | 1 unit                     |                 |       | 0.325                       |
|                                                                                     | 2                   |                   |    | <b>5SY4 502-5</b> |                 | 002               | --                |                  |                 | 1          | 1 unit                     |                 |       | 0.325                       |
|                                                                                     | 3                   |                   |    | <b>5SY4 503-5</b> |                 | 002               | --                |                  |                 | 1          | 1 unit                     |                 |       | 0.330                       |
|                                                                                     | 4                   |                   |    | <b>5SY4 504-5</b> |                 | 002               | --                |                  |                 | 1          | 1 unit                     |                 |       | 0.319                       |
|                                                                                     | 6                   |                   |    | <b>5SY4 506-5</b> |                 | 002               | <b>5SY4 506-6</b> |                  | 1               | 1 unit     | 002                        |                 |       | 0.315                       |
|                                                                                     | 8                   |                   |    | <b>5SY4 508-5</b> |                 | 002               | --                |                  |                 | 1          | 1 unit                     |                 |       | 0.316                       |
|                                                                                     | 10                  |                   |    | <b>5SY4 510-5</b> |                 | 002               | <b>5SY4 510-6</b> |                  | 1               | 1 unit     | 002                        |                 |       | 0.312                       |
|                                                                                     | 13                  |                   |    | <b>5SY4 513-5</b> |                 | 002               | <b>5SY4 513-6</b> |                  | 1               | 1/6 units  | 002                        |                 |       | 0.315                       |
|                                                                                     | 16                  |                   |    | <b>5SY4 516-5</b> |                 | 002               | <b>5SY4 516-6</b> |                  | 1               | 1/6 units  | 002                        |                 |       | 0.311                       |
|                                                                                     | 20                  |                   |    | <b>5SY4 520-5</b> |                 | 002               | <b>5SY4 520-6</b> |                  | 1               | 1 unit     | 002                        |                 |       | 0.316                       |
|                                                                                     | 25                  |                   |    | <b>5SY4 525-5</b> |                 | 002               | <b>5SY4 525-6</b> |                  | 1               | 1 unit     | 002                        |                 |       | 0.317                       |
|                                                                                     | 32                  |                   |    | <b>5SY4 532-5</b> |                 | 002               | <b>5SY4 532-6</b> |                  | 1               | 1 unit     | 002                        |                 |       | 0.325                       |
|                                                                                     | 40                  |                   |    | <b>5SY4 540-5</b> |                 | 002               | <b>5SY4 540-6</b> |                  | 1               | 1 unit     | 002                        |                 |       | 0.307                       |
|                                                                                     | 50                  |                   |    | <b>5SY4 550-5</b> |                 | 002               | <b>5SY4 550-6</b> |                  | 1               | 1 unit     | 002                        |                 |       | 0.319                       |
|                                                                                     | 63                  |                   |    | <b>5SY4 563-5</b> |                 | 002               | <b>5SY4 563-6</b> |                  | 1               | 1 unit     | 002                        |                 |       | 0.346                       |
|  | 2P, 400 V AC        |                   |    |                   |                 |                   |                   |                  |                 |            |                            |                 |       |                             |
|                                                                                     | 0.5                 | 2                 |    | <b>5SY4 205-5</b> |                 | 002               | --                |                  |                 | 1          | 1 unit                     |                 |       | 0.330                       |
|                                                                                     | 1                   |                   |    | <b>5SY4 201-5</b> |                 | 002               | --                |                  |                 | 1          | 1 unit                     |                 |       | 0.327                       |
|                                                                                     | 1.6                 |                   |    | <b>5SY4 215-5</b> |                 | 002               | --                |                  |                 | 1          | 1 unit                     |                 |       | 0.324                       |
|                                                                                     | 2                   |                   |    | <b>5SY4 202-5</b> |                 | 002               | --                |                  |                 | 1          | 1 unit                     |                 |       | 0.325                       |
|                                                                                     | 3                   |                   |    | <b>5SY4 203-5</b> |                 | 002               | --                |                  |                 | 1          | 1 unit                     |                 |       | 0.324                       |
|                                                                                     | 4                   |                   |    | <b>5SY4 204-5</b> |                 | 002               | --                |                  |                 | 1          | 1 unit                     |                 |       | 0.322                       |
|                                                                                     | 6                   |                   |    | <b>5SY4 206-5</b> |                 | 002               | <b>5SY4 206-6</b> |                  | 1               | 1 unit     | 002                        |                 |       | 0.314                       |
|                                                                                     | 8                   |                   |    | <b>5SY4 208-5</b> |                 | 002               | --                |                  |                 | 1          | 1 unit                     |                 |       | 0.300                       |
|                                                                                     | 10                  |                   |    | <b>5SY4 210-5</b> |                 | 002               | <b>5SY4 210-6</b> |                  | 1               | 1/6 units  | 002                        |                 |       | 0.306                       |
|                                                                                     | 13                  |                   |    | <b>5SY4 213-5</b> |                 | 002               | <b>5SY4 213-6</b> |                  | 1               | 1 unit     | 002                        |                 |       | 0.315                       |
|                                                                                     | 16                  |                   |    | <b>5SY4 216-5</b> |                 | 002               | <b>5SY4 216-6</b> |                  | 1               | 1/6 units  | 002                        |                 |       | 0.295                       |
|                                                                                     | 20                  |                   |    | <b>5SY4 220-5</b> |                 | 002               | <b>5SY4 220-6</b> |                  | 1               | 1 unit     | 002                        |                 |       | 0.313                       |
|                                                                                     | 25                  |                   |    | <b>5SY4 225-5</b> |                 | 002               | <b>5SY4 225-6</b> |                  | 1               | 1 unit     | 002                        |                 |       | 0.318                       |
|                                                                                     | 32                  |                   |    | <b>5SY4 232-5</b> |                 | 002               | <b>5SY4 232-6</b> |                  | 1               | 1 unit     | 002                        |                 |       | 0.323                       |
|                                                                                     | 40                  |                   |    | <b>5SY4 240-5</b> |                 | 002               | <b>5SY4 240-6</b> |                  | 1               | 1 unit     | 002                        |                 |       | 0.323                       |
|                                                                                     | 50                  |                   |    | <b>5SY4 250-5</b> |                 | 002               | <b>5SY4 250-6</b> |                  | 1               | 1 unit     | 002                        |                 |       | 0.330                       |
|                                                                                     | 63                  |                   |    | <b>5SY4 263-5</b> |                 | 002               | <b>5SY4 263-6</b> |                  | 1               | 1 unit     | 002                        |                 |       | 0.342                       |
|                                                                                     | 80                  |                   |    | --                |                 |                   | <b>5SY4 280-6</b> |                  | 1               | 1 unit     | 002                        |                 |       | 0.328                       |

<sup>1)</sup> 1 MW (modular width) = 18 mm.





# Miniature Circuit Breakers

## 5SY and 5SP Miniature Circuit Breakers

5SY4, 10 000 A

3

| 10 000<br>3                                                                         |  | I <sub>n</sub> | Mounting width<br>MW <sup>1)</sup> | DT | Characteristic A |                 |       | Characteristic B |                 |  | PU<br>(UNIT, SET, M) | PS*/<br>P. unit | PG  | Weight<br>per PU<br>approx.<br>kg |  |  |
|-------------------------------------------------------------------------------------|--|----------------|------------------------------------|----|------------------|-----------------|-------|------------------|-----------------|--|----------------------|-----------------|-----|-----------------------------------|--|--|
|                                                                                     |  |                |                                    |    | Order No.        | Price<br>per PU | PG DT | Order No.        | Price<br>per PU |  |                      |                 |     |                                   |  |  |
| <b>MCBs 10000 A</b>                                                                 |  |                |                                    |    |                  |                 |       |                  |                 |  |                      |                 |     |                                   |  |  |
|    |  | 3P, 400 V AC   |                                    |    |                  |                 |       |                  |                 |  |                      |                 |     |                                   |  |  |
|                                                                                     |  | 0.5            | 3                                  |    | 5SY4 305-5       |                 | 002   | --               |                 |  | 1                    | 1 unit          |     | 0.495                             |  |  |
|                                                                                     |  | 1              |                                    |    | 5SY4 301-5       |                 | 002   | --               |                 |  | 1                    | 1 unit          |     | 0.482                             |  |  |
|                                                                                     |  | 1.6            |                                    |    | 5SY4 315-5       |                 | 002   | --               |                 |  | 1                    | 1 unit          |     | 0.477                             |  |  |
|                                                                                     |  | 2              |                                    |    | 5SY4 302-5       |                 | 002   | --               |                 |  | 1                    | 1 unit          |     | 0.485                             |  |  |
|                                                                                     |  | 3              |                                    |    | 5SY4 303-5       |                 | 002   | --               |                 |  | 1                    | 1 unit          |     | 0.490                             |  |  |
|                                                                                     |  | 4              |                                    |    | 5SY4 304-5       |                 | 002   | --               |                 |  | 1                    | 1 unit          |     | 0.456                             |  |  |
|                                                                                     |  | 6              |                                    |    | 5SY4 306-5       |                 | 002   | 5SY4 306-6       |                 |  | 1                    | 1 unit          | 002 | 0.467                             |  |  |
|                                                                                     |  | 8              |                                    |    | 5SY4 308-5       |                 | 002   | --               |                 |  | 1                    | 1 unit          |     | 0.478                             |  |  |
|                                                                                     |  | 10             |                                    |    | 5SY4 310-5       |                 | 002   | 5SY4 310-6       |                 |  | 1                    | 1 unit          | 002 | 0.463                             |  |  |
|                                                                                     |  | 13             |                                    |    | 5SY4 313-5       |                 | 002   | 5SY4 313-6       |                 |  | 1                    | 1 unit          | 002 | 0.469                             |  |  |
|                                                                                     |  | 16             |                                    |    | 5SY4 316-5       |                 | 002   | 5SY4 316-6       |                 |  | 1                    | 1/4 units       | 002 | 0.439                             |  |  |
|                                                                                     |  | 20             |                                    |    | 5SY4 320-5       |                 | 002   | 5SY4 320-6       |                 |  | 1                    | 1 unit          | 002 | 0.465                             |  |  |
|                                                                                     |  | 25             |                                    |    | 5SY4 325-5       |                 | 002   | 5SY4 325-6       |                 |  | 1                    | 1 unit          | 002 | 0.472                             |  |  |
|                                                                                     |  | 32             |                                    |    | 5SY4 332-5       |                 | 002   | 5SY4 332-6       |                 |  | 1                    | 1/4 units       | 002 | 0.475                             |  |  |
|                                                                                     |  | 40             |                                    |    | 5SY4 340-5       |                 | 002   | 5SY4 340-6       |                 |  | 1                    | 1 unit          | 002 | 0.478                             |  |  |
|                                                                                     |  | 50             |                                    |    | 5SY4 350-5       |                 | 002   | 5SY4 350-6       |                 |  | 1                    | 1 unit          | 002 | 0.490                             |  |  |
|                                                                                     |  | 63             |                                    |    | 5SY4 363-5       |                 | 002   | 5SY4 363-6       |                 |  | 1                    | 1 unit          | 002 | 0.499                             |  |  |
|                                                                                     |  | 80             |                                    |    | --               |                 |       | 5SY4 380-6       |                 |  | 1                    | 1 unit          | 002 | 0.481                             |  |  |
|   |  | 3P+N, 400 V AC |                                    |    |                  |                 |       |                  |                 |  |                      |                 |     |                                   |  |  |
|                                                                                     |  | 1              | 4                                  |    | 5SY4 601-5       |                 | 002   | --               |                 |  | 1                    | 1 unit          |     | 0.648                             |  |  |
|                                                                                     |  | 1.6            |                                    |    | 5SY4 615-5       |                 | 002   | --               |                 |  | 1                    | 1 unit          |     | 0.641                             |  |  |
|                                                                                     |  | 2              |                                    |    | 5SY4 602-5       |                 | 002   | --               |                 |  | 1                    | 1 unit          |     | 0.641                             |  |  |
|                                                                                     |  | 3              |                                    |    | 5SY4 603-5       |                 | 002   | --               |                 |  | 1                    | 1 unit          |     | 0.650                             |  |  |
|                                                                                     |  | 4              |                                    |    | 5SY4 604-5       |                 | 002   | --               |                 |  | 1                    | 1 unit          |     | 0.660                             |  |  |
|                                                                                     |  | 6              |                                    |    | 5SY4 606-5       |                 | 002   | 5SY4 606-6       |                 |  | 1                    | 1 unit          | 002 | 0.615                             |  |  |
|                                                                                     |  | 8              |                                    |    | 5SY4 608-5       |                 | 002   | --               |                 |  | 1                    | 1 unit          |     | 0.660                             |  |  |
|                                                                                     |  | 10             |                                    |    | 5SY4 610-5       |                 | 002   | 5SY4 610-6       |                 |  | 1                    | 1 unit          | 002 | 0.616                             |  |  |
|                                                                                     |  | 13             |                                    |    | 5SY4 613-5       |                 | 002   | 5SY4 613-6       |                 |  | 1                    | 1 unit          | 002 | 0.625                             |  |  |
|                                                                                     |  | 16             |                                    |    | 5SY4 616-5       |                 | 002   | 5SY4 616-6       |                 |  | 1                    | 1 unit          | 002 | 0.616                             |  |  |
|                                                                                     |  | 20             |                                    |    | 5SY4 620-5       |                 | 002   | 5SY4 620-6       |                 |  | 1                    | 1 unit          | 002 | 0.611                             |  |  |
|                                                                                     |  | 25             |                                    |    | 5SY4 625-5       |                 | 002   | 5SY4 625-6       |                 |  | 1                    | 1 unit          | 002 | 0.632                             |  |  |
|                                                                                     |  | 32             |                                    |    | 5SY4 632-5       |                 | 002   | 5SY4 632-6       |                 |  | 1                    | 1 unit          | 002 | 0.636                             |  |  |
|                                                                                     |  | 40             |                                    |    | 5SY4 640-5       |                 | 002   | 5SY4 640-6       |                 |  | 1                    | 1 unit          | 002 | 0.608                             |  |  |
|                                                                                     |  | 50             |                                    |    | 5SY4 650-5       |                 | 002   | 5SY4 650-6       |                 |  | 1                    | 1 unit          | 002 | 0.631                             |  |  |
|                                                                                     |  | 63             |                                    |    | 5SY4 663-5       |                 | 002   | 5SY4 663-6       |                 |  | 1                    | 1 unit          | 002 | 0.665                             |  |  |
|  |  | 4P, 400 V AC   |                                    |    |                  |                 |       |                  |                 |  |                      |                 |     |                                   |  |  |
|                                                                                     |  | 1              | 4                                  |    | 5SY4 401-5       |                 | 002   | --               |                 |  | 1                    | 1 unit          |     | 0.649                             |  |  |
|                                                                                     |  | 1.6            |                                    |    | 5SY4 415-5       |                 | 002   | --               |                 |  | 1                    | 1 unit          |     | 0.649                             |  |  |
|                                                                                     |  | 2              |                                    |    | 5SY4 402-5       |                 | 002   | --               |                 |  | 1                    | 1 unit          |     | 0.642                             |  |  |
|                                                                                     |  | 3              |                                    |    | 5SY4 403-5       |                 | 002   | --               |                 |  | 1                    | 1 unit          |     | 0.660                             |  |  |
|                                                                                     |  | 4              |                                    |    | 5SY4 404-5       |                 | 002   | --               |                 |  | 1                    | 1 unit          |     | 0.642                             |  |  |
|                                                                                     |  | 6              |                                    |    | 5SY4 406-5       |                 | 002   | 5SY4 406-6       |                 |  | 1                    | 1 unit          | 002 | 0.621                             |  |  |
|                                                                                     |  | 8              |                                    |    | 5SY4 408-5       |                 | 002   | --               |                 |  | 1                    | 1 unit          |     | 0.601                             |  |  |
|                                                                                     |  | 10             |                                    |    | 5SY4 410-5       |                 | 002   | 5SY4 410-6       |                 |  | 1                    | 1 unit          | 002 | 0.609                             |  |  |
|                                                                                     |  | 13             |                                    |    | 5SY4 413-5       |                 | 002   | 5SY4 413-6       |                 |  | 1                    | 1 unit          | 002 | 0.650                             |  |  |
|                                                                                     |  | 16             |                                    |    | 5SY4 416-5       |                 | 002   | 5SY4 416-6       |                 |  | 1                    | 1 unit          | 002 | 0.612                             |  |  |
|                                                                                     |  | 20             |                                    |    | 5SY4 420-5       |                 | 002   | 5SY4 420-6       |                 |  | 1                    | 1 unit          | 002 | 0.619                             |  |  |
|                                                                                     |  | 25             |                                    |    | 5SY4 425-5       |                 | 002   | 5SY4 425-6       |                 |  | 1                    | 1 unit          | 002 | 0.617                             |  |  |
|                                                                                     |  | 32             |                                    |    | 5SY4 432-5       |                 | 002   | 5SY4 432-6       |                 |  | 1                    | 1 unit          | 002 | 0.636                             |  |  |
|                                                                                     |  | 40             |                                    |    | 5SY4 440-5       |                 | 002   | 5SY4 440-6       |                 |  | 1                    | 1 unit          | 002 | 0.634                             |  |  |
|                                                                                     |  | 50             |                                    |    | 5SY4 450-5       |                 | 002   | 5SY4 450-6       |                 |  | 1                    | 1 unit          | 002 | 0.645                             |  |  |
|                                                                                     |  | 63             |                                    |    | 5SY4 463-5       |                 | 002   | 5SY4 463-6       |                 |  | 1                    | 1 unit          | 002 | 0.669                             |  |  |
|                                                                                     |  | 80             |                                    |    | --               |                 |       | 5SY4 480-6       |                 |  | 1                    | 1 unit          | 002 | 0.651                             |  |  |

1) 1 MW (modular width) = 18 mm.



# Miniature Circuit Breakers

## 5SY and 5SP Miniature Circuit Breakers

**5SY4, 10 000 A**
**3**

| 10 000                                                                              |                     | I <sub>n</sub> | Mounting width   | DT         | Characteristic C |              |     | PG  | DT         | Characteristic D |              |   | PU (UNIT, SET, M) | PS*/ P. unit | PG    | Weight per PU approx. |
|-------------------------------------------------------------------------------------|---------------------|----------------|------------------|------------|------------------|--------------|-----|-----|------------|------------------|--------------|---|-------------------|--------------|-------|-----------------------|
| 3                                                                                   |                     |                |                  |            | Order No.        | Price per PU |     |     |            | Order No.        | Price per PU |   |                   |              |       |                       |
|                                                                                     |                     | A              | MW <sup>1)</sup> |            |                  |              |     |     |            |                  |              |   |                   |              |       | kg                    |
|    | <b>MCBs 10000 A</b> |                |                  |            |                  |              |     |     |            |                  |              |   |                   |              |       |                       |
|                                                                                     | 1P, 230/400 V AC    |                |                  |            |                  |              |     |     |            |                  |              |   |                   |              |       |                       |
|                                                                                     |                     | 0.3            | 1                |            | 5SY4 114-7       |              |     | 002 |            | 5SY4 114-8       |              |   | 1                 | 1 unit       | 002   | 0.167                 |
|                                                                                     |                     | 0.5            |                  |            | 5SY4 105-7       |              |     | 002 |            | 5SY4 105-8       |              |   | 1                 | 1 unit       | 002   | 0.166                 |
|                                                                                     |                     | 1              |                  |            | 5SY4 101-7       |              |     | 002 |            | 5SY4 101-8       |              |   | 1                 | 1 unit       | 002   | 0.165                 |
|                                                                                     |                     | 1.6            |                  |            | 5SY4 115-7       |              |     | 002 |            | 5SY4 115-8       |              |   | 1                 | 1 unit       | 002   | 0.163                 |
|                                                                                     |                     | 2              |                  | ▶          | 5SY4 102-7       |              |     | 002 |            | 5SY4 102-8       |              |   | 1                 | 1/12 units   | 002   | 0.155                 |
|                                                                                     |                     | 3              |                  |            | 5SY4 103-7       |              |     | 002 |            | 5SY4 103-8       |              |   | 1                 | 1 unit       | 002   | 0.160                 |
|                                                                                     |                     | 4              |                  | ▶          | 5SY4 104-7       |              |     | 002 |            | 5SY4 104-8       |              |   | 1                 | 1/12 units   | 002   | 0.158                 |
|                                                                                     |                     | 5              |                  |            | 5SY4 111-7       |              |     | 002 |            | --               |              |   | 1                 | 1 unit       |       | 0.149                 |
|                                                                                     |                     | 6              |                  | ▶          | 5SY4 106-7       |              |     | 002 |            | 5SY4 106-8       |              |   | 1                 | 1 unit       | 002   | 0.159                 |
|                                                                                     |                     | 8              |                  |            | 5SY4 108-7       |              |     | 002 |            | 5SY4 108-8       |              |   | 1                 | 1 unit       | 002   | 0.156                 |
|                                                                                     |                     | 10             |                  | ▶          | 5SY4 110-7       |              |     | 002 |            | 5SY4 110-8       |              |   | 1                 | 1/12 units   | 002   | 0.155                 |
|                                                                                     |                     | 13             |                  |            | 5SY4 113-7       |              |     | 002 |            | 5SY4 113-8       |              |   | 1                 | 1 unit       | 002   | 0.156                 |
|                                                                                     |                     | 15             |                  |            | 5SY4 118-7       |              |     | 002 |            | --               |              |   | 1                 | 1 unit       |       | 0.151                 |
|                                                                                     |                     | 16             |                  | ▶          | 5SY4 116-7       |              |     | 002 |            | 5SY4 116-8       |              |   | 1                 | 1 unit       | 002   | 0.156                 |
|                                                                                     |                     | 20             |                  |            | 5SY4 120-7       |              |     | 002 |            | 5SY4 120-8       |              |   | 1                 | 1 unit       | 002   | 0.162                 |
|                                                                                     |                     | 25             |                  |            | 5SY4 125-7       |              |     | 002 |            | 5SY4 125-8       |              |   | 1                 | 1 unit       | 002   | 0.161                 |
|                                                                                     |                     | 30             |                  |            | 5SY4 130-7       |              |     | 002 |            | --               |              |   | 1                 | 1 unit       |       | 0.148                 |
|                                                                                     |                     | 32             |                  |            | 5SY4 132-7       |              |     | 002 |            | 5SY4 132-8       |              |   | 1                 | 1 unit       | 002   | 0.165                 |
|                                                                                     |                     | 35             |                  |            | 5SY4 135-7       |              |     | 002 |            | --               |              |   | 1                 | 1 unit       |       | 0.180                 |
|                                                                                     | 40                  |                |                  | 5SY4 140-7 |                  |              | 002 |     | 5SY4 140-8 |                  |              | 1 | 1 unit            | 002          | 0.166 |                       |
|                                                                                     | 45                  |                |                  | 5SY4 145-7 |                  |              | 002 |     | --         |                  |              | 1 | 1 unit            |              | 0.160 |                       |
|                                                                                     | 50                  |                |                  | 5SY4 150-7 |                  |              | 002 |     | 5SY4 150-8 |                  |              | 1 | 1 unit            | 002          | 0.164 |                       |
|                                                                                     | 60                  |                |                  | 5SY4 160-7 |                  |              | 002 |     | --         |                  |              | 1 | 1 unit            |              | 0.160 |                       |
|                                                                                     | 63                  |                |                  | 5SY4 163-7 |                  |              | 002 |     | 5SY4 163-8 |                  |              | 1 | 1 unit            | 002          | 0.166 |                       |
|                                                                                     | 80                  |                |                  | 5SY4 180-7 |                  |              | 002 |     | --         |                  |              | 1 | 1 unit            |              | 0.160 |                       |
|   | 1P+N, 230 V AC      |                |                  |            |                  |              |     |     |            |                  |              |   |                   |              |       |                       |
|                                                                                     |                     | 0.3            | 2                |            | 5SY4 514-7       |              |     | 002 |            | 5SY4 514-8       |              |   | 1                 | 1 unit       | 002   | 0.323                 |
|                                                                                     |                     | 0.5            |                  |            | 5SY4 505-7       |              |     | 002 |            | 5SY4 505-8       |              |   | 1                 | 1 unit       | 002   | 0.316                 |
|                                                                                     |                     | 1              |                  |            | 5SY4 501-7       |              |     | 002 |            | 5SY4 501-8       |              |   | 1                 | 1 unit       | 002   | 0.303                 |
|                                                                                     |                     | 1.6            |                  |            | 5SY4 515-7       |              |     | 002 |            | 5SY4 515-8       |              |   | 1                 | 1 unit       | 002   | 0.319                 |
|                                                                                     |                     | 2              |                  |            | 5SY4 502-7       |              |     | 002 |            | 5SY4 502-8       |              |   | 1                 | 1 unit       | 002   | 0.320                 |
|                                                                                     |                     | 3              |                  |            | 5SY4 503-7       |              |     | 002 |            | 5SY4 503-8       |              |   | 1                 | 1 unit       | 002   | 0.314                 |
|                                                                                     |                     | 4              |                  |            | 5SY4 504-7       |              |     | 002 |            | 5SY4 504-8       |              |   | 1                 | 1 unit       | 002   | 0.310                 |
|                                                                                     |                     | 6              |                  |            | 5SY4 506-7       |              |     | 002 |            | 5SY4 506-8       |              |   | 1                 | 1 unit       | 002   | 0.311                 |
|                                                                                     |                     | 8              |                  |            | 5SY4 508-7       |              |     | 002 |            | 5SY4 508-8       |              |   | 1                 | 1 unit       | 002   | 0.305                 |
|                                                                                     |                     | 10             |                  |            | 5SY4 510-7       |              |     | 002 |            | 5SY4 510-8       |              |   | 1                 | 1 unit       | 002   | 0.305                 |
|                                                                                     |                     | 13             |                  |            | 5SY4 513-7       |              |     | 002 |            | 5SY4 513-8       |              |   | 1                 | 1 unit       | 002   | 0.304                 |
|                                                                                     |                     | 16             |                  |            | 5SY4 516-7       |              |     | 002 |            | 5SY4 516-8       |              |   | 1                 | 1 unit       | 002   | 0.306                 |
|                                                                                     |                     | 20             |                  |            | 5SY4 520-7       |              |     | 002 |            | 5SY4 520-8       |              |   | 1                 | 1 unit       | 002   | 0.309                 |
|                                                                                     |                     | 25             |                  |            | 5SY4 525-7       |              |     | 002 |            | 5SY4 525-8       |              |   | 1                 | 1 unit       | 002   | 0.309                 |
|                                                                                     |                     | 32             |                  |            | 5SY4 532-7       |              |     | 002 |            | 5SY4 532-8       |              |   | 1                 | 1 unit       | 002   | 0.320                 |
|                                                                                     | 40                  |                |                  | 5SY4 540-7 |                  |              | 002 |     | 5SY4 540-8 |                  |              | 1 | 1 unit            | 002          | 0.312 |                       |
|                                                                                     | 50                  |                |                  | 5SY4 550-7 |                  |              | 002 |     | 5SY4 550-8 |                  |              | 1 | 1 unit            | 002          | 0.322 |                       |
|                                                                                     | 63                  |                |                  | 5SY4 563-7 |                  |              | 002 |     | 5SY4 563-8 |                  |              | 1 | 1 unit            | 002          | 0.332 |                       |
|                                                                                     | 80                  |                |                  | 5SY4 580-7 |                  |              | 002 |     | --         |                  |              | 1 | 1 unit            |              | 0.321 |                       |
|  | 2P, 400 V AC        |                |                  |            |                  |              |     |     |            |                  |              |   |                   |              |       |                       |
|                                                                                     |                     | 0.3            | 2                |            | 5SY4 214-7       |              |     | 002 |            | 5SY4 214-8       |              |   | 1                 | 1 unit       | 002   | 0.325                 |
|                                                                                     |                     | 0.5            |                  |            | 5SY4 205-7       |              |     | 002 |            | 5SY4 205-8       |              |   | 1                 | 1 unit       | 002   | 0.325                 |
|                                                                                     |                     | 1              |                  |            | 5SY4 201-7       |              |     | 002 |            | 5SY4 201-8       |              |   | 1                 | 1 unit       | 002   | 0.320                 |
|                                                                                     |                     | 1.6            |                  |            | 5SY4 215-7       |              |     | 002 |            | 5SY4 215-8       |              |   | 1                 | 1 unit       | 002   | 0.319                 |
|                                                                                     |                     | 2              |                  | ▶          | 5SY4 202-7       |              |     | 002 |            | 5SY4 202-8       |              |   | 1                 | 1 unit       | 002   | 0.318                 |
|                                                                                     |                     | 3              |                  |            | 5SY4 203-7       |              |     | 002 |            | 5SY4 203-8       |              |   | 1                 | 1 unit       | 002   | 0.313                 |
|                                                                                     |                     | 4              |                  |            | 5SY4 204-7       |              |     | 002 |            | 5SY4 204-8       |              |   | 1                 | 1 unit       | 002   | 0.309                 |
|                                                                                     |                     | 5              |                  |            | 5SY4 211-7       |              |     | 002 |            | --               |              |   | 1                 | 1 unit       |       | 0.297                 |
|                                                                                     |                     | 6              |                  | ▶          | 5SY4 206-7       |              |     | 002 |            | 5SY4 206-8       |              |   | 1                 | 1 unit       | 002   | 0.312                 |
|                                                                                     |                     | 8              |                  |            | 5SY4 208-7       |              |     | 002 |            | 5SY4 208-8       |              |   | 1                 | 1 unit       | 002   | 0.305                 |
|                                                                                     |                     | 10             |                  | ▶          | 5SY4 210-7       |              |     | 002 |            | 5SY4 210-8       |              |   | 1                 | 1 unit       | 002   | 0.303                 |
|                                                                                     |                     | 13             |                  |            | 5SY4 213-7       |              |     | 002 |            | 5SY4 213-8       |              |   | 1                 | 1 unit       | 002   | 0.304                 |
|                                                                                     |                     | 15             |                  |            | 5SY4 218-7       |              |     | 002 |            | --               |              |   | 1                 | 1 unit       |       | 0.294                 |
|                                                                                     |                     | 16             |                  | ▶          | 5SY4 216-7       |              |     | 002 |            | 5SY4 216-8       |              |   | 1                 | 1 unit       | 002   | 0.305                 |
|                                                                                     |                     | 20             |                  |            | 5SY4 220-7       |              |     | 002 |            | 5SY4 220-8       |              |   | 1                 | 1 unit       | 002   | 0.317                 |
|                                                                                     |                     | 25             |                  |            | 5SY4 225-7       |              |     | 002 |            | 5SY4 225-8       |              |   | 1                 | 1 unit       | 002   | 0.318                 |
|                                                                                     |                     | 30             |                  |            | 5SY4 230-7       |              |     | 002 |            | --               |              |   | 1                 | 1 unit       |       | 0.300                 |
|                                                                                     |                     | 32             |                  |            | 5SY4 232-7       |              |     | 002 |            | 5SY4 232-8       |              |   | 1                 | 1 unit       | 002   | 0.324                 |
|                                                                                     |                     | 35             |                  |            | 5SY4 235-7       |              |     | 002 |            | --               |              |   | 1                 | 1 unit       |       | 0.298                 |
|                                                                                     |                     | 40             |                  |            | 5SY4 240-7       |              |     | 002 |            | 5SY4 240-8       |              |   | 1                 | 1 unit       | 002   | 0.326                 |
|                                                                                     |                     | 45             |                  |            | 5SY4 245-7       |              |     | 002 |            | --               |              |   | 1                 | 1 unit       |       | 0.312                 |
|                                                                                     |                     | 50             |                  |            | 5SY4 250-7       |              |     | 002 |            | 5SY4 250-8       |              |   | 1                 | 1 unit       | 002   | 0.324                 |
|                                                                                     |                     | 60             |                  |            | 5SY4 260-7       |              |     | 002 |            | --               |              |   | 1                 | 1 unit       |       | 0.322                 |
|                                                                                     | 63                  |                |                  | 5SY4 263-7 |                  |              | 002 |     | 5SY4 263-8 |                  |              | 1 | 1 unit            | 002          | 0.325 |                       |
|                                                                                     | 80                  |                |                  | 5SY4 280-7 |                  |              | 002 |     | --         |                  |              | 1 | 1/6 units         |              | 0.313 |                       |





# Miniature Circuit Breakers

## 5SY and 5SP Miniature Circuit Breakers

5SY4, 10 000 A

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| 10 000                                                                              |                | $I_n$ | Mounting width   | DT         | Characteristic C |              |     | PG | DT         | Characteristic D |              |        | PU (UNIT, SET, M) | PS*/ P. unit | PG    | Weight per PU approx. |
|-------------------------------------------------------------------------------------|----------------|-------|------------------|------------|------------------|--------------|-----|----|------------|------------------|--------------|--------|-------------------|--------------|-------|-----------------------|
| 3                                                                                   |                |       |                  |            | Order No.        | Price per PU |     |    |            | Order No.        | Price per PU |        |                   |              |       |                       |
|                                                                                     |                | A     | MW <sup>1)</sup> |            |                  |              |     |    |            |                  |              |        |                   |              |       | kg                    |
| <b>MCBs 10000 A</b>                                                                 |                |       |                  |            |                  |              |     |    |            |                  |              |        |                   |              |       |                       |
|    | 3P, 400 V AC   |       |                  |            |                  |              |     |    |            |                  |              |        |                   |              |       |                       |
|                                                                                     | 0.3            | 3     |                  | 5SY4 314-7 |                  |              | 002 |    | 5SY4 314-8 |                  |              | 1      | 1 unit            | 002          | 0.481 |                       |
|                                                                                     | 0.5            |       |                  | 5SY4 305-7 |                  |              | 002 |    | 5SY4 305-8 |                  |              | 1      | 1 unit            | 002          | 0.474 |                       |
|                                                                                     | 1              |       |                  | 5SY4 301-7 |                  |              | 002 |    | 5SY4 301-8 |                  |              | 1      | 1 unit            | 002          | 0.478 |                       |
|                                                                                     | 1.6            |       |                  | 5SY4 315-7 |                  |              | 002 |    | 5SY4 315-8 |                  |              | 1      | 1 unit            | 002          | 0.474 |                       |
|                                                                                     | 2              |       |                  | 5SY4 302-7 |                  |              | 002 |    | 5SY4 302-8 |                  |              | 1      | 1 unit            | 002          | 0.476 |                       |
|                                                                                     | 3              |       |                  | 5SY4 303-7 |                  |              | 002 |    | 5SY4 303-8 |                  |              | 1      | 1 unit            | 002          | 0.466 |                       |
|                                                                                     | 4              |       |                  | 5SY4 304-7 |                  |              | 002 |    | 5SY4 304-8 |                  |              | 1      | 1 unit            | 002          | 0.460 |                       |
|                                                                                     | 5              |       |                  | 5SY4 311-7 |                  |              | 002 |    | --         |                  |              | 1      | 1 unit            |              | 0.455 |                       |
|                                                                                     | 6              |       |                  | 5SY4 306-7 |                  |              | 002 |    | 5SY4 306-8 |                  |              | 1      | 1 unit            | 002          | 0.461 |                       |
|                                                                                     | 8              |       |                  | 5SY4 308-7 |                  |              | 002 |    | 5SY4 308-8 |                  |              | 1      | 1 unit            | 002          | 0.451 |                       |
|                                                                                     | 10             |       | ▶                | 5SY4 310-7 |                  |              | 002 |    | 5SY4 310-8 |                  |              | 1      | 1 unit            | 002          | 0.447 |                       |
|                                                                                     | 13             |       |                  | 5SY4 313-7 |                  |              | 002 |    | 5SY4 313-8 |                  |              | 1      | 1 unit            | 002          | 0.455 |                       |
|                                                                                     | 15             |       |                  | 5SY4 318-7 |                  |              | 002 |    | --         |                  |              | 1      | 1 unit            |              | 0.461 |                       |
|                                                                                     | 16             |       | ▶                | 5SY4 316-7 |                  |              | 002 |    | 5SY4 316-8 |                  |              | 1      | 1/4 units         | 002          | 0.431 |                       |
|                                                                                     | 20             |       |                  | 5SY4 320-7 |                  |              | 002 |    | 5SY4 320-8 |                  |              | 1      | 1 unit            | 002          | 0.472 |                       |
|                                                                                     | 25             |       |                  | 5SY4 325-7 |                  |              | 002 |    | 5SY4 325-8 |                  |              | 1      | 1 unit            | 002          | 0.470 |                       |
|                                                                                     | 30             |       |                  | 5SY4 330-7 |                  |              | 002 |    | --         |                  |              | 1      | 1 unit            |              | 0.451 |                       |
|                                                                                     | 32             |       | ▶                | 5SY4 332-7 |                  |              | 002 |    | 5SY4 332-8 |                  |              | 1      | 1 unit            | 002          | 0.481 |                       |
|                                                                                     | 35             |       |                  | 5SY4 335-7 |                  |              | 002 |    | --         |                  |              | 1      | 1 unit            |              | 0.450 |                       |
|                                                                                     | 40             |       |                  | 5SY4 340-7 |                  |              | 002 |    | 5SY4 340-8 |                  |              | 1      | 1 unit            | 002          | 0.481 |                       |
|                                                                                     | 45             |       |                  | 5SY4 345-7 |                  |              | 002 |    | --         |                  |              | 1      | 1 unit            |              | 0.469 |                       |
|                                                                                     | 50             |       |                  | 5SY4 350-7 |                  |              | 002 |    | 5SY4 350-8 |                  |              | 1      | 1 unit            | 002          | 0.482 |                       |
|                                                                                     | 60             |       |                  | 5SY4 360-7 |                  |              | 002 |    | --         |                  |              | 1      | 1 unit            |              | 0.490 |                       |
|                                                                                     | 63             |       |                  | 5SY4 363-7 |                  |              | 002 |    | 5SY4 363-8 |                  |              | 1      | 1 unit            | 002          | 0.486 |                       |
| 80                                                                                  |                |       | 5SY4 380-7       |            |                  | 002          |     | -- |            |                  | 1            | 1 unit |                   | 0.480        |       |                       |
|  | 3P+N, 400 V AC |       |                  |            |                  |              |     |    |            |                  |              |        |                   |              |       |                       |
|                                                                                     | 0.3            | 4     |                  | 5SY4 614-7 |                  |              | 002 |    | 5SY4 614-8 |                  |              | 1      | 1 unit            | 002          | 0.660 |                       |
|                                                                                     | 0.5            |       |                  | 5SY4 605-7 |                  |              | 002 |    | 5SY4 605-8 |                  |              | 1      | 1 unit            | 002          | 0.660 |                       |
|                                                                                     | 1              |       |                  | 5SY4 601-7 |                  |              | 002 |    | 5SY4 601-8 |                  |              | 1      | 1 unit            | 002          | 0.636 |                       |
|                                                                                     | 1.6            |       |                  | 5SY4 615-7 |                  |              | 002 |    | 5SY4 615-8 |                  |              | 1      | 1 unit            | 002          | 0.621 |                       |
|                                                                                     | 2              |       |                  | 5SY4 602-7 |                  |              | 002 |    | 5SY4 602-8 |                  |              | 1      | 1 unit            | 002          | 0.608 |                       |
|                                                                                     | 3              |       |                  | 5SY4 603-7 |                  |              | 002 |    | 5SY4 603-8 |                  |              | 1      | 1 unit            | 002          | 0.660 |                       |
|                                                                                     | 4              |       |                  | 5SY4 604-7 |                  |              | 002 |    | 5SY4 604-8 |                  |              | 1      | 1 unit            | 002          | 0.587 |                       |
|                                                                                     | 6              |       |                  | 5SY4 606-7 |                  |              | 002 |    | 5SY4 606-8 |                  |              | 1      | 1 unit            | 002          | 0.615 |                       |
|                                                                                     | 8              |       |                  | 5SY4 608-7 |                  |              | 002 |    | 5SY4 608-8 |                  |              | 1      | 1 unit            | 002          | 0.595 |                       |
|                                                                                     | 10             |       |                  | 5SY4 610-7 |                  |              | 002 |    | 5SY4 610-8 |                  |              | 1      | 1 unit            | 002          | 0.597 |                       |
|                                                                                     | 13             |       |                  | 5SY4 613-7 |                  |              | 002 |    | 5SY4 613-8 |                  |              | 1      | 1 unit            | 002          | 0.594 |                       |
|                                                                                     | 16             |       |                  | 5SY4 616-7 |                  |              | 002 |    | 5SY4 616-8 |                  |              | 1      | 1 unit            | 002          | 0.602 |                       |
|                                                                                     | 20             |       |                  | 5SY4 620-7 |                  |              | 002 |    | 5SY4 620-8 |                  |              | 1      | 1 unit            | 002          | 0.627 |                       |
|                                                                                     | 25             |       |                  | 5SY4 625-7 |                  |              | 002 |    | 5SY4 625-8 |                  |              | 1      | 1 unit            | 002          | 0.625 |                       |
|                                                                                     | 32             |       |                  | 5SY4 632-7 |                  |              | 002 |    | 5SY4 632-8 |                  |              | 1      | 1 unit            | 002          | 0.631 |                       |
|                                                                                     | 40             |       |                  | 5SY4 640-7 |                  |              | 002 |    | 5SY4 640-8 |                  |              | 1      | 1 unit            | 002          | 0.633 |                       |
|                                                                                     | 50             |       |                  | 5SY4 650-7 |                  |              | 002 |    | 5SY4 650-8 |                  |              | 1      | 1 unit            | 002          | 0.641 |                       |
|                                                                                     | 63             |       |                  | 5SY4 663-7 |                  |              | 002 |    | 5SY4 663-8 |                  |              | 1      | 1 unit            | 002          | 0.639 |                       |
| 80                                                                                  |                |       | 5SY4 680-7       |            |                  | 002          |     | -- |            |                  | 1            | 1 unit |                   | 0.640        |       |                       |
|  | 4P, 400 V AC   |       |                  |            |                  |              |     |    |            |                  |              |        |                   |              |       |                       |
|                                                                                     | 0.3            | 4     |                  | 5SY4 414-7 |                  |              | 002 |    | 5SY4 414-8 |                  |              | 1      | 1 unit            | 002          | 0.639 |                       |
|                                                                                     | 0.5            |       |                  | 5SY4 405-7 |                  |              | 002 |    | 5SY4 405-8 |                  |              | 1      | 1 unit            | 002          | 0.633 |                       |
|                                                                                     | 1              |       |                  | 5SY4 401-7 |                  |              | 002 |    | 5SY4 401-8 |                  |              | 1      | 1 unit            | 002          | 0.636 |                       |
|                                                                                     | 1.6            |       |                  | 5SY4 415-7 |                  |              | 002 |    | 5SY4 415-8 |                  |              | 1      | 1 unit            | 002          | 0.623 |                       |
|                                                                                     | 2              |       |                  | 5SY4 402-7 |                  |              | 002 |    | 5SY4 402-8 |                  |              | 1      | 1 unit            | 002          | 0.630 |                       |
|                                                                                     | 3              |       |                  | 5SY4 403-7 |                  |              | 002 |    | 5SY4 403-8 |                  |              | 1      | 1 unit            | 002          | 0.660 |                       |
|                                                                                     | 4              |       |                  | 5SY4 404-7 |                  |              | 002 |    | 5SY4 404-8 |                  |              | 1      | 1 unit            | 002          | 0.610 |                       |
|                                                                                     | 6              |       |                  | 5SY4 406-7 |                  |              | 002 |    | 5SY4 406-8 |                  |              | 1      | 1 unit            | 002          | 0.610 |                       |
|                                                                                     | 8              |       |                  | 5SY4 408-7 |                  |              | 002 |    | 5SY4 408-8 |                  |              | 1      | 1 unit            | 002          | 0.571 |                       |
|                                                                                     | 10             |       |                  | 5SY4 410-7 |                  |              | 002 |    | 5SY4 410-8 |                  |              | 1      | 1 unit            | 002          | 0.597 |                       |
|                                                                                     | 13             |       |                  | 5SY4 413-7 |                  |              | 002 |    | 5SY4 413-8 |                  |              | 1      | 1 unit            | 002          | 0.571 |                       |
|                                                                                     | 16             |       |                  | 5SY4 416-7 |                  |              | 002 |    | 5SY4 416-8 |                  |              | 1      | 1 unit            | 002          | 0.600 |                       |
|                                                                                     | 20             |       |                  | 5SY4 420-7 |                  |              | 002 |    | 5SY4 420-8 |                  |              | 1      | 1 unit            | 002          | 0.626 |                       |
|                                                                                     | 25             |       |                  | 5SY4 425-7 |                  |              | 002 |    | 5SY4 425-8 |                  |              | 1      | 1 unit            | 002          | 0.617 |                       |
|                                                                                     | 32             |       |                  | 5SY4 432-7 |                  |              | 002 |    | 5SY4 432-8 |                  |              | 1      | 1 unit            | 002          | 0.640 |                       |
|                                                                                     | 40             |       |                  | 5SY4 440-7 |                  |              | 002 |    | 5SY4 440-8 |                  |              | 1      | 1 unit            | 002          | 0.638 |                       |
|                                                                                     | 50             |       |                  | 5SY4 450-7 |                  |              | 002 |    | 5SY4 450-8 |                  |              | 1      | 1 unit            | 002          | 0.636 |                       |
|                                                                                     | 63             |       |                  | 5SY4 463-7 |                  |              | 002 |    | 5SY4 463-8 |                  |              | 1      | 1 unit            | 002          | 0.644 |                       |
| 80                                                                                  |                |       | 5SY4 480-7       |            |                  | 002          |     | -- |            |                  | 1            | 1 unit |                   | 0.640        |       |                       |

1) 1 MW (modular width) = 18 mm.



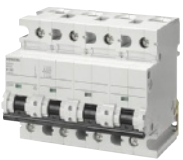
# Miniature Circuit Breakers

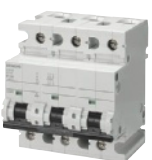
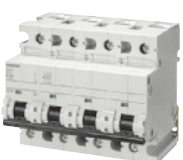
## 5SY and 5SP Miniature Circuit Breakers

### 5SP4, high-current, 10 000 A

3

#### Selection and ordering data

| 10 000                                                                                                                                                                                                                                                                                                                                            | $I_n$                             | Mounting width   | DT | Characteristic B  | Price per PU | PU (UNIT, SET, M) | PS*/P. unit | PG  | Weight per PU approx. kg |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|------------------|----|-------------------|--------------|-------------------|-------------|-----|--------------------------|
|                                                                                                                                                                                                                                                                                                                                                   | A                                 | MW <sup>1)</sup> |    | Order No.         |              |                   |             |     |                          |
| <br><br><br> | <b>MCBs 10000 A, high current</b> |                  |    |                   |              |                   |             |     |                          |
|                                                                                                                                                                                                                                                                                                                                                   | 1P, 230/400 V AC                  |                  |    |                   |              |                   |             |     |                          |
|                                                                                                                                                                                                                                                                                                                                                   | 80                                | 1.5              |    | <b>5SP4 180-6</b> |              | 1                 | 1 unit      | 002 | 0.263                    |
|                                                                                                                                                                                                                                                                                                                                                   | 100                               |                  |    | <b>5SP4 191-6</b> |              | 1                 | 1 unit      | 002 | 0.265                    |
|                                                                                                                                                                                                                                                                                                                                                   | 125                               |                  |    | <b>5SP4 192-6</b> |              | 1                 | 1 unit      | 002 | 0.269                    |
|                                                                                                                                                                                                                                                                                                                                                   | 2P, 400 V AC                      |                  |    |                   |              |                   |             |     |                          |
|                                                                                                                                                                                                                                                                                                                                                   | 80                                | 3                |    | <b>5SP4 280-6</b> |              | 1                 | 1 unit      | 002 | 0.532                    |
|                                                                                                                                                                                                                                                                                                                                                   | 100                               |                  |    | <b>5SP4 291-6</b> |              | 1                 | 1 unit      | 002 | 0.527                    |
|                                                                                                                                                                                                                                                                                                                                                   | 125                               |                  |    | <b>5SP4 292-6</b> |              | 1                 | 1 unit      | 002 | 0.534                    |
|                                                                                                                                                                                                                                                                                                                                                   | 3P, 400 V AC                      |                  |    |                   |              |                   |             |     |                          |
|                                                                                                                                                                                                                                                                                                                                                   | 80                                | 4.5              |    | <b>5SP4 380-6</b> |              | 1                 | 1 unit      | 002 | 0.800                    |
|                                                                                                                                                                                                                                                                                                                                                   | 100                               |                  |    | <b>5SP4 391-6</b> |              | 1                 | 1 unit      | 002 | 0.787                    |
|                                                                                                                                                                                                                                                                                                                                                   | 125                               |                  |    | <b>5SP4 392-6</b> |              | 1                 | 1 unit      | 002 | 0.793                    |
|                                                                                                                                                                                                                                                                                                                                                   | 4P, 400 V AC                      |                  |    |                   |              |                   |             |     |                          |
|                                                                                                                                                                                                                                                                                                                                                   | 80                                | 6                |    | <b>5SP4 480-6</b> |              | 1                 | 1 unit      | 002 | 1.046                    |
|                                                                                                                                                                                                                                                                                                                                                   | 100                               |                  |    | <b>5SP4 491-6</b> |              | 1                 | 1 unit      | 002 | 1.038                    |
|                                                                                                                                                                                                                                                                                                                                                   | 125                               |                  |    | <b>5SP4 492-6</b> |              | 1                 | 1 unit      | 002 | 1.062                    |

| 10 000                                                                                                                                                                                                                                                                                                                                                   | $I_n$                             | Mounting width   | DT | Characteristic C  | Price per PU | PG  | DT | Characteristic D  | Price per PU | PU (UNIT, SET, M) | PS*/P. unit | PG  | Weight per PU approx. kg |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|------------------|----|-------------------|--------------|-----|----|-------------------|--------------|-------------------|-------------|-----|--------------------------|
|                                                                                                                                                                                                                                                                                                                                                          | A                                 | MW <sup>1)</sup> |    | Order No.         |              |     |    | Order No.         |              |                   |             |     |                          |
| <br><br><br> | <b>MCBs 10000 A, high current</b> |                  |    |                   |              |     |    |                   |              |                   |             |     |                          |
|                                                                                                                                                                                                                                                                                                                                                          | 1P, 230/400 V AC                  |                  |    |                   |              |     |    |                   |              |                   |             |     |                          |
|                                                                                                                                                                                                                                                                                                                                                          | 80                                | 1.5              |    | <b>5SP4 180-7</b> |              | 002 |    | <b>5SP4 180-8</b> |              | 1                 | 1 unit      | 002 | 0.257                    |
|                                                                                                                                                                                                                                                                                                                                                          | 100                               |                  |    | <b>5SP4 191-7</b> |              | 002 |    | <b>5SP4 191-8</b> |              | 1                 | 1 unit      | 002 | 0.254                    |
|                                                                                                                                                                                                                                                                                                                                                          | 125                               |                  |    | <b>5SP4 192-7</b> |              | 002 |    | --                |              | 1                 | 1 unit      |     | 0.248                    |
|                                                                                                                                                                                                                                                                                                                                                          | 2P, 400 V AC                      |                  |    |                   |              |     |    |                   |              |                   |             |     |                          |
|                                                                                                                                                                                                                                                                                                                                                          | 80                                | 3                |    | <b>5SP4 280-7</b> |              | 002 |    | <b>5SP4 280-8</b> |              | 1                 | 1 unit      | 002 | 0.505                    |
|                                                                                                                                                                                                                                                                                                                                                          | 100                               |                  |    | <b>5SP4 291-7</b> |              | 002 |    | <b>5SP4 291-8</b> |              | 1                 | 1 unit      | 002 | 0.515                    |
|                                                                                                                                                                                                                                                                                                                                                          | 125                               |                  |    | <b>5SP4 292-7</b> |              | 002 |    | --                |              | 1                 | 1 unit      |     | 0.521                    |
|                                                                                                                                                                                                                                                                                                                                                          | 3P, 400 V AC                      |                  |    |                   |              |     |    |                   |              |                   |             |     |                          |
|                                                                                                                                                                                                                                                                                                                                                          | 80                                | 4.5              | ▶  | <b>5SP4 380-7</b> |              | 002 |    | <b>5SP4 380-8</b> |              | 1                 | 1 unit      | 002 | 0.762                    |
|                                                                                                                                                                                                                                                                                                                                                          | 100                               |                  | ▶  | <b>5SP4 391-7</b> |              | 002 |    | <b>5SP4 391-8</b> |              | 1                 | 1 unit      | 002 | 0.783                    |
|                                                                                                                                                                                                                                                                                                                                                          | 125                               |                  |    | <b>5SP4 392-7</b> |              | 002 |    | --                |              | 1                 | 1 unit      |     | 0.787                    |
|                                                                                                                                                                                                                                                                                                                                                          | 4P, 400 V AC                      |                  |    |                   |              |     |    |                   |              |                   |             |     |                          |
|                                                                                                                                                                                                                                                                                                                                                          | 80                                | 6                |    | <b>5SP4 480-7</b> |              | 002 |    | <b>5SP4 480-8</b> |              | 1                 | 1 unit      | 002 | 1.031                    |
|                                                                                                                                                                                                                                                                                                                                                          | 100                               |                  |    | <b>5SP4 491-7</b> |              | 002 |    | <b>5SP4 491-8</b> |              | 1                 | 1 unit      | 002 | 1.033                    |
|                                                                                                                                                                                                                                                                                                                                                          | 125                               |                  |    | <b>5SP4 492-7</b> |              | 002 |    | --                |              | 1                 | 1 unit      |     | 1.031                    |

<sup>1)</sup> 1 MW (modular width) = 18 mm.



# Miniature Circuit Breakers

## 5SY and 5SP Miniature Circuit Breakers

**5SY5, universal current, 10 000 A**
**3**
**Selection and ordering data**

| 10 000<br>3 | $I_n$                      | Mounting width   | DT                | Characteristic B |              | PG  | DT | Characteristic C  |              | PU (UNIT, SET, M) | PS*/ P. unit | PG  | Weight per PU approx. |
|-------------|----------------------------|------------------|-------------------|------------------|--------------|-----|----|-------------------|--------------|-------------------|--------------|-----|-----------------------|
|             |                            |                  |                   | Order No.        | Price per PU |     |    | Order No.         | Price per PU |                   |              |     |                       |
|             | A                          | MW <sup>1)</sup> |                   |                  |              |     |    |                   |              |                   |              |     | kg                    |
|             | <b>MCBs 10000 A, UC</b>    |                  |                   |                  |              |     |    |                   |              |                   |              |     |                       |
|             | 1P, 230/400 V AC, 220 V DC |                  |                   |                  |              |     |    |                   |              |                   |              |     |                       |
|             | 0.3                        | 1                | --                |                  |              |     |    | <b>5SY5 114-7</b> |              | 1                 | 1 unit       | 002 | 0.169                 |
|             | 0.5                        |                  | --                |                  |              |     |    | <b>5SY5 105-7</b> |              | 1                 | 1 unit       | 002 | 0.168                 |
|             | 1                          |                  | --                |                  |              |     |    | <b>5SY5 101-7</b> |              | 1                 | 1 unit       | 002 | 0.166                 |
|             | 1.6                        |                  | --                |                  |              |     |    | <b>5SY5 115-7</b> |              | 1                 | 1 unit       | 002 | 0.164                 |
|             | 2                          |                  | <b>5SY5 102-6</b> |                  |              | 002 |    | <b>5SY5 102-7</b> |              | 1                 | 1 unit       | 002 | 0.167                 |
|             | 3                          |                  | --                |                  |              |     |    | <b>5SY5 103-7</b> |              | 1                 | 1 unit       | 002 | 0.162                 |
|             | 4                          |                  | <b>5SY5 104-6</b> |                  |              | 002 |    | <b>5SY5 104-7</b> |              | 1                 | 1 unit       | 002 | 0.163                 |
|             | 6                          |                  | <b>5SY5 106-6</b> |                  |              | 002 |    | <b>5SY5 106-7</b> |              | 1                 | 1 unit       | 002 | 0.163                 |
|             | 8                          |                  | --                |                  |              |     |    | <b>5SY5 108-7</b> |              | 1                 | 1 unit       | 002 | 0.162                 |
|             | 10                         |                  | <b>5SY5 110-6</b> |                  |              | 002 |    | <b>5SY5 110-7</b> |              | 1                 | 1 unit       | 002 | 0.160                 |
|             | 13                         |                  | <b>5SY5 113-6</b> |                  |              | 002 |    | <b>5SY5 113-7</b> |              | 1                 | 1 unit       | 002 | 0.164                 |
|             | 16                         |                  | <b>5SY5 116-6</b> |                  |              | 002 |    | <b>5SY5 116-7</b> |              | 1                 | 1 unit       | 002 | 0.161                 |
|             | 20                         |                  | <b>5SY5 120-6</b> |                  |              | 002 |    | <b>5SY5 120-7</b> |              | 1                 | 1 unit       | 002 | 0.163                 |
|             | 25                         |                  | <b>5SY5 125-6</b> |                  |              | 002 |    | <b>5SY5 125-7</b> |              | 1                 | 1 unit       | 002 | 0.165                 |
|             | 32                         |                  | <b>5SY5 132-6</b> |                  |              | 002 |    | <b>5SY5 132-7</b> |              | 1                 | 1 unit       | 002 | 0.164                 |
|             | 40                         |                  | <b>5SY5 140-6</b> |                  |              | 002 |    | <b>5SY5 140-7</b> |              | 1                 | 1 unit       | 002 | 0.164                 |
|             | 50                         |                  | <b>5SY5 150-6</b> |                  |              | 002 |    | <b>5SY5 150-7</b> |              | 1                 | 1 unit       | 002 | 0.171                 |
|             | 63                         |                  | <b>5SY5 163-6</b> |                  |              | 002 |    | <b>5SY5 163-7</b> |              | 1                 | 1 unit       | 002 | 0.169                 |
|             | 2P, 400 V AC, 440 V DC     |                  |                   |                  |              |     |    |                   |              |                   |              |     |                       |
|             | 0.3                        | 2                | --                |                  |              |     |    | <b>5SY5 214-7</b> |              | 1                 | 1 unit       | 002 | 0.333                 |
|             | 0.5                        |                  | --                |                  |              |     |    | <b>5SY5 205-7</b> |              | 1                 | 1 unit       | 002 | 0.328                 |
|             | 1                          |                  | --                |                  |              |     |    | <b>5SY5 201-7</b> |              | 1                 | 1 unit       | 002 | 0.324                 |
|             | 1.6                        |                  | --                |                  |              |     |    | <b>5SY5 215-7</b> |              | 1                 | 1 unit       | 002 | 0.321                 |
|             | 2                          |                  | --                |                  |              |     |    | <b>5SY5 202-7</b> |              | 1                 | 1 unit       | 002 | 0.329                 |
|             | 3                          |                  | --                |                  |              |     |    | <b>5SY5 203-7</b> |              | 1                 | 1 unit       | 002 | 0.317                 |
|             | 4                          |                  | --                |                  |              |     |    | <b>5SY5 204-7</b> |              | 1                 | 1 unit       | 002 | 0.319                 |
|             | 6                          |                  | <b>5SY5 206-6</b> |                  |              | 002 | ▶  | <b>5SY5 206-7</b> |              | 1                 | 1/6 units    | 002 | 0.300                 |
|             | 8                          |                  | --                |                  |              |     |    | <b>5SY5 208-7</b> |              | 1                 | 1 unit       | 002 | 0.313                 |
|             | 10                         |                  | <b>5SY5 210-6</b> |                  |              | 002 |    | <b>5SY5 210-7</b> |              | 1                 | 1 unit       | 002 | 0.314                 |
|             | 13                         |                  | <b>5SY5 213-6</b> |                  |              | 002 |    | <b>5SY5 213-7</b> |              | 1                 | 1 unit       | 002 | 0.322                 |
|             | 16                         |                  | <b>5SY5 216-6</b> |                  |              | 002 |    | <b>5SY5 216-7</b> |              | 1                 | 1 unit       | 002 | 0.314                 |
|             | 20                         |                  | <b>5SY5 220-6</b> |                  |              | 002 |    | <b>5SY5 220-7</b> |              | 1                 | 1 unit       | 002 | 0.319                 |
|             | 25                         |                  | <b>5SY5 225-6</b> |                  |              | 002 |    | <b>5SY5 225-7</b> |              | 1                 | 1 unit       | 002 | 0.321                 |
|             | 32                         |                  | <b>5SY5 232-6</b> |                  |              | 002 |    | <b>5SY5 232-7</b> |              | 1                 | 1 unit       | 002 | 0.322                 |
|             | 40                         |                  | <b>5SY5 240-6</b> |                  |              | 002 |    | <b>5SY5 240-7</b> |              | 1                 | 1 unit       | 002 | 0.323                 |
|             | 50                         |                  | <b>5SY5 250-6</b> |                  |              | 002 |    | <b>5SY5 250-7</b> |              | 1                 | 1 unit       | 002 | 0.333                 |
|             | 63                         |                  | <b>5SY5 263-6</b> |                  |              | 002 |    | <b>5SY5 263-7</b> |              | 1                 | 1 unit       | 002 | 0.342                 |

For application examples, see engineering manual at: [www.siemens.com/lowvoltage/manuals](http://www.siemens.com/lowvoltage/manuals).

<sup>1)</sup> 1 MW (modular width) = 18 mm.

# Miniature Circuit Breakers

## 5SY and 5SP Miniature Circuit Breakers

### 5SY5, universal current, 10 000 A

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| 10 000<br>3                                                                       |     | $I_n$             | Mounting width<br>DT | Characteristic B |                 | PG DT             | Characteristic C  |                 | PU<br>(UNIT,<br>SET,<br>M) | PS*/<br>P. unit | PG    | Weight<br>per PU<br>approx.<br>kg |
|-----------------------------------------------------------------------------------|-----|-------------------|----------------------|------------------|-----------------|-------------------|-------------------|-----------------|----------------------------|-----------------|-------|-----------------------------------|
|                                                                                   |     |                   |                      | Order No.        | Price<br>per PU |                   | Order No.         | Price<br>per PU |                            |                 |       |                                   |
|                                                                                   |     | A                 | MW <sup>1)</sup>     |                  |                 |                   |                   |                 |                            |                 |       |                                   |
| <b>MCBs 10000 A, UC</b>                                                           |     |                   |                      |                  |                 |                   |                   |                 |                            |                 |       |                                   |
| 4P, 400 V AC, 880 V DC<br>(max. 1000 V DC)                                        |     |                   |                      |                  |                 |                   |                   |                 |                            |                 |       |                                   |
|  | 0.3 | 1                 | --                   |                  |                 |                   | <b>5SY5 414-7</b> |                 | 1                          | 1 unit          | 002   | 0.660                             |
|                                                                                   | 0.5 |                   | --                   |                  |                 |                   | <b>5SY5 405-7</b> |                 | 1                          | 1 unit          | 002   | 0.660                             |
|                                                                                   | 1   |                   | --                   |                  |                 |                   | <b>5SY5 401-7</b> |                 | 1                          | 1 unit          | 002   | 0.660                             |
|                                                                                   | 1.6 |                   | --                   |                  |                 |                   | <b>5SY5 415-7</b> |                 | 1                          | 1 unit          | 002   | 0.660                             |
|                                                                                   | 2   |                   | --                   |                  |                 |                   | <b>5SY5 402-7</b> |                 | 1                          | 1 unit          | 002   | 0.660                             |
|                                                                                   | 3   |                   | --                   |                  |                 |                   | <b>5SY5 403-7</b> |                 | 1                          | 1 unit          | 002   | 0.660                             |
|                                                                                   | 4   |                   | --                   |                  |                 |                   | <b>5SY5 404-7</b> |                 | 1                          | 1 unit          | 002   | 0.660                             |
|                                                                                   | 6   |                   | <b>5SY5 406-6</b>    |                  | 002             |                   | <b>5SY5 406-7</b> |                 | 1                          | 1 unit          | 002   | 0.660                             |
|                                                                                   | 8   |                   | --                   |                  |                 |                   | <b>5SY5 408-7</b> |                 | 1                          | 1 unit          | 002   | 0.660                             |
|                                                                                   | 10  |                   | <b>5SY5 410-6</b>    |                  | 002             |                   | <b>5SY5 410-7</b> |                 | 1                          | 1 unit          | 002   | 0.660                             |
|                                                                                   | 13  |                   | <b>5SY5 413-6</b>    |                  | 002             |                   | <b>5SY5 413-7</b> |                 | 1                          | 1 unit          | 002   | 0.660                             |
|                                                                                   | 16  |                   | <b>5SY5 416-6</b>    |                  | 002             |                   | <b>5SY5 416-7</b> |                 | 1                          | 1 unit          | 002   | 0.660                             |
|                                                                                   | 20  |                   | <b>5SY5 420-6</b>    |                  | 002             |                   | <b>5SY5 420-7</b> |                 | 1                          | 1 unit          | 002   | 0.660                             |
|                                                                                   | 25  |                   | <b>5SY5 425-6</b>    |                  | 002             |                   | <b>5SY5 425-7</b> |                 | 1                          | 1 unit          | 002   | 0.660                             |
|                                                                                   | 32  |                   | <b>5SY5 432-6</b>    |                  | 002             |                   | <b>5SY5 432-7</b> |                 | 1                          | 1 unit          | 002   | 0.660                             |
| 40                                                                                |     | <b>5SY5 440-6</b> |                      | 002              |                 | <b>5SY5 440-7</b> |                   | 1               | 1 unit                     | 002             | 0.660 |                                   |
| 50                                                                                |     | <b>5SY5 450-6</b> |                      | 002              |                 | <b>5SY5 450-7</b> |                   | 1               | 1 unit                     | 002             | 0.660 |                                   |
| 63                                                                                |     | <b>5SY5 463-6</b> |                      | 002              |                 | <b>5SY5 463-7</b> |                   | 1               | 1 unit                     | 002             | 0.660 |                                   |

<sup>1)</sup> 1 MW (modular width) = 18 mm.

#### Note:

The 5ST3 600 or 5ST3 630 busbars enable simple wiring of 4-pole miniature circuit breakers, [see page 3/43](#).

For application examples, [see engineering manual at: \[www.siemens.com/lowvoltage/manuals\]\(http://www.siemens.com/lowvoltage/manuals\)](#).

# Miniature Circuit Breakers

## 5SY and 5SP Miniature Circuit Breakers

5SY7, 15 000 A

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## Selection and ordering data

| 15 000                                                                              | $I_n$               | Mounting width   | DT         | Characteristic B | Price per PU | PU (UNIT, SET, M) | PS*/ P. unit | PG    | Weight per PU approx. kg |
|-------------------------------------------------------------------------------------|---------------------|------------------|------------|------------------|--------------|-------------------|--------------|-------|--------------------------|
|                                                                                     | A                   | MW <sup>1)</sup> |            |                  |              |                   |              |       |                          |
|    | <b>MCBs 15000 A</b> |                  |            |                  |              |                   |              |       |                          |
|                                                                                     | 1P, 230/400 V AC    |                  |            |                  |              |                   |              |       |                          |
|                                                                                     | 6                   | 1                |            | 5SY7 106-6       |              | 1                 | 1 unit       | 003   | 0.161                    |
|                                                                                     | 10                  |                  |            | 5SY7 110-6       |              | 1                 | 1 unit       | 003   | 0.160                    |
|                                                                                     | 13                  |                  |            | 5SY7 113-6       |              | 1                 | 1 unit       | 003   | 0.159                    |
|                                                                                     | 16                  |                  |            | 5SY7 116-6       |              | 1                 | 1 unit       | 003   | 0.159                    |
|                                                                                     | 20                  |                  |            | 5SY7 120-6       |              | 1                 | 1 unit       | 003   | 0.161                    |
|                                                                                     | 25                  |                  |            | 5SY7 125-6       |              | 1                 | 1 unit       | 003   | 0.162                    |
|                                                                                     | 32                  |                  |            | 5SY7 132-6       |              | 1                 | 1 unit       | 003   | 0.164                    |
|                                                                                     | 40                  |                  |            | 5SY7 140-6       |              | 1                 | 1 unit       | 003   | 0.212                    |
|                                                                                     | 50                  |                  |            | 5SY7 150-6       |              | 1                 | 1 unit       | 003   | 0.168                    |
| 63                                                                                  |                     |                  | 5SY7 163-6 |                  | 1            | 1 unit            | 003          | 0.176 |                          |
|    | 1P+N, 230 V AC      |                  |            |                  |              |                   |              |       |                          |
|                                                                                     | 6                   | 2                |            | 5SY7 506-6       |              | 1                 | 1 unit       | 003   | 0.314                    |
|                                                                                     | 10                  |                  |            | 5SY7 510-6       |              | 1                 | 1 unit       | 003   | 0.294                    |
|                                                                                     | 13                  |                  |            | 5SY7 513-6       |              | 1                 | 1 unit       | 003   | 0.330                    |
|                                                                                     | 16                  |                  |            | 5SY7 516-6       |              | 1                 | 1 unit       | 003   | 0.311                    |
|                                                                                     | 20                  |                  |            | 5SY7 520-6       |              | 1                 | 1 unit       | 003   | 0.314                    |
|                                                                                     | 25                  |                  |            | 5SY7 525-6       |              | 1                 | 1 unit       | 003   | 0.321                    |
|                                                                                     | 32                  |                  |            | 5SY7 532-6       |              | 1                 | 1 unit       | 003   | 0.321                    |
|                                                                                     | 40                  |                  |            | 5SY7 540-6       |              | 1                 | 1 unit       | 003   | 0.336                    |
|                                                                                     | 50                  |                  |            | 5SY7 550-6       |              | 1                 | 1 unit       | 003   | 0.330                    |
|                                                                                     | 63                  |                  |            | 5SY7 563-6       |              | 1                 | 1 unit       | 003   | 0.330                    |
|   | 2P, 400 V AC        |                  |            |                  |              |                   |              |       |                          |
|                                                                                     | 6                   | 2                |            | 5SY7 206-6       |              | 1                 | 1 unit       | 003   | 0.312                    |
|                                                                                     | 10                  |                  |            | 5SY7 210-6       |              | 1                 | 1 unit       | 003   | 0.313                    |
|                                                                                     | 13                  |                  |            | 5SY7 213-6       |              | 1                 | 1 unit       | 003   | 0.296                    |
|                                                                                     | 16                  |                  |            | 5SY7 216-6       |              | 1                 | 1 unit       | 003   | 0.302                    |
|                                                                                     | 20                  |                  |            | 5SY7 220-6       |              | 1                 | 1 unit       | 003   | 0.313                    |
|                                                                                     | 25                  |                  |            | 5SY7 225-6       |              | 1                 | 1 unit       | 003   | 0.316                    |
|                                                                                     | 32                  |                  |            | 5SY7 232-6       |              | 1                 | 1 unit       | 003   | 0.325                    |
|                                                                                     | 40                  |                  |            | 5SY7 240-6       |              | 1                 | 1 unit       | 003   | 0.324                    |
|                                                                                     | 50                  |                  |            | 5SY7 250-6       |              | 1                 | 1 unit       | 003   | 0.321                    |
|                                                                                     | 63                  |                  |            | 5SY7 263-6       |              | 1                 | 1 unit       | 003   | 0.336                    |
|  | 3P, 400 V AC        |                  |            |                  |              |                   |              |       |                          |
|                                                                                     | 6                   | 3                |            | 5SY7 306-6       |              | 1                 | 1 unit       | 003   | 0.468                    |
|                                                                                     | 10                  |                  |            | 5SY7 310-6       |              | 1                 | 1 unit       | 003   | 0.466                    |
|                                                                                     | 13                  |                  |            | 5SY7 313-6       |              | 1                 | 1 unit       | 003   | 0.449                    |
|                                                                                     | 16                  |                  |            | 5SY7 316-6       |              | 1                 | 1 unit       | 003   | 0.462                    |
|                                                                                     | 20                  |                  |            | 5SY7 320-6       |              | 1                 | 1 unit       | 003   | 0.465                    |
|                                                                                     | 25                  |                  |            | 5SY7 325-6       |              | 1                 | 1 unit       | 003   | 0.472                    |
|                                                                                     | 32                  |                  |            | 5SY7 332-6       |              | 1                 | 1 unit       | 003   | 0.488                    |
|                                                                                     | 40                  |                  |            | 5SY7 340-6       |              | 1                 | 1 unit       | 003   | 0.481                    |
|                                                                                     | 50                  |                  |            | 5SY7 350-6       |              | 1                 | 1 unit       | 003   | 0.490                    |
|                                                                                     | 63                  |                  |            | 5SY7 363-6       |              | 1                 | 1 unit       | 003   | 0.485                    |
|  | 3P+N, 400 V AC      |                  |            |                  |              |                   |              |       |                          |
|                                                                                     | 6                   | 4                |            | 5SY7 606-6       |              | 1                 | 1 unit       | 003   | 0.614                    |
|                                                                                     | 10                  |                  |            | 5SY7 610-6       |              | 1                 | 1 unit       | 003   | 0.617                    |
|                                                                                     | 13                  |                  |            | 5SY7 613-6       |              | 1                 | 1 unit       | 003   | 0.622                    |
|                                                                                     | 16                  |                  |            | 5SY7 616-6       |              | 1                 | 1 unit       | 003   | 0.606                    |
|                                                                                     | 20                  |                  |            | 5SY7 620-6       |              | 1                 | 1 unit       | 003   | 0.622                    |
|                                                                                     | 25                  |                  |            | 5SY7 625-6       |              | 1                 | 1 unit       | 003   | 0.634                    |
|                                                                                     | 32                  |                  |            | 5SY7 632-6       |              | 1                 | 1 unit       | 003   | 0.638                    |
|                                                                                     | 40                  |                  |            | 5SY7 640-6       |              | 1                 | 1 unit       | 003   | 0.635                    |
|                                                                                     | 50                  |                  |            | 5SY7 650-6       |              | 1                 | 1 unit       | 003   | 0.649                    |
|                                                                                     | 63                  |                  |            | 5SY7 663-6       |              | 1                 | 1 unit       | 003   | 0.665                    |
|  | 4P, 400 V AC        |                  |            |                  |              |                   |              |       |                          |
|                                                                                     | 6                   | 4                |            | 5SY7 406-6       |              | 1                 | 1 unit       | 003   | 0.621                    |
|                                                                                     | 10                  |                  |            | 5SY7 410-6       |              | 1                 | 1 unit       | 003   | 0.614                    |
|                                                                                     | 13                  |                  |            | 5SY7 413-6       |              | 1                 | 1 unit       | 003   | 0.633                    |
|                                                                                     | 16                  |                  |            | 5SY7 416-6       |              | 1                 | 1 unit       | 003   | 0.617                    |
|                                                                                     | 20                  |                  |            | 5SY7 420-6       |              | 1                 | 1 unit       | 003   | 0.587                    |
|                                                                                     | 25                  |                  |            | 5SY7 425-6       |              | 1                 | 1 unit       | 003   | 0.629                    |
|                                                                                     | 32                  |                  |            | 5SY7 432-6       |              | 1                 | 1 unit       | 003   | 0.615                    |
|                                                                                     | 40                  |                  |            | 5SY7 440-6       |              | 1                 | 1 unit       | 003   | 0.611                    |
|                                                                                     | 50                  |                  |            | 5SY7 450-6       |              | 1                 | 1 unit       | 003   | 0.647                    |
|                                                                                     | 63                  |                  |            | 5SY7 463-6       |              | 1                 | 1 unit       | 003   | 0.666                    |

<sup>1)</sup> 1 MW (modular width) = 18 mm.

# Miniature Circuit Breakers

## 5SY and 5SP Miniature Circuit Breakers

### 5SY7, 15 000 A

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| 15 000                                                                              |                     | $I_n$ | Mounting width   | DT                | Characteristic C  |              |                   | PG                | DT | Characteristic D |              |        | PU (UNIT, SET, M) | PS*/ P. unit | PG | Weight per PU approx. |
|-------------------------------------------------------------------------------------|---------------------|-------|------------------|-------------------|-------------------|--------------|-------------------|-------------------|----|------------------|--------------|--------|-------------------|--------------|----|-----------------------|
|                                                                                     |                     |       |                  |                   | Order No.         | Price per PU |                   |                   |    | Order No.        | Price per PU |        |                   |              |    |                       |
|                                                                                     |                     | A     | MW <sup>1)</sup> |                   |                   |              |                   |                   |    |                  |              |        |                   |              |    | kg                    |
|    | <b>MCBs 15000 A</b> |       |                  |                   |                   |              |                   |                   |    |                  |              |        |                   |              |    |                       |
|                                                                                     | 1P, 230/400 V AC    |       |                  |                   |                   |              |                   |                   |    |                  |              |        |                   |              |    |                       |
|                                                                                     | 0.3                 | 1     |                  |                   | <b>5SY7 114-7</b> | 003          |                   | <b>5SY7 114-8</b> |    |                  | 1            | 1 unit | 003               | 0.160        |    |                       |
|                                                                                     | 0.5                 |       |                  |                   | <b>5SY7 105-7</b> | 003          |                   | <b>5SY7 105-8</b> |    |                  | 1            | 1 unit | 003               | 0.153        |    |                       |
|                                                                                     | 1                   |       |                  |                   | <b>5SY7 101-7</b> | 003          |                   | <b>5SY7 101-8</b> |    |                  | 1            | 1 unit | 003               | 0.180        |    |                       |
|                                                                                     | 1.6                 |       |                  |                   | <b>5SY7 115-7</b> | 003          |                   | <b>5SY7 115-8</b> |    |                  | 1            | 1 unit | 003               | 0.165        |    |                       |
|                                                                                     | 2                   |       |                  |                   | <b>5SY7 102-7</b> | 003          |                   | <b>5SY7 102-8</b> |    |                  | 1            | 1 unit | 003               | 0.162        |    |                       |
|                                                                                     | 3                   |       |                  |                   | <b>5SY7 103-7</b> | 003          |                   | <b>5SY7 103-8</b> |    |                  | 1            | 1 unit | 003               | 0.161        |    |                       |
|                                                                                     | 4                   |       |                  |                   | <b>5SY7 104-7</b> | 003          |                   | <b>5SY7 104-8</b> |    |                  | 1            | 1 unit | 003               | 0.158        |    |                       |
|                                                                                     | 6                   |       |                  |                   | <b>5SY7 106-7</b> | 003          |                   | <b>5SY7 106-8</b> |    |                  | 1            | 1 unit | 003               | 0.160        |    |                       |
|                                                                                     | 8                   |       |                  |                   | <b>5SY7 108-7</b> | 003          |                   | <b>5SY7 108-8</b> |    |                  | 1            | 1 unit | 003               | 0.154        |    |                       |
|                                                                                     | 10                  |       |                  |                   | <b>5SY7 110-7</b> | 003          |                   | <b>5SY7 110-8</b> |    |                  | 1            | 1 unit | 003               | 0.156        |    |                       |
|                                                                                     | 13                  |       |                  |                   | <b>5SY7 113-7</b> | 003          |                   | <b>5SY7 113-8</b> |    |                  | 1            | 1 unit | 003               | 0.156        |    |                       |
|                                                                                     | 16                  |       |                  |                   | <b>5SY7 116-7</b> | 003          |                   | <b>5SY7 116-8</b> |    |                  | 1            | 1 unit | 003               | 0.156        |    |                       |
|                                                                                     | 20                  |       |                  |                   | <b>5SY7 120-7</b> | 003          |                   | <b>5SY7 120-8</b> |    |                  | 1            | 1 unit | 003               | 0.141        |    |                       |
| 25                                                                                  |                     |       |                  | <b>5SY7 125-7</b> | 003               |              | <b>5SY7 125-8</b> |                   |    | 1                | 1 unit       | 003    | 0.162             |              |    |                       |
| 32                                                                                  |                     |       |                  | <b>5SY7 132-7</b> | 003               |              | <b>5SY7 132-8</b> |                   |    | 1                | 1 unit       | 003    | 0.166             |              |    |                       |
| 40                                                                                  |                     |       |                  | <b>5SY7 140-7</b> | 003               |              | <b>5SY7 140-8</b> |                   |    | 1                | 1 unit       | 003    | 0.166             |              |    |                       |
| 50                                                                                  |                     |       |                  | <b>5SY7 150-7</b> | 003               |              | <b>5SY7 150-8</b> |                   |    | 1                | 1 unit       | 003    | 0.167             |              |    |                       |
| 63                                                                                  |                     |       |                  | <b>5SY7 163-7</b> | 003               |              | <b>5SY7 163-8</b> |                   |    | 1                | 1 unit       | 003    | 0.165             |              |    |                       |
|   | 1P+N, 230 V AC      |       |                  |                   |                   |              |                   |                   |    |                  |              |        |                   |              |    |                       |
|                                                                                     | 0.3                 | 2     |                  |                   | <b>5SY7 514-7</b> | 003          |                   | <b>5SY7 514-8</b> |    |                  | 1            | 1 unit | 003               | 0.323        |    |                       |
|                                                                                     | 0.5                 |       |                  |                   | <b>5SY7 505-7</b> | 003          |                   | <b>5SY7 505-8</b> |    |                  | 1            | 1 unit | 003               | 0.312        |    |                       |
|                                                                                     | 1                   |       |                  |                   | <b>5SY7 501-7</b> | 003          |                   | <b>5SY7 501-8</b> |    |                  | 1            | 1 unit | 003               | 0.320        |    |                       |
|                                                                                     | 1.6                 |       |                  |                   | <b>5SY7 515-7</b> | 003          |                   | <b>5SY7 515-8</b> |    |                  | 1            | 1 unit | 003               | 0.319        |    |                       |
|                                                                                     | 2                   |       |                  |                   | <b>5SY7 502-7</b> | 003          |                   | <b>5SY7 502-8</b> |    |                  | 1            | 1 unit | 003               | 0.319        |    |                       |
|                                                                                     | 3                   |       |                  |                   | <b>5SY7 503-7</b> | 003          |                   | <b>5SY7 503-8</b> |    |                  | 1            | 1 unit | 003               | 0.298        |    |                       |
|                                                                                     | 4                   |       |                  |                   | <b>5SY7 504-7</b> | 003          |                   | <b>5SY7 504-8</b> |    |                  | 1            | 1 unit | 003               | 0.310        |    |                       |
|                                                                                     | 6                   |       |                  |                   | <b>5SY7 506-7</b> | 003          |                   | <b>5SY7 506-8</b> |    |                  | 1            | 1 unit | 003               | 0.326        |    |                       |
|                                                                                     | 8                   |       |                  |                   | <b>5SY7 508-7</b> | 003          |                   | <b>5SY7 508-8</b> |    |                  | 1            | 1 unit | 003               | 0.286        |    |                       |
|                                                                                     | 10                  |       |                  |                   | <b>5SY7 510-7</b> | 003          |                   | <b>5SY7 510-8</b> |    |                  | 1            | 1 unit | 003               | 0.305        |    |                       |
|                                                                                     | 13                  |       |                  |                   | <b>5SY7 513-7</b> | 003          |                   | <b>5SY7 513-8</b> |    |                  | 1            | 1 unit | 003               | 0.304        |    |                       |
|                                                                                     | 16                  |       |                  |                   | <b>5SY7 516-7</b> | 003          |                   | <b>5SY7 516-8</b> |    |                  | 1            | 1 unit | 003               | 0.293        |    |                       |
|                                                                                     | 20                  |       |                  |                   | <b>5SY7 520-7</b> | 003          |                   | <b>5SY7 520-8</b> |    |                  | 1            | 1 unit | 003               | 0.317        |    |                       |
|                                                                                     | 25                  |       |                  |                   | <b>5SY7 525-7</b> | 003          |                   | <b>5SY7 525-8</b> |    |                  | 1            | 1 unit | 003               | 0.313        |    |                       |
| 32                                                                                  |                     |       |                  | <b>5SY7 532-7</b> | 003               |              | <b>5SY7 532-8</b> |                   |    | 1                | 1 unit       | 003    | 0.325             |              |    |                       |
| 40                                                                                  |                     |       |                  | <b>5SY7 540-7</b> | 003               |              | <b>5SY7 540-8</b> |                   |    | 1                | 1 unit       | 003    | 0.308             |              |    |                       |
| 50                                                                                  |                     |       |                  | <b>5SY7 550-7</b> | 003               |              | <b>5SY7 550-8</b> |                   |    | 1                | 1 unit       | 003    | 0.330             |              |    |                       |
| 63                                                                                  |                     |       |                  | <b>5SY7 563-7</b> | 003               |              | <b>5SY7 563-8</b> |                   |    | 1                | 1 unit       | 003    | 0.308             |              |    |                       |
|  | 2P, 400 V AC        |       |                  |                   |                   |              |                   |                   |    |                  |              |        |                   |              |    |                       |
|                                                                                     | 0.3                 | 2     |                  |                   | <b>5SY7 214-7</b> | 003          |                   | <b>5SY7 214-8</b> |    |                  | 1            | 1 unit | 003               | 0.322        |    |                       |
|                                                                                     | 0.5                 |       |                  |                   | <b>5SY7 205-7</b> | 003          |                   | <b>5SY7 205-8</b> |    |                  | 1            | 1 unit | 003               | 0.325        |    |                       |
|                                                                                     | 1                   |       |                  |                   | <b>5SY7 201-7</b> | 003          |                   | <b>5SY7 201-8</b> |    |                  | 1            | 1 unit | 003               | 0.313        |    |                       |
|                                                                                     | 1.6                 |       |                  |                   | <b>5SY7 215-7</b> | 003          |                   | <b>5SY7 215-8</b> |    |                  | 1            | 1 unit | 003               | 0.359        |    |                       |
|                                                                                     | 2                   |       |                  |                   | <b>5SY7 202-7</b> | 003          |                   | <b>5SY7 202-8</b> |    |                  | 1            | 1 unit | 003               | 0.318        |    |                       |
|                                                                                     | 3                   |       |                  |                   | <b>5SY7 203-7</b> | 003          |                   | <b>5SY7 203-8</b> |    |                  | 1            | 1 unit | 003               | 0.314        |    |                       |
|                                                                                     | 4                   |       |                  |                   | <b>5SY7 204-7</b> | 003          |                   | <b>5SY7 204-8</b> |    |                  | 1            | 1 unit | 003               | 0.310        |    |                       |
|                                                                                     | 6                   |       |                  |                   | <b>5SY7 206-7</b> | 003          |                   | <b>5SY7 206-8</b> |    |                  | 1            | 1 unit | 003               | 0.312        |    |                       |
|                                                                                     | 8                   |       |                  |                   | <b>5SY7 208-7</b> | 003          |                   | <b>5SY7 208-8</b> |    |                  | 1            | 1 unit | 003               | 0.302        |    |                       |
|                                                                                     | 10                  |       |                  |                   | <b>5SY7 210-7</b> | 003          |                   | <b>5SY7 210-8</b> |    |                  | 1            | 1 unit | 003               | 0.306        |    |                       |
|                                                                                     | 13                  |       |                  |                   | <b>5SY7 213-7</b> | 003          |                   | <b>5SY7 213-8</b> |    |                  | 1            | 1 unit | 003               | 0.287        |    |                       |
|                                                                                     | 16                  |       |                  |                   | <b>5SY7 216-7</b> | 003          |                   | <b>5SY7 216-8</b> |    |                  | 1            | 1 unit | 003               | 0.304        |    |                       |
|                                                                                     | 20                  |       |                  |                   | <b>5SY7 220-7</b> | 003          |                   | <b>5SY7 220-8</b> |    |                  | 1            | 1 unit | 003               | 0.314        |    |                       |
|                                                                                     | 25                  |       |                  |                   | <b>5SY7 225-7</b> | 003          |                   | <b>5SY7 225-8</b> |    |                  | 1            | 1 unit | 003               | 0.313        |    |                       |
| 32                                                                                  |                     |       |                  | <b>5SY7 232-7</b> | 003               |              | <b>5SY7 232-8</b> |                   |    | 1                | 1 unit       | 003    | 0.328             |              |    |                       |
| 40                                                                                  |                     |       |                  | <b>5SY7 240-7</b> | 003               |              | <b>5SY7 240-8</b> |                   |    | 1                | 1 unit       | 003    | 0.325             |              |    |                       |
| 50                                                                                  |                     |       |                  | <b>5SY7 250-7</b> | 003               |              | <b>5SY7 250-8</b> |                   |    | 1                | 1 unit       | 003    | 0.308             |              |    |                       |
| 63                                                                                  |                     |       |                  | <b>5SY7 263-7</b> | 003               |              | <b>5SY7 263-8</b> |                   |    | 1                | 1 unit       | 003    | 0.326             |              |    |                       |

<sup>1)</sup> 1 MW (modular width) = 18 mm.

# Miniature Circuit Breakers

## 5SY and 5SP Miniature Circuit Breakers

5SY7, 15 000 A

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| 15 000                                                                            |       |                  |    |                  |              |     |    |                  |              |              |                   |              |     |                       |
|-----------------------------------------------------------------------------------|-------|------------------|----|------------------|--------------|-----|----|------------------|--------------|--------------|-------------------|--------------|-----|-----------------------|
|  | $I_n$ | Mounting width   | DT | Characteristic C |              | PG  | DT | Characteristic D |              | Price per PU | PU (UNIT, SET, M) | PS*/ P. unit | PG  | Weight per PU approx. |
|                                                                                   | A     | MW <sup>1)</sup> |    | Order No.        | Price per PU |     |    | Order No.        | Price per PU |              |                   |              |     |                       |
| MCBs 15000 A                                                                      |       |                  |    |                  |              |     |    |                  |              |              |                   |              |     |                       |
| 3P, 400 V AC                                                                      |       |                  |    |                  |              |     |    |                  |              |              |                   |              |     |                       |
|                                                                                   | 0.3   | 3                |    | 5SY7 314-7       |              | 003 |    | 5SY7 314-8       |              |              | 1                 | 1 unit       | 003 | 0.473                 |
|                                                                                   | 0.5   |                  |    | 5SY7 305-7       |              | 003 |    | 5SY7 305-8       |              |              | 1                 | 1 unit       | 003 | 0.495                 |
|                                                                                   | 1     |                  |    | 5SY7 301-7       |              | 003 |    | 5SY7 301-8       |              |              | 1                 | 1 unit       | 003 | 0.458                 |
|                                                                                   | 1.6   |                  |    | 5SY7 315-7       |              | 003 |    | 5SY7 315-8       |              |              | 1                 | 1 unit       | 003 | 0.495                 |
|                                                                                   | 2     |                  |    | 5SY7 302-7       |              | 003 |    | 5SY7 302-8       |              |              | 1                 | 1 unit       | 003 | 0.451                 |
|                                                                                   | 3     |                  |    | 5SY7 303-7       |              | 003 |    | 5SY7 303-8       |              |              | 1                 | 1 unit       | 003 | 0.458                 |
|                                                                                   | 4     |                  |    | 5SY7 304-7       |              | 003 |    | 5SY7 304-8       |              |              | 1                 | 1 unit       | 003 | 0.441                 |
|                                                                                   | 6     |                  |    | 5SY7 306-7       |              | 003 |    | 5SY7 306-8       |              |              | 1                 | 1 unit       | 003 | 0.457                 |
|                                                                                   | 8     |                  |    | 5SY7 308-7       |              | 003 |    | 5SY7 308-8       |              |              | 1                 | 1 unit       | 003 | 0.442                 |
|                                                                                   | 10    |                  |    | 5SY7 310-7       |              | 003 |    | 5SY7 310-8       |              |              | 1                 | 1 unit       | 003 | 0.453                 |
|                                                                                   | 13    |                  |    | 5SY7 313-7       |              | 003 |    | 5SY7 313-8       |              |              | 1                 | 1 unit       | 003 | 0.445                 |
|                                                                                   | 16    |                  |    | 5SY7 316-7       |              | 003 |    | 5SY7 316-8       |              |              | 1                 | 1 unit       | 003 | 0.445                 |
|                                                                                   | 20    |                  |    | 5SY7 320-7       |              | 003 |    | 5SY7 320-8       |              |              | 1                 | 1 unit       | 003 | 0.463                 |
|                                                                                   | 25    |                  |    | 5SY7 325-7       |              | 003 |    | 5SY7 325-8       |              |              | 1                 | 1 unit       | 003 | 0.464                 |
|                                                                                   | 32    |                  |    | 5SY7 332-7       |              | 003 |    | 5SY7 332-8       |              |              | 1                 | 1 unit       | 003 | 0.482                 |
|                                                                                   | 40    |                  |    | 5SY7 340-7       |              | 003 |    | 5SY7 340-8       |              |              | 1                 | 1 unit       | 003 | 0.484                 |
|                                                                                   | 50    |                  |    | 5SY7 350-7       |              | 003 |    | 5SY7 350-8       |              |              | 1                 | 1 unit       | 003 | 0.480                 |
|                                                                                   | 63    |                  |    | 5SY7 363-7       |              | 003 |    | 5SY7 363-8       |              |              | 1                 | 1 unit       | 003 | 0.479                 |
| 3P+N, 400 V AC                                                                    |       |                  |    |                  |              |     |    |                  |              |              |                   |              |     |                       |
|                                                                                   | 0.3   | 4                |    | 5SY7 614-7       |              | 003 |    | 5SY7 614-8       |              |              | 1                 | 1 unit       | 003 | 0.660                 |
|                                                                                   | 0.5   |                  |    | 5SY7 605-7       |              | 003 |    | 5SY7 605-8       |              |              | 1                 | 1 unit       | 003 | 0.660                 |
|                                                                                   | 1     |                  |    | 5SY7 601-7       |              | 003 |    | 5SY7 601-8       |              |              | 1                 | 1 unit       | 003 | 0.660                 |
|                                                                                   | 1.6   |                  |    | 5SY7 615-7       |              | 003 |    | 5SY7 615-8       |              |              | 1                 | 1 unit       | 003 | 0.660                 |
|                                                                                   | 2     |                  |    | 5SY7 602-7       |              | 003 |    | 5SY7 602-8       |              |              | 1                 | 1 unit       | 003 | 0.632                 |
|                                                                                   | 3     |                  |    | 5SY7 603-7       |              | 003 |    | 5SY7 603-8       |              |              | 1                 | 1 unit       | 003 | 0.660                 |
|                                                                                   | 4     |                  |    | 5SY7 604-7       |              | 003 |    | 5SY7 604-8       |              |              | 1                 | 1 unit       | 003 | 0.660                 |
|                                                                                   | 6     |                  |    | 5SY7 606-7       |              | 003 |    | 5SY7 606-8       |              |              | 1                 | 1 unit       | 003 | 0.590                 |
|                                                                                   | 8     |                  |    | 5SY7 608-7       |              | 003 |    | 5SY7 608-8       |              |              | 1                 | 1 unit       | 003 | 0.600                 |
|                                                                                   | 10    |                  |    | 5SY7 610-7       |              | 003 |    | 5SY7 610-8       |              |              | 1                 | 1 unit       | 003 | 0.593                 |
|                                                                                   | 13    |                  |    | 5SY7 613-7       |              | 003 |    | 5SY7 613-8       |              |              | 1                 | 1 unit       | 003 | 0.610                 |
|                                                                                   | 16    |                  |    | 5SY7 616-7       |              | 003 |    | 5SY7 616-8       |              |              | 1                 | 1 unit       | 003 | 0.585                 |
|                                                                                   | 20    |                  |    | 5SY7 620-7       |              | 003 |    | 5SY7 620-8       |              |              | 1                 | 1 unit       | 003 | 0.618                 |
|                                                                                   | 25    |                  |    | 5SY7 625-7       |              | 003 |    | 5SY7 625-8       |              |              | 1                 | 1 unit       | 003 | 0.628                 |
|                                                                                   | 32    |                  |    | 5SY7 632-7       |              | 003 |    | 5SY7 632-8       |              |              | 1                 | 1 unit       | 003 | 0.644                 |
|                                                                                   | 40    |                  |    | 5SY7 640-7       |              | 003 |    | 5SY7 640-8       |              |              | 1                 | 1 unit       | 003 | 0.645                 |
|                                                                                   | 50    |                  |    | 5SY7 650-7       |              | 003 |    | 5SY7 650-8       |              |              | 1                 | 1 unit       | 003 | 0.678                 |
|                                                                                   | 63    |                  |    | 5SY7 663-7       |              | 003 |    | 5SY7 663-8       |              |              | 1                 | 1 unit       | 003 | 0.643                 |
| 4P, 400 V AC                                                                      |       |                  |    |                  |              |     |    |                  |              |              |                   |              |     |                       |
|                                                                                   | 0.3   | 4                |    | 5SY7 414-7       |              | 003 |    | 5SY7 414-8       |              |              | 1                 | 1 unit       | 003 | 0.642                 |
|                                                                                   | 0.5   |                  |    | 5SY7 405-7       |              | 003 |    | 5SY7 405-8       |              |              | 1                 | 1 unit       | 003 | 0.660                 |
|                                                                                   | 1     |                  |    | 5SY7 401-7       |              | 003 |    | 5SY7 401-8       |              |              | 1                 | 1 unit       | 003 | 0.660                 |
|                                                                                   | 1.6   |                  |    | 5SY7 415-7       |              | 003 |    | 5SY7 415-8       |              |              | 1                 | 1 unit       | 003 | 0.660                 |
|                                                                                   | 2     |                  |    | 5SY7 402-7       |              | 003 |    | 5SY7 402-8       |              |              | 1                 | 1 unit       | 003 | 0.630                 |
|                                                                                   | 3     |                  |    | 5SY7 403-7       |              | 003 |    | 5SY7 403-8       |              |              | 1                 | 1 unit       | 003 | 0.660                 |
|                                                                                   | 4     |                  |    | 5SY7 404-7       |              | 003 |    | 5SY7 404-8       |              |              | 1                 | 1 unit       | 003 | 0.624                 |
|                                                                                   | 6     |                  |    | 5SY7 406-7       |              | 003 |    | 5SY7 406-8       |              |              | 1                 | 1 unit       | 003 | 0.615                 |
|                                                                                   | 8     |                  |    | 5SY7 408-7       |              | 003 |    | 5SY7 408-8       |              |              | 1                 | 1 unit       | 003 | 0.603                 |
|                                                                                   | 10    |                  |    | 5SY7 410-7       |              | 003 |    | 5SY7 410-8       |              |              | 1                 | 1 unit       | 003 | 0.608                 |
|                                                                                   | 13    |                  |    | 5SY7 413-7       |              | 003 |    | 5SY7 413-8       |              |              | 1                 | 1 unit       | 003 | 0.608                 |
|                                                                                   | 16    |                  |    | 5SY7 416-7       |              | 003 |    | 5SY7 416-8       |              |              | 1                 | 1 unit       | 003 | 0.592                 |
|                                                                                   | 20    |                  |    | 5SY7 420-7       |              | 003 |    | 5SY7 420-8       |              |              | 1                 | 1 unit       | 003 | 0.615                 |
|                                                                                   | 25    |                  |    | 5SY7 425-7       |              | 003 |    | 5SY7 425-8       |              |              | 1                 | 1 unit       | 003 | 0.628                 |
|                                                                                   | 32    |                  |    | 5SY7 432-7       |              | 003 |    | 5SY7 432-8       |              |              | 1                 | 1 unit       | 003 | 0.639                 |
|                                                                                   | 40    |                  |    | 5SY7 440-7       |              | 003 |    | 5SY7 440-8       |              |              | 1                 | 1 unit       | 003 | 0.642                 |
|                                                                                   | 50    |                  |    | 5SY7 450-7       |              | 003 |    | 5SY7 450-8       |              |              | 1                 | 1 unit       | 003 | 0.603                 |
|                                                                                   | 63    |                  |    | 5SY7 463-7       |              | 003 |    | 5SY7 463-8       |              |              | 1                 | 1 unit       | 003 | 0.642                 |

1) 1 MW (modular width) = 18 mm.



# Miniature Circuit Breakers

## 5SY and 5SP Miniature Circuit Breakers

**5SY8, 25 000 A**
**3**
**Selection and ordering data**

| $I_n$                   | Mounting width   | DT | Characteristic C  |              |       | Characteristic D  |              |   | PU (UNIT, SET, M) | PS*/ P. unit | PG | Weight per PU approx. |
|-------------------------|------------------|----|-------------------|--------------|-------|-------------------|--------------|---|-------------------|--------------|----|-----------------------|
|                         |                  |    | Order No.         | Price per PU | PG DT | Order No.         | Price per PU |   |                   |              |    |                       |
| A                       | MW <sup>1)</sup> |    |                   |              |       |                   |              |   |                   |              |    | kg                    |
| <b>MCBs 25 000 A</b>    |                  |    |                   |              |       |                   |              |   |                   |              |    |                       |
| <b>1P, 230/400 V AC</b> |                  |    |                   |              |       |                   |              |   |                   |              |    |                       |
| 0.3                     | 1                |    | <b>5SY8 114-7</b> |              | 003   | <b>5SY8 114-8</b> |              | 1 | 1 unit            | 003          |    | 0.167                 |
| 0.5                     |                  |    | <b>5SY8 105-7</b> |              | 003   | <b>5SY8 105-8</b> |              | 1 | 1 unit            | 003          |    | 0.165                 |
| 1                       |                  |    | <b>5SY8 101-7</b> |              | 003   | <b>5SY8 101-8</b> |              | 1 | 1 unit            | 003          |    | 0.152                 |
| 1.6                     |                  |    | <b>5SY8 115-7</b> |              | 003   | <b>5SY8 115-8</b> |              | 1 | 1 unit            | 003          |    | 0.165                 |
| 2                       |                  |    | <b>5SY8 102-7</b> |              | 003   | <b>5SY8 102-8</b> |              | 1 | 1 unit            | 003          |    | 0.163                 |
| 3                       |                  |    | <b>5SY8 103-7</b> |              | 003   | <b>5SY8 103-8</b> |              | 1 | 1 unit            | 003          |    | 0.161                 |
| 4                       |                  |    | <b>5SY8 104-7</b> |              | 003   | <b>5SY8 104-8</b> |              | 1 | 1 unit            | 003          |    | 0.158                 |
| 6                       |                  |    | <b>5SY8 106-7</b> |              | 003   | <b>5SY8 106-8</b> |              | 1 | 1 unit            | 003          |    | 0.159                 |
| 8                       |                  |    | <b>5SY8 108-7</b> |              | 003   | <b>5SY8 108-8</b> |              | 1 | 1 unit            | 003          |    | 0.156                 |
| 10                      |                  |    | <b>5SY8 110-7</b> |              | 003   | <b>5SY8 110-8</b> |              | 1 | 1 unit            | 003          |    | 0.157                 |
| 13                      |                  |    | <b>5SY8 113-7</b> |              | 003   | <b>5SY8 113-8</b> |              | 1 | 1 unit            | 003          |    | 0.142                 |
| 16                      |                  |    | <b>5SY8 116-7</b> |              | 003   | <b>5SY8 116-8</b> |              | 1 | 1 unit            | 003          |    | 0.155                 |
| 20                      |                  |    | <b>5SY8 120-7</b> |              | 003   | <b>5SY8 120-8</b> |              | 1 | 1 unit            | 003          |    | 0.165                 |
| 25                      |                  |    | <b>5SY8 125-7</b> |              | 003   | <b>5SY8 125-8</b> |              | 1 | 1 unit            | 003          |    | 0.162                 |
| 32                      |                  |    | <b>5SY8 132-7</b> |              | 003   | <b>5SY8 132-8</b> |              | 1 | 1 unit            | 003          |    | 0.166                 |
| 40                      |                  |    | <b>5SY8 140-7</b> |              | 003   | <b>5SY8 140-8</b> |              | 1 | 1 unit            | 003          |    | 0.155                 |
| 50                      |                  |    | <b>5SY8 150-7</b> |              | 003   | <b>5SY8 150-8</b> |              | 1 | 1 unit            | 003          |    | 0.158                 |
| 63                      |                  |    | <b>5SY8 163-7</b> |              | 003   | <b>5SY8 163-8</b> |              | 1 | 1 unit            | 003          |    | 0.160                 |
| <b>1P+N, 230 V AC</b>   |                  |    |                   |              |       |                   |              |   |                   |              |    |                       |
| 0.3                     | 2                |    | <b>5SY8 514-7</b> |              | 003   | <b>5SY8 514-8</b> |              | 1 | 1 unit            | 003          |    | 0.330                 |
| 0.5                     |                  |    | <b>5SY8 505-7</b> |              | 003   | <b>5SY8 505-8</b> |              | 1 | 1 unit            | 003          |    | 0.323                 |
| 1                       |                  |    | <b>5SY8 501-7</b> |              | 003   | <b>5SY8 501-8</b> |              | 1 | 1 unit            | 003          |    | 0.337                 |
| 1.6                     |                  |    | <b>5SY8 515-7</b> |              | 003   | <b>5SY8 515-8</b> |              | 1 | 1 unit            | 003          |    | 0.324                 |
| 2                       |                  |    | <b>5SY8 502-7</b> |              | 003   | <b>5SY8 502-8</b> |              | 1 | 1 unit            | 003          |    | 0.318                 |
| 3                       |                  |    | <b>5SY8 503-7</b> |              | 003   | <b>5SY8 503-8</b> |              | 1 | 1 unit            | 003          |    | 0.318                 |
| 4                       |                  |    | <b>5SY8 504-7</b> |              | 003   | <b>5SY8 504-8</b> |              | 1 | 1 unit            | 003          |    | 0.311                 |
| 6                       |                  |    | <b>5SY8 506-7</b> |              | 003   | <b>5SY8 506-8</b> |              | 1 | 1 unit            | 003          |    | 0.326                 |
| 8                       |                  |    | <b>5SY8 508-7</b> |              | 003   | <b>5SY8 508-8</b> |              | 1 | 1 unit            | 003          |    | 0.313                 |
| 10                      |                  |    | <b>5SY8 510-7</b> |              | 003   | <b>5SY8 510-8</b> |              | 1 | 1 unit            | 003          |    | 0.282                 |
| 13                      |                  |    | <b>5SY8 513-7</b> |              | 003   | <b>5SY8 513-8</b> |              | 1 | 1 unit            | 003          |    | 0.305                 |
| 16                      |                  |    | <b>5SY8 516-7</b> |              | 003   | <b>5SY8 516-8</b> |              | 1 | 1 unit            | 003          |    | 0.297                 |
| 20                      |                  |    | <b>5SY8 520-7</b> |              | 003   | <b>5SY8 520-8</b> |              | 1 | 1 unit            | 003          |    | 0.318                 |
| 25                      |                  |    | <b>5SY8 525-7</b> |              | 003   | <b>5SY8 525-8</b> |              | 1 | 1 unit            | 003          |    | 0.312                 |
| 32                      |                  |    | <b>5SY8 532-7</b> |              | 003   | <b>5SY8 532-8</b> |              | 1 | 1 unit            | 003          |    | 0.366                 |
| 40                      |                  |    | <b>5SY8 540-7</b> |              | 003   | <b>5SY8 540-8</b> |              | 1 | 1 unit            | 003          |    | 0.325                 |
| 50                      |                  |    | <b>5SY8 550-7</b> |              | 003   | <b>5SY8 550-8</b> |              | 1 | 1 unit            | 003          |    | 0.326                 |
| 63                      |                  |    | <b>5SY8 563-7</b> |              | 003   | <b>5SY8 563-8</b> |              | 1 | 1 unit            | 003          |    | 0.330                 |
| <b>2P, 400 V AC</b>     |                  |    |                   |              |       |                   |              |   |                   |              |    |                       |
| 0.3                     | 2                |    | <b>5SY8 214-7</b> |              | 003   | <b>5SY8 214-8</b> |              | 1 | 1 unit            | 003          |    | 0.337                 |
| 0.5                     |                  |    | <b>5SY8 205-7</b> |              | 003   | <b>5SY8 205-8</b> |              | 1 | 1 unit            | 003          |    | 0.325                 |
| 1                       |                  |    | <b>5SY8 201-7</b> |              | 003   | <b>5SY8 201-8</b> |              | 1 | 1 unit            | 003          |    | 0.313                 |
| 1.6                     |                  |    | <b>5SY8 215-7</b> |              | 003   | <b>5SY8 215-8</b> |              | 1 | 1 unit            | 003          |    | 0.316                 |
| 2                       |                  |    | <b>5SY8 202-7</b> |              | 003   | <b>5SY8 202-8</b> |              | 1 | 1 unit            | 003          |    | 0.322                 |
| 3                       |                  |    | <b>5SY8 203-7</b> |              | 003   | <b>5SY8 203-8</b> |              | 1 | 1 unit            | 003          |    | 0.346                 |
| 4                       |                  |    | <b>5SY8 204-7</b> |              | 003   | <b>5SY8 204-8</b> |              | 1 | 1 unit            | 003          |    | 0.314                 |
| 6                       |                  |    | <b>5SY8 206-7</b> |              | 003   | <b>5SY8 206-8</b> |              | 1 | 1 unit            | 003          |    | 0.311                 |
| 8                       |                  |    | <b>5SY8 208-7</b> |              | 003   | <b>5SY8 208-8</b> |              | 1 | 1 unit            | 003          |    | 0.306                 |
| 10                      |                  |    | <b>5SY8 210-7</b> |              | 003   | <b>5SY8 210-8</b> |              | 1 | 1 unit            | 003          |    | 0.305                 |
| 13                      |                  |    | <b>5SY8 213-7</b> |              | 003   | <b>5SY8 213-8</b> |              | 1 | 1 unit            | 003          |    | 0.305                 |
| 16                      |                  |    | <b>5SY8 216-7</b> |              | 003   | <b>5SY8 216-8</b> |              | 1 | 1 unit            | 003          |    | 0.304                 |
| 20                      |                  |    | <b>5SY8 220-7</b> |              | 003   | <b>5SY8 220-8</b> |              | 1 | 1 unit            | 003          |    | 0.305                 |
| 25                      |                  |    | <b>5SY8 225-7</b> |              | 003   | <b>5SY8 225-8</b> |              | 1 | 1 unit            | 003          |    | 0.318                 |
| 32                      |                  |    | <b>5SY8 232-7</b> |              | 003   | <b>5SY8 232-8</b> |              | 1 | 1 unit            | 003          |    | 0.324                 |
| 40                      |                  |    | <b>5SY8 240-7</b> |              | 003   | <b>5SY8 240-8</b> |              | 1 | 1 unit            | 003          |    | 0.308                 |
| 50                      |                  |    | <b>5SY8 250-7</b> |              | 003   | <b>5SY8 250-8</b> |              | 1 | 1 unit            | 003          |    | 0.331                 |
| 63                      |                  |    | <b>5SY8 263-7</b> |              | 003   | <b>5SY8 263-8</b> |              | 1 | 1 unit            | 003          |    | 0.327                 |

<sup>1)</sup> 1 MW (modular width) = 18 mm.

# Miniature Circuit Breakers

## 5SY and 5SP Miniature Circuit Breakers

5SY8, 25 000 A

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|                                                                                     | <i>I</i> <sub>n</sub> | Mounting width   | DT         | Characteristic C |              |            | Characteristic D |              |        | PU (UNIT, SET, M) | PS*/ P. unit | PG    | Weight per PU approx. |
|-------------------------------------------------------------------------------------|-----------------------|------------------|------------|------------------|--------------|------------|------------------|--------------|--------|-------------------|--------------|-------|-----------------------|
|                                                                                     |                       |                  |            | Order No.        | Price per PU | PG DT      | Order No.        | Price per PU |        |                   |              |       |                       |
|                                                                                     | A                     | MW <sup>1)</sup> |            |                  |              |            |                  |              |        |                   |              | kg    |                       |
|    | <b>MCBs 25 000 A</b>  |                  |            |                  |              |            |                  |              |        |                   |              |       |                       |
|                                                                                     | 3P, 400 V AC          |                  |            |                  |              |            |                  |              |        |                   |              |       |                       |
|                                                                                     | 0.3                   | 3                |            | 5SY8 314-7       |              | 003        | 5SY8 314-8       |              | 1      | 1 unit            | 003          | 0.495 |                       |
|                                                                                     | 0.5                   |                  |            | 5SY8 305-7       |              | 003        | 5SY8 305-8       |              | 1      | 1 unit            | 003          | 0.482 |                       |
|                                                                                     | 1                     |                  |            | 5SY8 301-7       |              | 003        | 5SY8 301-8       |              | 1      | 1 unit            | 003          | 0.478 |                       |
|                                                                                     | 1.6                   |                  |            | 5SY8 315-7       |              | 003        | 5SY8 315-8       |              | 1      | 1 unit            | 003          | 0.495 |                       |
|                                                                                     | 2                     |                  |            | 5SY8 302-7       |              | 003        | 5SY8 302-8       |              | 1      | 1 unit            | 003          | 0.471 |                       |
|                                                                                     | 3                     |                  |            | 5SY8 303-7       |              | 003        | 5SY8 303-8       |              | 1      | 1 unit            | 003          | 0.467 |                       |
|                                                                                     | 4                     |                  |            | 5SY8 304-7       |              | 003        | 5SY8 304-8       |              | 1      | 1 unit            | 003          | 0.460 |                       |
|                                                                                     | 6                     |                  |            | 5SY8 306-7       |              | 003        | 5SY8 306-8       |              | 1      | 1 unit            | 003          | 0.442 |                       |
|                                                                                     | 8                     |                  |            | 5SY8 308-7       |              | 003        | 5SY8 308-8       |              | 1      | 1 unit            | 003          | 0.495 |                       |
|                                                                                     | 10                    |                  |            | 5SY8 310-7       |              | 003        | 5SY8 310-8       |              | 1      | 1 unit            | 003          | 0.455 |                       |
|                                                                                     | 13                    |                  |            | 5SY8 313-7       |              | 003        | 5SY8 313-8       |              | 1      | 1 unit            | 003          | 0.487 |                       |
|                                                                                     | 16                    |                  |            | 5SY8 316-7       |              | 003        | 5SY8 316-8       |              | 1      | 1 unit            | 003          | 0.449 |                       |
|                                                                                     | 20                    |                  |            | 5SY8 320-7       |              | 003        | 5SY8 320-8       |              | 1      | 1 unit            | 003          | 0.452 |                       |
|                                                                                     | 25                    |                  |            | 5SY8 325-7       |              | 003        | 5SY8 325-8       |              | 1      | 1 unit            | 003          | 0.472 |                       |
|                                                                                     | 32                    |                  |            | 5SY8 332-7       |              | 003        | 5SY8 332-8       |              | 1      | 1 unit            | 003          | 0.482 |                       |
|                                                                                     | 40                    |                  |            | 5SY8 340-7       |              | 003        | 5SY8 340-8       |              | 1      | 1 unit            | 003          | 0.464 |                       |
| 50                                                                                  |                       |                  | 5SY8 350-7 |                  | 003          | 5SY8 350-8 |                  | 1            | 1 unit | 003               | 0.465        |       |                       |
| 63                                                                                  |                       |                  | 5SY8 363-7 |                  | 003          | 5SY8 363-8 |                  | 1            | 1 unit | 003               | 0.467        |       |                       |
|   | 3P+N, 400 V AC        |                  |            |                  |              |            |                  |              |        |                   |              |       |                       |
|                                                                                     | 0.3                   | 4                |            | 5SY8 614-7       |              | 003        | 5SY8 614-8       |              | 1      | 1 unit            | 003          | 0.660 |                       |
|                                                                                     | 0.5                   |                  |            | 5SY8 605-7       |              | 003        | 5SY8 605-8       |              | 1      | 1 unit            | 003          | 0.660 |                       |
|                                                                                     | 1                     |                  |            | 5SY8 601-7       |              | 003        | 5SY8 601-8       |              | 1      | 1 unit            | 003          | 0.660 |                       |
|                                                                                     | 1.6                   |                  |            | 5SY8 615-7       |              | 003        | 5SY8 615-8       |              | 1      | 1 unit            | 003          | 0.660 |                       |
|                                                                                     | 2                     |                  |            | 5SY8 602-7       |              | 003        | 5SY8 602-8       |              | 1      | 1 unit            | 003          | 0.631 |                       |
|                                                                                     | 3                     |                  |            | 5SY8 603-7       |              | 003        | 5SY8 603-8       |              | 1      | 1 unit            | 003          | 0.621 |                       |
|                                                                                     | 4                     |                  |            | 5SY8 604-7       |              | 003        | 5SY8 604-8       |              | 1      | 1 unit            | 003          | 0.660 |                       |
|                                                                                     | 6                     |                  |            | 5SY8 606-7       |              | 003        | 5SY8 606-8       |              | 1      | 1 unit            | 003          | 0.660 |                       |
|                                                                                     | 8                     |                  |            | 5SY8 608-7       |              | 003        | 5SY8 608-8       |              | 1      | 1 unit            | 003          | 0.660 |                       |
|                                                                                     | 10                    |                  |            | 5SY8 610-7       |              | 003        | 5SY8 610-8       |              | 1      | 1 unit            | 003          | 0.571 |                       |
|                                                                                     | 13                    |                  |            | 5SY8 613-7       |              | 003        | 5SY8 613-8       |              | 1      | 1 unit            | 003          | 0.609 |                       |
|                                                                                     | 16                    |                  |            | 5SY8 616-7       |              | 003        | 5SY8 616-8       |              | 1      | 1 unit            | 003          | 0.602 |                       |
|                                                                                     | 20                    |                  |            | 5SY8 620-7       |              | 003        | 5SY8 620-8       |              | 1      | 1 unit            | 003          | 0.596 |                       |
|                                                                                     | 25                    |                  |            | 5SY8 625-7       |              | 003        | 5SY8 625-8       |              | 1      | 1 unit            | 003          | 0.601 |                       |
|                                                                                     | 32                    |                  |            | 5SY8 632-7       |              | 003        | 5SY8 632-8       |              | 1      | 1 unit            | 003          | 0.611 |                       |
|                                                                                     | 40                    |                  |            | 5SY8 640-7       |              | 003        | 5SY8 640-8       |              | 1      | 1 unit            | 003          | 0.617 |                       |
|                                                                                     | 50                    |                  |            | 5SY8 650-7       |              | 003        | 5SY8 650-8       |              | 1      | 1 unit            | 003          | 0.650 |                       |
| 63                                                                                  |                       |                  | 5SY8 663-7 |                  | 003          | 5SY8 663-8 |                  | 1            | 1 unit | 003               | 0.625        |       |                       |
|  | 4P, 400 V AC          |                  |            |                  |              |            |                  |              |        |                   |              |       |                       |
|                                                                                     | 0.3                   | 4                |            | 5SY8 414-7       |              | 003        | 5SY8 414-8       |              | 1      | 1 unit            | 003          | 0.660 |                       |
|                                                                                     | 0.5                   |                  |            | 5SY8 405-7       |              | 003        | 5SY8 405-8       |              | 1      | 1 unit            | 003          | 0.660 |                       |
|                                                                                     | 1                     |                  |            | 5SY8 401-7       |              | 003        | 5SY8 401-8       |              | 1      | 1 unit            | 003          | 0.636 |                       |
|                                                                                     | 1.6                   |                  |            | 5SY8 415-7       |              | 003        | 5SY8 415-8       |              | 1      | 1 unit            | 003          | 0.660 |                       |
|                                                                                     | 2                     |                  |            | 5SY8 402-7       |              | 003        | 5SY8 402-8       |              | 1      | 1 unit            | 003          | 0.681 |                       |
|                                                                                     | 3                     |                  |            | 5SY8 403-7       |              | 003        | 5SY8 403-8       |              | 1      | 1 unit            | 003          | 0.660 |                       |
|                                                                                     | 4                     |                  |            | 5SY8 404-7       |              | 003        | 5SY8 404-8       |              | 1      | 1 unit            | 003          | 0.660 |                       |
|                                                                                     | 6                     |                  |            | 5SY8 406-7       |              | 003        | 5SY8 406-8       |              | 1      | 1 unit            | 003          | 0.660 |                       |
|                                                                                     | 8                     |                  |            | 5SY8 408-7       |              | 003        | 5SY8 408-8       |              | 1      | 1 unit            | 003          | 0.598 |                       |
|                                                                                     | 10                    |                  |            | 5SY8 410-7       |              | 003        | 5SY8 410-8       |              | 1      | 1 unit            | 003          | 0.597 |                       |
|                                                                                     | 13                    |                  |            | 5SY8 413-7       |              | 003        | 5SY8 413-8       |              | 1      | 1 unit            | 003          | 0.660 |                       |
|                                                                                     | 16                    |                  |            | 5SY8 416-7       |              | 003        | 5SY8 416-8       |              | 1      | 1 unit            | 003          | 0.601 |                       |
|                                                                                     | 20                    |                  |            | 5SY8 420-7       |              | 003        | 5SY8 420-8       |              | 1      | 1 unit            | 003          | 0.627 |                       |
|                                                                                     | 25                    |                  |            | 5SY8 425-7       |              | 003        | 5SY8 425-8       |              | 1      | 1 unit            | 003          | 0.627 |                       |
|                                                                                     | 32                    |                  |            | 5SY8 432-7       |              | 003        | 5SY8 432-8       |              | 1      | 1 unit            | 003          | 0.641 |                       |
|                                                                                     | 40                    |                  |            | 5SY8 440-7       |              | 003        | 5SY8 440-8       |              | 1      | 1 unit            | 003          | 0.647 |                       |
|                                                                                     | 50                    |                  |            | 5SY8 450-7       |              | 003        | 5SY8 450-8       |              | 1      | 1 unit            | 003          | 0.646 |                       |
| 63                                                                                  |                       |                  | 5SY8 463-7 |                  | 003          | 5SY8 463-8 |                  | 1            | 1 unit | 003               | 0.644        |       |                       |

1) 1 MW (modular width) = 18 mm.

# Miniature Circuit Breakers

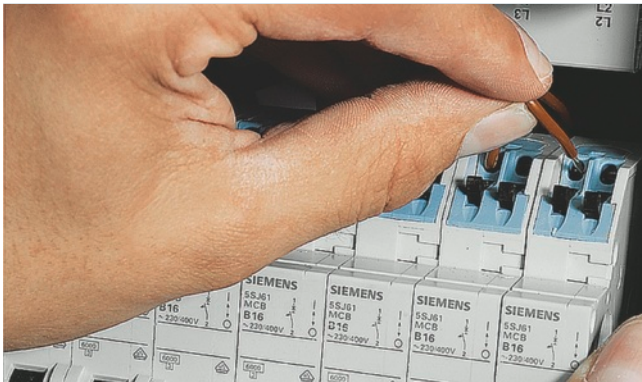
## 5SJ6 ...-KS miniature circuit breakers with plug-in terminals

3

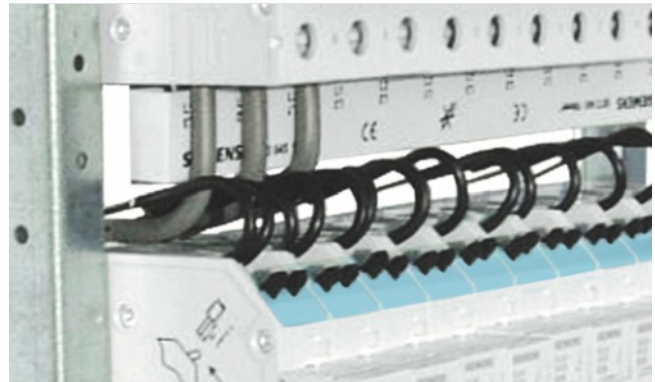
### Overview

Miniature circuit breakers with plug-in terminals are used for the protection of socket outlets and lighting circuits with the most common rated currents of 10 to 20 A.

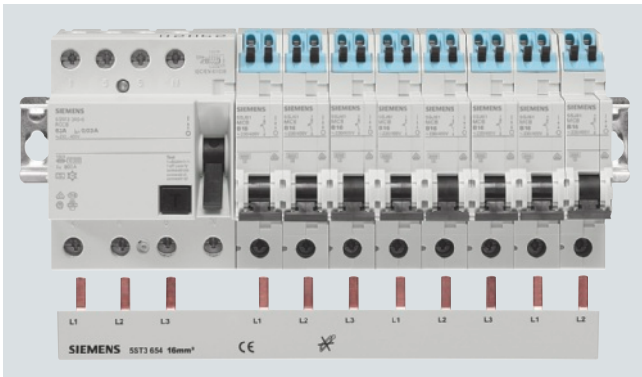
### Benefits



- Double, self-contained, screwless outgoing terminals for fast connection of conductors.



- Removal of individual conductors requires no tools and ensures high operating reliability
- No end sleeves required for finely stranded conductors. This saves mounting time.



- Conventional pin busbars are used for the incoming terminal. This ensures clear, manageable and convenient access to all terminals as part of the uniform Siemens connection concept.

5SJ6 ...-KS miniature circuit breakers  
with plug-in terminals

3

## Technical specifications

|                                                           |                        |       | 5SJ6 ...-KS                                                                         |
|-----------------------------------------------------------|------------------------|-------|-------------------------------------------------------------------------------------|
| <b>Standards</b>                                          |                        |       | EN 60898-1                                                                          |
| <b>Approvals</b>                                          |                        |       | <a href="#">See appendix, chapter 20</a>                                            |
| <b>Rated voltage <math>U_n</math></b>                     | V AC                   |       | 230/400                                                                             |
| <b>Operational voltage</b>                                |                        |       |                                                                                     |
| • Min.                                                    | V AC/DC/pole           |       | 24                                                                                  |
| • Max.                                                    | V AC<br>V DC/pole      |       | 250/440<br>60 <sup>1)</sup>                                                         |
| <b>Rated making and breaking capacity</b>                 | Acc. to EN 60898-1     | kA AC | 6                                                                                   |
| <b>Insulation coordination</b>                            |                        |       |                                                                                     |
| • Rated insulation voltage                                | V AC                   |       | 250/440                                                                             |
| • Pollution degree for overvoltage category               |                        |       | 2/III                                                                               |
| <b>Touch protection</b>                                   | Acc. to EN 50274       |       | Yes                                                                                 |
| <b>Handle end position</b> , sealable                     |                        |       | Yes                                                                                 |
| <b>Degree of protection</b>                               | Acc. to EN 60529       |       | IP20 with connected conductors,<br>IP40 in the handle range with distribution cover |
| <b>CFC and silicone-free</b>                              |                        |       | Yes                                                                                 |
| <b>Terminals</b>                                          |                        |       | Screwless terminals on the outgoing terminals for 1.5 ... 4 mm <sup>2</sup>         |
| <b>Conductor cross-sections</b>                           |                        |       |                                                                                     |
| • Top, plug-in terminals                                  |                        |       |                                                                                     |
| - Solid, stranded and finely stranded, without end sleeve | mm <sup>2</sup>        |       | 1.5 ... 4                                                                           |
| - Finely stranded, with end sleeve                        | mm <sup>2</sup>        |       | 1.5 ... 2.5                                                                         |
| • Bottom, tunnel terminal                                 | ±screw (Pozidriv)      |       | 2                                                                                   |
| - Solid, stranded or finely stranded, with end sleeve     | mm <sup>2</sup>        |       | 0.75 ... 25                                                                         |
| <b>Mounting position</b>                                  |                        |       | Any                                                                                 |
| <b>Service life</b> ,<br>on average, with rated load      |                        |       | 20000 actuations                                                                    |
| <b>Ambient temperature</b>                                |                        |       | °C -25 ... +45, occasionally +55, max. 95 % humidity                                |
| <b>Storage temperature</b>                                |                        |       | °C -40 ... +75                                                                      |
| <b>Resistance to climate</b>                              | Acc. to IEC 60068-2-30 |       | 6 cycles                                                                            |

<sup>1)</sup> The operational voltage 60 V DC/pole takes into account a battery charging voltage with a peak value of 72 V.

# Miniature Circuit Breakers

## 5SJ6 ...-KS miniature circuit breakers with plug-in terminals

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### Selection and ordering data

| 6 000<br>3                                                                          |                                                         | I <sub>n</sub> | Mounting width      | DT | Characteristic B |              |                     | Characteristic C |           |              | PU (UNIT, SET, M) | PS*/ P. unit | PG    | Weight per PU approx. kg |
|-------------------------------------------------------------------------------------|---------------------------------------------------------|----------------|---------------------|----|------------------|--------------|---------------------|------------------|-----------|--------------|-------------------|--------------|-------|--------------------------|
|                                                                                     |                                                         |                |                     |    | Order No.        | Price per PU | PG                  | DT               | Order No. | Price per PU |                   |              |       |                          |
|                                                                                     |                                                         | A              | MW <sup>1)</sup>    |    |                  |              |                     |                  |           |              |                   |              |       |                          |
|    | <b>Miniature circuit breakers with plug-in terminal</b> |                |                     |    |                  |              |                     |                  |           |              |                   |              |       |                          |
|                                                                                     | 1P                                                      |                |                     |    |                  |              |                     |                  |           |              |                   |              |       |                          |
|                                                                                     | 10                                                      | 1              | <b>5SJ6 110-6KS</b> |    | 001              |              | <b>5SJ6 110-7KS</b> |                  | 1         |              | 1 unit            | 001          | 0.117 |                          |
|                                                                                     | 13                                                      |                | <b>5SJ6 113-6KS</b> |    | 001              |              | <b>5SJ6 113-7KS</b> |                  | 1         |              | 1 unit            | 001          | 0.098 |                          |
|                                                                                     | 16                                                      |                | <b>5SJ6 116-6KS</b> |    | 001              |              | <b>5SJ6 116-7KS</b> |                  | 1         |              | 1/12 units        | 001          | 0.123 |                          |
|                                                                                     | 20                                                      |                | <b>5SJ6 120-6KS</b> |    | 001              |              | <b>5SJ6 120-7KS</b> |                  | 1         |              | 1 unit            | 001          | 0.103 |                          |
|    | 1P+N                                                    |                |                     |    |                  |              |                     |                  |           |              |                   |              |       |                          |
|                                                                                     | 10                                                      | 2              | <b>5SJ6 510-6KS</b> |    | 001              |              | <b>5SJ6 510-7KS</b> |                  | 1         |              | 1 unit            | 001          | 0.209 |                          |
|                                                                                     | 13                                                      |                | <b>5SJ6 513-6KS</b> |    | 001              |              | <b>5SJ6 513-7KS</b> |                  | 1         |              | 1 unit            | 001          | 0.210 |                          |
|                                                                                     | 16                                                      |                | <b>5SJ6 516-6KS</b> |    | 001              |              | <b>5SJ6 516-7KS</b> |                  | 1         |              | 1 unit            | 001          | 0.208 |                          |
|                                                                                     | 20                                                      |                | <b>5SJ6 520-6KS</b> |    | 001              |              | <b>5SJ6 520-7KS</b> |                  | 1         |              | 1 unit            | 001          | 0.209 |                          |
|   | 2P                                                      |                |                     |    |                  |              |                     |                  |           |              |                   |              |       |                          |
|                                                                                     | 10                                                      | 2              | <b>5SJ6 210-6KS</b> |    | 001              |              | <b>5SJ6 210-7KS</b> |                  | 1         |              | 1 unit            | 001          | 0.229 |                          |
|                                                                                     | 13                                                      |                | <b>5SJ6 213-6KS</b> |    | 001              |              | <b>5SJ6 213-7KS</b> |                  | 1         |              | 1 unit            | 001          | 0.228 |                          |
|                                                                                     | 16                                                      |                | <b>5SJ6 216-6KS</b> |    | 001              |              | <b>5SJ6 216-7KS</b> |                  | 1         |              | 1 unit            | 001          | 0.226 |                          |
|                                                                                     | 20                                                      |                | <b>5SJ6 220-6KS</b> |    | 001              |              | <b>5SJ6 220-7KS</b> |                  | 1         |              | 1 unit            | 001          | 0.226 |                          |
|  | 3P                                                      |                |                     |    |                  |              |                     |                  |           |              |                   |              |       |                          |
|                                                                                     | 10                                                      | 3              | <b>5SJ6 310-6KS</b> |    | 001              |              | <b>5SJ6 310-7KS</b> |                  | 1         |              | 1/4 units         | 001          | 0.353 |                          |
|                                                                                     | 13                                                      |                | <b>5SJ6 313-6KS</b> |    | 001              |              | <b>5SJ6 313-7KS</b> |                  | 1         |              | 1/4 units         | 001          | 0.357 |                          |
|                                                                                     | 16                                                      |                | <b>5SJ6 316-6KS</b> |    | 001              |              | <b>5SJ6 316-7KS</b> |                  | 1         |              | 1/4 units         | 001          | 0.358 |                          |
|                                                                                     | 20                                                      |                | <b>5SJ6 320-6KS</b> |    | 001              |              | <b>5SJ6 320-7KS</b> |                  | 1         |              | 1/4 units         | 001          | 0.354 |                          |

<sup>1)</sup> 1 MW (modular width) = 18 mm.

# Miniature Circuit Breakers

## 5SY Miniature Circuit Breakers, 1+N in 1 MW

### Introduction

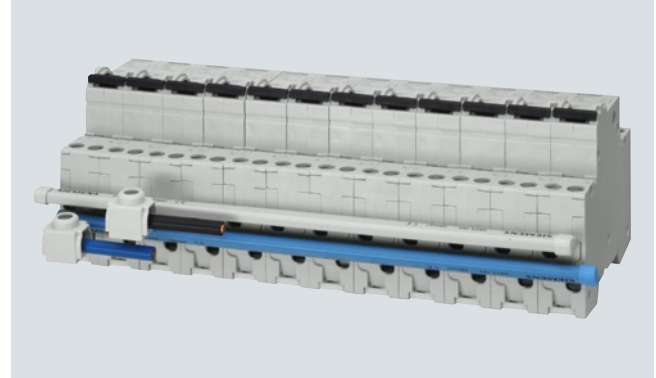
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#### Overview

These miniature circuit breakers are used for the protection of systems and installations with switched neutral conductors in distribution boards with little space. They are just a single modular width.

Compact busbars facilitate installation in space-saving distribution boards.

#### Benefits



- Auxiliary switches and fault signal contacts from the high-capacity range can be freely mounted on these miniature circuit breakers. This increases availability and cuts down on logistics.

- The infeed can be implemented either from the top or the bottom. Additional terminals with lateral cable entry facilitate mounting when using large conductor cross-sections.

#### Technical specifications

|                                                               |                        | 5SY3 0..                                                                         | 5SY6 0..                                    |
|---------------------------------------------------------------|------------------------|----------------------------------------------------------------------------------|---------------------------------------------|
| <b>Standards</b>                                              |                        | EN 60898-1                                                                       |                                             |
| <b>Approvals</b>                                              |                        | <a href="#">See appendix, chapter 20</a>                                         |                                             |
| <b>Rated voltage <math>U_n</math></b>                         | V AC                   | 230                                                                              |                                             |
| <b>Operational voltage</b>                                    |                        |                                                                                  |                                             |
| • Min.                                                        | V AC/DC                | 24                                                                               |                                             |
| • Max.                                                        | V AC                   | 250                                                                              |                                             |
| • Max.                                                        | V DC/pole              | 72                                                                               |                                             |
| <b>Rated making and breaking capacity <math>I_{cn}</math></b> | kA AC                  | 4.5                                                                              | 6                                           |
| <b>Insulation coordination</b>                                |                        |                                                                                  |                                             |
| • Rated insulation voltage                                    | V AC                   | 250                                                                              |                                             |
| • Pollution degree for overvoltage category                   |                        | 2/III                                                                            |                                             |
| <b>Touch protection</b>                                       | Acc. to EN 50274       | Yes                                                                              |                                             |
| <b>Handle end position</b> , sealable                         |                        | Yes                                                                              |                                             |
| <b>Degree of protection</b>                                   | Acc. to EN 60259       | IP20 with connected conductors, IP40 in the handle range with distribution cover |                                             |
| <b>CFC and silicone-free</b>                                  |                        | Yes                                                                              |                                             |
| <b>Terminals</b>                                              |                        |                                                                                  |                                             |
| • Solid and stranded, top and bottom terminal                 | ±screw (Pozidriv)      | 2                                                                                |                                             |
| • Finely stranded, with end sleeve, top and bottom terminal   | mm <sup>2</sup>        | 0.75 ... 16                                                                      |                                             |
| • Terminal tightening torque                                  | Nm                     | 2.0 ... 2.5                                                                      |                                             |
| <b>Mounting position</b>                                      |                        | Any                                                                              |                                             |
| <b>Service life</b>                                           |                        |                                                                                  |                                             |
| On average, with rated load                                   |                        | 20000 actuations at 2 A/4 A and 40 A: 8000 actuations                            |                                             |
| <b>Ambient temperature</b>                                    | °C                     | -25 ... +45, occasionally +55, max. 95 % humidity                                |                                             |
| <b>Storage temperature</b>                                    | °C                     | -40 ... +75                                                                      |                                             |
| <b>Resistance to climate</b>                                  | Acc. to IEC 60068-2-30 | 6 cycles                                                                         |                                             |
| <b>Resistance to vibrations</b>                               | Acc. to IEC 60068-2-6  | m/s <sup>2</sup>                                                                 | 50 at 25 ... 150 Hz and 60 at 35 Hz (4 sec) |







# Miniature Circuit Breakers

## 5SY Miniature Circuit Breakers, 1+N in 1 MW

**5SY6 0, 6 000 A**
**Selection and ordering data**

| 6 000<br>3                                                                        | $I_n$ | Mounting<br>width | DT | Characteristic B |                 |  | PG  | DT | Characteristic C |                 |  | PU<br>(UNIT,<br>SET,<br>M) | PS*/<br>P. unit | PG  | Weight<br>per PU<br>approx.<br>kg |
|-----------------------------------------------------------------------------------|-------|-------------------|----|------------------|-----------------|--|-----|----|------------------|-----------------|--|----------------------------|-----------------|-----|-----------------------------------|
|                                                                                   |       |                   |    | Order No.        | Price<br>per PU |  |     |    | Order No.        | Price<br>per PU |  |                            |                 |     |                                   |
|                                                                                   | A     | MW <sup>1)</sup>  |    |                  |                 |  |     |    |                  |                 |  |                            |                 |     |                                   |
| <b>Miniature circuit breakers, compact, 1+N (1P+N), 230 V AC</b>                  |       |                   |    |                  |                 |  |     |    |                  |                 |  |                            |                 |     |                                   |
| <b>N pole, right</b>                                                              |       |                   |    |                  |                 |  |     |    |                  |                 |  |                            |                 |     |                                   |
|  | 2     | 1                 |    | --               |                 |  |     |    | 5SY6 002-7       |                 |  | 1                          | 1 unit          | 001 | 0.107                             |
|                                                                                   | 4     |                   |    | --               |                 |  |     |    | 5SY6 004-7       |                 |  | 1                          | 1 unit          | 001 | 0.106                             |
|                                                                                   | 6     |                   |    | 5SY6 006-6       |                 |  | 001 |    | 5SY6 006-7       |                 |  | 1                          | 1 unit          | 001 | 0.100                             |
|                                                                                   | 8     |                   |    | --               |                 |  |     |    | 5SY6 008-7       |                 |  | 1                          | 1 unit          | 001 | 0.107                             |
|                                                                                   | 10    |                   |    | 5SY6 010-6       |                 |  | 001 |    | 5SY6 010-7       |                 |  | 1                          | 1 unit          | 001 | 0.100                             |
|                                                                                   | 13    |                   |    | 5SY6 013-6       |                 |  | 001 |    | 5SY6 013-7       |                 |  | 1                          | 1 unit          | 001 | 0.107                             |
|                                                                                   | 16    |                   |    | 5SY6 016-6       |                 |  | 001 |    | 5SY6 016-7       |                 |  | 1                          | 1 unit          | 001 | 0.100                             |
|                                                                                   | 20    |                   |    | 5SY6 020-6       |                 |  | 001 |    | 5SY6 020-7       |                 |  | 1                          | 1 unit          | 001 | 0.100                             |
|                                                                                   | 25    |                   |    | 5SY6 025-6       |                 |  | 001 |    | 5SY6 025-7       |                 |  | 1                          | 1 unit          | 001 | 0.100                             |
|                                                                                   | 32    |                   |    | 5SY6 032-6       |                 |  | 001 |    | 5SY6 032-7       |                 |  | 1                          | 1 unit          | 001 | 0.111                             |
|                                                                                   | 40    |                   |    | 5SY6 040-6       |                 |  | 001 |    | 5SY6 040-7       |                 |  | 1                          | 1 unit          | 001 | 0.100                             |
| <b>N pole, left</b>                                                               |       |                   |    |                  |                 |  |     |    |                  |                 |  |                            |                 |     |                                   |
|  | 2     | 1                 |    | --               |                 |  |     |    | 5SY6 002-7KL     |                 |  | 1                          | 1 unit          | 001 | 0.106                             |
|                                                                                   | 4     |                   |    | --               |                 |  |     |    | 5SY6 004-7KL     |                 |  | 1                          | 1 unit          | 001 | 0.100                             |
|                                                                                   | 6     |                   |    | 5SY6 006-6KL     |                 |  | 001 |    | 5SY6 006-7KL     |                 |  | 1                          | 1 unit          | 001 | 0.100                             |
|                                                                                   | 8     |                   |    | --               |                 |  |     |    | 5SY6 008-7KL     |                 |  | 1                          | 1 unit          | 001 | 0.107                             |
|                                                                                   | 10    |                   |    | 5SY6 010-6KL     |                 |  | 001 |    | 5SY6 010-7KL     |                 |  | 1                          | 1 unit          | 001 | 0.100                             |
|                                                                                   | 13    |                   |    | 5SY6 013-6KL     |                 |  | 001 |    | 5SY6 013-7KL     |                 |  | 1                          | 1 unit          | 001 | 0.107                             |
|                                                                                   | 16    |                   |    | 5SY6 016-6KL     |                 |  | 001 |    | 5SY6 016-7KL     |                 |  | 1                          | 1 unit          | 001 | 0.100                             |
|                                                                                   | 20    |                   |    | 5SY6 020-6KL     |                 |  | 001 |    | 5SY6 020-7KL     |                 |  | 1                          | 1 unit          | 001 | 0.100                             |
|                                                                                   | 25    |                   |    | 5SY6 025-6KL     |                 |  | 001 |    | 5SY6 025-7KL     |                 |  | 1                          | 1 unit          | 001 | 0.100                             |
|                                                                                   | 32    |                   |    | 5SY6 032-6KL     |                 |  | 001 |    | 5SY6 032-7KL     |                 |  | 1                          | 1 unit          | 001 | 0.112                             |
|                                                                                   | 40    |                   |    | 5SY6 040-6KL     |                 |  | 001 |    | 5SY6 040-7KL     |                 |  | 1                          | 1 unit          | 001 | 0.100                             |

\* You can order this quantity or a multiple thereof.

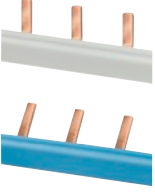
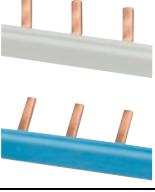
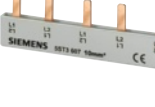
# Miniature Circuit Breakers

## 5SY Miniature Circuit Breakers, 1+N in 1 MW

### Accessories

3

#### Selection and ordering data

|                                                                                     | Pin spacing                                                                                                                | Length | DT    | Order No.       | Price per PU | PU (UNIT, SET, M) | PS* / P. unit | PG  | Weight per PU approx. kg |
|-------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|--------|-------|-----------------|--------------|-------------------|---------------|-----|--------------------------|
|                                                                                     | MW <sup>1)</sup>                                                                                                           | mm     |       |                 |              |                   |               |     |                          |
|    | <b>5ST3 7 busbar system, 10 mm<sup>2</sup>, 12 MW, for MCB 1+N in 1 MW of the compact range, can be cut, with end caps</b> |        |       |                 |              |                   |               |     |                          |
|                                                                                     | Single-phase                                                                                                               |        |       |                 |              |                   |               |     |                          |
|                                                                                     | For 12 MCBs 1+N, gray                                                                                                      | 1      | 216   | <b>5ST3 762</b> |              | 1                 | 10 units      | 020 | 0.022                    |
|                                                                                     | For 12 MCBs 1+N, blue                                                                                                      |        | 216   | <b>5ST3 763</b> |              | 1                 | 10 units      | 020 | 0.033                    |
|    | <b>5ST3 7 busbar system, 10 mm<sup>2</sup>, for MCB 1+N in 1 MW of the compact range, can be cut, without end caps</b>     |        |       |                 |              |                   |               |     |                          |
|                                                                                     | Single-phase                                                                                                               |        |       |                 |              |                   |               |     |                          |
|                                                                                     | For MCBs 1+N, gray                                                                                                         | 1      | 1016  | <b>5ST3 764</b> |              | 1                 | 10 units      | 020 | 0.134                    |
|                                                                                     | For MCBs 1+N, blue                                                                                                         |        | 1016  | <b>5ST3 765</b> |              | 1                 | 10 units      | 020 | 0.134                    |
|    | <b>End caps for 5ST3 76 busbars</b>                                                                                        |        |       |                 |              |                   |               |     |                          |
|                                                                                     | 1 set comprises a right and a left cap                                                                                     |        |       |                 |              |                   |               |     |                          |
|                                                                                     | Gray                                                                                                                       |        |       | <b>5ST3 766</b> |              | 1                 | 10 sets       | 020 | 0.001                    |
|                                                                                     | Blue                                                                                                                       |        |       | <b>5ST3 767</b> |              | 1                 | 10 sets       | 020 | 0.001                    |
|   | <b>5ST3 6 busbar systems, 10 mm<sup>2</sup>, for MCBs, fixed lengths, cannot be cut, fully insulated</b>                   |        |       |                 |              |                   |               |     |                          |
|                                                                                     | Three-phase                                                                                                                |        |       |                 |              |                   |               |     |                          |
|                                                                                     | For 6 MCBs 1+N                                                                                                             | 1      | 102   | <b>5ST3 613</b> |              | 1                 | 10 units      | 020 | 0.030                    |
|                                                                                     | For 9 MCBs 1+N                                                                                                             |        | 257.5 | <b>5ST3 614</b> |              | 1                 | 10 units      | 020 | 0.056                    |
|                                                                                     | For 12 MCBs 1+N                                                                                                            |        | 210   | <b>5ST3 615</b> |              | 1                 | 10 units      | 020 | 0.075                    |
|  | <b>Terminals for 5ST3 76</b>                                                                                               |        |       |                 |              |                   |               |     |                          |
|                                                                                     | Side terminal version                                                                                                      |        |       | <b>5ST3 768</b> |              | 1                 | 25 units      | 020 | 0.018                    |
|                                                                                     | For conductors up to 25 mm <sup>2</sup>                                                                                    |        |       |                 |              |                   |               |     |                          |

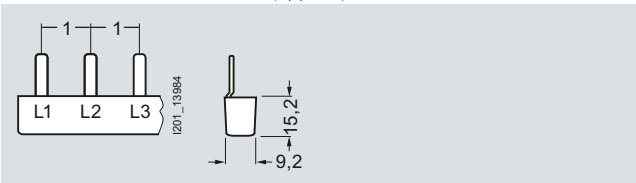
<sup>1)</sup> 1 MW (modular width) = 18 mm.

#### Dimensional drawings

##### 5ST3 6

##### Pin spacing in MW

Dimensions of side view in mm (approx.).

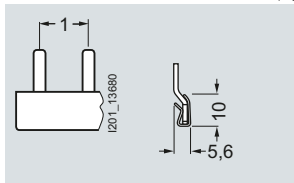


5ST3 613  
5ST3 614  
5ST3 615

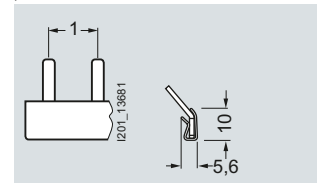
##### 5ST3 7

##### Pin spacing in MW

Dimensions of side view in mm (approx.).



5ST3 762  
5ST3 764



5ST3 763  
5ST3 765

# Miniature Circuit Breakers

## Additional Components

### Electrical components

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#### Overview

The Siemens mounting concept supports the combination of all 5ST3 additional components with Siemens 5SY and 5SP miniature circuit breakers and with 5SU1 RCBOs.

5SL and 5SY6 0... miniature circuit breakers are suitable for mounting auxiliary switches and fault signal contacts. Auxiliary switches can also be mounted on 5TE8 control switches and 5SG7 1 MINIZED switch disconnectors.

#### Auxiliary switches (AS)

The auxiliary switch (AS) always signals the contact position of the miniature circuit breaker, regardless of whether the miniature circuit breaker was tripped manually or as the result of a fault. An additional version is also available for the switching of small currents and voltages for the control of programmable control systems (PLCs) acc. to EN 61131-2. The auxiliary switch with test button enables the testing of control circuits without the need to switch the miniature circuit breaker.

#### Fault signal contacts (FC)

The fault signal contact (FC) signals the automatic tripping of the miniature circuit breaker in the event of a fault, such as an overload or a short circuit. If the fault signal contact is activated, the contact position does not change if the miniature circuit breaker is tripped manually. Fault signal contacts with TEST and RESET buttons enable the testing of control circuits without the need to trip the miniature circuit breaker. The red RESET button integrated in the handle also indicates the automatic tripping of the MCB. The signal can be acknowledged manually using the RESET button.

#### Shunt trips (units)

Shunt trips are used for the remote tripping of miniature circuit breakers.

#### Undervoltage releases (UR)

Undervoltage releases are integrated (e.g. in EMERGENCY-OFF loops), thus ensuring that the MCB trips in the event of an emergency, which, in turn, ensures disconnection of the control circuit according to EN 60204. In the event that the voltage is interrupted or too low, it also trips, i.e. prevents activation of the MCB.

#### Remote controlled mechanisms (RC)

Remote controlled mechanisms are used for the remote ON/OFF switching of miniature circuit breakers and the remote ON switching of RC units, as well as the local manual switching of these devices. A blocking function permits maintenance work. In the event that a miniature circuit breaker or RC unit is tripped, an acknowledgment must be carried out prior to switching back on. The remote controlled mechanism has an operating mode selector switch with the functions: "Locked", "Manual" and "Remote Switching".

Position of selector switch:

OFF: The remote controlled mechanism is switched off, blocked mechanically and can be sealed and/or locked.

RC OFF: Only manual operation is possible.

RC ON: Both manual and remote operation are possible.

In the event that a device is tripped by a fault (RC units, miniature circuit breakers), the handle of the basic device and remote controlled mechanism switches to the OFF position. The operator must then acknowledge the tripping by resetting the remote controlled mechanism (OFF command) before it can be reactivated. This serves the safety of the installation or to protect personnel during maintenance work.

In an RC unit/miniature circuit breaker combination, the RC unit is switched on asynchronously, i.e. prior to the miniature circuit breaker. The RC units for 5SY and 5SP4 can be switched ON via the MCB handle jumper using the supplied actuator attachment. There is no need to switch off the RC unit via the re-

mote controlled mechanism as the MCB contacts ensure disconnection of the electrical circuit.

The switching frequency is max. 2 actuations per minute. If this actuation frequency is exceeded it may cause internal tripping of the remote controlled mechanism as a protection against possible overload. In this case, the remote controlled mechanism must be switched OFF at the function selector switch and not switched back on again for at least 5 minutes. More additional 5ST3 ... components, such as AS, FC, units and UR, can be added to the right-hand side of the remote controlled mechanism in line with the Siemens mounting concept.

#### RC units

RC units can be combined with miniature circuit breakers of characteristic A, B, C and D. They then form a combination of RCCB and MCB for personnel, fire and line protection. The combinations can be tailored to meet individual requirements.

For information on RC units, [please see chapter "Residual current protective devices"](#).

#### Benefits

**Can be universally retrofitted with all additional components**



- The 5SL, 5SY and 5SP miniature circuit breakers are ideal for the quick and easy mounting of auxiliary switches and fault signal contacts. Captive metal brackets on the additional components ensure the quick and easy mounting of devices on the miniature circuit breakers without the need for tools.



- Fault signal contacts with TEST and RESET button enable the simple testing of auxiliary circuits and, in the event of a fault, acknowledgement of the fault over the RESET button, without the need to switch the miniature circuit breakers.



- The auxiliary switches with TEST button enable the simple manual testing of control circuits during operation of the entire installation without the need to switch the miniature circuit breakers.



# Miniature Circuit Breakers

## Additional Components

### Electrical components

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#### Technical specifications

|                                                  |   | Auxiliary switches (AS)                                              |                                                                      | Fault signal contacts (FC)                                           |
|--------------------------------------------------|---|----------------------------------------------------------------------|----------------------------------------------------------------------|----------------------------------------------------------------------|
|                                                  |   | 5ST3 010, 5ST3 010-2<br>5ST3 011, 5ST3 011-2<br>5ST3 012, 5ST3 012-2 | 5ST3 013, 5ST3 013-2<br>5ST3 014, 5ST3 014-2<br>5ST3 015, 5ST3 015-2 | 5ST3 020, 5ST3 020-2<br>5ST3 021, 5ST3 021-2<br>5ST3 022, 5ST3 022-2 |
| <b>Standards</b>                                 |   | EN 62019; IEC/EN 60947-5-1; UL 1077; CSA C22.2 No. 235               |                                                                      |                                                                      |
| <b>Approvals</b>                                 |   | See appendix, chapter 20                                             |                                                                      |                                                                      |
| <b>Short-circuit protection</b>                  |   | Miniature circuit breaker or gG 6 A fuse                             |                                                                      |                                                                      |
| <b>Contact load</b>                              |   |                                                                      |                                                                      |                                                                      |
| • Min.                                           |   | 50 mA, 24 V                                                          | 1 mA/5 V DC                                                          | 50 mA, 24 V                                                          |
| • Max.                                           |   | --                                                                   | 50 mA/30 V DC                                                        | --                                                                   |
| • 400 V AC, AC-14, NO                            | A | 2                                                                    | --                                                                   | 2                                                                    |
| • 230 V AC, AC-14, NO                            | A | 6                                                                    | --                                                                   | 6                                                                    |
| • 400 V AC, AC-13, NC                            | A | 2                                                                    | --                                                                   | 2                                                                    |
| • 230 V AC, AC-13, NC                            | A | 6                                                                    | --                                                                   | 6                                                                    |
| • 220 V DC, DC-13, NO+NC                         | A | 1                                                                    | --                                                                   | 1                                                                    |
| • 110 V DC, DC-13, NO+NC                         | A | 1                                                                    | --                                                                   | 1                                                                    |
| • 60 V DC, DC-13, NO+NC                          | A | 3                                                                    | --                                                                   | 3                                                                    |
| • 24 V DC, DC-13, NO+NC                          | A | 6                                                                    | --                                                                   | 6                                                                    |
| <b>Service life, on average, with rated load</b> |   | 20000 actuations                                                     | 20000 actuations                                                     | 20000 actuations                                                     |
| <b>Conductor cross-sections</b>                  |   | mm <sup>2</sup><br>AWG                                               | 0.5 ... 2.5<br>22 ... 14                                             | 0.5 ... 2.5<br>22 ... 14                                             |
| <b>Terminals</b>                                 |   |                                                                      |                                                                      |                                                                      |
| • Terminal tightening torque                     |   | Nm<br>lb/in                                                          | 0.5<br>4.5                                                           | 0.5<br>4.5                                                           |
| <b>Mounting position</b>                         |   | Any                                                                  | Any                                                                  | Any                                                                  |
| <b>Ambient temperature</b>                       |   | °C                                                                   | -25 ... +55                                                          | -25 ... +55                                                          |
| <b>Storage temperature</b>                       |   |                                                                      | -40 ... +75                                                          | -40 ... +75                                                          |
| <b>Resistance to climate</b>                     |   | Acc. to IEC 60068-2-30 Cycles                                        | 28                                                                   |                                                                      |
| <b>Shock</b>                                     |   | Acc. to IEC 60068-2-27 m/s                                           | 50 at 11 ms half-sine                                                |                                                                      |
| <b>Resistance to vibrations</b>                  |   | Acc. to IEC 60068-2-6 m/s <sup>2</sup>                               | 50 at 10 ... 150 Hz                                                  |                                                                      |

|                                                         |      | Undervoltage releases (UR)                        | Shunt trips (units)      |                          | Remote controlled mechanisms (RC)               |
|---------------------------------------------------------|------|---------------------------------------------------|--------------------------|--------------------------|-------------------------------------------------|
|                                                         |      | 5ST3 04.                                          | 5ST3 030                 | 5ST3 031                 | 5ST3 050                                        |
| <b>Standards</b>                                        |      | EN 60947-1                                        |                          |                          |                                                 |
| <b>Rated voltages <math>U_n</math></b>                  | V AC | 230                                               | 110 ... 415              | 24 ... 60                | 230                                             |
|                                                         | V DC | 24, 110                                           | 110                      | 24 ... 60                | --                                              |
| • Operating range $U_n$                                 |      | 0.85 ... 1.1 x $U_n$                              | 0.7 ... 1.1 x $U_n$      |                          | 0.9 ... 1.15 x $U_n$                            |
| • Rated frequency $f_n$                                 | Hz   | --                                                | 50 ... 60                |                          | 50 ... 60                                       |
| <b>Response limits</b>                                  |      |                                                   |                          |                          |                                                 |
| • Tripping                                              |      | < 0.35 ... 0.7 x $U_n$                            | --                       |                          | --                                              |
| <b>Short-circuit protection</b>                         |      | Miniature circuit breakers B/C 6 A or fuse gG 6 A |                          |                          |                                                 |
| <b>Minimum contact load</b>                             |      | 50 mA, 24 V                                       | 50 mA, 24 V              |                          | --                                              |
| <b>Tripping operations</b>                              |      | max. 2000                                         | max. 2000                |                          | --                                              |
| <b>Service life, on average, with rated load</b>        |      | 20000 actuations                                  | 20000 actuations         |                          | 20000 actuations<br>5000 at RC unit             |
| <b>Conductor cross-sections</b>                         |      | mm <sup>2</sup><br>AWG                            | 0.5 ... 2.5<br>22 ... 14 | 0.5 ... 2.5<br>22 ... 14 | 0.5 ... 2.5<br>22 ... 14                        |
| <b>Terminals</b>                                        |      |                                                   |                          |                          |                                                 |
| • Terminal tightening torque                            |      | Nm<br>lb/in                                       | 0.8<br>6.8               | 0.8<br>6.8               | 0.4 ... 0.5<br>4.5                              |
| <b>Mounting position</b>                                |      | Any                                               | Any                      |                          | Any                                             |
| <b>Ambient temperature</b>                              |      | °C                                                | -25 ... +55              | -25 ... +55              | -20 ... +55                                     |
| <b>Storage temperature</b>                              |      | °C                                                | -40 ... +75              | -40 ... +75              | -40 ... +75                                     |
| <b>Resistance to climate</b>                            |      | Acc. to IEC 60068-2-30 Cycles                     | 28                       |                          |                                                 |
| <b>Shock</b>                                            |      | Acc. to IEC 60068-2-27 m/s                        | 50 at 11 ms half-sine    |                          |                                                 |
| <b>Resistance to vibrations</b>                         |      | Acc. to IEC 60068-2-6 m/s <sup>2</sup>            | 50 at 10 ... 150 Hz      |                          |                                                 |
| <b>Switching frequency</b>                              |      | --                                                |                          |                          | 2 actuations per minute                         |
| <b>Switching duration</b>                               |      | s                                                 | --                       |                          | < 2                                             |
| <b>Minimum command duration</b>                         |      | s                                                 | --                       |                          | 0.2 continuous command possible                 |
| <b>Rated power dissipation</b>                          |      | VA                                                | --                       |                          | No power consumption, in switching operation 26 |
| <b>Behavior in the event of control voltage failure</b> |      | --                                                |                          |                          | No change                                       |

For technical information on RC units, please see chapter "Residual current protective devices".

# Miniature Circuit Breakers

## Additional Components

### Electrical components

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#### Selection and ordering data

|                                                                                     | Rated voltage<br>$U_n$<br>V                                                                                                                                      | Mounting width<br>MW <sup>1)</sup> | DT | Order No.                              | Price per PU | PU (UNIT, SET, M) | PS*/P. unit | PG  | Weight per PU approx.<br>kg |
|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|----|----------------------------------------|--------------|-------------------|-------------|-----|-----------------------------|
|    | <b>Auxiliary switches (AS)</b><br>For 5SL, 5SY, 5SP miniature circuit breakers, 5SU1 RCBOs and 5TE8 switches                                                     |                                    |    |                                        |              |                   |             |     |                             |
|                                                                                     | 1 NO + 1 NC<br>For low power                                                                                                                                     | 0.5                                | ▶  | <b>5ST3 010</b><br><b>5ST3 013</b>     |              | 1                 | 1 unit      | 020 | 0.066                       |
|                                                                                     | 2 NO<br>For low power                                                                                                                                            |                                    | ▶  | <b>5ST3 011</b><br><b>5ST3 014</b>     |              | 1                 | 1 unit      | 020 | 0.055                       |
|                                                                                     | 2 NC<br>For low power                                                                                                                                            |                                    |    | <b>5ST3 012</b><br><b>5ST3 015</b>     |              | 1                 | 1 unit      | 020 | 0.055                       |
|                                                                                     |                                                                                                                                                                  |                                    |    |                                        |              | 1                 | 1 unit      | 020 | 0.060                       |
|                                                                                     |                                                                                                                                                                  |                                    |    |                                        |              | 1                 | 1 unit      | 020 | 0.055                       |
|    | <b>Auxiliary switches (AS) with TEST button</b><br>For 5SL, 5SY, 5SP miniature circuit breakers, 5SU1 RCBOs and 5TE8 switches                                    |                                    |    |                                        |              |                   |             |     |                             |
|                                                                                     | 1 NO + 1 NC<br>For low power                                                                                                                                     | 0.5                                |    | <b>5ST3 010-2</b><br><b>5ST3 013-2</b> |              | 1                 | 1 unit      | 020 | 0.045                       |
|                                                                                     | 2 NO<br>For low power                                                                                                                                            |                                    |    | <b>5ST3 011-2</b><br><b>5ST3 014-2</b> |              | 1                 | 1 unit      | 020 | 0.045                       |
|                                                                                     | 2 NC<br>For low power                                                                                                                                            |                                    |    | <b>5ST3 012-2</b><br><b>5ST3 015-2</b> |              | 1                 | 1 unit      | 020 | 0.045                       |
|                                                                                     |                                                                                                                                                                  |                                    |    |                                        |              | 1                 | 1 unit      | 020 | 0.045                       |
|                                                                                     |                                                                                                                                                                  |                                    |    |                                        |              | 1                 | 1 unit      | 020 | 0.045                       |
|   | <b>Fault signal contacts (FC)</b><br>For 5SL, 5SY, 5SP miniature circuit breakers and 5SU1 RCBOs                                                                 |                                    |    |                                        |              |                   |             |     |                             |
|                                                                                     | 1 NO + 1 NC                                                                                                                                                      | 0.5                                | ▶  | <b>5ST3 020</b>                        |              | 1                 | 1 unit      | 020 | 0.056                       |
|                                                                                     | 2 NO                                                                                                                                                             |                                    |    | <b>5ST3 021</b>                        |              | 1                 | 1 unit      | 020 | 0.056                       |
|                                                                                     | 2 NC                                                                                                                                                             |                                    |    | <b>5ST3 022</b>                        |              | 1                 | 1 unit      | 020 | 0.057                       |
|  | <b>Fault signal contacts (FC) with TEST and ACKNOWLEDGE button</b><br>For 5SL, 5SY, 5SP miniature circuit breakers and 5SU1 RCBOs                                |                                    |    |                                        |              |                   |             |     |                             |
|                                                                                     | 1 NO + 1 NC                                                                                                                                                      | 0.5                                | ▶  | <b>5ST3 020-2</b>                      |              | 1                 | 1 unit      | 020 | 0.050                       |
|                                                                                     | 2 NO                                                                                                                                                             |                                    |    | <b>5ST3 021-2</b>                      |              | 1                 | 1 unit      | 020 | 0.050                       |
|                                                                                     | 2 NC                                                                                                                                                             |                                    |    | <b>5ST3 022-2</b>                      |              | 1                 | 1 unit      | 020 | 0.050                       |
|  | <b>Undervoltage releases (UR)</b><br>For 5SY, 5SP MCBs and 5SU1 RCBOs but not suitable for use with 5SY6 0.. and 5SL miniature circuit breakers                  |                                    |    |                                        |              |                   |             |     |                             |
|                                                                                     | With integrated auxiliary switch                                                                                                                                 |                                    |    |                                        |              |                   |             |     |                             |
|                                                                                     | 230 AC                                                                                                                                                           | 1                                  | ▶  | <b>5ST3 040</b>                        |              | 1                 | 1 unit      | 020 | 0.107                       |
|                                                                                     | 110 DC                                                                                                                                                           |                                    |    | <b>5ST3 041</b>                        |              | 1                 | 1 unit      | 020 | 0.105                       |
|                                                                                     | 24 DC                                                                                                                                                            |                                    |    | <b>5ST3 042</b>                        |              | 1                 | 1 unit      | 020 | 0.101                       |
|                                                                                     | Without integrated auxiliary switch                                                                                                                              |                                    |    |                                        |              |                   |             |     |                             |
|                                                                                     | 230 AC                                                                                                                                                           | 1                                  | ▶  | <b>5ST3 043</b>                        |              | 1                 | 1 unit      | 020 | 0.092                       |
|                                                                                     | 110 DC                                                                                                                                                           |                                    |    | <b>5ST3 044</b>                        |              | 1                 | 1 unit      | 020 | 0.091                       |
|  | <b>Shunt trips (units)</b><br>For 5SY, 5SP MCBs and 5SU1 RCBOs but not suitable for use with 5SY6 0.. and 5SL miniature circuit breakers                         |                                    |    |                                        |              |                   |             |     |                             |
|                                                                                     | 110 ... 415 V AC                                                                                                                                                 | 1                                  | ▶  | <b>5ST3 030</b>                        |              | 1                 | 1 unit      | 020 | 0.090                       |
|                                                                                     | 24 ... 60 V AC/DC                                                                                                                                                | 1                                  | ▶  | <b>5ST3 031</b>                        |              | 1                 | 1 unit      | 020 | 0.090                       |
|                                                                                     |                                                                                                                                                                  |                                    |    |                                        |              |                   |             |     |                             |
|  | <b>Remote controlled mechanisms (RC)</b><br>For 5SY and 5SP MCBs and 5SU1 RCBOs, but not suitable for use with 5SL3, 5SL6, 5TE8 ...CC miniature circuit breakers |                                    |    |                                        |              |                   |             |     |                             |
|                                                                                     | 230 AC                                                                                                                                                           | 3.5                                | ▶  | <b>5ST3 050</b>                        |              | 1                 | 1 unit      | 020 | 0.461                       |

<sup>1)</sup> 1 MW (modular width) = 18 mm.

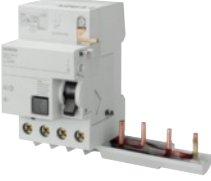


# Miniature Circuit Breakers

## Additional Components

### Electrical components

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|                                                                                     | Rated residual current                                                                                                                                     | Rated current | Mounting width   | DT | Order No.         | Price per PU | PU (UNIT, SET, M) | PS*/P. unit | PG  | Weight per PU approx. |
|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|------------------|----|-------------------|--------------|-------------------|-------------|-----|-----------------------|
|                                                                                     | $I_{\Delta n}$<br>mA                                                                                                                                       | $I_n$<br>A    | MW <sup>1)</sup> |    |                   |              |                   |             |     | kg                    |
| <b>RC units, type A, instantaneous tripping</b>                                     |                                                                                                                                                            |               |                  |    |                   |              |                   |             |     |                       |
|    | For 5SY miniature circuit breakers, not suitable for use with 5SY5, 5SY8, 5SY6 0... and 5SL miniature circuit breakers, 2P, 230 ... 400 V AC, 50 ... 60 Hz |               |                  |    |                   |              |                   |             |     |                       |
|                                                                                     | 10                                                                                                                                                         | 0.3 ... 16    | 2                | ▶  | <b>5SM2 121-6</b> |              | 1                 | 1 unit      | 011 | 0.207                 |
|                                                                                     | 30                                                                                                                                                         | 0.3 ... 40    |                  |    | <b>5SM2 322-6</b> |              | 1                 | 1 unit      | 011 | 0.209                 |
|                                                                                     | 300                                                                                                                                                        |               |                  |    | <b>5SM2 622-6</b> |              | 1                 | 1 unit      | 011 | 0.199                 |
|                                                                                     | 30                                                                                                                                                         | 0.3 ... 63    |                  |    | <b>5SM2 325-6</b> |              | 1                 | 1 unit      | 011 | 0.215                 |
|                                                                                     | 100                                                                                                                                                        |               |                  |    | <b>5SM2 425-6</b> |              | 1                 | 1 unit      | 011 | 0.211                 |
|    | 300                                                                                                                                                        |               |                  |    | <b>5SM2 625-6</b> |              | 1                 | 1 unit      | 011 | 0.203                 |
|                                                                                     | 500                                                                                                                                                        |               |                  |    | <b>5SM2 725-6</b> |              | 1                 | 1 unit      | 011 | 0.198                 |
|                                                                                     | For 5SY miniature circuit breakers, not suitable for use with 5SY5, 5SY8, 5SY6 0... and 5SL miniature circuit breakers, 3P, 230 ... 400 V AC, 50 ... 60 Hz |               |                  |    |                   |              |                   |             |     |                       |
|                                                                                     | 30                                                                                                                                                         | 0.3 ... 40    | 3                |    | <b>5SM2 332-6</b> |              | 1                 | 1 unit      | 011 | 0.314                 |
|                                                                                     | 300                                                                                                                                                        |               |                  |    | <b>5SM2 632-6</b> |              | 1                 | 1 unit      | 011 | 0.295                 |
|                                                                                     | 30                                                                                                                                                         | 0.3 ... 63    |                  |    | <b>5SM2 335-6</b> |              | 1                 | 1 unit      | 011 | 0.359                 |
|   | 100                                                                                                                                                        |               |                  |    | <b>5SM2 435-6</b> |              | 1                 | 1 unit      | 011 | 0.327                 |
|                                                                                     | 300                                                                                                                                                        |               |                  |    | <b>5SM2 635-6</b> |              | 1                 | 1 unit      | 011 | 0.298                 |
|                                                                                     | 500                                                                                                                                                        |               |                  |    | <b>5SM2 735-6</b> |              | 1                 | 1 unit      | 011 | 0.322                 |
|                                                                                     | For 5SY miniature circuit breakers, not suitable for use with 5SY5, 5SY8, 5SY6 0... and 5SL miniature circuit breakers, 4P, 230 ... 400 V AC, 50 ... 60 Hz |               |                  |    |                   |              |                   |             |     |                       |
|                                                                                     | 30                                                                                                                                                         | 0.3 ... 40    | 3                | ▶  | <b>5SM2 342-6</b> |              | 1                 | 1 unit      | 011 | 0.337                 |
|                                                                                     | 300                                                                                                                                                        |               |                  | ▶  | <b>5SM2 642-6</b> |              | 1                 | 1 unit      | 011 | 0.326                 |
|  | 30                                                                                                                                                         | 0.3 ... 63    |                  |    | <b>5SM2 345-6</b> |              | 1                 | 1 unit      | 011 | 0.397                 |
|                                                                                     | 100                                                                                                                                                        |               |                  |    | <b>5SM2 445-6</b> |              | 1                 | 1 unit      | 011 | 0.357                 |
|                                                                                     | 300                                                                                                                                                        |               |                  |    | <b>5SM2 645-6</b> |              | 1                 | 1 unit      | 011 | 0.328                 |
|                                                                                     | 500                                                                                                                                                        |               |                  |    | <b>5SM2 745-6</b> |              | 1                 | 1 unit      | 011 | 0.326                 |
|                                                                                     | For 5SP4 miniature circuit breakers (characteristics B and C) 2P, 125 ... 230 V AC, 50 ... 60 Hz                                                           |               |                  |    |                   |              |                   |             |     |                       |
|                                                                                     | 30                                                                                                                                                         | 80 ... 100    | 3.5              |    | <b>5SM2 327-6</b> |              | 1                 | 1 unit      | 011 | 0.529                 |
|  | 300                                                                                                                                                        |               |                  |    | <b>5SM2 627-6</b> |              | 1                 | 1 unit      | 011 | 0.458                 |
|                                                                                     | For 5SP4 miniature circuit breakers (characteristics B and C) 4P, 230 ... 400 V AC, 50 ... 60 Hz                                                           |               |                  |    |                   |              |                   |             |     |                       |
|                                                                                     | 30                                                                                                                                                         | 80 ... 100    | 5                |    | <b>5SM2 347-6</b> |              | 1                 | 1 unit      | 011 | 0.934                 |
|                                                                                     | 300                                                                                                                                                        |               |                  |    | <b>5SM2 647-6</b> |              | 1                 | 1 unit      | 011 | 0.682                 |
|                                                                                     |                                                                                                                                                            |               |                  |    |                   |              |                   |             |     |                       |
|                                                                                     |                                                                                                                                                            |               |                  |    |                   |              |                   |             |     |                       |

<sup>1)</sup> 1 MW (modular width) = 18 mm.



# Miniature Circuit Breakers

## Additional Components

### Electrical components

3

|                                                                                     | Rated residual current                                                                                                                                     | Rated current | Mounting width | DT               | Order No.             | Price per PU | PU (UNIT, SET, M) | PS*/P. unit | PG  | Weight per PU approx. |
|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|----------------|------------------|-----------------------|--------------|-------------------|-------------|-----|-----------------------|
|                                                                                     | $I_{\Delta n}$<br>mA                                                                                                                                       | $I_n$<br>A    |                | MW <sup>1)</sup> |                       |              |                   |             |     | kg                    |
|    | <b>RC units, type A, super resistant [K]</b>                                                                                                               |               |                |                  |                       |              |                   |             |     |                       |
|                                                                                     | For 5SY miniature circuit breakers, not suitable for use with 5SY5, 5SY8, 5SY6 0... and 5SL miniature circuit breakers, 2P, 230 ... 400 V AC, 50 ... 60 Hz |               |                |                  |                       |              |                   |             |     |                       |
|                                                                                     | 30                                                                                                                                                         | 0.3 ... 40    | 2              |                  | <b>5SM2 322-6KK01</b> |              | 1                 | 1 unit      | 011 | 0.215                 |
|                                                                                     | 30                                                                                                                                                         | 0.3 ... 63    |                |                  | <b>5SM2 325-6KK01</b> |              | 1                 | 1 unit      | 011 | 0.214                 |
|                                                                                     | For 5SY miniature circuit breakers, not suitable for use with 5SY5, 5SY8, 5SY6 0... and 5SL miniature circuit breakers, 3P, 230 ... 400 V AC, 50 ... 60 Hz |               |                |                  |                       |              |                   |             |     |                       |
|                                                                                     | 30                                                                                                                                                         | 0.3 ... 40    | 3              |                  | <b>5SM2 332-6KK01</b> |              | 1                 | 1 unit      | 011 | 0.365                 |
|                                                                                     | 30                                                                                                                                                         | 0.3 ... 63    |                |                  | <b>5SM2 335-6KK01</b> |              | 1                 | 1 unit      | 011 | 0.365                 |
|                                                                                     | For 5SY miniature circuit breakers, not suitable for use with 5SY5, 5SY8, 5SY6 0... and 5SL miniature circuit breakers, 4P, 230 ... 400 V AC, 50 ... 60 Hz |               |                |                  |                       |              |                   |             |     |                       |
|                                                                                     | 30                                                                                                                                                         | 0.3 ... 40    | 3              |                  | <b>5SM2 342-6KK01</b> |              | 1                 | 1 unit      | 011 | 0.390                 |
|                                                                                     | 30                                                                                                                                                         | 0.3 ... 63    |                |                  | <b>5SM2 345-6KK01</b> |              | 1                 | 1 unit      | 011 | 0.388                 |
|   | <b>RC units, type A, selective [S]</b>                                                                                                                     |               |                |                  |                       |              |                   |             |     |                       |
|                                                                                     | For 5SY miniature circuit breakers, not suitable for use with 5SY5, 5SY8, 5SY6 0... and 5SL miniature circuit breakers, 2P, 230 ... 400 V AC, 50 ... 60 Hz |               |                |                  |                       |              |                   |             |     |                       |
|                                                                                     | 300                                                                                                                                                        | 0.3 ... 40    | 2              |                  | <b>5SM2 622-8</b>     |              | 1                 | 1 unit      | 011 | 0.210                 |
|                                                                                     | 300                                                                                                                                                        | 0.3 ... 63    |                |                  | <b>5SM2 625-8</b>     |              | 1                 | 1 unit      | 011 | 0.210                 |
|                                                                                     | For 5SY miniature circuit breakers, not suitable for use with 5SY5, 5SY8, 5SY6 0... and 5SL miniature circuit breakers, 3P, 230 ... 400 V AC, 50 ... 60 Hz |               |                |                  |                       |              |                   |             |     |                       |
|                                                                                     | 300                                                                                                                                                        | 0.3 ... 63    | 3              |                  | <b>5SM2 635-8</b>     |              | 1                 | 1 unit      | 011 | 0.341                 |
|                                                                                     | 500                                                                                                                                                        |               |                |                  | <b>5SM2 735-8</b>     |              | 1                 | 1 unit      | 011 | 0.323                 |
|                                                                                     | 1000                                                                                                                                                       |               |                |                  | <b>5SM2 835-8</b>     |              | 1                 | 1 unit      | 011 | 0.304                 |
|                                                                                     | For 5SY miniature circuit breakers, not suitable for use with 5SY5, 5SY8, 5SY6 0... and 5SL miniature circuit breakers, 4P, 230 ... 400 V AC, 50 ... 60 Hz |               |                |                  |                       |              |                   |             |     |                       |
|                                                                                     | 300                                                                                                                                                        | 0.3 ... 63    | 3              |                  | <b>5SM2 645-8</b>     |              | 1                 | 1 unit      | 011 | 0.373                 |
|  | 500                                                                                                                                                        |               |                |                  | <b>5SM2 745-8</b>     |              | 1                 | 1 unit      | 011 | 0.333                 |
|                                                                                     | 1000                                                                                                                                                       |               |                |                  | <b>5SM2 845-8</b>     |              | 1                 | 1 unit      | 011 | 0.333                 |
|                                                                                     | For 5SP4 miniature circuit breakers (characteristics B and C)                                                                                              |               |                |                  |                       |              |                   |             |     |                       |
|                                                                                     | 2P, 125 ... 230 V AC, 50 ... 60 Hz                                                                                                                         |               |                |                  |                       |              |                   |             |     |                       |
|                                                                                     | 300                                                                                                                                                        | 80 ... 100    | 3.5            |                  | <b>5SM2 627-8</b>     |              | 1                 | 1 unit      | 011 | 0.519                 |
|                                                                                     | For 5SP4 miniature circuit breakers (characteristics B and C)                                                                                              |               |                |                  |                       |              |                   |             |     |                       |
|                                                                                     | 4P, 230 ... 400 V AC, 50 ... 60 Hz                                                                                                                         |               |                |                  |                       |              |                   |             |     |                       |
|                                                                                     | 300                                                                                                                                                        | 80 ... 100    | 5              |                  | <b>5SM2 647-8</b>     |              | 1                 | 1 unit      | 011 | 0.838                 |
|                                                                                     | 1000                                                                                                                                                       |               |                |                  | <b>5SM2 847-8</b>     |              | 1                 | 1 unit      | 011 | 0.706                 |
|                                                                                     |                                                                                                                                                            |               |                |                  |                       |              |                   |             |     |                       |

<sup>1)</sup> 1 MW (modular width) = 18 mm.



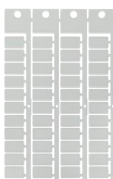
# Miniature Circuit Breakers

## Additional Components

### Mechanical components

3

#### Selection and ordering data

| Version                                                                                                                                                                                                                                                 | Mounting width<br>MW <sup>1)</sup> | DT | Order No.       | Price<br>per PU | PU<br>(UNIT,<br>SET, M) | PS*/<br>P. unit | PG  | Weight<br>per PU<br>approx.<br>kg |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|----|-----------------|-----------------|-------------------------|-----------------|-----|-----------------------------------|
|                                                                                                                                                                        |                                    |    | <b>5ST3 800</b> |                 | 1                       | 10 units        | 020 | 0.002                             |
| <b>Terminal covers</b><br>For miniature circuit breakers, not suitable for use with 5SY6 0...<br>For additional covering of the screw openings per pole, sealable. In the case of 5SY, also prevents removal of device from the standard mounting rail. |                                    |    |                 |                 |                         |                 |     |                                   |
|                                                                                                                                                                        |                                    |    | <b>5ST3 801</b> |                 | 1                       | 1 unit          | 020 | 0.012                             |
| <b>Handle locking devices</b><br>Sealable to prevent undesired mechanical ON/OFF switching<br>For 5SP and 5SY miniature circuit breakers<br>For padlock with max. 3 mm shackle                                                                          |                                    |    |                 |                 |                         |                 |     |                                   |
|                                                                                                                                                                        |                                    |    | <b>5ST3 806</b> |                 | 1                       | 5 units         | 020 | 0.007                             |
| <b>Handle locking devices</b><br>For 5SL miniature circuit breakers<br>For padlock with 3 ... 6 mm shackle                                                                                                                                              |                                    |    |                 |                 |                         |                 |     |                                   |
|                                                                                                                                                                       |                                    |    | <b>5ST3 802</b> |                 | 1                       | 1 unit          | 020 | 0.031                             |
| <b>Padlocks</b><br>For 5ST3 801 and 5ST3 806 handle locking devices                                                                                                                                                                                     |                                    |    |                 |                 |                         |                 |     |                                   |
|                                                                                                                                                                                                                                                         |                                    |    | <b>5ST3 803</b> |                 | 1                       | 1 set           | 020 | 0.041                             |
| <b>Locking devices</b><br>For 5SP and 5SY miniature circuit breakers comprising 5ST3 801 handle locking device and 5ST3 802 padlock                                                                                                                     |                                    |    |                 |                 |                         |                 |     |                                   |
|                                                                                                                                                                                                                                                         |                                    |    | <b>5ST3 807</b> |                 | 1                       | 1 set           | 020 | 0.034                             |
| <b>Locking devices</b><br>For 5SL miniature circuit breakers, comprising 5ST3 806 handle locking device and 5ST3 802 padlock                                                                                                                            |                                    |    |                 |                 |                         |                 |     |                                   |
|                                                                                                                                                                      | 0.5                                |    | <b>5TG8 240</b> |                 | 1                       | 2 units         | 026 | 0.010                             |
| <b>Spacers</b><br>Can be placed on either side of the standard mounting rail. Two spacers allow for convenient cable routing                                                                                                                            |                                    |    |                 |                 |                         |                 |     |                                   |
|                                                                                                                                                                      |                                    |    | <b>5ST2 201</b> |                 | 1                       | 1 unit          | 020 | 0.013                             |
| <b>Fixing parts</b><br>Made of plastic, for use on a mounting plate                                                                                                                                                                                     |                                    |    |                 |                 |                         |                 |     |                                   |
|                                                                                                                                                                      |                                    |    | <b>5ST2 173</b> |                 | 1                       | 1 set           | 020 | 0.049                             |
| <b>Inscription labels</b><br>15 mm x 9 mm, 3 frames à 44 labels, can be mounted on casing collar, white, self-adhesive                                                                                                                                  |                                    |    |                 |                 |                         |                 |     |                                   |

#### Labeling system

Inscription on self-adhesive labels for a uniform and tidy appearance in electrical power distribution. The labeling program can be downloaded to your PC free of charge at:

[www.siemens.com/labeling-tool](http://www.siemens.com/labeling-tool)

Recommended ELAT-3-747 labels for printing on normal printers can be ordered at:

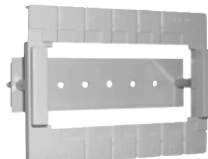
Brady GmbH  
Otto-Hahn-Str. 5-7  
D-63222 Langen  
Tel.: +49 (6103) 7598-660

# Miniature Circuit Breakers

## Additional Components

### Mechanical components

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| Version                                                                                                                                                                                     | DT                                                                                                                                                                                                                                                                                                                                                                                                                            | Order No.                                                                                                                                     | Price<br>per PU | PU<br>(UNIT,<br>SET,<br>M) | PS*/<br>P. unit                      | PG                       | Weight<br>per PU<br>approx.<br><br>kg |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|-----------------|----------------------------|--------------------------------------|--------------------------|---------------------------------------|
|                                                                                                            | <b>Terminal covers, gray</b><br>For surface mounting, degree of protection IP40, sealable, with 35 mm standard mounting rail<br><ul style="list-style-type: none"><li>• Up to 2.5 MW</li><li>• Up to 4.5 MW</li></ul>                                                                                                                                                                                                         | <b>5SW3 004</b><br><b>5SW3 005</b>                                                                                                            |                 | 1<br>1                     | 1 unit<br>1 unit                     | 015<br>015               | 0.091<br>0.171                        |
|                                                                                                            | <b>Wall enclosures, gray</b><br>For flush mounting, degree of protection IP40 with 35 mm standard mounting rail<br><ul style="list-style-type: none"><li>• Up to 2.5 MW</li><li>• Up to 4.5 MW</li></ul>                                                                                                                                                                                                                      | <b>5SW3 006</b><br><b>5SW3 007</b>                                                                                                            |                 | 1<br>1                     | 1/4 units<br>1 unit                  | 015<br>015               | 0.133<br>0.162                        |
|                                                                                                           | <b>Molded-plastic enclosures, gray</b><br>For surface mounting, degree of protection IP54, with 35 mm standard mounting rail, sealable with transparent hinged lid<br>For 4.5 MW                                                                                                                                                                                                                                              | <b>5SW1 200</b>                                                                                                                               |                 | 1                          | 1 unit                               | 015                      | 0.447                                 |
|                                                                                                          | <b>Covers</b><br>Can be assembled as mini distribution board, suitable for all devices, cover parts prepared for rail mounting of conventional label caps, comprising:<br><ul style="list-style-type: none"><li>• End plates (for snapping onto standard mounting rail)</li><li>• Angled profile (approx. 1 m long)</li><li>• Alternative flat profiles (as a cover between the rows of devices length approx. 1 m)</li></ul> |  <b>5ST2 134</b><br><br><b>5ST2 135</b><br><b>5ST2 136</b> |                 | 1<br>1<br>1                | 10 units<br>5 units<br>5 units       | 020<br>020<br>020        | 0.021<br>0.288<br>0.239               |
|                                                                                                          | <b>Holders for front panel installation</b><br>Universal use for devices from 1 to 6 MW<br>Cutout dimensions:<br>Height 45 <sup>+0.5</sup> mm<br>Width: 23, 41, 59, 77, 95 or 113 mm                                                                                                                                                                                                                                          | <b>7LF9 006</b>                                                                                                                               |                 | 1                          | 1 unit                               | 025                      | 0.070                                 |
|                                                                                                          | <b>Intermediate frames for 70 mm devices in 55 mm ALPHA SIMBOX distribution boards</b><br>Versions<br><ul style="list-style-type: none"><li>• 1-tier</li><li>• 2-tier</li><li>• 3-tier</li><li>• 4-tier</li></ul>                                                                                                                                                                                                             | <b>8GB4 561</b><br><b>8GB4 562</b><br><b>8GB4 563</b><br><b>8GB4 564</b>                                                                      |                 | 1<br>1<br>1<br>1           | 1 unit<br>1 unit<br>1 unit<br>1 unit | 032<br>032<br>032<br>032 | 0.900<br>1.100<br>1.300<br>1.500      |
| For further information on ALPHA distribution boards, ALPHA SIMBOX small distribution boards and intermediate frames, see <a href="#">Catalog LV 10.2, chapter, "Distribution boards"</a> . |                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                               |                 |                            |                                      |                          |                                       |

8GB4 563

# Miniature Circuit Breakers

## Additional Components

### Mechanical components

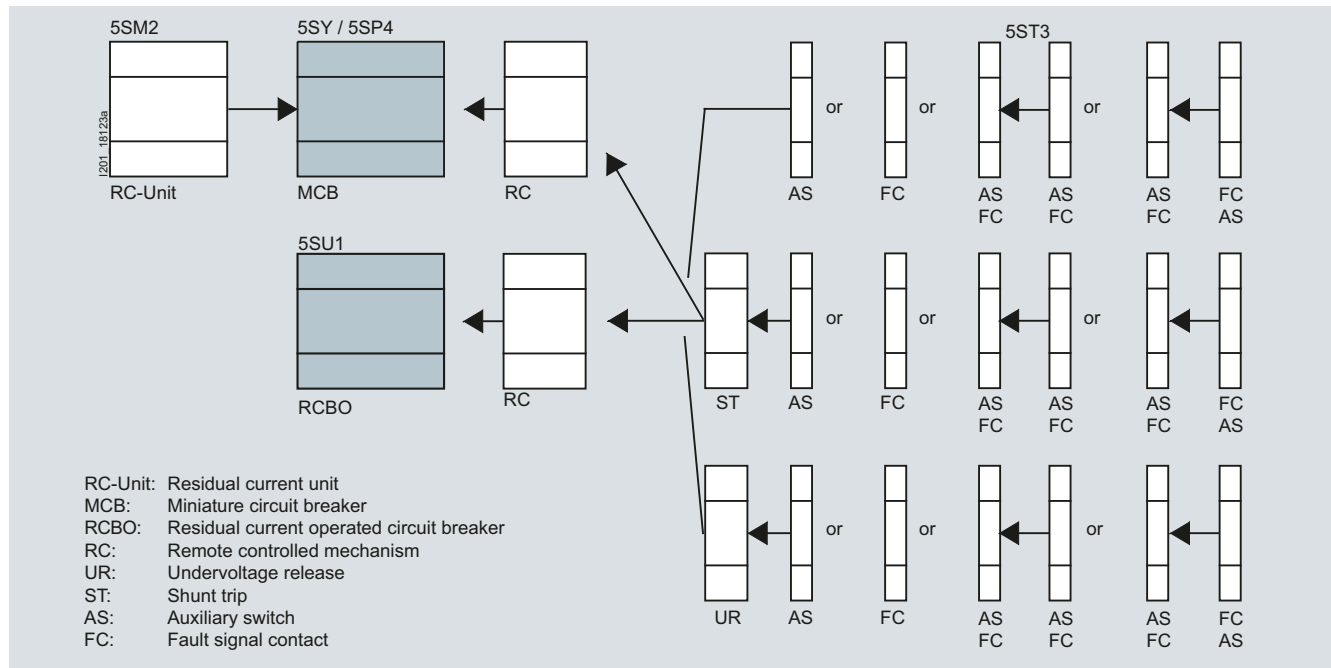
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#### More information

The Siemens mounting concept supports the combination of all 5ST3 additional components with miniature circuit breakers of the 5SY and 5SP series and RCBOs of the 5SU1 series.

5SL and 5SY6 0.. miniature circuit breakers are suitable for mounting auxiliary switches and fault signal contacts. Auxiliary switches can also be mounted on 5TE8 control switches and 5SG7 1 MINIZED switch disconnectors.

The diagram shows which additional components can be mounted on either the right or the left.



For further information on the mounting concept for RCBOs, see chapter, "Residual Current Protective Devices".

#### Overview

The busbar system with pin-type connections can be used for all 5SL6 and 5SJ6 miniature circuit breakers . . . -KS and 5SY miniature circuit breakers with or without mounted auxiliary switch (AS) or fault signal contact (FC).

Busbars in 10 mm<sup>2</sup> and 16 mm<sup>2</sup> versions are available.

The 5ST3 7 busbar system with bars that can be cut to length can be tailored to any requirements.

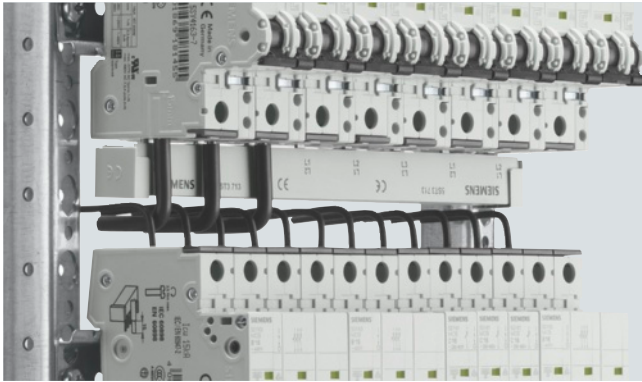
The extremely flexible 5ST3 6 busbar system with fixed lengths also enables installation in any length as the busbars can be overlapped.

No further need for time-consuming tasks, such as cutting, cutting to length, deburring, cleaning of cut surfaces and mounting of end caps.

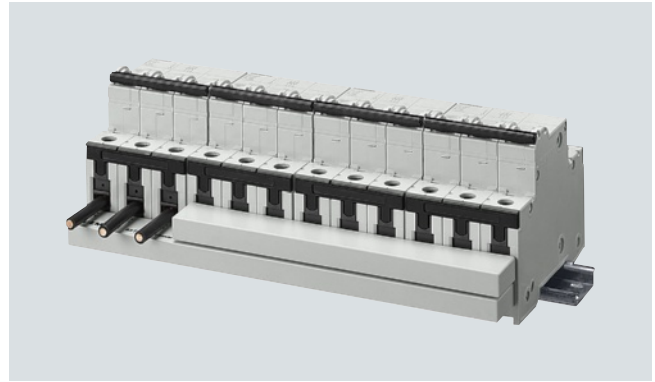
Any free pins on the busbars can be made safe by covering with touch protection.

For further information on the bus-mounting of miniature circuit breakers with residual current operated circuit breakers, [please refer to the chapter "Residual Current Protective Devices"](#).

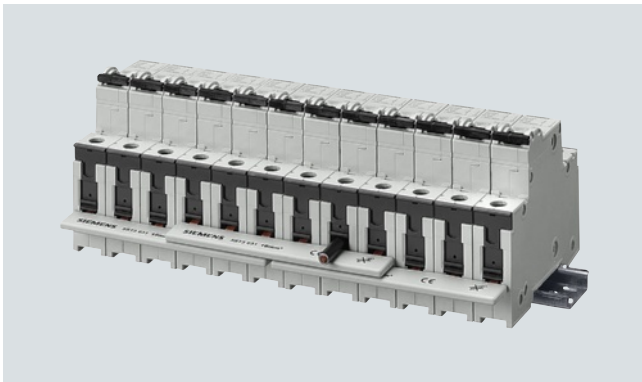
#### Benefits



- Between the rows of devices, the busbar, that is located at the bottom and behind the conductor, provides an optimum wiring space with easy view of the inserted conductor. This enables easy control of connections.



- The ability to overlap when mounting the busbars enables a cross-section enlargement of up to 32 mm<sup>2</sup> using the respective components, 10 mm<sup>2</sup> and 16 mm<sup>2</sup>.



- By overlapping the busbars with fixed lengths, it is possible to achieve device combinations with any number of devices.



- The fact that the connection of the conductor is always clearly visible facilitates cable entry of all pole types and considerably reduces mounting times.

# Miniature Circuit Breakers

## Busbars

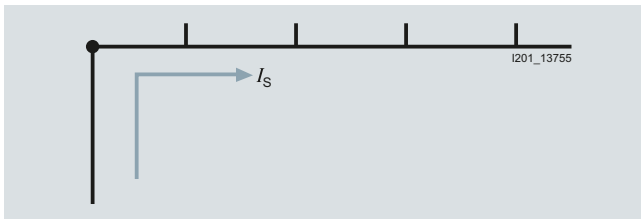
### 5ST standard busbars

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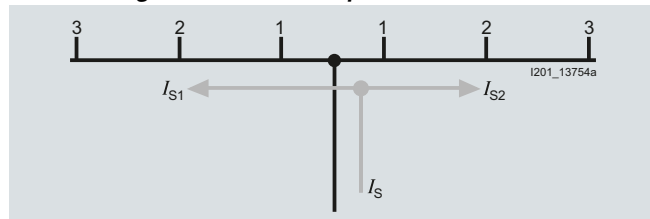
#### Technical specifications

|                                                                    |      |  | 5ST3                                                                                                                       |
|--------------------------------------------------------------------|------|--|----------------------------------------------------------------------------------------------------------------------------|
| <b>Standards</b>                                                   |      |  | EN 60439-1 (VDE 0660-500): 2005-01                                                                                         |
| <b>Busbar material</b>                                             |      |  | SF-Cu F 24                                                                                                                 |
| <b>Partition material</b>                                          |      |  | Plastic, Cycloy 3600<br>heat-resistant over 90 °C<br>flame-retardant and<br>self-extinguishing,<br>dioxin and halogen-free |
| <b>Rated operational voltage <math>U_c</math></b>                  | V AC |  | 400                                                                                                                        |
| <b>Rated current <math>I_n</math></b>                              |      |  |                                                                                                                            |
| • Cross-section 10 mm <sup>2</sup>                                 |      |  | A 63                                                                                                                       |
| • Cross-section 16 mm <sup>2</sup>                                 |      |  | A 80                                                                                                                       |
| <b>Rated impulse withstand voltage <math>U_{imp}</math></b>        | kV   |  | 4                                                                                                                          |
| <b>Test pulse voltage (1.2/50)</b>                                 | kV   |  | 6.2                                                                                                                        |
| <b>Rated conditional short-circuit current <math>I_{cc}</math></b> | kA   |  | 25                                                                                                                         |
| <b>Resistance to climate</b>                                       |      |  |                                                                                                                            |
| • Constant atmosphere                                              |      |  | Acc. to DIN 50015                                                                                                          |
| • Humid heat                                                       |      |  | Acc. to IEC 60068-2-30                                                                                                     |
|                                                                    |      |  | 23/83; 40/92; 55/20<br>28 cycles                                                                                           |
| <b>Insulation coordination</b>                                     |      |  |                                                                                                                            |
| • Overvoltage category                                             |      |  | III                                                                                                                        |
| • Pollution degree                                                 |      |  | 2                                                                                                                          |
| <b>Maximum busbar current <math>I_S</math>/phase</b>               |      |  |                                                                                                                            |
| • Infeed at the start of the busbar                                |      |  |                                                                                                                            |
| - Cross-section 10 mm <sup>2</sup>                                 |      |  | A 63                                                                                                                       |
| - Cross-section 16 mm <sup>2</sup>                                 |      |  | A 80                                                                                                                       |
| • Infeed at the center of the busbar                               |      |  |                                                                                                                            |
| - Cross-section 10 mm <sup>2</sup>                                 |      |  | A 100                                                                                                                      |
| - Cross-section 16 mm <sup>2</sup>                                 |      |  | A 130                                                                                                                      |

#### Infeed at the start or end of the busbar

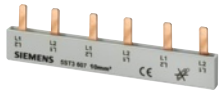
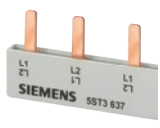


#### Infeed along the busbar or midpoint infeed



The sum of the outgoing current per branch (1, 2, 3 ... n) must not be greater than the max. busbar current  $I_S$ /phase.

## Selection and ordering data

|                                                                                                                                                                            | Pin spacing                          | Length  | DT    | Order No.       | Price per PU | PU (UNIT, SET, M) | PS*/P. unit | PG  | Weight per PU approx. |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|---------|-------|-----------------|--------------|-------------------|-------------|-----|-----------------------|
|                                                                                                                                                                            | MW <sup>1)</sup>                     | mm      |       |                 |              |                   |             |     | kg                    |
| <b>5ST3 6 busbar systems, 10 mm<sup>2</sup>, for MCBs, fixed lengths, cannot be cut, fully insulated</b>                                                                   |                                      |         |       |                 |              |                   |             |     |                       |
| <br>     | Single-phase                         |         |       |                 |              |                   |             |     |                       |
|                                                                                                                                                                            | For 2 MCBs 1P                        | 1       | 33    | <b>5ST3 600</b> |              | 1                 | 10 units    | 020 | 0.009                 |
|                                                                                                                                                                            | For 6 MCBs 1P                        |         | 105   | <b>5ST3 601</b> |              | 1                 | 10 units    | 020 | 0.019                 |
|                                                                                                                                                                            | For 12 MCBs 1P                       |         | 210   | <b>5ST3 602</b> |              | 1                 | 10 units    | 020 | 0.047                 |
|                                                                                                                                                                            | Single-phase, for MCBs with AS or FC |         |       |                 |              |                   |             |     |                       |
|                                                                                                                                                                            | For 2 MCBs 1P                        | 1.5     | 40    | <b>5ST3 603</b> |              | 1                 | 10 units    | 020 | 0.010                 |
|                                                                                                                                                                            | For 6 MCBs 1P                        |         | 156.5 | <b>5ST3 604</b> |              | 1                 | 10 units    | 020 | 0.030                 |
|                                                                                                                                                                            | For 9 MCBs 1P                        |         | 237   | <b>5ST3 605</b> |              | 1                 | 10 units    | 020 | 0.044                 |
|                                                                                                                                                                            | Two-phase                            |         |       |                 |              |                   |             |     |                       |
|                                                                                                                                                                            | For 2 MCBs 2P                        | 1       | 75.5  | <b>5ST3 606</b> |              | 1                 | 10 units    | 020 | 0.018                 |
|                                                                                                                                                                            | For 3 MCBs 2P                        |         | 105   | <b>5ST3 607</b> |              | 1                 | 10 units    | 020 | 0.027                 |
|                                                                                                                                                                            | For 6 MCBs 2P                        |         | 210   | <b>5ST3 608</b> |              | 1                 | 10 units    | 020 | 0.063                 |
|                                                                                                                                                                            | Three-phase                          |         |       |                 |              |                   |             |     |                       |
|                                                                                                                                                                            | For 2 MCBs 3P                        | 1       | 102   | <b>5ST3 613</b> |              | 1                 | 10 units    | 020 | 0.030                 |
|                                                                                                                                                                            | For 3 MCBs 3P                        |         | 157.5 | <b>5ST3 614</b> |              | 1                 | 10 units    | 020 | 0.056                 |
|                                                                                                                                                                            | For 4 MCBs 3P                        |         | 210   | <b>5ST3 615</b> |              | 1                 | 10 units    | 020 | 0.075                 |
|                                                                                                                                                                            | Three-phase, for MCBs with AS or FC  |         |       |                 |              |                   |             |     |                       |
|                                                                                                                                                                            | For 2 MCBs 3P                        | 1+1+1.5 | 115   | <b>5ST3 616</b> |              | 1                 | 10 units    | 020 | 0.038                 |
|                                                                                                                                                                            | For 4 MCBs 3P                        |         | 237   | <b>5ST3 617</b> |              | 1                 | 10 units    | 020 | 0.090                 |
|                                                                                                                                                                            | For 6 MCBs 1P                        | 1.5     | 125   | <b>5ST3 618</b> |              | 1                 | 10 units    | 020 | 0.046                 |
|                                                                                                                                                                            | For 9 MCBs 1P                        |         | 229   | <b>5ST3 620</b> |              | 1                 | 10 units    | 020 | 0.075                 |
|                                                                                                                                                                            | Three-phase                          |         |       |                 |              |                   |             |     |                       |
|                                                                                                                                                                            | For 1 RCCB 4P N right and 8 MCBs 1P  | 1       | 210   | <b>5ST3 624</b> |              | 1                 | 10 units    | 020 | 0.077                 |
|                                                                                                                                                                            | For 1 RCCB 4P N left and 8 MCBs 1P   | 1       | 192   | <b>5ST3 667</b> |              | 1                 | 10 units    | 020 | 0.061                 |
|                                                                                                                                                                            | Four-phase                           |         |       |                 |              |                   |             |     |                       |
|                                                                                                                                                                            | For 2 MCBs 4P or 3P+N                | 1       | 145   | <b>5ST3 621</b> |              | 1                 | 10 units    | 020 | 0.055                 |
|                                                                                                                                                                            | For 3 MCBs 4P or 3P+N                |         | 215   | <b>5ST3 622</b> |              | 1                 | 10 units    | 020 | 0.093                 |
|                                                                                                                                                                            | For 6 MCBs 2P or 1P+N                |         | 215   | <b>5ST3 623</b> |              | 1                 | 10 units    | 020 | 0.087                 |
| <b>5ST3 6 busbars, 16 mm<sup>2</sup>, for MCBs, fixed lengths, cannot be cut, fully insulated</b>                                                                          |                                      |         |       |                 |              |                   |             |     |                       |
| <br> | Single-phase                         |         |       |                 |              |                   |             |     |                       |
|                                                                                                                                                                            | For 2 MCBs 1P                        | 1       | 33    | <b>5ST3 630</b> |              | 1                 | 10 units    | 020 | 0.007                 |
|                                                                                                                                                                            | For 6 MCBs 1P                        |         | 105   | <b>5ST3 631</b> |              | 1                 | 10 units    | 020 | 0.025                 |
|                                                                                                                                                                            | For 12 MCBs 1P                       |         | 210   | <b>5ST3 632</b> |              | 1                 | 10 units    | 020 | 0.048                 |
|                                                                                                                                                                            | Single-phase, for MCBs with AS or FC |         |       |                 |              |                   |             |     |                       |
|                                                                                                                                                                            | For 2 MCBs 1P                        | 1.5     | 40    | <b>5ST3 633</b> |              | 1                 | 10 units    | 020 | 0.010                 |
|                                                                                                                                                                            | For 6 MCBs 1P                        |         | 156.5 | <b>5ST3 634</b> |              | 1                 | 10 units    | 020 | 0.029                 |
|                                                                                                                                                                            | For 9 MCBs 1P                        |         | 237   | <b>5ST3 635</b> |              | 1                 | 10 units    | 020 | 0.052                 |
|                                                                                                                                                                            | Two-phase                            |         |       |                 |              |                   |             |     |                       |
|                                                                                                                                                                            | For 2 MCBs 2P                        | 1       | 75.5  | <b>5ST3 636</b> |              | 1                 | 10 units    | 020 | 0.012                 |
|                                                                                                                                                                            | For 3 MCBs 2P                        |         | 105   | <b>5ST3 637</b> |              | 1                 | 10 units    | 020 | 0.037                 |
|                                                                                                                                                                            | For 6 MCBs 2P                        |         | 210   | <b>5ST3 638</b> |              | 1                 | 10 units    | 020 | 0.089                 |
|                                                                                                                                                                            | Two-phase with AS or FC              |         |       |                 |              |                   |             |     |                       |
|                                                                                                                                                                            | For 2 MCBs 2P                        | 1 + 1.5 | 75.5  | <b>5ST3 640</b> |              | 1                 | 10 units    | 020 | 0.024                 |
|                                                                                                                                                                            | For 3 MCBs 2P                        |         | 120.5 | <b>5ST3 641</b> |              | 1                 | 10 units    | 020 | 0.048                 |
|                                                                                                                                                                            | For 5 MCBs 2P                        |         | 210   | <b>5ST3 642</b> |              | 1                 | 10 units    | 020 | 0.081                 |

<sup>1)</sup> 1 MW (modular width) = 18 mm.

# Miniature Circuit Breakers

## Busbars

### 5ST standard busbars

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|                                                                                                   | Pin spacing      | Length | DT | Order No.       | Price per PU | PU (UNIT, SET, M) | PS*/P. unit | PG  | Weight per PU approx. |
|---------------------------------------------------------------------------------------------------|------------------|--------|----|-----------------|--------------|-------------------|-------------|-----|-----------------------|
|                                                                                                   | MW <sup>1)</sup> | mm     |    |                 |              |                   |             |     | kg                    |
| <b>5ST3 6 busbars, 16 mm<sup>2</sup>, for MCBs, fixed lengths, cannot be cut, fully insulated</b> |                  |        |    |                 |              |                   |             |     |                       |
| Three-phase                                                                                       |                  |        |    |                 |              |                   |             |     |                       |
| For 2 MCBs 3P                                                                                     | 1                | 102.5  |    | <b>5ST3 643</b> |              | 1                 | 10 units    | 020 | 0.047                 |
| For 3 MCBs 3P                                                                                     |                  | 157.5  |    | <b>5ST3 644</b> |              | 1                 | 10 units    | 020 | 0.085                 |
| For 4 MCBs 3P                                                                                     |                  | 210    | ▶  | <b>5ST3 645</b> |              | 1                 | 10 units    | 020 | 0.119                 |
| Three-phase, for MCBs with AS or FC                                                               |                  |        |    |                 |              |                   |             |     |                       |
| For 2 MCBs 3P                                                                                     | 1+1+1.5          | 115    |    | <b>5ST3 646</b> |              | 1                 | 10 units    | 020 | 0.052                 |
| For 4 MCBs 3P                                                                                     |                  | 237    |    | <b>5ST3 647</b> |              | 1                 | 10 units    | 020 | 0.126                 |
| For 6 MCBs 1P                                                                                     | 1.5              | 156    |    | <b>5ST3 648</b> |              | 1                 | 10 units    | 020 | 0.067                 |
| For 9 MCBs 1P                                                                                     |                  | 245    |    | <b>5ST3 650</b> |              | 1                 | 10 units    | 020 | 0.110                 |
| Three-phase,                                                                                      |                  |        |    |                 |              |                   |             |     |                       |
| For 1 RCCB 4P N right and 8 MCBs 1P                                                               | 1                | 210    |    | <b>5ST3 654</b> |              | 1                 | 10 units    | 020 | 0.108                 |
| For 1 RCCB 4P N left and 8 MCBs 1P                                                                | 1                | 210    |    | <b>5ST3 668</b> |              | 1                 | 10 units    | 020 | 0.099                 |
| Four-phase                                                                                        |                  |        |    |                 |              |                   |             |     |                       |
| For 2 MCBs 4P or 3P+N                                                                             | 1                |        |    | <b>5ST3 651</b> |              | 1                 | 10 units    | 020 | 0.071                 |
| For 3 MCBs 4P or 3P+N                                                                             |                  |        |    | <b>5ST3 652</b> |              | 1                 | 10 units    | 020 | 0.130                 |
| For 6 MCBs 2P or 1P+N                                                                             |                  |        |    | <b>5ST3 653</b> |              | 1                 | 10 units    | 020 | 0.118                 |
| <b>Touch protection</b>                                                                           |                  |        |    |                 |              |                   |             |     |                       |
| For free connections, yellow (RAL 1004)<br>5 x 1 pin                                              |                  |        | ▶  | <b>5ST3 655</b> |              | 1                 | 10 units    | 020 | 0.003                 |
| <b>Assortment</b>                                                                                 |                  |        |    |                 |              |                   |             |     |                       |
| 10 mm <sup>2</sup>                                                                                |                  |        |    |                 |              |                   |             |     |                       |
| 20 x 5ST3 613 + 10 x 5ST3 614 +<br>50 x 5ST3 615 + 50 x 5ST3 655                                  |                  |        |    | <b>5ST3 656</b> |              | 1                 | 1 set       | 020 | 5.460                 |
| 16 mm <sup>2</sup>                                                                                |                  |        |    |                 |              |                   |             |     |                       |
| 20 x 5ST3 643 + 10 x 5ST3 644 +<br>50 x 5ST3 645 + 50 x 5ST3 655                                  |                  |        |    | <b>5ST3 657</b> |              | 1                 | 1 set       | 020 | 7.650                 |
| <b>5ST3 7 busbar system, 10 mm<sup>2</sup>, 12 MW, for MCBs, can be cut, with end caps</b>        |                  |        |    |                 |              |                   |             |     |                       |
| Single-phase, angled                                                                              |                  |        |    |                 |              |                   |             |     |                       |
| For 12 MCBs 1P                                                                                    | 1                | 214    |    | <b>5ST3 730</b> |              | 1                 | 1 unit      | 020 | 0.032                 |
| For 9 MCBs 1P with AS or FC                                                                       | 1.5              |        |    | <b>5ST3 732</b> |              | 1                 | 1 unit      | 020 | 0.034                 |
| Two-phase                                                                                         |                  |        |    |                 |              |                   |             |     |                       |
| For 6 MCBs 2P                                                                                     | 1                |        |    | <b>5ST3 734</b> |              | 1                 | 1 unit      | 020 | 0.070                 |
| For 4 MCBs 2P with AS or FC                                                                       | 1+1.5            |        |    | <b>5ST3 736</b> |              | 1                 | 1 unit      | 020 | 0.072                 |
| Three-phase                                                                                       |                  |        |    |                 |              |                   |             |     |                       |
| For 4 MCBs 3P                                                                                     | 1                |        | ▶  | <b>5ST3 738</b> |              | 1                 | 1 unit      | 020 | 0.084                 |
| For 3 MCBs 3P with AS or FC                                                                       | 1+1+1.5          |        |    | <b>5ST3 741</b> |              | 1                 | 1 unit      | 020 | 0.078                 |
| For 3 MCBs 1P with AS or FC                                                                       | 1.5              |        |    | <b>5ST3 743</b> |              | 1                 | 1 unit      | 020 | 0.075                 |
| Four-phase                                                                                        |                  |        |    |                 |              |                   |             |     |                       |
| For 3 MCBs 4P or 3P+N                                                                             | 1                |        |    | <b>5ST3 745</b> |              | 1                 | 1 unit      | 020 | 0.119                 |
| <b>5ST3 7 busbar system, 10 mm<sup>2</sup>, 56 MW, for MCBs, can be cut, without end caps</b>     |                  |        |    |                 |              |                   |             |     |                       |
| Single-phase, angled                                                                              |                  |        |    |                 |              |                   |             |     |                       |
| For MCBs 1P                                                                                       | 1                | 1016   |    | <b>5ST3 731</b> |              | 1                 | 1 unit      | 020 | 0.153                 |
| For MCBs 1P with AS or FC                                                                         | 1.5              |        |    | <b>5ST3 733</b> |              | 1                 | 1 unit      | 020 | 0.157                 |
| Two-phase                                                                                         |                  |        |    |                 |              |                   |             |     |                       |
| For MCBs 2P                                                                                       | 1                |        |    | <b>5ST3 735</b> |              | 1                 | 1 unit      | 020 | 0.343                 |
| For MCBs 2P with AS or FC                                                                         | 1+1.5            |        |    | <b>5ST3 737</b> |              | 1                 | 1 unit      | 020 | 0.327                 |
| Three-phase                                                                                       |                  |        |    |                 |              |                   |             |     |                       |
| For MCBs 3P                                                                                       | 1                |        | ▶  | <b>5ST3 740</b> |              | 1                 | 1 unit      | 020 | 0.440                 |
| For MCBs 3P with AS or FC                                                                         | 1+1+1.5          |        |    | <b>5ST3 742</b> |              | 1                 | 1 unit      | 020 | 0.421                 |
| For MCBs 1P with AS or FC                                                                         | 1.5              |        |    | <b>5ST3 744</b> |              | 1                 | 1 unit      | 020 | 0.420                 |
| Four-phase                                                                                        |                  |        |    |                 |              |                   |             |     |                       |
| For MCBs 4P or 3P+N                                                                               | 1                |        |    | <b>5ST3 746</b> |              | 1                 | 1 unit      | 020 | 0.600                 |

<sup>1)</sup> 1 MW (modular width) = 18 mm.



# Miniature Circuit Breakers

## Busbars

### 5ST standard busbars

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|                                                                                                 | Pin<br>spacing                                                                             | Length  | DT     | Order No.         | Price<br>per PU | PU<br>(UNIT,<br>SET,<br>M) | PS*/<br>P. unit | PG  | Weight<br>per PU<br>approx. |
|-------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|---------|--------|-------------------|-----------------|----------------------------|-----------------|-----|-----------------------------|
|                                                                                                 | MW <sup>1)</sup>                                                                           | mm      |        |                   |                 |                            |                 |     | kg                          |
|                                                                                                 | <b>5ST3 7 busbar system, 16 mm², 12 MW,<br/>for MCBs,<br/>can be cut, with end caps</b>    |         |        |                   |                 |                            |                 |     |                             |
|                                                                                                 | Single-phase, angled                                                                       |         |        |                   |                 |                            |                 |     |                             |
|                                                                                                 | For MCBs 1P                                                                                | 1       | 214 ▶  | <b>5ST3 700</b>   |                 | 1                          | 1 unit          | 020 | 0.039                       |
|                                                                                                 | For MCBs 1P with AS or FC                                                                  | 1.5     |        | <b>5ST3 702</b>   |                 | 1                          | 1 unit          | 020 | 0.040                       |
|                                                                                                 | Two-phase                                                                                  |         |        |                   |                 |                            |                 |     |                             |
|                                                                                                 | For MCBs 2P                                                                                | 1       | ▶      | <b>5ST3 704</b>   |                 | 1                          | 1 unit          | 020 | 0.092                       |
|                                                                                                 | For MCBs 2P with AS or FC                                                                  | 1+1.5   |        | <b>5ST3 706</b>   |                 | 1                          | 1 unit          | 020 | 0.090                       |
|                                                                                                 | Three-phase                                                                                |         |        |                   |                 |                            |                 |     |                             |
|                                                                                                 | For MCBs 3P                                                                                | 1       | ▶      | <b>5ST3 708</b>   |                 | 1                          | 1 unit          | 020 | 0.116                       |
|                                                                                                 | For MCBs 3P with AS or FC                                                                  | 1+1+1.5 |        | <b>5ST3 711</b>   |                 | 1                          | 1 unit          | 020 | 0.098                       |
|                                                                                                 | For MCBs 1P with AS or FC                                                                  | 1.5     |        | <b>5ST3 713</b>   |                 | 1                          | 1 unit          | 020 | 0.098                       |
|                                                                                                 | Four-phase                                                                                 |         |        |                   |                 |                            |                 |     |                             |
|                                                                                                 | For MCBs 4P or 3P+N                                                                        | 1       |        | <b>5ST3 715</b>   |                 | 1                          | 1 unit          | 020 | 0.142                       |
|                                                                                                 | <b>5ST3 7 busbar system, 16 mm², 56 MW,<br/>for MCBs,<br/>can be cut, without end caps</b> |         |        |                   |                 |                            |                 |     |                             |
|                                                                                                 | Single-phase, angled                                                                       |         |        |                   |                 |                            |                 |     |                             |
|                                                                                                 | For MCBs 1P                                                                                | 1       | 1016 ▶ | <b>5ST3 701</b>   |                 | 1                          | 1 unit          | 020 | 0.196                       |
|                                                                                                 | For MCBs 1P with AS or FC                                                                  | 1.5     | ▶      | <b>5ST3 703</b>   |                 | 1                          | 1 unit          | 020 | 0.185                       |
|                                                                                                 | Two-phase                                                                                  |         |        |                   |                 |                            |                 |     |                             |
|                                                                                                 | For MCBs 2P                                                                                | 1       | ▶      | <b>5ST3 705</b>   |                 | 1                          | 1 unit          | 020 | 0.452                       |
|                                                                                                 | For MCBs 2P with AS or FC                                                                  | 1+1.5   |        | <b>5ST3 707</b>   |                 | 1                          | 1 unit          | 020 | 0.446                       |
|                                                                                                 | Three-phase                                                                                |         |        |                   |                 |                            |                 |     |                             |
|                                                                                                 | For MCBs 3P                                                                                | 1       | ▶      | <b>5ST3 710</b>   |                 | 1                          | 1 unit          | 020 | 0.610                       |
|                                                                                                 | For MCBs 3P with AS or FC                                                                  | 1+1+1.5 | ▶      | <b>5ST3 712</b>   |                 | 1                          | 1 unit          | 020 | 0.580                       |
|                                                                                                 | For MCBs 1P with AS or FC                                                                  | 1.5     |        | <b>5ST3 714</b>   |                 | 1                          | 1 unit          | 020 | 0.540                       |
|                                                                                                 | Four-phase                                                                                 |         |        |                   |                 |                            |                 |     |                             |
|                                                                                                 | For MCBs 4P or 3P+N                                                                        | 1       |        | <b>5ST3 716</b>   |                 | 1                          | 1 unit          | 020 | 0.798                       |
| <b>5ST3 7 busbar system, 10 mm², 56 MW<br/>can be cut, with end caps, with touch protection</b> |                                                                                            |         |        |                   |                 |                            |                 |     |                             |
| Four-phase                                                                                      |                                                                                            |         |        |                   |                 |                            |                 |     |                             |
| For MCBs 2P and RCBOs 1P+N                                                                      | 1                                                                                          | 1008    |        | <b>5ST3 770-2</b> |                 | 1                          | 10 units        | 020 | 0.400                       |
| <b>5ST3 7 busbar system, 16 mm², 56 MW<br/>can be cut, with end caps, with touch protection</b> |                                                                                            |         |        |                   |                 |                            |                 |     |                             |
| Four-phase                                                                                      |                                                                                            |         |        |                   |                 |                            |                 |     |                             |
| For MCBs 2P and RCBOs 1P+N                                                                      | 1                                                                                          | 1008    |        | <b>5ST3 770-3</b> |                 | 1                          | 10 units        | 020 | 0.550                       |
| <b>5ST3 7 busbar system, 10 mm², 16 MW<br/>can be cut, with end caps, with touch protection</b> |                                                                                            |         |        |                   |                 |                            |                 |     |                             |
| Four-phase                                                                                      |                                                                                            |         |        |                   |                 |                            |                 |     |                             |
| For RCCBs 4P, N right and 6 MCBs 1P+N                                                           | 1                                                                                          | 288     |        | <b>5ST3 770-4</b> |                 | 1                          | 10 units        | 020 | 0.100                       |
| <b>5ST3 7 busbar system, 16 mm², 16 MW<br/>can be cut, with end caps, with touch protection</b> |                                                                                            |         |        |                   |                 |                            |                 |     |                             |
| Four-phase                                                                                      |                                                                                            |         |        |                   |                 |                            |                 |     |                             |
| For RCCBs 4P, N right and 6 MCBs 1P+N                                                           | 1                                                                                          | 288     |        | <b>5ST3 770-5</b> |                 | 1                          | 10 units        | 020 | 0.160                       |
|                                                                                                 | <b>End caps for 5ST3 7, can be cut</b>                                                     |         |        |                   |                 |                            |                 |     |                             |
|                                                                                                 | For single-phase busbars                                                                   |         |        | ▶                 | <b>5ST3 748</b> | 1                          | 10 units        | 020 | 0.001                       |
|                                                                                                 | For two-phase and three-phase busbars                                                      |         |        | ▶                 | <b>5ST3 750</b> | 1                          | 10 units        | 020 | 0.001                       |
|                                                                                                 | For four-phase busbars                                                                     |         |        | ▶                 | <b>5ST3 718</b> | 1                          | 10 units        | 020 | 0.002                       |

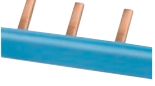
<sup>1)</sup> 1 MW (modular width) = 18 mm.

# Miniature Circuit Breakers

## Busbars

### 5ST standard busbars

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|                                                                                                                                                                        | Pin spacing<br>MW <sup>1)</sup>                                                                                                | Length<br>mm | DT   | Order No.                          | Price<br>per PU | PU<br>(UNIT,<br>SET,<br>M) | PS*/<br>P. unit      | PG         | Weight<br>per PU<br>approx.<br>kg |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|--------------|------|------------------------------------|-----------------|----------------------------|----------------------|------------|-----------------------------------|
| <br> | <b>5ST3 7 busbar system, 10 mm<sup>2</sup>, 12 MW, for MCBs 1+N in 1 MW of the compact range, can be cut, with end caps</b>    |              |      | <b>5ST3 762</b><br><b>5ST3 763</b> |                 | 1<br>1                     | 10 units<br>10 units | 020<br>020 | 0.022<br>0.033                    |
|                                                                                                                                                                        | Single-phase                                                                                                                   |              |      |                                    |                 |                            |                      |            |                                   |
|                                                                                                                                                                        | For 12 MCBs 1+N, gray<br>For 12 MCBs 1+N, blue                                                                                 | 1<br>1       | 216  |                                    |                 |                            |                      |            |                                   |
| <br> | <b>5ST3 7 busbar system, 10 mm<sup>2</sup>, 56 MW, for MCBs 1+N in 1 MW of the compact range, can be cut, without end caps</b> |              |      | <b>5ST3 764</b><br><b>5ST3 765</b> |                 | 1<br>1                     | 10 units<br>10 units | 020<br>020 | 0.134<br>0.134                    |
|                                                                                                                                                                        | Single-phase                                                                                                                   |              |      |                                    |                 |                            |                      |            |                                   |
|                                                                                                                                                                        | For MCBs 1+N, gray<br>For MCBs 1+N, blue                                                                                       | 1<br>1       | 1016 |                                    |                 |                            |                      |            |                                   |
|                                                                                       | <b>End caps for 5ST3 76</b>                                                                                                    |              |      | <b>5ST3 766</b><br><b>5ST3 767</b> |                 | 1<br>1                     | 10 sets<br>10 sets   | 020<br>020 | 0.001<br>0.001                    |
|                                                                                                                                                                        | 1 set comprises a right and a left cap                                                                                         |              |      |                                    |                 |                            |                      |            |                                   |
|                                                                                                                                                                        | Gray<br>Blue                                                                                                                   |              |      |                                    |                 |                            |                      |            |                                   |
|                                                                                      | <b>Terminals for 5ST3 76</b>                                                                                                   |              |      | <b>5ST3 768</b>                    |                 | 1                          | 25 units             | 020        | 0.018                             |
|                                                                                                                                                                        | Terminal version S<br>For conductors up to 25 mm <sup>2</sup>                                                                  |              |      |                                    |                 |                            |                      |            |                                   |

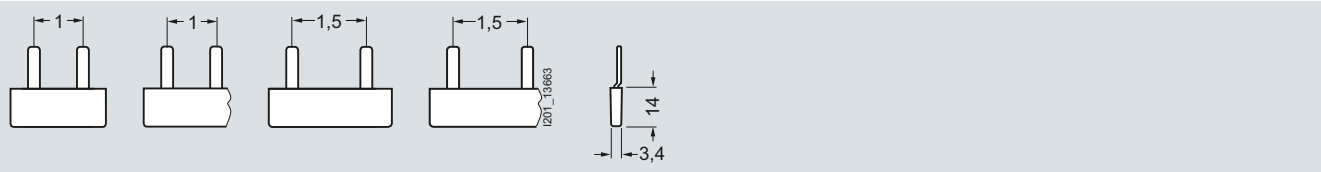
<sup>1)</sup> 1 MW (modular width) = 18 mm.

### Dimensional drawings

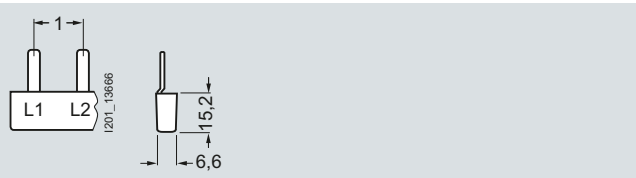
#### 5ST3 6

Pin spacings in MW (modular width 1 MW = 18 mm)

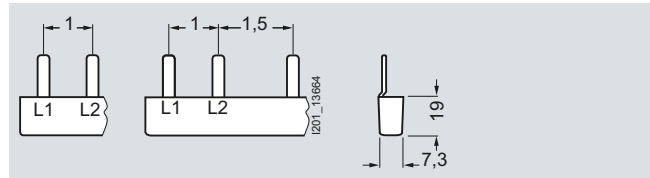
Dimensions of side view in mm (approx.)



|          |          |          |          |
|----------|----------|----------|----------|
| 5ST3 600 | 5ST3 601 | 5ST3 603 | 5ST3 604 |
| 5ST3 630 | 5ST3 602 | 5ST3 633 | 5ST3 605 |
|          | 5ST3 631 |          | 5ST3 634 |
|          | 5ST3 632 |          | 5ST3 635 |

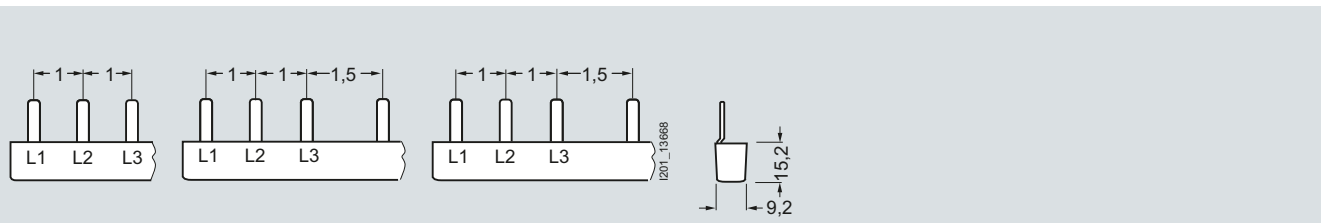


5ST3 606  
5ST3 607  
5ST3 608

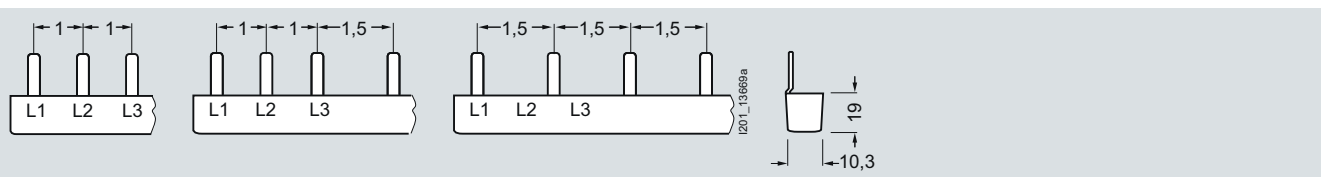


5ST3 636  
5ST3 637  
5ST3 638

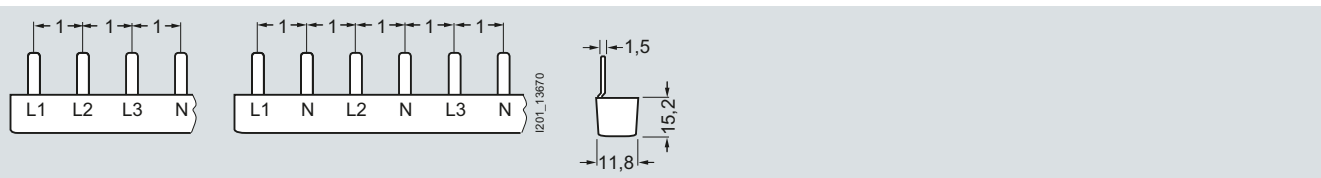
5ST3 640  
5ST3 641  
5ST3 642



|          |          |          |
|----------|----------|----------|
| 5ST3 613 | 5ST3 616 | 5ST3 618 |
| 5ST3 614 | 5ST3 617 | 5ST3 620 |
| 5ST3 615 |          |          |
| 5ST3 667 |          |          |

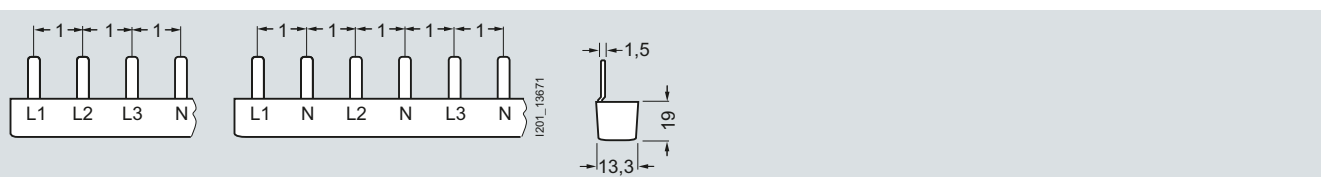


|          |          |          |
|----------|----------|----------|
| 5ST3 643 | 5ST3 646 | 5ST3 648 |
| 5ST3 644 | 5ST3 647 | 5ST3 650 |
| 5ST3 645 |          |          |
| 5ST3 668 |          |          |



5ST3 621  
5ST3 622

5ST3 623



5ST3 651  
5ST3 652

5ST3 653

# Miniature Circuit Breakers

## Busbars

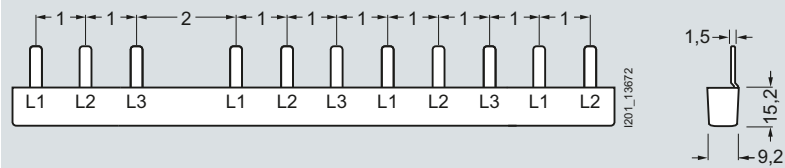
### 5ST standard busbars

3

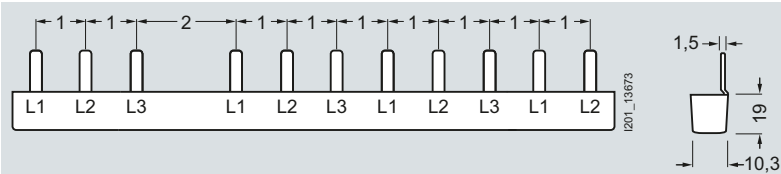
#### 5ST3 6

Pin spacings in MW (modular width 1 MW = 18 mm)

Dimensions of side view in mm (approx.)



5ST3 624

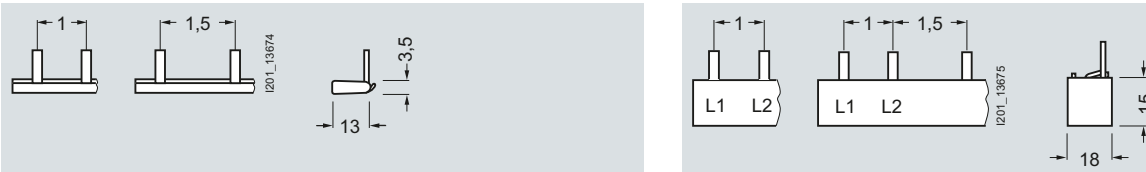


5ST3 654

#### 5ST3 7

Pin spacings in MW (modular width 1 MW = 18 mm)

Dimensions of side view in mm (approx.)

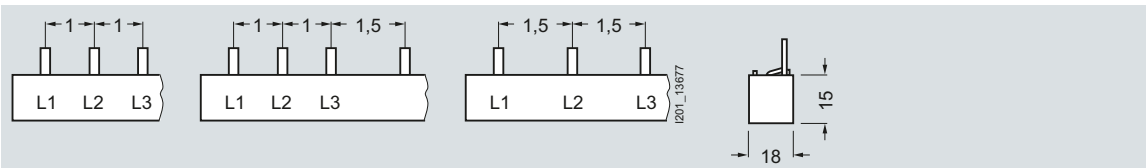


5ST3 700  
5ST3 701  
5ST3 730  
5ST3 731  
Single-phase

5ST3 702  
5ST3 703  
5ST3 732  
5ST3 733  
Single-phase

5ST3 704  
5ST3 705  
5ST3 734  
5ST3 735  
Two-phase

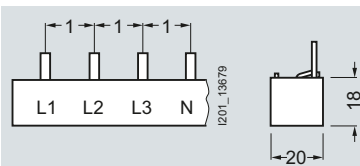
5ST3 706  
5ST3 707  
5ST3 736  
5ST3 737  
Two-phase



5ST3 708  
5ST3 710  
5ST3 738  
5ST3 740

5ST3 711  
5ST3 712  
5ST3 741  
5ST3 742

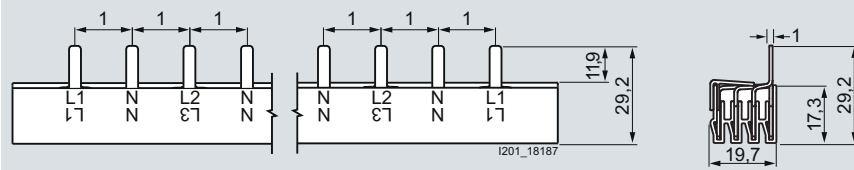
5ST3 713  
5ST3 714  
5ST3 743  
5ST3 744



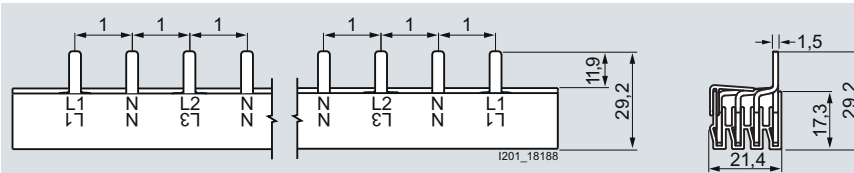
5ST3 715  
5ST3 716  
5ST3 745  
5ST3 746

**5ST3 7****Pin spacings in MW (modular width 1 MW = 18 mm)**

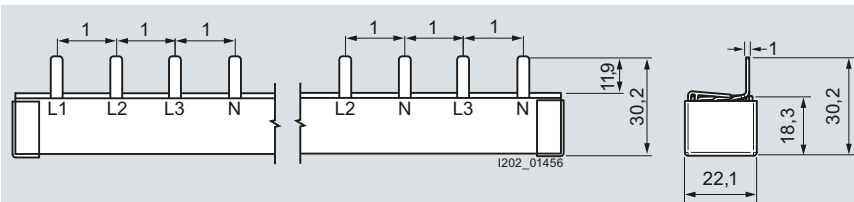
Dimensions of side view in mm (approx.)



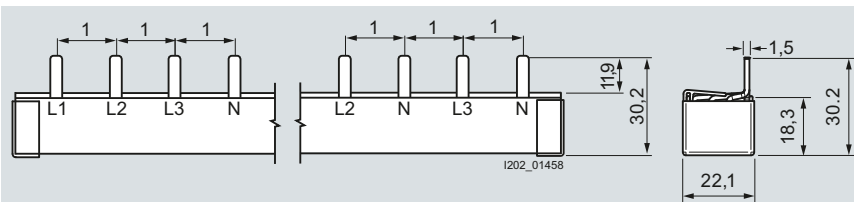
5ST3 770-2



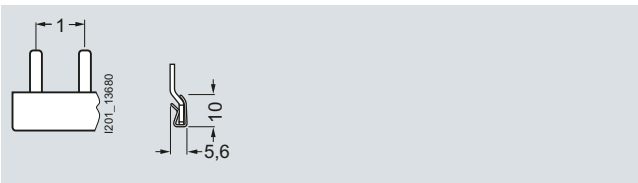
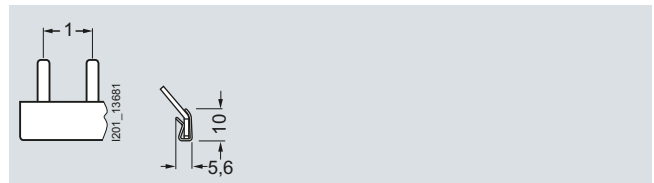
5ST3 770-3



5ST3 770-4



5ST3 770-5

5ST3 762  
5ST3 7645ST3 763  
5ST3 765

# Miniature Circuit Breakers

## Busbars

### 5ST3 busbars acc. to UL 508

3

#### Overview

Products according to UL standards are used in North America, but also in several other countries. This is important in particular for exporting machines or electrical switchgear assemblies and equipment to the USA. Acceptance and delivery are possible only if the relevant UL standards are satisfied.

The 5ST3 7 busbar system according to UL 508 and CSA is suitable for both universal use worldwide with all 5SY and 5SP miniature circuit breakers for "Supplementary Protection" certified according to UL 1077 and for 3NW and 3NC fuse holders certified according to UL 512. Not approved for use in feeder circuits.

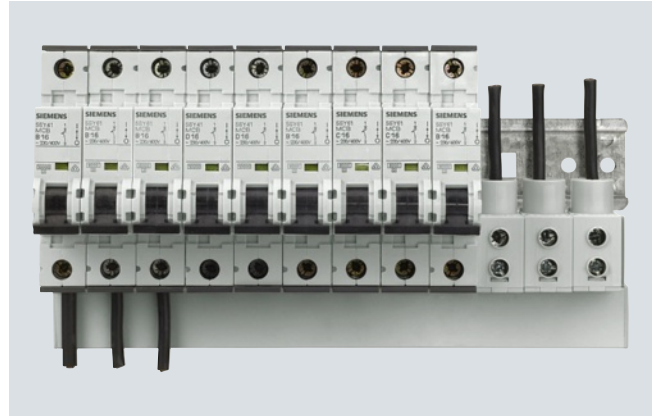
The busbars are available in single-, two- and three-phase versions with different pin spacings and with two cross-sections 18 mm<sup>2</sup> and 25 mm<sup>2</sup>. Infeed can be directly into the terminals of the miniature circuit breaker or through connection terminals.

The connection terminals are available in two versions – for direct infeed at the busbar or for infeed directly at the miniature circuit breaker/fuse holder. Pins that are not required can be covered with touch protection covers.

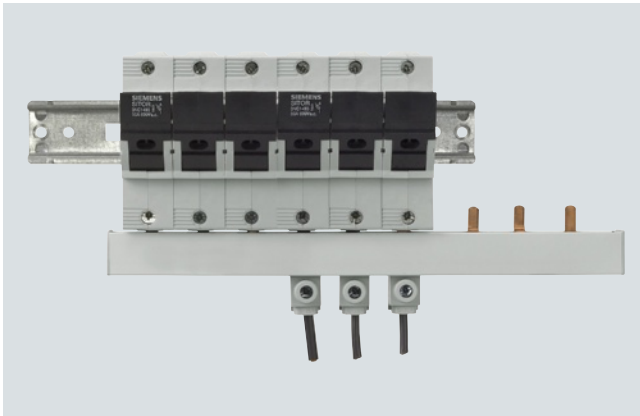
#### Benefits



- Busbar with infeed through a connection terminal directly on the miniature circuit breaker up to a conductor cross-section of 35 mm<sup>2</sup>



- Infeed directly on the miniature circuit breaker up to a cross-section of 35 mm<sup>2</sup> and connection terminal for connection directly on the busbar up to a conductor cross-section of 50 mm<sup>2</sup>
- Suitable for universal use according to both IEC and UL standards
- Can be used for 5SY, 5SP miniature circuit breakers and for Class CC, cylindrical and SITOP fuse holders
- UL-tested combination – device and busbar
- Different cross-sections 18 mm<sup>2</sup> and 25 mm<sup>2</sup>.

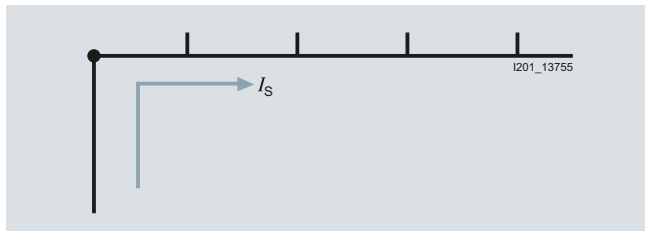


- Bus mounting with infeed at the fuse holder for conductor cross-sections up to 35 mm<sup>2</sup>

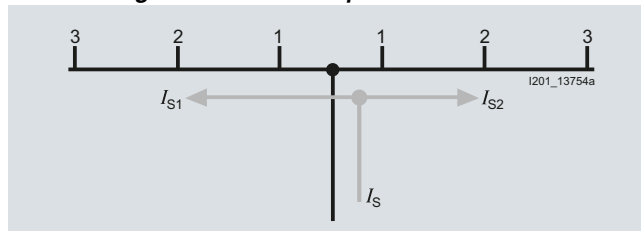
## Technical specifications

|                                                      |                        | 5ST3 7...-0HG                                        | 5ST3 7...-2HG | 5ST3 770-0HG                      | 5ST3 770-1HG                    |
|------------------------------------------------------|------------------------|------------------------------------------------------|---------------|-----------------------------------|---------------------------------|
| <b>Standards</b>                                     |                        | UL 508, CSA C22.2 No. 14-M 95                        |               |                                   |                                 |
| <b>Approvals</b>                                     |                        | UL 508 File No. E328403<br>CSA                       |               |                                   |                                 |
| <b>Operational voltage</b>                           |                        |                                                      |               |                                   |                                 |
| • Acc. to IEC                                        | V AC                   | 690                                                  |               |                                   |                                 |
| • Acc. to UL 508                                     | V AC                   | 600                                                  |               |                                   |                                 |
| <b>Rated conditional short-circuit current</b>       | kA                     | 10                                                   |               |                                   |                                 |
| • Dielectric strength                                | kV/mm                  | 25                                                   |               |                                   |                                 |
| • Surge strength                                     | kV                     | > 9.5                                                |               |                                   |                                 |
| <b>Rated current</b>                                 | A                      | --                                                   | --            | 115                               |                                 |
| <b>Maximum busbar current <math>I_S</math>/phase</b> |                        |                                                      |               |                                   |                                 |
| • Infeed at the start of the busbar                  | A                      | 80                                                   | 100           | --                                | --                              |
| • Infeed at the center of the busbar                 | A                      | 160                                                  | 200           | --                                | --                              |
| <b>Insulation coordination</b>                       |                        |                                                      |               |                                   |                                 |
| • Overvoltage category                               |                        | III                                                  |               |                                   |                                 |
| • Pollution degree                                   |                        | 2                                                    |               |                                   |                                 |
| <b>Short-circuit current load capability</b>         |                        |                                                      |               |                                   |                                 |
| 18 mm <sup>2</sup>                                   |                        | 10000 A RMS sym. 600 V for three connections         |               |                                   |                                 |
| 25 mm <sup>2</sup>                                   |                        | 100 000 A RMS sym. for protection with Class J 175 A |               |                                   |                                 |
|                                                      |                        | 100 000 A RMS sym. for protection with Class J 200 A |               |                                   |                                 |
| <b>Busbar cross-section</b>                          | mm <sup>2</sup> Cu     | 18                                                   | 25            | --                                | --                              |
| <b>Infeed</b>                                        |                        | Any                                                  |               |                                   |                                 |
| <b>Conductor cross-sections</b>                      | AWG<br>mm <sup>2</sup> | --                                                   | --            | 10 ... 1/0<br>6 ... 35 (Cu 60 °C) | 14 ... 1<br>6 ... 50 (Cu 75 °C) |
| <b>Terminals</b>                                     | ±screw (Pozidriv)      | --                                                   | --            | 2                                 | 2                               |
| • Terminal tightening torque                         | Nm<br>lbs/in           | --                                                   | --            | 5<br>50                           | 3.5<br>35                       |

## Infeed at the start or end of the busbar



## Infeed along the busbar or midpoint infeed



The sum of the outgoing current per branch (1, 2, 3 ... n) must not be greater than the max. busbar current  $I_S$ /phase.



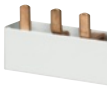
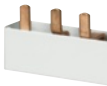
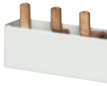
# Miniature Circuit Breakers

## Busbars

### 5ST3 busbars acc. to UL 508

3

#### Selection and ordering data

|                                                                                                  | Pin spacing                                                                            | Length  | DT   | Order No.           | Price per PU | PU (UNIT, SET, M) | PS*/ P. unit | PG  | Weight per PU approx. |
|--------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|---------|------|---------------------|--------------|-------------------|--------------|-----|-----------------------|
|                                                                                                  | MW <sup>1)</sup>                                                                       | mm      |      |                     |              |                   |              |     | kg                    |
| <b>5ST3 7...-HG busbars according to UL 508, 18 mm<sup>2</sup>, can be cut, without end caps</b> |                                                                                        |         |      |                     |              |                   |              |     |                       |
|                 | Single-phase                                                                           |         |      |                     |              |                   |              |     |                       |
|                                                                                                  | • For MCBs 1P (5SY) or fuse holder 10 x 38 mm/class CC (3NC1 091, 3NW7 513-0HG)        | 1       | 1000 | <b>5ST3 701-0HG</b> |              | 1                 | 1 unit       | 005 | 0.330                 |
|                 | Two-phase                                                                              |         |      |                     |              |                   |              |     |                       |
|                                                                                                  | • For MCBs 2P (5SY) or fuse holders 10 x 38 mm/class CC (3NC1 092, 3NW7 523-0HG)       | 1       | 1000 | <b>5ST3 705-0HG</b> |              | 1                 | 1 unit       | 005 | 0.700                 |
|                 | Three-phase                                                                            |         |      |                     |              |                   |              |     |                       |
|                                                                                                  | • For MCBs 2P (5SY) with AS or FC                                                      | 1+1.5   | 1000 | <b>5ST3 707-0HG</b> |              | 1                 | 1 unit       | 005 | 0.690                 |
|                 | Three-phase                                                                            |         |      |                     |              |                   |              |     |                       |
|                                                                                                  | • For MCBs 3P (5SY) or fuse holders 10 x 38 mm/class CC (3NC1 093, 3NW7 533-0HG)       | 1       | 1000 | <b>5ST3 710-0HG</b> |              | 1                 | 1 unit       | 005 | 0.850                 |
|                                                                                                  | • For MCBs 3P (5SY) with AS or FC                                                      | 1+1+1.5 | 1000 | <b>5ST3 712-0HG</b> |              | 1                 | 1 unit       | 005 | 0.850                 |
|                                                                                                  | • For MCBs 1P (5SY, 5SP) with AS or FC or fuse holders 14 x 51 mm (3NC1 493, 3NW7 131) | 1.5     | 1000 | <b>5ST3 714-0HG</b> |              | 1                 | 1 unit       | 005 | 0.850                 |
| <b>5ST3 7...-HG busbars according to UL 508, 25 mm<sup>2</sup>, can be cut, without end caps</b> |                                                                                        |         |      |                     |              |                   |              |     |                       |
|                | Single-phase                                                                           |         |      |                     |              |                   |              |     |                       |
|                                                                                                  | • For MCBs 1P (5SP) or fuse holder 14 x 51 mm (3NC1 491, 3NW7 111)                     | 1.5     | 1000 | <b>5ST3 701-2HG</b> |              | 1                 | 1 unit       | 005 | 0.340                 |
|               | Two-phase                                                                              |         |      |                     |              |                   |              |     |                       |
|                                                                                                  | • For MCBs 2P (5SP) or fuse holders 14 x 51 mm (3NC1 492, 3NW7 121)                    | 1.5     | 1000 | <b>5ST3 705-2HG</b> |              | 1                 | 1 unit       | 005 | 0.800                 |
|               | Three-phase                                                                            |         |      |                     |              |                   |              |     |                       |
|                                                                                                  | • For MCBs 3P (5SP) or fuse holders 14 x 51 mm (3NC1 493, 3NW7 131)                    | 1.5     | 1000 | <b>5ST3 710-2HG</b> |              | 1                 | 1 unit       | 005 | 1.090                 |
| <b>End caps for 5ST3 7...-HG</b>                                                                 |                                                                                        |         |      |                     |              |                   |              |     |                       |
|               | • For single-phase busbars                                                             |         |      | <b>5ST3 748-0HG</b> |              | 1                 | 10 units     | 005 | 0.001                 |
|                                                                                                  | • For two- and three-phase busbars                                                     |         |      | <b>5ST3 750-0HG</b> |              | 1                 | 10 units     | 005 | 0.002                 |
| <b>Terminals according to UL 508</b>                                                             |                                                                                        |         |      |                     |              |                   |              |     |                       |
|               | Infeed to device                                                                       |         |      |                     |              |                   |              |     |                       |
|                                                                                                  | • 35 mm <sup>2</sup>                                                                   |         |      | <b>5ST3 770-0HG</b> |              | 1                 | 10 units     | 005 | 0.035                 |
|               | Infeed to busbar                                                                       |         |      |                     |              |                   |              |     |                       |
|                                                                                                  | • 50 mm <sup>2</sup>                                                                   |         |      | <b>5ST3 770-1HG</b> |              | 1                 | 10 units     | 005 | 0.035                 |
| <b>Touch protection cover for busbars according to UL 508</b>                                    |                                                                                        |         |      |                     |              |                   |              |     |                       |
|               | • 5 x 1 pin                                                                            |         |      | <b>5ST3 655-0HG</b> |              | 1                 | 10 units     | 005 | 0.005                 |

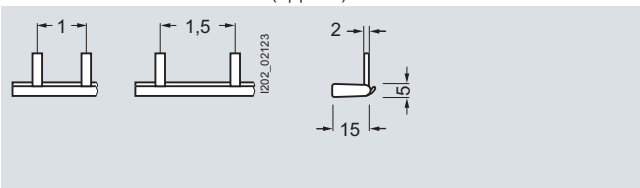
<sup>1)</sup> 1 MW (modular width) = 18 mm.

## Dimensional drawings

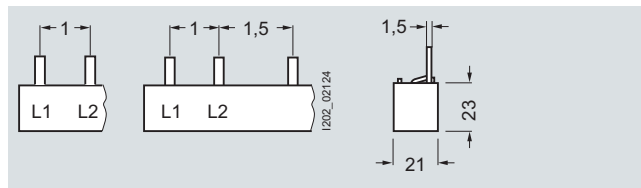
## 5ST3 7 busbars

## Pin spacings in MW (modular width 1 MW = 18 mm)

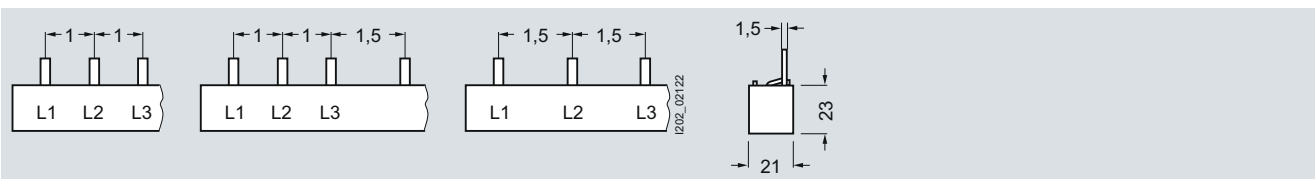
Dimensions of side view in mm (approx.)



5ST3 701-0HG 5ST3 703-0HG



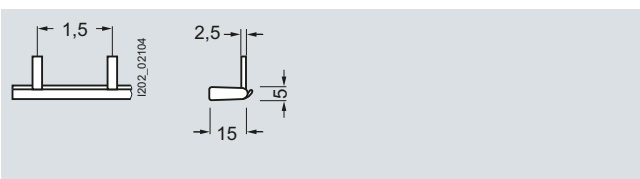
5ST3 705-0HG 5ST3 707-0HG



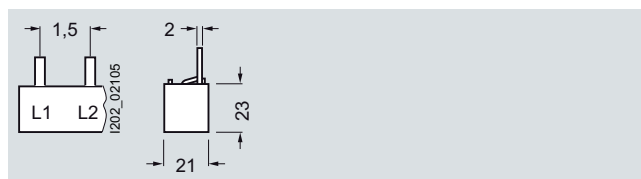
5ST3 710-0HG

5ST3 712-0HG

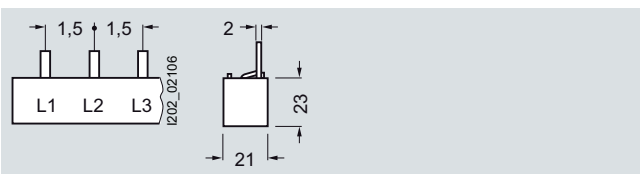
5ST3 714-0HG



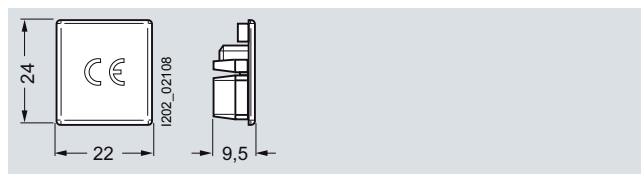
5ST3 701-2HG



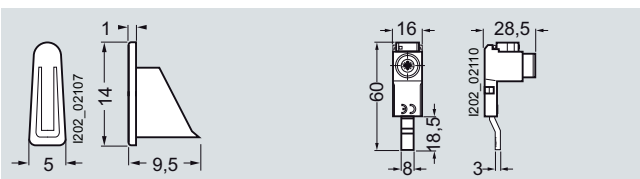
5ST3 705-2HG



5ST3 710-2HG

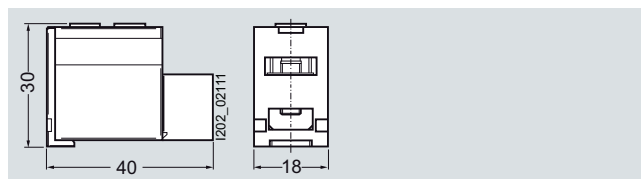


5ST3 750-0HG



5ST3 748-0HG

5ST3 770-0HG

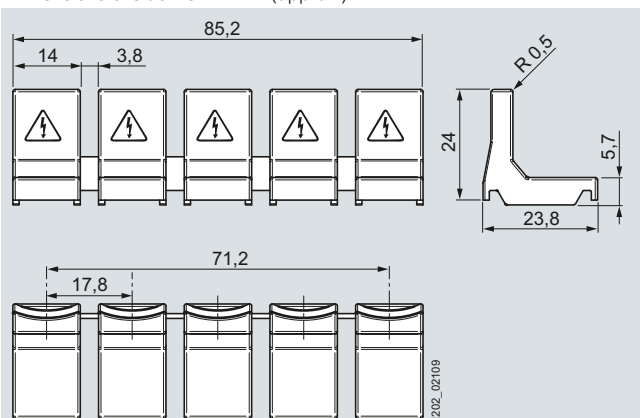


5ST3 770-1HG

## 5ST3 6 touch protection covers

## Pin spacings in MW (modular width 1 MW = 18 mm)

Dimensions of side view in mm (approx.)



5ST3 655-0HG

# Miniature Circuit Breakers

## Busbars

### 5ST2 5 distribution blocks

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#### Overview

##### Distribution blocks for standard rail mounting

Using distribution blocks it is possible to implement one, two, three and four-phase systems with a rated current of up to 400 A. This allows supply terminals to be divided into several load circuits with different cable cross-sections.

The distribution blocks are made of thermoplastic with electrical and mechanical components, which enables their use under high thermal and mechanical load acc. to IEC 60947-7-1.

#### Technical specifications

|                                                              |                    |       |               | 5ST2 501                  | 5ST2 502                  | 5ST2 503                         |
|--------------------------------------------------------------|--------------------|-------|---------------|---------------------------|---------------------------|----------------------------------|
| Standards, certifications                                    |                    |       |               | IEC 60947-7-1             |                           |                                  |
| Degree of protection                                         |                    |       |               | IP 20                     |                           |                                  |
| Poles                                                        |                    |       |               | 4                         |                           |                                  |
| Approved cable                                               |                    |       |               | Copper                    |                           |                                  |
| Conductor cross-section                                      |                    |       |               |                           |                           |                                  |
| • Inputs per pole<br>- Solid/stranded conductor acc. to IEC  | Neutral conductor  |       | mm²           | 1 x 1.5 ... 16/2.5 ... 16 | 1 x 6 ... 25/6 ... 35     | 1 x 10 ... 35/10 ... 50          |
|                                                              |                    |       | mm²           | --                        | 1 x 6 ... 25/6 ... 35     | --                               |
| • Outputs per pole<br>- Solid/stranded conductor acc. to IEC | Large              |       | mm²           | 8 x 1.5 ... 10/2.5 ... 10 | 2 x 1.5 ... 10/1.5 ... 16 | 3 x 6 ... 25/10 ... 35           |
|                                                              |                    |       | mm²           | --                        | 5 x 1.5 ... 6/1.5 ... 6   | 8 x 1.5 ... 16/2.5 ... 16        |
|                                                              | Neutral conductor  | Large | mm²           | --                        | 6 x 1.5 ... 10/1.5 ... 16 | --                               |
|                                                              |                    | Small | mm²           | --                        | 4 x 1.5 ... 6/1.5 ... 6   | --                               |
| Tightening torque                                            |                    |       |               |                           |                           |                                  |
| • Inputs                                                     | Plug-in connection |       | lb/inch<br>Nm | 13.5<br>1.5<br>PZ2        | 13.5<br>1.5<br>PZ2        | 17.5<br>2<br>Allen key<br>(5 mm) |
|                                                              |                    |       |               |                           |                           |                                  |
| • Outputs                                                    | Large              |       | lb/inch<br>Nm | 7.2<br>0.8<br>PZ1         | 13.5<br>1.5<br>PZ2        | 13.5<br>1.5<br>PZ2               |
|                                                              | Plug-in connection |       |               |                           |                           |                                  |
|                                                              | Small              |       | lb/inch<br>Nm | --<br>--                  | 7.2<br>0.8                | 13.5<br>1.5                      |
|                                                              | Plug-in connection |       |               | --                        | PZ1                       | PZ2                              |
| Operational voltage                                          |                    |       |               |                           |                           |                                  |
| • IEC, max.                                                  |                    | V     |               | 500                       | 690                       | 500                              |
| Overcurrent protection                                       |                    |       |               |                           |                           |                                  |
| • Max. rated current                                         |                    | A     |               | 80                        | 125                       | 160                              |
| • Rated impulse withstand voltage (Ipk)                      |                    | kA    |               | 21.6                      | 24                        | 20                               |
| • Rated short-time withstand current (Icw 1 s)               |                    | kA    |               | 3                         | 4.2                       | 6.2                              |
| Block dimensions (D x H x W)                                 |                    |       | mm            | 88 x 49 x 86              | 75 x 49 x 45              | 160.5 x 90 x 50                  |

## UL types

|                                                |                    |               | 5ST2 504                                                                                       | 5ST2 505         | 5ST2 507                   | 5ST2 508                                              | 5ST2 511              |                                                    |                                                                                  |    |    |
|------------------------------------------------|--------------------|---------------|------------------------------------------------------------------------------------------------|------------------|----------------------------|-------------------------------------------------------|-----------------------|----------------------------------------------------|----------------------------------------------------------------------------------|----|----|
| Standards, certifications                      |                    |               | UL 1059 / UL 486E / IEC 60947-7-1<br>UL File No. E80027 / XCFR2<br>C22.2 No. 158 -1987 / XCFR8 |                  |                            | UL 486E / IEC 60947-7-1<br>UL File No. E80027 / XCFR2 |                       |                                                    |                                                                                  |    |    |
| Degree of protection                           |                    |               | IP 20                                                                                          |                  |                            |                                                       |                       |                                                    |                                                                                  |    |    |
| Poles                                          |                    |               | 1                                                                                              |                  |                            |                                                       |                       |                                                    |                                                                                  |    |    |
| Approved cable                                 |                    |               | Copper                                                                                         |                  |                            |                                                       |                       |                                                    |                                                                                  |    |    |
| Wiring type                                    |                    |               | Factory and field wiring                                                                       |                  |                            |                                                       |                       |                                                    |                                                                                  |    |    |
| • Front/back                                   |                    |               | Pressure wire connector                                                                        |                  |                            |                                                       |                       |                                                    |                                                                                  |    |    |
| Conductor cross-section                        |                    |               |                                                                                                |                  |                            |                                                       |                       |                                                    |                                                                                  |    |    |
| • Inputs                                       |                    |               |                                                                                                |                  |                            |                                                       |                       |                                                    |                                                                                  |    |    |
| - Solid and stranded conductor acc. to UL      | Large              | AWG           | 1 x 8 ... 4                                                                                    | 1 x 8 ... 2      | 1 x 8 ... 2 / 0            | 1 x 2 ... 4 / 0 <sup>1)</sup>                         | 1 x 3 / 0 ... 350 MCM |                                                    |                                                                                  |    |    |
| - Solid and stranded acc. to IEC               |                    | mm²           | 2.5 ... 16                                                                                     | 10 ... 35        | 10 ... 70                  | 35 ... 120 <sup>1)</sup>                              | 95 ... 185            |                                                    |                                                                                  |    |    |
| - Solid and stranded conductor acc. to UL      | Small              | AWG           | --                                                                                             | 1 x 14 ... 4     | --                         |                                                       |                       |                                                    |                                                                                  |    |    |
| - Solid and stranded acc. to IEC               |                    | mm²           | --                                                                                             | 2.5 ... 25       | --                         |                                                       |                       |                                                    |                                                                                  |    |    |
| • Outputs                                      |                    |               |                                                                                                |                  |                            |                                                       |                       |                                                    |                                                                                  |    |    |
| - Solid and stranded conductor acc. to UL      | Top                | AWG           | 4 x 14 ... 10                                                                                  | 6 x 14 ... 4     | 6 x 14 ... 4 <sup>1)</sup> | 4 x 14 ... 6                                          | 4 x 10 ... 14         |                                                    |                                                                                  |    |    |
| - Solid and stranded acc. to IEC               |                    | mm²           | 2.5 ... 6                                                                                      | 2.5 ... 16       | 2.5 ... 25 <sup>1)</sup>   | 1.5 ... 16                                            | 2.5 ... 6             |                                                    |                                                                                  |    |    |
| - Solid and stranded conductor acc. to UL      | Medium             | AWG           | --                                                                                             |                  |                            | 4 x 14 ... 8                                          |                       |                                                    |                                                                                  |    |    |
| - Solid and stranded acc. to IEC               |                    | mm²           | --                                                                                             |                  |                            | 1.5 ... 10                                            |                       |                                                    |                                                                                  |    |    |
| - Solid and stranded conductor acc. to UL      | Bottom             | AWG           | 3 x 8 ... 4                                                                                    | --               |                            | 2 x 14 ... 2 / 1 x 14 ... 6                           |                       |                                                    |                                                                                  |    |    |
| - Solid and stranded acc. to IEC               |                    | mm²           | 2.5 ... 16                                                                                     | --               |                            | 2 x 6 ... 35 / 1.5 ... 16                             |                       |                                                    |                                                                                  |    |    |
| Tightening torque                              |                    |               |                                                                                                |                  |                            |                                                       |                       |                                                    |                                                                                  |    |    |
| • Inputs                                       |                    |               | lb/inch<br>Nm                                                                                  | 13.5<br>3        | 31<br>3.5                  | 35.7<br>5                                             | 170<br>19             | 230<br>25                                          |                                                                                  |    |    |
|                                                | Plug-in connection |               |                                                                                                | Allen key (4 mm) | Allen key (5 mm)           | Allen key (6 mm)                                      | Allen key (8 mm)      |                                                    |                                                                                  |    |    |
| • Outputs                                      |                    |               | Large                                                                                          | lb/inch<br>Nm    | 13.5<br>3                  | 17.5<br>2                                             | 31<br>3.5             |                                                    |                                                                                  |    |    |
|                                                | Plug-in connection |               | PZ2                                                                                            |                  |                            | Standard screwdriver                                  |                       |                                                    |                                                                                  |    |    |
|                                                | Small              | lb/inch<br>Nm | 7.2<br>0.8                                                                                     | --<br>--         |                            | 31<br>3.5                                             |                       |                                                    |                                                                                  |    |    |
|                                                | Plug-in connection |               | PZ1                                                                                            | --               |                            | Standard screwdriver                                  |                       |                                                    |                                                                                  |    |    |
| Ampere per pole, max.                          |                    |               | A                                                                                              | 80               | 115                        | 160                                                   | 230                   | 310                                                |                                                                                  |    |    |
| Operational voltage                            |                    |               |                                                                                                |                  |                            |                                                       |                       |                                                    |                                                                                  |    |    |
| • UL, max.                                     | V                  |               | 600                                                                                            |                  |                            |                                                       |                       |                                                    |                                                                                  |    |    |
| • IEC, max.                                    | V                  |               | 690                                                                                            |                  |                            |                                                       |                       |                                                    |                                                                                  |    |    |
| Overcurrent protection                         |                    |               |                                                                                                |                  |                            |                                                       |                       |                                                    |                                                                                  |    |    |
| • Required Class                               |                    |               | J                                                                                              |                  |                            |                                                       |                       |                                                    |                                                                                  |    |    |
| • Max. rated current                           | A                  |               | 80                                                                                             | 125              | 160                        | 250                                                   | 350                   |                                                    |                                                                                  |    |    |
| • SCCR RMS Sym A                               | kA                 |               | 100                                                                                            |                  |                            |                                                       |                       |                                                    |                                                                                  |    |    |
| • Rated impulse withstand voltage (Ipk)        | kA                 |               | 2.7                                                                                            | 30               |                            | 51                                                    |                       |                                                    |                                                                                  |    |    |
| • Rated short-time withstand current (Icw 1 s) | kA                 |               | 1.9                                                                                            | 4.4              | 11                         | 21                                                    |                       |                                                    |                                                                                  |    |    |
| Clearance                                      |                    |               |                                                                                                |                  |                            |                                                       |                       |                                                    |                                                                                  |    |    |
| • Air                                          | inches<br>(mm)     |               | 3 / 8 (9.5)                                                                                    |                  |                            |                                                       |                       |                                                    |                                                                                  |    |    |
| • Creepage distance                            | inches<br>(mm)     |               | 1 / 2 (12.7)                                                                                   |                  |                            |                                                       |                       |                                                    |                                                                                  |    |    |
| Fire class                                     |                    |               | UL94V-0                                                                                        |                  |                            |                                                       |                       |                                                    |                                                                                  |    |    |
| Block dimensions (D x H x W)                   |                    |               | mm                                                                                             | 66 x 49 x 27     | 74 x 49 x 27               | 92 x 35 x 49                                          | 96 x 49 x 45          | 96 x 49 x 45                                       |                                                                                  |    |    |
| Connections                                    |                    |               | With cable up to 16 mm²                                                                        |                  |                            |                                                       |                       | With connector or cable up to 16 mm² <sup>2)</sup> | Lateral incoming feeder for parallel connection with copper bar (max. 16 x 5 mm) | -- | -- |

<sup>1)</sup> Only stranded conductors<sup>2)</sup> Copper jumper is tested for a rated current of 100 A

# Miniature Circuit Breakers

## Busbars

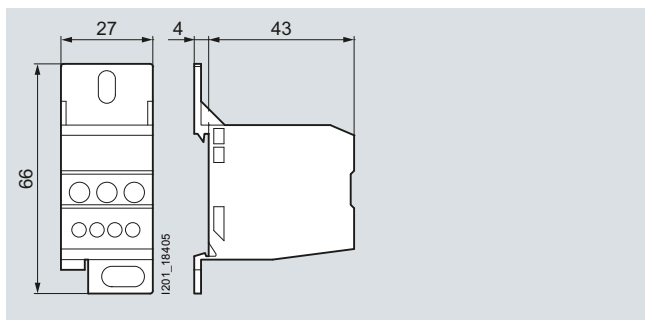
### 5ST2 5 distribution blocks

3

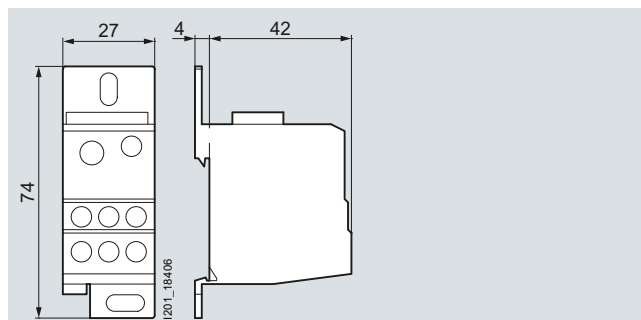
#### Selection and ordering data

|                                                                                     | Version                    | Standard                          | I   | U   | Mounting width | DT | Order No.       | Price per PU | PU (UNIT, SET, M) | PS*/P. unit | PG  | Weight per PU approx. |
|-------------------------------------------------------------------------------------|----------------------------|-----------------------------------|-----|-----|----------------|----|-----------------|--------------|-------------------|-------------|-----|-----------------------|
|                                                                                     |                            |                                   | A   | V   | MW             |    |                 |              |                   |             |     | kg                    |
|    | <b>1-pole</b>              | UL 1059 / UL 486E / IEC 60947-7-1 | 80  | 600 | 1.5            |    | <b>5ST2 504</b> |              | 1                 | 1 unit      | 020 | 0.072                 |
|                                                                                     |                            | UL File No. E80027 / XCFR2        | 125 | 600 | 1.5            |    | <b>5ST2 505</b> |              | 1                 | 1 unit      | 020 | 0.146                 |
|                                                                                     |                            | C22.2 No158 -1987 / XCFR8         | 160 | 600 | 2              | ▶  | <b>5ST2 507</b> |              | 1                 | 1 unit      | 020 | 0.252                 |
|                                                                                     |                            | UL 486E / IEC 60947-7-1           | 250 | 600 | 2.5            | ▶  | <b>5ST2 508</b> |              | 1                 | 1 unit      | 020 | 0.440                 |
|                                                                                     |                            | UL File No. E80027 / XCFR2        | 350 | 600 | 2.5            | ▶  | <b>5ST2 511</b> |              | 1                 | 1 unit      | 020 | 0.418                 |
| 5ST2 504                                                                            |                            |                                   |     |     |                |    |                 |              |                   |             |     |                       |
|    | <b>4-pole</b>              | IEC 60947-7-1                     | 80  | 500 | 5              |    | <b>5ST2 501</b> |              | 1                 | 1 unit      | 020 | 0.246                 |
| 5ST2 501                                                                            |                            |                                   |     |     |                |    |                 |              |                   |             |     |                       |
|   |                            | IEC 60947-7-1                     | 125 | 690 | 5.5            |    | <b>5ST2 502</b> |              | 1                 | 1 unit      | 020 | 0.352                 |
| 5ST2 502                                                                            |                            |                                   |     |     |                |    |                 |              |                   |             |     |                       |
|  |                            | IEC 60947-7-1                     | 160 | 500 | 9              |    | <b>5ST2 503</b> |              | 1                 | 1 unit      | 020 | 0.690                 |
| 5ST2 503                                                                            |                            |                                   |     |     |                |    |                 |              |                   |             |     |                       |
| <b>Accessories</b>                                                                  |                            |                                   |     |     |                |    |                 |              |                   |             |     |                       |
|  | <b>Copper jumper 32 mm</b> |                                   | --  | --  | --             |    | <b>5ST2 506</b> |              | 1                 | 10 units    | 020 | 0.012                 |
|                                                                                     | Single-phase, for 5ST2 505 |                                   |     |     |                |    |                 |              |                   |             |     |                       |
| 5ST2 506                                                                            |                            |                                   |     |     |                |    |                 |              |                   |             |     |                       |

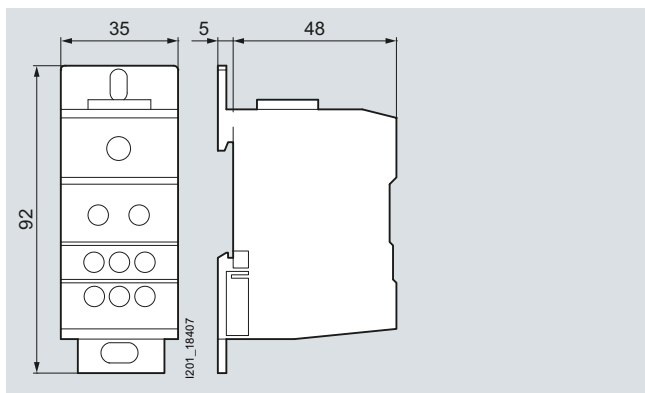
## Dimensional drawings



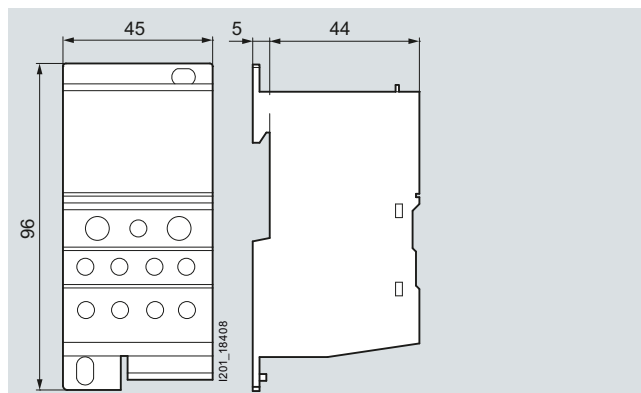
5ST2 504



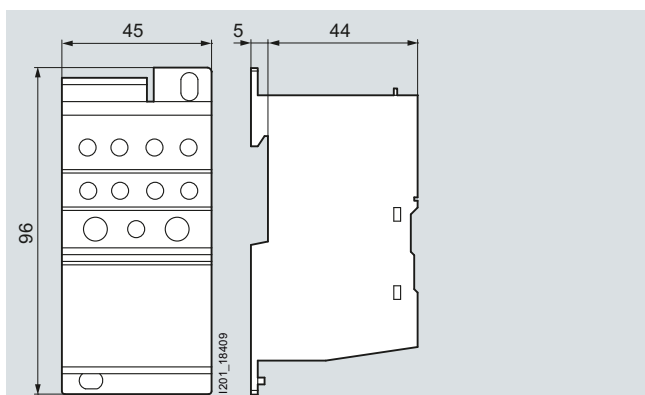
5ST2 505



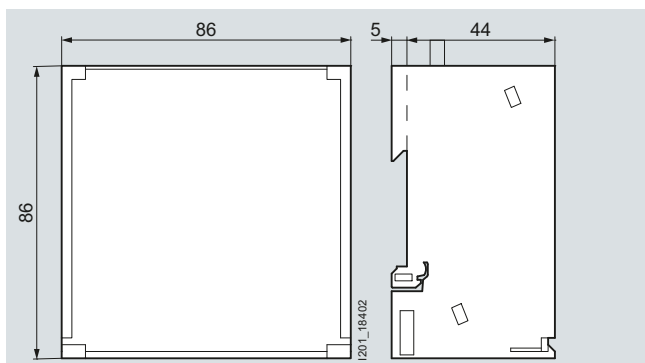
5ST2 507



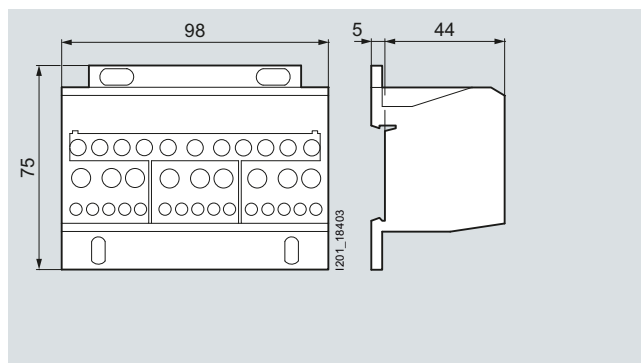
5ST2 508



5ST2 511



5ST2 501

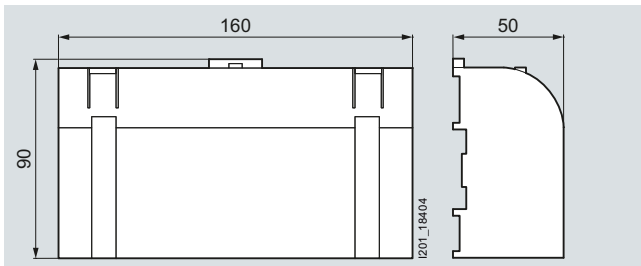


5ST2 502

# Miniature Circuit Breakers

## Busbars

### 5ST2 5 distribution blocks

**3**

5ST2 503

# Miniature Circuit Breakers

## Busbars

### SIKclip wiring system

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#### Overview

SIKclip is a fast wiring system that simplifies the connection of control switches:

- For mounting directly on the rear vertical CU busbar system
- Mounting using brackets on the rear of the DIN rail.

The 4-pole busbar can handle loads of up to 250 A, each individual contact up to 63 A.

High degree of protection because each contact is locked individually.

SIKclip is made of thermoplastic acc. to IEC 60439-3 and is suitable for high thermal loads.

#### Technical specifications

| 5ST2 5..                        |                                                       |                                   |
|---------------------------------|-------------------------------------------------------|-----------------------------------|
| Compliance to standards         | EN 60947-1, EN 60439-3                                |                                   |
| Degree of protection            | IP20                                                  |                                   |
| Max. rated current $I_n$        | A                                                     | 250 at 40 °C ambient temperature  |
| Max. rated output current $I_n$ | A                                                     | 63 A at 40 °C ambient temperature |
| Rated operational voltage $U_n$ | V AC                                                  | 400                               |
| Rated insulation voltage        | V AC                                                  | 660                               |
| Test voltage                    | kV                                                    | 2.5, 50 Hz                        |
| Connecting cables               | 40 A (6 mm <sup>2</sup> ), 63 A (10 mm <sup>2</sup> ) |                                   |
| Connecting cable type           | H07VK                                                 |                                   |
| Ambient temperature             | °C                                                    | -5 ... +60                        |

#### Selection and ordering data

|                                                                                     | Length                                                        | Conductor cross-section | Color of insulation | DT | Order No. | Price per PU | PU (UNIT, SET, M) | PS*/P. unit | PG  | Weight per PU approx. |
|-------------------------------------------------------------------------------------|---------------------------------------------------------------|-------------------------|---------------------|----|-----------|--------------|-------------------|-------------|-----|-----------------------|
|                                                                                     | mm                                                            | mm <sup>2</sup>         |                     |    |           |              |                   |             |     | kg                    |
|  | <b>SIKclip busbar</b>                                         |                         |                     |    |           |              |                   |             |     |                       |
|                                                                                     | 12 MW                                                         |                         |                     |    | 5ST2 520  |              | 1                 | 1 unit      | 020 | 0.772                 |
|                                                                                     | 24 MW                                                         |                         |                     | ►  | 5ST2 521  |              | 1                 | 1 unit      | 020 | 1.400                 |
|                                                                                     | 36 MW                                                         |                         |                     | ►  | 5ST2 522  |              | 1                 | 1 unit      | 020 | 2.041                 |
|  | <b>Connecting cables with plug</b>                            |                         |                     |    |           |              |                   |             |     |                       |
|                                                                                     | 120                                                           | 6                       | Black               | ►  | 5ST2 523  |              | 1                 | 10 units    | 020 | 0.011                 |
|                                                                                     |                                                               |                         | Blue                | ►  | 5ST2 524  |              | 1                 | 10 units    | 020 | 0.012                 |
|                                                                                     |                                                               | 10                      | Black               |    | 5ST2 525  |              | 1                 | 10 units    | 020 | 0.013                 |
|                                                                                     |                                                               |                         | Blue                |    | 5ST2 526  |              | 1                 | 10 units    | 020 | 0.017                 |
|                                                                                     | 220                                                           | 6                       | Black               |    | 5ST2 527  |              | 1                 | 10 units    | 020 | 0.019                 |
|                                                                                     |                                                               |                         | Blue                |    | 5ST2 528  |              | 1                 | 10 units    | 020 | 0.019                 |
|                                                                                     |                                                               | 10                      | Black               |    | 5ST2 530  |              | 1                 | 10 units    | 020 | 0.028                 |
|                                                                                     |                                                               |                         | Blue                |    | 5ST2 531  |              | 1                 | 10 units    | 020 | 0.027                 |
|                                                                                     |                                                               |                         |                     |    |           |              |                   |             |     |                       |
|  | <b>Crimp connectors</b>                                       |                         |                     |    | 5ST2 532  |              | 1                 | 20 units    | 020 | 0.006                 |
|                                                                                     | For connection to cables 4/6 mm <sup>2</sup>                  |                         |                     |    |           |              |                   |             |     |                       |
|  | <b>Fixing brackets</b>                                        |                         |                     |    | 5ST2 533  |              | 1                 | 2 units     | 020 | 0.032                 |
|                                                                                     | For mounting on the rear of the standard mounting rail (pair) |                         |                     |    |           |              |                   |             |     |                       |

Note:

To install the SIKclip wiring system in the ALPHA AS, the busbars must be installed in a vertical rear position, but not recessed. If the busbars are in a recessed position the cables will not reach the circuit breakers.



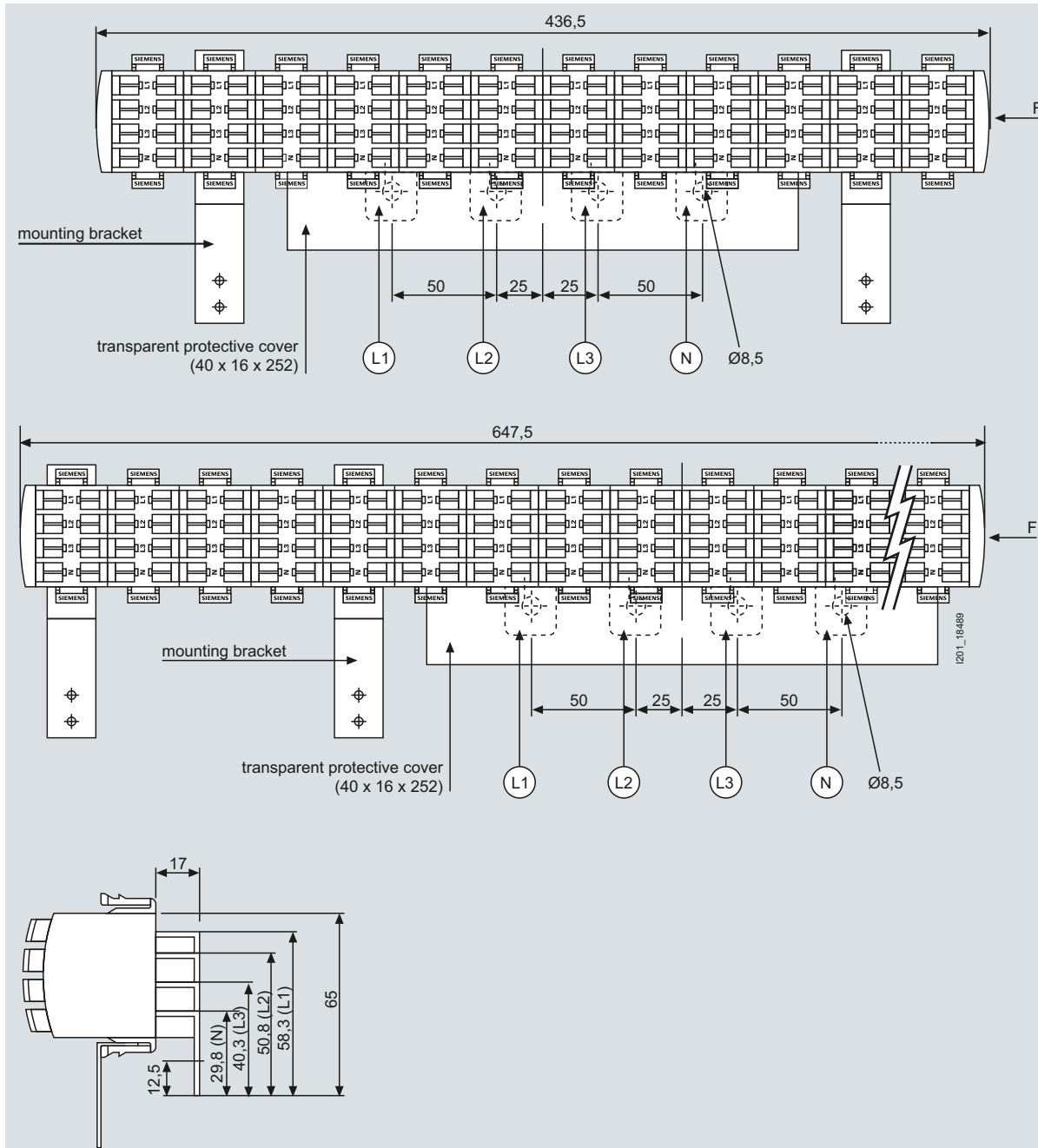
# Miniature Circuit Breakers

## Busbars

### SIKclip wiring system

3

#### Dimensional drawings



### Overview

UL standards are used in North America as well as in several other countries. This is of particular importance to European exporters of electrical switchgear assemblies and equipment for machines who export to the USA, as their products will only be accepted if they meet the relevant UL standards.

A wide range of low-voltage circuit protection devices from Siemens comply with UL standards and are therefore suitable for implementation worldwide in both IEC/EN and UL applications within the framework of their specified use.

Miniature circuit breakers certified to UL 489 permit use as an all-round solution for protection tasks in distribution boards, control cabinets and control systems to UL 508A as "branch protectors". In particular, they are also approved for the protection of electrical circuits in heating, ventilating and cooling systems (HVAC), as well as for DC applications up to 60 V/125 V.

This covers a wide range of protection tasks, in residential and non-residential buildings, as well as in industry. The tripping characteristics B, C and D to EN/IEC 60898-1 have been adapted so that they fall in the permissible tripping range according to UL 489, as well as for applications at 25 °C and 40 °C.

This means that the devices are approved for use according to both standards. The enclosure dimensions of the devices correspond to DIN format. This means that the device series are suitable for universal use worldwide according to IEC or UL standards.

The key difference between the three device series is their application in different power supply systems.

- 5SJ4 ...-HG40: 240/120 V AC, 1-pole, "same polarity only",
- 5SJ4 ...-HG41: 240 V AC, 1-, 2- and 3-pole,
- 5SJ4 ...-HG42: 480Y/277 V AC, 1-, 2- and 3-pole.

The terminals are suitable for "field wiring". This means that the devices can be installed not only in factory-built distribution boards and control cabinets, but also on-site in a customer system.

Using this mounting concept, all additional 5ST3 ...-HG components can be combined with miniature circuit breakers of the 5SJ4 ...-HG range. The auxiliary switch (AS) signals the contact position. In the event of a fault, the fault signal contact (FC) signals the automatic tripping of the MCB as well as the contact position. Shunt trips (units) are used for the remote tripping of miniature circuit breakers. Captive metal brackets on the additional components ensure fast mounting on the devices.

Single, two and three-phase busbars in 3 lengths with 6, 12 or 18 pins are available as accessories for all device series for "field wiring". The infeed is via connection terminals, which are available in two versions, for direct infeed at either the busbar or the miniature circuit breakers. Pins that are not required can be covered with touch protection covers.

### Benefits

- Can be used globally for all applications in residential, non-residential and industrial buildings. This facilitates the planning of installations and enhances export opportunities
- The devices can be used according to IEC/EN 60898-1 and UL 489, which means these devices can be installed anywhere in the world
- Miniature circuit breakers with 480Y/277 V up to 40 A, with 240/120 V and 240 V up to 63 A
- Can be used for both AC voltage and DC voltage up to 125 V
- Rated making and breaking capacity up to 14 kA in acc. with UL 489 and up to 15 kA in acc. with IEC 60947-2
- Fast mounting with busbars up to 115 A and feeder terminals up to 50 mm<sup>2</sup>.



- Infeed direct at miniature circuit breaker for conductor cross-sections up to 35 mm<sup>2</sup>



- Bus mounting with central infeed directly on the busbar up to conductor cross-section of 50 mm<sup>2</sup>



- Accessories: Auxiliary switches, fault signal contacts and shunt trips up to 480 V can be easily mounted onto the miniature circuit breaker.

# Miniature Circuit Breakers

## 5SJ4 . . . - . HG miniature circuit breakers acc. to UL 489 and IEC, and accessories

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### Technical specifications

|                                                           |                            | 5SJ4 . . . - . HG40                                                                                | 5SJ4 . . . - . HG41 | 5SJ4 . . . - . HG42   |
|-----------------------------------------------------------|----------------------------|----------------------------------------------------------------------------------------------------|---------------------|-----------------------|
| <b>Standards</b>                                          |                            | EN 60898-1; EN 60947-2;<br>UL 489 (UL-File E243414); UL 489A (UL-File E332105); CSA C22.2 No. 5-02 |                     |                       |
| <b>Approvals</b>                                          |                            | See appendix, chapter 20                                                                           |                     |                       |
| <b>Tripping characteristic</b>                            |                            | B, C, D                                                                                            | C, D                |                       |
| <b>Rated voltage</b>                                      |                            |                                                                                                    |                     |                       |
| • Acc. to EN 60947-1                                      | V AC                       | 230/400                                                                                            | 230/400             | 230/400               |
| • Acc. to UL 489 and CSA C22.2 No.5-02                    | V AC<br>DC V/1P<br>DC V/2P | 240/120<br>60<br>--                                                                                | 240<br>60<br>125    | 480Y/277<br>60<br>125 |
| <b>Operational voltage</b>                                | Min.                       | V AC/DC<br>per pole                                                                                | 24                  |                       |
| • Acc. to IEC 60898-1                                     | Max.<br>Max.               | V DC/pole<br>V AC                                                                                  | 60<br>250/440       |                       |
| <b>Rated breaking capacity</b>                            |                            |                                                                                                    |                     |                       |
| • $I_{cn}$ acc. to IEC 60898-1                            | kA AC                      | 10                                                                                                 |                     |                       |
| • $I_{cu}$ acc. to IEC 60947-2                            | kA AC                      | 15                                                                                                 |                     |                       |
| • Acc. to UL 489/UL 489A and CSA C22.2 No. 5-02           | kA AC                      | 14/10 <sup>1)</sup>                                                                                | 14/10 <sup>1)</sup> | 10 <sup>1)</sup>      |
| <b>Insulation coordination</b>                            |                            |                                                                                                    |                     |                       |
| • Rated insulation voltage                                | V AC                       | 250                                                                                                | 250/440             |                       |
| • Pollution degree for overvoltage category               |                            | 3/III                                                                                              |                     |                       |
| <b>Touch protection according to EN 50274</b>             |                            | Yes                                                                                                |                     |                       |
| <b>Handle end position, sealable</b>                      |                            | Yes                                                                                                |                     |                       |
| <b>Degree of protection according to EN 60529</b>         |                            | IP20 with connected conductors, IP40 in the handle range                                           |                     |                       |
| <b>CFC and silicone-free</b>                              |                            | Yes                                                                                                |                     |                       |
| <b>Mounting</b>                                           |                            | On standard mounting rail                                                                          |                     |                       |
| <b>Terminals</b>                                          | ±screw (Pozidriv)          | 2                                                                                                  |                     |                       |
| • Combined terminals at both ends                         |                            | Yes                                                                                                |                     |                       |
| • Terminal tightening torque, only for Cu, 60/75 °C       | Nm<br>lb.in                | 3.5<br>31                                                                                          |                     |                       |
| <b>Conductor cross-sections</b>                           |                            |                                                                                                    |                     |                       |
| • Solid and stranded, acc. to UL489 and CSA C22.2 No.5-02 | AWG                        | 14 ... 4                                                                                           |                     |                       |
| • Solid and stranded, according to IEC 60898-1            | mm <sup>2</sup>            | 0.75 ... 35                                                                                        |                     |                       |
| • Finely stranded, with end sleeve                        | mm <sup>2</sup>            | 0.75 ... 25                                                                                        |                     |                       |
| <b>Mains connection</b>                                   |                            | Any                                                                                                |                     |                       |
| <b>Mounting position</b>                                  |                            | Any                                                                                                |                     |                       |
| <b>Service life, on average, with rated load</b>          |                            | 20000 actuations                                                                                   |                     |                       |
| <b>EMC environment</b>                                    |                            |                                                                                                    |                     |                       |
| • Acc. to EN 60947-2                                      |                            | Suitable for environment "B" (immunity to interference not applicable)                             |                     |                       |
| <b>Ambient temperature</b>                                | °C                         | -25 ... +55, max. 95 % humidity                                                                    |                     |                       |
| <b>Storage temperature</b>                                | °C                         | -40 ... +75                                                                                        |                     |                       |
| <b>Resistance to climate acc. to IEC 60068-2-30</b>       |                            | 6 cycles                                                                                           |                     |                       |
| <b>Resistance to vibrations acc. to IEC 60068-2-6</b>     | m/s <sup>2</sup>           | 50 at 25 ... 150 Hz and 60 at 35 Hz (4 sec)                                                        |                     |                       |

<sup>1)</sup> For detailed information on the rated making and breaking capacity, see engineering manual at: [www.siemens.com/lowvoltage/manuals](http://www.siemens.com/lowvoltage/manuals).

| Additional components                          |      | Auxiliary switches (AS)                                                      |                          | Fault signal contacts (FC)                   |          | Shunt trips (units) |                          |           |
|------------------------------------------------|------|------------------------------------------------------------------------------|--------------------------|----------------------------------------------|----------|---------------------|--------------------------|-----------|
|                                                |      | 5ST3 010-0HG<br>5ST3 011-0HG<br>5ST3 012-0HG                                 |                          | 5ST3 020-0HG<br>5ST3 021-0HG<br>5ST3 022-0HG |          | 5ST3 030-0HG        | 5ST3 031-0HG             |           |
| Standards                                      |      | UL 489, UL-File E321559; CSA 22.2 No. 5-02<br>IEC/EN 62019, IEC/EN 60947-5-1 |                          |                                              |          | IEC/EN 60947-1      |                          |           |
| Operational voltage/operational current (load) |      |                                                                              |                          |                                              |          |                     |                          |           |
| • Acc. to IEC                                  | V AC | 400                                                                          | 230                      |                                              |          |                     | 110 ... 415              | 24 ... 60 |
|                                                | A AC | 2                                                                            | 6 (NC: 13 AC, S: AC14)   |                                              |          |                     | --                       | --        |
|                                                | V DC | 220                                                                          | 110                      | 60                                           | 24       |                     | --                       | 24 ... 60 |
|                                                | A DC | 1                                                                            | 1                        | 3                                            | 6 (DC13) |                     | --                       | --        |
| • Acc. to UL                                   | V AC | 480                                                                          | 277                      | 240                                          | 120      |                     | 110 ... 480              | 24 ... 60 |
|                                                | A AC | 1.5                                                                          | 3                        | 4                                            | 6        |                     | --                       | --        |
|                                                | V DC | 125                                                                          | 60                       |                                              |          |                     | --                       | 24 ... 60 |
|                                                | A DC | 1                                                                            | 3                        |                                              |          |                     | --                       | --        |
| Short-circuit protection                       |      | Miniature circuit breaker or 6 A fuse                                        |                          |                                              |          |                     |                          |           |
| Minimum contact load                           |      | 50 mA, 24 V                                                                  |                          |                                              |          |                     |                          |           |
| Tripping operations                            |      | --                                                                           |                          | --                                           |          | max. 2000           |                          |           |
| Service life, on average, with rated load      |      | 12000 actuations                                                             |                          |                                              |          |                     |                          |           |
| Primary operating range                        |      | x $U_n$                                                                      | --                       |                                              |          |                     | 0.7 ... 1.1              |           |
| Conductor cross-sections                       |      | AWG<br>mm <sup>2</sup>                                                       | 22 ... 14<br>0.5 ... 2.5 |                                              |          |                     | 22 ... 14<br>0.5 ... 2.5 |           |
| Terminals                                      |      | ±screw (Pozidriv)                                                            | 1                        |                                              | 1        |                     | 1                        |           |
| • Terminal tightening torque                   |      | Nm<br>lb/in                                                                  | 0.5<br>4.5               |                                              |          |                     | 0.8<br>6.8               |           |

**5SJ4 . . . - . HG miniature circuit breakers  
acc. to UL 489 and IEC, and accessories**

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| Version<br>Type                                                                             | Busbars<br>5ST3 663-.HG<br>5ST3 664-.HG<br>5ST3 665-.HG | Terminals<br>5ST3 666-0HG                     | 5ST3 666-2HG                    |
|---------------------------------------------------------------------------------------------|---------------------------------------------------------|-----------------------------------------------|---------------------------------|
| <b>Standards</b>                                                                            | UL 489;<br>UL File No. E321559                          |                                               |                                 |
| <b>Operational voltage</b><br>• Acc. to IEC<br>• Acc. to UL 489                             | V AC<br>V AC                                            | 690<br>480 V (60z)                            |                                 |
| <b>Rated conditional short-circuit current</b><br>• Dielectric strength<br>• Surge strength | kA<br>kV/mm<br>kV                                       | 15 (with NH3 355A gL/gG 500 V)<br>30<br>> 9.5 |                                 |
| <b>Rated current</b> at 40 °C ambient temperature                                           | A                                                       | 115                                           | 115 (Cu 75 °C)<br>95 (Cu 60 °C) |
| <b>Insulation coordination</b><br>• Pollution degree<br>• Overvoltage category              |                                                         | 2<br>III                                      |                                 |
| <b>Busbar cross-section (Cu)</b>                                                            | mm <sup>2</sup>                                         | 16                                            |                                 |
| <b>Infeed</b>                                                                               |                                                         | Any                                           |                                 |
| <b>Conductor cross-sections</b><br>• AWG cables<br>• Solid and stranded                     | AWG<br>mm <sup>2</sup>                                  | --<br>--                                      | 14 ... 2<br>1.5 ... 35          |
| <b>Terminals</b><br>• Terminal tightening torque                                            | Nm<br>lb.in                                             | --<br>--<br>--                                | 6 mm Allen key<br>3.3<br>30     |
| <b>Temperature resistance</b>                                                               | °C                                                      | 200 – UL 94-V0/0.4 mm                         |                                 |
| <b>Interrupting rating</b>                                                                  |                                                         | 10 kA at 240 V AC or 480 V AC                 |                                 |

Note:

The busbars and terminals are suitable for applications up to 80 A if installed in distribution boards with min. dimensions of 18 x 18 x 6.25", or up to 115 A if installed in distribution boards with min. dimensions of 30 x 30 x 10".

**Selection and ordering data**

| $I_n$                                                                                                                                     | Mounting width   | DT | Characteristic B<br>Order No. | Price<br>per PU | PU<br>(UNIT,<br>SET,<br>M) | PS*/<br>P. unit | PG  | Weight<br>per PU<br>approx. |
|-------------------------------------------------------------------------------------------------------------------------------------------|------------------|----|-------------------------------|-----------------|----------------------------|-----------------|-----|-----------------------------|
| A                                                                                                                                         | MW <sup>1)</sup> |    |                               |                 |                            |                 |     | kg                          |
|  <b>MCBs<br/>"same polarity only"<br/>1P, 240 V AC</b> |                  |    |                               |                 |                            |                 |     |                             |
| 6                                                                                                                                         | 1                |    | <b>5SJ4 106-6HG40</b>         |                 | 1                          | 1 unit          | 005 | 0.153                       |
| 10                                                                                                                                        |                  |    | <b>5SJ4 110-6HG40</b>         |                 | 1                          | 1 unit          | 005 | 0.157                       |
| 13                                                                                                                                        |                  |    | <b>5SJ4 113-6HG40</b>         |                 | 1                          | 1 unit          | 005 | 0.152                       |
| 15                                                                                                                                        |                  |    | <b>5SJ4 118-6HG40</b>         |                 | 1                          | 1 unit          | 005 | 0.153                       |
| 16                                                                                                                                        |                  |    | <b>5SJ4 116-6HG40</b>         |                 | 1                          | 1 unit          | 005 | 0.149                       |
| 20                                                                                                                                        |                  |    | <b>5SJ4 120-6HG40</b>         |                 | 1                          | 1 unit          | 005 | 0.147                       |
| 25                                                                                                                                        |                  |    | <b>5SJ4 125-6HG40</b>         |                 | 1                          | 1 unit          | 005 | 0.154                       |
| 30                                                                                                                                        |                  |    | <b>5SJ4 130-6HG40</b>         |                 | 1                          | 1 unit          | 005 | 0.154                       |
| 32                                                                                                                                        |                  |    | <b>5SJ4 132-6HG40</b>         |                 | 1                          | 1 unit          | 005 | 0.154                       |
| 35                                                                                                                                        |                  |    | <b>5SJ4 135-6HG40</b>         |                 | 1                          | 1 unit          | 005 | 0.156                       |
| 40                                                                                                                                        |                  |    | <b>5SJ4 140-6HG40</b>         |                 | 1                          | 1 unit          | 005 | 0.156                       |
| 45                                                                                                                                        |                  |    | <b>5SJ4 145-6HG40</b>         |                 | 1                          | 1 unit          | 005 | 0.120                       |
| 50                                                                                                                                        |                  |    | <b>5SJ4 150-6HG40</b>         |                 | 1                          | 1 unit          | 005 | 0.159                       |
| 60                                                                                                                                        |                  |    | <b>5SJ4 160-6HG40</b>         |                 | 1                          | 1 unit          | 005 | 0.120                       |
| 63                                                                                                                                        |                  |    | <b>5SJ4 163-6HG40</b>         |                 | 1                          | 1 unit          | 005 | 0.162                       |

<sup>1)</sup> 1 MW (modular width) = 18 mm.

# Miniature Circuit Breakers

## 5SJ4 . . . - . HG miniature circuit breakers acc. to UL 489 and IEC, and accessories

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|                                                                                     | $I_n$                                        | Mounting width   | DT | Characteristic C |              | PG  | DT | Characteristic D |           | PU (UNIT, SET, M) | PS*/ P. unit | PG  | Weight per PU approx. |
|-------------------------------------------------------------------------------------|----------------------------------------------|------------------|----|------------------|--------------|-----|----|------------------|-----------|-------------------|--------------|-----|-----------------------|
|                                                                                     | A                                            | MW <sup>1)</sup> |    | Order No.        | Price per PU |     |    |                  | Order No. |                   |              |     | Price per PU          |
|    | MCBs<br>"same polarity only"<br>1P, 240 V AC |                  |    |                  |              |     |    |                  |           |                   |              |     |                       |
|                                                                                     | 0.3                                          | 1                |    | 5SJ4 114-7HG40   |              | 005 |    | 5SJ4 114-8HG40   |           | 1                 | 1 unit       | 005 | 0.152                 |
|                                                                                     | 0.5                                          |                  |    | 5SJ4 105-7HG40   |              | 005 |    | 5SJ4 105-8HG40   |           | 1                 | 1 unit       | 005 | 0.152                 |
|                                                                                     | 1                                            |                  |    | 5SJ4 101-7HG40   |              | 005 |    | 5SJ4 101-8HG40   |           | 1                 | 1 unit       | 005 | 0.156                 |
|                                                                                     | 1.6                                          |                  |    | 5SJ4 115-7HG40   |              | 005 |    | 5SJ4 115-8HG40   |           | 1                 | 1 unit       | 005 | 0.151                 |
|                                                                                     | 2                                            |                  |    | 5SJ4 102-7HG40   |              | 005 |    | 5SJ4 102-8HG40   |           | 1                 | 1 unit       | 005 | 0.151                 |
|                                                                                     | 3                                            |                  |    | 5SJ4 103-7HG40   |              | 005 |    | 5SJ4 103-8HG40   |           | 1                 | 1 unit       | 005 | 0.139                 |
|                                                                                     | 4                                            |                  |    | 5SJ4 104-7HG40   |              | 005 |    | 5SJ4 104-8HG40   |           | 1                 | 1 unit       | 005 | 0.153                 |
|                                                                                     | 5                                            |                  |    | 5SJ4 111-7HG40   |              | 005 |    | 5SJ4 111-8HG40   |           | 1                 | 1 unit       | 005 | 0.150                 |
|                                                                                     | 6                                            |                  |    | 5SJ4 106-7HG40   |              | 005 |    | 5SJ4 106-8HG40   |           | 1                 | 1 unit       | 005 | 0.150                 |
|                                                                                     | 8                                            |                  |    | 5SJ4 108-7HG40   |              | 005 |    | 5SJ4 108-8HG40   |           | 1                 | 1 unit       | 005 | 0.152                 |
|                                                                                     | 10                                           |                  |    | 5SJ4 110-7HG40   |              | 005 |    | 5SJ4 110-8HG40   |           | 1                 | 1 unit       | 005 | 0.151                 |
|                                                                                     | 13                                           |                  |    | 5SJ4 113-7HG40   |              | 005 |    | 5SJ4 113-8HG40   |           | 1                 | 1 unit       | 005 | 0.147                 |
|                                                                                     | 15                                           |                  |    | 5SJ4 118-7HG40   |              | 005 |    | 5SJ4 118-8HG40   |           | 1                 | 1 unit       | 005 | 0.153                 |
|                                                                                     | 16                                           |                  |    | 5SJ4 116-7HG40   |              | 005 |    | 5SJ4 116-8HG40   |           | 1                 | 1 unit       | 005 | 0.152                 |
|                                                                                     | 20                                           |                  |    | 5SJ4 120-7HG40   |              | 005 |    | 5SJ4 120-8HG40   |           | 1                 | 1 unit       | 005 | 0.152                 |
|                                                                                     | 25                                           |                  |    | 5SJ4 125-7HG40   |              | 005 |    | 5SJ4 125-8HG40   |           | 1                 | 1 unit       | 005 | 0.152                 |
|                                                                                     | 30                                           |                  |    | 5SJ4 130-7HG40   |              | 005 |    | 5SJ4 130-8HG40   |           | 1                 | 1 unit       | 005 | 0.158                 |
|                                                                                     | 32                                           |                  |    | 5SJ4 132-7HG40   |              | 005 |    | 5SJ4 132-8HG40   |           | 1                 | 1 unit       | 005 | 0.156                 |
|                                                                                     | 35                                           |                  |    | 5SJ4 135-7HG40   |              | 005 |    | 5SJ4 135-8HG40   |           | 1                 | 1 unit       | 005 | 0.161                 |
|                                                                                     | 40                                           |                  |    | 5SJ4 140-7HG40   |              | 005 |    | 5SJ4 140-8HG40   |           | 1                 | 1 unit       | 005 | 0.156                 |
|                                                                                     | 45                                           |                  |    | 5SJ4 145-7HG40   |              | 005 |    | 5SJ4 145-8HG40   |           | 1                 | 1 unit       | 005 | 0.159                 |
|                                                                                     | 50                                           |                  |    | 5SJ4 150-7HG40   |              | 005 |    | 5SJ4 150-8HG40   |           | 1                 | 1 unit       | 005 | 0.159                 |
|                                                                                     | 60                                           |                  |    | 5SJ4 160-7HG40   |              | 005 |    | 5SJ4 160-8HG40   |           | 1                 | 1 unit       | 005 | 0.157                 |
|                                                                                     | 63                                           |                  |    | 5SJ4 163-7HG40   |              | 005 |    | 5SJ4 163-8HG40   |           | 1                 | 1 unit       | 005 | 0.157                 |
|  | MCBs<br>1P, 240 V AC                         |                  |    |                  |              |     |    |                  |           |                   |              |     |                       |
|                                                                                     | 0.3                                          | 1                |    | 5SJ4 114-7HG41   |              | 005 |    | 5SJ4 114-8HG41   |           | 1                 | 1 unit       | 005 | 0.155                 |
|                                                                                     | 0.5                                          |                  |    | 5SJ4 105-7HG41   |              | 005 |    | 5SJ4 105-8HG41   |           | 1                 | 1 unit       | 005 | 0.155                 |
|                                                                                     | 1                                            |                  |    | 5SJ4 101-7HG41   |              | 005 |    | 5SJ4 101-8HG41   |           | 1                 | 1 unit       | 005 | 0.175                 |
|                                                                                     | 1.6                                          |                  |    | 5SJ4 115-7HG41   |              | 005 |    | 5SJ4 115-8HG41   |           | 1                 | 1 unit       | 005 | 0.155                 |
|                                                                                     | 2                                            |                  |    | 5SJ4 102-7HG41   |              | 005 |    | 5SJ4 102-8HG41   |           | 1                 | 1 unit       | 005 | 0.168                 |
|                                                                                     | 3                                            |                  |    | 5SJ4 103-7HG41   |              | 005 |    | 5SJ4 103-8HG41   |           | 1                 | 1 unit       | 005 | 0.171                 |
|                                                                                     | 4                                            |                  |    | 5SJ4 104-7HG41   |              | 005 |    | 5SJ4 104-8HG41   |           | 1                 | 1 unit       | 005 | 0.170                 |
|                                                                                     | 5                                            |                  |    | 5SJ4 111-7HG41   |              | 005 |    | 5SJ4 111-8HG41   |           | 1                 | 1 unit       | 005 | 0.155                 |
|                                                                                     | 6                                            |                  |    | 5SJ4 106-7HG41   |              | 005 |    | 5SJ4 106-8HG41   |           | 1                 | 1 unit       | 005 | 0.169                 |
|                                                                                     | 8                                            |                  |    | 5SJ4 108-7HG41   |              | 005 |    | 5SJ4 108-8HG41   |           | 1                 | 1 unit       | 005 | 0.172                 |
|                                                                                     | 10                                           |                  |    | 5SJ4 110-7HG41   |              | 005 |    | 5SJ4 110-8HG41   |           | 1                 | 1 unit       | 005 | 0.173                 |
|                                                                                     | 13                                           |                  |    | 5SJ4 113-7HG41   |              | 005 |    | 5SJ4 113-8HG41   |           | 1                 | 1 unit       | 005 | 0.172                 |
|                                                                                     | 15                                           |                  |    | 5SJ4 118-7HG41   |              | 005 |    | 5SJ4 118-8HG41   |           | 1                 | 1 unit       | 005 | 0.155                 |
|                                                                                     | 16                                           |                  |    | 5SJ4 116-7HG41   |              | 005 |    | 5SJ4 116-8HG41   |           | 1                 | 1 unit       | 005 | 0.172                 |
|                                                                                     | 20                                           |                  |    | 5SJ4 120-7HG41   |              | 005 |    | 5SJ4 120-8HG41   |           | 1                 | 1 unit       | 005 | 0.171                 |
|                                                                                     | 25                                           |                  |    | 5SJ4 125-7HG41   |              | 005 |    | 5SJ4 125-8HG41   |           | 1                 | 1 unit       | 005 | 0.172                 |
|                                                                                     | 30                                           |                  |    | 5SJ4 130-7HG41   |              | 005 |    | 5SJ4 130-8HG41   |           | 1                 | 1 unit       | 005 | 0.155                 |
|                                                                                     | 32                                           |                  |    | 5SJ4 132-7HG41   |              | 005 |    | 5SJ4 132-8HG41   |           | 1                 | 1 unit       | 005 | 0.155                 |
|                                                                                     | 35                                           |                  |    | 5SJ4 135-7HG41   |              | 005 |    | 5SJ4 135-8HG41   |           | 1                 | 1 unit       | 005 | 0.155                 |
|                                                                                     | 40                                           |                  |    | 5SJ4 140-7HG41   |              | 005 |    | 5SJ4 140-8HG41   |           | 1                 | 1 unit       | 005 | 0.175                 |
|                                                                                     | 45                                           |                  |    | 5SJ4 145-7HG41   |              | 005 |    | 5SJ4 145-8HG41   |           | 1                 | 1 unit       | 005 | 0.155                 |
|                                                                                     | 50                                           |                  |    | 5SJ4 150-7HG41   |              | 005 |    | 5SJ4 150-8HG41   |           | 1                 | 1 unit       | 005 | 0.155                 |
|                                                                                     | 60                                           |                  |    | 5SJ4 160-7HG41   |              | 005 |    | 5SJ4 160-8HG41   |           | 1                 | 1 unit       | 005 | 0.155                 |
|                                                                                     | 63                                           |                  |    | 5SJ4 163-7HG41   |              | 005 |    | 5SJ4 163-8HG41   |           | 1                 | 1 unit       | 005 | 0.155                 |

<sup>1)</sup> 1 MW (modular width) = 18 mm.

# Miniature Circuit Breakers

## 5SJ4 . . . - HG miniature circuit breakers acc. to UL 489 and IEC, and accessories

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|                                                                                     | $I_n$                    | Mounting width   | DT             | Characteristic C |              | PG  | DT             | Characteristic D |              | PU (UNIT, SET, M) | PS*/ P. unit | PG    | Weight per PU approx. |
|-------------------------------------------------------------------------------------|--------------------------|------------------|----------------|------------------|--------------|-----|----------------|------------------|--------------|-------------------|--------------|-------|-----------------------|
|                                                                                     | A                        | MW <sup>1)</sup> |                | Order No.        | Price per PU |     |                | Order No.        | Price per PU |                   |              |       | kg                    |
|    | <b>MCBs 2P, 240 V AC</b> |                  |                |                  |              |     |                |                  |              |                   |              |       |                       |
|                                                                                     | 0.3                      | 2                |                |                  |              |     |                |                  |              |                   |              |       |                       |
|                                                                                     | 0.5                      |                  |                | 5SJ4 214-7HG41   |              | 005 |                | 5SJ4 214-8HG41   |              | 1                 | 1 unit       | 005   | 0.310                 |
|                                                                                     | 1                        |                  |                | 5SJ4 205-7HG41   |              | 005 |                | 5SJ4 205-8HG41   |              | 1                 | 1 unit       | 005   | 0.341                 |
|                                                                                     |                          |                  |                | 5SJ4 201-7HG41   |              | 005 |                | 5SJ4 201-8HG41   |              | 1                 | 1 unit       | 005   | 0.337                 |
|                                                                                     | 1.6                      |                  |                | 5SJ4 215-7HG41   |              | 005 |                | 5SJ4 215-8HG41   |              | 1                 | 1 unit       | 005   | 0.332                 |
|                                                                                     | 2                        |                  |                | 5SJ4 202-7HG41   |              | 005 |                | 5SJ4 202-8HG41   |              | 1                 | 1 unit       | 005   | 0.332                 |
|                                                                                     | 3                        |                  |                | 5SJ4 203-7HG41   |              | 005 |                | 5SJ4 203-8HG41   |              | 1                 | 1 unit       | 005   | 0.329                 |
|                                                                                     | 4                        |                  |                | 5SJ4 204-7HG41   |              | 005 |                | 5SJ4 204-8HG41   |              | 1                 | 1 unit       | 005   | 0.329                 |
|                                                                                     | 5                        |                  |                | 5SJ4 211-7HG41   |              | 005 |                | 5SJ4 211-8HG41   |              | 1                 | 1 unit       | 005   | 0.310                 |
|                                                                                     | 6                        |                  |                | 5SJ4 206-7HG41   |              | 005 |                | 5SJ4 206-8HG41   |              | 1                 | 1 unit       | 005   | 0.335                 |
|                                                                                     | 8                        |                  |                | 5SJ4 208-7HG41   |              | 005 |                | 5SJ4 208-8HG41   |              | 1                 | 1 unit       | 005   | 0.337                 |
|                                                                                     | 10                       |                  |                | 5SJ4 210-7HG41   |              | 005 |                | 5SJ4 210-8HG41   |              | 1                 | 1 unit       | 005   | 0.332                 |
|                                                                                     | 13                       |                  |                | 5SJ4 213-7HG41   |              | 005 |                | 5SJ4 213-8HG41   |              | 1                 | 1 unit       | 005   | 0.332                 |
|                                                                                     | 15                       |                  |                | 5SJ4 218-7HG41   |              | 005 |                | 5SJ4 218-8HG41   |              | 1                 | 1 unit       | 005   | 0.310                 |
|                                                                                     | 16                       |                  |                | 5SJ4 216-7HG41   |              | 005 |                | 5SJ4 216-8HG41   |              | 1                 | 1 unit       | 005   | 0.335                 |
|                                                                                     | 20                       |                  |                | 5SJ4 220-7HG41   |              | 005 |                | 5SJ4 220-8HG41   |              | 1                 | 1 unit       | 005   | 0.334                 |
|                                                                                     | 25                       |                  |                | 5SJ4 225-7HG41   |              | 005 |                | 5SJ4 225-8HG41   |              | 1                 | 1 unit       | 005   | 0.333                 |
|                                                                                     | 30                       |                  |                | 5SJ4 230-7HG41   |              | 005 |                | 5SJ4 230-8HG41   |              | 1                 | 1 unit       | 005   | 0.336                 |
|                                                                                     | 32                       |                  |                | 5SJ4 232-7HG41   |              | 005 |                | 5SJ4 232-8HG41   |              | 1                 | 1 unit       | 005   | 0.342                 |
|                                                                                     | 35                       |                  |                | 5SJ4 235-7HG41   |              | 005 |                | 5SJ4 235-8HG41   |              | 1                 | 1 unit       | 005   | 0.310                 |
|                                                                                     | 40                       |                  |                | 5SJ4 240-7HG41   |              | 005 |                | 5SJ4 240-8HG41   |              | 1                 | 1 unit       | 005   | 0.343                 |
|                                                                                     | 45                       |                  |                | 5SJ4 245-7HG41   |              | 005 |                | 5SJ4 245-8HG41   |              | 1                 | 1 unit       | 005   | 0.310                 |
| 50                                                                                  |                          |                  | 5SJ4 250-7HG41 |                  | 005          |     | 5SJ4 250-8HG41 |                  | 1            | 1 unit            | 005          | 0.343 |                       |
| 60                                                                                  |                          |                  | 5SJ4 260-7HG41 |                  | 005          |     | 5SJ4 260-8HG41 |                  | 1            | 1 unit            | 005          | 0.310 |                       |
| 63                                                                                  |                          |                  | 5SJ4 263-7HG41 |                  | 005          |     | 5SJ4 263-8HG41 |                  | 1            | 1 unit            | 005          | 0.310 |                       |
|  | <b>MCBs 3P, 240 V AC</b> |                  |                |                  |              |     |                |                  |              |                   |              |       |                       |
|                                                                                     | 0.3                      | 3                |                |                  |              |     |                |                  |              |                   |              |       |                       |
|                                                                                     | 0.5                      |                  |                | 5SJ4 314-7HG41   |              | 005 |                | 5SJ4 314-8HG41   |              | 1                 | 1 unit       | 005   | 0.465                 |
|                                                                                     | 1                        |                  |                | 5SJ4 305-7HG41   |              | 005 |                | 5SJ4 305-8HG41   |              | 1                 | 1 unit       | 005   | 0.465                 |
|                                                                                     |                          |                  |                | 5SJ4 301-7HG41   |              | 005 |                | 5SJ4 301-8HG41   |              | 1                 | 1 unit       | 005   | 0.465                 |
|                                                                                     | 1.6                      |                  |                | 5SJ4 315-7HG41   |              | 005 |                | 5SJ4 315-8HG41   |              | 1                 | 1 unit       | 005   | 0.465                 |
|                                                                                     | 2                        |                  |                | 5SJ4 302-7HG41   |              | 005 |                | 5SJ4 302-8HG41   |              | 1                 | 1 unit       | 005   | 0.488                 |
|                                                                                     | 3                        |                  |                | 5SJ4 303-7HG41   |              | 005 |                | 5SJ4 303-8HG41   |              | 1                 | 1 unit       | 005   | 0.486                 |
|                                                                                     | 4                        |                  |                | 5SJ4 304-7HG41   |              | 005 |                | 5SJ4 304-8HG41   |              | 1                 | 1 unit       | 005   | 0.484                 |
|                                                                                     | 5                        |                  |                | 5SJ4 311-7HG41   |              | 005 |                | 5SJ4 311-8HG41   |              | 1                 | 1 unit       | 005   | 0.465                 |
|                                                                                     | 6                        |                  |                | 5SJ4 306-7HG41   |              | 005 |                | 5SJ4 306-8HG41   |              | 1                 | 1 unit       | 005   | 0.489                 |
|                                                                                     | 8                        |                  |                | 5SJ4 308-7HG41   |              | 005 |                | 5SJ4 308-8HG41   |              | 1                 | 1 unit       | 005   | 0.498                 |
|                                                                                     | 10                       |                  |                | 5SJ4 310-7HG41   |              | 005 |                | 5SJ4 310-8HG41   |              | 1                 | 1 unit       | 005   | 0.492                 |
|                                                                                     | 13                       |                  |                | 5SJ4 313-7HG41   |              | 005 |                | 5SJ4 313-8HG41   |              | 1                 | 1 unit       | 005   | 0.494                 |
|                                                                                     | 15                       |                  |                | 5SJ4 318-7HG41   |              | 005 |                | 5SJ4 318-8HG41   |              | 1                 | 1 unit       | 005   | 0.499                 |
|                                                                                     | 16                       |                  |                | 5SJ4 316-7HG41   |              | 005 |                | 5SJ4 316-8HG41   |              | 1                 | 1 unit       | 005   | 0.506                 |
|                                                                                     | 20                       |                  |                | 5SJ4 320-7HG41   |              | 005 |                | 5SJ4 320-8HG41   |              | 1                 | 1 unit       | 005   | 0.495                 |
|                                                                                     | 25                       |                  |                | 5SJ4 325-7HG41   |              | 005 |                | 5SJ4 325-8HG41   |              | 1                 | 1 unit       | 005   | 0.494                 |
|                                                                                     | 30                       |                  |                | 5SJ4 330-7HG41   |              | 005 |                | 5SJ4 330-8HG41   |              | 1                 | 1 unit       | 005   | 0.504                 |
|                                                                                     | 32                       |                  |                | 5SJ4 332-7HG41   |              | 005 |                | 5SJ4 332-8HG41   |              | 1                 | 1 unit       | 005   | 0.504                 |
|                                                                                     | 35                       |                  |                | 5SJ4 335-7HG41   |              | 005 |                | 5SJ4 335-8HG41   |              | 1                 | 1 unit       | 005   | 0.465                 |
|                                                                                     | 40                       |                  |                | 5SJ4 340-7HG41   |              | 005 |                | 5SJ4 340-8HG41   |              | 1                 | 1 unit       | 005   | 0.505                 |
|                                                                                     | 45                       |                  |                | 5SJ4 345-7HG41   |              | 005 |                | 5SJ4 345-8HG41   |              | 1                 | 1 unit       | 005   | 0.465                 |
| 50                                                                                  |                          |                  | 5SJ4 350-7HG41 |                  | 005          |     | 5SJ4 350-8HG41 |                  | 1            | 1 unit            | 005          | 0.499 |                       |
| 60                                                                                  |                          |                  | 5SJ4 360-7HG41 |                  | 005          |     | 5SJ4 360-8HG41 |                  | 1            | 1 unit            | 005          | 0.465 |                       |
| 63                                                                                  |                          |                  | 5SJ4 363-7HG41 |                  | 005          |     | 5SJ4 363-8HG41 |                  | 1            | 1 unit            | 005          | 0.465 |                       |

<sup>1)</sup> 1 MW (modular width) = 18 mm.

# Miniature Circuit Breakers

## 5SJ4 . . . - . HG miniature circuit breakers acc. to UL 489 and IEC, and accessories

3

|                                                                                     | $I_n$                    | Mounting width   | DT | Characteristic C |              |       | Characteristic D |              |    | PU (UNIT, SET, M) | PS*/ P. unit | PG    | Weight per PU approx. |
|-------------------------------------------------------------------------------------|--------------------------|------------------|----|------------------|--------------|-------|------------------|--------------|----|-------------------|--------------|-------|-----------------------|
|                                                                                     | A                        | MW <sup>1)</sup> |    | Order No.        | Price per PU | PG DT | Order No.        | Price per PU | kg |                   |              |       |                       |
|    | <b>MCBs</b>              |                  |    |                  |              |       |                  |              |    |                   |              |       |                       |
|                                                                                     | <b>1P, 480Y/277 V AC</b> |                  |    |                  |              |       |                  |              |    |                   |              |       |                       |
|                                                                                     | 0.3                      | 1                |    | 5SJ4 114-7HG42   |              | 005   | 5SJ4 114-8HG42   |              | 1  | 1 unit            | 005          | 0.155 |                       |
|                                                                                     | 0.5                      |                  |    | 5SJ4 105-7HG42   |              | 005   | 5SJ4 105-8HG42   |              | 1  | 1 unit            | 005          | 0.155 |                       |
|                                                                                     | 1                        |                  |    | 5SJ4 101-7HG42   |              | 005   | 5SJ4 101-8HG42   |              | 1  | 1 unit            | 005          | 0.155 |                       |
|                                                                                     | 1.6                      |                  |    | 5SJ4 115-7HG42   |              | 005   | 5SJ4 115-8HG42   |              | 1  | 1 unit            | 005          | 0.155 |                       |
|                                                                                     | 2                        |                  |    | 5SJ4 102-7HG42   |              | 005   | 5SJ4 102-8HG42   |              | 1  | 1 unit            | 005          | 0.155 |                       |
|                                                                                     | 3                        |                  |    | 5SJ4 103-7HG42   |              | 005   | 5SJ4 103-8HG42   |              | 1  | 1 unit            | 005          | 0.155 |                       |
|                                                                                     | 4                        |                  |    | 5SJ4 104-7HG42   |              | 005   | 5SJ4 104-8HG42   |              | 1  | 1 unit            | 005          | 0.155 |                       |
|                                                                                     | 5                        |                  |    | 5SJ4 111-7HG42   |              | 005   | 5SJ4 111-8HG42   |              | 1  | 1 unit            | 005          | 0.155 |                       |
|                                                                                     | 6                        |                  |    | 5SJ4 106-7HG42   |              | 005   | 5SJ4 106-8HG42   |              | 1  | 1 unit            | 005          | 0.155 |                       |
|                                                                                     | 8                        |                  |    | 5SJ4 108-7HG42   |              | 005   | 5SJ4 108-8HG42   |              | 1  | 1 unit            | 005          | 0.155 |                       |
|                                                                                     | 10                       |                  |    | 5SJ4 110-7HG42   |              | 005   | 5SJ4 110-8HG42   |              | 1  | 1 unit            | 005          | 0.155 |                       |
|                                                                                     | 13                       |                  |    | 5SJ4 113-7HG42   |              | 005   | 5SJ4 113-8HG42   |              | 1  | 1 unit            | 005          | 0.155 |                       |
|                                                                                     | 15                       |                  |    | 5SJ4 118-7HG42   |              | 005   | 5SJ4 118-8HG42   |              | 1  | 1 unit            | 005          | 0.155 |                       |
|                                                                                     | 16                       |                  |    | 5SJ4 116-7HG42   |              | 005   | 5SJ4 116-8HG42   |              | 1  | 1 unit            | 005          | 0.155 |                       |
|                                                                                     | 20                       |                  |    | 5SJ4 120-7HG42   |              | 005   | 5SJ4 120-8HG42   |              | 1  | 1 unit            | 005          | 0.155 |                       |
|                                                                                     | 25                       |                  |    | 5SJ4 125-7HG42   |              | 005   | 5SJ4 125-8HG42   |              | 1  | 1 unit            | 005          | 0.155 |                       |
|                                                                                     | 30                       |                  |    | 5SJ4 130-7HG42   |              | 005   | 5SJ4 130-8HG42   |              | 1  | 1 unit            | 005          | 0.155 |                       |
|                                                                                     | 32                       |                  |    | 5SJ4 132-7HG42   |              | 005   | 5SJ4 132-8HG42   |              | 1  | 1 unit            | 005          | 0.155 |                       |
|                                                                                     | 35                       |                  |    | 5SJ4 135-7HG42   |              | 005   | --               |              | 1  | 1 unit            |              | 0.155 |                       |
|                                                                                     | 40                       |                  |    | 5SJ4 140-7HG42   |              | 005   | --               |              | 1  | 1 unit            |              | 0.155 |                       |
|  | <b>MCBs</b>              |                  |    |                  |              |       |                  |              |    |                   |              |       |                       |
|                                                                                     | <b>2P, 480Y/277 V AC</b> |                  |    |                  |              |       |                  |              |    |                   |              |       |                       |
|                                                                                     | 0.3                      | 2                |    | 5SJ4 214-7HG42   |              | 005   | 5SJ4 214-8HG42   |              | 1  | 1 unit            | 005          | 0.310 |                       |
|                                                                                     | 0.5                      |                  |    | 5SJ4 205-7HG42   |              | 005   | 5SJ4 205-8HG42   |              | 1  | 1 unit            | 005          | 0.310 |                       |
|                                                                                     | 1                        |                  |    | 5SJ4 201-7HG42   |              | 005   | 5SJ4 201-8HG42   |              | 1  | 1 unit            | 005          | 0.310 |                       |
|                                                                                     | 1.6                      |                  |    | 5SJ4 215-7HG42   |              | 005   | 5SJ4 215-8HG42   |              | 1  | 1 unit            | 005          | 0.310 |                       |
|                                                                                     | 2                        |                  |    | 5SJ4 202-7HG42   |              | 005   | 5SJ4 202-8HG42   |              | 1  | 1 unit            | 005          | 0.310 |                       |
|                                                                                     | 3                        |                  |    | 5SJ4 203-7HG42   |              | 005   | 5SJ4 203-8HG42   |              | 1  | 1 unit            | 005          | 0.310 |                       |
|                                                                                     | 4                        |                  |    | 5SJ4 204-7HG42   |              | 005   | 5SJ4 204-8HG42   |              | 1  | 1 unit            | 005          | 0.310 |                       |
|                                                                                     | 5                        |                  |    | 5SJ4 211-7HG42   |              | 005   | 5SJ4 211-8HG42   |              | 1  | 1 unit            | 005          | 0.310 |                       |
|                                                                                     | 6                        |                  |    | 5SJ4 206-7HG42   |              | 005   | 5SJ4 206-8HG42   |              | 1  | 1 unit            | 005          | 0.310 |                       |
|                                                                                     | 8                        |                  |    | 5SJ4 208-7HG42   |              | 005   | 5SJ4 208-8HG42   |              | 1  | 1 unit            | 005          | 0.310 |                       |
|                                                                                     | 10                       |                  |    | 5SJ4 210-7HG42   |              | 005   | 5SJ4 210-8HG42   |              | 1  | 1 unit            | 005          | 0.310 |                       |
|                                                                                     | 13                       |                  |    | 5SJ4 213-7HG42   |              | 005   | 5SJ4 213-8HG42   |              | 1  | 1 unit            | 005          | 0.310 |                       |
|                                                                                     | 15                       |                  |    | 5SJ4 218-7HG42   |              | 005   | 5SJ4 218-8HG42   |              | 1  | 1 unit            | 005          | 0.310 |                       |
|                                                                                     | 16                       |                  |    | 5SJ4 216-7HG42   |              | 005   | 5SJ4 216-8HG42   |              | 1  | 1 unit            | 005          | 0.310 |                       |
|                                                                                     | 20                       |                  |    | 5SJ4 220-7HG42   |              | 005   | 5SJ4 220-8HG42   |              | 1  | 1 unit            | 005          | 0.310 |                       |
|                                                                                     | 25                       |                  |    | 5SJ4 225-7HG42   |              | 005   | 5SJ4 225-8HG42   |              | 1  | 1 unit            | 005          | 0.310 |                       |
|                                                                                     | 30                       |                  |    | 5SJ4 230-7HG42   |              | 005   | 5SJ4 230-8HG42   |              | 1  | 1 unit            | 005          | 0.310 |                       |
|                                                                                     | 32                       |                  |    | 5SJ4 232-7HG42   |              | 005   | 5SJ4 232-8HG42   |              | 1  | 1 unit            | 005          | 0.310 |                       |
|                                                                                     | 35                       |                  |    | 5SJ4 235-7HG42   |              | 005   | --               |              | 1  | 1 unit            |              | 0.310 |                       |
|                                                                                     | 40                       |                  |    | 5SJ4 240-7HG42   |              | 005   | --               |              | 1  | 1 unit            |              | 0.310 |                       |

<sup>1)</sup> 1 MW (modular width) = 18 mm.



# Miniature Circuit Breakers

## 5SJ4 . . . - HG miniature circuit breakers acc. to UL 489 and IEC, and accessories

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|  | $I_n$ | Mounting width   | DT | Characteristic C | Price per PU | PG  | DT | Characteristic D | Price per PU | PU (UNIT, SET, M) | PS*/P. unit | PG  | Weight per PU approx. |
|-----------------------------------------------------------------------------------|-------|------------------|----|------------------|--------------|-----|----|------------------|--------------|-------------------|-------------|-----|-----------------------|
|                                                                                   | A     | MW <sup>1)</sup> |    | Order No.        |              |     |    | Order No.        |              |                   |             |     | kg                    |
| <b>MCBs</b>                                                                       |       |                  |    |                  |              |     |    |                  |              |                   |             |     |                       |
| <b>3P, 480Y/277 V AC</b>                                                          |       |                  |    |                  |              |     |    |                  |              |                   |             |     |                       |
|                                                                                   | 0.3   | 3                |    | 5SJ4 314-7HG42   |              | 005 |    | 5SJ4 314-8HG42   |              | 1                 | 1 unit      | 005 | 0.465                 |
|                                                                                   | 0.5   |                  |    | 5SJ4 305-7HG42   |              | 005 |    | 5SJ4 305-8HG42   |              | 1                 | 1 unit      | 005 | 0.465                 |
|                                                                                   | 1     |                  |    | 5SJ4 301-7HG42   |              | 005 |    | 5SJ4 301-8HG42   |              | 1                 | 1 unit      | 005 | 0.465                 |
|                                                                                   | 1.6   |                  |    | 5SJ4 315-7HG42   |              | 005 |    | 5SJ4 315-8HG42   |              | 1                 | 1 unit      | 005 | 0.465                 |
|                                                                                   | 2     |                  |    | 5SJ4 302-7HG42   |              | 005 |    | 5SJ4 302-8HG42   |              | 1                 | 1 unit      | 005 | 0.465                 |
|                                                                                   | 3     |                  |    | 5SJ4 303-7HG42   |              | 005 |    | 5SJ4 303-8HG42   |              | 1                 | 1 unit      | 005 | 0.465                 |
|                                                                                   | 4     |                  |    | 5SJ4 304-7HG42   |              | 005 |    | 5SJ4 304-8HG42   |              | 1                 | 1 unit      | 005 | 0.465                 |
|                                                                                   | 5     |                  |    | 5SJ4 311-7HG42   |              | 005 |    | 5SJ4 311-8HG42   |              | 1                 | 1 unit      | 005 | 0.465                 |
|                                                                                   | 6     |                  |    | 5SJ4 306-7HG42   |              | 005 |    | 5SJ4 306-8HG42   |              | 1                 | 1 unit      | 005 | 0.465                 |
|                                                                                   | 8     |                  |    | 5SJ4 308-7HG42   |              | 005 |    | 5SJ4 308-8HG42   |              | 1                 | 1 unit      | 005 | 0.465                 |
|                                                                                   | 10    |                  |    | 5SJ4 310-7HG42   |              | 005 |    | 5SJ4 310-8HG42   |              | 1                 | 1 unit      | 005 | 0.465                 |
|                                                                                   | 13    |                  |    | 5SJ4 313-7HG42   |              | 005 |    | 5SJ4 313-8HG42   |              | 1                 | 1 unit      | 005 | 0.465                 |
|                                                                                   | 15    |                  |    | 5SJ4 318-7HG42   |              | 005 |    | 5SJ4 318-8HG42   |              | 1                 | 1 unit      | 005 | 0.465                 |
|                                                                                   | 16    |                  |    | 5SJ4 316-7HG42   |              | 005 |    | 5SJ4 316-8HG42   |              | 1                 | 1 unit      | 005 | 0.465                 |
|                                                                                   | 20    |                  |    | 5SJ4 320-7HG42   |              | 005 |    | 5SJ4 320-8HG42   |              | 1                 | 1 unit      | 005 | 0.465                 |
|                                                                                   | 25    |                  |    | 5SJ4 325-7HG42   |              | 005 |    | 5SJ4 325-8HG42   |              | 1                 | 1 unit      | 005 | 0.465                 |
|                                                                                   | 30    |                  |    | 5SJ4 330-7HG42   |              | 005 |    | 5SJ4 330-8HG42   |              | 1                 | 1 unit      | 005 | 0.465                 |
|                                                                                   | 32    |                  |    | 5SJ4 332-7HG42   |              | 005 |    | 5SJ4 332-8HG42   |              | 1                 | 1 unit      | 005 | 0.465                 |
|                                                                                   | 35    |                  |    | 5SJ4 335-7HG42   |              | 005 |    | --               |              | 1                 | 1 unit      |     | 0.465                 |
|                                                                                   | 40    |                  |    | 5SJ4 340-7HG42   |              | 005 |    | --               |              | 1                 | 1 unit      |     | 0.465                 |

|                                                                                     |                                                  | Mounting width   | DT | Order No.    | Price per PU | PU (UNIT, SET, M) | PS*/P. unit | PG  | Weight per PU approx. |
|-------------------------------------------------------------------------------------|--------------------------------------------------|------------------|----|--------------|--------------|-------------------|-------------|-----|-----------------------|
|                                                                                     |                                                  | MW <sup>1)</sup> |    |              |              |                   |             |     | kg                    |
|  | <b>Auxiliary switches (AS) acc. to UL 489</b>    |                  |    |              |              |                   |             |     |                       |
|                                                                                     | 1 NO + 1 NC                                      | 0.5              |    | 5ST3 010-0HG |              | 1                 | 1 unit      | 005 | 0.071                 |
|                                                                                     | 2 NO                                             |                  |    | 5ST3 011-0HG |              | 1                 | 1 unit      | 005 | 0.050                 |
|                                                                                     | 2 NC                                             |                  |    | 5ST3 012-0HG |              | 1                 | 1 unit      | 005 | 0.050                 |
|  | <b>Fault signal contacts (FC) acc. to UL 489</b> |                  |    |              |              |                   |             |     |                       |
|                                                                                     | 1 NO + 1 NC                                      | 0.5              |    | 5ST3 020-0HG |              | 1                 | 1 unit      | 005 | 0.050                 |
|                                                                                     | 2 NO                                             |                  |    | 5ST3 021-0HG |              | 1                 | 1 unit      | 005 | 0.050                 |
|                                                                                     | 2 NC                                             |                  |    | 5ST3 022-0HG |              | 1                 | 1 unit      | 005 | 0.050                 |
|  | <b>Shunt trips (units) acc. to UL 489</b>        |                  |    |              |              |                   |             |     |                       |
|                                                                                     | 110 ... 480 V AC                                 | 1                |    | 5ST3 030-0HG |              | 1                 | 1 unit      | 005 | 0.098                 |
|                                                                                     | 24 ... 60 V AC/DC                                |                  | ▶  | 5ST3 031-0HG |              | 1                 | 1 unit      | 005 | 0.098                 |

<sup>1)</sup> 1 MW (modular width) = 18 mm.

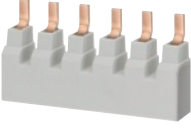


# Miniature Circuit Breakers

## 5SJ4 . . . - .HG miniature circuit breakers acc. to UL 489 and IEC, and accessories

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### Accessories

|                                                                                     | Pin spacing                                                                                                                                                                 | Length | DT  | Order No.           | Price<br>per PU | PU<br>(UNIT,<br>SET,<br>M) | PS*/<br>P. unit | PG  | Weight<br>per PU<br>approx. |
|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|-----|---------------------|-----------------|----------------------------|-----------------|-----|-----------------------------|
|                                                                                     | MW <sup>1)</sup>                                                                                                                                                            | mm     |     |                     |                 |                            |                 |     | kg                          |
|    | <b>Busbars according to UL 489<br/>specially for 5SJ4 ... -HG..<br/>miniature circuit breakers -.HG..<br/>fixed lengths, cannot be cut<sup>2)</sup><br/>UL-File E321559</b> |        |     |                     |                 |                            |                 |     |                             |
|                                                                                     | Single-phase                                                                                                                                                                |        |     |                     |                 |                            |                 |     |                             |
|                                                                                     | For 6 MCBs 1P                                                                                                                                                               | 1      | 100 | <b>5ST3 663-0HG</b> |                 | 1                          | 10 units        | 005 | 0.056                       |
|                                                                                     | For 12 MCBs 1P                                                                                                                                                              |        | 205 | <b>5ST3 663-1HG</b> |                 | 1                          | 10 units        | 005 | 0.112                       |
|                                                                                     | For 18 MCBs 1P                                                                                                                                                              |        | 310 | <b>5ST3 663-2HG</b> |                 | 1                          | 10 units        | 005 | 0.170                       |
|                                                                                     | Two-phase                                                                                                                                                                   |        |     |                     |                 |                            |                 |     |                             |
|                                                                                     | For 3 MCBs 2P                                                                                                                                                               | 1      | 100 | <b>5ST3 664-0HG</b> |                 | 1                          | 10 units        | 005 | 0.065                       |
|                                                                                     | For 6 MCBs 2P                                                                                                                                                               |        | 205 | <b>5ST3 664-1HG</b> |                 | 1                          | 10 units        | 005 | 0.137                       |
|                                                                                     | For 9 MCBs 2P                                                                                                                                                               |        | 310 | <b>5ST3 664-2HG</b> |                 | 1                          | 10 units        | 005 | 0.211                       |
|                                                                                     | Three-phase                                                                                                                                                                 |        |     |                     |                 |                            |                 |     |                             |
|    | Infeed at the miniature circuit breaker<br>Max. 35 mm <sup>2</sup>                                                                                                          |        |     | <b>5ST3 666-0HG</b> |                 | 1                          | 10 units        | 005 | 0.033                       |
|                                                                                     | Infeed at the busbar<br>Max. 50 mm <sup>2</sup>                                                                                                                             |        |     | <b>5ST3 666-2HG</b> |                 | 1                          | 10 units        | 005 | 0.034                       |
|  | <b>Touch protection covers<br/>for busbars acc. to UL 489</b>                                                                                                               |        |     |                     |                 |                            |                 |     |                             |
|                                                                                     | 3 x 1 pin                                                                                                                                                                   |        |     | <b>5ST3 666-1HG</b> |                 | 1                          | 10 units        | 005 | 0.003                       |
|  | <b>Handle locking devices according to UL,<br/>UL-File E321559</b>                                                                                                          |        |     | <b>5ST3 801</b>     |                 | 1                          | 1 unit          | 020 | 0.012                       |
|                                                                                     | Can be sealed against undesired manual<br>ON/OFF switching, padlock with max. 3 mm shackle                                                                                  |        |     |                     |                 |                            |                 |     |                             |
|  | <b>Padlocks</b>                                                                                                                                                             |        |     | <b>5ST3 802</b>     |                 | 1                          | 1 unit          | 020 | 0.031                       |
|                                                                                     | For 5ST3 801 handle locking device                                                                                                                                          |        |     |                     |                 |                            |                 |     |                             |

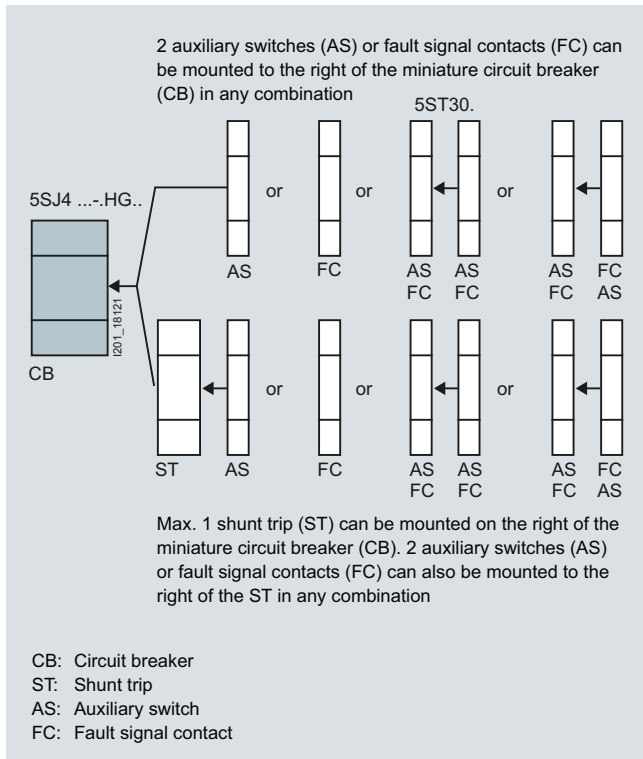
<sup>1)</sup> 1 MW (modular width) = 18 mm.

<sup>2)</sup> All unassigned pins of the busbar must be covered with 5ST3 666-1HG touch protection covers.

### More information

Mounting concept for mounting 5ST3 0 . . -0HG accessories on 5SJ4 . . . - . HG miniature circuit breakers

The diagram shows which additional components can be mounted on the right.



# Miniature Circuit Breakers

## SHU 5SP3 main miniature circuit breakers

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### Overview

Selective main miniature circuit breakers are used as circuit breakers at meter panels and provide an optimum solution.

Characteristic E is adapted to the special application requirements for cascade circuits between melting fuses and miniature circuit breakers in distributor circuits.

An integrated adapter enables quick and easy mounting of the devices on 40 mm busbars. The reduced width of 1.5 MW creates lots of additional space in the meter cabinet. The screwless outgoing terminal provides optimum user-friendliness.

Used in conjunction with the downstream miniature circuit breaker, selective main miniature circuit breakers ensure effective protection and optimum availability of the system.

### Benefits

- Quick and easy installation as can be snapped directly onto busbar
- Space-saving field installation due to reduced mounting width
- Tool-free connection of meter cable
- Reliable and high selectivity
- Optimum availability of customer system
- Voltage-independent operation of selective main miniature circuit breakers
- Practical locking options
- The selective main miniature circuit breakers support downstream miniature circuit breakers by providing excellent current limitation, thus enhancing system protection
- High and safe selectivity between sub-distribution and meter panel ensures the continued supply of the unaffected circuits in the event of a fault, thus improving system availability
- The selective main miniature circuit breaker prevents the affected circuit from being reconnected until the fault is eliminated. Greater safety during operation
- No previous knowledge required for operation of the selective main miniature circuit breakers. This ensures fast and safe disconnection and reconnection of loads.
- Complies with all the requirements of TAB 2007.

### Technical specifications

|                                                               |  |  | 5SP3 7..., 5SP3 7...-1 | 5SP3 7...-2, 5SP3 7...-2KK0.                    | 5SP3 8...-2                                                                                                  |
|---------------------------------------------------------------|--|--|------------------------|-------------------------------------------------|--------------------------------------------------------------------------------------------------------------|
| <b>Standards</b>                                              |  |  | DIN VDE 0645           |                                                 | E DIN VDE 0641-21                                                                                            |
| <b>Rated voltage <math>U_n</math></b>                         |  |  |                        |                                                 |                                                                                                              |
| • 1-pole<br>• 3 x 1-pole                                      |  |  | V AC<br>V AC           | 230/400<br>400                                  | --<br>400                                                                                                    |
| <b>Operational voltage</b>                                    |  |  | Min.<br>Max.           | V AC<br>V AC                                    | 110<br>440                                                                                                   |
| <b>Rated frequency</b>                                        |  |  | Hz                     | 50 ... 60                                       |                                                                                                              |
| <b>Rated current <math>I_n</math></b>                         |  |  | A                      | 16 ... 100                                      | 16 ... 63                                                                                                    |
| <b>Rated insulation voltage <math>U_i</math></b>              |  |  | V AC                   | 690                                             |                                                                                                              |
| <b>Rated making and breaking capacity <math>I_{cn}</math></b> |  |  | A                      | 25 000                                          |                                                                                                              |
| <b>Insulation coordination</b>                                |  |  |                        |                                                 |                                                                                                              |
| • Overvoltage category<br>• Pollution degree                  |  |  |                        | IV<br>3                                         |                                                                                                              |
| <b>Surge strength <math>U_{imp}</math></b>                    |  |  | kV                     | 6                                               |                                                                                                              |
| <b>Impact resistance</b>                                      |  |  |                        | 30 g, at least 3 impacts, impact duration 11 ms |                                                                                                              |
| <b>Resistance to vibrations</b>                               |  |  |                        | 2 g, 20 frequency cycles 5 ... 150 ... 15 Hz    |                                                                                                              |
| <b>Switching position indication</b>                          |  |  |                        | OFF = green, ON = red                           |                                                                                                              |
| <b>Main switch characteristics</b>                            |  |  | Acc. to EN 60204-1     | Yes                                             |                                                                                                              |
| <b>Handle end position, sealable</b>                          |  |  |                        | Yes                                             |                                                                                                              |
| <b>Cutoff</b>                                                 |  |  | ON/OFF                 | --                                              | Locking slide with lock, additional wire seal, cable ties and Antilux                                        |
| <b>Device depth</b>                                           |  |  | mm                     | 92                                              |                                                                                                              |
| <b>Degree of protection</b>                                   |  |  |                        | IP20, with connected conductors                 |                                                                                                              |
| <b>Mains connection</b>                                       |  |  |                        | Any                                             |                                                                                                              |
| <b>Mounting position</b>                                      |  |  |                        | Any                                             |                                                                                                              |
| <b>Mounting</b>                                               |  |  |                        | On standard mounting rail or interface adapter  | Direct tool-free mounting on the busbar system                                                               |
| <b>Service life, on average, with rated load</b>              |  |  | Actuations             | 20 000                                          |                                                                                                              |
| <b>Wire connections</b>                                       |  |  |                        | Saddle terminals at both ends                   |                                                                                                              |
| • Top                                                         |  |  |                        |                                                 | Screwless spring terminal for flexible cables, in particular for meter connecting cables acc. to DIN 43870-3 |
| • Bottom                                                      |  |  |                        |                                                 | Box terminal, also for infeed to the busbar system, up to 100 A infeed current                               |

## SHU 5SP3 main miniature circuit breakers

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|                                                                |                 | 5SP3 7..., 5SP3 7...-1 | 5SP3 7...-2,<br>5SP3 7...-2KK0. | 5SP3 8...-2 |
|----------------------------------------------------------------|-----------------|------------------------|---------------------------------|-------------|
| <b>Conductor cross-sections</b>                                |                 |                        |                                 |             |
| • Top and bottom, solid and stranded                           | mm <sup>2</sup> | 2.5 ... 70             | --                              |             |
| • Top and bottom, finely stranded                              | mm <sup>2</sup> | 2.5 ... 50             | --                              |             |
| • Top, finely stranded                                         | mm <sup>2</sup> | --                     | 2.5 ... 16                      |             |
| • Bottom, solid, stranded and finely stranded, with end sleeve | mm <sup>2</sup> | --                     | 2.5 ... 50                      |             |
| <b>Storage temperature</b>                                     | °C              | -40 ... +70            |                                 |             |
| <b>Ambient temperature</b>                                     | °C              | -25 ... +55            |                                 |             |

## Selection and ordering data

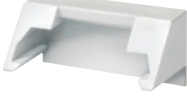
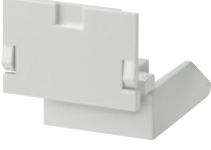
|                                                                                     | $I_n$                                                                                                                                                             | Mounting width   | DT | Order No.      | Price per PU | PU (UNIT, SET, M) | PS*/P. unit | PG  | Weight per PU approx. |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|----|----------------|--------------|-------------------|-------------|-----|-----------------------|
|                                                                                     | A                                                                                                                                                                 | MW <sup>1)</sup> |    |                |              |                   |             |     | kg                    |
|    | <b>Main miniature circuit breakers, 1P, L1</b><br>For direct busbar mounting (spacing: 40 mm), no further accessories required                                    |                  |    |                |              |                   |             |     |                       |
|                                                                                     | 16                                                                                                                                                                | 1.5              |    | 5SP3 716-2KK01 |              | 1                 | 1 unit      | 019 | 0.400                 |
|                                                                                     | 20                                                                                                                                                                |                  |    | 5SP3 720-2KK01 |              | 1                 | 1 unit      | 019 | 0.400                 |
|                                                                                     | 25                                                                                                                                                                |                  |    | 5SP3 725-2KK01 |              | 1                 | 1 unit      | 019 | 0.400                 |
|                                                                                     | 35                                                                                                                                                                |                  |    | 5SP3 735-2KK01 |              | 1                 | 1 unit      | 019 | 0.400                 |
|                                                                                     | 40                                                                                                                                                                |                  |    | 5SP3 740-2KK01 |              | 1                 | 1 unit      | 019 | 0.400                 |
|                                                                                     | 50                                                                                                                                                                |                  |    | 5SP3 750-2KK01 |              | 1                 | 1 unit      | 019 | 0.400                 |
|                                                                                     | 63                                                                                                                                                                |                  |    | 5SP3 763-2KK01 |              | 1                 | 1 unit      | 019 | 0.400                 |
|   | <b>Main miniature circuit breakers, 1P, L2</b><br>For direct busbar mounting (spacing: 40 mm), no further accessories required                                    |                  |    |                |              |                   |             |     |                       |
|                                                                                     | 16                                                                                                                                                                | 1.5              |    | 5SP3 716-2KK02 |              | 1                 | 1 unit      | 019 | 0.400                 |
|                                                                                     | 20                                                                                                                                                                |                  |    | 5SP3 720-2KK02 |              | 1                 | 1 unit      | 019 | 0.400                 |
|                                                                                     | 25                                                                                                                                                                |                  |    | 5SP3 725-2KK02 |              | 1                 | 1 unit      | 019 | 0.400                 |
|                                                                                     | 35                                                                                                                                                                |                  |    | 5SP3 735-2KK02 |              | 1                 | 1 unit      | 019 | 0.400                 |
|                                                                                     | 40                                                                                                                                                                |                  |    | 5SP3 740-2KK02 |              | 1                 | 1 unit      | 019 | 0.400                 |
|                                                                                     | 50                                                                                                                                                                |                  |    | 5SP3 750-2KK02 |              | 1                 | 1 unit      | 019 | 0.400                 |
|                                                                                     | 63                                                                                                                                                                |                  |    | 5SP3 763-2KK02 |              | 1                 | 1 unit      | 019 | 0.400                 |
|  | <b>Main miniature circuit breakers, 1P, L3</b><br>For direct busbar mounting (spacing: 40 mm), no further accessories required                                    |                  |    |                |              |                   |             |     |                       |
|                                                                                     | 16                                                                                                                                                                | 1.5              |    | 5SP3 716-2KK03 |              | 1                 | 1 unit      | 019 | 0.400                 |
|                                                                                     | 20                                                                                                                                                                |                  |    | 5SP3 720-2KK03 |              | 1                 | 1 unit      | 019 | 0.400                 |
|                                                                                     | 25                                                                                                                                                                |                  |    | 5SP3 725-2KK03 |              | 1                 | 1 unit      | 019 | 0.400                 |
|                                                                                     | 35                                                                                                                                                                |                  |    | 5SP3 735-2KK03 |              | 1                 | 1 unit      | 019 | 0.400                 |
|                                                                                     | 40                                                                                                                                                                |                  |    | 5SP3 740-2KK03 |              | 1                 | 1 unit      | 019 | 0.400                 |
|                                                                                     | 50                                                                                                                                                                |                  |    | 5SP3 750-2KK03 |              | 1                 | 1 unit      | 019 | 0.400                 |
|                                                                                     | 63                                                                                                                                                                |                  |    | 5SP3 763-2KK03 |              | 1                 | 1 unit      | 019 | 0.400                 |
|  | <b>Main miniature circuit breakers, 1P each 1 x L1, L2, L3, packaged as a set</b><br>For direct busbar mounting (spacing: 40 mm), no further accessories required |                  |    |                |              |                   |             |     |                       |
|                                                                                     | 16                                                                                                                                                                | 3 x 1.5          |    | 5SP3 716-2     |              | 1                 | 1 set       | 019 | 1.275                 |
|                                                                                     | 20                                                                                                                                                                |                  |    | 5SP3 720-2     |              | 1                 | 1 set       | 019 | 1.275                 |
|                                                                                     | 25                                                                                                                                                                |                  |    | 5SP3 725-2     |              | 1                 | 1 set       | 019 | 1.275                 |
|                                                                                     | 35                                                                                                                                                                |                  |    | 5SP3 735-2     |              | 1                 | 1 set       | 019 | 1.275                 |
|                                                                                     | 40                                                                                                                                                                |                  |    | 5SP3 740-2     |              | 1                 | 1 set       | 019 | 1.275                 |
|                                                                                     | 50                                                                                                                                                                |                  |    | 5SP3 750-2     |              | 1                 | 1 set       | 019 | 1.275                 |
|                                                                                     | 63                                                                                                                                                                |                  |    | 5SP3 763-2     |              | 1                 | 1 set       | 019 | 1.275                 |
|  | <b>Main miniature circuit breakers, 3 x 1P single-pole switching</b><br>For direct busbar mounting (spacing: 40 mm), no further accessories required              |                  |    |                |              |                   |             |     |                       |
|                                                                                     | 16                                                                                                                                                                | 4.5              |    | 5SP3 816-2     |              | 1                 | 1 unit      | 019 | 1.275                 |
|                                                                                     | 20                                                                                                                                                                |                  |    | 5SP3 820-2     |              | 1                 | 1 unit      | 019 | 1.275                 |
|                                                                                     | 25                                                                                                                                                                |                  |    | 5SP3 825-2     |              | 1                 | 1 unit      | 019 | 1.275                 |
|                                                                                     | 35                                                                                                                                                                |                  |    | 5SP3 835-2     |              | 1                 | 1 unit      | 019 | 1.275                 |
|                                                                                     | 40                                                                                                                                                                |                  |    | 5SP3 840-2     |              | 1                 | 1 unit      | 019 | 1.275                 |
|                                                                                     | 50                                                                                                                                                                |                  |    | 5SP3 850-2     |              | 1                 | 1 unit      | 019 | 1.275                 |
|                                                                                     | 63                                                                                                                                                                |                  |    | 5SP3 863-2     |              | 1                 | 1 unit      | 019 | 1.275                 |

<sup>1)</sup> 1 MW (modular width) = 18 mm.

# Miniature Circuit Breakers

## SHU 5SP3 main miniature circuit breakers

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|                                                                                     | $I_n$                                                                                                                                                                                                      | Mounting width   | DT | Order No.         | Price per PU | PU (UNIT, SET, M) | PS*/P. unit | PG  | Weight per PU approx. |
|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|----|-------------------|--------------|-------------------|-------------|-----|-----------------------|
|                                                                                     | A                                                                                                                                                                                                          | MW <sup>1)</sup> |    |                   |              |                   |             |     | kg                    |
|    | <b>Main miniature circuit breakers, 1P</b>                                                                                                                                                                 |                  |    |                   |              |                   |             |     |                       |
|                                                                                     | For mounting on TH 35 standard mounting rail, busbar (spacing: 40 mm, with 5ST1 busbar adapter), or for screw fixing                                                                                       |                  |    |                   |              |                   |             |     |                       |
|                                                                                     | 16                                                                                                                                                                                                         | 2                |    | <b>5SP3 716</b>   |              | 1                 | 1 unit      | 019 | 0.474                 |
|                                                                                     | 20                                                                                                                                                                                                         |                  |    | <b>5SP3 720</b>   |              | 1                 | 1 unit      | 019 | 0.461                 |
|                                                                                     | 25                                                                                                                                                                                                         |                  |    | <b>5SP3 725</b>   |              | 1                 | 1 unit      | 019 | 0.497                 |
|                                                                                     | 32                                                                                                                                                                                                         |                  |    | <b>5SP3 732</b>   |              | 1                 | 1 unit      | 019 | 0.465                 |
|                                                                                     | 35                                                                                                                                                                                                         |                  |    | <b>5SP3 735</b>   |              | 1                 | 1 unit      | 019 | 0.497                 |
|                                                                                     | 40                                                                                                                                                                                                         |                  |    | <b>5SP3 740</b>   |              | 1                 | 1 unit      | 019 | 0.461                 |
|                                                                                     | 50                                                                                                                                                                                                         |                  |    | <b>5SP3 750</b>   |              | 1                 | 1 unit      | 019 | 0.501                 |
|                                                                                     | 63                                                                                                                                                                                                         |                  |    | <b>5SP3 763</b>   |              | 1                 | 1 unit      | 019 | 0.517                 |
|    | 80                                                                                                                                                                                                         |                  |    | <b>5SP3 780-1</b> |              | 1                 | 1 set       | 019 | 1.827                 |
|                                                                                     | 100                                                                                                                                                                                                        | 6                |    | <b>5SP3 791-1</b> |              | 1                 | 1 set       | 019 | 1.855                 |
|                                                                                     |                                                                                                                                                                                                            |                  |    |                   |              |                   |             |     |                       |
|   | <b>Mounting plates</b>                                                                                                                                                                                     |                  |    |                   |              |                   |             |     |                       |
|                                                                                     | For mounting on TH 35 standard mounting rails according to IEC 60715                                                                                                                                       |                  |    |                   |              |                   |             |     |                       |
|                                                                                     | For 1 or 2 standard mounting rails, universal application, tier spacing 125 mm                                                                                                                             |                  |    |                   |              |                   |             |     |                       |
|                                                                                     |                                                                                                                                                                                                            |                  | ►  | <b>5ST1 322</b>   |              | 1                 | 10 units    | 019 | 0.025                 |
|  | <b>Busbar adapters for 5SP3 7.. and 5SP3 7..-1</b>                                                                                                                                                         |                  |    |                   |              |                   |             |     |                       |
|                                                                                     | Suitable for busbar spacing 40 mm can be equipped with 3 selective main miniature circuit breakers                                                                                                         |                  |    |                   |              |                   |             |     |                       |
|                                                                                     |                                                                                                                                                                                                            |                  |    | <b>5ST1 328</b>   |              | 1                 | 1 unit      | 019 | 0.256                 |
|  | <b>Breaker blocking covers for 5SP3 7.. and 5SP3 7..-1</b>                                                                                                                                                 |                  |    |                   |              |                   |             |     |                       |
|                                                                                     | To prevent manual switching OFF                                                                                                                                                                            |                  |    |                   |              |                   |             |     |                       |
|                                                                                     |                                                                                                                                                                                                            |                  |    | <b>5ST1 318</b>   |              | 1                 | 10 units    | 019 | 0.003                 |
|  | <b>Operating protective covers, transparent, for 5SP3 7.. and 5SP3 7..-1</b>                                                                                                                               |                  |    |                   |              |                   |             |     |                       |
|                                                                                     | Multiple locking options against accidental and intentional operation                                                                                                                                      |                  |    |                   |              |                   |             |     |                       |
|                                                                                     | <ul style="list-style-type: none"> <li>• Padlocks</li> <li>• Phillips screwdrivers</li> <li>• Special wrenches (Antilux)</li> <li>• These can be installed by the operator or the power utility</li> </ul> |                  |    |                   |              |                   |             |     |                       |
|                                                                                     |                                                                                                                                                                                                            |                  |    | <b>5ST1 323</b>   |              | 1                 | 3 units     | 019 | 0.011                 |
|  | <b>Terminal covers for 5SP3 7.. and 5SP3 7..-1</b>                                                                                                                                                         |                  |    |                   |              |                   |             |     |                       |
|                                                                                     | 2 units required per device Terminal covers in compliance with cladding dimensions acc. to DIN 43880                                                                                                       |                  |    |                   |              |                   |             |     |                       |
|                                                                                     |                                                                                                                                                                                                            |                  |    | <b>5ST1 316</b>   |              | 1                 | 6 units     | 019 | 0.004                 |

<sup>1)</sup> 1 MW (modular width) = 18 mm.