

Parameterization, Configuration and Visualization with SIRIUS

14



Price groups

PG 200, 346, 42B, 42C, 42D, 42H,
42J, 4N1

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Introduction

Overview

Engineering software



SIRIUS ES engineering software (E-SW)

Intuitive, efficient and future-proof – the engineering programs of the SIRIUS ES software family

The programs of the SIRIUS ES software family enable:

- **Intuitive engineering from the word go**
The SIRIUS ES programs enable you to focus on your engineering task. Thanks to the intuitive layout and simple navigation, a clearly arranged configuring of device functions and their parameters is possible – online and offline. The task- and user-oriented portal views as well as the flexible screen layout, the uniform look and feel for all program editors and finally the graphic network and device configuration provide support.
- **Efficient parameterization for quick success**
Faster start-up is achieved by the use of local and global libraries. The joint hardware configuration for all components in the application also assists in the efficient parameterization and simple networking of system components. Not least, integrated system diagnostics offers fast troubleshooting and efficient fault analysis, thus making it possible to shorten startup times even further and to minimize production downtimes.
- **Future-oriented basis for innovative results**
All future product developments are seamlessly integrated into the TIA Portal. Investments made up to now are still safe tomorrow. To harmonize engineering in all performance classes, the SIRIUS ES programs in TIA Portal are scalable and upwardly compatible. In the event of an upgrade, existing projects can easily be transferred and integrated into the next product level. Even existing SIRIUS ES projects in version 2007 can easily be migrated to the TIA Portal software version.

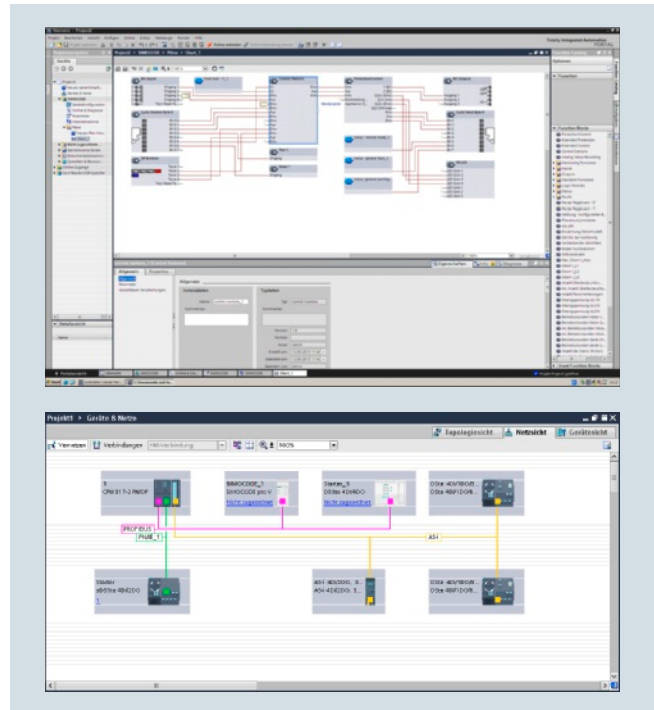
The next generation of SIRIUS ES programs, such as SIMOCODE ES V12 (TIA Portal), is based on the central engineering framework Totally Integrated Automation Portal (TIA Portal), which provides the user with a consistent, efficient and intuitive solution for all automation tasks. Thus, the TIA Portal is also the integrated working environment for the programs in the SIRIUS software family. The same operator control concept, the elimination of interfaces and a high degree of user-friendliness make it possible to quickly integrate SIRIUS devices into an automation process and start them up with the TIA Portal. Besides SIMOCODE ES Version 12, which is based on the central engineering framework Totally Integrated Automation Portal (TIA Portal), the 2007 version of the software continues to be available for commissioning, operation and diagnostics of SIMOCODE pro.

The SIRIUS ES programs such as Motor Starter ES, Soft Starter ES, MSS ES and SIMOCODE ES are available in three versions which differ in user-friendliness, scope of functions and price:

- **Basic**
The Basic version contains all basic functions that are needed to parameterize devices. These include both parameterization functions and also operator control, diagnostics and test functions.
- **Standard**
The Standard version contains the basic functionality plus standard functions. The standard functions include parameterization with the aid of integrated graphic editors, creation of typicals, parameter export, analog value recording and parameter comparison.
- **Premium**
The Premium versions contain the complete functionality of the software package. Besides the standard functionality, this includes communication functions such as access via PROFIBUS/PROFINET and S7 routing.

Note:

The scope of functions depends on the SIRIUS ES program, for details [see the descriptions of the individual products](#).



Efficient engineering and startup with graphic user interfaces and simple network and device configuration

Introduction

Types of delivery and license

The programs of the SIRIUS ES software family are available as follows:

- Floating license – the license for any one user at any one time
 - Authorizes any one user
 - Independent of the number of installations (unlike the single license which is allowed to be installed once only)
 - Only the actual use of the program has to be licensed
- Combo license - license for parallel use
 - Licensed parallel use of the TIA Portal version and SIRIUS ES Version 2007
 - For all other properties such as floating license
- Trial license (free use of all program functions for 14/21 days for test and evaluation purposes, included on every product CD/DVD, available in the download file of the SIRIUS ES program in the Service&Support portal)

Following delivery versions are available in addition for the programs of the SIRIUS ES software family:

- Upgrade
Switching from an old to a new version with expanded functions, e.g. upgrade from Motor Starter ES 2006 to Motor Starter ES 2007
- Powerpack
Special pack for switching within the same software version to a more powerful version with more functionality, e.g. Powerpack Motor Starter ES 2007 for switching from Standard to Premium
- Software Update Service
To keep you up to date at all times we offer a special service which supplies you automatically with all service packs and upgrades.
- License download
User-friendly license key download from our Mall (for selected countries) as an easy and quick way for you to receive additional licenses for your software.
For more information [see www.siemens.com/tia-online-software-delivery](http://www.siemens.com/tia-online-software-delivery).

Article number scheme for the engineering software

| Digit of the Article No. | 1st - 4th | 5th | 6th | 7th | | 8th | 9th | 10th | 11th | 12th | | 13th | 14th | 15th | 16th |
|-----------------------------|-----------|-----|-----|-----|---|-----|-----|------|------|------|---|------|------|------|------|
| | □□□□ | □ | □ | □ | – | □ | □ | □ | □ | □ | – | □ | □ | □ | □ |
| SIRIUS engineering software | 3 Z S 1 | | | | | | | | | | | | | | |
| Software type | | □ | | | | | | | | | | | | | |
| Package designation 1 | | | □ | | | | | | | | | | | | |
| Package designation 2 | | | | □ | | | | | | | | | | | |
| Package designation 3 | | | | | | □ | | | | | | | | | |
| Hardware, operating system | | | | | | | □ | | | | | | | | |
| Data carriers | | | | | | | | □ | | | | | | | |
| Serial number | | | | | | | | | □ | | | | | | |
| Function status | | | | | | | | | | □ | | | | | |
| Product category | | | | | | | | | | | | 0 | | | |
| Language | | | | | | | | | | | | | □ | | |
| Delivery versions | | | | | | | | | | | | | | □ | |
| License type | | | | | | | | | | | | | | | □ |
| Example | 3 Z S 1 | 3 | 1 | 3 | – | 4 | C | C | 1 | 0 | – | 0 | Y | A | 5 |

Note:

The Article No. scheme is presented here merely for information purposes and for better understanding of the logic behind the article numbers.

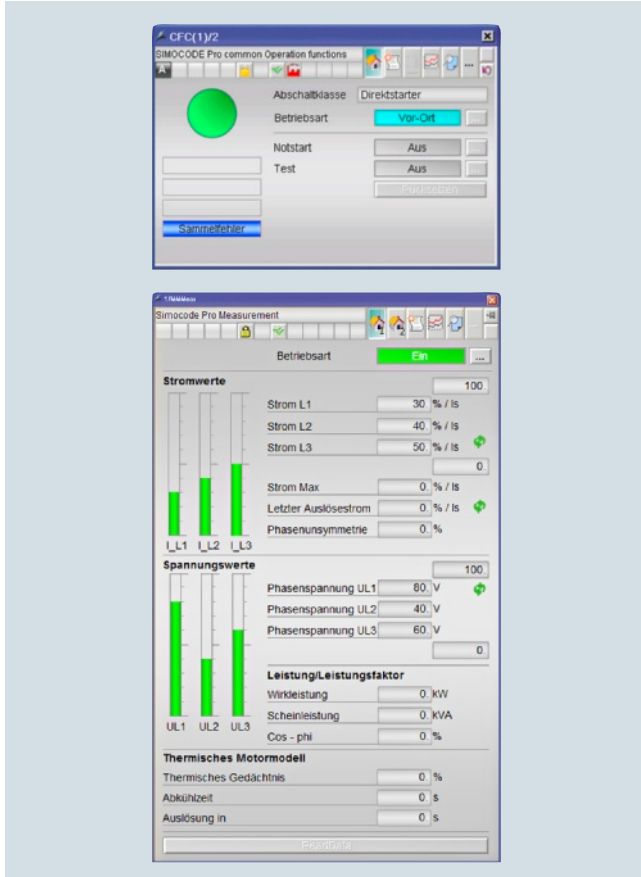
For your orders, please use the article numbers quoted in the catalog in the Selection and ordering data.

Safety note:

System networking requires suitable protective measures (including network segmentation for IT security) in order to ensure safe plant operation.
More information about the subject of Industrial Security [see www.siemens.com/industrialsecurity](http://www.siemens.com/industrialsecurity).

Introduction

Block libraries for SIMATIC PCS 7



Advanced Process Library (APL) – faceplates and blocks for control and measured data of the SIMOCODE pro block library for PCS 7

The PCS 7 block libraries for SIMOCODE, motor starters, soft starters and AS-Interface can be used for simple and easy integration of the corresponding units into the SIMATIC PCS 7 process control system. PCS 7 block libraries contain the diagnostics and driver blocks corresponding with the diagnostics and driver concept of SIMATIC PCS 7 as well as the elements (symbols and faceplate) required for operator control and process monitoring.

Types of delivery and license

The PCS 7 block libraries supplied on CD-ROM allow the user to run the required engineering software on the engineering station (single license) including the runtime software for executing the AS modules in an automation system (single license). If the AS modules are to be used in additional automation systems, the corresponding number of runtime licenses are required which are supplied without a data carrier.

Article number scheme of the block libraries for SIMATIC PCS 7

| Digit of the Article No. | 1st - 4th | 5th | 6th | 7th | – | 8th | 9th | 10th | 11th | 12th | – | 13th | 14th | 15th | 16th |
|------------------------------------|-----------|-----|-----|-----|---|-----|-----|------|------|------|---|------|------|------|------|
| | □□□□ | □ | □ | □ | | □ | X | X | □ | □ | | □ | □ | □ | □ |
| SIRIUS engineering software | 3 Z S 1 | | | | | | | | | | | | | | |
| Software type, standard FB/FC | | □ | | | | | | | | | | | | | |
| Package designation 1 | | | □ | | | | | | | | | | | | |
| Package designation 2 | | | | □ | | | | | | | | | | | |
| Type | | | | | | □ | | | | | | | | | |
| Function status, start of delivery | | | | | | | | | □ | □ | | | | | |
| Product category | | | | | | | | | | | | 0 | | | |
| Language (multilingual) | | | | | | | | | | | | | Y | | |
| Delivery versions | | | | | | | | | | | | | | □ | |
| License type | | | | | | | | | | | | | | | □ |
| Example | 3 Z S 1 | 6 | 3 | 3 | – | 1 | X | X | 0 | 0 | – | 0 | Y | A | 0 |

Note:

The Article No. scheme is presented here merely for information purposes and for better understanding of the logic behind the article numbers.

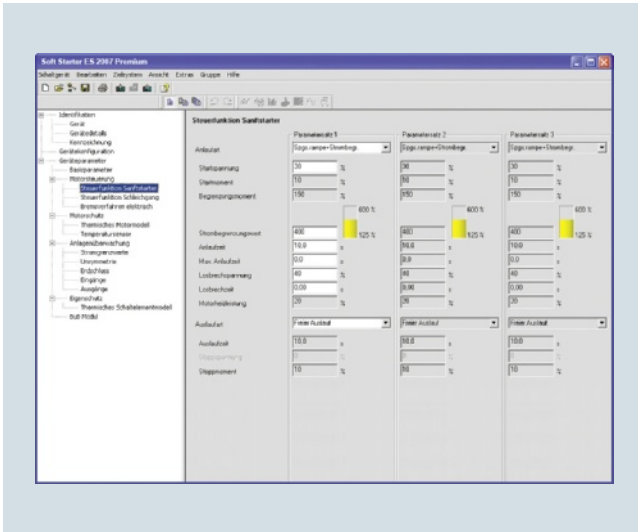
For your orders, please use the article numbers quoted in the catalog in the Selection and ordering data.

Safety note:

System networking requires suitable protective measures (including network segmentation for IT security) in order to ensure safe plant operation.

More information about the subject of Industrial Security see www.siemens.com/industrialsecurity.

Overview



Easy and clearly arranged parameter setting of the 3RW44 soft starter with Soft Starter ES 2007

The Soft Starter ES software permits the quick and easy parameterization, monitoring and diagnostics of SIRIUS 3RW44 High-Feature soft starters for service purposes.

The device parameters can be configured directly on the PC and transferred to the soft starter through a serial cable or an optional PROFIBUS/PROFINET interface.

Efficient engineering with three program versions

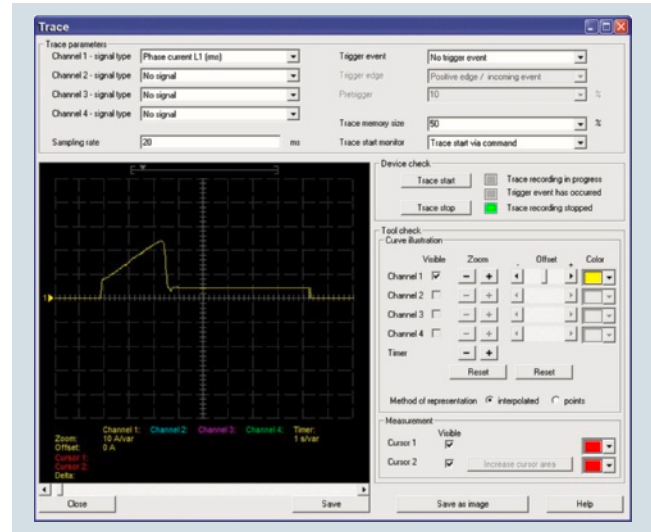
The Soft Starter ES software program is available in three versions which differ in their user-friendliness, scope of functions and price.

| Soft Starter ES | Basic | Standard | Premium |
|---|-------|-----------------|---------|
| Access through the local interface on the device | ✓ | ✓ | ✓ |
| Parameter assignment | ✓ | ✓ | ✓ |
| Operating | ✓ | ✓ | ✓ |
| Diagnostics | ✓ | ✓ | ✓ |
| Creation of typicals | -- | ✓ ¹⁾ | ✓ |
| Parameter export | -- | ✓ | ✓ |
| Comparison functions | -- | ✓ | ✓ |
| Standard-compatible printout according to EN ISO 7200 | -- | ✓ | ✓ |
| Service data (slave pointer, statistics data) | -- | ✓ | ✓ |
| Access through PROFIBUS/PROFINET | -- | -- | ✓ |
| Group functions | -- | -- | ✓ |
| Teleservice through MPI | -- | -- | ✓ |
| S7 routing | -- | -- | ✓ |
| STEP7 Object Manager | -- | -- | ✓ |

✓ Function available

-- Function not available

¹⁾ Typicals with Service Pack 1 and higher.



Graphic presentation of measured values with the trace function (oscilloscope function) of Soft Starter ES 2007 Standard and Premium

Additional functions

- **Standard-compatible printouts**
The software tool greatly simplifies machine documentation. It enables parameterization printouts according to EN ISO 7200. The elements to be printed are easy to select and group as required.
- **Easy creation of typicals**
Typicals can be created for devices and applications with only minimum differences in their parameters. These typicals contain all the parameters which are needed for the parameterization. In addition it is possible to specify which of these parameters are fixed and which can be adapted, e. g. by the startup engineer.
- **Group function**
For the user-friendly parameterization of numerous devices or applications of the same type, the programs of the SIRIUS ES software family offer a group function which enables the parameterization of several devices to be read out or written through PROFIBUS/PROFINET. In conjunction with typicals it is even possible to selectively adapt the same parameters in any number of parameterizations.
- **Teleservice through MPI**
The Soft Starter ES Premium version supports the use of MPI Teleservice (comprising the Teleservice software and various Teleservice adapters) for remote diagnostics of the devices. This facilitates diagnostics and maintenance, and it shortens response times for service purposes.

Soft Starter ES

Types of delivery and license

Soft Starter ES is available as follows:

- Floating license – the license for any one user at any one time
 - Authorizes any one user
 - Independent of the number of installations (unlike the single license which is allowed to be installed once only)
 - Only the actual use of the program has to be licensed
 - Trial license (free use of all program functions for 14 days for test and evaluation purposes, included on every product CD, available in the download file of the SIRIUS ES program in the Service&Support portal).

Following delivery versions are available in addition for Soft Starter ES 2007:

- Upgrade
Switching from an old to a new version with expanded functions, e.g. upgrade from Soft Starter ES 2006 to Soft Starter ES 2007.
- Powerpack
Special pack for switching within the same software version to a more powerful version with more functionality, e.g. Powerpack Soft Starter ES 2007 for switching from Standard to Premium.

- Software Update Service
To keep you up to date at all times we offer a special service which supplies you automatically with all service packs and upgrades.
- License download
User-friendly license key download from our Mall (for selected countries) as an easy and quick way for you to receive additional licenses for your software.
For more information see www.siemens.com/tia-online-software-delivery.

Licensing procedure

To make licensing easier, the three versions of Soft Starter ES are available with the following license:

14 day trial license for Premium functions:
for test and evaluation purposes, included on every product CD, available also in the download file of the SIRIUS Soft Starter ES 2007 program in the Service&Support portal.

System requirements

| Soft Starter ES 2007 parameterization, start-up and diagnostics software for SIRIUS 3RW44 soft starters | Basic/Standard | Premium |
|---|---|---------------------------------------|
| | Product version ≥ *E04* ¹⁾ | Product version ≥ *E06* ²⁾ |
| Operating system | Windows XP Professional (Service Pack 2 or 3), Windows 7 32/64-bit Professional/Ultimate/Enterprise (Service Pack 1) | |
| Processor | ≥ Pentium 800 MHz/≥ 1 GHz (Windows 7) | |
| RAM | ≥ 512 Mbyte (Windows XP Professional)/≥ 1 GB (Windows 7 32 Bit)/ ≥ 2 GB (Windows 7 64 Bit) | |
| Free space on hard disk | ≥ 150 Mbyte | |
| CD-ROM/DVD drive | Yes (only when installing from CD) | |
| Interface | Depends on PC cable: serial (COM) or USB | |
| PC cable/parameterization cable/connection cable | Yes | |
| PROFIBUS/PROFINET communication module (optional) | -- | Yes |

¹⁾ SIRIUS 3RW44 with product version ≥ *E04*. Installed in starters delivered after December 2005.

²⁾ SIRIUS 3RW44 with product version ≥ *E06*. Installed in starters delivered after May 2006.

Benefits

- Transparent setting of the device functions and their parameters – online and offline
- Effective diagnostics functions on the soft starter and display of the most important measured values
- Trace function (oscilloscope function) for recording measured values and events (in the Soft Starter ES Standard and Premium versions)
- Complete transparency thanks to printout, logbook and event memory
- High degree of user-friendliness – convenient user interface, with German, English and French as possible operating languages
- Time savings through shorter startup times
- Fast, low-cost licensing using a simple licensing procedure (available online too)

Selection and ordering data

Soft Starter ES parameterization and service software for SIRIUS 3RW44 soft starters

- Delivered without PC cable

| Version | DT | Article No. | Price per PU | PU (UNIT, SET, M) | PS* | PG |
|---------|----|-------------|--------------|-------------------|-----|----|
|---------|----|-------------|--------------|-------------------|-----|----|

Soft Starter ES 2007 Basic



Floating license for one user

Engineering software in limited-function version for diagnostics purposes, software and documentation on CD, 3 languages (German/English/French), communication through system interface

- License key on USB stick, Class A, including CD
- License key download, Class A, without CD

| | | | | |
|---|---------------------------|---|--------|-----|
| B | 3ZS1313-4CC10-0YA5 | 1 | 1 unit | 42H |
| ► | 3ZS1313-4CE10-0YB5 | 1 | 1 unit | 42H |

3ZS1313-4CC10-0YA5

Soft Starter ES 2007 Standard

Floating license for one user

Engineering software, software and documentation on CD, 3 languages (German/English/French), communication through system interface

- License key on USB stick, Class A, including CD
- License key download, Class A, without CD

| | | | | |
|---|---------------------------|---|--------|-----|
| B | 3ZS1313-5CC10-0YA5 | 1 | 1 unit | 42H |
| ► | 3ZS1313-5CE10-0YB5 | 1 | 1 unit | 42H |

Upgrade for Soft Starter ES 2006

| | | | | |
|---|---------------------------|---|--------|-----|
| B | 3ZS1313-5CC10-0YE5 | 1 | 1 unit | 42H |
|---|---------------------------|---|--------|-----|

Floating license for one user, engineering software, software and documentation on CD, license key on USB stick, Class A, 3 languages (German/English/French), communication through the system interface

Powerpack for Soft Starter ES 2007 Basic

| | | | | |
|---|---------------------------|---|--------|-----|
| B | 3ZS1313-5CC10-0YD5 | 1 | 1 unit | 42H |
|---|---------------------------|---|--------|-----|

Floating license for one user, engineering software, license key on USB stick, Class A, 3 languages (German/English/French), communication through system interface

Software Update Service

| | | | | |
|---|---------------------------|---|--------|-----|
| ► | 3ZS1313-5CC10-0YL5 | 1 | 1 unit | 42H |
|---|---------------------------|---|--------|-----|

For 1 year with automatic extension, assuming the current software version is in use, engineering software, software and documentation on CD, communication through the system interface

Notes:

Please order PC cable separately, [see page 14/8](#).

For description of the software versions [see page 14/5](#).

Parameterization, Configuration and Visualization with SIRIUS

Soft Starter ES



| Version | DT | Article No. | Price per PU | PU (UNIT, SET, M) | PS* | PG |
|--|----|---------------------------|--------------|-------------------|--------|-----|
| Soft Starter ES 2007 Premium | | | | | | |
| Floating license for one user | | | | | | |
| Engineering software, software and documentation on CD, 3 languages (German/English/French), communication through system interface or PROFIBUS/PROFINET/STEP7 Object Manager | | | | | | |
| • License key on USB stick, Class A, including CD | B | 3ZS1313-6CC10-0YA5 | | 1 | 1 unit | 42H |
| • License key download, Class A, without CD | ► | 3ZS1313-6CE10-0YB5 | | 1 | 1 unit | 42H |
| Upgrade for Soft Starter ES 2006 | | | | | | |
| Floating license for one user, engineering software, software and documentation on CD, license key on USB stick, Class A, 3 languages (German/English/French), communication through the system interface or PROFIBUS/PROFINET | | | | | | |
| | B | 3ZS1313-6CC10-0YE5 | | 1 | 1 unit | 42H |
| Powerpack for Soft Starter ES 2007 Standard | | | | | | |
| Floating license for one user, engineering software, license key on USB stick, Class A, 3 languages (German/English/French), communication through the system interface or PROFIBUS/PROFINET | | | | | | |
| | B | 3ZS1313-6CC10-0YD5 | | 1 | 1 unit | 42H |
| Software Update Service | | | | | | |
| For 1 year with automatic extension, assuming the current software version is in use, engineering software, software and documentation on CD, communication through the system interface or PROFIBUS/PROFINET | | | | | | |
| | ► | 3ZS1313-6CC10-0YL5 | | 1 | 1 unit | 42H |

Notes:

Please order PC cable separately, [see Accessories](#).

For description of the software versions [see page 14/5](#).

Accessories

| Version | DT | Article No. | Price per PU | PU (UNIT, SET, M) | PS* | PG |
|--|----|------------------------|--------------|-------------------|--------|-----|
| Optional accessories | | | | | | |
|  3UF7940-0AA00-0 | ► | 3UF7940-0AA00-0 | | 1 | 1 unit | 42J |
| | ► | 3UF7941-0AA00-0 | | 1 | 1 unit | 42J |
| | B | 3UF7946-0AA00-0 | | 1 | 1 unit | 42J |
|  3UF7941-0AA00-0 | ► | 3RW4900-0KC00 | | 1 | 1 unit | 42H |
| | ► | 3RW4900-0NC00 | | 1 | 1 unit | 42H |

Overview

The SIRIUS 3RW44 Soft Starter PCS 7 block library can be used for simple and easy integration of SIRIUS 3RW44 soft starters into the SIMATIC PCS 7 process control system. The SIRIUS 3RW44 soft starter PCS 7 block library contains the diagnostics and driver blocks corresponding with the SIMATIC PCS 7 diagnostics and driver concept as well as the elements (symbols and faceplates) required for operator control and process monitoring.

Integrated functionality for optimal process control for all process control systems

In addition to the general sensor technology, the motor feeder data is increasingly being integrated into the process control system. By integrating the SIRIUS 3RW44 soft starters into the process control system it becomes possible to prevent errors in the motor feeder simply and reliably, or to detect these errors quickly and rectify them. Downtimes are reduced to a minimum or can be prevented before they happen.

For example, the output and display of the key measured values calculated by the 3RW44 is also a good aid for being able to assess and monitor the current system status.

Easy integration with the PCS 7 block library

The PCS 7 block library can be used for simple and easy integration of SIRIUS 3RW44 soft starters into the SIMATIC PCS 7 process control system. The focus here is simple configuration. The function of the modules is based on the PCS 7 standard libraries and is optimally harmonized with the functions of the SIRIUS 3RW44.

Users who have previously integrated motor feeders into conventional technology via signal blocks and motor or valve blocks or, for example, already have experience with SIMOCODE modules, are easily able to switch to SIRIUS 3RW44.

All blocks required for the automation systems are provided by the PCS 7 block library – as are the block symbols and faceplates for the operator station required for monitoring and control.

With the integration of the SIRIUS 3RW44 into SIMATIC PDM, the system-wide device parameterization and diagnostics of the SIRIUS 3RW44 soft starters are possible from a central point.

Motor block for the direct control of the drive

The low-voltage motors started and protected by SIRIUS 3RW44 soft starters can be integrated into the process automation via the motor blocks. This means that they form the interface between the process control system and the motors controlled by the SIRIUS 3RW44.

To reduce the amount of configuring work required, functions for signal processing and technological functions are integrated into one motor block.

The important measured value – the current in the motor feeder – is recorded via the 3RW44 and monitored for motor protection. The motor current is accessible from the I&C system via the motor blocks.

The block symbols and faceplates for the motor blocks display the motor feeders on the operator station and provide all the required information for monitoring and control as well as detailed diagnostics.



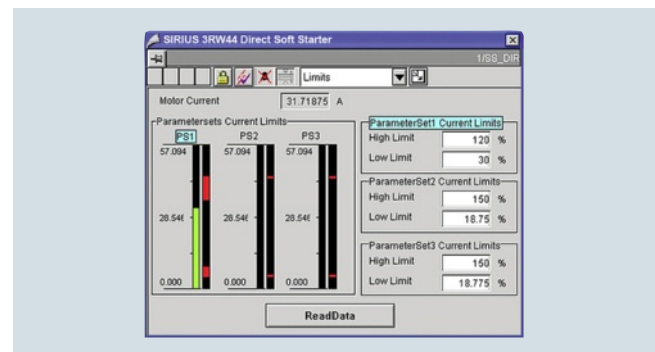
Faceplate of the motor block

Evaluation of additional motor feeder measurements

All measured values calculated by the soft starter, such as current, voltage and output of the feeder, are displayed and output via the measured value blocks. A key advantage here is that where required, a wide range of information on important motor feeder measurements is available, e.g. for load monitoring.

The 3RW44 is not only able to detect measured values here, but also to react if these values are exceeded or undershot, for example, via custom settings – e.g. with a motor disconnection or with a warning.

The faceplate for the measured values is accessed from the motor block faceplate.



Faceplate for measured values

Evaluation of maintenance-related motor feeder data

The 3RW44 has powerful functions to detect and monitor maintenance-related motor feeder data. For example, the operating and downtimes of the motor, operating cycles and overload tripping events are detected and stored directly on the device. If required, the information already on the device is available via the statistics block in the I&C system. The display is provided on a separate faceplate for the statistics block on the operator station.

Types of delivery and license

The SIRIUS 3RW44 soft starter PCS 7 block library supplied on CD-ROM allows the user to run the required engineering software on the engineering station (single license) including the runtime software for executing the AS modules in an automation system (single license). If the AS modules are to be used in additional automation systems, the corresponding number of runtime licenses are required which are supplied without a data carrier.

Parameterization, Configuration and Visualization with SIRIUS

SIRIUS 3RW44 soft starter block library for SIMATIC PCS 7

Benefits

- Uniform and continuous integration into SIMATIC PCS 7
- Standardized blocks for simple integration and optimal operation
- Including Advanced Process Library (APL) in Version V8
- Greater process transparency due to greater information density in the process control system
- System-wide device parameterization and diagnostics with SIMATIC PDM

Selection and ordering data

| Version | DT | Article No. | Price per PU | PU (UNIT, SET, M) | PS* | PG |
|---------|----|-------------|--------------|-------------------|-----|----|
|---------|----|-------------|--------------|-------------------|-----|----|

SIRIUS 3RW44 soft starter block library for SIMATIC PCS 7 Version V8 with Advanced Process Library (APL)



3ZS1633-1XX02-0YA0

Engineering software V8

NEW ▶

For one engineering station (single license) including runtime software for execution of the AS modules in an automation system (single license), German/English

Scope of supply:

AS modules and faceplates for integrating SIRIUS 3RW44 into the PCS 7 process control system, with Advanced Process Library, for PCS 7 version V8.0

Type of delivery:

Software and documentation on CD, one license for one engineering station, one license for one automation system

3ZS1633-1XX02-0YA0

1 1 unit 42H

Runtime license V8

NEW ▶

For execution of the AS modules in an automation system (single license)

Required for using the AS modules of the engineering software V8 on an additional automation system within a plant

Type of delivery:

one license for one automation system, without software and documentation

3ZS1633-2XX02-0YB0

1 1 unit 42H

Upgrade for PCS 7 block library SIRIUS 3RW44, V6.0 or V7 to version SIRIUS 3RW44 V8

NEW ▶

For one engineering station (single license) including runtime software for execution of the AS modules in an automation system (single license), German/English

Scope of supply:

AS modules and faceplates for integrating SIRIUS 3RW44 into the PCS 7 process control system, with Advanced Process Library, for PCS 7 version V 8.0

Type of delivery:

Software and documentation on CD, one license for one engineering station, one license for one automation system

3ZS1633-1XX02-0YE0

1 1 unit 42H

Parameterization, Configuration and Visualization with SIRIUS

SIRIUS 3RW44 soft starter block library for SIMATIC PCS 7

| Version | DT | Article No. | Price per PU | PU (UNIT, SET, M) | PS* | PG |
|---------|----|-------------|--------------|-------------------|-----|----|
|---------|----|-------------|--------------|-------------------|-----|----|

SIRIUS 3RW44 soft starter block library for SIMATIC PCS 7 Version V7



3ZS1633-1XX00-0YA0

Engineering software V7

For one engineering station (single license) including runtime software for execution of the AS modules in an automation system (single license), German/English

Scope of supply:
AS modules and faceplates for integrating SIRIUS 3RW44 into the PCS 7 process control system, for PCS 7, version V 6.1/V7.0/V7.1¹⁾

Type of delivery:
Software and documentation on CD,
one license for one engineering station,
one license for one automation system



3ZS1633-1XX00-0YA0

1 1 unit 42H

Runtime license V7

For execution of the AS modules in an automation system (single license)

Required for using the AS modules of the engineering software V7 or the engineering software migration V7-V8 on an additional automation system within a plant

Type of delivery:
one license for one automation system,
without software and documentation



3ZS1633-2XX00-0YB0

1 1 unit 42H

Engineering software migration V7-V8

NEW



3ZS1633-1XX10-0YE0

1 1 unit 42H

For upgrading (migrating) an existing engineering software V6.1/V7.0/V7.1 of the SIRIUS 3RW44 soft starter block library for PCS 7

Conditions of use:
Availability of the engineering software V7 (license) of the SIRIUS 3RW44 soft starter block library for PCS 7 for the PCS 7 version V6.1, V7.0 or V7.1

The engineering software migration V7-V8 can be installed directly onto a system with PCS 7 version V8.0; installation of the previous version is unnecessary.

For one engineering station (single license) including runtime software for execution of the AS modules in an automation system (single license), German/English

Scope of supply:
AS modules and faceplates for integrating SIRIUS 3RW44 soft starters into the PCS 7 process control system, for PCS 7 version V8.0

Type of delivery:
software and documentation on CD,
license for upgrading an existing license
for one engineering station and a plant's assigned runtime licenses

¹⁾ For earlier versions of the engineering software, SP1 can be downloaded from www.siemens.com/sirius-engineering.

Parameterization, Configuration and Visualization with SIRIUS

SIRIUS 3RW44 soft starter block library for SIMATIC PCS 7

More information

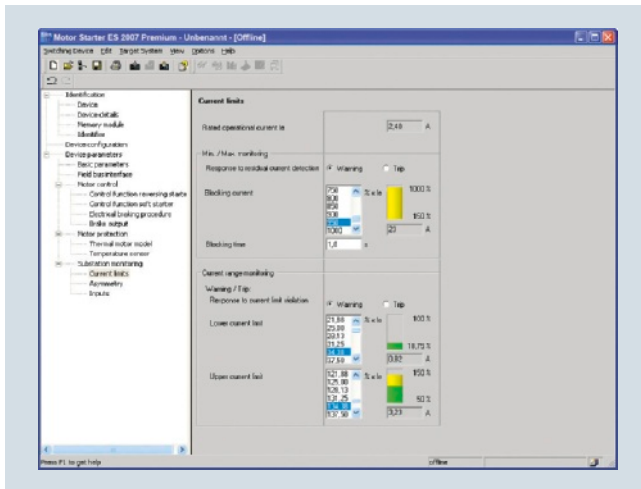
Programming and Operating Manual for PCS 7 Block Library
for SIRIUS Soft Starter 3RW44 V6.1/V7.0 + SP1 [see](http://support.automation.siemens.com/WW/view/en/41856585)
<http://support.automation.siemens.com/WW/view/en/41856585>.

Getting Started for PCS 7 Block Library for
SIRIUS 3RW44 Soft Starter V6.1/V7.0 + SP1 [see](http://support.automation.siemens.com/WW/view/en/41856498)
<http://support.automation.siemens.com/WW/view/en/41856498>.

Note:

Programming Manual and GETTING STARTED are valid for
engineering software V7 and engineering software
migration V7-V8.

Overview



Motor Starter ES for parameterization, monitoring, diagnostics and testing of motor starters

Motor Starter ES is used for start-up, parameterization, diagnostics, documentation and the preventative maintenance of the motor starters in the SIMATIC ET 200S, ET 200pro, ECOFAST and M200D product families.

Interfacing is performed

- Through the local interface on the device
- With PROFIBUS DP V1 capable motor starters from any point in PROFIBUS or in PROFINET (applies to ET 200S DP V1/ ET 200pro/ECOFAST/M200D)
- With PROFINET capable motor starters from any point in PROFINET or in PROFIBUS (applies to ET 200S DP V1, ET 200pro/M200D)

Using Motor Starter ES, the communication-capable motor starters are easily parameterized during start-up, monitored during normal operation and successfully diagnosed for service purposes. Preventative maintenance is supported by a function for reading out diverse statistical data (e. g. operating hours, operating cycles, cut-off currents, etc.). The user is supported during these procedures with comprehensive Help functions and plain text displays.

Motor Starter ES can either be used as a stand-alone program or it can be integrated into STEP 7 via an Object Manager.

Efficient engineering with three program versions

The Motor Starter ES software program is available in three versions which differ in their user-friendliness, scope of functions and price.

| Motor Starter ES | Basic | Standard | Premium |
|-----------------------------------|-------|----------|---------|
| ET 200S High-Feature PROFIBUS IM | ✓ | ✓ | ✓ |
| ET 200S High-Feature PROFINET IM | ✓ | ✓ | ✓ |
| ECOFAST AS-Interface High-Feature | ✓ | ✓ | -- |
| ECOFAST PROFIBUS | ✓ | ✓ | ✓ |
| ET 200pro PROFIBUS IM | ✓ | ✓ | ✓ |
| ET 200pro PROFINET IM | ✓ | ✓ | ✓ |
| M200D AS-Interface Standard | ✓ | ✓ | (✓) |
| M200D PROFIBUS | ✓ | ✓ | ✓ |
| M200D PROFINET | ✓ | ✓ | ✓ |

✓ Function available, (✓) Available with restricted functionality

-- Function not available

| Motor Starter ES | Basic | Standard | Premium |
|--|-------|----------|---------|
| Access through the local interface on the device | ✓ | ✓ | ✓ |
| Parameter assignment | ✓ | ✓ | ✓ |
| Operating | ✓ | ✓ | ✓ |
| Diagnostics | -- | ✓ | ✓ |
| Creation of typicals | -- | ✓ | ✓ |
| Comparison functions | -- | ✓ | ✓ |
| Standard-compliant printout according to EN ISO 7200 | -- | ✓ | ✓ |
| Service data (slave pointer, statistics data) | -- | ✓ | ✓ |
| Access through PROFIBUS | -- | -- | ✓ |
| Access through PROFINET | -- | -- | ✓ |
| S7 routing | -- | -- | ✓ |
| Teleservice through MPI | -- | -- | ✓ |
| STEP 7 Object Manager | -- | -- | ✓ |
| Trace function | -- | ✓ | ✓ |

✓ Function available

-- Function not available

Additional functions

- Standard-compatible printouts
The software tool greatly simplifies machine documentation. It enables parameterization printouts according to EN ISO 7200. The elements to be printed are easy to select and group as required.
- Easy creation of typicals
Typicals can be created for devices and applications with only minimum differences in their parameters. These typicals contain all the parameters which are needed for the parameterization. In addition it is possible to specify which of these parameters are fixed and which can be adapted, e. g. by the startup engineer.
- Teleservice through MPI
The Motor Starter ES Premium version supports the use of MPI Teleservice (comprising the Teleservice software and various Teleservice adapters) for remote diagnostics of the devices. This facilitates diagnostics and maintenance, and it shortens response times for service purposes.

Types of delivery and license

Motor Starter ES is available as follows:

- Floating license – the license for any one user at any one time
 - Authorizes any one user
 - Independent of the number of installations (unlike the single license which is allowed to be installed once only)
 - Only the actual use of the program has to be licensed
 - Trial license (free use of all program functions for 14 days for test and evaluation purposes, included on every product CD, available in the download file of the SIRIUS ES program in the Service&Support portal)

Parameterization, Configuration and Visualization with SIRIUS

Motor Starter ES

Following delivery versions are also available for Motor Starter ES 2007:

- **Upgrade**
Switching from an old to a new version with expanded functions, e.g. upgrade from Motor Starter ES 2006 to Motor Starter ES 2007
- **Powerpack**
Special pack for switching within the same software version to a more powerful version with more functionality, e.g. Powerpack Motor Starter ES 2007 for switching from Standard to Premium
- **Software Update Service**
To keep you up to date at all times we offer a special service which supplies you automatically with all service packs and upgrades.
- **License download**
User-friendly license key download from our Mall (for selected countries) as an easy and quick way for you to receive additional licenses for your software.
For more information see www.siemens.com/tia-online-software-delivery.

System requirements

| | |
|--|--|
| Parameterization, start-up and diagnostics software Motor Starter ES 2007 For ECOFAST Motor Starter, SIMATIC ET 200S High-Feature Starter, SIMATIC ET 200pro Starter and M200D (AS-I Standard, PROFIBUS, PROFINET) | |
| Operating system | Windows XP Professional (Service Pack 2 or 3) Windows 7 32/64 Bit Professional/Ultimate/Enterprise (Service Pack 1) |
| Processor | ≥ Pentium 800 MHz/≥ 1 GHz (Windows 7) |
| RAM | ≥ 512 Mbyte (Windows XP Professional)/≥ 1 GB (Windows 7 32 Bit)/ ≥ 2 GB (Windows 7 64 Bit) |
| Monitor resolution | ≥ 1024 x 768 |
| Free space on hard disk¹⁾ | ≥ 400 Mbyte |
| CD-ROM/DVD drive | Yes (only when installing from CD) |
| Interface | Depends on PC cable: serial (COM) or USB |
| PC cable/parameterization cable/connection cable | Yes |
| PROFIBUS card/PROFIBUS processor | Optional, for parameterization and diagnostics through PROFIBUS |
| Ethernet interface/PROFINET card | Optional, for parameterization and diagnostics through PROFINET |

¹⁾ Additional free space recommended, e.g. for swap-out file.

Benefits

- Fast, error-free configuration and startup of motor starters even without extensive previous knowledge
- Transparent setting of the device functions and their parameters – online and offline
- Effective diagnostics functions on the soft starter and display of the most important measured values
- Trace function (oscilloscope function) for recording measured values and events (included in the Motor Starter ES Standard and Premium software version for M200D PROFIBUS and PROFINET).

Selection and ordering data
**Parameterization, start-up and diagnostics software
Motor Starter ES 2007**

For ECOFAST Motor Starter, SIMATIC ET 200S High-Feature Starter, SIMATIC ET 200pro Starter and M200D (AS-I Standard, PROFIBUS, PROFINET)

| Version | DT | Article No. | Price per PU | PU (UNIT, SET, M) | PS* | PG |
|---------|----|-------------|--------------|-------------------|-----|----|
|---------|----|-------------|--------------|-------------------|-----|----|

Motor Starter ES 2007 Basic

Floating license for one user

Engineering software in limited-function version for diagnostics purposes, software and documentation on CD, 3 languages (German/English/French), communication through system interface

- License key on USB stick, Class A, including CD
- License key download, Class A, without CD

B

▶

3ZS1310-4CC10-0YA5

1

1 unit

42D

3ZS1310-4CE10-0YB5

1

1 unit

42D

3ZS1310-4CC10-0YA5

Motor Starter ES 2007 Standard
Floating license for one user

Engineering software, software and documentation on CD, 3 languages (German/English/French), communication through system interface

- License key on USB stick, Class A, including CD
- License key download, Class A, without CD

B

▶

3ZS1310-5CC10-0YA5

1

1 unit

42D

3ZS1310-5CE10-0YB5

1

1 unit

42D

Upgrade for Motor Starter ES 2006

B

3ZS1310-5CC10-0YE5

1

1 unit

42D

Floating license for one user, engineering software, software and documentation on CD, license key on USB stick, Class A, 3 languages (German/English/French), communication through the system interface

Powerpack for Motor Starter ES 2007 Basic

B

3ZS1310-5CC10-0YD5

1

1 unit

42D

Floating license for one user, engineering software, license key on USB stick, Class A, 3 languages (German/English/French), communication through system interface

Software Update Service

B

3ZS1310-5CC10-0YL5

1

1 unit

42D

For 1 year with automatic extension, assuming the current software version is in use, engineering software, software and documentation on CD, communication through the system interface

Notes:

Please order PC cable separately, [see page 14/16](#).

For description of the software versions [see page 14/13](#).

Parameterization, Configuration and Visualization with SIRIUS

Motor Starter ES

| Version | DT | Article No. | Price per PU | PU (UNIT, SET, M) | PS* | PG |
|---|----|---------------------------|--------------|-------------------|--------|-----|
| Motor Starter ES 2007 Premium | | | | | | |
| Floating license for one user | | | | | | |
| Engineering software, software and documentation on CD, 3 languages (German/English/French), communication through system interface or PROFIBUS/PROFINET/STEP7 Object Manager | | | | | | |
| • License key on USB stick, Class A, including CD | B | 3ZS1310-6CC10-0YA5 | | 1 | 1 unit | 42D |
| • License key download, Class A, without CD | ► | 3ZS1310-6CE10-0YB5 | | 1 | 1 unit | 42D |
| Upgrade for Motor Starter ES 2006 | | | | | | |
| Floating license for one user, engineering software, software and documentation on CD, license key on USB stick, Class A, 3 languages (German/English/French), communication through the system interface or PROFIBUS | | | | | | |
| | B | 3ZS1310-6CC10-0YE5 | | 1 | 1 unit | 42D |
| Powerpack for Motor Starter ES 2007 Standard | | | | | | |
| Floating license for one user, engineering software, license key on USB stick, Class A, 3 languages (German/English/French), communication through the system interface or PROFIBUS | | | | | | |
| | B | 3ZS1310-6CC10-0YD5 | | 1 | 1 unit | 42D |
| Software Update Service | | | | | | |
| For 1 year with automatic extension, assuming the current software version is in use, engineering software, software and documentation on CD, communication through the system interface or PROFIBUS | | | | | | |
| | B | 3ZS1310-6CC10-0YL5 | | 1 | 1 unit | 42D |

Notes:

Please order PC cable separately, [see Accessories](#).

For description of the software versions [see page 14/13](#).

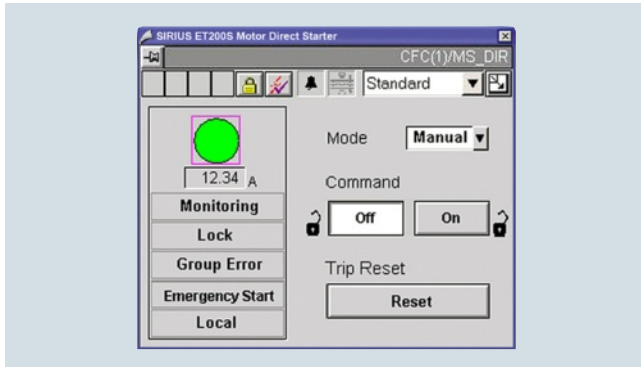
Accessories

| Version | DT | Article No. | Price per PU | PU (UNIT, SET, M) | PS* | PG |
|---|----|---------------------------|--------------|-------------------|--------|-----|
| Optional accessories | | | | | | |
| Control module 2DI LC COM | | | | | | |
| For ET 200S High-Feature starter, Failsafe starter A | | | | | | |
| | A | 3RK1903-0CH20 | | 1 | 1 unit | 42D |
| LOGO! PC cables | | | | | | |
| For ET 200S High-Feature starter | | | | | | |
| | A | 6ED1057-1AA00-0BA0 | | 1 | 1 unit | 200 |
| RS 232 interface cable | | | | | | |
| Serial data connection between ET 200pro MS/FC, M200D and laptop/PC/PG or MS | | | | | | |
| | B | 3RK1922-2BP00 | | 1 | 1 unit | 42D |
| USB interface cable | | | | | | |
| Serial data connection between ET 200pro MS/FC, M200D and laptop/PC/PG or MS | | | | | | |
| | B | 6SL3555-0PA00-2AA0 | | 1 | 1 unit | 346 |
| USB/serial adapters | | | | | | |
| For connecting an RS 232 PC cable to the USB interface of a PC, recommended for use in conjunction with ET 200S/ECOFAS/ET 200pro motor starters | | | | | | |
| | B | 3UF7946-0AA00-0 | | 1 | 1 unit | 42J |



3RK1903-0CH20

Overview



Faceplate of the motor block

With the SIRIUS motor starter PCS 7 block library, SIRIUS ET 200S and ET 200pro motor starters can be easily and simply integrated into the SIMATIC PCS 7 process control system. The SIRIUS motor starter PCS 7 block library contains the diagnostics and driver blocks corresponding to the SIMATIC PCS 7 diagnostics and driver concept as well as the elements (symbols and faceplates) required for operator control and process monitoring.

Easy integration with the PCS 7 block library

The PCS 7 block library can be used for simple and easy integration of SIRIUS ET 200S and ET 200pro motor starters into the SIMATIC PCS 7 process control system V7.0, V7.1 and V8.0. The focus here is simple configuration. The function of the modules is based on the PCS 7 standard libraries and is optimally harmonized with the functions of the SIRIUS motor starters.

Users who have previously integrated motor feeders into PCS 7 are easily able to switch to SIRIUS motor starters.

All blocks required for the automation systems are provided by the PCS 7 block library – as are the block symbols and faceplates for the operator station required for monitoring and control.

Regardless of whether, for example, the motor starter is controlled directly, or its current value is to be read out and status, warning and error signals are to be displayed, the right modules are always available.

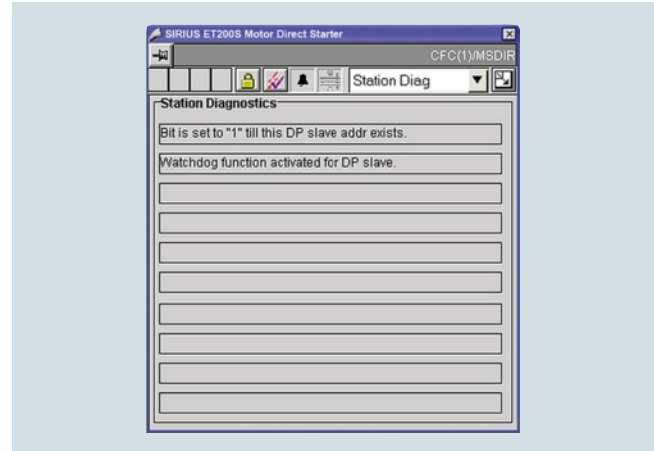
Connection to powerrate

The SIRIUS motor starters can be connected to powerrate. The block provides the possibility of integrating the motor starters into energy management.

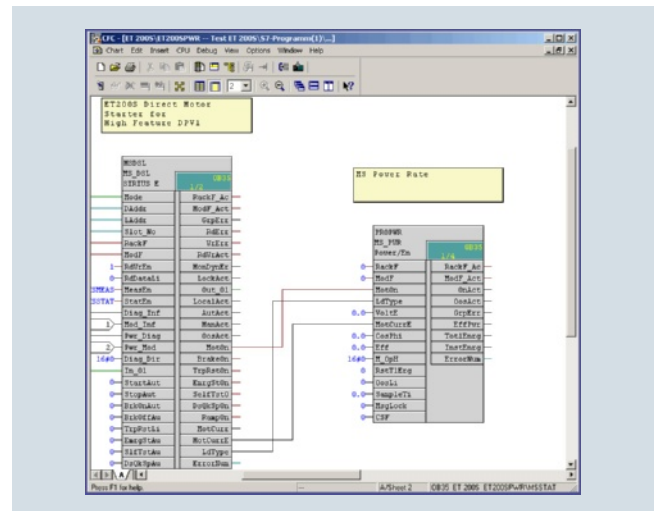
The current values are supplied directly from the motor starter block, while the voltage and the power factor (p.f.) must be entered manually.

Types of delivery and license

The SIRIUS Motor Starter PCS 7 block library supplied on CD-ROM allows the user to run the required engineering software on the engineering station (single license) including the runtime software for executing the AS modules in an automation system (single license). If the AS modules are to be used in additional automation systems, the corresponding number of runtime licenses are required which are supplied without a data carrier.



Faceplate for diagnostics



Faceplate for energy management with powerrate


Benefits

- Uniform and continuous integration into SIMATIC PCS 7
- Standardized blocks for simple integration and optimal operation
- Greater process transparency due to greater information density in the process control system

Parameterization, Configuration and Visualization with SIRIUS

SIRIUS motor starter block library for SIMATIC PCS 7

Selection and ordering data

| Version | DT | Article No. | Price per PU | PU (UNIT, SET, M) | PS* | PG |
|--|---|---------------------------|-----------------|----------------------------|--------|-----|
| SIRIUS motor starter block library for SIMATIC PCS 7 | | | | | | |
|  3ZS1630-1XX00-0YA0 | ▶ | 3ZS1630-1XX01-0YA0 | | 1 | 1 unit | 42D |
| | Engineering software V7 For one engineering station (single license) including runtime software for execution of the AS modules in an automation system (single license), German/English Scope of supply: AS modules and faceplates for integrating SIRIUS motor starters into the PCS 7 process control system, for PCS 7 version V 7.0/V7.1 Type of delivery: Software and documentation on CD, one license for one engineering station, one license for one automation system | | | | | |
| | ▶ | 3ZS1630-2XX01-0YB0 | | 1 | 1 unit | 42D |
| | Runtime license V7 For execution of the AS modules in an automation system (single license) Required for using the AS modules of the engineering software V7 or the engineering software migration V7-V8 on an additional automation system within a plant Type of delivery: One license for one automation system, without software and documentation | | | | | |
| | ▶ | 3ZS1630-1XX01-0YE0 | | 1 | 1 unit | 42D |
| | Upgrade for SIRIUS motor starter block library for SIMATIC PCS 7 V6.1/V7.0 to V7.0/V7.1 For one engineering station (single license) including runtime software for execution of the AS modules in an automation system (single license), German/English Scope of supply: AS modules and faceplates for integrating SIRIUS motor starters into the PCS 7 process control system, for PCS 7 version V7.0 or V7.1 Type of delivery: Software and documentation on CD, one license for one engineering station, one license for one automation system | | | | | |
| | NEW ▶ | 3ZS1630-1XX10-0YE0 | | 1 | 1 unit | 42H |
| Engineering software migration V7-V8 For upgrading (migrating) an existing engineering software V7 of the SIRIUS motor starter block library for PCS 7 Conditions of use: Availability of the engineering software V7 (license) of the SIRIUS motor starter block library for PCS 7 for the PCS 7 version V7.0 or V7.1 The engineering software migration V7-V8 can be installed directly onto a system with PCS 7 version V8.0; installation of the previous version is unnecessary. For one engineering station (single license) including runtime software for execution of the AS modules in an automation system (single license), German/English Scope of supply: AS modules and faceplates for integrating SIRIUS motor starters into the PCS 7 process control system, for PCS 7 version V8.0 Type of delivery: software and documentation on CD, license for upgrading an existing license for one engineering station and a plant's assigned runtime licenses | | | | | | |

More information

Programming and Operating Manual for SIRIUS Motor Starter
PCS 7 Block Library V7.1 [see](http://support.automation.siemens.com/WW/view/en/41856573)
<http://support.automation.siemens.com/WW/view/en/41856573>.

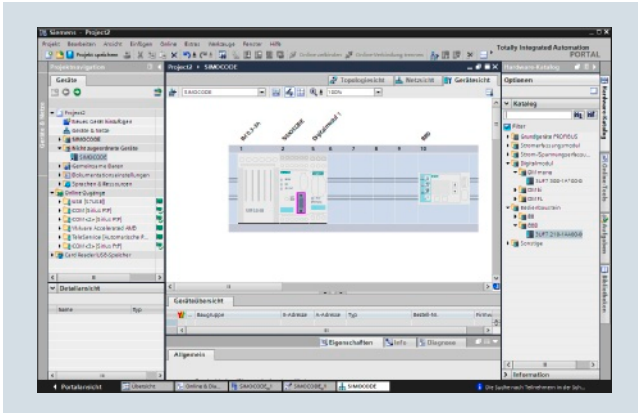
Getting Started for SIRIUS Motor Starter PCS 7 Block Library
V7.1 [see](http://support.automation.siemens.com/WW/view/en/41856486)
<http://support.automation.siemens.com/WW/view/en/41856486>.

Note:

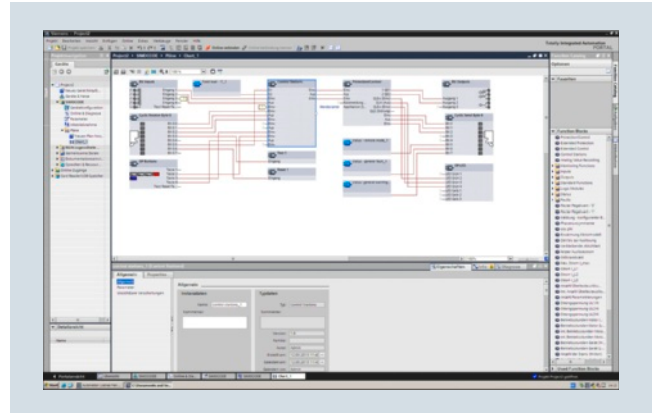
Programming Manual and GETTING STARTED are valid for
engineering software V7 and engineering software
migration V7-V8.

SIMOCODE ES (TIA Portal)

Overview



Selection of SIMOCODE pro device configuration in SIMOCODE ES V12



Parameterize easily and ergonomically with the CFC-based graphics editor of SIMOCODE ES V12

SIMOCODE ES is the central software for configuration, startup, operation and diagnostics of SIMOCODE pro.

Version 12, which is based on the central engineering framework Totally Integrated Automation Portal (TIA Portal), is available in addition to SIMOCODE ES Version 2007.

SIMOCODE ES V12 is integrated seamlessly when further TIA Portal-based software exists such as STEP 7 or WinCC, thus enabling users to achieve a consistent, efficient and intuitive solution for all automation tasks.

Users who use SIMOCODE ES V12 as stand-alone software also profit from these advantages, through.

Three program versions

The user can choose between three different versions of SIMOCODE ES: SIMOCODE ES Basic, SIMOCODE ES Standard and SIMOCODE ES Premium. While SIMOCODE ES Basic is a powerful tool for startup or maintenance personnel, SIMOCODE ES Standard and Premium are the perfect tools for engineers or configuration engineers on account of their larger scope of functions and integrated graphics editor. Unlike the Standard version, SIMOCODE ES Premium also permits parameterization and diagnostics through PROFIBUS. Indication of all operating, service and diagnostics data supplies important information about the current state of the motor and plant at all times – everywhere on the PROFIBUS.

Working with libraries

Users can create copy templates for SIMOCODE pro device configuration and can manage them in global or project libraries.

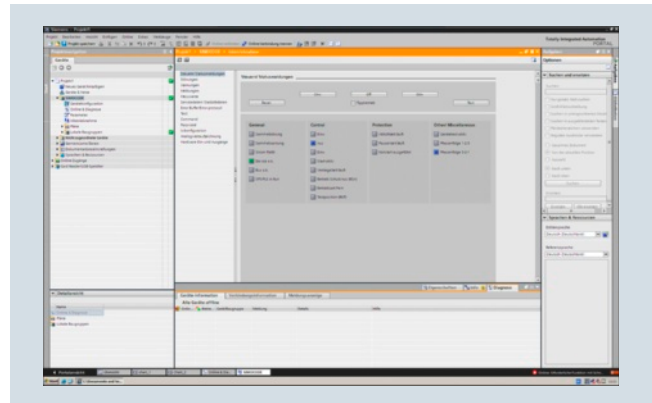
Thus, individual modules and diagrams and also complete device configurations can be saved as reusable elements for frequently occurring tasks.

Integrated graphics editor

The graphics editor is a part of SIMOCODE ES Standard and SIMOCODE ES Premium. It is based on the Continuous Function Chart (CFC) and adds a powerful tool to the parameterizing interface that enables easy parameterization of devices by Drag&Drop. Extremely compact documentation of all configured parameters is possible, as is the graphic online presentation of the configured device functions including all signal states during operation.

Online functions for startup and diagnostics

To this end, SIMOCODE ES provides powerful functions for start-up and diagnostics of motor feeders. Besides a detailed display of status information and the causes of faults, all available measurement and statistics data can be retrieved online. Access to the fault and event memory and also to analog values recorded on the device, e.g. current or voltage, is also possible.



Startup functions of SIMOCODE ES V12

Efficient engineering with three program versions

| SIMOCODE ES V12 | Basic | Standard | Premium |
|--|-------|----------|---------|
| Access through the local interface on the device | ✓ | ✓ | ✓ |
| Parameter assignment in list form | ✓ | ✓ | ✓ |
| Parameter printing in list form | ✓ | ✓ | ✓ |
| Operating | ✓ | ✓ | ✓ |
| Diagnostics | ✓ | ✓ | ✓ |
| Test | ✓ | ✓ | ✓ |
| Service data | ✓ | ✓ | ✓ |
| Analog value recording ¹⁾ | ✓ | ✓ | ✓ |
| Parameterizing with convenient graphical display | -- | ✓ | ✓ |
| Parameterizing with the integrated graphics editor (CFC-based) | -- | ✓ | ✓ |
| Printing of diagrams | -- | ✓ | ✓ |
| Parameter comparison | -- | ✓ | ✓ |
| Access through PROFIBUS | -- | -- | ✓ |
| Teleservice through MPI | -- | -- | ✓ |
| S7 routing | -- | -- | ✓ |

✓ Function available

-- Function not available

¹⁾ For SIMOCODE pro V.

Additional functions

SIMOCODE ES V12 offers numerous advantages of the TIA Portal that can be used in an integrated working environment.

- Seamless integration when using other TIA Portal-based software such as STEP 7 or WinCC.
Thus, for example, the configuration for devices and networks for all components used is created in a standardized environment.
- Working with libraries
Users can create copy templates for device configuration and can manage them in global libraries. In this way, frequently used functions can be managed in a clearly structured fashion.

System requirements

SIMOCODE ES V12 parameterization, start-up and diagnostics software for SIMOCODE pro

| | |
|---|--|
| Operating system | Windows XP Professional (Service Pack 3 required), Windows 7 32/64 bit Professional/Ultimate/Enterprise (Service Pack 1), Windows Server 2008 32 bit (Service Pack 2), Windows Server 2008 64 bit R2 (Service Pack 1) |
| Processor | ≥ 2 GHz (Core 2 Duo) |
| RAM | ≥ 1 GB (Windows XP) ≥ 2 GB (other operating system) |
| Monitor resolution | ≥ 1024 x 768 |
| Graphics cards | ≥ 32 Mbyte RAM, 24-bit color intensity |
| Free space on hard disk | ≥ 2 GB |
| CD-ROM/DVD drive | DVD-ROM (only when installing from DVD) |
| Interface | Depends on PC cable: serial (COM) or USB |
| PC cable/parameterization cable/connection cable | Yes |
| PROFIBUS interface | Optional, for parameterization and diagnostics through PROFIBUS |

Types of delivery and license

SIMOCODE ES V12 is available as follows:

- Floating license – the license for any one user at any one time
 - Authorizes any one user
 - Independent of the number of installations (unlike the single license which is allowed to be installed once only)
 - Only the actual use of the program has to be licensed
 - Trial license (free use of all program functions for 21 days for test and evaluation purposes, included on every product DVD, available in the download file of the SIRIUS ES program in the Service&Support portal)
- Combo license - license for parallel use
 - Licensed parallel use of the TIA Portal version and SIRIUS ES Version 2007
 - For all other properties see floating license

Following delivery versions are available in addition for SIMOCODE ES V12:

- Upgrade
Upgrade of an old version to a new version with expanded functions, e.g. upgrade from SIMOCODE ES 2007 to SIMOCODE ES V12; includes a combo license for parallel use of SIMOCODE ES 2007 and SIMOCODE ES V12
- Powerpack
Special pack for switching within the same software version to a more powerful version with more functionality, e.g. Powerpack SIMOCODE ES V12 Premium for switching from Standard to Premium
- Software Update Service
To keep you up to date at all times we offer a special service which supplies you automatically with all service packs and upgrades.
- License download
User-friendly license key download from our Mall (for selected countries) as an easy and quick way for you to receive additional licenses for your software.
For more information see www.siemens.com/tia-online-software-delivery.

Parameterization, Configuration and Visualization with SIRIUS

SIMOCODE ES (TIA Portal)

Benefits

- Easy parameterization with the graphics editor based on the Continuous Function Chart (CFC) reduces engineering work and shortens start-up times.
- Clear plant documentation by means of graphic presentation
- Detailed information, also when there are faults, is a help for maintenance personnel and shortens downtimes
- Universally applicable through stand-alone version or seamless integration into the central engineering framework when other TIA Portal-based software such as STEP 7 or WinCC are available
- Parameter changes are also possible during normal operation
- Users can create copy templates for device configurations and can manage them in global libraries

Selection and ordering data

Parameterization and service software for SIMOCODE pro 3UF7

- Delivered without PC cable

| Version | DT | Article No. | Price per PU | PU (UNIT, SET, M) | PS* | PG |
|---|----|---------------------------|--------------|-------------------|--------|-----|
| SIMOCODE ES V12 Basic | | | | | | |
| Floating license for one user | | | | | | |
| Engineering software, software and documentation on DVD, 6 languages (German/English/French/Italian/Spanish/Chinese), for all SIMOCODE pro with PROFIBUS, online functions through system interface) | | | | | | |
| • License key on USB stick, Class A | ► | 3ZS1322-4CC10-0YA5 | | 1 | 1 unit | 42J |
| • License key download, Class A | ► | 3ZS1322-4CE10-0YB5 | | 1 | 1 unit | 42J |
| SIMOCODE ES V12 Standard | | | | | | |
| Floating license for one user | | | | | | |
| Engineering software, software and documentation on DVD, 6 languages (German/English/French/Italian/Spanish/Chinese), for all SIMOCODE pro with PROFIBUS, online functions through system interface parameterizing with integrated graphics editor (CFC-based) | | | | | | |
| • License key on USB stick, Class A | ► | 3ZS1322-5CC10-0YA5 | | 1 | 1 unit | 42J |
| • License key download, Class A | ► | 3ZS1322-5CE10-0YB5 | | 1 | 1 unit | 42J |
| Upgrade for SIMOCODE ES 2007 | A | 3ZS1322-5CC10-0YE5 | | 1 | 1 unit | 42J |
| Floating license for one user, engineering software, software and documentation on DVD, license key on USB stick, Class A, 6 languages (German/English/French/Italian/Spanish/Chinese), combo license for parallel use of versions 2007 and V12 of SIRIUS ES, for all SIMOCODE pro with PROFIBUS, online functions through system interface, parameterizing with integrated graphics editor (CFC-based) | | | | | | |
| Powerpack for SIMOCODE ES V12 Basic | A | 3ZS1322-5CC10-0YD5 | | 1 | 1 unit | 42J |
| Floating license for one user, engineering software, license key on USB stick, Class A, 6 languages (German/English/French/Italian/Spanish/Chinese), for all SIMOCODE pro with PROFIBUS, online functions through system interface, parameterizing with integrated graphics editor (CFC-based) | | | | | | |
| Software Update Service | ► | 3ZS1322-5CC10-0YL5 | | 1 | 1 unit | 42J |
| For 1 year with automatic extension, assuming the current software version is in use, engineering software, software and documentation on DVD, online functions through system interface, parameterizing with integrated graphics editor (CFC-based) | | | | | | |

Notes:

Please order PC cable separately, [see page 14/23](#).

For description of the software versions [see page 14/21](#).

Parameterization, Configuration and Visualization with SIRIUS

SIMOCODE ES (TIA Portal)

| Version | DT | Article No. | Price per PU | PU (UNIT, SET, M) | PS* | PG |
|--|----|---------------------------|--------------|-------------------|--------|-----|
| SIMOCODE ES V12 Premium | | | | | | |
| Floating license for one user | | | | | | |
| Engineering software, software and documentation on DVD, 6 languages (German/English/French/Italian/Spanish/Chinese), for all SIMOCODE pro with PROFIBUS, online functions through system interface and PROFIBUS, parameterizing with integrated graphics editor (CFC-based) | | | | | | |
| • License key on USB stick, Class A | ► | 3ZS1322-6CC10-0YA5 | | 1 | 1 unit | 42J |
| • License key download, Class A | ► | 3ZS1322-6CE10-0YB5 | | 1 | 1 unit | 42J |
| Upgrade for SIMOCODE ES 2007 | A | 3ZS1322-6CC10-0YE5 | | 1 | 1 unit | 42J |
| Floating license for one user, engineering software, software and documentation on DVD, license key on USB stick, Class A, 6 languages (German/English/French/Italian/Spanish/Chinese), combo license for parallel use of versions 2007 and V12 of SIRIUS ES, for all SIMOCODE pro with PROFIBUS, online functions through system interface and PROFIBUS, parameterizing with integrated graphics editor (CFC-based) | | | | | | |
| Powerpack for SIMOCODE ES V12 Standard | A | 3ZS1322-6CC10-0YD5 | | 1 | 1 unit | 42J |
| Floating license for one user, engineering software, license key on USB stick, Class A, 6 languages (German/English/French/Italian/Spanish/Chinese), for all SIMOCODE pro with PROFIBUS, online functions through system interface and PROFIBUS, parameterizing with integrated graphics editor (CFC-based) | | | | | | |
| Software Update Service | ► | 3ZS1322-6CC10-0YL5 | | 1 | 1 unit | 42J |
| For 1 year with automatic extension, assuming the current software version is in use, engineering software, software and documentation on DVD, online functions through the system interface and PROFIBUS, parameterizing with integrated graphics editor (CFC-based) | | | | | | |

Notes:

Please order PC cable separately, see [Accessories](#).

For description of the software versions see [page 14/21](#).

Accessories

| Version | DT | Article No. | Price per PU | PU (UNIT, SET, M) | PS* | PG |
|---|----|------------------------|--------------|-------------------|--------|-----|
| Optional accessories | | | | | | |
| RS 232 PC cables | | | | | | |
| For connecting to the serial interface of a PC/PG, for communication with SIMOCODE ES through the system interface | | | | | | |
| USB PC cables | | | | | | |
| For connecting to the USB interface of a PC/PG, for communication with SIMOCODE ES through the system interface | | | | | | |
| USB/serial adapters | | | | | | |
| For connecting an RS 232 PC cable to the USB interface of a PC, recommended for use in conjunction with SIMOCODE ES | | | | | | |
| | ► | 3UF7940-0AA00-0 | | 1 | 1 unit | 42J |
| | ► | 3UF7941-0AA00-0 | | 1 | 1 unit | 42J |
| | B | 3UF7946-0AA00-0 | | 1 | 1 unit | 42J |



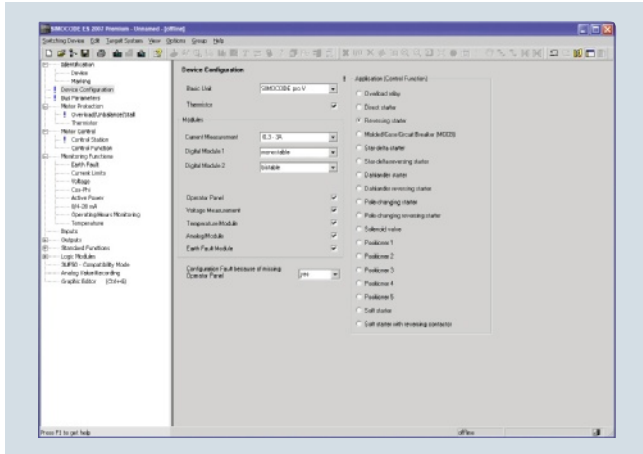
3UF7940-0AA00-0



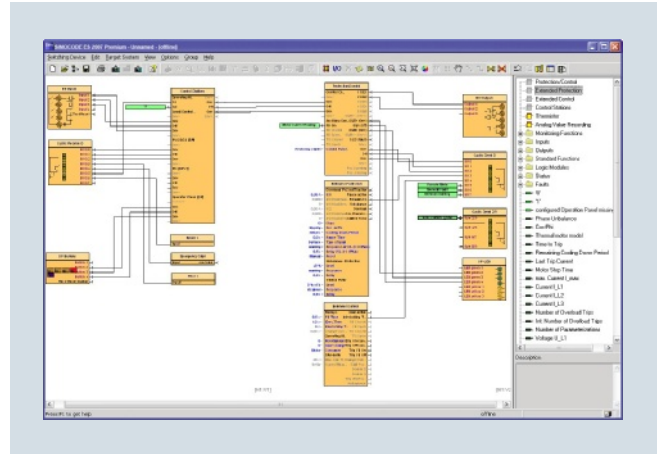
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SIMOCODE ES

Overview



Selection of predefined control functions in SIMOCODE ES



Easy and ergonomic parameterizing with the graphics editor

Besides SIMOCODE ES Version 12, which is based on the central engineering framework Totally Integrated Automation Portal (TIA Portal), the 2007 version of the software continues to be available for commissioning, operation and diagnostics of SIMOCODE pro.

As a result, unnecessary plant downtimes can be consistently prevented, for example, by changing parameters online during operation. Control functions, protection functions and the wiring of the control circuit are implemented in SIMOCODE pro by pre-defined control functions and can be readily configured using SIMOCODE ES.

Three program versions

The user can choose between three different versions of SIMOCODE ES: SIMOCODE ES Basic, SIMOCODE ES Standard and SIMOCODE ES Premium. While SIMOCODE ES Basic is a powerful tool for startup or maintenance personnel, SIMOCODE ES Standard and Premium are the perfect tools for engineers or configuration engineers on account of their larger scope of functions and integrated graphics editor. Unlike the Standard version, SIMOCODE ES Premium also permits parameterization and diagnostics through PROFIBUS/PROFINET. Indication of all operating, service and diagnostics data supplies important information about the current state of the motor and plant at all times – everywhere on PROFIBUS/PROFINET.

Object Manager for SIMATIC S7

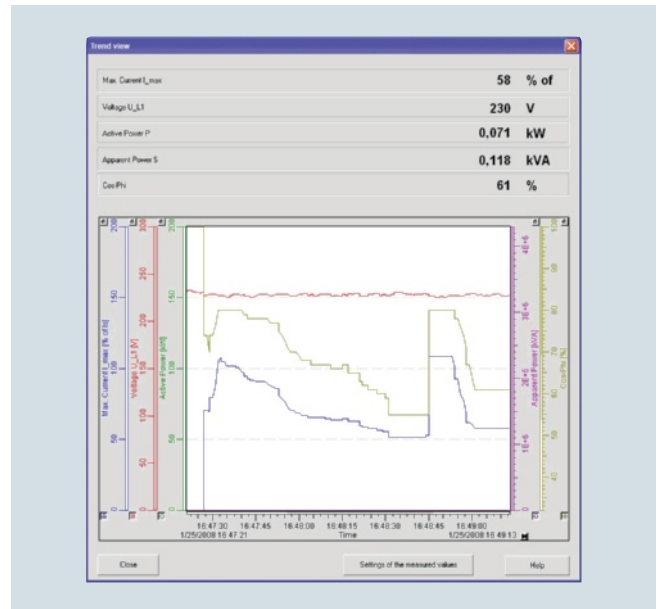
The Object Manager is a component of SIMOCODE ES Premium. Thanks to this software tool, SIMOCODE ES is totally integrated in SIMATIC S7. If the two software packages are installed on the PG/PC with which the SIMATIC S7 hardware configuration is performed, then SIMOCODE ES can be called up directly from STEP 7.

Integrated graphics editor

The graphics editor is a part of SIMOCODE ES Standard and SIMOCODE ES Premium. It adds a powerful tool to the parameterizing interface that enables easy parameterization of devices by Drag&Drop. Extremely compact documentation of all configured parameters is possible, as is the graphic online presentation of the configured device functions including all signal states during operation.

Trend display of measured values

With this online function, SIMOCODE ES Standard or Premium can present the trend of up to five different measured values. It is thus possible for example to record and evaluate the start-up characteristic of a motor or its behavior in different load conditions.



Trend displays of measured values in SIMOCODE ES

Efficient engineering with three program versions

| SIMOCODE ES | Basic | Standard | Premium |
|---|-------|----------|---------|
| Access through the local interface on the device | ✓ | ✓ | ✓ |
| Parameter assignment | ✓ | ✓ | ✓ |
| Operating | ✓ | ✓ | ✓ |
| Diagnostics | ✓ | ✓ | ✓ |
| Test | ✓ | ✓ | ✓ |
| Service data | ✓ | ✓ | ✓ |
| Parameterizing with the integrated graphics editor | -- | ✓ | ✓ |
| Creation of typicals | -- | ✓ | ✓ |
| Parameter export | -- | ✓ | ✓ |
| Comparison functions | -- | ✓ | ✓ |
| Trend display of measured values | -- | ✓ | ✓ |
| Parameter comparison | -- | ✓ | ✓ |
| Analog value recording ¹⁾ | -- | ✓ | ✓ |
| Standard-compatible printout according to EN ISO 7200 | -- | ✓ | ✓ |
| Group functions | -- | -- | ✓ |
| Access through PROFIBUS/PROFINET | -- | -- | ✓ |
| Teleservice through MPI | -- | -- | ✓ |
| S7 routing | -- | -- | ✓ |
| STEP7 Object Manager | -- | -- | ✓ |

✓ Function available

-- Function not available

¹⁾ For SIMOCODE pro V.

Additional functions

In addition to device-specific parameterization, SIMOCODE ES 2007 also offers the following functionality in a uniform look and feel. These functions are available in many SIRIUS ES programs.

- **Standard-compatible printouts**
The software tool greatly simplifies machine documentation. It enables parameterization printouts according to EN ISO 7200. The elements to be printed are easy to select and group as required.
- **Easy creation of typicals**
Typicals can be created for devices and applications with only minimum differences in their parameters. These typicals contain all the parameters which are needed for the parameterization. In addition it is possible to specify which of these parameters are fixed and which can be adapted, e. g. by the startup engineer.

System requirements

SIMOCODE ES 2007 parameterization, start-up and diagnostics software for SIMOCODE pro

| | |
|---|---|
| Operating system | Windows XP Professional (Service Pack 2 or 3), Windows 7 32/64 bit Professional/Ultimate/Enterprise (Service Pack 1) |
| Processor | ≥ Pentium 800 MHz/≥ 1 GHz (Windows 7) |
| RAM | ≥ 512 Mbyte (Windows XP Professional)/≥ 1 GB (Windows 7 32 bit)/ ≥ 2 GB (Windows 7 64 bit) |
| Monitor resolution | ≥ 1024 x 768 |
| Free space on hard disk | ≥ 280 Mbyte |
| CD-ROM/DVD drive | Yes (only when installing from CD) |
| Interface | Depends on PC cable: serial (COM) or USB |
| PC cable/parameterization cable/connection cable | Yes |
| Network adapter | ≥ 100 Mbit/s Ethernet, for parameterization and diagnostics through PROFINET |
| PROFIBUS card/PROFIBUS processor | Optional, for parameterization and diagnostics through PROFIBUS |

Group function

For the user-friendly parameterization of numerous devices or applications of the same type, the programs of the SIRIUS ES software family offer a group function which enables the parameterization of several devices to be read out or written through PROFIBUS/PROFINET. In conjunction with typicals it is even possible to selectively adapt the same parameters in any number of parameterizations.

Teleservice through MPI

The SIMOCODE ES Premium version supports the use of MPI Teleservice (comprising the Teleservice software and various Teleservice adapters) for remote diagnostics of the devices. This facilitates diagnostics and maintenance, and it shortens response times for service purposes.

Types of delivery and license

SIMOCODE ES is available as follows:

- **Floating license** – the license for any one user at any one time
 - Authorizes any one user
 - Independent of the number of installations (unlike the single license which is allowed to be installed once only)
 - Only the actual use of the program has to be licensed
 - Trial license (free use of all program functions for 14 days for test and evaluation purposes, included on every product CD, available in the download file of the SIRIUS ES program in the Service&Support portal)

Following delivery versions are available in addition for SIMOCODE ES 2007:

- **Upgrade**
Switching from an old to a new version with expanded functions, e.g. upgrade from SIMOCODE ES 2004 to SIMOCODE ES 2007
- **Powerpack**
Special pack for switching within the same software version to a more powerful version with more functionality, e.g. Powerpack SIMOCODE ES 2007 Premium for switching from Standard to Premium
- **Software Update Service**
To keep you up to date at all times we offer a special service which supplies you automatically with all service packs and upgrades.
- **License download**
User-friendly license key download from our Mall (for selected countries) as an easy and quick way for you to receive additional licenses for your software.
For more information see www.siemens.com/tia-online-software-delivery.

Parameterization, Configuration and Visualization with SIRIUS

SIMOCODE ES

Benefits

- Easy parameterization reduces the amount of engineering work and shortens start-up times
- Clear plant documentation by means of graphic presentation
- Detailed information, also when there are faults, is a help for maintenance personnel and shortens downtimes
- Stand-alone version and integration in SIMATIC STEP 7 enable universal use
- Parameter changes are also possible during normal operation
- Consistent data storage and easy configuration by means of integration in TIA (Totally Integrated Automation)

Selection and ordering data

Parameterization and service software for SIMOCODE pro 3UF7

- Delivered without PC cable

| Version | DT | Article No. | Price per PU | PU (UNIT, SET, M) | PS* | PG |
|---------|----|-------------|--------------|-------------------|-----|----|
|---------|----|-------------|--------------|-------------------|-----|----|

SIMOCODE ES 2007 Basic



Floating license for one user

Engineering software, software and documentation on CD, 3 languages (German/English/French), communication through system interface

- License key on USB stick, Class A
- License key download, Class A

| | | | | |
|---|---------------------------|---|--------|-----|
| ▶ | 3ZS1312-4CC10-0YA5 | 1 | 1 unit | 42J |
| ▶ | 3ZS1312-4CE10-0YB5 | 1 | 1 unit | 42J |

3ZS1312-4CC10-0YA5

SIMOCODE ES 2007 Standard

Floating license for one user

Engineering software, software and documentation on CD, 3 languages (German/English/French), communication through system interface, integrated graphics editor

- License key on USB stick, Class A
- License key download, Class A

| | | | | |
|---|---------------------------|---|--------|-----|
| ▶ | 3ZS1312-5CC10-0YA5 | 1 | 1 unit | 42J |
| ▶ | 3ZS1312-5CE10-0YB5 | 1 | 1 unit | 42J |

Upgrade for SIMOCODE ES 2004 and later

| | | | | |
|---|---------------------------|---|--------|-----|
| A | 3ZS1312-5CC10-0YE5 | 1 | 1 unit | 42J |
|---|---------------------------|---|--------|-----|

Floating license for one user, engineering software, software and documentation on CD, license key on USB stick, Class A, 3 languages (German/English/French), communication through system interface, integrated graphics editor

Powerpack for SIMOCODE ES 2007 Basic

| | | | | |
|---|---------------------------|---|--------|-----|
| A | 3ZS1312-5CC10-0YD5 | 1 | 1 unit | 42J |
|---|---------------------------|---|--------|-----|

Floating license for one user, engineering software, license key on USB stick, Class A, 3 languages (German/English/French), communication through system interface, integrated graphics editor

Software Update Service

| | | | | |
|---|---------------------------|---|--------|-----|
| ▶ | 3ZS1312-5CC10-0YL5 | 1 | 1 unit | 42J |
|---|---------------------------|---|--------|-----|

For 1 year with automatic extension, assuming the current software version is in use, engineering software, software and documentation on CD, communication through system interface, integrated graphics editor

Notes:

Please order PC cable separately, [see page 14/27](#).

For description of the software versions [see page 14/25](#).

Parameterization, Configuration and Visualization with SIRIUS

SIMOCODE ES

| Version | DT | Article No. | Price per PU | PU (UNIT, SET, M) | PS* | PG |
|--|----|---------------------------|--------------|-------------------|--------|-----|
| SIMOCODE ES 2007 Premium | | | | | | |
| Floating license for one user | | | | | | |
| Engineering software, software and documentation on CD, 3 languages (German/English/French), communication through PROFIBUS/PROFINET or system interface, integrated graphics editor, STEP7 Object Manager | | | | | | |
| • License key on USB stick, Class A | ► | 3ZS1312-6CC10-0YA5 | | 1 | 1 unit | 42J |
| • License key download, Class A | ► | 3ZS1312-6CE10-0YB5 | | 1 | 1 unit | 42J |
| Upgrade for SIMOCODE ES 2004 and later | A | 3ZS1312-6CC10-0YE5 | | 1 | 1 unit | 42J |
| Floating license for one user, engineering software, software and documentation on CD, license key on USB stick, Class A, 3 languages (German/English/French), communication through PROFIBUS/PROFINET or system interface, integrated graphics editor, STEP7 Object Manager | | | | | | |
| Powerpack for SIMOCODE ES 2007 Standard | A | 3ZS1312-6CC10-0YD5 | | 1 | 1 unit | 42J |
| Floating license for one user, engineering software, license key on USB stick, Class A, 3 languages (German/English/French), communication through PROFIBUS/PROFINET or system interface, integrated graphics editor, STEP7 Object Manager | | | | | | |
| Software Update Service | ► | 3ZS1312-6CC10-0YL5 | | 1 | 1 unit | 42J |
| For 1 year with automatic extension, assuming the current software version is in use, engineering software, software and documentation on CD, communication through PROFIBUS/PROFINET or system interface, integrated graphics editor, STEP7 Object Manager | | | | | | |

Notes:

Please order PC cable separately, see [Accessories](#).

For description of the software versions see [page 14/25](#).

Accessories

| Version | DT | Article No. | Price per PU | PU (UNIT, SET, M) | PS* | PG |
|---|----|-------------|--------------|-------------------|-----|----|
| Optional accessories | | | | | | |
| RS 232 PC cables | | | | | | |
| For connecting to the serial interface of a PC/PG, for communication with SIMOCODE ES through the system interface | | | | | | |
| USB PC cables | | | | | | |
| For connecting to the USB interface of a PC/PG, for communication with SIMOCODE ES through the system interface | | | | | | |
| USB/serial adapters | | | | | | |
| For connecting an RS 232 PC cable to the USB interface of a PC, recommended for use in conjunction with SIMOCODE ES | | | | | | |



3UF7940-0AA00-0

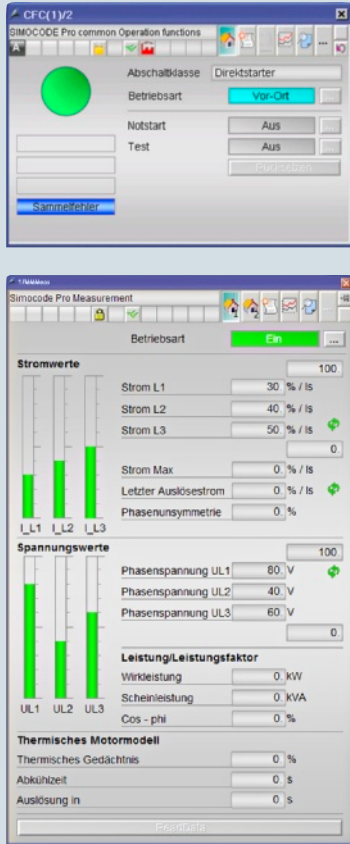


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Parameterization, Configuration and Visualization with SIRIUS

SIMOCODE pro block library for SIMATIC PCS 7

Overview

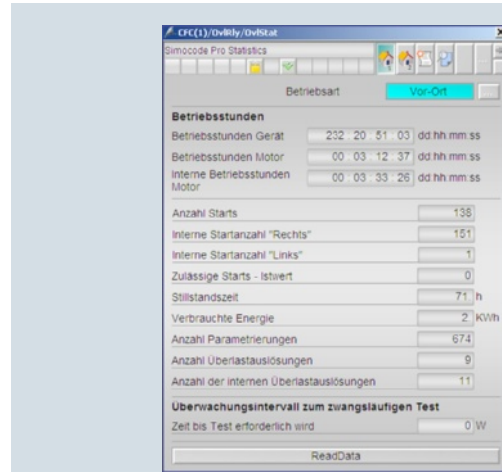


Advanced Process Library (APL) - faceplates and blocks for control and measured data of the SIMOCODE pro library for PCS 7

The PCS 7 block library can be used for simple and easy integration of SIMOCODE pro into the SIMATIC PCS 7 process control system. One focus here is on easy configuration, because the number of required configuration steps is reduced crucially. The configuration of the modules is based on the PCS 7 standard configuration processes and is optimally harmonized with the functions of SIMOCODE pro. Users who have previously integrated conventional motor feeders into PCS 7 will therefore find it easy to switch to SIMOCODE pro.

Types of delivery and license

The SIMOCODE pro PCS 7 block library supplied on CD-ROM allows users to run the required engineering software on an engineering station (single license) including the runtime software for executing the AS modules in an automation system (single license). If the AS modules are to be used in additional automation systems, the corresponding number of runtime licenses are required which are supplied without a data carrier.




Advanced Process Library (APL) - faceplates and blocks for statistical data of the SIMOCODE pro library for PCS 7

Benefits


- Uniform and continuous integration into SIMATIC PCS 7
- Standardized blocks for simple integration and optimal operation
- Greater process transparency due to greater information density in the process control system

Selection and ordering data

| Version | DT | Article No. | Price per PU | PU (UNIT, SET, M) | PS* | PG |
|---|----|--|-----------------|-------------------------|--------|-----|
| SIMOCODE pro block library for SIMATIC PCS 7 Version V8 with Advanced Process Library (APL) | | | | | | |
|  3ZS1632-1XX02-0YA0 | | Engineering software V8 NEW ▶ | | 1 | 1 unit | 42J |
| | | For one engineering station (single license) including runtime software for execution of the AS modules in an automation system (single license), German/English Scope of supply: AS modules and faceplates for integrating SIMOCODE pro into the PCS 7 process control system, with Advanced Process Library, for PCS 7 version V8.0 Type of delivery: Software and documentation on CD, one license for one engineering station, one license for one automation system | | | | |
| | | Runtime license V8 NEW ▶ | | 1 | 1 unit | 42J |
| | | For execution of the AS modules in an automation system (single license) Required for using the AS modules of the engineering software V8 within a plant Type of delivery: One license for one automation system, without software and documentation | | | | |
| | | Upgrade for PCS 7 block library SIMOCODE pro, V6.0 or V7 to version SIMOCODE pro V8 NEW A | | 1 | 1 unit | 42J |
| | | For one engineering station (single license) including runtime software for execution of the AS modules in an automation system (single license), German/English Scope of supply: AS modules and faceplates for integrating SIMOCODE pro into the PCS 7 process control system, with Advanced Process Library, for PCS 7 version V8.0 Type of delivery: Software and documentation on CD, one license for one engineering station, one license for one automation system | | | | |

Parameterization, Configuration and Visualization with SIRIUS

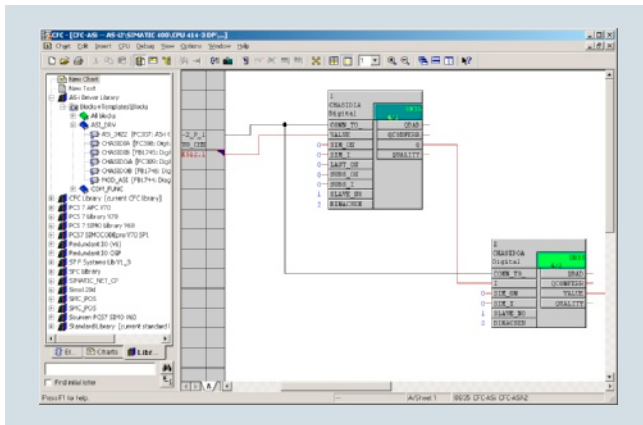
SIMOCODE pro block library for SIMATIC PCS 7

| Version | DT | Article No. | Price per PU | PU (UNIT, SET, M) | PS* | PG |
|--|----|---|-----------------|-------------------------|--------|-----|
| SIMOCODE pro block library for SIMATIC PCS 7 Version 7 | | | | | | |
|  3UF7982-0AA00-0 | | ▶ Engineering software V7 | | 1 | 1 unit | 42J |
| | | For one engineering station (single license) including runtime software for execution of the AS modules in an automation system (single license), German/English/French Scope of supply: AS modules and faceplates for integrating SIMOCODE pro into the PCS 7 process control system, for PCS7 version V7.0/V7.1 Type of delivery: Software and documentation on CD, one license for one engineering station, one license for one automation system | | | | |
| | | ▶ Runtime license V7 | | 1 | 1 unit | 42J |
| | | For execution of the AS modules in an automation system (single license) Required for using the AS modules of the engineering software V7 or the engineering software migration V7-V8 on an additional automation system within a plant Type of delivery: One license for one automation system, without software and documentation | | | | |
| | A | ▶ Upgrade for PCS 7 block library SIMOCODE pro, V6.0 or V6.1 to version SIMOCODE pro V7.0/V7.1 | | 1 | 1 unit | 42J |
| | | For one engineering station (single license) including runtime software for execution of the AS modules in an automation system (single license), German/English/French Scope of supply: AS modules and faceplates for integrating SIMOCODE pro into the PCS 7 process control system, for PCS7 version V7.0 or V7.1 Type of delivery: Software and documentation on CD, one license for one engineering station, one license for one automation system | | | | |
| | | ▶ Engineering software migration V7-V8 NEW | | 1 | 1 unit | 42J |
| | | For upgrading (migrating) an existing engineering software V7 of the SIMOCODE pro block library for PCS 7 Conditions of use: Availability of the engineering software V7 (license) of the SIMOCODE pro block library for PCS 7 for the PCS 7 version V7.0 or V7.1 The engineering software migration V7-V8 can be installed directly onto a system with PCS 7 version V8.0; installation of the previous version is unnecessary. For one engineering station (single license) including runtime software for execution of the AS modules in an automation system (single license), German/English/French Scope of supply: AS modules and faceplates for integrating SIMOCODE pro into the PCS 7 process control system, for PCS 7 version V8.0 Type of delivery: software and documentation on CD, license for upgrading an existing license for one engineering station and a plant's assigned runtime licenses | | | | |

More information

Programming and Operating Manual SIMOCODE pro Library for
PCS 7 see
<http://support.automation.siemens.com/WW/view/en/49963525>.

Overview



AS-Interface block library for SIMATIC PCS 7: User interfaces

The AS-Interface block library for PCS 7 is integrated in the SIMATIC PCS 7 process control system and expands it for integration of the AS-Interface system.

As the result, the advantages of AS-Interface such as the considerable reduction of wiring outlay for distributed actuators/sensors and very simple installation can also be used in a system based on PCS 7.

The library contains modules for accessing the I/O data of AS-i slaves, modules for diagnostics of the AS-i system, and a faceplate for the PCS 7 Maintenance Station.

Supported AS-Interface modules

The AS-Interface block library for PCS 7 can be used with the following AS-i master and link modules:

- CP 343-2 (in ET 200M station) 6GK7343-2AH01-0XA0
- CP 343-2P (in ET 200M station) 6GK7343-2AH11-0XA0
- DP/AS-i LINK Advanced single master 6GK1415-2BA10
- DP/AS-i LINK Advanced double master 6GK1415-2BA20

The AS-i CP 343-2 and CP 343-2P masters are supported within an ET 200M station connected through PROFIBUS.

For direct connection to PROFIBUS it is possible to use DP/AS-i LINK Advanced as an AS-i single master and double master.

Digital AS-i standard slaves and A/B slaves (according to AS-Interface Specification V 3.0) can be used on the CP 343-2 and CP 343-2P.

In combination with DP/AS-i LINK Advanced it is also possible to integrate analog AS-i slaves.

Hardware and software requirements

The library requires PCS 7 version V6.1, V7.0 or V7.1 and PCS 7 version V8.0.

Types of delivery and license

The block library supplied on CD-ROM allows the user to run the required engineering software on the engineering station (single license) including the runtime software for executing the AS modules in an automation system (single license).

If the AS modules are to be used in additional automation systems, the corresponding number of runtime licenses are required which are supplied without a data carrier.

No additional licenses are required in order to use the faceplates on further operator stations.

Benefits

- Easy connection of AS-Interface to PCS 7
- Engineering work reduced to positioning and connecting the blocks in the CFC
- With no additional configuring steps required for connection to the PCS 7 Maintenance Station, diagnostics for the AS-i system is optimally guaranteed.


Application

The AS-Interface block library for PCS 7 is used in systems based on PCS 7 where the actuators and sensors are to be connected using AS-Interface.

Parameterization, Configuration and Visualization with SIRIUS

AS-Interface block library for SIMATIC PCS 7

Selection and ordering data

| Version | DT | Article No. | Price per PU | PU (UNIT, SET, M) | PS* | PG |
|---|----|--|-----------------|----------------------------|--------|-----|
| AS-Interface block library for PCS 7 | | | | | | |
|  3ZS1635-1XX01-0YA0 | ▶ | Engineering software V7 | | 1 | 1 unit | 42C |
| | | <p>For one engineering station (single license) including runtime software for execution of the AS modules in an automation system (single license), German/English</p> <p>Scope of supply: AS modules and faceplates for integrating AS-Interface into the PCS 7 process control system, for PCS 7 version V6.1, V7.0 or V7.1</p> <p>Type of delivery: Software and documentation on CD, one license for one engineering station, one license for one automation system</p> | | | | |
| | ▶ | Runtime license V7 | | 1 | 1 unit | 42C |
| | | <p>For execution of the AS modules in an automation system (single license)</p> <p>Required for using the AS modules of the engineering software V7 or the engineering software migration V7-V8 on an additional automation system within a plant</p> <p>Type of delivery: One license for one automation system, without software and documentation</p> | | | | |
| | ▶ | Engineering software migration V7-V8 | | 1 | 1 unit | 42C |
| | | <p>For upgrading (migrating) an existing engineering software V7 of the AS-Interface block library for PCS 7</p> <p>Conditions of use: Availability of the engineering software V7 (license) of the AS-Interface block library for PCS 7 for the PCS 7 version V6.1, V7.0 or V7.1</p> <p>The engineering software migration V7-V8 can be installed directly onto a system with PCS 7 version V8.0; installation of the previous version is unnecessary.</p> <p>For one engineering station (single license) including runtime software for execution of the AS modules in an automation system (single license), German/English</p> <p>Scope of supply: AS modules and faceplates for integrating AS-Interface into the PCS 7 process control system, for PCS 7 version V 8.0</p> <p>Type of delivery: software and documentation on CD, license for upgrading an existing license for one engineering station and a plant's assigned runtime licenses</p> | | | | |

More information

Programming Manual for the PCS 7 Block Library for AS-Interface [see](http://support.automation.siemens.com/WW/view/en/46504691)
<http://support.automation.siemens.com/WW/view/en/46504691>.

Note:

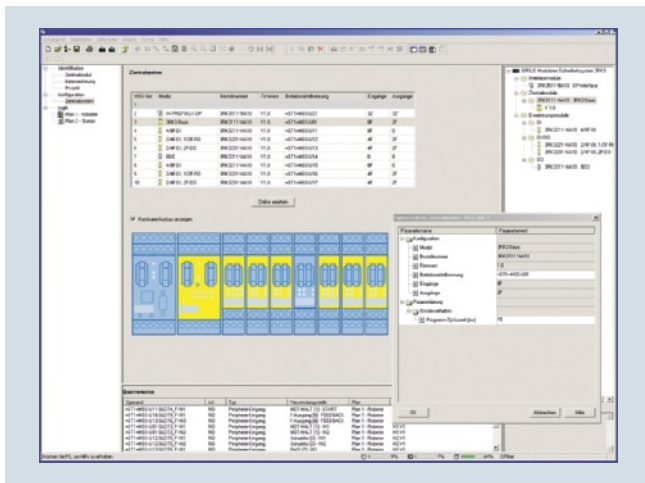
The Programming Manual is valid for engineering software V7 and engineering software migration V7-V8.

Overview

Modular Safety System ES is the engineering software for the configuration, start-up and diagnostics of the 3RK3 Modular Safety System. The software combines the configuring of the hardware, the parameterization of the safety functions, and the testing and diagnostics of the safety system.

Hardware configuration

The configuration defines the system's hardware layout. It lays down which modules are used in the system: A central unit as a safe control system including onboard peripherals, expansion modules with inputs and outputs, an interface module for connecting to PROFIBUS. For better clarity the layout is shown in a graphic presentation. In addition, the project data on the AS-i bus can be obtained online or configured from the AS-i library. For each module, it is optionally possible to issue an equipment ID which is shown in the logic diagram for identification of the inputs and outputs.



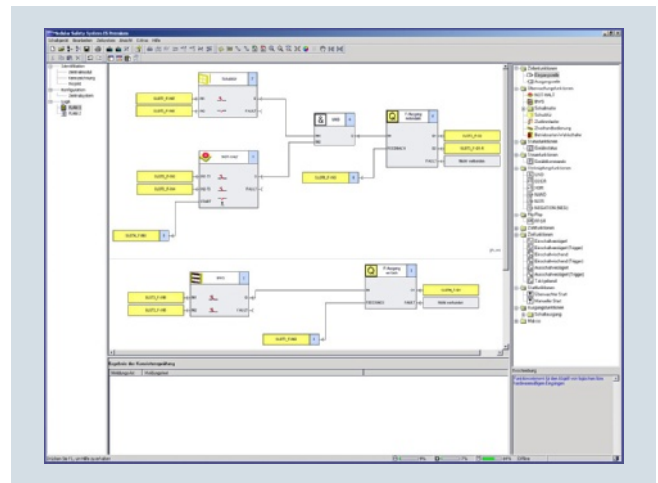
Definition of the hardware layout

Graphic parameterizing of the safety logic by Drag & Drop

The functionality of the safety logic is laid down with a graphics editor designed for intuitive operation. Safe monitoring functions (EMERGENCY-STOP, non-contact protective devices/light arrays, protective doors, etc.), output functions and logic functions (AND/OR operations, counting function, time functions, etc.), non-safety-related input/output functions, device status functions and control functions can be dragged from the extensive functions catalog onto the work interface by Drag&Drop. Depending on the version, each function has several input and output connecting points through which the functions can be interconnected by simple mouse clicks. Double-clicking on a function symbol opens the related features dialog window in which all the parameters can be displayed and configured: Scope of the function's inputs and outputs, configuring the channel type (single-/two-channel, NC contact/NO contact), activating crossover detection, defining start options, assigning the hardware inputs and outputs, etc. Of course each function can be issued with an individual name so that e.g. the position of a safety switch in the plant can be documented.

The safety logic can be divided into several diagrams in order to enable structured processing of the entire plant. The user can freely position the functions on a quasi infinitely large drawing board, whereby the connecting lines are drawn automatically. If there is not enough space, more pages are automatically added to the diagram in horizontal or vertical direction. Connecting lines extending over several pages are automatically issued with cross-references during print-out. If required in the interest of clarity, the user can divide a connecting line manually into two segments, whereby the mutual reference is marked by reference arrows. For further documentation, freely compilable comment texts can be placed at any point in the diagram. Every point in the logic diagram can be processed with ease by dragging and zooming.

Every project can be saved as a file and be password-protected from unauthorized access.



Processing the safety functions in the graphics editor

AS-Interface

Evaluation of the AS-i slaves connected to the AS-i bus is also parameterized using the tried and tested method described above. The CTT2 diagnostics slave allows cyclical and acyclical diagnostics to be carried out without difficulty.

In order to be able to use the AS-i functionalities, an Advanced central unit or ASIsafe (basic/extended) must be used.

User prompting during start-up and maintenance

To start up the 3RK3 Modular Safety System, the created project file is uploaded to the device. There are two ways of doing this:

- Connect the serial (COM) or USB interface of the PC to the device using an appropriate connection cable.
- Use the DP interface to download the parameterization through any PROFIBUS node.

Access to the device can be password-protected.

After the project is loaded, the user switches the device by means of the software from configuring mode to test mode in which the safety functions are tested.

Activating the diagnostics shows the status of the individual functions in the graphic logic diagram by means of different colors and symbols. In addition, the signal status of each input and output can be manually overwritten ("forcing").

Modular Safety System ES

If the test is completed successfully, the user releases the configuration and switches the device to protection mode, in which case "forcing" is automatically deactivated.

Service personnel can activate the graphic diagnostics in protection mode as well. The I&M (Identification & Maintenance) data saved in the device facilitate maintenance.

Efficient engineering with three program versions

| Modular Safety System ES | Basic | Standard | Premium |
|--|-------|----------|---------|
| Access through the local interface on the device | ✓ | ✓ | ✓ |
| Parameter assignment | ✓ | ✓ | ✓ |
| Operating | ✓ | ✓ | ✓ |
| Diagnostics | ✓ | ✓ | ✓ |
| Test | ✓ | ✓ | ✓ |
| Integrated graphics editor | ✓ | ✓ | ✓ |
| Importing/exporting parameters | -- | ✓ | ✓ |
| Comparison functions | -- | ✓ | ✓ |
| Comfort functions | -- | ✓ | ✓ |
| Terminal designator | -- | ✓ | ✓ |
| Work on sub-diagrams | -- | ✓ | ✓ |
| Standard-compliant printout according to EN ISO 7200 | ✓ | ✓ | ✓ |
| Downloading parameterization through PROFIBUS | -- | -- | ✓ |
| Online diagnostics using PROFIBUS | -- | -- | ✓ |
| Creating, importing and exporting macros | -- | -- | ✓ |

✓ Function available

-- Function not available

Additional functions

- The program interface language can be switched during use between German, English and French
- A context-sensitive help function provides useful assistance with questions concerning the use of the program
- A consistency check informs clearly about function assignment errors; Checks are carried out automatically when a project is saved and during the configuration test, but they can also be initiated manually
- Lists of symbols and cross-references can be issued output for effective processing of the project file
- Standards-conform printouts:
The programs of the SIRIUS ES software family make machine documentation far easier. They enable parameterization printouts according to EN ISO 7200. The elements to be printed are easy to select and group as required.

System requirements

| Modular Safety System ES 2008 parameterization, start-up and diagnostics software (including service pack 3) for the 3RK3 Modular Safety System | |
|---|--|
| Operating system | Windows XP Professional (Service Pack 2 or 3), Windows 7 32/64 bit Professional/Ultimate/Enterprise (Service Pack 1) |
| Processor | ≥ Pentium 800 MHz/≥ 1 GHz (Windows 7) |
| RAM | ≥ 512 Mbyte (Windows XP Professional)/≥ 1 GB (Windows 7 32 bit)/≥ 2 GB (Windows 7 64 bit) |
| Monitor resolution | ≥ 1024 x 768 |
| Free space on hard disk | ≥ 280 Mbyte |
| CD-ROM/DVD drive | Yes (only when installing from CD) |
| Interface | Depends on PC cable: serial (COM) or USB |
| PC cables for PC/PG communication | Yes |

Types of delivery and license

Modular Safety System ES 2008 is available as follows:

- Floating license
 - Package contains the software on CD and a floating license on a USB stick
 - The software can be installed on any number of PCs
 - The floating license enables the software to be used by 1 user; after use, it can be transferred from the one PC to another
 - The CD also contains a trial license for test and evaluation purposes (free use of all program functions on any PC for a period of 14 days).

Following delivery versions are available in addition for Modular Safety System ES 2008:

- Powerpack
Special pack for switching within the same software version to a more powerful version with more functionality, e. g. Powerpack Modular Safety System ES 2008 for switching from Basic to Standard and from Standard to Premium.
- Software Update Service
To keep you up to date at all times we offer a special service which supplies you automatically with all service packs and upgrades on CD (floating license not included in delivery)
- License download
User-friendly license key download from our Mall (for selected countries) as an easy and quick way for you to receive additional licenses for your software.
For more information see www.siemens.com/tia-online-software-delivery.

The software can be downloaded free from the Internet (without floating license) see <http://support.automation.siemens.com/WW/view/en/30319329>.

The download file also contains a trial license for test and evaluation purposes that allows free use of all program functions for a period of 14 days. A floating license is needed to use the software after the 14 days.

Benefits

- Convenient parameterization, operation, monitoring and testing by means of a user-friendly and clear-cut user interface
- Reliable diagnostic tool
- All functions, such as safety and logic functions, are available as modules, and are easy to link to one another.
- Automatic creation of comprehensive documentation of safety functions

Selection and ordering data

Parameterization, start-up and diagnostics software for the 3RK3 modular safety system

- Delivered without PC cable

| Version | DT | Article No. | Price per PU | PU (UNIT, SET, M) | PS* | PG |
|---------|----|-------------|--------------|-------------------|-----|----|
|---------|----|-------------|--------------|-------------------|-----|----|

Modular Safety System ES 2008 Basic



Floating license for one user

Engineering software in limited-function version for diagnostics purposes, software and documentation on CD, 3 languages (German/English/French), communication through the system interface

- License key on USB stick, Class A
- License key download, Class A

A



3ZS1314-4CC10-0YA5
3ZS1314-4CE10-0YB5

1

1 unit

42B

1

1 unit

42B

3ZS1314-4CC10-0YA5

Modular Safety System ES 2008 Standard



Floating license for one user

Engineering software, software and documentation on CD, 3 languages (German/English/French), communication through system interface

- License key on USB stick, Class A
- License key download, Class A

B



3ZS1314-5CC10-0YA5
3ZS1314-5CE10-0YB5

1

1 unit

42B

1

1 unit

42B

Powerpack for MSS ES 2008 Basic to Standard

A

3ZS1314-5CC10-0YD5

1

1 unit

42B

Floating license for one user, engineering software, license key on USB stick, Class A, 3 languages (German/English/French), communication through the system interface

Software Update Service

**3ZS1314-5CC10-0YL5**

1

1 unit

42B

For 1 year with automatic extension, assuming the current software version is in use, engineering software, software and documentation on CD, communication through the system interface

3ZS1314-5CC10-0YA5

Modular Safety System ES 2008 Premium



Floating license for one user

Engineering software, software and documentation on CD, 3 languages (German/English/French), communication through PROFIBUS or the system interface, online diagnostics via PROFIBUS, creating, importing and exporting macros

- License key on USB stick, Class A
- License key download, Class A

NEW

B

3ZS1314-6CC10-0YA5

1

1 unit

42B

NEW

**3ZS1314-6CE10-0YB5**

1

1 unit

42B

Powerpack for MSS ES 2008 Standard to Premium

NEW

A

3ZS1314-6CC10-0YD5

1

1 unit

42B

Floating license for one user, engineering software, license key on USB stick, Class A, 3 languages (German/English/French), communication through PROFIBUS or the system interface, online diagnostics via PROFIBUS, creating, importing and exporting macros

Software Update Service

NEW

**3ZS1314-6CC10-0YL5**

1

1 unit

42B

For 1 year with automatic extension, assuming the current software version is in use, engineering software, software and documentation on CD, communication through PROFIBUS or the system interface, online diagnostics via PROFIBUS, creating, importing and exporting macros

3ZS1314-6CC10-0YA5

Notes:



Please order PC cable separately, [see page 14/36](#).

For description of the software versions [see page 14/34](#).

Parameterization, Configuration and Visualization with SIRIUS

Modular Safety System ES

Accessories

| Version | DT | Article No. | Price per PU | PU (UNIT, SET, M) | PS* | PG |
|--|----|--|-----------------|-------------------------|--------|-----|
| Optional accessories | | | | | | |
|  3UF7940-0AA00-0 | | RS 232 PC cables ▶ For connecting to the serial interface of a PC/PG, for communication with the 3RK3 Modular Safety System through the system interface | | 1 | 1 unit | 42J |
| | | USB PC cables ▶ For connecting to the USB interface of a PC/PG, for communication with the 3RK3 Modular Safety System through the system interface, recommended for use in connection with 3RK3 Modular Safety System | | 1 | 1 unit | 42J |
|  3UF7941-0AA00-0 | B | USB/serial adapters For connecting a RS 232 PC cable to the USB interface of a PC | | 1 | 1 unit | 42J |