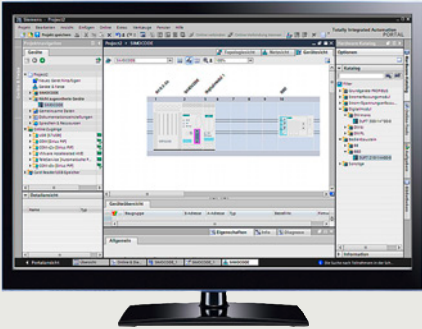


Parameterization, configuration and visualization with SIRIUS



	<b>Price groups</b> PG 368, 41L, 42B, 42C, 42D, 42H, 42J, 42S
14/2	<b>Introduction</b>
14/4	<b>Simulation Tool for Soft Starters (STS)</b>
14/5	<b>SIRIUS Soft Starter ES (TIA Portal)</b>
14/7	<b>SIRIUS 3RW soft starter block library for SIMATIC PCS 7</b>
14/10	<b>Motor Starter ES</b>
14/12	<b>SIMOCODE ES (TIA Portal)</b>
14/15	<b>SIMOCODE pro block library for SIMATIC PCS 7</b>
14/19	<b>AS-Interface block library for SIMATIC PCS 7</b>
14/22	<b>SIRIUS Safety ES (TIA Portal)</b>
14/25	<b>SIRIUS Sim</b>

# Parameterization, configuration and visualization with SIRIUS

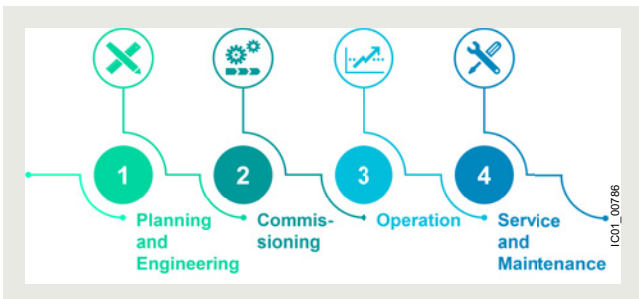
## Introduction

### Overview

#### More information

Industry Mall, see [www.siemens.com/product?3ZS1](http://www.siemens.com/product?3ZS1)

International competition, enormous cost pressure and time constraints, higher productivity and quality: Equipment and system planners and operators face a wide range of challenges in executing projects as efficiently and cost-effectively as possible. We provide extensive support in this process with our SIRIUS software applications to help users achieve the best possible results with SIRIUS products in a targeted and efficient manner.



Software applications for all phases of the project

Support provided by SIRIUS software applications is strongly oriented to the needs of the user in the specific phases of the project.

#### Planning

The TIA Selection Tool can be used for selection, configuration and ordering of SIRIUS products. Intelligent selection wizards check the compatibility of the configured components and enable error-free ordering, see [page 7](#) or [www.siemens.com/tst](http://www.siemens.com/tst).

Assistance with standard-compliant dimensioning and electrical planning is provided by Control Panel Design (CPD). At the push of a button you receive the appropriate switching and protection devices for your motor, including standard-compliant cable cross-sections and short-circuit values for fuseless and fused load feeders, see [page 8](#) or [www.siemens.com/cpd](http://www.siemens.com/cpd).

Convenient soft starter design is possible using the Simulation Tool for Soft Starters (STS), see [page 14/4](#).

#### Commissioning

The engineering programs of the SIRIUS ES software family are used for parameterization and commissioning of all software-configurable SIRIUS devices (such as SIMOCODE, soft starters and motor starters and 3SK2 safety relays).

The SIRIUS simulation tool can be used to quickly and easily test the generated functions and configurations in an office environment without having to be connected to any device.

The corresponding devices can also be easily and conveniently installed into the SIMATIC PCS 7 process control system with the PCS 7 block library, e.g. for SIMOCODE, soft starters, and AS-Interface. See the following individual product descriptions for details about the different packages.

#### Operation

Seamless embedding of SIRIUS devices in the Totally Integrated Automation Portal (TIA Portal) provides a variety of possibilities for operation and monitoring, e.g. with SIMATIC WinCC.

Linking of data to MindSphere, along with a corresponding application, also enables detailed evaluation and optimization with regard to device status and alarms and error messages.

#### Service and maintenance

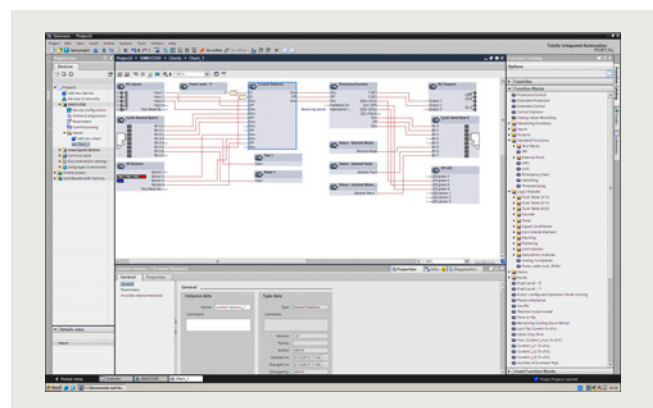
The engineering programs of the SIRIUS ES software family also provide support in this phase for diagnostics of the basic and fast SIRIUS devices and for detecting and easily eliminating faults. See the [following individual product descriptions](#) for details about the different packages.

#### Engineering software



SIRIUS ES engineering software (E-SW)

The SIRIUS ES programs, such as SIRIUS Safety ES, SIMOCODE ES or SIRIUS Soft Starter ES, are based on the central engineering framework Totally Integrated Automation Portal (TIA Portal), which provides users 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.



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

The SIRIUS ES programs (TIA Portal), such as SIRIUS Safety ES, SIRIUS Soft Starter ES and SIMOCODE ES, are available in two versions, which differ in terms of user-friendliness, scope of functions and price:

- **Basic**  
The basic variant contains all basic functions that are needed to parameterize devices. These include both parameterization functions and also operator control, diagnostics and test functions.  
It is available free of charge for downloading from the Siemens Industry Online Support Portal.
- **Professional**  
The Professional variants contain the complete functionality of the software packages. The functionality includes communication functions such as access via PROFIBUS/PROFINET and S7 routing.

The SIRIUS ES program Motor Starter ES is available in three versions (basic, standard, premium) which differ in their user-friendliness, scope of functions and price.

#### Note:

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

#### Types of licenses

The programs of the SIRIUS ES software family are available in the following license forms:

- Floating license – the license for any one user.
  - 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
  - License for parallel use of the TIA Portal version and of Version 2007 of SIRIUS ES (combo 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).

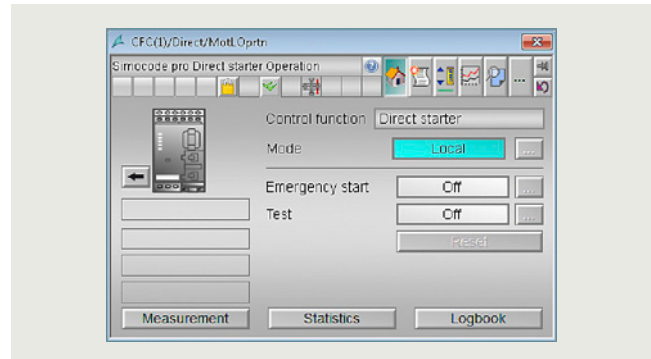
The following delivery versions are also available for a number of programs of the SIRIUS ES software family:

- **Upgrade**  
Switching from an old to a new version with expanded functions, e.g. upgrade from SIMOCODE ES 2007 to SIMOCODE ES V17.

#### Types of delivery

- **License/software download**  
Simply download your new software and license key from the internet via the Online Software Delivery (OSD) platform. After you have placed your order in our mall, you will receive your access data by email, which will allow you to immediately download the license or software you have ordered.  
For more information see [www.siemens.com/tia-online-software-delivery](http://www.siemens.com/tia-online-software-delivery).
- **Software Update Service**  
To keep you up to date at all times we offer a special service which automatically supplies you with all the service packs and upgrades within the SIRIUS ES (TIA Portal) range of programs.
- **Package delivery**  
The software is on a DVD and is delivered together with the license on a USB flash drive.

#### **Block libraries for SIMATIC PCS 7**



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

The corresponding devices can be easily and conveniently installed into the SIMATIC PCS 7 process control system with the PCS 7 block library, e.g. for SIMOCODE, soft starters, and AS-Interface. 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 licenses

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

#### **Notes on security**

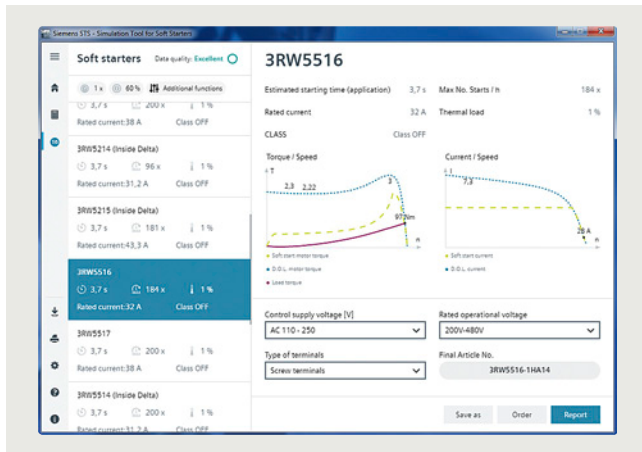
In order to protect plants, systems, machines and networks against cyber threats, it is necessary to implement – and continuously maintain – a holistic, state-of-the-art industrial security concept. Siemens products and solutions represent only one component of such a concept.

For more information about the subject of Industrial Security, see [www.siemens.com/industrialsecurity](http://www.siemens.com/industrialsecurity).

## Parameterization, configuration and visualization with SIRIUS

### Simulation Tool for Soft Starters (STS)

#### Overview

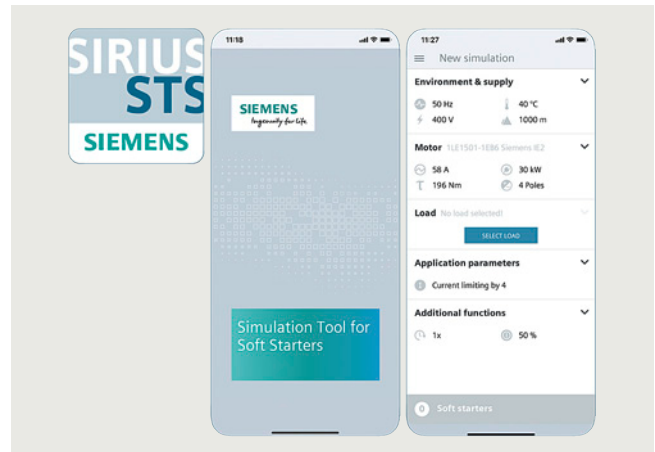


Easy input of motor and load data

#### More information

Simulation Tool for Soft Starters (STS), see <https://support.industry.siemens.com/cs/ww/en/view/101494917>

The Simulation Tool for Soft Starters (STS) provides a convenient means of designing soft starters using a simple, quick and easy-to-use interface. Entering the motor and load data will simulate the application and prompt suggestions for suitable soft starters.



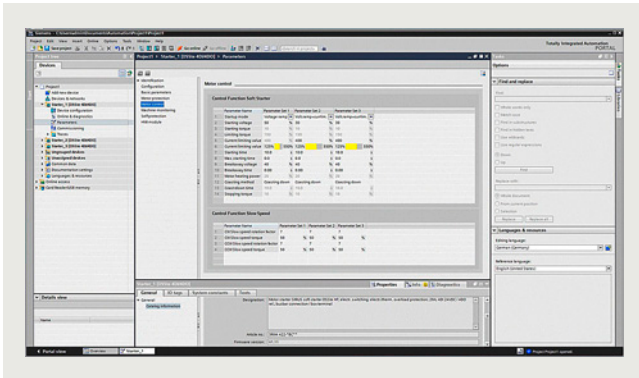
STS app

The Simulation Tool for Soft Starters (STS) is available free of charge as a download and as an app (for Android or iOS), see "More information".

#### Benefits

- Simple, quick and user-friendly operator interface
- Detailed and up-to-date Siemens motor database, including IE3 and IE4 motors
- Simulation of heavy starting up to CLASS 30
- Update-capable (e.g. motors, load types, functions)
- Fast simulations with minimum input data
- Immediate, graphical curve charts of start operations with limit values
- View in table form of suitable soft starters for the application

## Overview



Easy and clearly arranged parameter setting of the SIRIUS 3RW44 and 3RW55 soft starters with SIRIUS Soft Starter ES (TIA Portal)

### More information

Technical specifications and system requirements, see <https://support.industry.siemens.com/cs/ww/en/ps/24230/td>  
Download of the basic variant of Soft Starter ES, see <https://support.industry.siemens.com/cs/ww/en/view/109793076>

The SIRIUS Soft Starter ES (TIA Portal) software permits quick and easy parameterization, monitoring and diagnostics of SIRIUS 3RW44 and 3RW5 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.

The powerful SIRIUS Soft Starter ES Basic tool for startup or maintenance personnel is available for downloading free of charge in the Siemens Industry Online Support, see "More information".

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

However, use of SIRIUS Soft Starter ES as stand-alone software also provides these advantages.

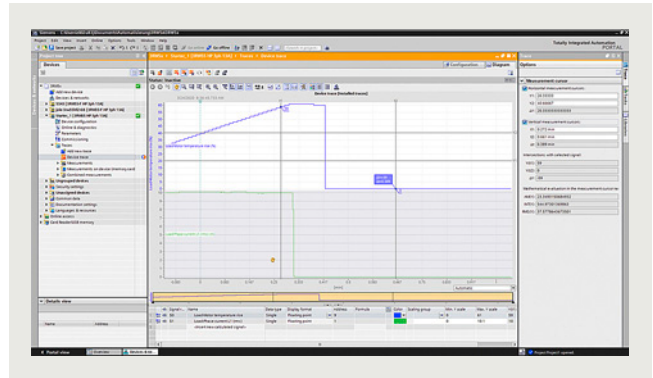
### Efficient engineering with two program versions

The SIRIUS Soft Starter ES (TIA Portal) software program is available in two versions, which differ in their user-friendliness, scope of functions and price.

SIRIUS Soft Starter ES	Basic	Professional
Access via the local interface on the device	✓	✓
Parameter assignment	✓	✓
Operating	✓	✓
Diagnostics	✓	✓
Expert list	--	✓
Parameter comparison	--	✓
Service data (slave pointer, statistics data)	--	✓
Trace	--	✓
Access via PROFIBUS/PROFINET	--	✓
Teleservice via MPI	✓	✓
Routing	--	✓
Bulk engineering (group function)	--	✓

✓ Function available

-- Function not available



Graphic presentation of measured values with the trace function (oscilloscope function) of SIRIUS Soft Starter ES (TIA Portal) Professional

### Additional functions

SIRIUS Soft Starter ES 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, 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 SIRIUS 3RW44 and 3RW55 soft starter device configuration and can manage them in global or project libraries. This way, individual modules, diagrams and complete device configurations can be saved as reusable elements for frequently occurring tasks.

#### Teleservice via MPI

SIRIUS Soft Starter ES (TIA Portal) 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.

## Parameterization, configuration and visualization with SIRIUS

### SIRIUS Soft Starter ES (TIA Portal)

#### 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 SIRIUS Soft Starter ES (TIA Portal) Professional version).
- Complete transparency thanks to printout, logbook and event memory
- High degree of user-friendliness – convenient user interface, with English, German, French, Italian, Spanish and Chinese as possible operating languages
- Time savings thanks to shorter startup times
- Fast, low-cost licensing using a simple licensing procedure (available online too)

#### Selection and ordering data

##### **SIRIUS Soft Starter ES (TIA Portal) parameterization and service software for SIRIUS 3RW44 and 3RW5 soft starters**

- Delivered without PC cable

Version	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
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#### SIRIUS Soft Starter ES V17 Basic

##### **Basic functional scope including Professional trial license**

Engineering software, class A, 6 languages (German/English/Chinese included, French/Italian/Spanish as a download), online functions via system interface

##### Type of delivery:

Software and documentation available free of charge as a download, see <https://support.industry.siemens.com/cs/ww/en/view/109793076>

#### SIRIUS Soft Starter ES V17 Professional



3ZS1320-6CC13-0YA5

##### **Floating license for one user**

Engineering software, class A, 6 languages (German/English/Chinese included, French/Italian/Spanish as a download), Combo license for parallel use of versions 2007 and V17 of SIRIUS ES, communication via system interface or PROFIBUS/PROFINET

##### Type of delivery:

- Software and documentation on DVD and floating license on USB flash drive
- Software and documentation as a download and floating license as a download

<b>3ZS1320-6CC13-0YA5</b>	1	1 unit	42H
<b>3ZS1320-6CE13-0YB5</b>	1	1 unit	42H

##### **Upgrade for Soft Starter ES 2007 Premium**

Engineering software, class A, 6 languages (German/English/Chinese included, French/Italian/Spanish as a download), Combo license for parallel use of versions 2007 and V17 of SIRIUS ES, online functions via system interface or PROFIBUS/PROFINET

##### Type of delivery:

- Software and documentation on DVD and floating license on USB flash drive

<b>3ZS1320-6CC13-0YE5</b>	1	1 unit	42H
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#### Notes:

Soft Starter ES Standard and Premium V14 to V15.1 licenses and Soft Starter ES V16 Professional licenses can also be used for Soft Starter ES V17 Professional.

For description of the software versions, see page 14/5.

#### Accessories

Version	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
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#### Optional accessories



3RW5950-0CH00

##### **Optional communications modules for SIRIUS 3RW5**

- PROFINET High-Feature with integrated switch
- PROFINET Standard
- PROFIBUS
- EtherNet/IP
- Modbus RTU
- Modbus TCP

<b>3RW5950-0CH00</b>	1	1 unit	42S
<b>3RW5980-0CS00</b>	1	1 unit	42S
<b>3RW5980-0CP00</b>	1	1 unit	42S
<b>3RW5980-0CE00</b>	1	1 unit	42S
<b>3RW5980-0CR00</b>	1	1 unit	42S
<b>3RW5980-0CT00</b>	1	1 unit	42S



# Parameterization, configuration and visualization with SIRIUS

## SIRIUS 3RW soft starter block library for SIMATIC PCS 7

### Overview

#### More information

Technical specifications, see  
<https://support.industry.siemens.com/cs/ww/en/ps/16710/td>  
 Overview of the available versions incl. programming manuals, Getting Started, updates and hotfixes, compatibility check

- For 3RW44, see  
<https://support.industry.siemens.com/cs/ww/en/view/109760625>
- For 3RW52 and 3RW55, see  
<https://support.industry.siemens.com/cs/ww/en/view/109770336>

The SIRIUS 3RW soft starter block library for PCS 7 can be used for simple and convenient integration of SIRIUS 3RW44, 3RW52 and 3RW55 soft starters into the SIMATIC PCS 7 process control system. The 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.

#### Integrated functionality for optimal process control for all process control systems

In addition to the general sensor technology, the motor feeder data are increasingly being integrated into the process control system. By integrating the SIRIUS 3RW44, 3RW52 and 3RW55 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 SIRIUS 3RW44, 3RW52 and 3RW55 soft starters 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, 3RW52 and 3RW55 soft starters into the SIMATIC PCS 7 process control system. The focus here is simple configuration. Functioning of the blocks is based on the PCS 7 standard libraries and is optimally harmonized with the functions of these soft starters.

Users who have previously integrated motor feeders with conventional technology via signal blocks and motor or valve blocks or, for example, already have experience with SIMOCODE blocks, are easily able to switch to SIRIUS 3RW44, 3RW52 and 3RW55.

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, 3RW52 and 3RW55 into SIMATIC PDM, the system-wide device parameterization and diagnostics of these soft starters are possible from a central point.

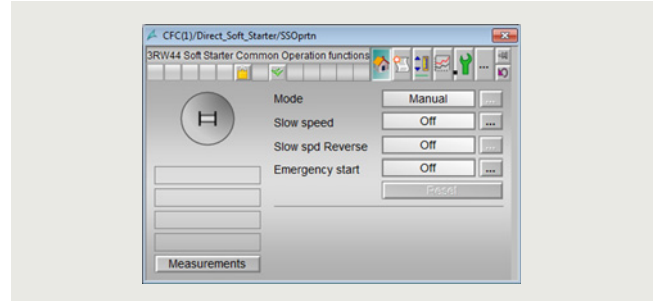
#### Motor block for direct control of the drive

The low-voltage motors started and protected by SIRIUS 3RW44, 3RW52 and 3RW55 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 these soft starters.

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 soft starter 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.



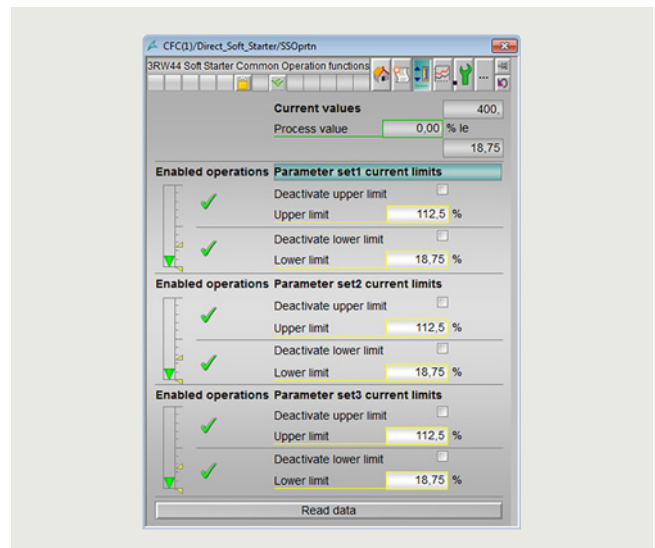
Faceplate of the motor block

#### 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 SIRIUS 3RW44, 3RW52 and 3RW55 soft starters are not only able to detect measured values here, but also to react if these values are exceeded or undershot, for example, via custom settings – with a motor shut-down 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 SIRIUS 3RW44, 3RW52 and 3RW55 soft starters have 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.

## Parameterization, configuration and visualization with SIRIUS

### SIRIUS 3RW 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
- With Advanced Process Library (APL)
- Greater process transparency due to greater information density in the I&C system
- System-wide device parameterization and diagnostics with SIMATIC PDM

#### Selection and ordering data

Version	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
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#### SIRIUS 3RW52 and 3RW55 soft starter block library for SIMATIC PCS 7 Version V9.1 with Advanced Process Library (APL)



3ZS1633-1XE51-0YA0

##### Engineering software V9.1

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

##### Scope of supply:

AS blocks and faceplates for integrating SIRIUS 3RW52 and 3RW55 into the PCS 7 process control system with Advanced Process Library, for PCS 7 version V9.1

##### Type of delivery:

One license for one engineering station, one license for one automation system

- Software and documentation as software download (OSD)

**3ZS1633-1XE51-0YA0**

1

1 unit

42H

##### Runtime license V9.1

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

Required for using the AS blocks of the engineering software V9.1 on an additional automation system within a plant

##### Type of delivery:

One license for one automation system, without software and documentation

- Certificate of License (CoL) in electronic form (OSD)<sup>1)</sup>

**3ZS1633-2XE51-0YB0**

1

1 unit

42H

#### SIRIUS 3RW52 and 3RW55 soft starter block library for SIMATIC PCS 7 Version V9 with Advanced Process Library (APL)



3ZS1633-1XX50-0YA0

##### Engineering software V9.0 + SP3

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

##### Scope of supply:

AS blocks and faceplates for integrating SIRIUS 3RW52 and 3RW55 into the PCS 7 process control system with Advanced Process Library, for PCS 7 version V9.0 + SP3

##### Type of delivery:

One license for one engineering station, one license for one automation system

- Software and documentation on CD
- Software and documentation as software download (OSD)

**3ZS1633-1XX50-0YA0**

1

1 unit

42H

**3ZS1633-1XE50-0YA0**

1

1 unit

42H

##### Runtime license V9.0 + SP3

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

Required for using the AS blocks of the engineering software V9.0 + SP3 on an additional automation system within a plant

##### Type of delivery:

One license for one automation system, without software and documentation

- Certificate of License (CoL) in paper form
- Certificate of License (CoL) in electronic form (OSD)<sup>1)</sup>

**3ZS1633-2XX50-0YB0**

1

1 unit

42H

**3ZS1633-2XE50-0YB0**

1

1 unit


42H

<sup>1)</sup> With a Certificate of License (CoL) in electronic form, the license is supplied via Online Software Delivery (OSD) as a PDF file. Notification of this with a download link is received by email.



# Parameterization, configuration and visualization with SIRIUS

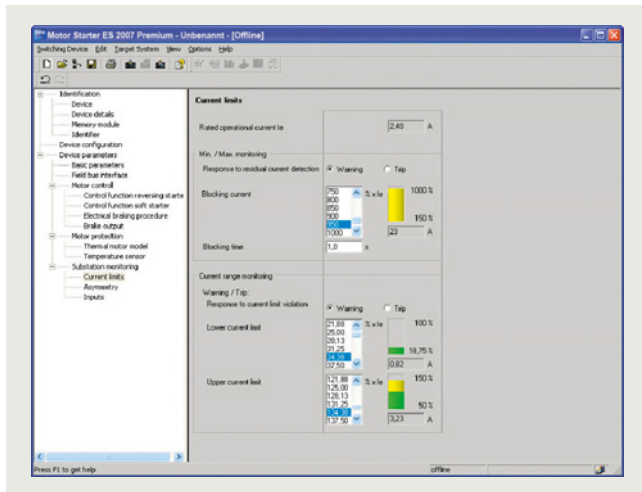
## SIRIUS 3RW soft starter block library for SIMATIC PCS 7

Version	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
<b>SIRIUS 3RW44 soft starter block library for SIMATIC PCS 7 version V9 with Advanced Process Library (APL)</b>					
 <p>3ZS1633-1XX03-0YA0</p>	<b>Engineering software V9</b> For one engineering station (single license) including runtime software for execution of the AS blocks in an automation system (single license), German/English <u>Scope of supply:</u> AS blocks and faceplates for integrating SIRIUS 3RW44 into the PCS 7 process control system with Advanced Process Library, for PCS 7 versions V9.0+SP2 <u>Type of delivery:</u> One license for one automation system, without software and documentation • Software and documentation on CD				
	<b>3ZS1633-1XX03-0YA0</b>		1	1 unit	42H
	<b>Runtime license V9</b> For execution of the AS blocks in an automation system (single license) Required for using the AS blocks of the engineering software V9.0+SP2 on an additional automation system within a plant <u>Type of delivery:</u> One license for one automation system, without software and documentation • Certificate of License (CoL) in paper form				
	<b>3ZS1633-2XX03-0YB0</b>		1	1 unit	42H

# Parameterization, configuration and visualization with SIRIUS

## Motor Starter ES

### Overview



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

#### More information

Technical specifications and system requirements, see <https://support.industry.siemens.com/cs/ww/en/ps/16713/td>

Motor Starter ES is used for startup, 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

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

Using Motor Starter ES, the communication-capable motor starters are easily parameterized during startup, 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.

#### Note:

The Motor Starter ES functionalities in relation to startup, parameterization and diagnostics are integrated directly in the TIA Portal from V17 and are accessible online for the SIMATIC ET 200pro, ET 200SP and M200D motor starters.

### 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 via the local interface on the device	✓	✓	✓
Parameter assignment	✓	✓	✓
Operating	✓	✓	✓
Diagnostics	--	✓	✓
Creation of templates	--	✓	✓
Comparison functions	--	✓	✓
Standard-compliant printout according to EN ISO 7200	--	✓	✓
Service data (slave pointer, statistics data)	--	✓	✓
Access via PROFIBUS	--	--	✓
Access via PROFINET	--	--	✓
S7 routing	--	--	✓
Teleservice via MPI	--	--	✓
STEP 7 object manager <sup>1)</sup>	--	--	✓
Trace function	--	✓	✓

✓ Function available

-- Function not available

<sup>1)</sup> Only for STEP 7 V5.x

### Additional functions

#### Standard-compliant printouts

The software tool greatly simplifies machine documentation. It enables parameterization printouts according to ISO 7200. The elements to be printed are easy to select and group as required.

#### Easy creation of templates

Templates can be created for devices and applications with only minimum differences in their parameters. These templates 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 via 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.

# Parameterization, configuration and visualization with SIRIUS

## Motor Starter ES

### 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, startup 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)

- Delivered without PC cable

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

#### Motor Starter ES 2007 Basic



3ZS1310-4CC10-0YA5

##### Floating license for one user

Engineering software in limited-function version for diagnostics purposes, class A, 3 languages (German/English/French), communication via system interface

##### Type of delivery:

- Software and documentation on CD and floating license on USB flash drive
- Floating license as a download

<b>3ZS1310-4CC10-0YA5</b>	1	1 unit	42D
<b>3ZS1310-4CE10-0YB5</b>	1	1 unit	42D

#### Motor Starter ES 2007 Standard



3ZS1310-5CC10-0YA5

##### Floating license for one user

Engineering software, class A, 3 languages (German/English/French), communication through the system interface

##### Type of delivery:

- Software and documentation on CD and floating license on USB flash drive
- Floating license as a download

<b>3ZS1310-5CC10-0YA5</b>	1	1 unit	42D
<b>3ZS1310-5CE10-0YB5</b>	1	1 unit	42D

#### Motor Starter ES 2007 Premium



3ZS1310-6CC10-0YA5

##### Floating license for one user

Engineering software, class A, 3 languages (German/English/French), communication via system interface or PROFIBUS/PROFINET, STEP 7 Object Manager

##### Type of delivery:

- Software and documentation on CD and floating license on USB flash drive
- Floating license as a download

<b>3ZS1310-6CC10-0YA5</b>	1	1 unit	42D
<b>3ZS1310-6CE10-0YB5</b>	1	1 unit	42D

For description of the software versions, see page 14/10.

### Accessories

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

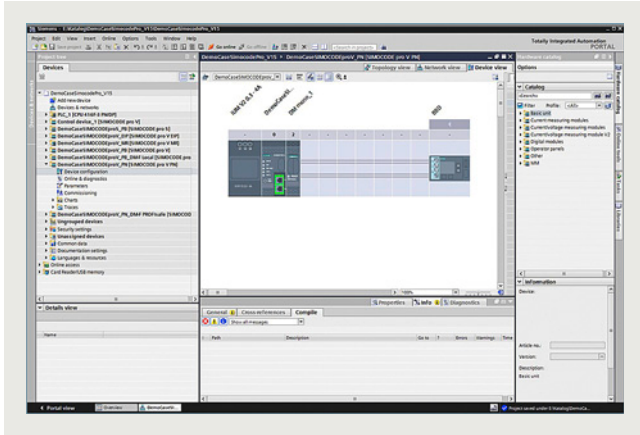
#### Optional accessories

<b>RS 232 interface cables</b> Serial data connection between ET 200pro MS/FC, M200D and laptop/PC/PG or MS	<b>3RK1922-2BP00</b>	1	1 unit	42D
<b>USB interface cables</b> Serial data connection between ET 200pro MS/FC, M200D and laptop/PC/PG or MS	<b>6SL3555-0PA00-2AA0</b>	1	1 unit	368
<b>USB/serial adapters</b> For connecting an RS 232 PC cable to the USB interface of a PC, recommended for use in conjunction with ET 200S/ECOFAST/ET 200pro motor starters	<b>3UF7946-0AA00-0</b>	1	1 unit	42J

# Parameterization, configuration and visualization with SIRIUS

## SIMOCODE ES (TIA Portal)

### Overview



Selection of SIMOCODE pro device configuration in SIMOCODE ES (TIA Portal)

#### More information

Industry Mall, see [www.siemens.com/product?3ZS1](http://www.siemens.com/product?3ZS1)

Technical specifications, see

<https://support.industry.siemens.com/cs/ww/en/ps/16716/td>

Software download

- SIMOCODE ES (TIA Portal), basic functional scope including Professional Trial License, see <https://support.industry.siemens.com/cs/ww/en/view/109793078>
- SIMOCODE ES 2007, see <https://support.industry.siemens.com/cs/ww/en/view/109750623>

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

SIMOCODE ES (TIA Portal) is available as a powerful successor to Version 2007, which is based on the central engineering framework Totally Integrated Automation Portal (TIA Portal).

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

However, use of SIMOCODE ES as stand-alone software also provides these advantages.

#### Two program versions

The user can choose between two versions of SIMOCODE ES:

- SIMOCODE ES Basic
- SIMOCODE ES Professional

The powerful SIMOCODE ES Basic tool for startup or maintenance personnel is available for downloading free of charge in the Siemens Industry Online Support, see "More information".

SIMOCODE ES Professional is a perfect tool for engineers or configuration engineers with its extended scope of functions and integrated graphics editor. Unlike the Basic version, SIMOCODE ES Professional also permits parameter assignment and diagnostics via PROFIBUS/PROFINET/Ethernet. 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/Ethernet.

SIMOCODE ES	Basic	Professional
Access via the local interface on the device	✓	✓
Parameter assignment in list form	✓	✓
Parameter assignment via expert list	--	✓
Bulk engineering	--	✓
Working with libraries	✓	✓
Parameter printing in list form	✓	✓
Operating	✓	✓
Diagnostics	✓	✓
Test	✓	✓
Service data	✓	✓
Analog value recording <sup>1)</sup>	✓	✓
Trend display of measured values	--	✓
Parameterizing with convenient graphical display	--	✓
Parameterizing with the integrated graphics editor (CFC-based)	--	✓
Printing of diagrams	--	✓
Parameter comparison	--	✓
Access via PROFIBUS/PROFINET/Ethernet	--	✓
Teleservice via MPI	--	✓
Routing <sup>2)</sup>	--	✓
Firmware update basic units <sup>1)</sup>	✓	✓

✓ Function available

-- Function not available

<sup>1)</sup> For SIMOCODE pro V.

<sup>2)</sup> See <https://support.industry.siemens.com/cs/ww/en/view/109738745>.

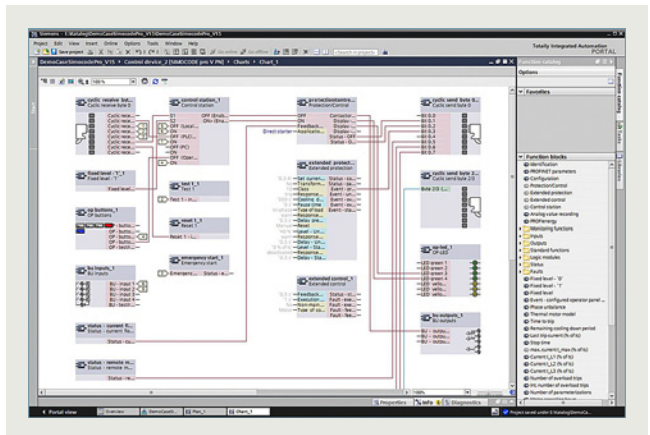
#### Working with libraries

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

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

#### Integrated graphics editor

The graphics editor is part of SIMOCODE ES Professional. 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. What is more, all the parameters can also be edited directly in the graphics editor. 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.



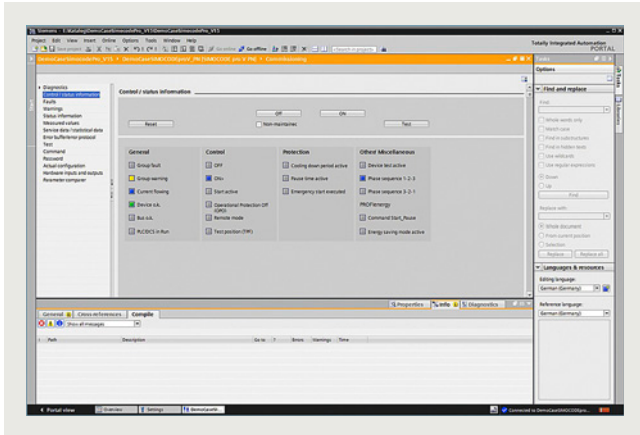
Parameterize easily and ergonomically with the CFC-based graphics editor of SIMOCODE ES Professional

## Parameterization, configuration and visualization with SIRIUS

### SIMOCODE ES (TIA Portal)

#### Online functions for startup and diagnostics

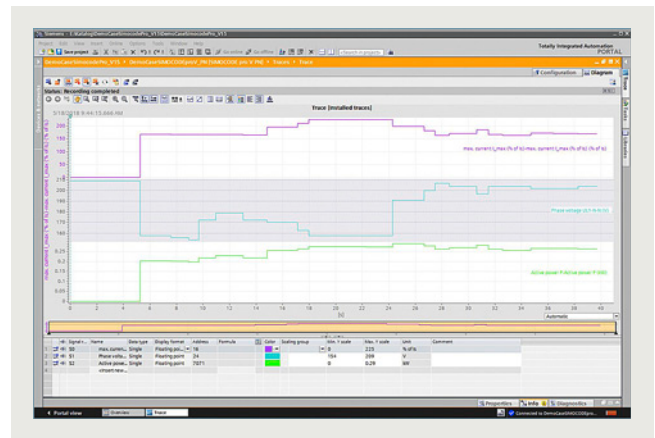
To this end, SIMOCODE ES provides powerful functions for startup and diagnostics of motor feeders. Besides a detailed display of status information and the causes of faults, all available measurement and statistics data can be retrieved online. Access to the fault and event memory and also to analog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



Commissioning functions of SIMOCODE ES

#### Trend display of measured values

With this online function, SIMOCODE ES Professional can present the trends of different measured values. It is thus possible for example to record and evaluate the startup characteristic of a motor or its behavior under different load conditions.



Live trend display of SIMOCODE ES

#### Additional functions

SIMOCODE ES 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, for example, the configuration for devices and networks for all components used is created in a standardized environment.

#### Teleservice via MPI

The SIMOCODE ES (TIA Portal) Professional 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.

### Benefits

- Easy parameterization with the graphics editor based on the Continuous Function Chart (CFC) reduces engineering work and shortens startup 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



# Parameterization, configuration and visualization with SIRIUS

## SIMOCODE ES (TIA Portal)

### Selection and ordering data

#### Parameterization and service software for SIMOCODE pro 3UF7

- Delivered without PC cable

Version	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
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#### SIMOCODE ES V17 Basic

##### Basic functional scope including Professional Trial License

Engineering software, class A, 6 languages (German/English/Chinese included, French/Italian/Spanish as a download), for all SIMOCODE pro, online functions via system interface  
 Type of delivery:  
 Software and documentation available free of charge as a download, see <https://support.industry.siemens.com/cs/ww/en/view/109793078>

#### SIMOCODE ES V17 Professional



3ZS1322-6CC15-0YA5

##### Floating license for one user

Engineering software, class A, 6 languages (German/English/Chinese included, French/Italian/Spanish as a download), Combo license for parallel use of versions 2007 and V17 of SIRIUS ES, for all SIMOCODE pro, online functions via system interface and PROFIBUS/PROFINET/Ethernet, parameterizing with the integrated graphics editor (CFC-based)  
 Type of delivery:

- Software and documentation on DVD and floating license on USB flash drive
- Software and documentation as a download and floating license as a download

##### Upgrade for SIMOCODE ES 2007 Premium

Engineering software, class A, 6 languages (German/English/Chinese included, French/Italian/Spanish as a download), Combo license for parallel use of versions 2007 and V17 of SIRIUS ES, for all SIMOCODE pro, online functions via system interface and PROFIBUS/PROFINET/Ethernet, parameterizing with the integrated graphics editor (CFC-based)  
 Type of delivery:

- Software and documentation on DVD and floating license on USB flash drive

##### Software update service

For 1 year with automatic extension, requires software version of SIMOCODE ES (TIA Portal), engineering software, class A, online functions via system interface and PROFIBUS/PROFINET/Ethernet, parameterizing with integrated graphics editor (CFC-based)  
 Type of delivery:

- Software and documentation on DVD

<b>3ZS1322-6CC15-0YA5</b>	1	1 unit	42J
<b>3ZS1322-6CE15-0YB5</b>	1	1 unit	42J
<b>3ZS1322-6CC15-0YE5</b>	1	1 unit	42J
<b>3ZS1322-6CC00-0YL5</b>	1	1 unit	42J

#### Notes:

For description of the software versions, see page 14/12.  
 Please order PC cable separately, see "Accessories".

SIMOCODE ES Standard and Premium V12 to V15 licenses can also be used for SIMOCODE ES V16/V17 Professional.

### Accessories

Version	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
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#### Optional accessories



3UF7941-0AA00-0

##### USB PC cables

For connecting to the USB interface of a PC/PG, for communication with SIMOCODE ES via the system interface

##### USB/serial adapters

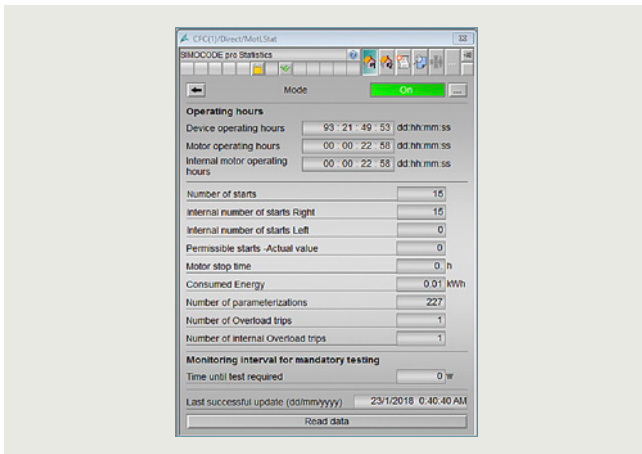
For connecting an RS 232 PC cable to the USB interface of a PC, recommended for use in conjunction with SIMOCODE ES

<b>3UF7941-0AA00-0</b>	1	1 unit	42J
<b>3UF7946-0AA00-0</b>	1	1 unit	42J

## Parameterization, configuration and visualization with SIRIUS

### SIMOCODE pro block library for SIMATIC PCS 7

#### Overview



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

#### More information

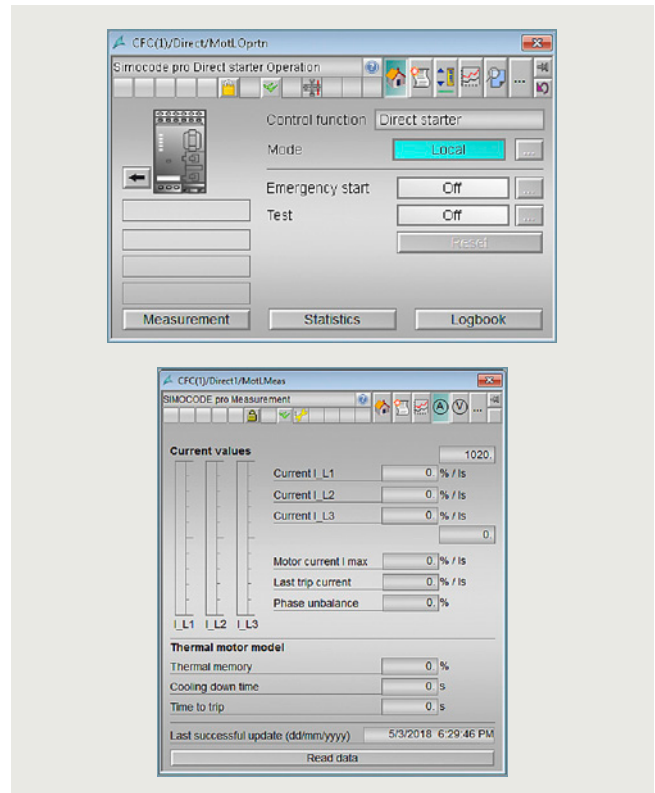
Industry Mall, see [www.siemens.com/product?3ZS1](http://www.siemens.com/product?3ZS1)

Technical specifications, see

<https://support.industry.siemens.com/cs/ww/en/ps/16718/td>

Overview of the available versions incl. programming manuals, Getting Started, updates and hotfixes, compatibility check, see <https://support.industry.siemens.com/cs/ww/en/view/109760422>

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 blocks 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.



Advanced Process Library (APL) - faceplates and function blocks for control and measured 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 I&C system

# Parameterization, configuration and visualization with SIRIUS

## SIMOCODE pro block library for SIMATIC PCS 7

### Selection and ordering data


Version	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
<b>SIMOCODE pro block library for SIMATIC PCS 7 version V9.1 with Advanced Process Library (APL)</b>					
 <p>3ZS1632-1XE04-0YA0</p>	<b>Engineering software V9.1</b> For one engineering station (single license) including runtime software for execution of the AS blocks in an automation system (single license), German/English <u>Scope of supply:</u> AS blocks and faceplates for integrating SIMOCODE pro into the PCS 7 process control system with Advanced Process Library, for PCS 7 version V9.1 <u>Type of delivery:</u> One license for one engineering station, one license for one automation system • Software and documentation as software download (OSD)				
	<b>3ZS1632-1XE04-0YA0</b>				
	<b>Runtime license V9.1</b> For execution of the AS blocks in an automation system (single license) Required for using the AS blocks of the engineering software V9.1 within a plant <u>Type of delivery:</u> One license for one automation system, without software and documentation • Certificate of License (CoL) in electronic form (OSD) <sup>1)</sup>				
	<b>3ZS1632-2XE04-0YB0</b>				
	<b>Upgrade for PCS 7 block library SIMOCODE pro V8 or V9.0<sup>2)</sup></b> To version SIMOCODE pro V9.1 for one engineering station (single license) including runtime software for execution of the AS blocks in an automation system (single license), German/English <u>Scope of supply:</u> AS blocks and faceplates for integrating SIMOCODE pro into the PCS 7 process control system with Advanced Process Library, for PCS 7 version V9.1 <u>Type of delivery:</u> One license for one engineering station, one license for one automation system • Software and documentation as software download (OSD)				
	<b>3ZS1632-1XE04-0YE0</b>				
	<b>Upgrade for PCS 7 block library SIMOCODE pro V7 (without APL)<sup>2)</sup></b> To version SIMOCODE pro V9.1 (with APL) for one engineering station (single license) including runtime software for execution of the AS blocks in an automation system (single license), German/English <u>Scope of supply:</u> AS blocks and faceplates for integrating SIMOCODE pro into the PCS 7 process control system with Advanced Process Library, for PCS 7 version V9.1 <u>Type of delivery:</u> One license for one engineering station, one license for one automation system • Software and documentation as software download (OSD)				
	<b>3ZS1632-1XE04-0YF0</b>				

<sup>1)</sup> With a Certificate of License (CoL) in electronic form, the license is supplied via Online Software Delivery (OSD) as a PDF file. Notification of this with a download link is received by email.

<sup>2)</sup> The upgrade is valid equally for existing engineering software incl. runtime license and for a single runtime license.

## Parameterization, configuration and visualization with SIRIUS


## SIMOCODE pro block library for SIMATIC PCS 7

Version	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
<b>SIMOCODE pro block library for SIMATIC PCS 7 version V9.0 with Advanced Process Library (APL)</b>					
 3ZS1632-1XX03-0YA0	<b>Engineering software V9.0</b>				
	For one engineering station (single license) including runtime software for execution of the AS blocks in an automation system (single license), German/English				
	<u>Scope of supply:</u> AS blocks and faceplates for integrating SIMOCODE pro into the PCS 7 process control system with Advanced Process Library, for PCS 7 version V9.0				
	<u>Type of delivery:</u> One license for one engineering station, one license for one automation system				
	<ul style="list-style-type: none"> <li>• Software and documentation on CD</li> <li>• Software and documentation as software download (OSD)</li> </ul>				
	<b>3ZS1632-1XX03-0YA0</b>		1	1 unit	42J
	<b>3ZS1632-1XE03-0YA0</b>		1	1 unit	42J
<b>Runtime license V9.0</b>					
For execution of the AS blocks in an automation system (single license)					
Required for using the AS blocks of the engineering software V9.0 within a plant					
<u>Type of delivery:</u> One license for one automation system, without software and documentation					
<ul style="list-style-type: none"> <li>• Certificate of License (CoL) in paper form</li> <li>• Certificate of License (CoL) in electronic form (OSD)<sup>1)</sup></li> </ul>					
	<b>3ZS1632-2XX03-0YB0</b>		1	1 unit	42J
	<b>3ZS1632-2XE03-0YB0</b>		1	1 unit	42J
<b>Upgrade for PCS 7 block library SIMOCODE pro V8</b>					
To version SIMOCODE pro V9.0 for one engineering station (single license) including runtime software for execution of the AS blocks in an automation system (single license), German/English					
<u>Scope of supply:</u> AS blocks and faceplates for integrating SIMOCODE pro into the PCS 7 process control system with Advanced Process Library, for PCS 7 version V9.0					
<u>Type of delivery:</u> One license for one engineering station, one license for one automation system					
<ul style="list-style-type: none"> <li>• Software and documentation on CD</li> </ul>					
	<b>3ZS1632-1XX03-0YE0</b>		1	1 unit	42J

<sup>1)</sup> With a Certificate of License (CoL) in electronic form, the license is supplied via Online Software Delivery (OSD) as a PDF file. Notification of this with a download link is received by email.

# Parameterization, configuration and visualization with SIRIUS

## SIMOCODE pro block library for SIMATIC PCS 7

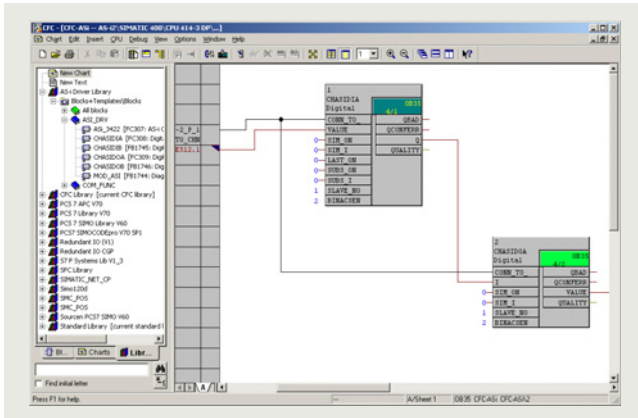
Version	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
<b>SIMOCODE pro block library for SIMATIC PCS 7 without Advanced Process Library (APL)</b>					
 3UF7982-0AA10-0	<b>Engineering software V7</b> For one engineering station (single license) including runtime software for execution of the AS blocks in an automation system (single license), German/English/French <u>Scope of supply:</u> AS blocks and faceplates for integrating SIMOCODE pro into the PCS 7 process control system, for PCS 7 versions V7.0/V7.1 <u>Type of delivery:</u> One license for one engineering station, one license for one automation system • Software and documentation on CD				
	<b>3UF7982-0AA10-0</b>		1	1 unit	42J
	<b>Runtime license V7</b> For execution of the AS blocks in an automation system (single license) Required for using the AS blocks of the engineering software V7 or the engineering software migration V7-V9 on an additional automation system within a plant <u>Type of delivery:</u> One license for one automation system, without software and documentation • Certificate of License (CoL) in paper form				
	<b>3UF7982-0AA11-0</b>		1	1 unit	42J
	<b>Engineering software migration V7-V9</b> 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-V9 can be installed directly onto a system with PCS 7 version V8 or V9; installation of the previous version is not required. For one engineering station (single license) including runtime software for execution of the AS blocks in an automation system (single license), German/English/French <u>Scope of supply:</u> AS blocks and faceplates for integrating SIMOCODE pro into the PCS 7 process control system <u>Type of delivery:</u> License for upgrading an existing license for one engineering station and a plant's assigned runtime licenses <u>For PCS 7 versions V8.0/V8.1/V8.2/V9.0</u> • Software and documentation on CD • Software and documentation as software download (OSD) <u>For PCS 7 version V9.1</u> • Software and documentation as software download (OSD)				
	<b>3UF7982-0AA20-0</b>		1	1 unit	42J
	<b>3UF7982-0AA20-1</b>		1	1 unit	42J
	<b>3UF7982-0AA30-1</b>		1	1 unit	42J



# Parameterization, configuration and visualization with SIRIUS

## AS-Interface block library for SIMATIC PCS 7

### Overview



AS-Interface block library for SIMATIC PCS 7 in CFC chart

#### More information

Overview of the available versions incl. programming manuals, Getting Started, service packs, updates and hotfixes, compatibility check, see <https://support.industry.siemens.com/cs/ww/en/view/109759605>

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 faceplates 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 modules, see also page 2/1 onwards:

- CM AS-i Master ST (in ET 200SP station)  
3RK7137-6SA00-0BC1
- CP 343-2 (in ET 200M station) 6GK7343-2AH01-0XA0
- CP 343-2P (in ET 200M station) 6GK7343-2AH11-0XA0

The support of further AS-i modules is described in the manuals of the libraries, see section "More information".

The CM AS-i Master ST module is supported with IM 155-6 PN High Feature or IM 155-6 DP High Feature within an ET 200SP station interfaced via PROFINET or PROFIBUS (ET 200SP PROFIBUS from engineering software V9.0 SP2 Update 1).

The AS-i master CP 343-2 and CP 343-2P are supported within an ET 200M station interfaced via PROFINET or PROFIBUS.

With the CM AS-i Master ST, CP 343-2 or CP 343-2P modules, digital AS-i slaves with standard addressing and extended addressing (A/B slaves; see also remark under "Application") can be operated via the library.

Analog AS-i slaves on the CM AS-i Master ST module are supported from engineering software V9.1.

#### Hardware and software requirements

The libraries require the following PCS 7 versions:

- Engineering software V9.1: PCS 7 version V9.1
- Engineering software V9.0: PCS 7 version V9.0
- Engineering software V8.1: PCS 7 versions V8.2, V8.1 and V8.0 (from V8.0 SP1 Update 3)

#### Notes:

More information on the combination of the various modules and software versions can be found via the compatibility tool, see <https://support.industry.siemens.com/cs/ww/en/view/64847781>

The delivery of the engineering software includes the basic version of the library. Service packs and updates are available for downloading to adapt to the PCS 7 version used, see <https://support.industry.siemens.com/cs/ww/en/view/109759605>

### 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 connected using AS-Interface.

#### Notes:



The AS-i masters CP 343-2 and CP 343-2P do not transmit I/O data from AS-i slaves with a B address via the cyclic process image (partition), but via data records.

To prevent delays in the communication of driver blocks for B slaves, we recommend avoiding the use of AS-i slaves with B addresses for PCS 7 configurations with CP 343-2 or CP 343-2P.

# Parameterization, configuration and visualization with SIRIUS

## AS-Interface block library for SIMATIC PCS 7


### Selection and ordering data

Version	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
AS-Interface block library for SIMATIC PCS 7 version V9.1 with Advanced Process Library (APL)					
 3ZS1635-1XE04-0YA0	<b>Engineering software V9.1</b>  For one engineering station (single license) including runtime software for execution of the AS blocks in an automation system (single license), German/English  <u>Scope of supply:</u> AS blocks and faceplates for integrating AS-Interface into the PCS 7 process control system with Advanced Process Library (APL), for PCS 7 version V9.1 and higher  <u>Type of delivery:</u> One license for one engineering station, one license for one automation system <ul style="list-style-type: none"><li>• Software and documentation as software download (OSD)</li></ul>	3ZS1635-1XE04-0YA0	1	1 unit	42C
	<b>Runtime license V9.1</b>  For execution of the AS blocks in an automation system (single license)  Required for using the AS blocks of the engineering software V9.1 on an additional automation system within a plant  <u>Type of delivery:</u> One license for one automation system, without software and documentation <ul style="list-style-type: none"><li>• Certificate of License (CoL) in electronic form (OSD)<sup>1)</sup></li></ul>				
AS-Interface block library for SIMATIC PCS 7 version V9.0 with Advanced Process Library (APL)					
 3ZS1635-1XX03-0YA0	<b>Engineering software V9.0</b>  For one engineering station (single license) including runtime software for execution of the AS blocks in an automation system (single license), German/English  <u>Scope of supply:</u> AS blocks and faceplates for integrating AS-Interface into the PCS 7 process control system with Advanced Process Library (APL), for PCS 7 version V9.0  <u>Type of delivery:</u> One license for one engineering station, one license for one automation system <ul style="list-style-type: none"><li>• Software and documentation on CD</li></ul>	3ZS1635-1XX03-0YA0	1	1 unit	42C
	<b>Runtime license V9.0</b>  For execution of the AS blocks in an automation system (single license)  Required for using the AS blocks of the engineering software V9.0 on an additional automation system within a plant  <u>Type of delivery:</u> One license for one automation system, without software and documentation <ul style="list-style-type: none"><li>• Certificate of License (CoL) in paper form</li></ul>				

<sup>1)</sup> With a Certificate of License (CoL) in electronic form, the license is supplied via Online Software Delivery (OSD) as a PDF file. Notification of this with a download link is received by email.

# Parameterization, configuration and visualization with SIRIUS

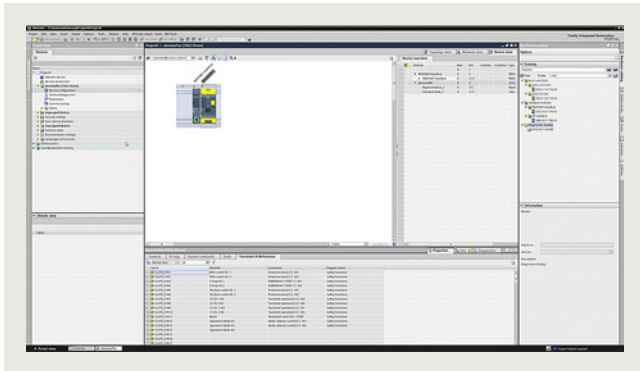
## AS-Interface block library for SIMATIC PCS 7

Version	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
<b>AS-Interface block library for SIMATIC PCS 7 version V8 with Advanced Process Library (APL)</b>					
 <p>3ZS1635-1XX02-0YA0</p>	<b>Engineering software V8.1</b> For one engineering station (single license) including runtime software for execution of the AS blocks in an automation system (single license), German/English <u>Scope of supply:</u> AS blocks and faceplates for integrating AS-Interface into the PCS 7 process control system with Advanced Process Library (APL), for PCS 7 versions V8.2, V8.1 and V8.0 (from V8.0 SP1 Update 3) <u>Type of delivery:</u> One license for one engineering station, one license for one automation system • Software and documentation on CD				
	<b>3ZS1635-1XX02-0YA0</b>		1	1 unit	42C
	<b>Runtime license V8</b> For execution of the AS blocks in an automation system (single license) Required for using the AS blocks of the engineering software V8 or V8.1 on an additional automation system within a plant <u>Type of delivery:</u> One license for one automation system, without software and documentation • Certificate of License (CoL) in paper form				
	<b>3ZS1635-2XX02-0YB0</b>		1	1 unit	42C

# Parameterization, configuration and visualization with SIRIUS

## SIRIUS Safety ES (TIA Portal)

### Overview



SIRIUS Safety ES (TIA Portal): Configuration

#### More information

Technical specifications, see <https://support.industry.siemens.com/cs/ww/en/ps/26081/td>  
 Download of SIRIUS Safety ES Basic, see <https://support.industry.siemens.com/cs/ww/en/view/109793090>

The SIRIUS Safety ES (TIA Portal) software permits quick and easy parameterization, commissioning and diagnostics of SIRIUS 3SK2 safety relays. Device configuration and device functionality can easily be created graphically directly on the PC and transferred to the switching device through a USB cable or an optional PROFIBUS/PROFINET interface.

The powerful SIRIUS Safety ES Basic program version for startup or maintenance personnel is available for downloading free of charge in the Siemens Industry Online Support, see "More information".

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

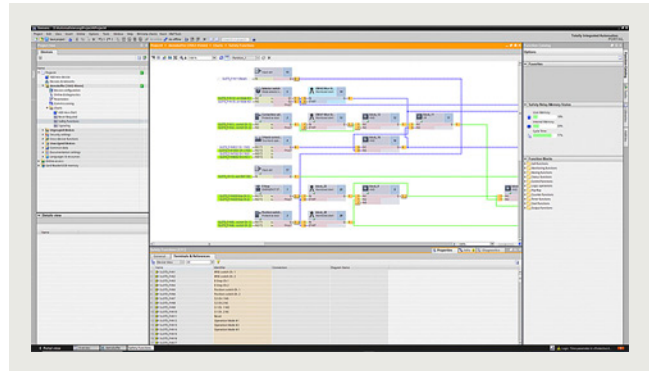
However, use of SIRIUS Safety ES (TIA Portal) as stand-alone software also provides these advantages.

#### Efficient engineering with two program versions

The SIRIUS Safety ES (TIA Portal) software program is available in two versions, which differ in their user-friendliness and scope of functions.

SIRIUS Safety ES (TIA Portal)	Basic	Professional
Unlimited number of function blocks	--	✓
Access to the local interface on the device	✓	✓
Access via PROFIBUS/PROFINET	--	✓
Routing	--	✓
Parameter comparison	--	✓
Parameter assignment	✓	✓

✓ Function available  
 -- Function not available



SIRIUS Safety ES (TIA Portal): Logic

#### Additional functions

SIRIUS Safety ES (TIA Portal) 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, 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 frequently-used applications or parameters and can manage them in global or project libraries. This way, individual modules, diagrams and complete device configurations can be saved as reusable elements for frequently occurring tasks.

#### Interface to SIRIUS Sim 3SK2

The integrated interface to the simulation software SIRIUS Sim allows all parameterization, application testing and diagnostics to be carried out on the digital twin without any real hardware components. This saves time and capital costs.

SIRIUS Sim, see page 14/25 or <https://support.industry.siemens.com/cs/ww/en/view/109763750>.

### Benefits

- Transparent setting of the device functions and their parameters
- Effective support during commissioning
- Comprehensive diagnostics functions
- Complete transparency thanks to printout, logbook memory
- High degree of user-friendliness – convenient user interface, with English, German, French, Italian, Spanish and Chinese as possible operating languages
- Time savings thanks to shorter startup times
- Fast, low-cost licensing using a simple licensing procedure (available online too)


## Parameterization, configuration and visualization with SIRIUS

## SIRIUS Safety ES (TIA Portal)

## Selection and ordering data

**Parameterization and service software for SIRIUS 3SK2 safety relays**

- Delivered without PC cable

Version	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
<b>SIRIUS Safety ES V17 Basic</b>					
<b>Basic functional scope including Professional Trial License</b> Engineering software, class A, 6 languages (German/English/Chinese included, French/Italian/Spanish as a download), for all 3SK2, online functions via system interface <u>Type of delivery:</u> Software and documentation available free of charge as a download, <a href="https://support.industry.siemens.com/cs/ww/en/view/109793090">see https://support.industry.siemens.com/cs/ww/en/view/109793090</a>					
<b>SIRIUS Safety ES V17 Professional</b>					
 3ZS1326-2CC10-0YA5	<b>Floating license for one user</b> Engineering software, class A, 6 languages (German/English/Chinese included, French/Italian/Spanish as a download), Combo license for parallel use of versions V1.0 and V17 of the Safety ES, for all 3SK2, online functions via system interface and PROFIBUS/PROFINET, parameterizing with the integrated graphics editor (CFC-based) <u>Type of delivery:</u> <ul style="list-style-type: none"> <li>Software and documentation on DVD and floating license on USB flash drive</li> <li>Software and documentation as a download and floating license as a download</li> </ul>				
	<b>3ZS1326-2CC10-0YA5</b>		1	1 unit	41L
	<b>3ZS1326-2CE10-0YB5</b>		1	1 unit	41L
<b>Upgrade for Safety ES V1.0 Premium</b>					
Engineering software, class A, 6 languages (German/English/Chinese included, French/Italian/Spanish as a download), Combo license for parallel use of versions V1.0 and V17 of the Safety ES, for all 3SK2, online functions via system interface and PROFIBUS/PROFINET/Ethernet, parameterizing with the integrated graphics editor (CFC-based) <u>Type of delivery:</u> <ul style="list-style-type: none"> <li>Software and documentation on DVD and floating license on USB flash drive</li> </ul>					
	<b>3ZS1326-2CC10-0YE5</b>		1	1 unit	41L

Notes:

For description of the software versions, [see page 14/22](#).











Please order PC cable separately, [see 14/24](#).



# Parameterization, configuration and visualization with SIRIUS

## SIRIUS Safety ES (TIA Portal)

### Accessories

Version	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
<b>Optional accessories</b>					
 3UF7941-0AA00-0	<b>USB PC cables</b> For connecting to the USB interface of a PC/PG, for communication with 3SK2 through the system interface, recommended for use in connection with 3SK2	3UF7941-0AA00-0	1	1 unit	42J
	<b>Interface modules</b> • For connecting 3SK2 safety relays via PROFINET				
 3SK2511-1FA10	<b>Screw terminals</b> 				
	- Screw terminals	3SK2511-1FA10	1	1 unit	41L
 3SK2511-2FA10	<b>Spring-loaded terminals (push-in)</b> 				
	- Spring-loaded terminals (push-in)	3SK2511-2FA10	1	1 unit	41L
 3RK3511-1BA10	<b>Screw terminals</b> 				
	- Screw terminals	3RK3511-1BA10	1	1 unit	42B
 3RK3511-2BA10	<b>Spring-loaded terminals</b> 				
	- Spring-loaded terminals	3RK3511-2BA10	1	1 unit	42B
 3UF7930-0AA00-0	<b>Connecting cables</b> For connecting central units with expansion modules or interface module Length: 0.025 m (flat)	3UF7930-0AA00-0	1	1 unit	42J

## Overview

### More information

SIRIUS Sim,  
see <https://support.industry.siemens.com/cs/ww/en/view/109763750>

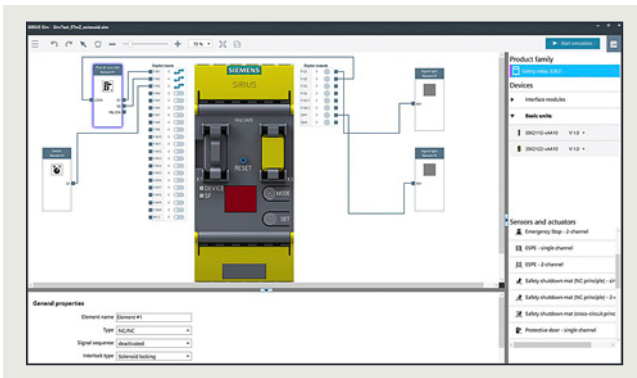
The SIRIUS simulation tool can be used to quickly and easily test functions and configurations in an office environment. These configurations can then be loaded directly into real devices.

SIRIUS Sim is available free of charge as a download, see "More information".

### General functions

- Comment function:  
comments can be placed in the logic diagram of the simulator.
- Simple exchange of devices and elements:  
when exchanging devices and elements, the connections are retained and do not have to be re-created.

### SIRIUS Sim 3SK2

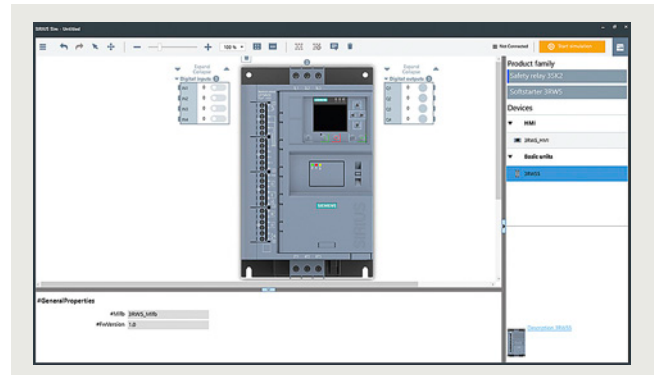


SIRIUS Sim 3SK2

- Support of SIRIUS 3SK2 safety relays and SIRIUS 3SK1 output expansions as well as the SIRIUS 3RM1 fail-safe motor starters and the SIRIUS 3RQ1 forced-guided coupling relays

- Display of connection status to ES tool:  
The connection status to the engineering software is displayed in the simulator. This makes it clear at first glance whether the simulator is connected to the ES tool.
- Automatic generation of the function elements:  
At the press of a button, the necessary function elements can be automatically generated based on the configuration data. Duplicated entry, in the engineering software and in the simulator, is unnecessary.

### SIRIUS Sim 3RW55



SIRIUS Sim 3RW55

- Complete parameterization of the SIRIUS 3RW55 High Performance and new 3RW55 Failsafe soft starters
- Complete navigation with the same menu structure as on the HMI
- Optional storage of the parameterization on a micro SD memory card for transfer to the real soft starter
- Simulation of startup and shutdown, including operating phases
- Simulation of different fault states

## Benefits

- Intuitive user interface
- Already contains predefined, standard application examples
- Simple familiarization with the devices
- Application engineering and testing in the simulation results in time and cost savings
- Free download

## Parameterization, configuration and visualization with SIRIUS

### Notes