SIEMENS

SIMATIC

# Process Control System PCS 7 Released Modules (V8.0 SP1)

Catalog Overview

Valid for PCS 7 as of V8.0 SP1


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## Legal information

### Warning notice system

This manual contains notices you have to observe in order to ensure your personal safety, as well as to prevent damage to property. The notices referring to your personal safety are highlighted in the manual by a safety alert symbol, notices referring only to property damage have no safety alert symbol. These notices shown below are graded according to the degree of danger.

**⚠ DANGER**

indicates that death or severe personal injury **will** result if proper precautions are not taken.

**⚠ WARNING**

indicates that death or severe personal injury **may** result if proper precautions are not taken.

**⚠ CAUTION**

indicates that minor personal injury can result if proper precautions are not taken.

**NOTICE**

indicates that property damage can result if proper precautions are not taken.

If more than one degree of danger is present, the warning notice representing the highest degree of danger will be used. A notice warning of injury to persons with a safety alert symbol may also include a warning relating to property damage.

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The product/system described in this documentation may be operated only by **personnel qualified** for the specific task in accordance with the relevant documentation, in particular its warning notices and safety instructions. Qualified personnel are those who, based on their training and experience, are capable of identifying risks and avoiding potential hazards when working with these products/systems.

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# ET 200M

1

## 1.1 IM

### Approved combinations

See the "SIMATIC Distributed I/O Device ET 200M" manual for the combinations of approved interface modules and bus modules and for the available functions.

| Product name | Order no.<br>MLFB<br>Firmware version | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | | | F | C | R | T |
| ET 200M-<br>IM 153-1 | 6ES7 153-1AA02-0XB0 | Bus interface for S7-300 SMs,<br>FM 350 to FM 352, FM 355, CP 341,<br>module replacement during operation | W | X | | 08/<br>00 |
| ET 200M-<br>IM 153-1,<br>extended<br>environmental<br>conditions | 6ES7 153-1AA82-0XB0 | Bus interface for S7-300 SMs,<br>extended environmental conditions | W | X | | 10/<br>05 |
| ET 200M-<br>IM 153-1 | 6ES7 153-1AA03-0XB0 | Bus interface for S7-300 SMs,<br>FM 350 to FM 352, FM 355, CP 341,<br>module replacement during operation | W | X | | |
| ET 200M-<br>IM 153-1,<br>extended<br>environmental<br>conditions | 6ES7 153-1AA83-0XB0 | Bus interface for S7-300 SMs,<br>extended environmental conditions | W | X | | 11/<br>03 |
| ET 200M-<br>IM 153-2 | 6ES7 153-2AA01-0XB0 | Bus interface for S7-300 SMs,<br>FMs (except FM 356-4),<br>module replacement during operation | W | X | | 04/<br>00 |
| ET 200M-<br>IM 153-2 | 6ES7 153-2AA02-0XB0 | Bus interface for S7-300 SMs,<br>FMs (except FM 356-4),<br>module replacement during operation | W | X | | 06/<br>04 |
| ET 200M-<br>IM 153-2 | 6ES7 153-2BA00-0XB0<br>V3.x | Bus interface for S7-300 SMs,<br>FMs (except FM 356-4),<br>module replacement during operation,<br>extension of process control functions | W | S | X | 07/<br>06 |
| ET 200M-<br>IM 153-2 | 6ES7 153-2BA01-0XB0<br>V4.x | Bus interface for S7-300 SMs,<br>FMs (except FM 356-4),<br>module replacement during operation,<br>extension of process control functions | W | S | X | 10/<br>09 |
| ET 200M-<br>IM 153-2 | 6ES7 153-2BA81-0XB0<br>V4.x | Bus interface for S7-300 SMs, (outdoor),<br>FMs (except FM 356-4),<br>module replacement during operation,<br>extension of process control functions | W | S | X | 12/<br>10 |

| Product name | Order no.<br>MLFB<br>Firmware version | Brief description | Properties (Page 161)<br>F | C | R | T |
|---|---|---|---|---|---|---|
| ET 200M-<br>IM 153-2 | 6ES7 153-2BA02-0XB0<br>V5.x | Bus interface for S7-300 SMs,<br>FMs (except FM 356-4),<br>module replacement during operation,<br>extension of process control functions,<br>up to 12 I/O modules can be operated | W | S | X | |
| ET 200M-<br>IM 153-2 | 6ES7 153-2BA82-0XB0<br>V5.x | Bus interface for S7-300 SMs, (outdoor),<br>FMs (except FM 356-4),<br>module replacement during operation,<br>extension of process control functions,<br>up to 12 I/O modules can be operated | W | S | X | |
| ET 200M-<br>IM 153-2 FO | 6ES7 153-2AB01-0XB0 | Bus interface for S7-300 SMs,<br>with fiber optics,<br>FMs (except FM 356-4),<br>module replacement during operation | W | X | | 01/<br>03 |
| ET 200M-<br>IM 153-2 FO | 6ES7 153-2BB00-0XB0<br>V3.x | Bus interface for S7-300 SMs,<br>with fiber optics,<br>FMs (except FM 356-4),<br>module replacement during operation,<br>extension of process control functions | W | S | X | 10/<br>06 |
| ET 200M-<br>IM 153-4 PN HF | 6ES7 153-4BA00-0XB0<br>V4.x | Bus interface for S7-300 SMs,<br>with PROFINET connection;<br>supports failsafe and HART module, PN system redundancy | W<br>P | | | |

# 1.2 Accessories

## Approved combinations

See the "SIMATIC Distributed I/O Device ET 200M" manual for the combinations of approved interface modules and bus modules and for the available functions.

| Product name | Order no. | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | MLFB | | F | C | R | T |
| Partition | 6ES7 195-1KA00-0XA0 | Ex partition for ET 200M | | | | |
| Bus module | 6ES7 195-7HA00-0XA0 | Active bus module for ET 200M IM 153; PS/IM | | | | |
| Bus module | 6ES7 195-7HB00-0XA0 | Active bus module for ET 200M IM 153; 2x 40 mm | | | | |
| Bus module | 6ES7 195-7HC00-0XA0 | Active bus module for ET 200M IM 153; 1x 80 mm | | | | |
| BM IM/IM | 6ES7 195-7HD00-0XA0 | Active bus module for ET 200M IM 153; IM/IM for redundant IM operation | | | | 07/04 |
| BM IM/IM | 6ES7 195-7HD10-0XA0 | Active bus module for ET 200M IM 153; IM/IM for redundant IM operation | | | | |
| F separator bus module | 6ES7 195-7HG00-0XA0 | F separator bus module for ET 200M | | | | |
| F separator module | 6ES7 195-7KF00-0XA0 | F separator module for ET 200M | | | | |

# Gateway

# 2

## 2.1 IE/PB Link

### Approved combinations

See *SIMATIC Net; S7-CPs for Industrial Ethernet; Manual, Part BL1* for approved combinations of interface modules, couplers and bus modules as well as for the available functions.

| Product name | Order no. | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | MLFB | | F | C | R | T |
| IE/PB Link PN IO | 6GK1 411-5AB00 | IE/PB link<br>PROFINET IO proxy including real-time; gateway between Industrial Ethernet and Profibus; S7 routing; data record gateway; S7 slaves; DPV1 slaves; 10/100 Mbit/s Fast Ethernet 9.6 kBit/s to 12 Mbit/s Profibus | W<br>P | | | |

# 2.2 DP link

## Approved combinations

See *SIMATIC Bus links DP/PA coupler, active field distributors, DP/PA Link and Y Link* for the approved combinations of interface modules, couplers and bus modules and for the available functions.

| Product name | Order no.<br>MLFB<br>Firmware version | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | | | F | C | R | T |
| IM 157 | 6ES7 157-0AA80-0XA0 | Interface module for PROFIBUS PA;<br>extended temperature range -25 ... 60 °C | W | X | | 06/<br>00 |
| IM 157 | 6ES7 157-0AA81-0XA0 | Interface module for PROFIBUS PA;<br>extended temperature range -25 ... 60 °C | W | X | | 12/<br>03 |
| IM 157 | 6ES7 157-0AA82-0XA0<br>V4.x | Interface module for PA Link,<br>DP V1 to DP and PA;<br>module replacement during operation, information function,<br>FW update via bus, extension of process control functions | W | S | | 06/<br>06 |
| IM 153-2 HF | 6ES7 153-2BA01-0XB0<br>V4.x | PA Link, DP V1 to DP and PA;<br>module replacement during operation, information function,<br>FW update via bus, extension of process control functions | W | S | | 10/<br>09 |
| IM 153-2 Outdoor | 6ES7 153-2BA81-0XB0<br>V4.x | PA Link, outdoor, DP V1 to DP and PA; module replacement during operation, information function,<br>FW update via bus, extension of process control functions | W | S | | 10/<br>07 |
| IM 153-2 HF | 6ES7 153-2BA02-0XB0<br>V5.x | PA Link, DP V1 to DP and PA;<br>module replacement during operation, information function,<br>FW update via bus, extension of process control functions<br>up to 12 I/O modules can be operated | W | S | | |
| IM 153-2 HF Outdoor | 6ES7 153-2BA82-0XB0<br>V5.x | PA Link, outdoor, DP V1 to DP and PA; module replacement during operation, information function,<br>FW update via bus, extension of process control functions<br>up to 12 I/O modules can be operated | W | S | | |

# 2.3 FF Link

## Approved combinations

See *SIMATIC Bus links FF Link bus link* for the approved combinations of interface modules, couplers and bus modules and for the available functions.

| Product name | Order no.<br>MLFB<br>Firmware version | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | | | F | C | R | T |
| IM 153-2 FF Outdoor | 6ES7 153-2DA80-0XB0 | Interface module for SIMATIC FF Link, capable of redundant operation; FOUNDATION Fieldbus Link Master, extended temperature range | W | | | |
| FDC 157 | 6ES7 157-0AC84-0XA0 | Interface module for SIMATIC FF Link; physical interface for FOUNDATION Fieldbus H1, capable of redundant operation, with integrated bus supply up to 1 A; integrated diagnostics | W | S | | |

# 2.4 Y Link

## Approved combinations

See *SIMATIC Bus links DP/PA coupler, active field distributors, DP/PA Link and Y Link* for the approved combinations of interface modules, couplers and bus modules and for the available functions.

| Product name | Order no. | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | MLFB | | F | C | R | T |
| Y coupler | 6ES7 654-0YK00-0AB0 | Y coupler; star connection for connection of single-channel I/O to H system;<br>single interface module | | | | 10/06 |
| Y coupler | 6ES7 197-1LB00-0XA0 | Y coupler;<br>star connection for connection of single-channel I/O to H system; single interface module with integrated RS 485 repeater | | | | |

# 2.5 PA coupler

## Approved combinations

See *SIMATIC*
*Bus links DP/PA coupler, active field distributors, DP/PA Link and Y Link* for the approved combinations of interface modules, couplers and bus modules and for the available functions.

| Product name | Order no. | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | MLFB | | F | C | R | T |
| DP/PA coupler | 6ES7 157-0AC00-0XA0 | DP/PA coupler | | | | 04/00 |
| DP/PA coupler | 6ES7 157-0AC80-0XA0 | DP/PA coupler, non-ex; (outdoor); 400 mA | | | | 05/04 |
| DP/PA coupler | 6ES7 157-0AC81-0XA0 | DP/PA coupler, non-ex; (outdoor); 400 mA | | | | 04/05 |
| DP/PA coupler | 6ES7 157-0AC82-0XA0 | DP/PA coupler, non-ex; (outdoor); 1000 mA, 31 V | | | | 07/07 |
| DP/PA coupler | 6ES7 157-0AC83-0XA0 | DP/PA coupler, non-ex; (outdoor); for redundant operation | | | A | |
| DP/PA coupler | 6ES7 157-0AD00-0XA0 | DP/PA coupler, ex(i) | | | | 07/01 |
| DP/PA coupler | 6ES7 157-0AD80-0XA0 | DP/PA coupler, ex(ib); extended environmental conditions | | | | 12/03 |
| DP/PA coupler, ex | 6ES7 157-0AD81-0XA0 | DP/PA coupler; extended environmental conditions (ia), FM certification | | | | 05/04 |
| DP/PA coupler, ex | 6ES7 157-0AD82-0XA0 | DP/PA coupler; extended environmental conditions (ia), FM certification, dust type certification | | | | |
| Active field distributor | 6ES7 157-0AG81-0XA0 | Active field distributor AFD for PROFIBUS PA; ring redundancy; 4 spur lines | | | | |
| Active field distributor | 6ES7 157-0AG82-0XA0 | Active field distributor AFD for PROFIBUS PA; ring redundancy; 8 spur lines | | | | |

# 2.6 Optical link module

## Combinations permitted

Please see the manual "SIMATIC DP/PA link and Y link bus links" for the combinations of interface modules, couplers and bus modules permitted and the available functions.

| Product name | Order no.<br>MLFB<br>Firmware version | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | | | F | C | R | T |
| PROFIBUS OLM P11 | 6GK1 503-2CA00<br>V4.x | Optical Link Module;<br>1 RS 485<br>single fiber-optic interface (2 BFOC - POF/PCF);<br>signaling contact and measuring output,<br>including 2 BFOC connectors | | | | |
| PROFIBUS OLM P12 | 6GK1 503-3CA00<br>V4.x | Optical Link Module;<br>1 RS 485<br>dual fiber-optic interface (4 BFOC - POF/PCF);<br>signaling contact and measuring output,<br>including 4 BFOC connectors | | | | |
| PROFIBUS OLM G11 | 6GK1 503-2CB00<br>V4.x | Optical Link Module;<br>1 RS 485<br>single fiber-optic interface (2 BFOC - multimode fiber-optic cable);<br>signaling contact and measuring output | | | | |
| PROFIBUS OLM G12 | 6GK1 503-3CB00<br>V4.x | Optical Link Module;<br>1 RS 485<br>single fiber-optic interface (2 BFOC - multimode fiber-optic cable);<br>signaling contact and measuring output | | | | |
| PROFIBUS OLM G12-EEC | 6GK1 503-3CD00<br>V4.x | Optical Link Module;<br>1 RS 485<br>2 fiber-optic interface (4 BFOC - multimode fiber-optic cable);<br>signaling contact and measuring output,<br>extended temperature range -20 ... +60 °C | | | | |
| PROFIBUS OLM G11-1300 | 6GK1 503-2CC00<br>V4.x | Optical Link Module;<br>1 RS 485<br>1 fiber-optic interface (2 BFOC - single-mode fiber-optic cable) wavelength 1300 nm for long distances,<br>signaling contact and measuring output | | | | |
| PROFIBUS OLM G12-1300 | 6GK1 503-3CC00<br>V4.x | Optical Link Module;<br>1 RS 485<br>2 fiber-optic interface (4 BFOC - single-mode fiber-optic cable) wavelength 1300 nm for long distances,<br>signaling contact and measuring output | | | | |
| PROFIBUS OLM G22 | 6GK1 503-4CB00<br>V4.x | Optical Link Module;<br>2 RS 485<br>2 fiber-optic interface (2 BFOC)<br>signaling contact and measuring output | | | | |

# 2.7 Accessories

## Approved combinations

See the corresponding manuals for the combinations of approved interface modules and bus modules and for the available functions.

| Product name | Order no. | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | MLFB | | F | C | R | T |
| BM PS/IM SIPLUS extreme | 6AG1 195-7HA00-2XA0 | Bus module for IM 153-2 High Feature / IM 153-2 FF<br>Active bus module for 1 load power supply and 1 module; for "hot swap in runtime" function, extended temperature range -25 to +70 °C | | | | |
| BM PS/IM | 6ES7 195-7HA00-0XA0 | Bus module for IM 153<br>Active bus module for 1 power supply and 1 module | | | | |
| BM IM/IM | 6ES7 195-7HD80-0XA0 | Bus module for IM 157 / IM 153-2 High Feature / IM 153-2 FF<br>Active bus module for 2 modules; for redundant and non-redundant configuration; "hot swap in runtime" function, extended temperature range -25 to +60 °C | | | | |
| BM IM/IM | 6ES7 195-7HD10-0XA0 | Bus module for IM 153-2<br>Bus module for redundant IM mode; "hot swap in runtime" function | | | | |
| BM | 6ES7 195-7HE80-0XA0 | Bus module for IM 157<br>Bus module for redundant configuration of the IM 157 and module hot swap in runtime; temperature range -25 to +60 °C | | | | |
| BM FDC | 6ES7 195-7HF80-0XA0 | Bus module for 1 DP/PA coupler Ex(i) / FDC 157-0 / 1 field device coupler<br>Active bus module for "hot swap in runtime" function, extended temperature range -25 to +60 °C | | | | |
| BM FDC/FDC | 6ES7 195-7HG80-0XA0 | Bus module for 2 DP/PA couplers / 2 field device couplers<br>Active bus module for redundant configuration; for "hot swap in runtime" function, extended temperature range -25 to +60 °C | | | | |
| BM | 6ES7 654-7HY00-0XA0 | Bus module for Y coupler | | | | |
| Active field distributor AFD | 6ES7 157-0AF81-0XA0 | Active field distributor AFD for PA or FF field devices; ring redundancy; 4 short-circuit proof spur line connections | | | | 08/12 |
| Active field distributor AFS | 6ES7 157-0AF82-0XA0 | Active field distributor AFS for PA or FF; coupler redundancy | | | | 08/12 |
| Active field distributor AFS | 6ES7 157-0AG80-0XA0 | Active field distributor AFS for PROFIBUS PA and FOUNDATION Fieldbus H1; coupler redundancy | | | | |
| Active field distributor AFD4 | 6ES7 157-0AG81-0XA0 | Active field distributor AFD4 for PROFIBUS PA and FOUNDATION Fieldbus H1; ring redundancy; 4 short-circuit proof spur line connections | | | | |

| Product name | Order no. | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | MLFB | | F | C | R | T |
| Active field distributor AFD8 | 6ES7 157-0AG82-0XA0 | Active field distributor AFD8 for PROFIBUS PA and FOUNDATION Fieldbus H1; ring redundancy; 8 short-circuit proof spur line connections | | | | |
| Active field distributor AFDiS | 6ES7 157-0AG83-0XA0 | Active field distributor AFDiS for PA or FF field devices; ring redundancy; 6 short-circuit proof and intrinsically safe spur line connections | | | | |

# ET 200S

# 3

## 3.1 AI

| Product name | Order no. | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | MLFB | | F | C | R | T |
| 2 AI 2 WIRE | 6ES7 134-5RB00-0AB0 | Analog input module<br>2 AI I; 2-wire measuring transducer; 0..20 mA / 12 -bit + sign,<br>4 ... 20 mA / 12-bit | W | | | |
| 2 AI 4 WIRE | 6ES7 134-5RB50-0AB0 | Analog input module<br>2 AI I; 4-wire measuring transducer; 0..20 mA / 12 -bit,<br>4 ... 20 mA / 12-bit | W | | | |
| 2 AI TC | 6ES7 134-5SB00-0AB0 | Analog input module<br>2 AI TC; 15 -bit + sign; standard;<br>thermocouples: E, N, J, K, L, S, R, B, T,U | W | | | |
| 2 AI RTD | 6ES7 134-5SB50-0AB0 | Analog input module<br>2 AI RTD; 15 -bit + sign; standard;<br>R: 600 Ohm; RTD: Pt 100, Ni 100: | W | | | |
| 2 AI 2 WIRE HART | 6ES7 134-5TB00-0AB0 | Analog input module<br>2 AI; 4 ... 20 mA,<br>with HART communication for connecting 2-wire measuring transducers | W | | | |
| 2 AI 4 WIRE HART | 6ES7 134-5TB50-0AB0 | Analog input module<br>2 AI; 4 ... 20 mA,<br>with HART communication for connecting 4-wire measuring transducers | W | | | |

# 3.2 AO

| Product name | Order no. | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | MLFB | | F | C | R | T |
| 2 AO 0/4-20mA | 6ES7 135-5RB00-0AB0 | Analog output module<br>2 AO; 0..20 mA / 12 -bit + sign; 4..20 mA / 12 -bit | W | | | |
| 2 AO HART | 6ES7 135-5TB00-0AB0 | Analog output module<br>2 AO; 4..20 mA;<br>with HART communication | W | | | |

# 3.3 DI

| Product name | Order no. | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | MLFB | | F | C | R | T |
| 4 DI NAMUR | 6ES7 131-5RD00-0AB0 | Digital input module<br>4 DI NAMUR | W | | | |

# 3.4 DO

| Product name | Order no. | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | MLFB | | F | C | R | T |
| 2 DO | 6ES7 132-5SB00-0AB0 | Digital output module<br>2 DO; DC 25 V / 25 mA | W | | | |

# 3.5 IM

| Product name | Order no. | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | MLFB | | F | C | R | T |
| ET 200iS-IM 151-2 | 6ES7 151-2AA00-0AB0 | Interface module for ET 200iS electronics modules for intrinsically safe PROFIBUS DP | W | X | | |

# 3.6 PS

| Product name | Order no. | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | MLFB | | F | C | R | T |
| PS | 6ES7 138-5EA00-0AA0 | Power supply for ET 200iS | | | | |

# 3.7 Terminal module

| Product name | Order no. | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | MLFB | | F | C | R | T |
| TM-E30S-44iS | 6ES7 193-5CB00-0AA0 | Terminal module for Ems; 4 rows; screw terminal | | | | |
| TM-E30C-44iS | 6ES7 193-5CB10-0AA0 | Terminal module for EMs; 4 rows; spring-loaded terminal | | | | |
| TM-PS-iS | 6ES7 193-5DA00-0AA0 | Terminal module for PS | | | | |
| TM-IM-iS | 6ES7 193-5DB00-0AA0 | Terminal module for IM 151-2 | | | | |

# ET 200iSP

# 4

## 4.1 AI

| Product name | Order no. | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | MLFB | | F | C | R | T |
| 4 AI I 2WIRE HART | 6ES7 134-7TD00-0AB0 | Analog input module<br>4 AI; 4 ... 20 mA;<br>with HART communication for connecting 2-wire measuring transducers | W | M | | |
| 4 AI I 4WIRE HART | 6ES7 134-7TD50-0AB0 | Analog input module<br>4 AI; 4 ... 20 mA;<br>with HART communication for connecting 4-wire measuring transducers | W | M | | |
| 4 AI TC | 6ES7 134-7SD00-0AB0 | Analog input module<br>4 AI TC | W | M | | |
| 4 AI RTD | 6ES7 134-7SD50-0AB0 | Analog input module<br>4 AI RTD | W | M | | 05/08 |
| 4 AI RTD | 6ES7 134-7SD51-0AB0 | Analog input module<br>4 AI RTD | W | M | | |

## 4.2 AI-F

| Product name | Order no. | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | MLFB | | F | C | R | T |
| 4 AI 2WIRE HART | 6ES7 138-7FA00-0AB0 | Analog input module<br>4 AI; 0/4 ... 20 mA;<br>safety-related, ex i;with HART communication for connecting 2-wire measuring transducers | W | M | | |

# 4.3 AO

| Product name | Order no. | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | MLFB | | F | C | R | T |
| 4 AO I HART | 6ES7 135-7TD00-0AB0 | Analog output module<br>4 AO; 4 ... 20 mA;<br>with HART communication | W | M | | |

# 4.4 DI

| Product name | Order no. | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | MLFB | | F | C | R | T |
| 8 DI NAMUR | 6ES7 131-7RF00-0AB0 | Digital input module<br>8 DI NAMUR | W | M | | |

# 4.5 DI-F

| Product name | Order no. | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | MLFB | | F | C | R | T |
| 8 DI NAMUR | 6ES7 138-7FN00-0AB0 | Digital input module<br>F-DI 8 NAMUR, safety-related, ex i | W | M | | |

# 4.6 DO

| Product name | Order no. | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | MLFB | | F | C | R | T |
| 4 DO DC23,1V/20mA | 6ES7 132-7RD00-0AB0 | Digital output module<br>4 DO; DC 23.1 V / 20 mA | W | M | | 10/06 |
| 4 DO DC23,1V/20mA Shutdown "H" | 6ES7 132-7RD01-0AB0 | Digital output module<br>4 DO; DC 23.1 V / 20 mA;<br>shutdown "H" | W | M | | |
| 4 DO DC17,4V/27mA | 6ES7 132-7RD10-0AB0 | Digital output module<br>4 DO; DC 17.4 V / 27 mA | W | M | | 10/06 |
| 4 DO DC17,4V/27mA Shutdown "H" | 6ES7 132-7RD11-0AB0 | Digital output module<br>4 DO; DC 17.4 V / 27 mA;<br>shutdown "H" | W | M | | |
| 4 DO DC17,4V/40mA | 6ES7 132-7RD20-0AB0 | Digital output module<br>4 DO; DC 17.4 V / 40 mA | W | M | | 10/06 |
| 4 DO DC17,4V/40mA Shutdown "H"" | 6ES7 132-7RD21-0AB0 | Digital output module<br>4 DO; DC 17.4 V / 40 mA;<br>shutdown "H" | W | M | | 06/10 |
| 4 DO DC17,4V/40mA Shutdown "H" | 6ES7 132-7RD22-0AB0 | Digital output module<br>4 DO; DC 17.4 V / 40 mA;<br>shutdown "H" | W | M | | |
| 4 DO DC23,1V/20mA Shutdown "L" | 6ES7 132-7GD00-0AB0 | Digital output module<br>4 DO; DC 23.1 V / 20 mA;<br>shutdown "L" | W | M | | |
| 4 DO DC17,4V/ 27mAShutdown "L" | 6ES7 132-7GD10-0AB0 | Digital output module<br>4 DO; DC 17.4 V / 27 mA;<br>shutdown "L" | W | M | | |
| 4 DO DC17,4V/40mA Shutdown "L" | 6ES7 132-7GD20-0AB0 | Digital output module<br>4 DO; DC 17.4 V / 40 mA;<br>shutdown "L" | W | M | | 06/10 |
| 4 DO DC17,4V/ 40mAShutdown "L" | 6ES7 132-7GD21-0AB0 | Digital output module<br>4 DO; DC 17.4 V / 40 mA;<br>shutdown "L" | W | M | | |
| 4 DO DC25,5V/22mA Shutdown "L" | 6ES7 132-7GD30-0AB0 | Digital output module<br>4 DO; DC 25.5 V / 22 mA;<br>shutdown "L" | W | M | | |
| 2 DO Relais UC60V/ 2A | 6ES7 132-7HB00-0AB0 | Digital output module<br>2 DO relay; UC 60 V / 2 A | W | M | | |

# 4.7 DO-F

| Product name | Order no. | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | MLFB | | F | C | R | T |
| 4 DO | 6ES7 138-7FD00-0AB0 | Digital output module<br>4 DO; DC 17.4 V / 40 mA;<br>PP-switching, safety-related, ex i | W | M | | |

# 4.8 IM

| Product name | Order no. | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | MLFB<br>Firmware version | | F | C | R | T |
| ET 200iSP-IM 152-1 | 6ES7 152-1AA00-0AB0 | Interface module for ET 200iSP<br>electronics modules for intrinsically safe<br>PROFIBUS DP | W | S | | |
| ET 200iSP-IM 152-1 | 6ES7 152-1AA00-0AB0<br>V2.0 | Interface module for ET 200iSP<br>electronics modules for intrinsically safe<br>PROFIBUS DP<br>can be used for redundant operation in the H system | W | S | | |

# 4.9 PS

| Product name | Order no. | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | MLFB | | F | C | R | T |
| PS DC 24V | 6ES7 138-7EA00-0AA0 | Power supply for ET 200iSP | | | | 07/06 |
| PS DC 24V | 6ES7 138-7EA01-0AA0 | Power supply for ET 200iSP | | | | |
| PS AC 120/230V | 6ES7 138-7EC00-0AA0 | Power supply for ET 200iSP | | | | |

# 4.10 EM

| Product name | Order no. | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | MLFB | | F | C | R | T |
| EM reserve module | 6ES7 138-7AA00-0AA0 | Reserve module for free slots | | | | |

# 4.11 Watchdog

| Product name | Order no. | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | MLFB | | F | C | R | T |
| Watchdog module | 6ES7 138-7BB00-0AB0 | Special module for station monitoring | W | M | | |

# 4.12 Couplers

| Product name | Order no. | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | MLFB | | F | C | R | T |
| RS 485-IS coupler | 6ES7 972-0AC80-0XA0 | Fieldbus coupler between PROFIBUS DP and RS 485-IS;<br>to control intrinsically safe PROFIBUS nodes;<br>installation in Zone 2 possible; extended temperature range | | | | |

# 4.13 Terminal module

| Product name | Order no. | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | MLFB | | F | C | R | T |
| TM-EM/EM 60 S | 6ES7 193-7CA00-0AA0 | Terminal module for 2 EM; screw terminal | | | | |
| TM-EM/EM 60 C | 6ES7 193-7CA10-0AA0 | Terminal module for 2 EM; spring-loaded terminal | | | | |
| TM-EM/EM 60 S | 6ES7 193-7CA20-0AA0 | Terminal module for 2 EM; screw terminal | | | | |
| TM-EM Relais C | 6ES7 193-7CB00-0AA0 | Terminal module for EM relay; screw terminal | | | | |
| TM-IM/EM 60 S | 6ES7 193-7AA00-0AA0 | Terminal module for IM / EM; screw terminal | | | | |
| TM-IM/EM 60 C | 6ES7 193-7AA10-0AA0 | Terminal module for IM / EM; spring-loaded terminal | | | | |
| TM-IM/EM 60 S | 6ES7 193-7AA20-0AA0 | Terminal module for IM / EM; screw terminal | | | | |
| TM-IM/IM | 6ES7 193-7AB00-0AA0 | Terminal module for redundant IM | | | | |
| TM-PS-A | 6ES7 193-7DA00-0AA0 | Terminal module for power supply | | | | 07/ 06 |
| TM-PS-B | 6ES7 193-7DB00-0AA0 | Terminal module for redundant power supply | | | | 07/ 06 |
| TM-PS-A | 6ES7 193-7DA10-0AA0 | Terminal module for 24 V DC power supply | | | | |
| TM-PS-B | 6ES7 193-7DB10-0AA0 | Terminal module for 24 V DC redundant power supply | | | | |
| TM-PS-A | 6ES7 193-7DA20-0AA0 | Terminal module for 120/230 V AC power supply | | | | |
| TM-PS-B | 6ES7 193-7DB20-0AA0 | Terminal module for 120/230 V AC redundant power supply | | | | |

# ET 200S

# 5

## 5.1 AI

| Product name | Order no. | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | MLFB | | F | C | R | T |
| 2 AI U | 6ES7 134-4FB00-0AB0 | Analog input module<br>2 AI; (+/-5 V, 1 ... 5 V, +/-10 V) / 13 -bit; standard | W<br>Y | | | 07/<br>05 |
| 2 AI U | 6ES7 134-4FB01-0AB0 | Analog input module<br>2 AI; (+/-5 V, 1 ... 5 V, +/-10 V) / 13-bit; standard | W<br>Y | | | |
| 2 AI I 2DMU | 6ES7 134-4GB00-0AB0 | Analog input module<br>2 AI; 2-wire measuring transducer (4 ... 20 mA) / 13 -bit; standard | W<br>Y | | | 04/<br>05 |
| 2 AI I 2DMU | 6ES7 134-4GB01-0AB0 | Analog input module<br>2 AI; 2-wire measuring transducer (4 ... 20 mA) / 13 -bit; standard | W<br>Y | | | |
| 2 AI I 4DMU | 6ES7 134-4GB10-0AB0 | Analog input module<br>2 AI; 4-wire measuring transducer (+/-20 mA, 4 ... 20 mA) / 13-bit; standard | W<br>Y | | | 05/<br>05 |
| 2 AI I 4DMU | 6ES7 134-4GB11-0AB0 | Analog input module<br>2 AI; 4-wire measuring transducer (+/-20 mA, 4 ... 20 mA) / 13-bit; standard | W<br>Y | | | |
| 2 AI I TC | 6ES7 134-4JB00-0AB0 | Analog input module<br>2 AI TC; 15 -bit; standard | W<br>Y | | | 09/<br>08 |
| 2 AI I TC | 6ES7 134-4JB01-0AB0 | Analog input module<br>2 AI TC; 15 -bit; standard | W<br>Y | | | |
| 2 AI I RTD | 6ES7 134-4JB50-0AB0 | Analog input module<br>2 AI RTD; 15 -bit; standard | W<br>Y | | | 09/<br>08 |
| 2 AI I RTD | 6ES7 134-4JB51-0AB0 | Analog input module<br>2 AI RTD; 15 -bit; standard | W | | | |
| 2 AI U | 6ES7 134-4LB00-0AB0 | Analog input module<br>2 AI; (1 ... 5 V, +/- 5 V, +/- 10 V) / 15 -bit; high-resolution | W<br>Y | | | 06/<br>06 |
| 2 AI U | 6ES7 134-4LB02-0AB0 | Analog input module<br>2 AI; (1 ... 5 V, +/- 5 V, +/- 10 V) / 15-bit; high-resolution | W<br>Y | | | |
| 2 AI I | 6ES7 134-4MB00-0AB0 | Analog input module<br>2 AI; (+/-20 mA, 4 ... 20 mA) / 15 -bit, high-resolution | W<br>Y | | | 06/<br>06 |
| 2 AI I | 6ES7 134-4MB02-0AB0 | Analog input module<br>2 AI; (+/-20 mA, 4 ... 20 mA) / 15 -bit, high-resolution | W<br>Y | | | |
| 2 AI I TC<br>High Feature | 6ES7 134-4NB00-0AB0 | Analog input module<br>2 AI TC; 15-bit;<br>high feature | W<br>Y | | | 09/<br>05 |

| Product name | Order no. | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | MLFB | | F | C | R | T |
| 2 AI I TC<br>High Feature | 6ES7 134-4NB01-0AB0 | Analog input module<br>2 AI TC; 15-bit;<br>high feature | W<br>Y | | | |
| 2 AI I RTD<br>High Feature | 6ES7 134-4NB50-0AB0 | Analog input module<br>2 AI RTD; 15 -bit;<br>high feature | W<br>Y | | | 11/<br>05 |
| 2 AI I RTD<br>High Feature | 6ES7 134-4NB51-0AB0 | Analog input module<br>2 AI RTD; 15-bit;<br>high feature | W<br>Y | | | |

# 5.2 AO

| Product name | Order no. | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | MLFB | | F | C | R | T |
| 2 AO U | 6ES7 135-4FB00-0AB0 | Analog output module<br>2 AO; 1 ... 5 V / 12 Bit, +/-10 V / 13-bit; standard | W<br>Y | | | 05/<br>05 |
| 2 AO U | 6ES7 135-4FB01-0AB0 | Analog output module<br>2 AO; 1 ... 5 V / 12 Bit, +/-10 V / 13 -bit; standard | W<br>Y | | | |
| 2 AO I | 6ES7 135-4GB00-0AB0 | Analog output module<br>2 AO; (+/-20 mA, 4 ... 20 mA) / 13 -bit; standard | W<br>Y | | | 05/<br>05 |
| 2 AO I | 6ES7 135-4GB01-0AB0 | Analog output module<br>2 AO; (+/-20 mA, 4 ... 20 mA) / 13 -bit; standard | W<br>Y | | | |
| 2 AO U | 6ES7 135-4LB00-0AB0 | Analog output module<br>2 AO; (1 ... 5 V, +/-10 V) / 15-bit;<br>high-resolution | W<br>Y | | | 08/<br>03 |
| 2 AO U | 6ES7 135-4LB01-0AB0 | Analog output module<br>2 AO; (1 ... 5 V, +/-10 V) / 15-bit;<br>high-resolution, supports synchronous operation | W<br>Y | | | 06/<br>06 |
| 2 AO U | 6ES7 135-4LB02-0AB0 | Analog output module<br>2 AO; (1 ... 5 V, +/-10 V) / 15 -bit;<br>high-resolution, supports synchronous operation | W<br>Y | | | |
| 2 AO I | 6ES7 135-4MB00-0AB0 | Analog output module<br>2 AO; (+/-20 mA, 4 ... 20 mA) / 15 -bit;<br>high-resolution | W<br>Y | | | 08/<br>03 |
| 2 AO I | 6ES7 135-4MB01-0AB0 | Analog output module<br>2 AO; (+/-20 mA, 4 ... 20 mA) / 15 -bit,<br>high-resolution, supports synchronous operation | W<br>Y | | | 06/<br>06 |
| 2 AO I | 6ES7 135-4MB02-0AB0 | Analog output module<br>2 AO; (+/-20 mA, 4 ... 20 mA) / 15 -bit;<br>high-resolution, supports synchronous operation | W<br>Y | | | |

# 5.3 DI

| Product name | Order no. | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | MLFB | | F | C | R | T |
| 2 DI DC24V | 6ES7 131-4BB00-0AA0 | Digital input module<br>2 DI; 24 V DC; standard | W<br>Y | | | 04/<br>05 |
| 2 DI DC24V | 6ES7 131-4BB01-0AA0 | Digital input module<br>2 DI; 24 V DC; standard | W<br>Y | | | |
| 4 DI DC24V | 6ES7 131-4BD00-0AA0 | Digital input module<br>4 DI; 24 V DC; standard | W<br>Y | | | 04/<br>05 |
| 4 DI DC24V | 6ES7 131-4BD01-0AA0 | Digital input module<br>4 DI; 24 V DC; standard | W<br>Y | | | |
| 2 DI DC24V<br>High Feature | 6ES7 131-4BB00-0AB0 | Digital input module<br>2 DI; 24 V DC; High Feature;<br>with diagnostics | W<br>Y | | | 06/<br>05 |
| 2 DI DC24V<br>High Feature | 6ES7 131-4BB01-0AB0 | Digital input module<br>2 DI; 24 V DC; High Feature;<br>with diagnostics | W<br>Y | | | |
| 4 DI DC24V<br>High Feature | 6ES7 131-4BD00-0AB0 | Digital input module<br>4 DI; 24 V DC; High Feature;<br>with diagnostics | W<br>Y | | | 05/<br>05 |
| 4 DI DC24V<br>High Feature | 6ES7 131-4BD01-0AB0 | Digital input module<br>4 DI; 24 V DC; High Feature;<br>with diagnostics | W<br>Y | | | |
| 8 DI DC24V<br>High Speed | 6ES7 131-4BF00-0AA0 | Digital input module<br>8 DI; DC 24 V;supports isochronous mode | W<br>Y | | | |
| 4 DI | 6ES7 131-4CD00-0AB0 | Digital input module<br>4 DI; UC24 ... 48 V; High Feature;<br>with diagnostics | W<br>Y | | | 08/<br>10 |
| 4 DI UC 24..48V HF | 6ES7 131-4CD02-0AB0 | Digital input module<br>4 DI; UC 24 ... 48 V; High Feature;<br>with diagnostics | W<br>Y | | | |
| 2 DI AC 120V | 6ES7 131-4EB00-0AB0 | Digital input module<br>2 DI; 120 V AC | W<br>Y | | | |
| 2 DI AC 230V | 6ES7 131-4FB00-0AB0 | Digital input module<br>2 DI; 120 V AC | W<br>Y | | | |
| 4 DI NAMUR | 6ES7 131-4RD00-0AB0 | Digital input module<br>4 DI NAMUR; with diagnostics | W<br>Y | | | 10/<br>10 |
| 4 DI NAMUR | 6ES7 131-4RD02-0AB0 | Digital input module<br>4 DI NAMUR; with diagnostics | W<br>Y | | | |
| 8 DI DC 24V | 6ES7 138-4FA00-0AB0 | Digital input module<br>4 / 8 DI; 24 V DC;<br>8 DI safety-related SIL-2 or 4 DI safety-related SIL-3,<br>with diagnostics | W<br>Y | | | 06/<br>04 |

| Product name | Order no. | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | MLFB | | F | C | R | T |
| 8 DI DC 24V | 6ES7 138-4FA01-0AB0 | Digital input module<br>4 / 8 DI; 24 V DC;<br>8 DIsafety-related SIL-2 or 4 DI safety-related SIL-3,<br>with diagnostics | W<br>Y | | | 10/<br>05 |
| 8 DI DC 24V | 6ES7 138-4FA02-0AB0 | Digital input module<br>4 / 8 DI; 24 V DC;<br>8 DI safety-related SIL-2 or 4 DI safety-related SIL-3,<br>with diagnostics | W<br>Y | | | 01/<br>07 |
| 8 DI DC 24V | 6ES7 138-4FA03-0AB0 | Digital input module<br>4 / 8 DI; 24 V DC;<br>8 DI safety-related SIL-2 or 4 DI safety-related SIL-3,<br>with diagnostics | W<br>Y | | | 10/<br>08 |
| 8 DI DC 24V | 6ES7 138-4FA04-0AB0 | Digital input module<br>4 / 8 DI; 24 V DC;<br>8 DI safety-related SIL-2 or 4 DI safety-related SIL-3,<br>with diagnostics | W<br>Y | | | |
| 8 DI DC 24V | 6ES7 138-4FA05-0AB0 | Digital input module<br>4 / 8 DI; 24 V DC;<br>8 DI safety-related SIL-2 or 4 DI safety-related SIL-3, with diagnostics | W<br>Y | | | |

# 5.4 DO

| Product name | Order no. | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | MLFB | | F | C | R | T |
| 2 DO DC24V/0.5A | 6ES7 132-4BB00-0AA0 | Digital output module 2 DO; 24 V DC / 0.5 A; standard | W Y | | | 04/ 05 |
| 2 DO DC24V/0.5A | 6ES7 132-4BB01-0AA0 | Digital output module 2 DO; 24 V DC / 0.5 A; standard | W Y | | | |
| 2 DO DC24V/2A | 6ES7 132-4BB30-0AA0 | Digital output module 2 DO; 24 V DC / 2 A; standard | W Y | | | 04/ 05 |
| 2 DO DC24V/2A | 6ES7 132-4BB31-0AA0 | Digital output module 2 DO; 24 V DC / 2 A; standard | W Y | | | |
| 2 DO DC24V/0.5A High Feature | 6ES7 132-4BB00-0AB0 | Digital output module 2 DO; 24 V DC / 0.5 A; High Feature; with diagnostics | W Y | | | 09/ 05 |
| 2 DO DC24V/0.5A High Feature | 6ES7 132-4BB01-0AB0 | Digital output module 2 DO; 24 V DC / 0.5 A; High Feature; with diagnostics | W Y | | | |
| 2 DO DC24V/2A High Feature | 6ES7 132-4BB30-0AB0 | Digital output module 2 DO; 24 V DC / 2 A; High Feature; with diagnostics | W Y | | | 07/ 05 |
| 2 DO DC24V/2A High Feature | 6ES7 132-4BB31-0AB0 | Digital output module 2 DO; 24 V DC / 2 A; High Feature; with diagnostics | W Y | | | |
| 4 DO DC24V/0.5A | 6ES7 132-4BD00-0AA0 | Digital output module 4 DO; 24 V DC / 0.5 A; standard | W Y | | | 05/ 05 |
| 4 DO DC24V/0.5A High Feature | 6ES7 132-4BD00-0AB0 | Digital output module 4 DO; 24 V DC / 0.5 A; High Feature; with diagnostics | W Y | | | |
| 4 DO DC24V/0.5A | 6ES7 132-4BD01-0AA0 | Digital output module 4 DO; 24 V DC / 0.5 A; standard | W Y | | | 10/ 10 |
| 4 DO DC24V/0.5A | 6ES7 132-4BD02-0AA0 | Digital output module 4 DO; 24 V DC / 0.5 A; standard | W Y | | | |
| 4 DO DC24V/2A | 6ES7 132-4BD30-0AA0 | Digital output module 4 DO; 24 V DC / 2 A; standard | W Y | | | 04/ 05 |
| 4 DO DC24V/2A High Feature | 6ES7 132-4BD30-0AB0 | Digital output module 4 DO; 24 V DC / 2 A; High Feature, with diagnostics | W Y | | | |
| 4 DO DC24V/2A | 6ES7 132-4BD31-0AA0 | Digital output module 4 DO; 24 V DC / 2 A; standard | W Y | | | 05/ 07 |
| 4 DO DC24V/2A | 6ES7 132-4BD32-0AA0 | Digital output module 4 DO; 24 V DC / 2 A; standard | W Y | | | |
| 8 DO DC24V/0.5A High Speed | 6ES7 132-4BF00-0AA0 | Digital output module 8 DO; 24 V DC/ 0.5 A; supports isochronous mode | W Y | | | |
| 8 DO DC24V/0.5A High Feature | 6ES7 132-4BF00-0AB0 | Digital output module 8 DO; 24 V DC/ 0.5 A; High Feature, with diagnostics, supports isochronous mode | W Y | | | |

| Product name | Order no. | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | MLFB | | F | C | R | T |
| 2 DO<br>AC 120/230V/ 1A | 6ES7 132-4FB00-0AB0 | Digital output module<br>2 DO; 120 / 230 V, 1 A AC | W<br>Y | | | 01/<br>07 |
| 2 DO<br>AC 120/230V/ 1A | 6ES7 132-4FB01-0AB0 | Digital output module<br>2 DO; 120 / 230 V, 1 A AC | W<br>Y | | | |
| 2 DO Rel.<br>24.230V/5A | 6ES7 132-4HB00-0AB0 | Digital output module<br>2 relays; 24..230 V / 5 A UC | W<br>Y | | | 04/<br>05 |
| 2 DO Rel.<br>24.230V/5A | 6ES7 132-4HB01-0AB0 | Digital output module<br>2 relays; 24..230 V / 5 A UC | W<br>Y | | | |
| 2 DO Rel.<br>24.230V/5A | 6ES7 132-4HB10-0AB0 | Digital output module<br>2 relays; form C; 24..230 V / 5 A UC | W<br>Y | | | 05/<br>11 |
| 2 DO Rel.<br>24.230V/5A | 6ES7 132-4HB12-0AB0 | Digital output module<br>2 relays; form C; 24..230 V / 5 A UC | W<br>Y | | | |
| 4 DO<br>DC 24V/2A | 6ES7 138-4FB00-0AB0 | Digital output module<br>4 DO; 24 V / 2 A; DC<br>safety-related up toSIL-3,<br>with diagnostics, PM-switching | W<br>Y | | | 06/<br>04 |
| 4 DO<br>DC 24V/2A | 6ES7 138-4FB01-0AB0 | Digital output module<br>4 DO; 24 V / 2 A; DC<br>safety-related up toSIL-3,<br>with diagnostics, PM-switching | W<br>Y | | | 10/<br>05 |
| 4 DO<br>DC 24V/2A | 6ES7 138-4FB02-0AB0 | Digital output module<br>4 DO; 24 V / 2 A; DC<br>safety-related up toSIL-3,<br>with diagnostics, PM-switching | W<br>Y | | | 10/<br>08 |
| 4 DO<br>DC 24V/2A | 6ES7 138-4FB03-0AB0 | Digital output module<br>4 DO; 24 V / 2 A; DC<br>safety-related up toSIL-3,<br>with diagnostics, PM-switching | W<br>Y | | | |
| 4 DO<br>DC 24V/2A | 6ES7 138-4FB04-0AB0 | Digital output module<br>4 DO; 24 V / 2 A;<br>DC safety related to SIL-3,<br>with diagnostics, PM switching | W<br>Y | | | |

# 5.5 FM

| Product name | Order no. | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | MLFB | | F | C | R | T |
| Counter module, 24 V/100 kHz | 6ES7 138-4DA04-0AB0 | Counter module, 24 V / 100 kHz; for one-off, continuous and periodic counting, supports synchronous operation (only counting and measuring modes have been released for PCS 7) | W Y | | | |

# 5.6 IM

| Product name | Order no. | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | MLFB | | F | C | R | T |
| IM 151-1 | 6ES7 151-1BA00-0AB0 | Interface module<br>IM 151-1 for ET 200S; high feature | W<br>Y | X | | 10/<br>05 |
| IM 151-1 | 6ES7 151-1BA01-0AB0 | Interface module<br>IM 151-1 for ET 200S; high feature | W<br>Y | X | | 03/<br>07 |
| IM 151-1 | 6ES7 151-1BA02-0AB0 | Interface module<br>IM 151-1 for ET 200S; high feature | W<br>Y | X | | |

# 5.7 PS

| Product name | Order no. | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | MLFB | | F | C | R | T |
| PM-E DC24V | 6ES7 138-4CA00-0AA0 | Power supply,<br>24 V DC; with diagnostics | W<br>Y | | | 04/<br>05 |
| PM-E DC24V | 6ES7 138-4CA01-0AA0 | Power supply,<br>24 V DC;<br>with diagnostics | W<br>Y | | | |
| PM-E DC24V HF | 6ES7 138-4CA60-0AB0 | Power supply,<br>24 V DC;<br>with diagnostics, high feature | W<br>Y | | | |
| PM-E DC24V/<br>AC120/230V | 6ES7 138-4CB10-0AB0 | Power supply,<br>24 V DC; AC 120 V or 230 V;<br>with diagnostics and fuse | W<br>Y | | | 11/<br>06 |
| PM-E DC24V..48/<br>AC24..230V | 6ES7 138-4CB11-0AB0 | Power supply,<br>DC 24 ... 48 V, AC 24 ... 230 V;<br>with diagnostics and fuse | W<br>Y | | | |
| PM-E DC24V | 6ES7 138-4CF00-0AB0 | Power supply,<br>24 V DC; failsafe,<br>with 2 DO 24V PM-switching;<br>with diagnostics | W<br>Y | | | 06/<br>04 |
| PM-E DC24V | 6ES7 138-4CF01-0AB0 | Power supply,<br>24 V DC; failsafe,<br>with 2 DO 24V PM-switching;<br>with diagnostics | W<br>Y | | | 10/<br>05 |
| PM-E DC24V | 6ES7 138-4CF02-0AB0 | Power supply,<br>24 V DC; failsafe,<br>with 2 DO 24V PM-switching;<br>with diagnostics | W<br>Y | | | 10/<br>08 |
| PM-E DC24V | 6ES7 138-4CF03-0AB0 | Power supply,<br>24 V DC; failsafe,<br>with 2 DO 24V PM-switching;<br>with diagnostics | W<br>Y | | | |
| PM-E DC24V | 6ES7 138-4CF42-0AB0 | Power supply,<br>24 V DC; failsafe,<br>PP-switching;<br>with diagnostics | W<br>Y | | | |
| PM-D DC24V | 3RK1 903-0BA00 | Power supply,<br>24 VDC;<br>2 PM-D; DC 24 V | W<br>Y | | | |
| PM-D F1 SIGUARD | 3RK1 903-1BA00 | Power supply;<br>EMERGENCY OFF; monitored start-up; 2-channel | W<br>Y | | | |
| PM-D F2 SIGUARD | 3RK1 903-1BB00 | Power supply;<br>protective door; autostart; 2-channel | W<br>Y | | | |
| PM-D F4 SIGUARD | 3RK1 903-1BC00 | Power supply;<br>extension to F1/2 for additional potential group | W<br>Y | | | |

| Product name | Order no. | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | MLFB | | F | C | R | T |
| PM-D F3 SIGUARD | 3RK1 903-1BD00 | Power supply;<br>extension to F1/2 for additional potential group;<br>time-delayed | W<br>Y | | | |
| PM-D F5 SIGUARD | 3RK1 903-1BE00 | Power supply;<br>extension to PM-D F1 to PM-D F4; contact multiplier | W<br>Y | | | |
| PM-X SIGUARD | 3RK1 903-1CB00 | Connection module for incoming feeder protection;<br>external safety circuits | W<br>Y | | | |
| PM-D F PROFIsafe | 3RK1 903-3BA00 | Power supply<br>for 6 vector groups; failsafe | W<br>Y | | | |
| PM-D F PROFIsafe | 3RK1 903-3BA01 | Power supply<br>for 6 vector groups; failsafe | W<br>Y | | | 10/<br>09 |
| PM-D F PROFIsafe | 3RK1 903-3BA02 | Power supply<br>for 6 vector groups; failsafe | W<br>Y | | | |
| F-CM | 3RK1 903-3CA00 | Contact multiplier;<br>extension to PM-D F PROFIsafe; | W<br>Y | | | |
| PM-D F X1 | 3RK1 903-3DA00 | Power supply/expansion module; overvoltage protection;<br>for supplying external EMERGENCY OFF signals;<br>for 6 vector groups | W<br>Y | | | |

# 5.8 Terminal module

| Product name | Order no. | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | MLFB | | F | C | R | T |
| TM-E15x26-A1 | 6ES7 193-4CAx0-0AA0 | Terminal module for electronics modules; pass-through AUX rail to neighboring potential group on the left; access to AUX1 potential via terminals | Y | | | |
| TM-E15x24-A1 | 6ES7 193-4CAx0-0AA0 | Terminal module for electronics modules; pass-through AUX rail to neighboring potential group on the left; access to AUX1 potential via terminals | Y | | | |
| TM-E15x24-01 | 6ES7 193-4CBx0-0AA0 | Terminal module for electronics modules; pass-through AUX rail to neighboring potential group on the left; no access to AUX1 potential via terminals | Y | | | |
| TM-E15x23-01 | 6ES7 193-4CBx0-0AA0 | Terminal module for electronics modules; pass-through AUX rail to neighboring potential group on the left; no access to AUX1 potential via terminals | Y | | | |
| TM-E15x24-AT | 6ES7 193-4CLx0-0AA0 | Terminal module for electronics modules 2 AI TC HF; pass-through AUX rail to neighboring potential group on the left; no access to AUX1 potential via terminals | Y | | | |
| TM-E30x46-A1 | 6ES7 193-4CFx0-0AA0 | Terminal module for electronics modules; pass-through AUX rail to neighboring potential group on the left; access to AUX1 potential via terminals | Y | | | |
| TM-E30x44-01 | 6ES7 193-4CGx0-0AA0 | Terminal module for electronics modules; pass-through AUX rail to neighboring potential group on the left; no access to AUX1 potential via terminals | Y | | | |
| TM-P15x23-A1 | 6ES7 193-4CCx0-0AA0 | Terminal module for power supply; pass-through AUX rail to neighboring potential group on the left; access to AUX1 potential via terminals | Y | | | |
| TM-P15x23-A0 | 6ES7 193-4CDx0-0AA0 | Terminal module for power supply; interrupted AUX rail to neighboring potential group on the left; access to AUX1 potential via terminals | Y | | | |
| TM-P15x22-01 | 6ES7 193-4CEx0-0AA0 | Terminal module for power supply; pass-through AUX rail to neighboring potential group on the left; no access to AUX1 potential via terminals | Y | | | |
| TM-P30x44-A0 | 6ES7 193-4CKx0-0AA0 | Terminal module for failsafe power supply PM-E F; interrupted AUX rail to neighboring potential group on the left; access to AUX1 potential via terminals | Y | | | |

| Product name | Order no. | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | MLFB | | F | C | R | T |
| TM-P15S27-01 | 3RK1 903-0AA00 | Terminal module for power supply PM-D;<br>with cover | Y | | | |
| TM-PF30S47-B1 | 3RK1 903-1AA00 | Terminal module<br>SIGUARD PM-D F 1,2;<br>for potential group, supply U1, U2,<br>sensor connection | Y | | | |
| TM-PF30S47-B0 | 3RK1 903-1AA10 | Terminal module for<br>SIGUARD PM-D F 1,2<br>for potential subgroup,<br>sensor connection | Y | | | |
| TM-PF30S47-C1 | 3RK1 903-1AC00 | Terminal module<br>SIGUARD PM-D F 3,4<br>for potential group, supply U1, U2 | Y | | | |
| TM-PF30S47-C0 | 3RK1 903-1AC10 | Terminal module<br>SIGUARD PM-D F 3,4<br>for potential subgroup, supply U2 | Y | | | |
| TM-PF30S47-D0 | 3RK1 903-1AD10 | Terminal module<br>SIGUARD PM-D F 5<br>for contact multipliers | Y | | | |
| TM-X15 S27-01 | 3RK1 903-1AB00 | Terminal module for connection module PM-X<br>connection unit for supply contactor | Y | | | |
| TM-PF30S47-F1 | 3RK1 903-3AA00 | Terminal module for failsafe power supply PM-D F;<br>pass-through AUX rail to neighboring potential group on the left;<br>no access to AUX1 potential via terminals | Y | | | |
| TM-FCM30S47-E0 | 3RK1 903-3AB10 | Terminal module for F-CM;<br>with lead-in for U1 | Y | | | |
| TM-PFX30S47-G1 | 3RK1 903-3AE00 | Terminal module for PM-D F X1;<br>for potential group; no supply from left for U1 | Y | | | |
| TM-PFX30S47-G0 | 3RK1 903-3AE10 | Terminal module for PM-D F X1;<br>for potential group; with supply from left for U1 | Y | | | |

# 5.9 Motor starter

| Product name | Order no. | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | MLFB | | F | C | R | T |
| DS1e-x<br>0,3 - 3 A<br>High Feature | 3RK1 301-0AB10-0AA2 | Direct starter<br>DS 1e-x; 0.3 - 3 A;<br>mechanical switching; electronic UE protection; no fuse; up to 1.1 KW / 400 V; 0.3 A to 3 A;<br>Option:<br>Brake control module, control module; high feature | W<br>Y | | | 05/<br>04 |
| DS1e-x<br>0,3 - 3 A<br>High Feature | 3RK1 301-0AB10-0AA3 | Direct starter<br>DS 1e-x; 0.3 - 3 A;<br>mechanical switching; electronic UE protection; no fuse; up to 1.1 KW / 400 V; 0.3 A to 3 A;<br>Option:<br>Brake control module, control module; switch ES; high feature | W<br>Y | | | |
| DS1e-x<br>0,3 - 3 A<br>High Feature | 3RK1 301-0AB10-0AA4 | Direct starter<br>DS 1e-x; 0.3 - 3 A;<br>mechanical switching; electronic UE protection; no fuse; up to 1.1 KW / 400 V; 0.3 A to 3 A;<br>Option:<br>Brake control module, control module; switch ES; high feature; circuit-breaker signal can be configured | W<br>Y | | | |
| DS1e-x<br>2,4 - 8 A<br>High Feature | 3RK1 301-0BB10-0AA2 | Direct starter<br>DS 1e-x; 2.4 - 8 A;<br>mechanical switching; electronic UE protection; no fuse; up to 3 KW / 400 V; 2,4 A to 8A;<br>Option:<br>Brake control module, control module; high feature | W<br>Y | | | 05/<br>04 |
| DS1e-x<br>2,4 - 8 A<br>High Feature | 3RK1 301-0BB10-0AA3 | Direct starter;<br>DS 1e-x; 2.4 - 8 A;<br>mechanical switching; electronic UE protection; no fuse; up to 3 KW / 400 V; 2,4 A up to 8 A;<br>Option:<br>Brake control module, control module; switch ES; high feature | W<br>Y | | | |

| Product name | Order no. | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | MLFB | | F | C | R | T |
| DS1e-x<br>2,4 - 8 A<br>High Feature | 3RK1 301-0BB10-0AA4 | Direct starter<br>DS 1e-x; 2.4 - 8 A;<br>mechanical switching; electronic UE protection; no fuse; up to 3 KW / 400 V; 2,4 A up to 8 A;<br>Option:<br>Brake control module, control module; switch ES; high feature; circuit-breaker signal can be configured | W<br>Y | | | |
| DS1e-x<br>2,4 - 16 A<br>High Feature | 3RK1 301-0CB10-0AA2 | Direct starter<br>DS1e-x 2.4 - 16 A;<br>mechanical switching; electronic UE protection; no fuse; up to 7.5 KW / 400 V; 2,4 A to 16 A;<br>Option:<br>Brake control module, control module; high feature | W<br>Y | | | 05/<br>04 |
| DS1e-x<br>2,4 - 16 A<br>High Feature | 3RK1 301-0CB10-0AA3 | Direct starter<br>DS 1e-x; 2.4 - 16 A;<br>mechanical switching; electronic UE protection; no fuse; up to 7.5 KW / 400 V; 2,4 A to 16 A;<br>Option:<br>Brake control module, control module; switch ES; high feature | W<br>Y | | | |
| DS1e-x<br>2,4 - 16 A<br>High Feature | 3RK1 301-0CB10-0AA4 | Direct starter<br>DS 1e-x; 2.4 - 16 A;<br>mechanical switching; electronic UE protection; no fuse; up to 7.5 KW / 400 V; 2,4 A to 16 A;<br>Option:<br>Brake control module, control module; switch ES; high feature; circuit-breaker signal can be configured | W<br>Y | | | |
| DSS1e-x<br>0,3 - 3 A<br>High Feature | 3RK1 301-0AB20-0AA2 | Direct soft starter<br>DSS 1e-x 0.3 - 3 A;<br>electronic switching; electronic UE protection; no fuse; up to 1.1 KW / 400V; 0,30A to 3,00 A;<br>Option:<br>Brake control module, control module; high feature | W<br>Y | | | 05/<br>04 |
| DSS1e-x<br>0,3 - 3 A<br>High Feature | 3RK1 301-0AB20-0AA3 | Direct soft starter<br>DSS 1e-x; 0.3 - 3 A;<br>electronic switching; electronic UE protection; no fuse; up to 1.1 KW / 400 V; 0.3 A to 3 A;<br>Option:<br>Brake control module, control module; switch ES; high feature | W<br>Y | | | |

| Product name | Order no. | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | MLFB | | F | C | R | T |
| DSS1e-x<br>0,3 - 3 A<br>High Feature | 3RK1 301-0AB20-0AA4 | Direct soft starter<br>DSS 1e-x; 0.3 - 3 A;<br>electronic switching; electronic UE protection; no fuse; up to 1.1 KW / 400 V; 0.3 A to 3 A;<br>Option:<br>Brake control module, control module; switch ES; high feature | W<br>Y | | | |
| DSS1e-x<br>2,4 - 8 A<br>High Feature | 3RK1 301-0BB20-0AA2 | Direct soft starter<br>DSS 1 e-x; 2.4 - 8 A;<br>electronic switching; electronic UE protection; no fuse; up to 3 KW / 400 V; 2.4 A to 8 A;<br>Option:<br>Brake control module, control module; high feature | W<br>Y | | | 05/<br>04 |
| DSS1e-x<br>2,4 - 8 A High Feature | 3RK1 301-0BB20-0AA3 | Direct soft starter<br>DSS 1e-x; 2,4 - 8 A;<br>electronic switching; electronic UE protection; no fuse; up to 3 KW / 400 V; 2.4 A to 8 A;<br>Option:<br>Brake control module, control module; switch ES; high feature | W<br>Y | | | |
| DSS1e-x<br>2,4 - 8 A<br>High Feature | 3RK1 301-0BB20-0AA4 | Direct soft starter<br>DSS 1e-x; 2.4 - 8 A;<br>electronic switching; electronic UE protection; no fuse; up to 3 KW / 400 V; 2.4 A to 8 A;<br>Option: Brake control module, control module; switch ES; high feature | W<br>Y | | | |
| DSS1e-x<br>2,4 - 16 A<br>High Feature | 3RK1 301-0CB20-0AA2 | Direct soft starter<br>DSS 1e-x; 2.4 - 16 A;<br>electronic switching; electronic UE protection; no fuse; up to 7.5 KW / 400 V; 2.4 A to 16 A;<br>Option:<br>Brake control module, control module; high feature | W<br>Y | | | 05/<br>04 |
| DSS1e-x 2,4 - 16 A<br>High Feature | 3RK1 301-0CB20-0AA3 | Direct soft starter<br>DSS 1e-x; 2.4 - 16 A;<br>electronic switching; electronic UE protection; no fuse; up to 7.5 KW / 400 V; 2.4 A to 16 A;<br>Option:<br>Brake control module, control module; switch ES; high feature | W<br>Y | | | |

| Product name | Order no. | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | MLFB | | F | C | R | T |
| DSS1e-x<br>2,4 - 16 A<br>High Feature | 3RK1 301-0CB20-0AA4 | Direct soft starter<br>DSS 1e-x 2.4 - 16 A;<br>electronic switching; electronic UE protection; no fuse; up to 7.5 KW / 400 V; 2.4 A to 16 A;<br>Option:<br>Brake control module, control module; switch ES; high feature | W<br>Y | | | |
| RS1e-x<br>(0,3 - 3A)<br>High Feature | 3RK1 301-0AB10-1AA2 | Reversing starter<br>RS 1e-x; 0.3 - 3 A;<br>high feature; mechanical switching; electronic UE protection; no fuse; up to 1.1 KW / 400V; 0.3 A to 3 A;<br>Option:<br>Brake control module, control module; high feature | W<br>Y | | | 05/<br>04 |
| RS1e-x<br>(0,3 - 3A) High Feature | 3RK1 301-0AB10-1AA3 | Reversing starter<br>RS 1e-x; 0.3 - 3 A;<br>high feature; mechanical switching; electronic UE protection; no fuse; up to 1.1 KW / 400 V; 0.3 A to 3 A;<br>Option:<br>Brake control module, control module; switch ES; high feature | W<br>Y | | | |
| RS1e-x<br>(0,3 - 3A)<br>High Feature | 3RK1 301-0AB10-1AA4 | Reversing starter<br>RS 1e-x; 0.3 - 3 A;<br>high feature; mechanical switching; electronic UE protection; no fuse; up to 1.1 KW / 400 V; 0.3 A bis 3 A;<br>Option:<br>Brake control module, control module; switch ES; high feature; circuit-breaker signal can be configured | W<br>Y | | | |
| RS1e-x<br>(2,4 - 8A)<br>High Feature | 3RK1 301-0BB10-1AA2 | Reversing starter<br>RS 1e-x; 2.4 - 8 A;<br>high feature; mechanical switching; electronic UE protection; no fuse; up to 3 KW / 400 V; 2.4 A to 8 A;<br>Option:<br>Brake control module, control module; high feature | W<br>Y | | | 05/<br>04 |
| RS1e-x<br>(2,4 - 8A)<br>High Feature | 3RK1 301-0BB10-1AA3 | Reversing starter<br>RS 1e-x; 2.4 - 8 A;<br>high feature; mechanical switching; electronic UE protection; no fuse; up to 3 KW / 400 V; 2.4 A to 8 A;<br>Option:<br>Brake control module, control module; switch ES; high feature | W<br>Y | | | |

| Product name | Order no. | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | MLFB | | F | C | R | T |
| RS1e-x (2,4 - 8A)<br>High Feature | 3RK1 301-0BB10-1AA4 | Reversing starter<br>RS 1e-x; 2,4 - 8 A;<br>high feature; mechanical switching;<br>electronic UE protection; no fuse; up to 3 KW / 400 V; 2.4 A to 8 A;<br>Option:<br>Brake control module, control module; switch ES; high feature; circuit-breaker signal can be configured | W<br>Y | | | |
| RS1e-x<br>(2,4 - 16A)<br>High Feature | 3RK1 301-0CB10-1AA2 | Reversing starter<br>RS 1e-x; 2.4 - 16 A;<br>high feature; mechanical switching;<br>electronic UE protection; no fuse; up to 7.5 KW / 400 V; 2.4 A to 16 A;<br>Option:<br>Brake control module, control module; high feature | W<br>Y | | | 05/<br>04 |
| RS1e-x<br>(2,4 - 16A)<br>High Feature | 3RK1 301-0CB10-1AA3 | Reversing starter<br>RS 1e-x; 2.4 - 16 A;<br>high feature; mechanical switching;<br>electronic UE protection; no fuse; up to 7.5 KW / 400V; 2.4 A to 16 A;<br>Option:<br>Brake control module, control module; switch ES; high feature | W<br>Y | | | |
| RS1e-x<br>(2,4 - 16A)<br>High Feature | 3RK1 301-0CB10-1AA4 | Reversing starter<br>RS 1e-x; 2.4 - 16 A;<br>high feature; mechanical switching;<br>electronic UE protection; no fuse; up to 7.5 KW / 400 V; 2.4 A to 16 A;<br>Option:<br>Brake control module, control module; switch ES; high feature; circuit-breaker signal can be configured | W<br>Y | | | |

# 5.10 F motor starter

| Product name | Order no. | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | MLFB | | F | C | R | T |
| F-DS1e-x<br>0,3 - 3 A<br>High Feature | 3RK1 301-0AB13-0AA2 | Safe direct starter<br>F-DS 1e-x; 0.3 - 3 A;<br>high feature; mechanical switching;<br>electronic UE protection; no fuse;<br>up to 1.1 KW / 400 V; 0.3 A to 3 A;<br>Option:<br>Brake control module, control module; high feature; for PM-D F PROFIsafe | W<br>Y | | | |
| F-DS1e-x<br>0,3 - 3 A<br>High Feature | 3RK1 301-0AB13-0AA4 | Safe direct starter<br>F-DS 1e-x; 0.3 - 3 A;<br>high feature; mechanical switching;<br>electronic UE protection; no fuse;<br>up to 1.1 KW / 400 V; 0.3 A to 3 A;<br>Option:<br>Brake control module, control module; high feature; for PM-D F PROFIsafe; circuit-breaker signal can be configured | W<br>Y | | | |
| F-DS1e-x<br>2,4 - 8 A<br>High Feature | 3RK1 301-0BB13-0AA2 | Safe direct starter<br>F-DS 1e-x; 2.4 - 8 A;<br>high feature; mechanical switching;<br>electronic UE protection; no fuse;<br>up to 3 KW / 400 V; 2.4 A to 8 A;<br>Option:<br>Brake control module, control module; high feature; for PM-D F PROFIsafe | W<br>Y | | | |
| F-DS1e-x<br>2,4 - 8 A<br>High Feature | 3RK1 301-0BB13-0AA4 | Safe direct starter<br>F-DS 1e-x; 2,4 - 8 A;<br>high feature; mechanical switching;<br>electronic UE protection; no fuse;<br>up to 3 KW / 400 V; 2.4 A to 8 A;<br>Option:<br>Brake control module, control module; high feature; for PM-D F PROFIsafe; circuit-breaker signal can be configured | W<br>Y | | | |
| F-DS1e-x<br>2,4 - 16 A<br>High Feature | 3RK1 301-0CB13-0AA2 | Safe direct starter<br>F-DS 1e-x; 2.4 - 16 A;<br>high feature; mechanical switching;<br>electronic UE protection; no fuse;<br>up to 7.5 KW / 400 V; 2.4 A to 16 A;<br>Option:<br>Brake control module, control module; high feature; for PM-D F PROFIsafe | W<br>Y | | | |

| Product name | Order no. | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | MLFB | | F | C | R | T |
| F-DS1e-x<br>2,4 - 16 A<br>High Feature | 3RK1 301-0CB13-0AA4 | Safe direct starter<br>F-DS 1e-x; 2.4 - 16 A;<br>high feature; mechanical switching;<br>electronic UE protection; no fuse;<br>up to 7.5 KW / 400 V; 2.4 A to 16 A;<br>Option:<br>Brake control module, control module; high feature; for PM-D F PROFIsafe; circuit-breaker signal can be configured | W<br>Y | | | |
| F-RS1e-x<br>0,3 - 3 A<br>High Feature | 3RK1 301-0AB13-1AA2 | Safe reversing starter<br>F-RS 1e-x; 0.3 - 3 A;<br>high feature; mechanical switching;<br>electronic UE protection; no fuse;<br>up to 1.1 KW / 400 V; 0.3 A to 3 A;<br>Option:<br>Brake control module, control module; high feature; for PM-D F PROFIsafe | W<br>Y | | | |
| F-RS1e-x<br>0,3 - 3 A<br>High Feature | 3RK1 301-0AB13-1AA4 | Safe reversing starter<br>F-RS 1e-x; 0.3 - 3 A;<br>high feature; mechanical switching;<br>electronic UE protection; no fuse;<br>up to 1.1 KW / 400 V; 0.3 A to 3 A;<br>Option:<br>Brake control module, control module; high feature; for PM-D F PROFIsafe; circuit-breaker signal can be configured | W<br>Y | | | |
| F-RS1e-x<br>2,4 - 8 A<br>High Feature | 3RK1 301-0BB13-1AA2 | Safe reversing starter<br>F-RS 1e-x; 2.4 - 8 A;<br>high feature; mechanical switching;<br>electronic UE protection; no fuse;<br>up to 3 KW / 400 V; 2.4 A to 8 A;<br>Option:<br>Brake control module, control module; high feature; for PM-D F PROFIsafe | W<br>Y | | | |
| F-RS1e-x<br>2,4 - 8 A<br>High Feature | 3RK1 301-0BB13-1AA4 | Safe reversing starter<br>F-RS 1e-x; 2.4 - 8 A;<br>high feature; mechanical switching;<br>electronic UE protection; no fuse;<br>up to 3 KW / 400 V; 2.4 A to 8 A;<br>Option:<br>Brake control module, control module; high feature; for PM-D F PROFIsafe; circuit-breaker signal can be configured | W<br>Y | | | |

| Product name | Order no. | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | MLFB | | F | C | R | T |
| F-RS1e-x<br>2,4 - 16 A<br>High Feature | 3RK1 301-0CB13-1AA2 | Safe reversing starter<br>F-RS 1e-x; 2.4 - 16 A;<br>high feature; mechanical switching;<br>electronic UE protection; no fuse;<br>up to 7.5 KW / 400 V; 2.4 A to 16 A;<br>Option:<br>Brake control module, control module; high feature; for PM-D F PROFIsafe | W<br>Y | | | |
| F-RS1e-x<br>2,4 - 16 A<br>High Feature | 3RK1 301-0CB13-1AA4 | Safe reversing starter<br>F-RS 1e-x; 2.4 - 16 A;<br>high feature; mechanical switching;<br>electronic UE protection; no fuse;<br>up to 7.5 KW / 400 V; 2.4 A to 16 A;<br>Option:<br>Brake control module, control module; high feature; for PM-D F PROFIsafe; circuit-breaker signal can be configured | W<br>Y | | | |

# 5.11 Motor starter accessories

| Product name | Order no. | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | MLFB | | F | C | R | T |
| xB3<br>DC24V/4A | 3RK1 903-0CE00 | Brake control module<br>DC 24 V / 4 A;<br>2 DI; 24 V DC;local control | W<br>Y | | | |
| xB4<br>DC500V/0,7A | 3RK1 903-0CF00 | Brake control module<br>DC 500 V / 0.7 A;<br>2 DI; 24 V DC;local control | W<br>Y | | | |

# 5.12 TM motor starter

| Product name | Order no. | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | MLFB | | F | C | R | T |
| TM-DS65-S32-01 FS L | 3RK1 903-0AK00 | Terminal module for DS 1e-x and DSS 1e-x; motor starters, with power bus supply, with caps | Y | | | |
| TM-DS65-S31-01 S | 3RK1 903-0AK10 | Terminal module for DS 1e-x and DSS 1e-x; motor starter, with power bus bushing | Y | | | |
| TM-RS130-S32-01 FS L | 3RK1 903-0AL00 | Terminal module for RS 1e-x; motor starter, with power bus supply, with caps | Y | | | |
| TM-RS130-S31-01 S | 3RK1 903-0AL10 | Terminal module for RS 1e-x; motor starter, with power bus bushing | Y | | | |
| TM-FDS65-S32-01 FS L | 3RK1 903-0AC00 | Terminal module for F-DS 1e-x; motor starter, with power bus supply, with caps | Y | | | |
| TM-FDS65-S32-01 FS L | 3RK1 903-3AC00 | Terminal module for F-DS 1e-x; motor starter, with power bus supply, with caps | Y | | | |
| TM-FDS65-S31-01 S | 3RK1 903-0AC10 | Terminal module for F-DS 1e-x; motor starter, with power bus bushing | Y | | | |
| TM-FDS65-S31-01 S | 3RK1 903-3AC10 | Terminal module for F-DS 1e-x; motor starter, with power bus bushing | Y | | | |
| TM-FRS130-S32-01 FS L | 3RK1 903-0AD00 | Terminal module for F-RS 1e-x; motor starter, with power bus supply, with caps | Y | | | |
| TM-FRS130-S32-01 FS L | 3RK1 903-3AD00 | Terminal module for F-RS 1e-x; motor starter, with power bus supply, with caps | Y | | | |
| TM-FRS130-S31-01 S | 3RK1 903-0AD10 | Terminal module for F-RS 1e-x; motor starter, with power bus bushing | Y | | | |
| TM-FRS130-S31-01 S | 3RK1 903-3AD10 | Terminal module for F-RS 1e-x; motor starter, with power bus bushing | Y | | | |
| TM-xB215 S24-01 | 3RK1 903-0AG01 | Terminal module for brake control module xB3, xB4 | Y | | | |

# ET 200X

# 6

## 6.1 AI

| Product name | Order no. | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | MLFB | | F | C | R | T |
| ET 200X EM 144 AI 2x U | 6ES7 144-1FB31-0XB0 | Expansion module 2 AI; +/-10 V; diagnostics | W | | | 10/08 |
| ET 200X EM 144 AI 2x I | 6ES7 144-1GB31-0XB0 | Expansion module 2 AI; +/-20 mA, 4 ... 20 mA; 4-wire measuring transducer; diagnostics | W | | | 10/08 |
| ET 200X EM 144 AI 2x I | 6ES7 144-1GB41-0XB0 | Expansion module 2 AI; 4 ... 20 mA; 2-wire measuring transducer; diagnostics | W | | | 10/08 |
| ET 200X EM 144 AI 2x RTD | 6ES7 144-1JB31-0XB0 | Expansion module 2 AI RTD; Pt 100; diagnostics | W | | | 10/08 |

# 6.2 AO

| Product name | Order no. | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | MLFB | | F | C | R | T |
| ET 200X EM 145 AO 2x U | 6ES7 145-1FB31-0XB0 | Expansion module 2 AO; +/-10 V; diagnostics | W | | | 10/ 08 |
| ET 200X EM 145 AO 2x I | 6ES7 145-1GB31-0XB0 | Expansion module 2 AO; +/-20 mA, 4 ... 20 mA; diagnostics | W | | | 10/ 08 |

# 6.3 BM_DI

| Product name | Order no. | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | MLFB | | F | C | R | T |
| ET 200X BM 141 DI 8xDC24V | 6ES7 141-1BF11-0XB0 | Basic module ET 200X;<br>8 DI; 24 V DC,<br>can be expanded with analog EMs | W | X | | 05/ 03 |

## 6.4 BM_DO

| Product name | Order no. | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | MLFB | | F | C | R | T |
| ET 200X BM 142 DO 4xDC24V/2A | 6ES7 142-1BD21-0XB0 | Basic module ET 200X;<br>4 DO; DC 24 V / 2 A;<br>can be expanded with analog EMs | W | X | | 11/02 |

# 6.5 DI

| Product name | Order no. | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | MLFB | | F | C | R | T |
| ET 200X EM 141 DI 8xDC24V | 6ES7 141-1BF30-0XA0 | Expansion module 8 DI; 24 V DC | W | | | 05/03 |
| ET 200X EM 141 DI 8xDC24V | 6ES7 141-1BF40-0XA0 | Expansion module 8 DI; 24 V DC | W | | | 05/03 |

# 6.6 DO

| Product name | Order no. | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | MLFB | | F | C | R | T |
| ET 200X EM 142 DO 4xDC24V/2A | 6ES7 142-1BD40-0XB0 | Expansion module 4 DO; 24 V / 2 A DC; diagnostics | W | | | 10/08 |
| ET 200X EM 142 DO 8xDC24V/1.3A | 6ES7 142-1BF30-0XA0 | Expansion module 8 DO; DC 24 V / 1.3 A | W | | | 10/08 |

# 6.7 PS

| Product name | Order no. | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | MLFB | | F | C | R | T |
| ET 200X PM 148 | 6ES7 148-1CA00-0XB0 | Power supply for ET 200X;<br>4 DO; 24 V / 2 A DC;with load voltage supply;<br>diagnostics by channel | W | | | 10/<br>08 |

# 6.8 Valve

| Product name | Order no. | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | MLFB | | F | C | R | T |
| ET 200X EM 148-P DO 16xP/CPV10 | 6ES7 148-1EH01-0XA0 | Expansion module 16 DO P (coupling module for valve island CPV 10) | W | | | 10/08 |
| ET 200X EM 148-P DO 16xP/CPV14 | 6ES7 148-1EH11-0XA0 | Expansion module 16 DO P (coupling module for valve island CPV 14) | W | | | 10/08 |

# ET 200pro

# 7

## 7.1 AI

| Product name | Order no. | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | MLFB | | F | C | R | T |
| ET 200PRO EM 144 AI 4 x U | 6ES7 144-4FF00-0AB0 | Analog input module<br>4 AI; ±10 V, ±5 V; 1 ... 5 V; 0 ... 10 V | W<br>Y | | | |
| ET 200PRO EM 144 AI 4 x I | 6ES7 144-4GF00-0AB0 | Analog input module<br>4 AI; ±20 mA; 0 ... 20 mA; 4 ... 20 mA | W<br>Y | | | |
| ET 200PRO EM 144 AI 4 x RTD | 6ES7 144-4JF00-0AB0 | Analog input module<br>4 AI RTD | W<br>Y | | | |
| ET 200PRO EM 144 AI 4 x TC HF | 6ES7 144-4PF00-0AB0 | Analog input module<br>4 AI TC; high feature | W<br>Y | | | |

# 7.2 AO

| Product name | Order no. | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | MLFB | | F | C | R | T |
| ET 200PRO EM 145 AO 4 x U | 6ES7 145-4FF00-0AB0 | Analog output module<br>4 AO; ±10 V; 1 ... 5 V; 0 ... 10 V | W<br>Y | | | |
| ET 200PRO EM 145 AO 4 x I | 6ES7 145-GF00-0AB0 | Analog output module<br>4 AO; ±20 mA; 0 ... 20 mA; 4 ... 20 mA | W<br>Y | | | |

# 7.3 DI

| Product name | Order no. | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | MLFB | | F | C | R | T |
| ET 200PRO EM 141<br>DI 8xDC 24V | 6ES7 141-4BF00-0AB0 | Digital input module<br>8 DI; 24 V DC; high feature | W<br>Y | | | |

# 7.4 DO

| Product name | Order no. | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | MLFB | | F | C | R | T |
| ET 200PRO EM 142<br>DO 4xDC 24V/2A | 6ES7 142-4BD00-0AB0 | Digital output module<br>4 DO; 24 V / 2A DC; high feature | W<br>Y | | | |

# 7.5 F_DI

| Product name | Order no. | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | MLFB | | F | C | R | T |
| ET 200PRO EM 148<br>F-DI 8/16xDC 24V | 6ES7 148-4FA00-0AB0 | Digital input module<br>8 / 16 DI; 24 VDC;<br>PROFIsafe V2, failsafe | W<br>Y | | | |

## 7.6 F_DI/DO

| Product name | Order no. | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | MLFB | | F | C | R | T |
| ET 200PRO EM 148<br>F-DI 4/8xDC 24V<br>F-DO 4xDC24V/2A | 6ES7 148-4FC00-0AB0 | Digital input/output module<br>4 / 8 DI; 4 DODC 24 V / 2 A;<br>PROFIsafe V2, failsafe | W<br>Y | | | |

# 7.7 IM

| Product name | Order no. | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | MLFB | | F | C | R | T |
| ET 200PRO IM154-2 DP HF | 6ES7 154-2AA00-0AB0 | PROFIBUS DP Interface module for ET 200pro; high feature; including termination module | W | X | | 05/ 10 |
| ET 200PRO IM154-2 DP HF | 6ES7 154-2AA01-0AB0 | PROFIBUS DP Interface module for ET 200pro; high feature; including termination module | W Y | X | | |

# 7.8 PS

| Product name | Order no. | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | MLFB | | F | C | R | T |
| ET 200PRO PM-E DC24V | 6ES7 148-4CA00-0AA0 | Power supply for ET 200pro; 24 V DC | W Y | | | |
| ET 200PRO PS 24 V/ 8 A | 6ES7 148-4PC00-0HA0 | SIMATIC ET 200PRO PS, IP67; Input: 3 AC 400-480 V Output: 24 V/8 A DC | | | | |

# 7.9 Connection modules

| Product name | Order no. | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | MLFB | | F | C | R | T |
| CM IM DP ECOFAST | 6ES7 194-4AA00-0AA0 | Connection module<br>CM for IM ECOFAST CU DP | Y | | | |
| CM IM DP Direkt | 6ES7 194-4AC00-0AA0 | Connection module<br>CM for IM DP direct | Y | | | |
| CM IM DP M12 / 7/8" | 6ES7 194-4AD00-0AA0 | Connection module<br>CM for IM DP M12 / 7 / 8" | Y | | | |
| CM PM ECOFAST | 6ES7 194-4BA00-0AA0 | Connection module<br>CM for PM ECOFAST | Y | | | |
| CM PM Direkt | 6ES7 194-4BC00-0AA0 | Connection module<br>CMfor PM direct | Y | | | |
| CM PM 7/8" | 6ES7 194-4BD00-0AA0 | Connection module<br>CM for PM 7 / 8" | Y | | | |
| CM IO 4 x M12 | 6ES7 194-4CA00-0AA0 | Connection module<br>CM for 4 IO M12 | Y | | | |
| CM IO 8 x M12 | 6ES7 194-4CB00-0AA0 | Connection module<br>CM for 8 IO M12 | Y | | | |
| CM 12×M12 für<br>4/8 F-DI/4 F-DO | 6ES7 194-4DC00-0AA0 | Connection module<br>CM for the F-DI / DO-EM;<br>4 / 8 F-DI / 4 F-DO; DC 24 V / 2 A | Y | | | |
| CM 16×M12 für<br>8/16 F-DI | 6ES7 194-4DD00-0AA0 | Connection module<br>CM for the F-DI EM<br>8 / 16 F-DI; DC 24 V / 2 A | Y | | | |

# Repeater

# 8

## 8.1 Repeater

| Product name | Order no. | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | MLFB | | F | C | R | T |
| Diagnostic Repeater | 6ES7 972-0AB00-0XA0 | Diagnostic repeater for line diagnostics on the PROFIBUS-DP (RS 485);<br>IP 20, to 12 Mbps, DP V0-Slave | W | X | | 02/03 |
| Diagnostic Repeater | 6ES7 972-0AB01-0XA0 | Diagnostic repeater for line diagnostics on the PROFIBUS-DP (RS 485);<br>IP 20, to 12 Mbps, DP V1-Slave | W<br>Y | X | | |
| RS 485 repeater | 6ES7 972-0AA01-0XA0 | RS 485 repeater; for connecting PROFIBUS/MPI bus systems to a max. of 31 nodes. Max. transmission rate 12 MBit/s; IP 20 degree of protection | | | | 05/11 |
| RS 485 repeater | 6ES7 972-0AA02-0XA0 | RS 485 repeater; for connecting PROFIBUS/MPI bus systems to a max. of 31 nodes. Max. transmission rate 12 MBit/s; IP 20 degree of protection | | | | |

# Network Components

# 9

## 9.1 IE OSM - ESM

| Product name | Order no. | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | MLFB | | F | C | R | T |
| IE OLM | 6GK1 102-4AA00 | Optical switch module for Industrial Ethernet;<br>2fiber-optic ports;<br>3 ITP ports;<br>redundant supply and signaling contact | | | | 10/05 |
| IE OSM TP22 | 6GK1 105-2AE00 | Optical switch module for Industrial Ethernet;<br>2 BFOC 100 MBit/s, multimode fiber-optic cable;<br>2 RJ45 ports 10/100 MBit/s;<br>4 digital inputs;<br>redundant 24 V DC supply and signaling contact, with network management | | | | 10/12 |
| IE OSM ITP62 | 6GK1 105-2AA10 | Optical switch module for Industrial Ethernet;<br>2 BFOC 100 MBit/s, multimode fiber-optic cable;<br>6 ITP ports 10/100 MBit/s;<br>redundant 24 V DC supply and signaling contact, integrated redundancy manager, | | | | 10/12 |
| IE OSM TP62 | 6GK1 105-2AB10 | Optical switch module for Industrial Ethernet;<br>2 BFOC 100 MBit/s; multimode fiber-optic cable;<br>6 RJ45 ports 10/100 MBit/s;<br>redundant 24 V DC supply and signaling contact, integrated redundancy manager, | | | | 10/12 |
| IE OSM ITP62-LD | 6GK1 105-2AC10 | Optical switch module for Industrial Ethernet;<br>2 BFOC 100 MBit/s long-distance (single-mode fiber-optic cable up to 18 km);<br>6 ITP ports 10/100 MBit/s;<br>redundant 24 V DC supply and signaling contact, integrated redundancy manager | | | | 10/12 |
| IE OSM ITP53 | 6GK1 105-2AD10 | Optical switch module for Industrial Ethernet;<br>3 BFOC 100 MBit/s; multimode fiber-optic cable;<br>5 ITP ports 10/100 MBit/s;<br>redundant 24 V DC supply and signaling contact, integrated redundancy manager, | | | | 10/12 |
| IE ESM ITP80 | 6GK1 105-3AA10 | Electrical switch module for Industrial Ethernet,<br>8 ITP ports 10/100 MBit/s;<br>redundant 24 V DC supply and signaling contact, integrated redundancy manager, | | | | 10/12 |

| Product name | Order no. | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | MLFB | | F | C | R | T |
| IE ESM TP80 | 6GK1 105-3AB10 | Electrical switch module for Industrial Ethernet,<br>8 RJ45 ports 10/100 MBit/s;<br>redundant 24 V DC supply and signaling contact,<br>integrated redundancy manager, | | | | 10/12 |
| IE OSM BC08 | 6GK1 105-4AA00 | Optical switch module for Industrial Ethernet;<br>8 BFOC 100 MBit/s;multimode fiber-optic cable; 8 digital inputs;<br>redundant 24 V DC supply and signaling contact, with network management | | | | 10/12 |

# 9.2 SCALANCE XB-000

| Product name | Order no. | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | MLFB | | F | C | R | T |
| SCALANCE XB004-1 | 6GK5 004-1BD00-1AB2 | Unmanaged Industrial Ethernet switch;<br>4 X 10/100MBIT/S twisted-pair ports with RJ45 sockets;<br>1 X100MBIT/S multimode glass fiber port with SC socket;<br>For configuration of small star or line structures;<br>LED diagnostics, IP20, DC 24 V power supply | | | | |

# 9.3 SCALANCE X100

| Product name | Order no. | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | MLFB | | F | C | R | T |
| SCALANCE X101-1 | 6GK5 101-1BB00-2AA3 | IE media converter; conversion from RJ45 TP to fiber-optic cables (BFOC);<br>1 BFOC 100 MBit/s; multimode fiber-optic cable;<br>1 RJ45 port 10/100 MBit/s;<br>redundant 24 V DC supply and signaling contact | | | | |
| SCALANCE X101-1LD | 6GK5 101-1BC00-2AA3 | IE media converter;<br>conversion from RJ45 TP to fiber-optic cables (BFOC);<br>1 BFOC 100 MBit/s; single mode fiber-optic cable;<br>1 RJ45 port 10/100 MBit/s;<br>redundant 24 V DC supply and signaling contact | | | | |
| SCALANCE X101-1POF | 6GK5 101-1BH00-2AA3 | IE media converter;<br>conversion from RJ45 TP to plastic/PCF fiber optic (SC RJ port) with 100 Mbit/s;<br>1 RJ45 port 10/100 Mbit/s ;<br>1 POF SC RJ port 100 Mbit/s;<br>redundante DC 24 V-Einspeisung and signaling contact | | | | |
| SCALANCE X104-2 | 6GK5 104-2BB00-2AA3 | Unmanaged Industrial Ethernet switch;<br>4 X 10/100MBIT/S RJ45 ports;<br>2 X 100MBIT/S multimode BFOC;<br>LED diagnostics, error signaling contact with SET button, redundant power supply | | | | |

# 9.4 SCALANCE X200

| Product name | Order no. | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | MLFB | | F | C | R | T |
| SCALANCE X200-4P IRT | 6GK5 200-4AH00-2BA3 | Managed Industrial Ethernet switch;<br>4 SC RJ ports 100 MBit/s; Plastic Optical Fiber (POF) or Polymer Clad Fiber (PCF);<br>can be used as redundancy manager **or** standby manager | | | | |
| SCALANCE X201-3P IRT | 6GK5 201-3BH00-2BA3 | Managed Industrial Ethernet switch;<br>1 RJ45 ports 10/100 MBit/s,<br>3 SC RJ ports 100 MBit/s; Plastic Optical Fiber (POF) or Polymer Clad Fiber (PCF);<br>can be used as redundancy manager **or** standby manager | | | | |
| SCALANCE X202-2 IRT | 6GK5 202-2BB00-2BA3 | Managed Industrial Ethernet IRT switch;<br>2 RJ45 ports 10/100 MBit/s push-pull;<br>2 BFOC ports;<br>for Industrial Ethernet configuration in line, star or ring structures;<br>isochronous real-time; Parallel Redundancy Protocol;<br>can be used as redundancy manager **or** standby manager | | | | |
| SCALANCE X202-2P IRT | 6GK5 202-2BH00-2BA3 | Managed Industrial Ethernet IRT switch;<br>2 RJ45 ports 10/100 MBit/s;<br>2 SC RJ ports 100 MBit/s;<br>Plastic Optical Fiber (POF) or Polymer Clad Fiber (PCF); isochronous real-time;<br>can be used as redundancy manager **or** standby manager | | | | |
| SCALANCE X202-2P IRT PRO | 6GK5 202-2JR00-2BA6 | Managed Industrial Ethernet IRT switch;<br>2 RJ45 ports 10/100 MBit/s push-pull;<br>2 SC RJ ports 100 MBit/s;<br>Plastic Optical Fiber (POF);<br>for Industrial Ethernet configuration in line, star or ring structures; isochronous real-time;<br>can be used as redundancy manager **or** standby manager | | | | |
| SCALANCE X204 IRT | 6GK5 204-0BA00-2BA3 | Managed Industrial Ethernet IRT switch;<br>4 RJ45 ports 10/100 MBit/s;<br>for Industrial Ethernet configuration in line, star or ring structures;<br>can be used as redundancy manager **or** standby manager | | | | |
| SCALANCE X204-2 | 6GK5 204-2BB00-2AA3 | Managed Industrial Ethernet switch;<br>4 RJ45 ports 10/100 MBit/s;<br>2 BFOC 100 MBit/s;<br>for Industrial Ethernet expansion into line, star or ring structures;<br>(not for Parallel Redundancy Protocol) | | | | 09/07 |

| Product name | Order no. | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | MLFB | | F | C | R | T |
| SCALANCE X204-2 | 6GK5 204-2BB10-2AA3 | Managed Industrial Ethernet switch;<br>4 RJ45 ports 10/100 MBit/s;<br>2 BFOC 100 MBit/s;<br>for Industrial Ethernet configuration in line, star or ring structures;<br>Parallel Redundancy Protocol as of firmware V4.4 | | | | |
| SCALANCE X204-2LD | 6GK5 204-2BC10-2AA3 | Managed Industrial Ethernet switch;<br>4 RJ45 ports 10/100 MBit/s;<br>2 BFOC 100 MBit/s; single mode fiber-optic cable;<br>for Industrial Ethernet expansion in line, star or ring structures; redundancy manager | | | | |
| SCALANCE X204 IRT PRO | 6GK5 204-0JA00-2BA6 | Managed Industrial Ethernet IRT switch;<br>4 RJ45 ports 10/100 MBit/s push-pull;<br>for Industrial Ethernet configuration in line, star or ring structures; isochronous real-time;<br>can be used as redundancy manager **or** standby manager | | | | |
| SCALANCE X204RNA | 6GK5 204-0BA00-2KB2 | Redundant network access for PRP networks; 4 X 100MBit/s RJ45 ports; redundant power supply; network management | | | | |
| SCALANCE X204RNA EEC | 6GK5 204-0BS00-3LA3 | Redundant network access for PRP networks; 2 X 100MBit/s RJ45 ports; 2 X 100MBit/s combo ports; redundant power supply; network management | | | | |
| SCALANCE X206-1 | 6GK5 206-1BB10-2AA3 | Managed Industrial Ethernet switch;<br>6 RJ45 ports 10/100 MBit/s;<br>1 BFOC 100 MBit/s;<br>for Industrial Ethernet line, star or ring structures | | | | |
| SCALANCE X206-1LD | 6GK5 206-1BC10-2AA3 | Managed Industrial Ethernet switch;<br>6 RJ45 ports 10/100 MBit/s;<br>1 BFOC 100 MBit/s; single-mode fiber; | | | | |
| SCALANCE X208 | 6GK5 208-0BA00-2AA3 | Managed Industrial Ethernet switch;<br>8 RJ45 ports10/100 MBit/s;<br>for Industrial Ethernet line, star and ring structures | | | | 10/07 |
| SCALANCE X208 | 6GK5 208-0BA10-2AA3 | Managed Industrial Ethernet switch;<br>8 RJ45 ports10/100 MBit/s;<br>for Industrial Ethernet line, star and ring structures | | | | |
| SCALANCE X208 PRO | 6GK5 208-0HA00-2AA6 | Managed Industrial Ethernet switch;<br>8 M12 ports10/100 MBit/s;<br>for Industrial Ethernet line, star and ring structures | | | | |
| SCALANCE X212-2 | 6GK5 212-2BB00-2AA3 | Managed Industrial Ethernet switch;<br>12 RJ45 ports 10/100 MBit/s;<br>2 BFOC 100 MBit/s; multi-mode fiber | | | | |
| SCALANCE X212-2LD | 6GK5 212-2BC00-2AA3 | Managed Industrial Ethernet switch;<br>12 RJ45 ports 10/100 MBit/s;<br>2 BFOC 100 MBit/s; single mode fiber-optic cable | | | | |
| SCALANCE X216 | 6GK5 216-0BA00-2AA3 | Managed Industrial Ethernet switch;<br>16 RJ45 ports10/100 MBit/s | | | | |
| SCALANCE X224 | 6GK5 224-0BA00-2AA3 | Managed Industrial Ethernet switch;<br>24 RJ45 ports10/100 MBit/s | | | | |

| Product name | Order no. | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | MLFB | | F | C | R | T |
| SIPLUS SCALANCE X202-2P IRT | 6GK1 202-2BH00-2BA3 | Managed Industrial Ethernet IRT switch;<br>2 RJ45 ports 10/100 MBit/s;<br>2 SC RJ ports 10/100 MBit/s;<br>Plastic Optical Fiber (POF) or Polymer Clad Fiber (PCF); isochronous real-time;<br>-25 to +60 °C; condensation permitted,<br>suitable for exceptional medial load (e.g. chlorine sulfur atmosphere);<br>can be used as redundancy manager **or** standby manager | | | | |
| SCALANCE XF204 | 6GK5 204-0BA00-2AF2 | Managed Industrial Ethernet switch;<br>4 RJ45 ports10/100 MBit/s;<br>for Industrial Ethernet line, star and ring structures | | | | |
| SCALANCE XF204-2 | 6GK5 204-0BC00-2AF2 | Managed Industrial Ethernet switch;<br>4 RJ45 ports 10/100 MBit/s;<br>2 BFOC 100 MBit/s;<br>for Industrial Ethernet line, star or ring structures | | | | |
| SCALANCE XF204 IRT | 6GK5 204-2BA00-2BF2 | Flat Managed Industrial Ethernet IRT switch;<br>4 RJ45 ports 10/100 MBit/s;<br>for Industrial Ethernet configuration in line, star or ring structures; isochronous real-time;<br>can be used as redundancy manager **or** standby manager | | | | |
| SCALANCE XF206-1 | 6GK5 206-1BC00-2AF2 | Managed Industrial Ethernet switch;<br>6 RJ45 ports 10/100 MBit/s;<br>1 BFOC 100 MBit/s;<br>for Industrial Ethernet line, star or ring structures | | | | |
| SCALANCE XF208 | 6GK5 208-0BA00-2AF2 | Managed Industrial Ethernet switch;<br>8 RJ45 ports10/100 MBit/s;<br>for Industrial Ethernet line, star and ring structures | | | | |

# 9.5 SCALANCE X300

| Product name | Order no. | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | MLFB | | F | C | R | T |
| SCALANCE X306-1LDFE | 6GK5 306-1BF00-2AA3 | Managed IE switch;<br>1 SC RJ ports 1000 MBit/s; single-mode fiber optic cable;<br>4 RJ45 ports 10/100 MBit/s | | | | |
| SCALANCE X307-3 | 6GK5 307-3BL00-2AA3 | Managed IE switch;<br>2 SC RJ ports 1000 MBit/s;<br>7 RJ45 ports 10/100 MBit/s | | | | |
| SCALANCE X307-3LD | 6GK5 307-3BM00-2AA3 | Managed IE switch;<br>3 SC RJ ports 1000 MBit/s; single-mode fiber optic cable;<br>7 RJ45 ports 10/100 MBit/s | | | | |
| SCALANCE X308-2 | 6GK5 308-2FL00-2AA3 | Managed plus IE switch;<br>2 SC RJ ports 1000 MBit/s; Multimode fiber-optic cable;<br>7 RJ45 ports 10/100 MBit/s;<br>1 RJ45 port 10/100/1000 MBit/s;<br>redundancy manager, standby manager; Parallel Redundancy Protocol from FWV3.7.0 | | | | |
| SCALANCE X308-2LD | 6GK5 308-2FM00-2AA3 | Managed plus IE Switch;<br>2 SC RJ ports 1000 MBit/s; Single mode fiber-optic cable;<br>7 RJ45 ports 10/100 MBit/s;<br>1 RJ45 port 10/100/1000 MBit/s;<br>redundancy manager, standby manager | | | | |
| SCALANCE X308-2LH | 6GK5 308-2FN00-2AA3 | Managed IE switch;<br>3 SC RJ ports 1000 MBit/s; Single mode fiber-optic cable;<br>7 RJ45 ports 10/100 MBit/s;<br>1 RJ45 ports 1000 MBit/s;<br>redundancy manager, standby manager | | | | |
| SCALANCE X308-2LH+ | 6GK5 308-2FP00-2AA3 | Managed IE switch;<br>3 SC RJ ports 1000 MBit/s; Single mode fiber-optic cable;<br>7 RJ45 ports 10/100 MBit/s;<br>1 RJ45 ports 1000 MBit/s;<br>redundancy manager, standby manager | | | | |
| SCALANCE X308-2M | 6GK5 308-2GG00-2AA2 | Compact Managed IE switch;<br>4 RJ45 ports 10/100/1000 MBit/s electrical;<br>2 x 2 port media modules 100/1000Mbit/s, electrical or optical;<br>redundancy manager, standby manager | | | | |
| SCALANCE X310 | 6GK5 310-0FA00-2AA3 | Managed plus IE switch;<br>7 RJ45 ports 10/100 MBit/s;<br>3 RJ45 ports 1000 MBit/s | | | | |
| SCALANCE X310FE | 6GK5 310-0BA00-2AA3 | Managed plus IE switch;<br>10 RJ45 ports10/100 MBit/s | | | | |

| Product name | Order no. | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | MLFB | | F | C | R | T |
| SCALANCE X320-1FE | 6GK5 320-1BD00-2AA3 | Managed plus IE switch;<br>1 SC RJ port100 MBit/s;<br>20 RJ45 ports 10/100 MBit/s | | | | |
| SCALANCE X320-3LDFE | 6GK5 320-3BF00-2AA3 | Managed IE switch;<br>2 SC RJ ports 100 MBit/s; single-mode fiber optic cable;<br>1 SC RJ port 100 MBit/s;multi-mode fiber optic cable;<br>20 RJ45 ports 10/100 MBit/s | | | | |

# 9.6 SCALANCE XR300 Modular

| Product name | Order no. | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | MLFB | | F | C | R | T |
| SCALANCE XR324-12M (1AR2) | 6GK5 324-0GG00-1AR2 | Managed IE switch;<br>12 x 2 port media modules 100/1000 MBit/s, electrical or optical;<br>voltage supply 1x24V;<br>cable outlet at front | | | | |
| SCALANCE XR324-12M (1HR2) | 6GK5 324-0GG00-1HR2 | Managed IE switch;<br>12 x 2 port media modules 100/1000 MBit/s, electrical or optical;<br>voltage supply 1x24V;<br>cable outlet at rear | | | | |
| SCALANCE XR324-12M (3AR2) | 6GK5 324-0GG00-3AR2 | Managed IE switch;<br>12 x 2 port media modules 100/1000 MBit/s, electrical or optical;<br>voltage supply 1x230V;<br>cable outlet at front | | | | |
| SCALANCE XR324-12M (3HR2) | 6GK5 324-0GG00-3HR2 | Managed IE switch;<br>12 x 2 port media modules 100/1000 MBit/s, electrical or optical;<br>voltage supply 1x230V;<br>cable outlet at rear | | | | |
| SCALANCE XR324-4M EEC (1ER2) | 6GK5 324-4GG00-1ER2 | Managed IE switch;<br>16 RJ45 ports 10/100/1000 MBit/s, electrical;<br>4 x 2 port media modules 100/1000 MBit/s, electrical or optical;<br>voltage supply 1x24V;<br>cable outlet at front | | | | |
| SCALANCE XR324-4M EEC (1JR2) | 6GK5 324-4GG00-1JR2 | Managed IE switch;<br>16 RJ45 ports 10/100/1000 MBit/s, electrical;<br>4x 2 port media modules 100/1000 MBit/s, electrical or optical;<br>voltage supply 1x24V;<br>cable outlet at rear | | | | |
| SCALANCE XR324-4M EEC (1JR2) | 6GK5 324-4GG00-2JR2 | Managed IE switch;<br>16 RJ45 ports 10/100/1000 MBit/s, electrical;<br>4x 2 port media modules 100/1000 MBit/s, electrical or optical;<br>voltage supply 1x24V;<br>cable outlet at rear | | | | |
| SCALANCE XR324-4M EEC (2ER2) | 6GK5 324-4GG00-2ER2 | Managed IE switch;<br>16 RJ45 ports 10/100/1000 MBit/s, electrical;<br>4 x 2 port media modules 100/1000 MBit/s, electrical or optical;<br>voltage supply 1x24V;<br>cable outlet at front | | | | |

| Product name | Order no. | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | MLFB | | F | C | R | T |
| SCALANCE XR324-4M EEC (3ER2) | 6GK5 324-4GG00-3ER2 | Managed IE switch;<br>16 RJ45 ports 10/100/1000 MBit/s, , electrical;<br>4x 2 port media modules 100/1000 MBit/s, electrical or optical;<br>voltage supply 1 x 100-240V AC / 60-250V DC;<br>cable outlet at front | | | | |
| SCALANCE XR324-4M EEC (3JR2) | 6GK5 324-4GG00-3JR2 | Managed IE switch;<br>16 RJ45 ports 10/100/1000 MBit/s, electrical;<br>4x 2 port media modules 100/1000 MBit/s, electrical or optical;<br>voltage supply 1 x 100-240V AC / 60-250V DC;<br>cable outlet at rear | | | | |
| SCALANCE XR324-4M EEC (4ER2) | 6GK5 324-4GG00-4ER2 | Managed IE switch;<br>16 RJ45 ports 10/100/1000 MBit/s, electrical;<br>4x 2 port media modules 100/1000 MBit/s, electrical or optical;<br>voltage supply 2 x 100-240V AC / 60-250V DC;<br>cable outlet at front | | | | |
| SCALANCE XR324-4M EEC (4JR2) | 6GK5 324-4GG00-4JR2 | Managed IE switch;<br>16 RJ45 ports 10/100/1000 MBit/s, electrical;<br>4 x 2 port media modules 100/1000 MBit/s, electrical or optical;<br>voltage supply 2 x 100-240V AC / 60-250V DC;<br>cable outlet at rear | | | | |
| SCALANCE XR324-4M POE (1AR2) | 6GK5 324-4QG00-1AR2 | Managed IE switch;<br>8 RJ45 ports 10/100/1000 MBit/s, electrical with PoE;<br>8 RJ45 ports 10/100/1000 MBit/s,electrical without PoE;<br>4 x 2 port media modules 10/100/1000 MBit/s, electrical or optical;<br>voltage supply 1 x 24V DC;<br>cable outlet at front | | | | |
| SCALANCE XR324-4M POE (1HR2) | 6GK5 324-4QG00-1HR2 | Managed IE switch;<br>8 RJ45 ports 10/100/1000 MBit/s, electrical with PoE;<br>8 RJ45 ports 10/100/1000 MBit/s,electrical without PoE;<br>4 x 2 port media modules 10/100/1000 MBit/s, electrical or optical;<br>voltage supply 1 x 24V DC;<br>cable outlet at rear | | | | |
| MM992-2CUC | 6GK5 992-2GA00-8AA0 | Electrical media module;<br>2 RJ45 ports 10/100/1000 MBit/s, electrical, with retaining collars | | | | |
| MM992-2CU | 6GK5 992-2SA00-8AA0 | Electrical media module;<br>2 RJ45 ports 10/100/1000 MBit/s, electrical, without retaining collars | | | | |
| MM991-2 | 6GK5 991-2AB00-8AA0 | Media module;<br>2 BFOC ports 100 MBit/s, optical, multimode, glass, up to max. 3 km | | | | |

| Product name | Order no. | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | MLFB | | F | C | R | T |
| MM991-2LD | 6GK5 991-2AC00-8AA0 | Media module;<br>2 BFOC ports 100 MBit/s, optical, single mode, glass, up to max. 26 km | | | | |
| MM991-2 | 6GK5 991-2AD00-8AA0 | Media module;<br>2 SC RJ ports 100 MBit/s, optical, multimode, glass, up to max. 3 km | | | | |
| MM991-2LD | 6GK5 991-2AF00-8AA0 | Media module;<br>2 SC RJ ports 100 MBit/s, optical, single mode, glass, up to max. 26 km | | | | |
| MM991-2LH+ | 6GK5 991-2AE00-8AA0 | Media module;<br>2 SC RJ ports 100 MBit/s, optical, single-mode, glass, up to max. 70 km | | | | |
| MM992-2 | 6GK5 992-2AL00-8AA0 | Media module;<br>2 SC RJ ports 1000 MBit/s, optical, multimode, glass, up to max. 750 m | | | | |
| MM992-2LD | 6GK5 992-2AM00-8AA0 | Media module;<br>2 SC RJ ports 1000 MBit/s, optical, single mode, glass, up to max. 10 km | | | | |
| MM992-2LH | 6GK5 992-2AN00-8AA0 | Media module;<br>2 SC RJ ports 1000 MBit/s, optical, single-mode, glass, up to max. 40 km | | | | |
| MM992-2LH+ | 6GK5 992-2AP00-8AA0 | Media module;<br>2 SC RJ ports 1000 MBit/s, optical, single-mode, glass, up to max. 70 km | | | | |
| MM992-2ELH | 6GK5 992-2AQ00-8AA0 | Media module;<br>2 SC RJ ports 1000 MBit/s, optical, single-mode, glass, up to max. 120 km | | | | |
| MM992-2SFP | 6GK5 992-2AS00-8AA0 | Media module;<br>2 x 100/1000 MBit/s for SFP plug-on transceiver, optical, for SFP plug-in transceiver with 1 x 100 or 1 x 1000 MBit/s, multimode or single-mode, glass | | | | |
| SFP991-1 | 6GK5 991-1AD00-8AA0 | SFP plug-in transceiver;<br>1 LC port 100 MBit/s, optical, multimode, glass, up to max. 3 km | | | | |
| SFP991-1LD | 6GK5 991-1AF00-8AA0 | SFP plug-in transceiver;<br>1 LC port 100 MBit/s, optical, single-mode, glass, up to max. 26 km | | | | |
| SFP991-1LH+ | 6GK5 991-1AE00-8AA0 | SFP plug-in transceiver;<br>1 LC port 100 MBit/s, optical, single-mode, glass, up to max. 70 km | | | | |
| SFP992-1 | 6GK5 992-1AL00-8AA0 | SFP plug-in transceiver;<br>1 LC port 1000 MBit/s, optical, multimode, glass, up to max. 750 m | | | | |
| SFP992-1LD | 6GK5 992-1AM00-8AA0 | SFP plug-in transceiver;<br>1 LC port 1000 MBit/s, optical, single-mode, glass, up to max. 10 km | | | | |

| Product name | Order no. | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | MLFB | | F | C | R | T |
| SFP992-1LH | 6GK5 992-1AN00-8AA0 | SFP plug-in transceiver;<br>1 LC port 1000 MBit/s, optical, single-mode, glass, up to max. 40 km | | | | |
| SFP992-1LH+ | 6GK5 992-1AP00-8AA0 | SFP plug-in transceiver;<br>1 LC port 1000 MBit/s, optical, single-mode, glass, up to max. 70 km | | | | |
| SFP992-1ELH | 6GK5 992-1AQ00-8AA0 | SFP plug-in transceiver;<br>1 LC port 1000 MBit/s, optical, single-mode, glass, up to max. 120 km | | | | |

# 9.7 SCALANCE X400

| Product name | Order no. | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | MLFB | | F | C | R | T |
| SCALANCE X408-2 | 6GK5 408-2FD00-2AA2 | Modular Industrial Ethernet switch;<br>4 RJ45 ports 10/100/1000 MBit/s;<br>4 RJ45 ports 10/100 MBit/s,<br>2 media module slots 1000 MBit ;<br>integrated redundancy manager,<br>Office features (RSTP, VLAN,..);<br>C-PLUG in scope of supply; network management;<br>redundancy manager; standby manager;<br>Parallel Redundancy Protocol from FW-V3.7.0 | | | | |
| SCALANCE X414-3E | 6GK5 414-3FC00-2AA2 | Modular Industrial Ethernet switch;<br>2 RJ45 ports 10/100/1000 MBit/s;<br>12 RJ45 ports 10/100 MBit/s,<br>1 media module slot 1000 MBit,<br>2 media module slots 100 MBit;<br>extender interface;<br>integrated redundancy manager;<br>Office features (RSTP, VLAN,..);<br>C-PLUG in scope of supply; network management;<br>redundancy manager; standby manager;<br>Parallel Redundancy Protocol from FW-V3.7.1 | | | | |
| Medienmodul MM491-2 | 6GK5 491-2AB00-8AA2 | 100Base FX Ethernet media module for SCALENCE X414-3E / X408-2 | | | | |
| Medienmodul MM492-2 | 6GK5 492-2AL00-8AA2 | 1000Base SX Ethernet media module for SCALENCE X414-3E / X408-2 | | | | |
| Extendermodul EM495-8 | 6GK5 495-8BA00-8AA2 | Extender module<br>8 TP ports10/100 MBit/s | | | | |
| Extendermodul EM496-4 | 6GK5 496-4MA00-8AA2 | Extender module 4 slots for 100 MBit/s media modules | | | | |

# 9.8 SCALANCE XR500 Modular

| Product name | Order no. | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | MLFB | | F | C | R | T |
| SCALANCE XR552-12M | 6GK5552-0A*00-2*R | Managed IE switch;<br>12 x 4 port media modules 10/100/1000 MBit/s, electrical or optical;<br>1x24V power supply;<br>19" rack, cable outlet at front<br>optional:<br>• 4 slots (SFP+) 10 Gbit/s;<br>• KEY-PLUG | | | | |

# 9.9 SCALANCE S600 (Industrial Security Module)

| Product name | Order no. | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | MLFB | | F | C | R | T |
| SCALANCE S602 | 6GK5 602-0BA00-2AA3 | Industrial security module;<br>to prevent unauthorized access by means of stateful inspection firewall | | | | 09/12 |
| SCALANCE S602 | 6GK5 602-0BA10-2AA3 | Industrial security module;<br>to protect devices and networks and to protect industrial communication by means of VPN and firewalls;<br>additional functions: address translation (NAT/NAPT), DHCP server, Syslog, symbol. names for IP addresses, PPPOE, DYNDNS, SNMP (V1+V3), global firewall rules | | | | |
| SCALANCE S612 | 6GK5 612-0BA00-2AA3 | Industrial security module;<br>to prevent unauthorized access by means of stateful inspection firewall and to protect up to 32devices per VPN tunnel (up to 64VPN tunnels simultaneously) | | | | 09/12 |
| SCALANCE S612 | 6GK5 612-0BA10-2AA3 | Industrial security module;<br>to protect devices and networks and to protect industrial communication by means of VPN and firewalls, up to 128 network nodes with VPN connections, 128 simultaneously operable VPN connections;<br>additional functions: address translation (NAT/NAPT), DHCP server, Syslog, symbol. names for IP addresses | | | | |
| SCALANCE S613 | 6GK5 613-0BA00-2AA3 | Industrial security module;<br>to prevent unauthorized access by means of stateful inspection firewall and to protect up to 64devices per VPN tunnel (up to 128VPN tunnels simultaneously) | | | | |
| SCALANCE S623 | 6GK5623-0BA10-2AA3 | Industrial security module;<br>to prevent unauthorized access by means of stateful inspection firewall and to protect up to 128 devices per VPN tunnel (up to 128 VPN tunnels simultaneously) | | | | |

# 9.10 SCALANCE W700 (WLAN)

| Product name | Order no. | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | MLFB | | F | C | R | T |
| SCALANCE W744-1 Rest of world | 6GK5 744-1AA30-2AA0 | IP30 IWLAN client,; maximum number of connected devices: 1; Ethernet, RJ45 | | | | |
| SCALANCE W744-1 USA | 6GK5 744-1AA30-2AB0 | IP30 IWLAN client; maximum number of connected devices: 1; Ethernet, RJ45 | | | | |
| SCALANCE W744-1PRO Rest of world | 6GK5 744-1AA60-2AA0 | IP65 IWLAN client; maximum number of connected devices: 1; Ethernet, RJ45 | | | | |
| SCALANCE W744-1PRO USA | 6GK5 744-1AA60-2AB0 | IP65 IWLAN client; maximum number of connected devices: 1; Ethernet, RJ45 | | | | |
| SCALANCE W744-1PRO | 6GK5 744-1ST00-2AA6 | Industrial WLAN client module | | | | 11/ 08 |
| SCALANCE W746-1PRO | 6GK5 746-1ST00-2AA6 | Industrial WLAN client module | | | | 11/ 08 |
| SCALANCE W746-1 Rest of world | 6GK5 746-1AA30-4AA0 | IP30 IWLAN client; maximum number of connected devices: 8; Ethernet, RJ45 | | | | |
| SCALANCE W746-1 USA | 6GK5 746-1AA30-4AB0 | IP30 IWLAN client; maximum number of connected devices: 8; Ethernet, RJ45 | | | | |
| SCALANCE W746-1PRO Rest of world | 6GK5 746-1AA60-4AA0 | IP65 IWLAN client; maximum number of connected devices: 8; Ethernet, RJ45 | | | | |
| SCALANCE W746-1PRO USA | 6GK5 746-1AA60-4AB0 | IP65 IWLAN client; maximum number of connected devices: 8; Ethernet, RJ45 | | | | |
| SCALANCE W747-1RR Rest of world | 6GK5 747-1AA60-6AA0 | IP65 IWLAN client; maximum number of connected devices: 8; Ethernet, RJ45, iPCF | | | | |
| SCALANCE W748-1 Rest of world | 6GK5 748-1FC00-0AA0 | IP30 IWLAN client; 1 X RJ45, 1 radio interface, external antenna | | | | |
| SCALANCE W748-1 USA | 6GK5748-1FC00-0AB0 | IP30 IWLAN client; 1 X RJ45, 1 radio interface, external antenna | | | | |
| SCALANCE W748-1 Rest of world | 6GK5748-1GD00-0AA0 | IP65 IWLAN client; 1 X M12, 1 radio interface, external antenna | | | | |

| Product name | Order no. | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | MLFB | | F | C | R | T |
| SCALANCE W748-1 USA | 6GK5748-1GD00-0AB0 | IP65 IWLAN client; 1 X M12, 1 radio interface, external antenna | | | | |
| SCALANCE W784-1 Rest of world | 6GK5 784-1AA30-2AA0 | IP30 IWLAN Access Point, 1 radio interface, Ethernet, RJ45 | | | | |
| SCALANCE W784-1 USA | 6GK5 784-1AA30-2AB0 | IP30 IWLAN Access Point, 1 radio interface, Ethernet, RJ45 | | | | |
| SCALANCE W786-1PRO Rest of world | 6GK5 786-1AA60-2AA0 | IP 65 IWLAN Outdoor Access Point, 1 radio interface, Ethernet, RJ45, external antenna | | | | |
| SCALANCE W786-1PRO USA | 6GK5 786-1AA60-2AB0 | IP 65 IWLAN Outdoor Access Point, 1 radio interface, Ethernet, RJ45, external antenna | | | | |
| SCALANCE W786-1PRO Rest of world | 6GK5 786-1AB60-2AA0 | IP 65 IWLAN Outdoor Access Point, 1 radio interface, Ethernet, fiber optic cable, external antenna | | | | |
| SCALANCE W786-1PRO USA | 6GK5 786-1AB60-2AB0 | IP 65 IWLAN Outdoor Access Point, 1 radio interface, Ethernet, fiber optic cable, external antenna | | | | |
| SCALANCE W786-1PRO Rest of world | 6GK5 786-1BA60-2AA0 | IP 65 IWLAN Outdoor Access Point, 1 radio interface, Ethernet, RJ45, internal antenna | | | | |
| SCALANCE W786-1PRO USA | 6GK5 786-1BA60-2AB0 | IP 65 IWLAN Outdoor Access Point, 1 radio interface, Ethernet, RJ45, internal antenna | | | | |
| SCALANCE W786-1PRO Rest of world | 6GK5 786-1BB60-2AA0 | IP 65 IWLAN Outdoor Access Point, 1 radio interface, fiber optic cable, internal antenna | | | | |
| SCALANCE W786-1PRO USA | 6GK5 786-1BB60-2AB0 | IP 65 IWLAN Outdoor Access Point, 1 radio interface, fiber optic cable, internal antenna | | | | |
| SCALANCE W786-2PRO Rest of world | 6GK5 786-2AA60-2AA0 | IP 65 IWLAN Outdoor Access Point, 2 radio interfaces, Ethernet, RJ45, external antenna | | | | |
| SCALANCE W786-2PRO USA | 6GK5 786-2AA60-2AB0 | IP 65 IWLAN Outdoor Access Point, 2 radio interfaces, Ethernet, RJ45, external antenna | | | | |
| SCALANCE W786-2PRO Rest of world | 6GK5 786-2AB60-2AA0 | IP 65 IWLAN Outdoor Access Point, 2 radio interfaces, fiber optic cable, external antenna | | | | |
| SCALANCE W786-2PRO USA | 6GK5 786-2AB60-2AB0 | IP 65 IWLAN Outdoor Access Point, 2 radio interfaces, fiber optic cable, external antenna | | | | |

| Product name | Order no. | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | MLFB | | F | C | R | T |
| SCALANCE W786-2PRO Rest of world | 6GK5 786-2BA60-2AA0 | IP 65 IWLAN Outdoor Access Point, 2 radio interfaces, Ethernet, RJ45, internal antenna | | | | |
| SCALANCE W786-2PRO USA | 6GK5 786-2BA60-2AB0 | IP 65 IWLAN Outdoor Access Point, 2 radio interfaces, Ethernet; RJ45, internal antenna | | | | |
| SCALANCE W786-2PRO Rest of world | 6GK5 786-2BB60-2AA0 | IP 65 IWLAN Outdoor Access Point, 2 radio interfaces, fiber optic cable, internal antenna | | | | |
| SCALANCE W786-2PRO USA | 6GK5 786-2BB60-2AB0 | IP 65 IWLAN Outdoor Access Point, 2 radio interfaces, fiber optic cable, internal antenna | | | | |
| SCALANCE W786-1 Rest of world | 6GK5786-1FC00-0AA0 | IP65 IWLAN Access Point; 1 X RJ45, 2 radio interfaces, fiber optic cable, external antenna | | | | |
| SCALANCE W786-1 USA | 6GK5786-1FC00-0AB0 | IP65 IWLAN Access Point; 1 X RJ45, 2 radio interfaces, fiber optic cable, external antenna | | | | |
| SCALANCE W786-2 Rest of world | 6GK5786-2FC00-0AA0 | IP65 IWLAN Access Point; 1 X RJ45, 2 radio interfaces, external antenna | | | | |
| SCALANCE W786-2 USA | 6GK5786-2FC00-0AB0 | IP65 IWLAN Access Point; 1 X RJ45, 2 radio interfaces, external antenna | | | | |
| SCALANCE W786-2IA Rest of world | 6GK5786-2HC00-0AA0 | IP65 IWLAN Access Point; 1 X RJ45, 2 radio interfaces, internal antenna | | | | |
| SCALANCE W786-2IA USA | 6GK5786-2HC00-0AB0 | IP65 IWLAN Access Point; 1 X RJ45, 2 radio interfaces, internal antenna | | | | |
| SCALANCE W786-2 SFP Rest of world | 6GK5786-2FE00-0AA0 | IP65 IWLAN Access Point; 2 X SFP, 2 radio interfaces, fiber optic cable, external antenna | | | | |
| SCALANCE W786-2 SFP USA | 6GK5786-2FE00-0AB0 | IP65 IWLAN Access Point; 2 X SFP, 2 radio interfaces, fiber optic cable, external antenna | | | | |
| SCALANCE W788-1Pro Rest of world | 6GK5 788-1AA60-2AA0 | IP 65 IWLAN Outdoor Access Point, 1 radio interfaces, Ethernet; RJ45, internal antenna | | | | |
| SCALANCE W788-1Pro USA | 6GK5 788-1AA60-2AB0 | IP 65 IWLAN Access Point, 1 radio interface, Ethernet, RJ45, external antenna | | | | |
| SCALANCE W788-1RR Rest of world | 6GK5 788-1AA60-6AA0 | IP 65 IWLAN Access Point, 1 radio interface, iPCF, Ethernet, RJ45, external antenna | | | | |

| Product name | Order no. | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | MLFB | | F | C | R | T |
| SCALANCE W788-2Pro<br>Rest of world | 6GK5 788-2AA60-2AA0 | IP 65 IWLAN Access Point,<br>2 radio interfaces, Ethernet, RJ45,<br>external antenna | | | | |
| SCALANCE W788-2Pro<br>USA | 6GK5 788-2AA60-2AB0 | IP 65 IWLAN Access Point,<br>2 radio interfaces, Ethernet, RJ45,<br>external antenna | | | | |
| SCALANCE W788-1PRO | 6GK5 788-1ST00-2AA6 | Industrial WLAN access point | | | | 11/08 |
| SCALANCE W788-2PRO | 6GK5 788-2ST00-2AA6 | Industrial WLAN dual access point | | | | 11/08 |
| SCALANCE W788-1<br>Rest of world | 6GK5788-1FC00-0AA0 | IP30 IWLAN Access Point;<br>1 X RJ45, 1 radio interface,<br>external antenna | | | | |
| SCALANCE W788-1<br>USA | 6GK5788-1FC00-0AB0 | IP30 IWLAN Access Point;<br>1 X RJ45, 1 radio interface,<br>external antenna | | | | |
| SCALANCE W788-1<br>Rest of world | 6GK5788-1GD00-0AA0 | IP65 IWLAN Access Point;<br>1 X M12, 1 radio interface,<br>external antenna | | | | |
| SCALANCE W788-1<br>USA | 6GK5788-1GD00-0AB0 | IP65 IWLAN Access Point;<br>1 X M12, 1 radio interface,<br>external antenna | | | | |
| SCALANCE W788-2<br>Rest of world | 6GK5788-2FC00-0AA0 | IP30 IWLAN Access Point;<br>1 X RJ45, 2 radio interface,<br>external antenna | | | | |
| SCALANCE W788-2<br>USA | 6GK5788-2FC00-0AB0 | IP30 IWLAN Access Point;<br>1 X RJ45, 2 radio interface,<br>external antenna | | | | |
| SCALANCE W788-2<br>Rest of world | 6GK5788-2GD00-0AA0 | IP65 IWLAN Access Point;<br>1 X M12, 2 radio interface,<br>external antenna | | | | |
| SCALANCE W788-2<br>USA | 6GK5788-2GD00-0AB0 | IP65 IWLAN Access Point;<br>1 X M12, 2 radio interface,<br>external antenna | | | | |
| SCALANCE W788-2<br>Rest of world | 6GK5788-2GD00-0TA0 | IP65 IWLAN Access Point;<br>1 X M12, EEC, 2 radio interfaces,<br>external antenna | | | | |
| SCALANCE W788-2<br>USA | 6GK5788-2GD00-0TB0 | IP65 IWLAN Access Point;<br>1 X M1, EEC, 2 radio interfaces,<br>external antenna | | | | |

# PC 10

## 10.1 CP Ethernet

| Product name | Order no. | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | MLFB | | F | C | R | T |
| CP 1613 | 6GK1 161-3AA00 | SIMATIC NET CP 1613 Industrial Ethernet; Iso, TCP/IP, S7 connections, programming device functions, PCI network card; RJ45 port | | | | 10/09 |
| CP 1613 A2 | 6GK1 161-3AA01 | SIMATIC NET CP 1613 Industrial Ethernet; Iso, TCP/IP, S7 connections, programming device functions, PCI network card; RJ45 port | | | | |
| CP 1623 | 6GK1 162-3AA00 | SIMATIC NET CP 1623 Industrial Ethernet; Iso, TCP/IP, S7 connections, programming device functions, PCI-E (Express) network card; 2-port switch; RJ45 port | | | | |
| CP 1628 | 6GK1 162-8AA00 | SIMATIC NET CP 1628 Industrial Ethernet; Iso, TCP/IP, S7 connections, programming device functions, PCI-E (Express) X1; 2-port switch; RJ45 connector; Integrated Security | | | | |
| CP 1512 | 6GK1 151-2AA00 | SIMATIC NET CP 1512 Industrial Ethernet; Iso, TCP/IP, S7 connections, programming device functions, PCMCIA **only in connection with PCS 7 ES** | | | | 07/06 |
| CP 1612 | 6GK1 161-2AA00 | SIMATIC NET CP 1612 Industrial Ethernet; Iso, TCP/IP, S7 connections, programming device functions, PCI network card ; RJ45 port | | | | 06/06 |
| Desktop adapter network card PCI-E | A5E01579552 | Desktop adapter network card for BCE; Intel PCI-E (Express) network card for connecting to Industrial Ethernet (10/100/1000 MBit/s); RJ45 port; replacement part for redundant terminal bus | | | | |
| Redundant terminal bus adapter PCI-E | 6ES7 652-0XX01-1XF1 | Redundant terminal bus adapter package; 2xIntel PCI-E (Express) network cards for connecting to Industrial Ethernet (10/100/1000 MBit/s); RJ45 port | | | | |
| Server adapter network card PCI-E | A5E01579487 | Server adapter network card for BCE; Intel PCI-E (Express) network card for connecting to Industrial Ethernet (10/100/1000 MBit/s); RJ45 port; replacement part for redundant terminal bus | | | | |

| Product name | Order no. | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | MLFB | | F | C | R | T |
| Desktop adapter network card PCI | A5E00718412 | Desktop adapter network card for BCE;<br>Intel PCI network card for connecting to Industrial Ethernet (10/100/1000 MBit/s);<br>RJ45 port;<br>replacement part for redundant terminal bus | | | | |
| Redundant terminal bus adapter PCI | 6ES7 652-0XX01-1XF0 | Redundant terminal bus adapter package;<br>2xIntel PCI network cards for connecting to Industrial Ethernet (10/100/1000 Mbps);<br>RJ45 port; | | | | |
| Server adapter network card PCI | A5E01605513 | Server adapter network card for BCE;<br>2xIntel PCI network card for connecting to Industrial Ethernet (10/100/1000 MBit/s);<br>RJ45 port;<br>replacement part for redundant terminal bus | | | | |

# 10.2 CP PROFIBUS

| Product name | Order no. | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | MLFB | | F | C | R | T |
| CP 5611 | 6GK1 561-1AA00 | SIMATIC NET CP 5611 PROFIBUS;<br>PCI bus,<br>**Only in combination with SIMATIC PDM !** | W | | | 07/05 |
| CP 5611 A2 | 6GK1 561-1AA01 | SIMATIC NET CP 5611 A2 PROFIBUS;<br>PCI bus V2.2,<br>**Only in combination with SIMATIC PDM !** | W | | | |
| CP 5613 | 6GK1 561-3AA00 | SIMATIC NET CP 5613 PROFIBUS;<br>PCI bus,<br>DP master for DP-V0 /-V1 | W | | | 01/06 |
| CP 5613 A2 | 6GK1 561-3AA01 | SIMATIC NET CP 5613 A2 PROFIBUS;<br>PCI bus V2.2,<br>DP master for DP-V0 /-V1 | W | | | |

# 10.3 CP IWLAN

| Product name | Order no. | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | MLFB | | F | C | R | T |
| CP 7515 | 6GK1 751-5AA00 | SIMATIC NET CP 7515 Industrial WLAN PCMCIA | | | | 07/06 |

# PC-based automation

# 11

## 11.1 Controller

| Product name | Order no.<br>MLFB<br>Firmware version | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | | | F | C | R | T |
| CPU 416-2 PCI | 6ES7 616-2QL00-0AB4<br>V3.4 | CPU as PCI bus card for PCs;<br>constant bus cycle time and isochronous mode; routing | W | | | 10/06 |
| CPU 416-2 PCI | 6ES7 616-2QL10-0AB4<br>V4.0 | CPU as PCI bus card for PCs;<br>constant bus cycle time and isochronous mode; routing | W | | | 10/10 |
| PCS 7 AS mEC RTX 2010 | 6ES7 654-0MC23-0XX0<br>V1.2 | SIMATIC S7 modular embedded controller;<br>EC31;<br>1GB RAM, 4GB flash disk;<br>SDK ports: 1st port: 2X PROFINET, 2nd port: 1X FAST ETHERNET, 3rd port: 2 X USB, MMC SLOT | W<br>P | | | |

# 11.2 PCS7 BOX

| Product name | Order no. | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | MLFB | | F | C | R | T |
| PCS7 BOX RTX 2010 | 6ES7 650-4A...-.... | Based on BOX PC 627C;<br>2.53 GHz; 2 GB RAM; SATA 250 GB;<br>DVD +-RW; 2xRJ45;<br>WinAC RTX 2010 software CPU;<br>1x CP5611-compatible port | W | | | |
| PCS7 BOX RTX 2008 | 6ES7 650-2Q...-0YX0 | Based on BOX PC 627B;<br>2.16 GHz; 2 GB RAM; SATA 160 GB;<br>DVD +-RW; 2xRJ45 onboard;<br>WinAC RTX 2008 software CPU; 1x CP5613 A2 | W | | | 03/ 11 |
| PCS7 BOX 416 | 6ES7 650-2P...-0YX0 | Based on BOX PC 627B;<br>2.16 GHz; 2 GB RAM; SATA 160 GB;<br>DVD +-RW; 2xRJ45 onboard;<br>WinAC Slot CPU 416-2DP V4.0;<br>2 MB memory card | W | | | 03/ 11 |

# 11.3 PCS7 AS RTX

| Product name | Order no. | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | MLFB | | F | C | R | T |
| PCS7 AS RTX 2008 | 6ES7 654-0UE12-0XX0 | On basis of Microbox 427B; 1.4 GHz; 1GB RAM; 4GB flash drive; CP 5611 onboard; WinAC RTX 2008 software CPU; preinstalled for PCS 7 operation (may be used from PCS 7 V7.0 SP3 ); AS runtime license (PO250) | W | | | 11/ 10 |
| PCS7 AS RTX 2010 | 6ES7 654-0UE13-0XX0 | On basis of Microbox 427C; Core2 Duo 1.2 GHz; 2GB DDR3 RAM; 4GB compact flash; CP 5611 onboard; WinAC RTX 2010 software CPU; preinstalled for PCS 7 operation (may be used from PCS 7 V7.1 SP2); AS runtime license (PO100) | W | | | |

## 12.1 Partner modules

| Product name | Order no. | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | MLFB | | F | C | R | T |
| | 2XV9 450-1AR13 | WinGPS for Windows 95 / NT;<br>GPS receiver for time synchronization suitable for global use, assembly material included | | | | |
| | 2XV9 450-1AR14 | DCFRS for Windows 95 / NT;<br>DCF 77 receiver for time synchronization in Europe, assembly material included | | | | |
| SICLOCK TC400 | 2XV9 450-2AR01 | SICLOCK TC400; time transmitter<br>Synchronization of the nodes connected via Industrial Ethernet<br>• 4 independent Ethernet ports<br>• 3 outputs for point-to-point connections with TTY/24 V and RS 422/5 V<br>• Terminal for radio controlled clocks, outputs and alarm<br>• 19" RACK for SICLOCK TC400 (2XV9450-2AR81) | | | | |
| SICLOCK TC400 | 2XV9 450-2AR10 | SICLOCK TC400; time transmitter, complete package with SICLOCK GPS1000 radio controlled clock;<br>24 V to 110 V DC;<br>Synchronization of the nodes connected via Industrial Ethernet<br>• 4 independent Ethernet ports<br>• 3 outputs for point-to-point connections with TTY/24 V and RS 422/5 V<br>• Terminal for radio controlled clocks, outputs and alarm<br>• 19" RACK for SICLOCK TC400 (2XV9450-2AR81) | | | | |

| Product name | Order no. | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | MLFB | | F | C | R | T |
| SICLOCK TC400 | 2XV9 450-2AR20 | SICLOCK TC400; time transmitter DCFRS; complete package with radio clock SICLOCK DCFRS; 24 V to 110 V DC;<br>Synchronization of the nodes connected via Industrial Ethernet<br>• 4 independent Ethernet ports<br>• 3 outputs for point-to-point connections with TTY/24 V and RS 422/5 V<br>• Terminal for radio controlled clocks, outputs and alarm<br>• 19" RACK for SICLOCK TC400 (2XV9450-2AR81) | | | | |
| SICLOCK TC100 | 2XV9 450-2AR22 | SICLOCK TC100; time transmitter<br>24 V DC;<br>Synchronization of the nodes connected via Industrial Ethernet<br>• 1 Ethernet port 10/100 Mbps, autonegotiation<br>• Radio controlled clock input, relay outputs | | | | |
| SICLOCK TC100 | 2XV9 450-2AR26 | SICLOCK TC100 and DCF77 time receiver, consisting of master system clock TC100, DCFRS radio receiver<br>24 V DC;<br>Synchronization of the nodes connected via Industrial Ethernet<br>• 1 Ethernet port 10/100 Mbps, autonegotiation<br>• Radio controlled clock input, relay outputs | | | | |
| SICLOCK TC100 | 2XV9 450-2AR50 | SICLOCK TC100 and GPS radio receiver and lightning protection, consisting of master system clock TC100, GPS1000 radio receiver;<br>24 V DC;<br>Synchronization of the nodes connected via Industrial Ethernet<br>• 1 Ethernet port 10/100 Mbps, autonegotiation<br>• Radio controlled clock input, relay outputs | | | | |
| SICLOCK TM | 2XV9 450-1AR24 | SICLOCK TM time transmitter; complete package GPS;<br>24 V to 110 V DC;<br>for synchronizing the nodes connected via Industrial Ethernet | | | | |
| SICLOCK TM | 2XV9 450-1AR25 | SICLOCK TM time transmitter; GPS complete package;<br>90 V to 240 V AC/DC,<br>for synchronizing the nodes connected via Industrial Ethernet | | | | |

| Product name | Order no. | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | MLFB | | F | C | R | T |
| SICLOCK TM | 2XV9 450-1AR26 | SICLOCK TM time transmitter; complete package DCF77;<br>24 V to 110 V DC;<br>for synchronizing the nodes connected via Industrial Ethernet | | | | |
| SICLOCK TM | 2XV9 450-1AR27 | SICLOCK TM time transmitter, complete package DCF77;<br>90 V to 240 V; AC/DC;<br>for synchronizing the nodes connected via Industrial Ethernet | | | | |
| SITOP modular | 6EP1333-3BA00 | SITOP modular 5, 1-phase, 24 V/5 A;<br>Input: 120/230-500 V AC Output: 24 V/5 A DC | | | | |
| SITOP PSU200M | 6EP1334-3BA00 | SITOP PSU200M 10 A, modular, 1-phase;<br>Input: 120/230-500 V AC Output: 24 V/10 A DC | | | | |
| SITOP PSU100M | 6EP1336-3BA10 | SITOP PSU100M 20A, modular, 1-phase;<br>Input: 120-230 V AC 110-220 V DC Output: 24 V/ 20 A DC | | | | |
| SITOP modular | 6EP1337-3BA00 | SITOP modular 40, 1-phase;<br>Input: 120/230 V AC Output: 24 V/40 A DC | | | | |
| SITOP PSU300M | 6EP1436-3BA10 | SITOP PSU300M 20 A, 3-phase;<br>Input: 3 AC 400-500 V Output: 24 V/20 A DC | | | | |
| SITOP PSU300M | 6EP1437-3BA10 | SITOP PSU300M 40, 3-phase;<br>Input: 3 AC 400-500 V Output: 24 V/40 A DC | | | | |
| SITOP signal module | 6EP1961-3BA10 | SITOP modular signal module;<br>for SITOP modular, 1-phase, 24V/5 A, 10 A and 40 A | | | | |
| SITOP redundancy module | 6EP1961-3BA21 | SITOP PSE202U redundancy module;<br>Input/output: 24 V/40 A DC | | | | |
| SITOP PSE200U | 6EP1961-2BA11 | SITOP PSE200U 3 A selectivity module, 4-channel, common signaling contact;<br>Input: 24 V DC Output: 24 V/3 A DC | | | | |
| SITOP PSE200U | 6EP1961-2BA21 | SITOP PSE200U 10 A selectivity module, 4-channel, common signaling contact;<br>Input: 24 V DC Output: 24 V/10 A DC | | | | |
| SITOP PSE200U | 6EP1961-2BA31 | SITOP PSE200U 3 A selectivity module, 4-channel, status signal per channel;<br>Input: 24 V DC Output: 24 V/3 A DC | | | | |
| SITOP PSE200U | 6EP1961-2BA41 | SITOP PSE200U 10 A selectivity module, 4-channel, status signal per channel;<br>Input: 24 V DC Output: 24 V/10 A DC | | | | |
| SITOP buffer module | 6EP1961-3BA01 | SITOP modular buffer module, for 6EP1X3X-3BAX0, buffer time 100 ms to 10 s | | | | |
| SITOP UPS500S | 6EP1933-2EC41 | SITOP UPS500S base unit 2,5 KWS, USB port, IP20;<br>Input: 24 V DC Output: 24 V/15 A DC | | | | |
| SITOP UPS500S | 6EP1933-2EC51 | SITOP UPS500S base unit 5 KWS, USB port, IP20;<br>Input: 24 V DC Output: 24 V/15 A DC | | | | |

| Product name | Order no. | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | MLFB | | F | C | R | T |
| SITOP UPS501S | 6EP1935-5PG01 | SITOP UPS501S expansion module 5 KWS for UPS500S (2.5 KWS, 5 KWS), IP20 | | | | |
| SITOP DC UPS module | 6EP1931-2DC31 | SITOP DC UPS module 24 V/6 A, serial port; Input: 24 V/6,85 A DC Output: 24 V/6 A DC | | | | |
| SITOP DC UPS module | 6EP1931-2DC41 | SITOP DC UPS module 24 V/6 A, USB port; Input: 24 V DC / 6.85 A Output: 24 V DC / 6 A | | | | |
| SITOP DC UPS module | 6EP1931-2EC31 | SITOPDC UPS module 24 V/15 A, serial port; Input: 24 V/16 A DC Output: 24 V/15 A DC | | | | |
| SITOP DC UPS module | 6EP1931-2EC42 | SITOP DC UPS module 24 V/15 A, USB port; Input: 24 V/16 A DC Output: 24 V/15 A DC | | | | |
| SITOP DC UPS module | 6EP1931-2FC42 | SITOP DC UPS module 24 V/40 A, USB port, Input: 24 V/42,6 A DC Output: 24 V/40 A DC | | | | |
| SITOP battery module | 6EP1935-6MC01 | SITOP rechargeable battery module 24 V/1,2 AH for SITOP DC UPS module 6 A | | | | |
| SITOP battery module | 6EP1935-6MD11 | SITOP rechargeable battery module 24 V/3,2 AH for SITOP DC UPS module 6 A and 15 A | | | | |
| SITOP battery module | 6EP1935-6ME21 | SITOP rechargeable battery module 24 V/7 AH for SITOP DC UPS module 6 A, 15 A and 40 A | | | | |
| SITOP battery module | 6EP1935-6MF01 | SITOP rechargeable battery module 24 V/12 AH for SITOP DC UPS module 6 A, 15 A and 40 A | | | | |
| | 3P7217B00APF01 | MicroLaser 170 laser printer; rapid laser printer (monochrome), with Centronics interface, optional network card, 12 MB RAM | | | | |
| | 3P74C4B00APQ01 | MicroLaser C4 laser printer; high-resolution, network-ready color laser printer; network card, 24 MB RAM, GNC: | | | | |
| | 6DS1 916-8RR | Signal module, PCI card for installation in an operator station | | | | |
| | 6ES7 652-0XX01-1XC0 | Smart card reader, desktop version, V.24 connection, PS/2 power supply with 1.8 m cable, operating instructions, software for user administrator and process control; one required for each OS operator station | | | | 10/07 |
| | 6ES7 652-0XX02-1XC0 | Smart card reader, desktop version, V2.0 smart card reader, USB port, | | | | |
| | 6ES7 652-0XX03-1XE0 | G450 MMS multi-monitor graphics card "2 Screens" | | | | |
| | 6ES7 652-0XX03-1XE1 | G450 MMS multi-monitor graphics card "4 Screens" | | | | |
| | 6ES7 652-0XX04-1XE0 | M9120 Plus LP PCIe x16 multi-monitor graphics card "2 Screens" | | | | |
| | 6ES7 652-0XX04-1XE1 | M9140 LP PCIe x16 multi-monitor graphics card "4 Screens" | | | | |

## 13.1 CP PtP

| Product name | Order no. | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | MLFB | | F | C | R | T |
| CP341-1A | 6ES7 341-1AH01-0AE0 | Com. processor,<br>RS 232 interface, rechargeable drivers | W | M | | 12/08 |
| CP341-1A | 6ES7 341-1AH02-0AE0 | Com. processor,<br>RS 232 interface, rechargeable drivers;<br>frame length 4 KB, data transmission rate 115 kbps, printer driver | W<br>P | M | | |
| CP341-1B | 6ES7 341-1BH01-0AE0 | Com. processor,<br>TTY interface, rechargeable drivers | W | M | | 12/08 |
| CP341-1B | 6ES7 341-1BH02-0AE0 | Com. processor,<br>TTY interface, rechargeable drivers;<br>frame length 4 KB, data transmission rate 115 kbps, printer driver | W<br>P | M | | |
| CP341-1C | 6ES7 341-1CH01-0AE0 | Com. processor,<br>RS 422 interface, rechargeable drivers | W | M | | 12/08 |
| CP341-1C | 6ES7 341-1CH02-0AE0 | Com. processor,<br>RS 422 interface, rechargeable drivers;<br>frame length 4 KB, data transmission rate 115 kbps, printer driver | W<br>P | M | | |

# 13.2 CP AS-i

| Product name | Order no. | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | MLFB<br>Firmware version | | F | C | R | T |
| CP342-2 AS-I | 6GK7 342-2AH00-0XA0 [1)] | SIMATIC NET CP 342-2 for connecting S7-300 to AS-Interface | | M | | 07/ 00 |
| CP342-2 AS-I | 6GK7 342-2AH01-0XA0 [1)] | SIMATIC NET CP 342-2 for connecting S7-300 to AS-Interface | | M | | 04/ 02 |
| CP343-2 AS-i | 6GK7 343-2AH00-0XA0 [1)] | Basic module for connecting AS-Interface, supports AS-i A / B-Slaves and AS-i 7.3 / 7.4-analog slaves | | M | | |

[1)] Can only be automatically connected to PCS 7 with "Programming Instructions Driver Blocks V6.0"

# 13.3 FM

| Product name | Order no. | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | MLFB<br>Firmware version | | F | C | R | T |
| FM350-1<br>COUNTER | 6ES7 350-1AH03-0AE0<br>V1.0.2 | Counter module,<br>1 channel;<br>can also be installed with active bus modules, supports synchronous operation | W<br>P | M | | |
| FM350-2<br>COUNTER | 6ES7 350-2AH00-0AE0 | Counter module,<br>8 channels | W | M | | 10/<br>08 |
| FM350-2<br>COUNTER | 6ES7 350-2AH01-0AE0 | Counter module,<br>8 channels | W<br>P | M | | |
| FM355 C<br>PID Control | 6ES7 355-0VH10-0AE0 | Control module.<br>4 channels; (continuous) 4 AI + 8 DI + 4 AO; V2.0 | W<br>P | M | | |
| FM355 S<br>PID Control | 6ES7 355-1VH10-0AE0 | Control module<br>4 channels; (step and pulse) 4 AI + 8 DI + 8 DO; V2.0 | W<br>P | M | | |
| FM355-2 C | 6ES7 355-2CH00-0AE0 | Control module<br>4 channels;<br>temperature controller | W<br>P | M | | |
| FM355-2 S | 6ES7 355-2SH00-0AE0 | Control module<br>4 channels;<br>temperature controller | W<br>P | M | | |

# 13.4 PS

| Product name | Order no. | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | MLFB | | F | C | R | T |
| PS307 2A | 6ES7 307-1BA00-0AA0 | Power supply for 120 / 230 V AC; 24 V / 2 A DC | | | | 08/10 |
| PS307 2A | 6ES7 307-1BA01-0AA0 | Power supply for 120 / 230 V AC; 24 V / 2 A DC | | | | |
| PS305 2A | 6ES7 305-1BA80-0AA0 | Power supply 24 / 110 V AC; 24 V / 2 A DC | | | | |
| PS307 5A | 6ES7 307-1EA00-0AA0 | Power supply for 120 / 230 V AC; 24 V / 5 A DC | | | | 08/10 |
| PS307 5A | 6ES7 307-1EA01-0AA0 | Power supply for 120 / 230 V AC; 24 V / 5 A DC | | | | |
| PS307 5A | 6ES7 307-1EA80-0AA0 | Power supply for 120 / 230 V AC; 24 V / 5 A DC | | | | |
| PS307 10A | 6ES7 307-1KA00-0AA0 | Power supply for 120 / 230 V AC; 24 V / 10 A DC | | | | 04/03 |
| PS307 10A | 6ES7 307-1KA01-0AA0 | Power supply for 120 / 230 V AC; 24 V / 10 A DC | | | | 08/10 |
| PS307 10A | 6ES7 307-1KA02-0AA0 | Power supply for 120 / 230 V AC; 24 V / 10 A DC | | | | |

# 13.5 SM DI

| Product name | Order no. | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | MLFB | | F | C | R | T |
| SM321<br>DI 16xDC24V | 6ES7 321-1BH01-0AA0 | Digital input module<br>16 DI; 24 V DC;<br>grouping 16 | W | M | | 10/<br>04 |
| SM321<br>DI 16xDC24V | 6ES7 321-1BH02-0AA0 | Digital input module<br>16 DI; 24 V DC; grouping 16 | W<br>P<br>E | M | M | |
| SM321<br>DI 16xDC24V | 6ES7 321-1BH10-0AA0 | Digital input module<br>16 DI; 24 V DC; grouping 16, high speed, supports isochronous mode | W<br>P | M | | |
| SM321<br>DI 16xDC24V | 6ES7 321-1BH50-0AA0 | Digital input module<br>16 DI; 24 V DC; grouping 16, active low | W<br>P | M | | |
| SM321<br>DI 16xDC24V | 6ES7 321-1BH81-0AA0 | Digital input module<br>16 DI; 24 V DC;<br>extended environmental conditions | W | M | | 10/<br>00 |
| SM321<br>DI 16xDC24V | 6ES7 321-1BH82-0AA0 | Digital input module<br>16 DI; 24 V DC;<br>extended environmental conditions | W | M | | 11/<br>03 |
| SM321<br>DI 32xDC24V | 6ES7 321-1BL00-0AA0 | Digital input module<br>32 DI; 24 V DC;<br>grouping 32 | W<br>P<br>E | M | M | |
| SM321<br>DI 32xDC24V | 6ES7 321-1BL80-0AA0 | Digital input module<br>32 DI; 24 V DC;<br>extended environmental conditions | W | M | | 11/<br>03 |
| SM321<br>DI 64xDC24V | 6ES7 321-1BP00-0AA0 | Digital input module<br>64 DI; 24 V DC;<br>grouping 16, active high or active low | W<br>P | M | | |
| SM321<br>DI 16xAC/DC24..48V | 6ES7 321-1CH00-0AA0 | Digital input module<br>16 DI; 24 ...48 V AC / DC;<br>grouping 1 | W<br>P<br>E | M | | |
| SM321<br>DI 16xDC48..120V | 6ES7 321-1CH20-0AA0 | Digital input module<br>16 DI; 48 ...120 V DC;<br>grouping 8 | W<br>P<br>E | M | | |
| SM321<br>DI 16xDC48..120V | 6ES7 321-1CH80-0AA0 | Digital input module<br>16 DI; 48 ...120 V DC;<br>grouping 8, extended environmental conditions | W | M | | 11/<br>03 |
| SM321<br>DI 16xAC120V | 6ES7 321-1EH01-0AA0 | Digital input module<br>16 DI; 120 V AC;<br>grouping 4 | W | M | | 09/<br>01 |
| SM321<br>DI 32xAC120V | 6ES7 321-1EL00-0AA0 | Digital input module<br>32 DI; 120 V AC;<br>32 Pt 120 V AC input - IEC Type II - 8 Pts/Comm | W<br>P | M | | |
| SM321<br>DI 8xAC230V | 6ES7 321-1FF01-0AA0 | Digital input module<br>8 DI; 120 V ... 230 V AC;<br>grouping 2 | W<br>P<br>E | M | M | |

| Product name | Order no. | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | MLFB | | F | C | R | T |
| SM321<br>DI 8xAC120/230V | 6ES7 321-1FF10-0AA0 | Digital input module<br>8 DI; AC 120 / 230 V; 8 DI; AC Iso.;<br>grouping 1 | W<br>P | M | | |
| SM321<br>DI 8xAC120/230V | 6ES7 321-1FF81-0AA0 | Digital input module<br>8 DI; 120 / 230 V AC;<br>extended environmental conditions | W | M | | 11/<br>03 |
| SM321<br>DI 16xAC120V/230V | 6ES7 321-1FH00-0AA0 | Digital input module<br>16 DI; 120 / 230 V AC;<br>grouping 4 | W<br>P<br>E | M | | |
| SM321<br>DI 16xDC24V,<br>Alarm | 6ES7 321-7BH00-0AB0 | Digital input module<br>16 DI; 24 V DC;<br>with hardware and diagnostic interrupt,<br>grouping 16 | W | O | M | |
| SM321<br>DI 16xDC24V,<br>Alarm | 6ES7 321-7BH01-0AB0 | Digital input module<br>16 DI; 24 V DC;<br>with hardware interrupt and diagnostic interrupt,<br>grouping 16, supports isochronous mode | W<br>E | O | G | |
| SM321<br>DI 16xDC24V,<br>Alarm; High Feature | 6ES7 321-7BH01-0AB0<br>ES 6 (revision) | Digital input module<br>16 DI; 24 V DC;<br>with hardware interrupt and diagnostic interrupt,<br>grouping 16, supports isochronous mode; High Feature | W<br>P | O | C | |
| SM321<br>DI 16xDC24V,<br>Alarm | 6ES7 321-7BH80-0AB0 | Digital input module<br>16 DI; 24 V DC;<br>with hardware interrupt and diagnostic interrupt,<br>grouping 16, extended environmental conditions | W | O | | 08/<br>03 |
| SM321<br>DI 16xDC24-125V | 6ES7 321-7EH00-0AB0 | Digital input module<br>16 DI; 24-125V DC;<br>with hardware interrupt and diagnostic interrupt,<br>grouping 16 | W<br>P | O | | |
| SM321<br>DI 4xNAMUR,<br>Ex | 6ES7 321-7RD00-0AB0 | Digital input module<br>4 DI NAMUR;<br>with hardware interrupt and diagnostic interrupt,<br>grouping 1, [EEx ib] | W<br>P | O | C | |
| SM321<br>DI 16xNAMUR | 6ES7 321-7TH00-0AB0 | Digital input module<br>16 DI NAMUR;<br>with diagnostics and value status | W<br>P | O | C | |

# 13.6 SM DO

| Product name | Order no. | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | MLFB | | F | C | R | T |
| SM322<br>DO 8xDC24V/2A | 6ES7 322-1BF01-0AA0 | Digital output module<br>8 DO; 24 V / 2 A DC;<br>grouping 4 | W<br>P<br>E | M | C | |
| SM322<br>DO 16xDC24V/0.5A | 6ES7 322-1BH01-0AA0 | Digital output module<br>16 DO; DC 24 V / 0.5 A;<br>grouping 8 | W<br>P<br>E | M | | |
| SM322<br>DO 16xDC24V/0.5A | 6ES7 322-1BH10-0AA0 | Digital output module<br>16 DO; DC24 V / 0.5 A;<br>grouping8,<br>high speed, supports synchronous operation | W<br>P | M | | |
| SM322<br>DO 16xDC24V/0.5A | 6ES7 322-1BH81-0AA0 | Digital output module<br>16 DO; DC 24 V / 0.5 A;<br>extended environmental conditions | W | M | | 11/<br>03 |
| SM322<br>DO 32xDC24V/0.5A | 6ES7 322-1BL00-0AA0 | Digital output module<br>32 DO; DC24 V / 0.5 A;<br>grouping 8 | W<br>P<br>E | M | M | |
| SM322<br>DO 64xDC24V/0.3A | 6ES7 322-1BP00-0AA0 | Digital output module<br>64 DO; DC 24 V / 0.3 A;<br>grouping 16, P-switching | W<br>P | M | | |
| SM322<br>DO 64xDC24V/0.3A | 6ES7 322-1BP50-0AA0 | Digital output module<br>64 DO; DC 24 V / 0.3 A;<br>grouping 16, M-switching | W<br>P | M | | |
| SM322<br>DO 8xDC48..120V/1.5A | 6ES7 322-1CF00-0AA0 | Digital output module<br>8 DO; DC 48 ...120 V / 1.5 A;<br>grouping 4 | W<br>P | M | | |
| SM322<br>DO 8xDC48..120V/1.5A | 6ES7 322-1CF80-0AA0 | Digital output module<br>8 DO;<br>DC 48 ...120 V / 1.5 A;<br>grouping 4,<br>extended environmental conditions | W | M | | 11/<br>03 |
| SM322<br>DO 16xAC120V/0.5A | 6ES7 322-1EH01-0AA0 | Digital output module<br>16 DO; AC 120 V / 0.5 A;<br>grouping 8 | W | M | | 01/<br>02 |
| SM322<br>DO 32xAC120V/1A | 6ES7 322-1EL00-0AA0 | Digital output module<br>32 DO; AC 120 V / 1 A;<br>grouping 8 | W | M | | 10/<br>04 |
| SM322<br>DO 8xAC230V/2A | 6ES7 322-1FF01-0AA0 | Digital output module<br>8 DO; AC 230 V / 1 A;<br>grouping 4,<br>Si. | W<br>P<br>E | M | M | |
| SM322<br>DO 8xAC120/230V/1A | 6ES7 322-1FF81-0AA0 | Digital output module<br>8 DO; AC 120 / 230 V / 1 A;<br>extended environmental conditions | W | M | | 10/<br>03 |
| SM322<br>DO 16xAC120V/230V/0.5A | 6ES7 322-1FH00-0AA0 | Digital output module<br>16 DO; AC 120 / 230 V / 0.5 A;<br>grouping 8 | W<br>P<br>E | M | | |

| Product name | Order no. | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | MLFB | | F | C | R | T |
| SM322<br>DO 32xAC120V/230V/1A | 6ES7 322-1FL00-0AA0 | Digital output module<br>32 DO; AC 120 / 230 V / 1 A;<br>grouping 8 | W<br>P | M | | |
| SM322<br>DO 8xRel. AC230V | 6ES7 322-1HF01-0AA0 | Digital output module<br>8 DO relay;<br>DC 24 V / 2 A, AC 230 V / 2 A;<br>grouping 2 | W<br>P<br>E | M | | |
| SM322<br>DO 8xRel. AC 230V/5A | 6ES7 322-1HF10-0AA0 | Digital output module<br>8 DO relays; AC 230 V / 8 A;<br>grouping 1 | W<br>P<br>E | M | | |
| SM322<br>DO 8xRel. AC 24V/5A | 6ES7 322-1HF20-0AA0 | Digital output module<br>8 DO relay;<br>24 V / 5 A DC, 230 V / 5 A AC;<br>grouping 1,<br>with overvoltage protection component | W | M | | 07/<br>02 |
| SM322<br>DO 8xRel.<br>DC24V/AC230V/5A | 6ES7 322-1HF80-0AA0 | Digital output module<br>8 DO relays; 230 V / 5 A AC;<br>grouping 1,<br>extended environmental conditions | W | M | | 11/<br>03 |
| SM322<br>DO 16xRel. AC120V | 6ES7 322-1HH00-0AA0 | Digital output module<br>16 DO relay;<br>24 V / 2 A DC, 120 V / 2 A AC;<br>grouping 16 | W | M | | 07/<br>02 |
| SM322<br>DO 16xRel. AC120V/230V | 6ES7 322-1HH01-0AA0 | Digital output module<br>16 DO relay;<br>24 V / 2 A DC, 120 V / 2 A AC; 230 V / 2 A;<br>grouping 16 | W<br>P<br>E | M | | |
| SM322<br>DO 8xAC120/230V/2A | 6ES7 322-5FF00-0AB0 | Digital output module<br>8 DO; AC 120 / 230 V / 2 A,<br>with substitute value switching | W<br>P | O | | |
| SM322<br>DO 16xUC24/48V | 6ES7 322-5GH00-0AB0 | Digital output module<br>16 DO; UC 24 / 48 V;diagnostic interrupt,<br>grouping 1, | W<br>P | M | | |
| SM322<br>DO 8xRel AC230V | 6ES7 322-5HF00-0AB0 | Digital output module<br>8 DO; AC 230 V / 5 A | W<br>P | O | | |
| SM322<br>DO 4xDC15V/20mA, Ex | 6ES7 322-5RD00-0AB0 | Digital output module<br>4 DO; DC 15 V / 20 mA; diagnostic interrupt,<br>grouping 1, [EEx ib] | W<br>P | O | | |
| SM322<br>DO 4xDC24V/10mA, Ex | 6ES7 322-5SD00-0AB0 | Digital output module<br>4 DO; DC 24 V / 10 mA; diagnostic interrupt,<br>grouping 1, [EEx ib] | W<br>P | O | C | |
| SM322<br>DO 8xDC24V/0,5A | 6ES7 322-8BF00-0AB0 | Digital output module<br>8 DO; 24 V DC / 0.5 mA; diagnostic interrupt,<br>grouping 8 | W<br>P | O | M | |
| SM322<br>DO 8xDC24V/0,5A | 6ES7 322-8BF80-0AB0 | Digital output module<br>8 DO; 24 V DC / 0.5 A; with diagnostics,<br>extended environmental conditions | W | O | | 11/<br>03 |
| SM322<br>DO 16xDC24V/0,5A | 6ES7 322-8BH00-0AB0 | Digital output module<br>16 DO; 24 V DC / 0.5 A; with diagnostics | W | O | M | 12/<br>03 |

| Product name | Order no. | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | MLFB | | F | C | R | T |
| SM322<br>DO 16xDC24V/0,5A | 6ES7 322-8BH01-0AB0 | Digital output module<br>16 DO; 24 V DC / 0.5 A; with diagnostics | W | O | M | |
| SM322<br>DO 16xDC24V/0,5A | 6ES7 322-8BH10-0AB0 | Digital output module<br>16 DO; 24 V DC / 0.5 A; with diagnostics | W<br>P | O | M | |

# 13.7 SM DI/DO

| Product name | Order no. | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | MLFB | | F | C | R | T |
| SM323<br>DI 8/DO 8 x DC24V/0.5A | 6ES7 323-1BH01-0AA0 | Digital input/output module<br>8 DI / 8 DO; DC 24 V / 0,5 A | W<br>P<br>E | M | | |
| SM323<br>DI 8/DO 8 x DC24V/0.5A | 6ES7 323-1BH81-0AA0 | Digital input/output module;<br>8 DI / 8 DO; 24 V DC / 0.5 A; (Outdoor) | W | M | | 11/<br>03 |

# 13.8 SM DI-F

| Product name | Order no. | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | MLFB | | F | C | R | T |
| SM 326<br>DI 24x24VDC | 6ES7 326-1BK00-0AB0 | Digital input module<br>24 DI; 24 V DC;<br>failsafe | W | OS | C | 04/<br>06 |
| SM326<br>DI 24xDC24V | 6ES7 326-1BK01-0AB0 | Digital input module<br>24 DI; 24 V DC;<br>failsafe, with diagnostic interrupt | W | OS | C | |
| SM326<br>DI 24xDC24V | 6ES7 326-1BK02-0AB0 | Digital input module<br>24 DI; 24 V DC;<br>failsafe, with diagnostic interrupt | W<br>P | OS | C | |
| SM 326<br>DI 8xNAMUR, Ex(i) | 6ES7 326-1RF00-0AB0 | Digital input module<br>8 DI NAMUR;<br>Ex(i), failsafe | W | OS | C | |

# 13.9 SM DO-F

| Product name | Order no. | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | MLFB | | F | C | R | T |
| SM 326<br>DO 10x24VDC/2A | 6ES7 326-2BF00-0AB0 | Digital output module,<br>10 DO; 24 V / 2 A DC;<br>safety-related, | W | OS | C | 04/<br>03 |
| SM326<br>DO 10xDC24V/2A | 6ES7 326-2BF01-0AB0 | Digital output module,<br>10 DO; 24 V / 2 A DC;<br>safety-related, switching to P potential,<br>with diagnostic interrupt | W | OS | C [1] | |
| SM326<br>DO 10xDC24V/2A | 6ES7 326-2BF10-0AB0 | Digital output module,<br>10 DO; 24 V / 2 A DC;<br>safety-related, switching to P potential,<br>with diagnostic interrupt<br>PROFIBUSDP DP and PROFInet with PROFIsafe V2 | W<br>P | M | C | |
| SM 326F<br>DO 8xDC24V/2A | 6ES7 326-2BF40-0AB0 | Digital output module<br>8 DO; 24 V / 2 A DC;<br>safety-related, switching to P-M,<br>with diagnostic interrupt | W | M | | 09/<br>09 |
| SM 326F<br>DO 8xDC24V/2A | 6ES7 326-2BF41-0AB0 | Digital output module<br>8 DO; 24 V / 2 A DC;<br>safety-related, switching to P-M,<br>with diagnostic interrupt | W<br>P | M | | |

[1] = Firmware 2.0.9 or later / previous version only by module

# 13.10 SM AI

| Product name | Order no. | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | MLFB | | F | C | R | T |
| SM331<br>AI 8x13Bit | 6ES7 331-1KF00-0AB0 | Analog input module<br>8 AI; 13 Bit | W | O | | 10/03 |
| SM331<br>AI 8x13Bit | 6ES7 331-1KF01-0AB0 | Analog input module<br>8 AI; 13 Bit | W | O | | 01/10 |
| SM331<br>AI 8x13Bit | 6ES7 331-1KF02-0AB0 | Analog input module<br>8 AI; 13 Bit | W<br>P | O | | |
| SM331<br>AI 8x14Bit | 6ES7 331-7HF01-0AB0 | Analog input module<br>8 AI; 14 Bit;<br>High Speed, supports synchronous operation | W<br>P | O | | |
| SM331<br>AI 2x12Bit | 6ES7 331-7KB01-0AB0 | Analog input module<br>2 AI; 12 ... 14 Bit | W | O | | 10/04 |
| SM331<br>AI 2x12Bit | 6ES7 331-7KB02-0AB0 | Analog input module<br>2 AI; 12 ... 14 Bit | W<br>P | O | | |
| SM331<br>AI 2x12Bit | 6ES7 331-7KB81-0AB0 | Analog input module<br>2 AI; 12 ... 14 Bit;<br>extended environmental conditions | W | O | | 05/01 |
| SM331<br>AI 2x12Bit | 6ES7 331-7KB82-0AB0 | Analog input module<br>2 AI; 12 ... 14 Bit; (Outdoor) | W | O | | 11/03 |
| SM331<br>AI 8x12Bit | 6ES7 331-7KF01-0AB0 | Analog input module<br>8 AI; 12 ... 14 Bit | W | O | | 02/05 |
| SM331<br>AI 8x12Bit | 6ES7 331-7KF02-0AB0 | Analog input module<br>8 AI; 12 ... 14 Bit | W<br>P<br>E | O | M | |
| SM331<br>AI 8x16Bit | 6ES7 331-7NF00-0AB0 | Analog input module<br>8 AI; 16 Bit;<br>1 ... 5 V, +/- 5 V, +/- 10 V;<br>0 ... 20 mA, 4 ... 20 mA, +/- 20 mA | W<br>P<br>E | O | C | |
| SM331<br>AI 8x16Bit | 6ES7 331-7NF10-0AB0 | Analog input module<br>8 AI; 16 Bit;<br>1 ... 5 V, +/- 5 V, +/- 10 V;<br>0 ... 20 mA, 4 ... 20 mA, +/- 20 mA | W<br>P<br>E | O | C | |
| SM331<br>AI 6xTC | 6ES7 331-7PE10-0AB0 | Analog input module<br>6 AI TC; 16 Bit; ISO.<br>Can be used for redundancy by channel | W<br>P | O | C | |
| SM331<br>AI 8xRTD | 6ES7 331-7PF00-0AB0 | Analog input module<br>8 AI RTD;<br>16 Bit (internally 24 Bit according to sigma-delta method); RTD: Pt 100, Pt 200, Pt 500, Pt 1000, Ni 100, Ni 120, Ni 1000, Cu 10 | W | O | | 04/05 |

| Product name | Order no. | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | MLFB | | F | C | R | T |
| SM331<br>AI 8xRTD | 6ES7 331-7PF01-0AB0 | Analog input module<br>8 AI RTD;<br>16 Bit (internally 24 Bit according to sigma-delta method); RTD: Pt 100, Pt 200, Pt 500, Pt 1000, Ni 100, Ni 120, Ni 1000, Cu 10 | W<br>P<br>E | O | | |
| SM331<br>AI 8xTC | 6ES7 331-7PF10-0AB0 | Analog input module<br>8 AI TC;<br>16 Bit (internally 24 Bit according to sigma-delta method);<br>Thermocouples: B, E, J, K, L, N, R, S, T | W | O | | 07/05 |
| SM331<br>AI 8xTC | 6ES7 331-7PF11-0AB0 | Analog input module<br>8 AI TC;<br>16 Bit (internally 24 Bit according to sigma-delta method);<br>Thermocouples: B, E, J, K, L, N, R, S, T | W<br>P<br>E | O | | |
| SM331<br>AI 4x0/4...20mA, Ex | 6ES7 331-7RD00-0AB0 | Analog input module<br>4 AI; 0/4 ... 20 mA;<br>15 Bit, [EEx ib] | W<br>P | O | C | |
| SM331<br>AI 8xTC/4xRTD, Ex | 6ES7 331-7SF00-0AB0 | Analog input module<br>8 AI TC, 4 AI RTD;<br>15 Bit, [EEx ib] | W<br>P | O | | |
| SM331<br>AI 2x0/4...20mA<br>HART, EX | 6ES7 331-7TB00-0AB0 | Analog input module<br>2 AI; 0/4 ... 20 mA,<br>with HART communication, [EEx ib] | W<br>P | O | | |
| SM331<br>AI 8x0/4...20mA<br>HART | 6ES7 331-7TF00-0AB0 | Analog input module<br>8 AI; 0/4 ... 20 mA,+/-20 mA<br>with HART communication, | W | O | | 10/07 |
| SM331<br>AI 8x0/4...20mA<br>HART | 6ES7 331-7TF01-0AB0<br>to V2.x | Analog input module<br>8 AI; 0/4 ... 20 mA,+/-20 mA<br>with HART communication, | W | O | C | |
| SM331<br>AI 8x0/4...20mA<br>HART | 6ES7 331-7TF01-0AB0<br>as of V3.x | Analog input module<br>8 AI; 0/4 ... 20 mA,+/-20 mA<br>with HART communication, | W<br>P | O | C | |

# 13.11 SM AO

| Product name | Order no. | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | MLFB | | F | C | R | T |
| SM332<br>AO 2x12Bit | 6ES7 332-5HB01-0AB0 | Analog output module<br>2 AO; 12 Bit | W<br>P | O | | |
| SM332<br>AO 2x12Bit | 6ES7 332-5HB81-0AB0 | Analog output module<br>2 AO; 12 ... 14 Bit,<br>extended environmental conditions | W | O | | 11/<br>03 |
| SM332<br>AO 4x12Bit | 6ES7 332-5HD01-0AB0 | Analog output module<br>4 AO; 11 ... 12 Bit | W<br>P<br>E | O | C | |
| SM332<br>AO 8x12Bit | 6ES7 332-5HF00-0AB0 | Analog output module<br>8 AO; 12 Bit | W<br>P<br>E | O | C | |
| SM332<br>AO 4x0/4...20mA,<br>Ex | 6ES7 332-5RD00-0AB0 | Analog output module<br>4 AO; 0/4 ... 20 mA;<br>15Bit, [EEx ib] | W<br>P | O | C | |
| SM332<br>AO 2x0/4...20mA,<br>HART, EX | 6ES7 332-5TB00-0AB0 | Analog output module<br>2 AO; 0/4 ... 20 mA;<br>with HART communication, [EEx ib] | W<br>P | O | | |
| SM332<br>AO 4x16Bit | 6ES7 332-7ND00-0AB0 | Analog output module<br>4 AO; 16 Bit | W | O | | 10/<br>04 |
| SM332<br>AO 4x16Bit | 6ES7 332-7ND01-0AB0 | Analog output module<br>4 AO; 16 Bit;<br>supports isochronous mode | W | O | | 01/<br>05 |
| SM332<br>AO 4x16Bit | 6ES7 332-7ND02-0AB0 | Analog output module<br>4 AO; 16 Bit;<br>supports isochronous mode | W<br>P<br>E | O | | |
| SM332<br>AO 8x0/4...20mA<br>HART | 6ES7 332-8TF00-0AB0 | Analog output module<br>8 AO; 16 Bit, 0/4 ... 20 mA;<br>with HART communication | W | O | | 11/<br>07 |
| SM332<br>AO 8x0/4...20mA<br>HART | 6ES7 332-8TF01-0AB0<br>to V2.x | Analog output module<br>8 AO; 16 Bit, 0/4 ... 20 mA;<br>with HART communication | W | O | C | |
| SM332<br>AO 8x0/4...20mA<br>HART | 6ES7 332-8TF01-0AB0<br>as of V3.x | Analog output module<br>8 AO; 16 Bit, 0/4 ... 20 mA;<br>with HART communication | W<br>P | O | C | |

# 13.12 SM AI-F

| Product name | Order no. | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | MLFB | | F | C | R | T |
| SM336<br>AI 6x13Bit | 6ES7 336-1HE00-0AB0 | Analog input module<br>6 AI; 13 Bit; with diagnostics, safety-related to SIL-3, | W | OS | C | 10/08 |
| SM336<br>AI 6 HART | 6ES7 336-4GE00-0AB0 | Analog input module<br>6 AI; 0/4 ... 20 mA;<br>HART, PROFIsafe V2, safety-related,<br>with diagnostic interrupt, with HART communication, FW update, redundancy | W<br>P | M | C | |

# 13.13 SM MTA

| Product name | Order no. | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | MLFB | | F | C | R | T |
| MTA 16 channels DI standard | 6ES7 650-1AC10-3XX0 | MTA for 16 DI; 24 V DC;<br>for 6ES7 321-7BH01-0AB0 (product version 2 and higher) | | | | 02/08 |
| MTA 16 channels DI standard | 6ES7 650-1AC11-3XX0 | MTA for 16 DI; 24 V DC;<br>for 6ES7 321-7BH01-0AB0 (product version 2 and higher) | | | | |
| MTA 8 channels AI standard | 6ES7 650-1AA50-2XX0 | MTA for 8 AI; 1 ... 5 V / 0/4 ... 20 mA;<br>for 6ES7 331-7NF00-0AB0 (product version 5 and higher) | | | | 02/08 |
| MTA 8 channels AI standard | 6ES7 650-1AA51-2XX0 | MTA for 8 AI; 1 ... 5 V / 0/4 ... 20 mA;<br>for 6ES7 331-7NF00-0AB0 (product version 5 and higher) | | | | |
| MTA 8 channels AI standard | 6ES 7650-1AA52-2XX0 | MTA for 8 AI; 1 ... 5 V / 0/4 ... 20 mA;<br>for 6ES7 331-7NF00-0AB0 (product version 5 and higher)<br>and 6ES7 331-7NF10-0AB0 (product version 8 and higher) | | | | |
| MTA 8 channels AI-HART standard | 6ES7 650-1AA61-2XX0 | MTA for 8 AI; 4 ... 20 mA;<br>for 6ES7 331-7TF01-0AB0 | | | | |
| MTA 8 channels AO standard | 6ES7 650-1AB50-2XX0 | MTA for 8 AO; 4 ... 20 mA;<br>for 6ES7 332-5HF00-0AB0 (product version 3 and higher) | | | | 02/08 |
| MTA 8 channels AO standard | 6ES7 650-1AB51-2XX0 | MTA for 8 AO; 4 ... 20 mA;<br>for 6ES7 332-5HF00-0AB0 (product version 3 and higher) | | | | |
| MTA 8 channels AO-HART standard | 6ES7 650-1AB61-2XX0 | MTA for 8 AO; 0/4 ... 20 mA;<br>for 6ES7 332-8TF01-0AB0 | | | | |
| MTA 8 channels TC standard | 6ES7 650-1AF50-2XX0 | MTA for 8 TC;<br>for 6ES7 331-7PF10-0AB0 (product version 4 and higher)<br>and 6ES7 331-7PF11-0AB0 | | | | 02/08 |
| MTA 8 channels TC standard | 6ES7 650-1AF51-2XX0 | MTA for 8 TC;<br>for 6ES7 331-7PF10-0AB0 (product version 4 and higher)<br>and 6ES7 331-7PF11-0AB0 | | | | |
| MTA 8 channels RTD standard | 6ES7 650-1AG50-2XX0 | MTA for 8 RTD;<br>for 6ES7 331-7PF00-0AB0 (product version 8 and higher)<br>and 6ES7 331-7PF01-0AB0 | | | | 02/08 |
| MTA 8 channels RTD standard | 6ES7 650-1AG51-2XX0 | MTA for 8 RTD;<br>for 6ES7 331-7PF00-0AB0 (product version 8 and higher)<br>and 6ES7 331-7PF01-0AB0 | | | | |

| Product name | Order no. | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | MLFB | | F | C | R | T |
| MTA 24 channels F-DI (failsafe) | 6ES7 650-1AK10-7XX0 | MTA for 24 F- DI; 24 V DC; for 6ES7 326-1BK00-0AB0 and 6ES7 326-1BK01-0AB0 (product version 1 and higher) | | | | 02/08 |
| MTA 24 channels F-DI (failsafe) | 6ES7 650-1AK11-7XX0 | MTA for 24 F- DI; 24 V DC; for 6ES7 326-1BK00-0AB0 and 6ES7 326-1BK01-0AB0 (product version 1 and higher) | | | | |
| MTA 16 channels DO standard | 6ES7 650-1AD10-2XX0 | MTA for 16 DO; 24 V DC / 0.5 A; for 6ES7322-8BH01-0AB0 | | | | |
| MTA 10 channels F-DO (failsafe) | 6ES7 650-1AL10-6XX0 | MTA for 10 F-DO; 24 V DC / 2 A; for 6ES7 326-2BF01-0AB0 (product version 2 and higher) | | | | 02/08 |
| MTA 10 channels F-DO (failsafe) | 6ES7 650-1AL11-6XX0 | MTA for 10 F-DO; 24 V DC / 2 A; for 6ES7 326-2BF01-0AB0 (product version 2 and higher) | | | | |
| MTA 16 channels DO (relay) | 6ES7 650-1AM30-3XX0 | MTA for 16 DO relays; 120-230 V / 5 A AC; DC 24 V / 5 A; for 6ES7 322-8BH01-0AB0 (from product version 1) | | | | |
| MTA 10 channels DO (relay) | 6ES7 650-1AM30-6XX0 | MTA for 10 DO relays; AC 110-220 V / 5 A; DC 24 V / 5 A; for 6ES7 326-2BF01-0AB0 (product version 2 and higher) | | | | 11/07 |
| MTA 10 channels F-DO (failsafe, relay) | 6ES7 650-1AM31-6XX0 | MTA for 10 F-DO relays; AC 120-230 V / 5 A; DC 24 V / 5 A; for 6ES7 326-2BF01-0AB0 (product version 2 and higher) | | | | |
| MTA 6 channels F-AI (failsafe) | 6ES7 650-1AH50-5XX0 | MTA for 6 F-AI; 4 ... 20 mA; for 6ES7336-1HE00-0AB0 (E-Stand 6 and higher) | | | | 02/08 |
| MTA 6 channels F-AI (failsafe) | 6ES7 650-1AH51-5XX0 | MTA for 6 F-AI; 4 ... 20 mA; for 6ES7336-1HE00-0AB0 (E-Stand 6 and higher) | | | | 02/08 |
| MTA 6 channels F-AI (failsafe) | 6ES7 650-1AH61-5XX0 | MTA for 6 F-AI; 4 ... 20 mA; for 6ES7 336-1HE00-0AB0 (product version 6 and higher) for 6ES7 336-4GE00-0AB0 | | | | |
| MTA 6 channels F-AI (failsafe) | 6ES7 650-1AH62-5XX0 | MTA for 6 F-AI; 4 ... 20 mA; for 6ES7 336-4GE00-0AB0 | | | | |
| Redundant power monitor | 6ES7 650-1BA01-0XX0 | Monitoring module for redundant power supply | | | | 05/08 |
| Redundant power monitor | 6ES7 650-1BA02-0XX0 | Monitoring module for redundant power supply | | | | |
| 5.6 V Zener diode board | 6ES7 650-1BB51-0XX0 | 5.6 V Zener diode daughter board for F-AI MTA | | | | |
| 6.2 V Zener diode board | 6ES7 650-1BC51-0XX0 | 6.2 V Zener diode daughter board for F-AI MTA | | | | |
| FET switch adapter | 6ES7 650-1BD51-0XX0 | FET switch adapter | | | | |

## 14.1 CP Ethernet

| Product name | Order no. | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | MLFB<br>Firmware version | | F | C | R | T |
| CP 443-1 | 6GK7 443-1BX00-0XE0 | S7 CP for Industrial Ethernet;<br>with SEND-RECEIVE interface, S7 communication | | | | 02/<br>03 |
| CP 443-1 ISO | 6GK7 443-1BX01-0XE0 | S7 CP for Industrial Ethernet;<br>with SEND-RECEIVE interface, S7 communication, routing,<br>module replacement without programming device | | | | 02/<br>03 |
| CP 443-1 TCP | 6GK7 443-1EX01-0XE0 | S7 CP for Industrial Ethernet;<br>with TCP/IP, with SEND-RECEIVE interface, S7 communication, routing,<br>module replacement without programming device | | | | 02/<br>03 |
| CP 443-1 | 6GK7 443-1EX02-0XE0<br>V5.2 | S7 CP for Industrial Ethernet; ISO and TCP/IP;<br>with SEND-RECEIVE and FETCH-WRITE interface, long data, UDP, TCP, S7 functions, routing,<br>module replacement without programming device | | | | 02/<br>03 |
| CP 443-1 | 6GK7 443-1EX10-0XE0<br>V1.0 | S7 CP for Industrial Ethernet; ISO and TCP/IP;<br>with SEND-RECEIVE and FETCH-WRITE interface, long data, UDP, TCP, S7 functions, routing,<br>module replacement without programming device, 10/100 MBit fast send/receive | | | | 01/<br>01 |
| CP 443-1 | 6GK7 443-1EX10-0XE0<br>V2.x | S7 CP for Industrial Ethernet; ISO and TCP/IP;<br>with SEND-RECEIVE and FETCH-WRITE interface, long data, UDP, TCP, S7 functions, routing,<br>module replacement without programming device, 10/100 MBit fast send/receive | | | | 01/<br>01 |
| CP 443-1 | 6GK7 443-1EX11-0XE0<br>V1.1 | S7 CP for Industrial Ethernet; ISO and TCP/IP;<br>with SEND-RECEIVE and FETCH-WRITE interface, long data, UDP, TCP, S7 functions, routing,<br>module replacement without programming device, 10/100 MBit | | | | 10/<br>09 |
| CP 443-1 | 6GK7 443-1EX11-0XE0<br>V2.x | S7 CP for Industrial Ethernet ISO and TCP/IP;<br>with SEND-RECEIVE and FETCH-WRITE interface, long data, UDP, TCP, S7 functions, routing,<br>module replacement without programming device, 10/100 MBit, NTP, fixed MAC address | | | | 10/<br>09 |

| Product name | Order no.<br>MLFB<br>Firmware version | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | | | F | C | R | T |
| CP 443-1 | 6GK7 443-1EX20-0XE0<br>V2.x | S7 CP for Industrial Ethernet ISO and TCP/IP; 2-port switch with SEND-RECEIVE and FETCH-WRITE interface, long data, UDP, TCP, S7 functions, routing,<br>module replacement without programming device, 10/100 MBit, NTP, fixed MAC address | | | | |
| CP 443-1 | 6GK7 443-1EX30-0XE0<br>V3.x | S7 CP for Industrial Ethernet ISO and TCP/IP; Profinet IO controller; 2-port switch with SEND-RECEIVE and FETCH-WRITE interface, long data, UDP, TCP, S7 functions, routing,<br>module replacement without programming device, 10/100 MBit, NTP, fixed MAC address | P | | | |
| CP 443-1 Advanced | 6GK7 443-1GX30-0XE0<br>V3.x | S7 CP for Industrial Ethernet ISO and TCP/IP; 5-port switch with SEND-RECEIVE and FETCH-WRITE interface, long data, UDP, TCP, S7 functions, routing, module replacement without programming device, 10/100/1000 MBit, NTP, fixed MAC address | | | | |

# 14.2 CP PROFIBUS

| Product name | Order no.<br>MLFB<br>Firmware version | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | | | F | C | R | T |
| CP 443-5 Extended | 6GK7 443-5DX01-0XE0 | PROFIBUS CP with PROFIBUS DP;<br>SEND-RECEIVE interface,<br>FMS and S7 communication; sync/freeze | | | | 10/01 |
| CP 443-5 Extended | 6GK7 443-5DX02-0XE0<br>V3.x | PROFIBUS CP: DP master;<br>with sync/freeze and redundancy,<br>direct slave data exchange, equidistance,<br>SEND-RECEIVE interface,<br>S7 functions, time,<br>programming device routing, data record routing | | | | 08/01 |
| CP 443-5 Extended | 6GK7 443-5DX03-0XE0<br>V4.0 | PROFIBUS CP: DP master;<br>with sync/freeze and redundancy,<br>direct data exchange, equidistance,<br>SEND-RECEIVE interface,<br>S7 functions, time synchronization, routing, data record routing, DP V1 | W | | | 05/05 |
| CP 443-5 Extended | 6GK7 443-5DX03-0XE0<br>V5.x | PROFIBUS CP: DP master;<br>with sync/freeze and redundancy,<br>direct data exchange, equidistance,<br>SEND-RECEIVE interface,<br>S7 functions, time synchronization, routing, data record routing, DP V1, CiR | W | X | | 05/05 |
| CP 443-5 Extended | 6GK7 443-5DX04-0XE0<br>V6.x | PROFIBUS CP: DP master;<br>with sync/freeze and redundancy,<br>direct data exchange, equidistance,<br>SEND-RECEIVE interface,<br>S7 communication, time synchronization, routing, data record routing, DP V1, CiR | W | X | | |
| CP 443-5 Extended | 6GK7 443-5DX05-0XE0<br>V7.x | PROFIBUS CP: DP master;<br>with sync/freeze and redundancy,<br>direct data exchange, equidistance,<br>SEND-RECEIVE interface,<br>S7 communication, time synchronization, routing, data record routing, DP V1, CiR | W | X | | |

# 14.3 FM

| Product name | Order no. | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | MLFB<br>Firmware version | | W | C | R | T |
| FM458-1 DP | 6DD1 607-0AA2<br>V2.x | Application module for SIMATIC S7-400: high-performance and freely configurable closed-loop control tasks. 1DP connection,<br>60 MB user program memory,<br>OEM know-how protection | | | | |
| EXM 438-1 | 6DD1 607-0CA1 | I/O expansion module for FM458 | | | | |
| EXM 448-2 | 6DD1 607-0EA2 | Communication expansion module for FM458 | | | | |

## 14.4 CPU prior to 04/99 (up to PCS7 V4.02)

**Note**

CPUs of this generation are only supported by driver concepts up to PCS7 V4.02. Upgrading to driver concepts of PCS7 V5.0 or later is not possible.

| Product name | Order no. | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | MLFB | | F | C | R | T |
| CPU 414-2 DP | 6ES7 414-2XJ00-0AB0 | S7 CPU;<br>384 KB work memory, 0.1 ms/kA,<br>8 KB DI/O, 32 connections, MPI and PROFIBUS DP connection | | | | 04/98 |
| CPU 414-2 DP | 6ES7 414-2XJ01-0AB0 | S7 CPU;<br>work memory 384 KB, 0.1 ms/kA,<br>8 KB DI/O, 32 connections, MPI and PROFIBUS DP connection | | | | 03/00 |
| CPU 416-2 DP | 6ES7 416-2XK00-0AB0 | S7 CPU;<br>work memory 0.8 MB, 0.08 ms/kA,<br>16 KB DI/O, 64 connections, MPI and PROFIBUS DP connection | | | | 04/98 |
| CPU 416-2 DP | 6ES7 416-2XK01-0AB0 | S7 CPU;<br>work memory 0.8 MB, 0.08 ms/kA,<br>16 KB DI/O, 64 connections, MPI and PROFIBUS DP connection | | | | 02/01 |
| CPU 416-2 DP | 6ES7 416-2XL00-0AB0 | S7 CPU;<br>work memory 1.6 MB, 0.08 ms/kA,<br>16 KB DI/O, 64 connections, MPI and PROFIBUS DP connection | | | | 05/98 |
| CPU 416-2 DP | 6ES7 416-2XL01-0AB0 | S7 CPU;<br>work memory 1.6 MB, 0.08 ms/kA,<br>16 KB DI/O, 64 connections, MPI and PROFIBUS DP connection | | | | 02/01 |

# 14.5 CPU as of 04/99 (PCS7 V5.0 and later)

**Note**

The extended driver concept (PCS7 V5.2) can be used with FW V3.0 and higher.

| Product name | Order no.<br>MLFB<br>Firmware version | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | | | F | C | R | T |
| CPU 414-3 | 6ES7 414-3XJ00-0AB0<br>V1.1 | S7 CPU;<br>memory 384 KB code and 384 KB Daten; 0.1 ms/kA; 8 KB DI/O; 32 connections; 2 DP / MPI and 1 slot for IF modules; equidistance | W | | | 01/05 |
| CPU 414-3 | 6ES7 414-3XJ00-0AB0<br>V1.2 | S7 CPU;<br>memory 384 KB code and 384 KB data, 0.1 ms/kA; 8 KB DI/O; 32 connections, 2 DP / MPI and 1 slot for IF modules; equidistance, direct data exchange; routing | W | | | 01/05 |
| CPU 414-3 | 6ES7 414-3XJ00-0AB0<br>V3.0 | S7 CPU;<br>work memory 384 KB code and 384 KB data, 0.1 ms/kA; 8 KB DI/O; 32 connections; 2 DP / MPI and 1 slot for IF modules; direct data exchange, equidistance; routing; DP V1 | W | | | 01/05 |
| CPU 414-3 | 6ES7 414-3XJ00-0AB0<br>V3.1 | S7 CPU;<br>work memory 384 KB code and 384 KB data; 0.1 ms/kA; 8 KB DI/O; 32 connections; 2 DP / MPIand 1 slot for IF modules; direct data exchange, equidistance; routing; DP V1 | W | X | | 01/05 |
| CPU 416-2 | 6ES7 416-2XK02-0AB0<br>V1.1 | S7 CPU;<br>memory 0.8 MB code and 0.8 MB data; 0.08 ms/kA; 16 KB DI/O; 64 connections; 2 DP / MPI; equidistance | W | | | 01/05 |
| CPU 416-2 | 6ES7 416-2XK02-0AB0<br>V1.2 | S7 CPU;<br>memory 0.8 MB code and 0.8 MB data; 0.08 ms/kA; 16 KB DI/O; 64 connections; 2 DP / MPI; equidistance, direct data exchange; routing | W | | | 01/05 |
| CPU 416-2 | 6ES7 416-2XK02-0AB0<br>V3.0 | S7 CPU;<br>memory 0.8 MB code and 0.8 MB data; 0.08 ms/kA; 16 KB DI/O; 64 connections; 2 DP/MPI; direct data exchange, equidistance; routing; DPV1 | W | | | 01/05 |
| CPU 416-2 | 6ES7 416-2XK02-0AB0<br>V3.1 | S7 CPU;<br>memory 0.8 MB code and 0.8 MB data; 0.08 ms/kA; 16 KB DI/O; 64 connections; 2 DP / MPI direct data exchange,<br>equidistance; routing; DPV1 | W | X | | 01/05 |
| CPU 416-3 | 6ES7 416-3XL00-0AB0<br>V1.1 | S7 CPU; memory 1.6 MB code and 1.6 MB data, 0.08 ms/kA; 16 KB DI/O; 64 connections;<br>2 DP / MPI and 1 slot for IF modules; equidistance | W | | | 01/05 |

| Product name | Order no.<br>MLFB<br>Firmware version | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | | | F | C | R | T |
| CPU 416-3 | 6ES7 416-3XL00-0AB0<br>V1.2 | S7 CPU;<br>work memory 1.6 MB code and 1.6 MB data; 0.08 ms/kA; 16 KB DI/O; 64 connections; 2 DP / MPI and 1 slot for IF modules;<br>equidistance, direct data exchange; routing | W | | | 01/05 |
| CPU 416-3 | 6ES7 416-3XL00-0AB0<br>V3.0 | S7 CPU;<br>work memory 1.6 MB code and 1.6 MB data; 0.08 ms/kA; 16 KB DI/O; 64 connections; 2 DP / MPI and 1 slot for IF modules; direct data exchange, equidistance; routing; DP V1 | W | | | 01/05 |
| CPU 416-3 | 6ES7 416-3XL00-0AB0<br>V3.1 | S7 CPU;<br>memory 1.6 MB code and 1.6 MB data; 0.08 ms/kA; 16 KB DI/O; 64 connections; 2 DP / MPI and 1 slot for IF modules; direct data exchange, equidistance; routing; DP V1 | W | X | | 01/05 |
| CPU 417-4 | 6ES7 417-4XL00-0AB0<br>V1.1 | S7 CPU;<br>work memory 2 MB code and 2 MB data, (can be extended to up to 20 MB); 0.1 ms/kA; 16 KB DI/O; 64 connections; 2 DP / MPI and 2 slots for IF modules; receive capability for direct data exchange; equidistance; routing | W | | | 01/05 |
| CPU 417-4 | 6ES7 417-4XL00-0AB0<br>V1.2.0 | S7 CPU;<br>work memory 2 MB code and 2 MB data, (can be extended to up to 20 MB); 0.1 ms/kA; 16 KB DI/O; 64 connections; 2 DP / MPI and 2 slots for IF modules;<br>equidistance/direct data exchange; routing | W | | | 01/05 |
| CPU 417-4 | 6ES7 417-4XL00-0AB0<br>V3.0 | S7 CPU;<br>work memory 2 MB code and 2 MB data, (can be extended to up to 20 MB); 0.1 ms/kA; 16 KB DI/O; 64 connections; 2 DP / MPI and 2 slots for IF modules; receive capability for direct data exchange,<br>equidistance, routing, DP V1 | W | | | 01/05 |
| CPU 417-4 | 6ES7 417-4XL00-0AB0<br>V3.1 | S7 CPU;<br>memory 2 MB code and 2 MB data, (can be extended to up to 20 MB); 0.1 ms/kA; 16 KB DI/O; 64 connections; 2 DP / MPI and 2 slots for IF modules; receive capability for direct data exchange,<br>equidistance, routing, DP V1 | W | X | | 01/05 |

# 14.6 H-CPU as of 04/99 (PCS7 V5.0 and later)

**Note**

The extended driver concept (PCS7 V5.2) can be used with FW V3.0 and higher.

| Product name | Order no.<br>MLFB<br>Firmware version | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | | | F | C | R | T |
| CPU 414-4H | 6ES7 414-4HJ00-0AB0<br>V2.1.1; V2.1.2 | S7 CPU;<br>high availability; F capability, memory 384 KB code and 384 KB data; 0.1 ms/kA; 8 KB DI/O; 32 connections; 2 DP / MPI and 2 slots for H sync modules | W | | | 01/06 |
| CPU 414-4H | 6ES7 414-4HJ00-0AB0<br>V3.0 | S7 CPU;<br>high availability; F capability, memory 384 KB code and 384 KB data; 0.1 ms/kA; 8 KB DI/O; 32 connections; 2 DP / MPI and 2 slots for H sync modules, direct data exchange, DP V1 | W | | | 01/06 |
| CPU 414-4H | 6ES7 414-4HJ00-0AB0<br>V3.1 | S7 CPU;<br>high availability; F capability, memory 384 KB code and 384 KB data; 0.1 ms/kA; 8 KB DI/O; 32 connections; 2 DP / MPI and 2 slots for H sync modules, direct data exchange, DP V1 | W | X | | 01/06 |
| CPU 417-4H | 6ES7 417-4HL00-0AB0<br>V2.0; V2.1.x | S7 CPU;<br>high availability, memory 2 MB code and 2 MB data; (can be extended to up to 20 MB); 0.1 ms/kA; 16 KB DI/O; 64 connections; 2 DP MPI and 2 slots for IF modules, routing | W | | | 09/00 |
| CPU 417-4H | 6ES7 417-4HL01-0AB0<br>V2.1 | S7 CPU;<br>high availability, memory 2 MB code and 2 MB data; (can be extended to up to 20 MB); 0.1 ms/kA; 16 KB DI/O; 64 connections; 2 DP / MPI and 2 slots for H sync modules, routing | W | | | 01/06 |
| CPU 417-4H | 6ES7 417-4HL01-0AB0<br>V2.1.1; V2.1.2 | S7 CPU;<br>high availability, memory 2 MB code and 2 MB data; (can be extended to up to 20 MB); 0.1 ms/kA; 16 KB DI/O; 64 connections; 2 DP / MPI and 2 slots for H sync modules, routing | W | | | 01/06 |

| Product name | Order no.<br>MLFB<br>Firmware version | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | | | F | C | R | T |
| CPU 417-4H | 6ES7 417-4HL01-0AB0<br>V3.0 | S7 CPU;<br>high availability, F capability, memory 2 MB code and 2 MB data; (can be extended to up to 20 MB); 0.1 ms/kA; 16 KB DI/O; 64 connections; 2 DP / MPI and 2 slots for H sync modules, direct data exchange, routing, DP V1 | W | | | 01/06 |
| CPU 417-4H | 6ES7 417-4HL01-0AB0<br>V3.1 | S7 CPU;<br>high availability, F capability, memory 2 MB code and 2 MB data; (can be extended to up to 20 MB); 0.1 ms/kA; 16 KB DI/O; 64 connections; 2 DP / MPI and 2 slots for H sync modules, direct data exchange, routing, DP V1 | W | X | | 01/06 |

# 14.7 CPU as of 08/04 (PCS7 V6.1 and later)

| Product name | Order no.<br>MLFB<br>Firmware version | Brief description | Properties (Page 161)<br>F | C | R | T |
|---|---|---|---|---|---|---|
| CPU 414-3 | 6ES7 414-3XJ04-0AB0<br>V4.x | S7 CPU;<br>memory 0.7 MB code and 0.7 MB data;<br>0.06 ms/1000 instructions.; 8 KB DI/O; 32 connections;<br>1 DP / MPI, 1 DP and 1 slot for IF modules;<br>send and receive capability for direct data communication;<br>constant bus cycle time and isochronous processing; routing | W | X | | 03/07 |
| CPU 416-2 | 6ES7 416-2XK04-0AB0<br>V4.x | S7 CPU;<br>work memory 1.4 MB code and 1.4 MB data;<br>0.04 ms/1000 instructions; 16 KB DI/O; 64 connections;<br>1 DP / MPI, 1 DP;<br>send and receive capability for direct data communication;<br>constant bus cycle time and isochronous processing;<br>routing | W | X | | 03/07 |
| CPU 416-3 | 6ES7 416-3XL04-0AB0<br>V4.x | S7 CPU;<br>memory 2.8 MB code and 2.8 MB data;<br>0.04 ms/1000 instructions; 16 KB DI/O; 64 connections;<br>1 DP / MPI, 1 DP and 1 slot for IF modules;<br>send and receive capability for direct data communication;<br>constant bus cycle time and isochronous processing;<br>routing | W | X | | 03/07 |
| CPU 417-4 | 6ES7 417-4XL04-0AB0<br>V4.x | S7 CPU;<br>memory 10 MB code and 10 MB data;<br>0.03 ms/1000 instructions; 16 KB DI/O; 64 connections;<br>1 DP / MPI, 1 DPand 2 slots for IF modules; send and receive capability for direct data communication;<br>constant bus cycle time and isochronous processing;<br>routing | W | X | | 03/07 |

## 14.8 H-CPU as of 08/04 (PCS7 V6.1 and later)

| Product name | Order no.<br>MLFB<br>Firmware version | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | | | F | C | R | T |
| CPU 414-4H | 6ES7 414-4HJ04-0AB0<br>V4.x | S7 CPU;<br>high availability and failsafe capability;<br>work memory 0.7 MB code and 0.7 MB data;<br>0.08 ms/1000 instructions; 8 KB DI/O; 32 connections;<br>1 DP / MPI,<br>1 DP and 2 slots for H sync modules | W | X | | 01/10 |
| CPU 417-4H | 6ES7 417-4HL04-0AB0<br>V4.x | S7 CPU;<br>high availability and failsafe capability;<br>work memory 10 MB code and 10 MB data;<br>0.03 ms/1000 instructions; 16 KB DI/O; 64 connections;<br>1 DP / MPI,<br>1 DP and 2 slots for H sync modules | W | X | | 01/10 |

# 14.9 CPU as of 12/06 (PCS7 V7.0 and later)

| Product name | Order no.<br>MLFB<br>Firmware version | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | | | F | C | R | T |
| CPU 414-3 DP | 6ES7 414-3XM05-0AB0<br>V5.0 | S7 CPU;<br>work memory 1.4 MB code and 1.4 MB data; 0.045 ms/1000 instructions;<br>8 KB DI/O; 32 connections;<br>1 DP / MPI, 1 DP and 1 slot for IF modules;<br>send and receive capability for direct data exchange;<br>equidistance and synchronous processing; routing | W | X | | |
| CPU 414-3 DP | 6ES7 414-3XM05-0AB0<br>V5.1 .. V5.3.x | S7 CPU;<br>work memory 1.4 MB code and 1.4 MB data; 0.045 ms/1000 instructions;<br>8 KB DI/O; 32 connections;<br>1 DP / MPI, 1 DP and 1 slot for IF modules;<br>send and receive capability for direct data exchange;<br>equidistance and synchronous processing; routing;<br>integrated data record gateway | W | X | | |
| CPU 414-3 PN/DP | 6ES7 414-3EM05-0AB0<br>V5.0 | S7 CPU;<br>work memory 1.4 MB code and 1.4 MB data; 0.045 ms/1000 instructions;<br>8 KB DI/O; 32 connections;<br>1 DP / MPI, 1 PN and 1 slot for IF modules;<br>send and receive capability for direct data exchange;<br>equidistance and synchronous processing; routing | W | X | | |
| CPU 414-3 PN/DP | 6ES7 414-3EM05-0AB0<br>V5.1 .. V5.3.x | S7 CPU;<br>work memory 1.4 MB code and 1.4 MB data; 0.045 ms/1000 instructions;<br>8 KB DI/O; 32 connections;<br>1 DP / MPI, 1 PN and 1 slot for IF modules;<br>send and receive capability for direct data exchange;<br>equidistance and synchronous processing; routing;<br>integrated data record gateway | W | X | | |
| CPU 416-2 DP | 6ES7 416-2XN05-0AB0<br>V5.0 | S7 CPU;<br>work memory 2.8 MB code and 2.8 MB data; 0.030 ms/1000 instructions;<br>16 KB DI/O; 64 connections;<br>1 DP / MPI, 1 DP;<br>send and receive capability for direct data exchange;<br>equidistance and synchronous processing; routing | W | X | | |

| Product name | Order no.<br>MLFB<br>Firmware version | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | | | F | C | R | T |
| CPU 416-2 DP | 6ES7 416-2XN05-0AB0<br>V5.1 .. V5.3.x | S7 CPU;<br>work memory 2.8 MB code and 2.8 MB data; 0.030 ms/1000 instructions;<br>16 KB DI/O; 64 connections;<br>1 DP / MPI, 1 DP;<br>send and receive capability for direct data exchange;<br>equidistance and synchronous processing; routing;<br>integrated data record gateway | W | X | | |
| CPU 416-3 DP | 6ES7 416-3XR05-0AB0<br>V5.0 | S7 CPU;<br>work memory 5.6 MB code and 5.6 MB data; 0.030 ms/1000 instructions;<br>16 KBDI/O; 64 connections;<br>1 DP / MPI, 1 DP; and 1 slot for IF modules;<br>send and receive capability for direct data exchange;<br>equidistance and synchronous processing; routing | W | X | | |
| CPU 416-3 DP | 6ES7 416-3XR05-0AB0<br>V5.1 .. V5.3.x | S7 CPU;<br>work memory 5.6 MB code and 5.6 MB data; 0.030 ms/1000 instructions;<br>16 KB DI/O; 64 connections;<br>1 DP / MPI, 1 DP; and 1 slot for IF modules;<br>send and receive capability for direct data exchange;<br>equidistance and synchronous processing; routing;<br>integrated data record gateway | W | X | | |
| CPU 416-3 PN/DP | 6ES7 416-3ER05-0AB0<br>V5.0 | S7 CPU;<br>work memory 5.6 MB code and 5.6 MB data; 0.030 ms/1000 instructions;<br>16 KBDI/O; 64 connections;<br>1 DP / MPI, 1 PN and 1 slot for IF modules;<br>send and receive capability for direct data exchange;<br>equidistance and synchronous processing; routing | W | X | | |
| CPU 416-3 PN/DP | 6ES7 416-3ER05-0AB0<br>V5.1 .. V5.3.x | S7 CPU;<br>work memory 5.6 MB code and 5.6 MB data; 0.030 ms/1000 instructions;<br>16 KB DI/O; 64 connections;<br>1 DP / MPI, 1 PN and 1 slot for IF modules;<br>send and receive capability for direct data exchange;<br>equidistance and synchronous processing; routing;<br>integrated data record gateway | W | X | | |

| Product name | Order no.<br>MLFB<br>Firmware version | Brief description | Properties (Page 161)<br>F | C | R | T |
|---|---|---|---|---|---|---|
| CPU 417-4 DP | 6ES7 417-4XT05-0AB0<br>V5.0 | S7 CPU;<br>work memory 15 MB code and 15 MB data; 0.018 ms/1000 instructions;<br>16 KBDI/O; 64 connections;<br>1 DP / MPI, 1 DP and 2 slots for IF modules;<br>send and receive capability for direct data exchange;<br>equidistance and synchronous processing; routing | W | X | | |
| CPU 417-4 DP | 6ES7 417-4XT05-0AB0<br>V5.1 .. V5.3.x | S7 CPU;<br>work memory 15 MB code and 15 MB data; 0.018 ms/1000 instructions;<br>16 KB DI/O; 64 connections;<br>1 DP / MPI, 1 DP and 2 slots for IF modules;<br>send and receive capability for direct data exchange;<br>equidistance and synchronous processing; routing;<br>integrated data record gateway | W | X | | |

# 14.10 H-CPU as of 09/07 (PCS7 V7.0.1 and later)

| Product name | Order no.<br>MLFB<br>Firmware version | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | | | F | C | R | T |
| CPU 412-3H | 6ES7 412-3HJ14-0AB0<br>V4.5 | S7 CPU;<br>high availability and failsafe capability; memory 0.5 MB code and 0.25 MB data;<br>0.075 ms/1000 instructions; 8 KB DI/O; 16 connections;<br>1 DP / MPI, 1 DP and 2 slots for H sync modules; | W | X | | |
| CPU 414-4H | 6ES7 414-4HM14-0AB0<br>V4.5 | S7 CPU;<br>high availability and failsafe capability; memory 1.4 MB code and 1.4 MB data;<br>0.045 ms/1000 instructions; 8 KB DI/O; 32 connections;<br>1 DP / MPI, 1 DP and 2 slots for H sync modules; | W | X | | |
| CPU 417-4H | 6ES7 417-4HT14-0AB0<br>V4.5 | S7 CPU;<br>high availability and failsafe capability; memory 15 MB code and 15 MB data;<br>0.018 ms/1000 instructions; 16 KB DI/O; 64 connections;<br>1 DP / MPI, 1 DP and 2 slots for H sync modules; | W | X | | |

# 14.11 CPU as of 08/10 (PCS7 V7.1.2 and later)

| Product name | Order no.<br>MLFB<br>Firmware version | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | | | F | C | R | T |
| CPU 414-3 PN/DP | 6ES7 414-3EM06-0AB0<br>V6.x | S7 CPU;<br>work memory 2.0 MB code and 2.0 MB data; 0.045 ms/1000 instructions;<br>8 KB DI/O; 64 connections;<br>1*DP/MPI, 1*PN and 1 slot for IF modules;<br>send and receive capability for direct data exchange;<br>equidistance and synchronous processing; routing;<br>integrated data record gateway; | W<br>P | X | | |
| CPU 416-3 PN/DP | 6ES7 416-3ES06-0AB0<br>V6.x | S7 CPU;<br>memory 8.0 MB code and 8.0 MB data; 0.030 ms/1000 instructions;<br>16 KB DI/O; 96 connections;<br>1*DP/MPI, 1*PN and 1 slot for IF modules;<br>send and receive capability for direct data exchange;<br>equidistance and synchronous processing; routing;<br>integrated data record gateway; | W<br>P | X | | |

# 14.12 H-CPU as of 12/11 (PCS7 V8.0 and later)

| Product name | Order no.<br>MLFB<br>Firmware version | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | | | F | C | R | T |
| CPU 412-5H PN/DP | 6ES7 412-5HK06-0AB0<br>V6.x | S7 CPU;<br>fault-tolerant and failsafe capability; work memory 0.5 MB code and 0.5 MB data;<br>0.031 ms/1000 instructions;<br>8 KB DI/O; 48 connections;<br>1 DP / MPI, 1 DP, 1 PN and 2 slots for H sync modules; | W P | X | | |
| CPU 414-5H PN/DP | 6ES7 414-5HM06-0AB0<br>V6.x | S7 CPU;<br>fault-tolerant and failsafe capability; work memory 2 MB code and 2 MB data;<br>0.019 ms/1000 instructions;<br>8 KB DI/O; 64 connections;<br>1 DP / MPI, 1 DP, 1 PN and 2 slots for H sync modules; | W P | X | | |
| CPU 416-5H PN/DP | 6ES7 416-5HS06-0AB0<br>V6.x | S7 CPU;<br>fault-tolerant and failsafe capability; work memory 6 MB code and 10 MB data;<br>0.012 ms/1000 instructions;<br>16 KB DI/O; 96 connections;<br>1 DP / MPI, 1 DP, 1 PN and 2 slots for H sync modules; | W P | X | | |
| CPU 417-5H PN/DP | 6ES7 417-5HT06-0AB0<br>V6.x | S7 CPU;<br>fault-tolerant and failsafe capability; work memory 16 MB code and 16 MB data;<br>0.0075 ms/1000 instructions;<br>16 KB DI/O; 120 connections;<br>1 DP / MPI, 1 DP, 1PN and 2 slots for H sync modules; | W P | X | | |

# 14.13 CPU as of 06/13 (as of PCS 7 V8.0.1)

| Product name | Order no.<br>MLFB<br>Firmware version | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | | | F | C | R | T |
| CPU 410-5H process automation | 6ES7 410-5HX08-0AB0<br>V8.x<br>1) | S7 CPU;<br>Fault-tolerant and fail-safe; controller for all sectors of the process industry, 48 MB integrated load memory, 16 MB code and 16 MB data RAM;<br>PROFINET IO controller, PROFINET interface and 2 ports;<br>Average processing time of the PCS 7 typicals 46 µs;<br>16 KB DI/O; 120 connections;<br>1 PN, 1 DP, 2 for sync modules and 1 service; | W<br>P | X | | |

1) Hardware Upgrade Package "HUP CPU410-5H" is required. Available under entry ID 68627630 in Industry Online Support.

# 14.14 IM

| Product name | Order no. | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | MLFB | | F | C | R | T |
| IM 460-0 | 6ES7 460-0AA00-0AB0 | Send interface module, 3 m, without voltage transmission, with K bus | | | | 12/01 |
| IM 460-0 | 6ES7 460-0AA01-0AB0 | Send interface module for central coupling up to 3 m, without 5 V voltage transmission, with K bus | | | | |
| IM 460-1 | 6ES7 460-1BA00-0AB0 | Send interface module, 1.5 m; with voltage transmission, without K bus | | | | 12/01 |
| IM 460-1 | 6ES7 460-1BA01-0AB0 | Send interface module for central coupling up to 1.5 m; with voltage transmission, without K bus | | | | |
| IM 460-3 | 6ES7 460-3AA00-0AB0 | Send interface module, 100 m; without voltage transmission, with K bus | | | | 12/01 |
| IM 460-3 | 6ES7 460-3AA01-0AB0 | Send interface module, 100 m; without voltage transmission, with K bus | | | | |
| IM 460-4 | 6ES7 460-4AA01-0AB0 | Send interface module, 600 m; without voltage transmission, without K bus | | | | |
| IM 461-0 | 6ES7 461-0AA00-0AA0 | Receive interface module for central coupling up to 3 m; without voltage transmission, with K bus | | | | 12/01 |
| IM 461-0 | 6ES7 461-0AA01-0AA0 | Receive interface module for central coupling up to 3 m; without voltage transmission, with K bus | | | | |
| IM 461-1 | 6ES7 461-1BA00-0AA0 | Receive interface module, 1.5 m; with 5V voltage transmission, without K bus | | | | 12/01 |
| IM 461-1 | 6ES7 461-1BA01-0AA0 | Receive interface module for central coupling up to 1.5 m; with voltage transmission, without K bus | | | | |
| IM 461-3 | 6ES7 461-3AA00-0AA0 | Receive interface module, 100 m; without voltage transmission, with K bus | | | | 12/01 |
| IM 461-3 | 6ES7 461-3AA01-0AA0 | Receive interface module, 100 m; without voltage transmission, with K bus | | | | |
| IM 461-4 | 6ES7 461-4AA01-0AA0 | Receive interface module, 600 m; without voltage transmission, without K bus | | | | |
| IM 463-2 | 6ES7 463-2AA00-0AA0 | Send interface module, 600 m; for connecting S5 expansion unit with IM 314 | | | | |

# 14.15 PS

| Product name | Order no. | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | MLFB | | F | C | R | T |
| PS 405 10A | 6ES7 405-0KA00-0AA0 | Power supply, DC 24 V / 10 A | | | | 02/01 |
| PS 405 10A | 6ES7 405-0KA01-0AA0 | Power supply, DC 24 V / 10 A | | | | 03/05 |
| PS 405 10A | 6ES7 405-0KA02-0AA0 | Power supply, DC 24 V / 10 A; ATEX certification | | | | |
| PS 405 20A | 6ES7 405-0RA01-0AA0 | Power supply, DC 24 V / 10 A | | | | 10/07 |
| PS 405 20A | 6ES7 405-0RA02-0AA0 | Power supply, DC 24 V / 10 A; ATEX certification | | | | |
| PS 405 10A | 6ES7 405-0KR00-0AA0 | Power supply, DC 24 V / 10 A; redundant power supply | | | | 09/06 |
| PS 405 10A | 6ES7 405-0KR02-0AA0 | Power supply, DC 24 V / 10 A; redundant power supply, ATEX certification | | | | |
| PS 407 10A | 6ES7 407-0KA00-0AA0 | Power supply AC 120 / 230 V / 10 A | | | | 03/99 |
| PS 407 10A | 6ES7 407-0KA01-0AA0 | Power supply AC 120 / 230 V / 10 A | | | | 02/07 |
| PS 407 10A | 6ES7 407-0KA02-0AA0 | Power supply AC 120 / 230 V / 10 A | | | | |
| PS 407 20A | 6ES7 407-0RA01-0AA0 | Power supply AC 120 / 230 V / 20 A | | | | 09/06 |
| PS 407 20A | 6ES7 407-0RA02-0AA0 | Power supply AC 120 / 230 V / 20 A | | | | |
| PS 407 10A | 6ES7 407-0KR00-0AA0 | Power supply, AC 120 / 230 V / 10 A; redundant power supply | | | | 09/06 |
| PS 407 10A | 6ES7 407-0KR02-0AA0 | Power supply AC 120 / 230 V / 10 A; redundant power supply | | | | |

# 14.16 Racks

| Product name | Order no. | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | MLFB | | F | C | R | T |
| UR2 | 6ES7 400-1JA00-0AA0 | Universal rack;<br>9 slots, not suitable for power supply modules in redundant operation | | | | 01/98 |
| UR2 | 6ES7 400-1JA01-0AA0 | Universal rack;<br>9 slots | | | | |
| UR2ALU | 6ES7 400-1JA11-0AA0 | Universal aluminum rack;<br>9 slots | | | | |
| UR1 | 6ES7 400-1TA00-0AA0 | Universal rack;<br>18 slots, not suitable for power supply modules in redundant operation | | | | 08/98 |
| UR1 | 6ES7 400-1TA01-0AA0 | Universal rack;<br>18 slots | | | | |
| UR1ALU | 6ES7 400-1TA11-0AA0 | Universal aluminum rack;<br>18 slots | | | | |
| UR2-H | 6ES7 400-2JA00-0AA0 | Central rack;<br>18 slots,<br>2 segments (9 + 9), mainly for H systems | | | | |
| UR2ALU-H | 6ES7 400-2JA10-0AA0 | Central aluminum rack;<br>18 slots,<br>2 segments (9 + 9), mainly for H systems | | | | |

# 14.17 SM DI

| Product name | Order no. | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | MLFB | | F | C | R | T |
| SM 421<br>DI 32xDC 24V | 6ES7 421-1BL00-0AA0 | Digital input module<br>32 DI; 24 V DC;<br>grouping 32 | W | | | 10/<br>04 |
| SM 421<br>DI 32xDC 24V | 6ES7 421-1BL01-0AA0 | Digital input module<br>32 DI; 24 VDC;<br>grouping 32 | W | | | |
| SM 421<br>DI 32xAC 120V | 6ES7 421-1EL00-0AA0 | Digital input module<br>32 DI; UC 120 V;<br>grouping 8 | W | | | |
| SM 421<br>DI 16xUC 120/230V | 6ES7 421-1FH00-0AA0 | Digital input module<br>16 DI; UC 120 / 230 V;<br>grouping 4 | W | | | 08/<br>02 |
| SM 421<br>DI 16xUC 120/230V | 6ES7 421-1FH20-0AA0 | Digital input module<br>16 DI; UC 120 / 230 V;<br>grouping 4,<br>input characteristic curve pursuant to IEC 1131, type 2 | W | | | |
| SM 421<br>DI 16xDC 24V | 6ES7 421-7BH00-0AB0 | Digital input module<br>16 DI; 24 V DC;<br>grouping 1hardware and diagnostic interrupt, configurable substitute values | W | | | 10/<br>04 |
| SM 421<br>DI 16xDC 24V | 6ES7 421-7BH01-0AB0 | Digital input module<br>16 DI; 24 V DC;<br>grouping 8hardware and diagnostic interrupt, configurable substitute values | W | | | |
| SM421<br>DI 16xUC 24/60V<br>Alarm | 6ES7 421-7DH00-0AB0 | Digital input module<br>16 DI; UC 24 ... 60V;<br>grouping 1, hardware and diagnostic interrupt | W | | | |
| SM421<br>DI 16xAC 120V | 6ES7 421-5EH00-0AA0 | Digital input module<br>16 DI; AC 120 V;<br>grouping 1,<br>input characteristic curve pursuant to IEC 1131, type 2 | W | | | 10/<br>04 |

# 14.18 SM DO

| Product name | Order no. | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | MLFB | | F | C | R | T |
| SM 422<br>DO 16x<br>DC 24V/2A | 6ES7 422-1BH10-0AA0 | Digital output module<br>16 DO; DC 24 V / 2 A;<br>grouping 8 | W | | | 10/<br>04 |
| SM 422<br>DO 16x<br>DC 24V/2A | 6ES7 422-1BH11-0AA0 | Digital output module<br>16 DO; DC 24 V / 2 A;<br>grouping 8 | W | | | |
| SM 422<br>DO 32x<br>DC 24V/0,5A | 6ES7 422-1BL00-0AA0 | Digital output module<br>32 DO; DC 24 V / 0.5 A;<br>grouping 32 | W | | | |
| SM 422<br>DO 8x<br>AC 120/230/5A | 6ES7 422-1FF00-0AA0 | Digital output module<br>8 DO; AC 120 / 230 V / 5 A; grouping 1 | W | | | 10/<br>04 |
| SM 422<br>DO 16x<br>AC 120/230/2A | 6ES7 422-1FH00-0AA0 | Digital output module<br>16 DO; AC 120 / 230 V / 2 A;<br>grouping 4 | W | | | |
| SM 422<br>DO 16x<br>AC 230V/5A Rel. | 6ES7 422-1HH00-0AA0 | Digital output module<br>16 DO relays; 230 V AC; DC 60 V / 5 A;<br>grouping 4 | W | | | |
| SM 422<br>DO 32x<br>DC 24V/0.5A | 6ES7 422-7BL00-0AB0 | Digital output module<br>32 DO; DC 24 V / 0.5 A;<br>grouping8,<br>diagnostics, configurable substitute values | W | | | |
| SM 422<br>DO 16x<br>AC 120V/2A | 6ES7 422-5EH00-0AB0 | Digital output module<br>16 DO; AC 120 V / 2 A;<br>diagnostics | W | | | 10/<br>04 |
| SM 422<br>DO 16x<br>DC 20-125V/1.5A | 6ES7 422-5EH10-0AB0 | Digital output module<br>16 DO; DC20 ... 125 V / 1.5 A;<br>grouping 8,<br>diagnostics | W | | | 10/<br>04 |

# 14.19 SM AI

| Product name | Order no. | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | MLFB | | F | C | R | T |
| SM 431<br>AI 16x13Bit | 6ES7 431-0HH00-0AB0 | Analog input module<br>16 AI; 13 Bit;<br>integration time 16.7 / 20 ms | W | | | |
| SM 431<br>AI 8 x 13Bit | 6ES7 431-1KF00-0AB0 | Analog input module<br>8 AI; 12 + 1 Bit;<br>integration time 16.7 / 20 ms | W | | | |
| SM 431<br>AI 8 x 14Bit | 6ES7 431-1KF10-0AB0 | Analog input module<br>8 AI; 13 + 1 Bit;<br>integration time 16.7 / 20 ms;<br>linearization (RTD / TC) | W | | | |
| SM 431<br>AI 8 x 14Bit | 6ES7 431-1KF20-0AB0 | Analog input module<br>8 AI; 13 + 1 Bit;<br>conversion time10 µs | W | | | |
| SM 431<br>AI 16 x 16Bit | 6ES7 431-7QH00-0AB0 | Analog input module,<br>16 AI; 15 + 1 Bit;<br>integration time 16.7 / 20 ms;<br>linearization (RTD / TC), diagnostics | W | | | |
| SM 431<br>AI 8 x 16Bit | 6ES7 431-7KF00-0AB0 | Analog input module<br>8 "TC / U"<br>by channel Isol. | W | | | |
| SM 431<br>AI 8 x 16Bit | 6ES7 431-7KF10-0AB0 | Analog input module<br>8 "RTD"; 16 -bit | W | | | |

# 14.20 SM AO

| Product name | Order no. | Brief description | Properties (Page 161) | | | |
|---|---|---|---|---|---|---|
| | MLFB | | F | C | R | T |
| SM432<br>AO 8 x 13Bit | 6ES7 432-1HF00-0AB0 | Analog output module<br>8 AO; 13 Bit;<br>conversion time420 µs, 0 ... 10 V / 0 ... 20 mA | W | | | |

# Appendix A

## A.1 Properties

### Properties in the module list

| Column | Meaning of column | Identifier | Meanings |
|---|---|---|---|
| F | Functions | P | Component has been released for PROFINET |
| | | W | Module wizard is supported |
| | | E | Component is approved for central use behind an S7-mEC |
| | | Y | Component can be installed behind Y link |
| C | CiR support | X | Station can be installed and removed with CiR |
| | | S | Station can be reconfigured "Online" |
| | | M | Module can be installed and removed with CiR |
| | | O | Module parameters can be changed "online" |
| | | OS | Module parameters can be changed "online" only in standard mode |
| R | Redundant I/O | X | Component is supported |
| | | A | Redundant connection is possible |
| | | M | By module |
| | | G | By group |
| | | C | By channel |
| T | Discontinuation | | At posted date (month/year) |