

SIEMENS
Ingenuity for life

- Ready to start for motor on
- Motor right
- Motor left
- Quickstop
- PROFEnergy

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Engineered with TIA Portal

The powerful IO system for compact control cabinets

SIMATIC ET 200SP



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AUTOMATION – INSTRUMENTATION – POWER AND DRIVES – PROTECTION AND CONTROLS – VALVES

SIMATIC ET 200SP is a multifunctional distributed I/O system for a wide range of applications. Thanks to its scalable design, you can gear the I/O station exactly to the on-site requirements. SIMATIC ET 200SP is constructed with IP 20 protection and designed for installation in a control cabinet.

Via interface modules, it can exchange IO data of the connected I/O modules with a higher-level PLC. The following interface variants are available for this purpose:

- IM155-6MF: MultiFieldbus with the Ethernet-based protocols PROFINET, EtherNet/IP and Modbus TCP
- IM155-6PN: PROFINET
- IM155-6DP: PROFIBUS

Alternatively, as further head-end stations, various PLC, F-PLC and Open Controllers are available as compact S7-1500 PLCs (Distributed Controllers). ET 200SP components are available as SIPLUS version for extreme requirements and a high degree of robustness.

For ET 200SP, a comprehensive range of I/O modules, including fail-safe versions, is available:

- Digital input modules (DI), with color coding white
- Digital output modules (DO), with color coding black
- Analog input modules (AI), with color coding light blue
- Analog output modules (AQ), with color coding dark blue
- Technology modules (TM), with color coding turquoise
- Communication modules (CM), with color coding light gray
- Special modules, with color coding mint green
- Motor starters as direct-on-line starters (DS) and reversing starters (RS)
- Pneumatics

Compact design

- Modular configuration with up to 64 modules
- System-integrated self-assembling load group supply without power module via light BaseUnits
- Small size and highly flexible due to the modular design and comprehensive product range
- Up to 16 channels per module
- Permanent wiring
- Hot swapping: Module replacement without tools in RUN
- Startup and operation with slot gaps (free spaces)

Safety Integrated

- Easy integration of fail-safe modules
- Easy F parameter assignment via software
- Group-by-group disconnection of non-fail-safe modules

High performance

- Isochronous PROFINET
- Internal data transfer with up to 100 Mbps
- Record analog values and output as of 50 μ s
- Record digital values and output as of 1 μ s

High-performance technology

- Modules for the functions Counting, Positioning, Weighing, Output cams, PWM, Force measurement, etc.



The highlights of SIMATIC ET 200SP



Distributed Controller

The SIMATIC ET 200SP Open Controller has been equipped with safety functionality for the first time. The powerful new CPU 1515SP PC F now enables standard and fail-safe automation tasks to be handled by a single device. The distributed controller combines the functions of a PC-based software controller with visualization, Windows applications and central I/Os (inputs/outputs) in one compact device.



The new CPU 1516pro-2 PN of the SIMATIC ET 200pro Distributed Controller also performs standard and safety automation tasks in a single device – up to performance level (PL) e. The new CPUs are supplemented with the latest SIMATIC S7-1500 technology.

siemens.com/distributed-controller



PRONETA V2.3

PRONETA simplifies the commissioning and configuration of your PROFINET network. The topology of your network is read automatically. The address parameters of the SIMATIC ET 200SP station are either changed manually, or the parameters accepted from a template. I/O modules can be parameterized, controlled and monitored with the aid of PRONETA. The test results are clearly logged.

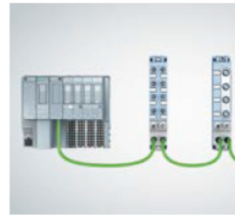
siemens.com/proneta



TIA Selection Tool Cloud

The TIA Selection Tool offers you wizards to help select the required devices and networks. In addition, there are configurators for selecting modules and accessories, as well as checking for correct function. The TIA Selection Tool generates a complete ordering list from your product selection or configuration. The TIA Selection Tool is now also available as a web version.

siemens.com/tia-selection-tool



SIMATIC ET 200AL

Thanks to their high IP65/67 degree of protection, compact design, minimal space requirements and low weight, the compact SIMATIC ET 200AL modules are specially designed for distributed control electronics in tight spaces and applications involving motion. By means of a front or lateral screw connection they can be mounted in all orientations. The modules can be incorporated in the automation network via PROFINET, PROFIBUS or by the integration of ET 200SP. The new modules are available with M12 connection technology, higher output current and greater spacing from one another. In accordance with SIL 2, actuators can now be safely shut down in groups via the ET 200AL outputs.

siemens.com/et200al



ET 200SP motor starters

The discretely modular ET 200SP motor starters in the SIMATIC ET 200SP IO system are the solution for starting and protecting motors of up to 5.5 kW in four setting ranges and are installed on a distributed basis in the control cabinet, e.g. in plant and machine construction. The new SIMATIC ET 200SP motor starters can be supplied in both the standard and fail-safe versions. Engineering is performed via the TIA Portal or STEP 7. The advantages of the system are the lower costs during configuration and installation by means of prewired load feeders. The flexible SIMATIC ET 200SP modular concept with its permanent wiring and hot-swapping features also forms the basis for the motor starters.

siemens.com/motorstarter



Safety Integrated

The SIMATIC ET 200SP also permits safety-related communication. The safety modules for DI and DO correspond to the size of the standard modules. Functional safety is certified according to EN 61508. They are designed for safety-related use up to SIL 3 according to EN 62061 and PL e according to ISO 13849. One special feature of the F modules of SIMATIC ET 200SP is that the F addresses are assigned via the engineering during commissioning. This simplifies the setup process and saves time.

siemens.com/simatic-safety

– IO modules

Digital input and output modules



	Article No.	
DI 8x24VDC BA	6ES7131-6BF00-#AA0*	
DI 8x24VDC SRC BA	6ES7131-6BF60-0AA0	
DI 4x120...230VAC ST	6ES7131-6FD00-0BB1	
DI 8x24VDC ST	6ES7131-6BF00-#BA0*	
DI 16x24VDC ST	6ES7131-6BH00-#BA0*	
DI 8x24VDC HF (add-on function: module-internal shared input)	6ES7131-6BF00-OCA0	
DI 8xNAMUR HF	6ES7131-6TF00-OCA0	
DI 8x24VDC HS (add-on function: counting and oversampling)	6ES7131-6BF00-0DA0	
DQ 8x24VDC/0.5A BA	6ES7132-6BF00-#AA0*	
DQ 8x24VDC/0.5A SNK BA	6ES7132-6BF60-0AA0	
DQ 4x24VDC/2A ST	6ES7132-6BD20-#BA0*	
DQ 4x24...230VAC/2A ST	6ES7132-6FD00-#BB1*	
DQ 8x24VDC/0,5A ST	6ES7132-6BF00-#BA0*	
DQ 16x24VDC/0,5A BA	6ES7132-6BH00-0AA0	NEU!
DQ 16x24VDC ST	6ES7132-6BH00-#BA0*	
DQ 4x24VDC/2A HF (add-on function: module-internal shared output)	6ES7132-6BD20-OCA0	
DQ 8x24VDC/0.5A HF (add-on function: module-internal shared output)	6ES7132-6BF00-OCA0	
DQ 4x24VDC/2A HS (Add-on-Funktion: PWM, Oversampling und Ventilsteuerung)	6ES7132-6BD20-0DA0	
DQ 4x24...230VAC/2A HF (Add-on-Funktion: Leistungssteuerung)	6ES7132-6FD00-0CU0	NEU!
RQ 4x24VDC/2A CO ST	6ES7132-6GD50-0BA0	
RQ 4x120VDC/230VAC/5A NO ST	6ES7132-6HD00-#BB1*	
RQ 4x120VDC/230VAC/5A NO MA ST (IO simulation module with manual operation)	6ES7132-6MD00-0BB1	

Analog input and output modules



	Article No.	
AI 8xI 2/4-wire BA	6ES7134-6GF00-0AA1	
AI 8xU BA	6ES7134-6FF00-0AA1	
AI 2xI 2/4-wire ST	6ES7134-6GB00-0BA1	
AI 2xU ST	6ES7134-6FB00-0BA1	
AI 4xU/I 2-wire ST	6ES7134-6HD00-#BA1*	
AI 4xI 2/4-wire ST	6ES7134-6GD00-0BA1	
AI 2xU/I 2/4-wire HF (add-on function: scaling of the measured values)	6ES7134-6HB00-OCA1	
AI 4xRTD/TC 2/3/4-wire HF	6ES7134-6JD00-#CA1*	
AI 8xRTD/TC 2-wire HF	6ES7134-6JF00-#CA1*	
AI 2xU/I 2/4-wire HS (add-on function: oversampling)	6ES7134-6HB00-0DA1	
AI 4xI 2-wire 4...20mA HART	6ES7134-6TD00-OCA1	
AI Energy Meter ST (230/400V)	6ES7134-6PA01-0BD0	
AI Energy Meter ST (277/480V)	6ES7134-6PA20-0BD0	
AQ 2xI ST	6ES7135-6GB00-0BA1	
AQ 2xU ST	6ES7135-6FB00-0BA1	
AQ 4xU/I ST	6ES7135-6HD00-0BA1	
AQ 2xU/I HF	6ES7135-6HB00-OCA1	
AQ 2xU/I HS (add-on function: oversampling)	6ES7135-6HB00-0DA1	

Fail-safe modules

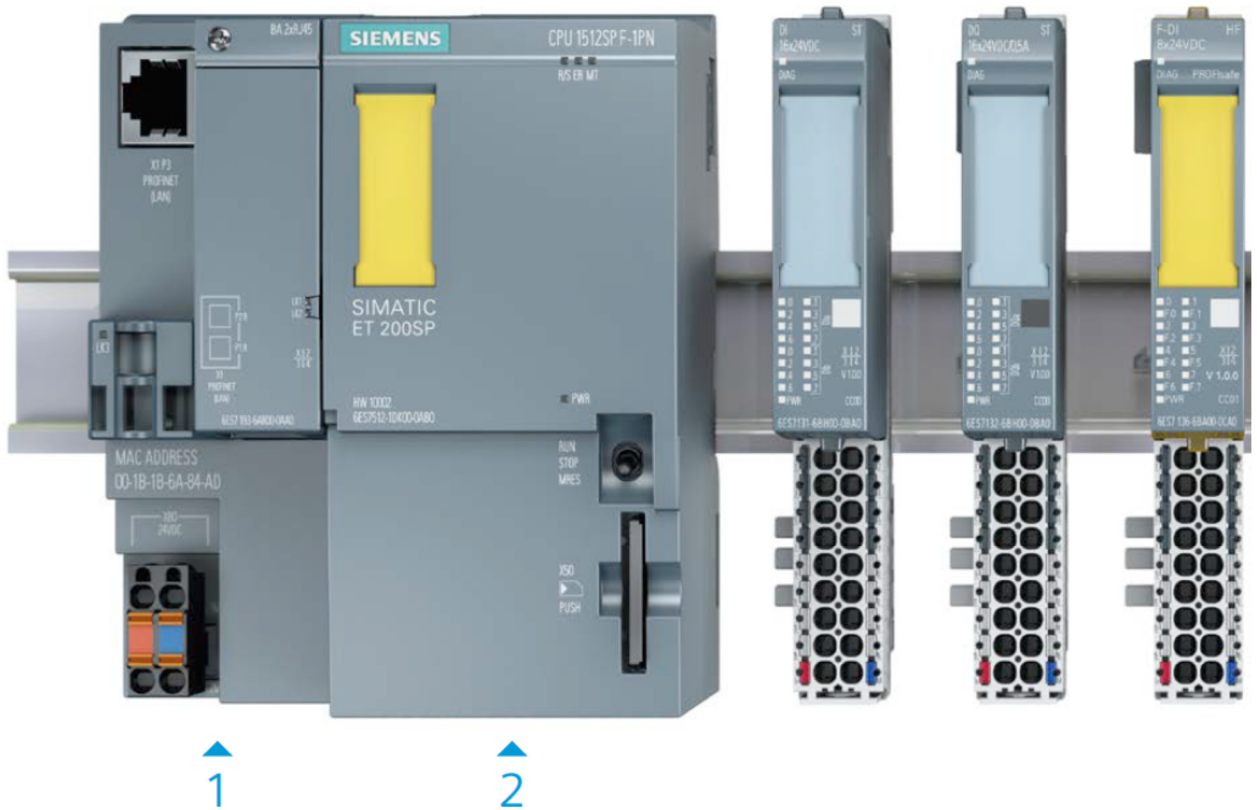


	Article No.	
F-DI 8x24VDC HF	6ES7136-6BA00-OCA0	
F-DQ 4x24VDC/2A HF	6ES7136-6DB00-OCA0	
F-PM-E 24VDC/8A PPM ST	6ES7136-6PA00-0BC0	
F-RQ 1x24VDC/24...230VAC/5A	6ES7136-6RA00-0BF0	
F-CM AS-i Safety ST	3RK7136-6SC00-0BC1	

Technologie- und Spezialmodule



	Artikelnummer	
TM Count 1x24V	6ES7138-6AA00-0BA0	
TM PosInput 1 (SSI, 5V-Count)	6ES7138-6BA00-0BA0	
TM 1xSIWAREX WP321 ST (Wiegemodul)	7MH4138-6AA00-0BA0	
TM Timer DIDQ 16x24V	6ES7552-1AA00-0AB0	
TM Pulse 2x24V	6ES7138-6DB00-0BB1	



3 – IO modules

Communication modules



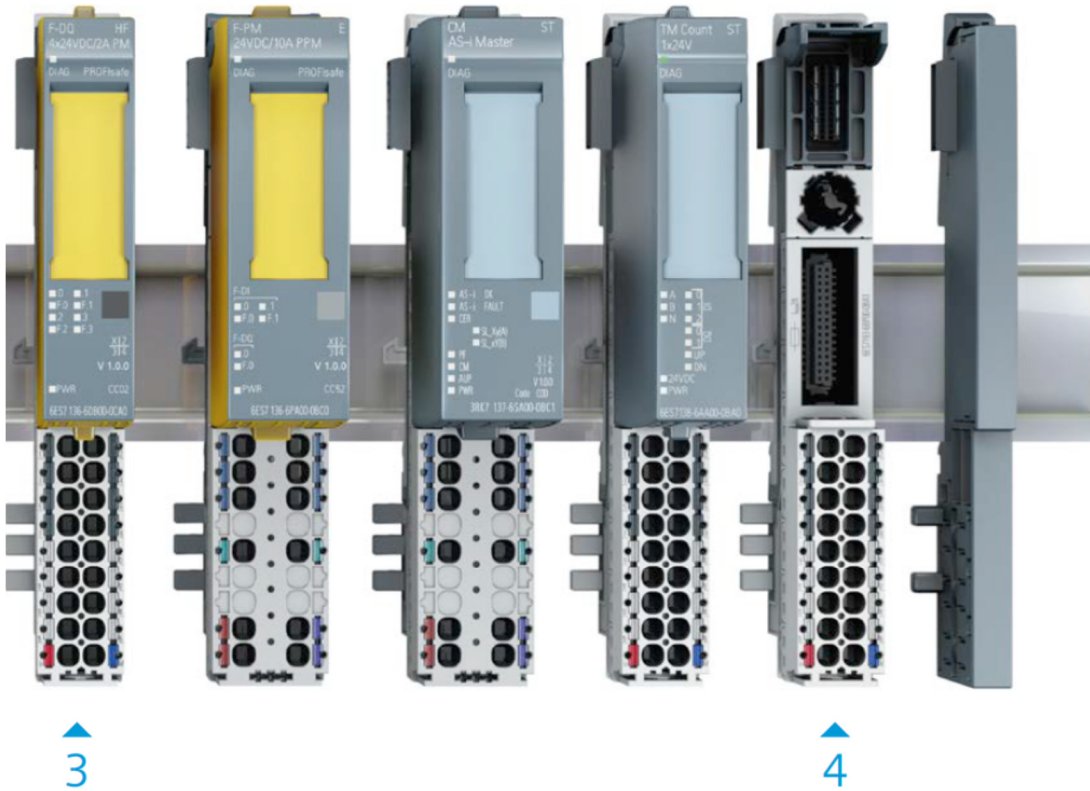
	Article No.
CM 4xIO-Link ST	6ES7137-6BD00-0BA0
CM 1xPtP ST (ASCII, 3964R, USS, Modbus)	6ES7137-6AA00-0BA0
CM AS-i Master ST	3RK7137-6SA00-0BC1
CM DP Master (for controllers)	6ES7545-5DA00-0AB0
CP 1542SP-1 (expansion of IE interface)	6GK7542-6UX00-0XE0
CP 1542SP-1 IRC (connection of RTUs)	6GK7542-6VX00-0XE0
CP 1543SP-1 (IP security)	6GK7543-6WX00-0XE0
ET 200AL BU-Send	6ES7193-6BN00-0NE0
ET 200AL BA-Send 1xFC	6ES7193-6AS00-0AA0

Potential Verteiler



	Article No.	
PotDis-TB-P1-R	6ES7193-6TP00-0TP1	NEU!
PotDis-TB-P2-B	6ES7193-6TP00-0TP2	NEU!
PotDis-TB-n.c.-G	6ES7193-6TP00-0TN0	NEU!
PotDis-TB-BR-W	6ES7193-6TP00-0TP0	NEU!
PotDis-BU-P1/D-R	6ES7193-6UP00-0DP1	NEU!
PotDis-BU-P1/B-R	6ES7193-6UP00-0BP1	NEU!
PotDis-BU-P2/D-B	6ES7193-6UP00-0DP2	NEU!
PotDis-BU-P2/B-B	6ES7193-6UP00-0BP2	NEU!

Also available as SIPLUS extreme ET 200SP for use in extreme environmental conditions.
 More information here: siemens.com/siplus-extreme



1 – BusAdapter



	Article No.
BA 2xRJ45	6ES7193-6AR00-0AA0
BA 2xFC	6ES7193-6AF00-0AA0
BA 2xSCRJ	6ES7193-6AP00-0AA0
BA SCRJ/RJ45 media converter (FOC – copper)	6ES7193-6AP20-0AA0
BA SCRJ/FC	6ES7193-6AP40-0AA0
BA 2xLC	6ES7193-6AG00-0AA0
BA LC/RJ45	6ES7193-6AG20-0AA0
BA LC/FC	6ES7193-6AG40-0AA0

2 – Interface modules and CPU



	Article No.
IM155-6PN ST with server module and BusAdapter 2xRJ45	6ES7155-6AA00-0BNO
IM155-6PN ST with server module, without BusAdapter	6ES7155-6AU00-0BNO
IM155-6PN HF with server module, without BusAdapter	6ES7155-6AU00-0CNO
IM155-6DP HF with server module (6ES71936PA000AA0) and DP connector (6ES7972-0BB700XA0)	6ES7155-6BA00-0CNO
IM155-6PN BA with server module and integrated RJ45	6ES7155-6AR00-0A00
IM155-6PN HS with server module, without BusAdapter	6ES7155-6AU00-0DNO
CPU 1510SP-1PN (SIMATIC Memory Card required)	6ES7510-1DJ01-0AB0
CPU 1512SP-1PN (SIMATIC Memory Card required)	6ES7512-1DK01-0AB0
CPU 1510SP F-1PN (SIMATIC Memory Card required)	6ES7510-1SJ01-0AB0
CPU 1512SP F-1PN (SIMATIC Memory Card required)	6ES7512-1SK01-0AB0
CPU 1515SP PC (incl. HMI)	6ES7677-2AA...
CPU 1515SP PC F (incl. HMI)	6ES7677-2FA...

4 – Base Units

Base Unit type A0



	Article No.
16 push-in, 2 infeeds jumpered, DI dig./analog, max. 24 V DC/10 A	6ES7193-6BP00-#BA0*
16 push-in, 10 AUX, 2 infeeds jumpered, DI dig./analog, max. 24 V DC/10 A	6ES7193-6BP20-#BA0*
16 push-in, 2 infeeds separate, DI dig./analog, max. 24 V DC/10 A	6ES7193-6BP00-#DA0*
16 push-in, 10 AUX, 2 infeeds separate, DI dig./analog, max. 24 V DC/10 A	6ES7193-6BP20-#DA0*

Base Unit type A1

	Article No.
16 push-in, 2 infeeds jumpered, temperature, max. 24 V DC/10 A	6ES7193-6BP00-0BA1
16 push-in, 2x5 add. term. + 2 infeeds, temperature, max. 24 V DC/10 A	6ES7193-6BP40-0BA1
16 push-in, 2 infeeds separate, temperature, max. 24 V DC/10 A	6ES7193-6BP00-0DA1
16 push-in, 2x5 add. term. + 2 infeeds, temperature, max. 24 V DC/10 A	6ES7193-6BP40-0DA1

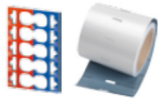
Base Unit Typ B0, C1, D0, F0 und U0



	Article No.
Base Unit type B0, 12 push-in, 4 AUX, up to 230 V	6ES7193-6BP20-0BB0
Base Unit type B1, 12 push-in, up to 230 V	6ES7193-6BP20-0BB1
Base Unit type C0, 6 push-in, 2 AUX, for AS-i, Safety	6ES7193-6BP20-0DC0
Base Unit type C1, 6 push-in	6ES7193-6BP20-0BC1
Base Unit Typ D0, 12 Push-in	6ES7193-6BP00-0BD0
Base Unit Typ F0, 8 Push-in	6ES7193-6BP20-0BF0
Base Unit Typ U0, 16 Push-in, 2 Einsp. getrennt*	6ES7193-6BP00-#DU0
Base Unit Typ U0, 16 Push-in, 2 Einsp. gebrückt*	6ES7193-6BP00-#BU0

You can find possible combinations of IO modules with the Base Units/interface modules or PC configurators at: www.siemens.com/et200sp or in the TIA Selection Tool.

Accessories



	Article No.
10 color-coded labels	6ES7193-6CP...
500 labeling strips, light gray	6ES7193-6LR10-0AA0
500 labeling strips, yellow	6ES7193-6LR10-0AG0
1,000 labeling strips 10 DIN A4, 100 labels per sheet, light gray	6ES7193-6LA10-0AA0
1,000 labeling strips 10 DIN A4, 100 labels per sheet, yellow	6ES7193-6LA10-0AG0
160 reference ID labels	6ES7193-6LF30-0AW0
5 BU cover, 15 mm	6ES7133-6CV15-1AM0
5 BU cover, 20 mm	6ES7133-6CV20-1AM0
5 shield contacts (terminal and shield support), max. 2 conductors	6ES7193-6SC00-1AM0
SIMATIC Memory Card (4, 12, 24, 256 MB, 2 GB)	6ES7954-8L...



Motor starter



	Article No.
Direct starter (0.3 – 12 A)	3RK1308-0A+00-0CP0**
Reversing starter (0.3 – 12 A)	3RK1308-0B+00-0CP0**
Direct starter Failsafe (0.3 – 12 A)	3RK1308-0C+00-0CP0**
Reversing starter Failsafe (0.3 – 12 A)	3RK1308-0D+00-0CP0**
Base Unit type motor starter (MS)	3RK1908-0AP00-...
3DI/LC module	3RK1908-1AA00-0BP0
BU cover, 30 mm	3RK1908-1CA00-0BP0
Cover for infeed bus	3RK1908-1DA00-2BP0
Additional mechanical bracket	3RK1908-1EA00-1BP0
Ancillary fans	3RW4928-8VB00

* »#«: if 0 = PU 1, if 2 = PU 10

** »+« replace in MLFB for required version: B for 0.3 – 1.0 A; C for 0.9 – 3.0 A; D for 2.8 – 9.0 A; E for 4.0 – 12.0 A