SIEMENS

Data sheet

6ES7313-6CE01-0AB0

SIMATIC S7-300, CPU 313C-2DP COMPACT CPU WITH MPI, 16 DI/16 DO, 3 FAST COUNTERS (30 KHZ), INTEGRATED DP INTERFACE, INTEGRATED 24V DC POWER SUPPLY, 32 KBYTE WORKING MEMORY, FRONT CONNECTOR (1 X 40PIN) AND MICRO MEMORY CARD REQUIRED

	MICRO MEMORY CARD REQUIRED
General information	
HW functional status	01
Firmware version	V2.0.0
Engineering with	
Programming package	STEP 7 V5.2 SP1 or higher (with STEP 7 V5.1 SP3 or higher,
	please use predecessor CPU)
Supply voltage	
Rated value (DC)	
• 24 V DC	Yes
permissible range, lower limit (DC)	20.4 V
permissible range, upper limit (DC)	28.8 V
Load voltage L+	
• Rated value (DC)	24 V
permissible range, lower limit (DC)	20.4 V
permissible range, upper limit (DC)	28.8 V
Input current	
Current consumption (rated value)	900 mA
Current consumption (in no-load operation), typ.	100 mA
Inrush current, typ.	11 A
Power loss	
Power loss, typ.	10 W
Memory	
Work memory	
• integrated	32 kbyte; For program and data
• expandable	No
Load memory	
• Plug-in (MMC)	Yes
● Plug-in (MMC), max.	8 Mbyte
 Data management on MMC (after last programming), min. 	10 y
Backup	
• present	Yes; Guaranteed by MMC (maintenance-free)

• without battery	Yes; Program and data
CPU processing times	
for bit operations, typ.	0.1 µs
for bit operations, max.	0.2 μs
for word operations, typ.	0.2 μs
for fixed point arithmetic, typ.	2 µs
for floating point arithmetic, typ.	3 µs
CPU-blocks	
Number of blocks (total)	1 024
DB	
• Number, max.	511; Number range: 1 to 511
• Size, max.	16 kbyte
FB	
Number, max.	512; Number range: 0 to 2047
• Size, max.	16 kbyte
FC	
Number, max.	512; Number range: 0 to 2047
• Size, max.	16 kbyte
OB	
Number, max.	see instruction list
• Size, max.	16 kbyte
Number of free cycle OBs	1; OB 1
Number of time alarm OBs	1; OB 10
Number of delay alarm OBs	1; OB 20
Number of cyclic interrupt OBs	1; OB 35
Number of process alarm OBs	1; OB 40
Number of startup OBs	1; OB 100
Number of asynchronous error OBs	1; OB 80
Number of synchronous error OBs	2; OB 121, 122
Nesting depth	
per priority class	8
 additional within an error OB 	4
Counters, timers and their retentivity	
S7 counter	
• Number	256
Retentivity	
— adjustable	Yes
— lower limit	0
— upper limit	256
Counting range	
— lower limit	0
-	

Feat
● Type SFB S7 times ● Number 256 Retentivity — adjustable Yes — lower limit 0 — upper limit 256 — preset No retentivity Time range — lower limit 10 ms — upper limit 9 990 s IEC timer
S7 times • Number 256 Retentivity — adjustable — lower limit — upper limit — preset Time range — lower limit — upper limit
 Number Retentivity — adjustable — lower limit — upper limit — preset No retentivity Time range — lower limit — upper limit — upper limit — lower limit — upper limit 9 990 s
Retentivity
 — adjustable — lower limit — upper limit — preset No retentivity Time range — lower limit — upper limit — upper limit 9 990 s IEC timer
— lower limit 0 — upper limit 256 — preset No retentivity Time range 10 ms — upper limit 9 990 s IEC timer
 upper limit preset No retentivity Time range lower limit upper limit 9 990 s IEC timer
— preset No retentivity Time range — lower limit 10 ms — upper limit 9 990 s IEC timer
Time range — lower limit 10 ms — upper limit 9 990 s IEC timer
— lower limit 10 ms — upper limit 9 990 s IEC timer
— upper limit 9 990 s IEC timer
IEC timer
• present Yes
Produit
• Type SFB
Data areas and their retentivity
retentive data area in total all
Flag
Number, max. 256 byte
Retentivity preset MB 0 to MB 15
Number of clock memories
Data blocks
Retentivity adjustable No
• Retentivity preset Yes
Address area
I/O address area
• Inputs 1 kbyte
• Outputs 1 kbyte
Process image
• Inputs 128 byte
• Outputs 128 byte
Default addresses of the integrated channels
— Digital inputs 124.0 to 125.7
— Digital outputs 124.0 to 125.7
Digital channels
• Inputs 8 192
— of which central 992
• Outputs 8 192
— of which central 992

Analog channels	
• Inputs	248
— of which central	248
Outputs	124
— of which central	248
Handa and a section	
Hardware configuration Number of expansion units, max.	3
Number of DP masters	
• integrated	1
• via CP	4
Number of operable FMs and CPs (recommended)	
• FM	8
• CP, PtP	8
• CP, LAN	6
Rack	
• Racks, max.	4
Modules per rack, max.	8; In rack 3 max. 7
Time of day	
Clock	Yes
Hardware clock (real-time)	Yes
retentive and synchronizable	6 wk
Backup time	
Deviation per day, max.	10 s
Operating hours counter	1
Number	1
Number/Number range	0 0 to 2024 hours (when using SEC 404)
Range of values	0 to 2^31 hours (when using SFC 101)
Granularity	1 h
• retentive	Yes
Clock synchronization	Yes
• supported	Yes
• to MPI, master	
• to MPI, slave	Yes
• in AS, master	Yes
Digital inputs	
Number of digital inputs	16
integrated channels (DI)	16
Input voltage	
Rated value (DC)	24 V
• for signal "0"	-3 to +5V
● for signal "1"	+15 to +30V

Input current	
● for signal "1", typ.	8 mA
Input delay (for rated value of input voltage)	
for standard inputs	
— parameterizable	Yes; 0.1 / 0.3 / 3 / 15 ms
for technological functions	
— at "0" to "1", max.	8 µs
Cable length	
• shielded, max.	1 000 m; 100 m for technological functions
• unshielded, max.	600 m
Digital outputs	
Number of digital outputs	16
integrated channels (DO)	16
Short-circuit protection	Yes; Clocked electronically
Limitation of inductive shutdown voltage to	L+ (-48 V)
Output voltage	
● for signal "1", min.	L+ (-0.8 V)
Output current	
for signal "1" permissible range, max.	500 mA
 for signal "1" permissible range for 0 to 60 °C, max. 	500 mA
for signal "1" minimum load current	5 mA
for signal "0" residual current, max.	0.5 mA
Switching frequency	
with resistive load, max.	100 Hz
 with inductive load, max. 	0.5 Hz
Total current of the outputs (per group)	
all mounting positions	
— up to 40 °C, max.	8 A
— up to 60 °C, max.	4 A
Cable length	
• shielded, max.	1 000 m
• unshielded, max.	600 m
Encoder	
Connectable encoders	
• 2-wire sensor	Yes
 permissible quiescent current (2-wire sensor), max. 	1.5 mA
Interfaces	
MPI	
Cable length, max.	50 m; without repeater

Integrated RS 485 interface Physics RS 485	1. Interface	
Solated	Interface type	Integrated RS 485 interface
Protocols • MPI • MPI • PROFIBUS DP master • PROFIBUS DP slave • Point-to-point connection MPI • Number of connections — Routing — Global data communication — S7 communication — S7 communication — S7 communication — S7 communication — S8 485 Isolated Power supply to interface (15 to 30 V DC), max. Number of connection resources • MPI No PROFIBUS DP master • No PROFIBUS DP master • No PROFIBUS DP master • PGOP communication — S7 basic communication — S7 communication — S7 communication — S8 485 Isolated Power supply to interface (15 to 30 V DC), max. Number of connection resources • MPI • PROFIBUS DP master • Point-to-point connection No PROFIBUS DP master • Point-to-point connection No PROFIBUS DP master • Number of connections, max. • Transmission rate, max. • Number of DP slaves, max. • Transmission rate, max. • Number of DP slaves, max. • Number of DP sla	Physics	RS 485
Protocols PROFIBUS DP master PROFIBUS DP slave Point-to-point connection No MPI Number of connections Transmission rate, max. PG/OP communication PG/OP communicat	Isolated	Yes
	Power supply to interface (15 to 30 V DC), max.	200 mA
• PROFIBUS DP master No • PROFIBUS DP slave No • Point-to-point connection No MPI • Number of connections • Name of connections 8 • Transmission rate, max. 187.5 kbit/s Services — PG/OP communication • Routing Yes • Global data communication Yes • S7 basic communication Yes • S7 communication Yes • S7 communication, as client No • S7 communication, as server Yes 2. Interface Integrated RS 485 interface Physics RS 485 Isolated Yes Power supply to interface (15 to 30 V DC), max. 200 mA Number of connection resources 8 Protocols *MPI • PROFIBUS DP master Yes • PROFIBUS DP slave Yes • Point-to-point connection No PROFIBUS DP master *No • Number of connections, max. 8; For PG/OP communication • Number of DP slaves, max. 32	Protocols	
PROFIBUS DP slave Point-to-point connection No MPI Number of connections Services PG/OP communication PS tasic communication PS tasic communication PS communication, as client PS communication, as server Interface type Interface type Interface type Interface type Interface type Physics PS 485 Isolated Power supply to interface (15 to 30 V DC), max. Number of connection resources Protocols MPI PROFIBUS DP master PROFIBUS DP slave Point-to-point connection No PROFIBUS DP master No PROFIBUS DP master PROFIBUS DP master PROFIBUS DP master No PROFIBUS DP master PROFIBUS DP	• MPI	Yes
Point-to-point connection MPI Number of connections Transmission rate, max. 8 Transmission rate, max. 187.5 kbit/s Services PG/OP communication Yes Global data communication Yes Global data communication Yes Sf basic communication Yes Sf communication Yes Sf communication, as client No Sf communication, as server Yes Interface type Integrated RS 485 interface Physics RS 485 Isolated Yes Power supply to interface (15 to 30 V DC), max. Number of connection resources Protocols MPI PROFIBUS DP master PROFIBUS DP master PROFIBUS DP master Proficies No PROFIBUS DP master No PROFIBUS DP master Protocone No PROFIBUS DP master Protocone No PROFIBUS DP master Profice Profices Profices PG/OP communication Yes Number of DP slaves, max. Services PG/OP communication Yes PG/OP communication Yes PGuting PGobal data communication No	 PROFIBUS DP master 	No
MPI • Number of connections	 PROFIBUS DP slave 	No
Number of connections Transmission rate, max. 187.5 kbit/s Services - PG/OP communication Yes - Routing Yes - Global data communication Yes - S7 basic communication Yes - S7 communication Yes - S7 communication, as client No - S7 communication, as server Yes 2. Interface Interface type Integrated RS 485 interface Physics RS 485 Isolated Yes Power supply to interface (15 to 30 V DC), max. 200 mA Number of connection resources 8 Protocols • MPI No - PROFIBUS DP master Yes • Point-to-point connection No PROFIBUS DP master • Number of connections, max. 8; For PG/OP communication • Transmission rate, max. 12 Mbit/s • Number of DP slaves, max. 32 Services - PG/OP communication Yes - Routing Yes - Routing Yes - Routing Yes - Routing Yes - Global data communication No	 Point-to-point connection 	No
Transmission rate, max. Services - PG/OP communication Yes - Routing Yes - Global data communication Yes - S7 basic communication Yes - S7 communication Yes - S7 communication Yes - S7 communication, as client No - S7 communication, as server Yes 2. Interface Interface type Integrated RS 485 interface Physics RS 485 Isolated Yes Power supply to interface (15 to 30 V DC), max. 200 mA Number of connection resources 8 Protocols • MPI No - PROFIBUS DP master Yes - PROFIBUS DP slave Yes - Point-to-point connection No PROFIBUS DP master • Number of connections, max. 8; For PG/OP communication - Transmission rate, max. 12 Mbit/s - Number of DP slaves, max. 32 Services - PG/OP communication Yes - Routing Yes - Routing Yes - Global data communication No	MPI	
Services	 Number of connections 	8
— PG/OP communication Yes — Routing Yes — Global data communication Yes — S7 basic communication Yes — S7 communication, as client No — S7 communication, as server Yes 2. Interface Integrated RS 485 interface Physics RS 485 Isolated Yes Power supply to interface (15 to 30 V DC), max. 200 mA Number of connection resources 8 Protocols ** • MPI No • PROFIBUS DP master Yes • PROFIBUS DP slave Yes • Point-to-point connection No PROFIBUS DP master ** • Number of connections, max. 8; For PG/OP communication • Transmission rate, max. 12 Mbit/s • Number of DP slaves, max. 32 Services — PG/OP communication Yes — Routing Yes — Global data communication No	Transmission rate, max.	187.5 kbit/s
— Routing Yes — Global data communication Yes — S7 basic communication Yes — S7 communication, as client No — S7 communication, as server Yes 2. Interface Yes Post communication, as server Yes 2. Interface Integrated RS 485 interface Physics RS 485 Isolated Yes Power supply to interface (15 to 30 V DC), max. 200 mA Number of connection resources 8 Protocols ** • MPI No • PROFIBUS DP master Yes • PROFIBUS DP slave Yes • Point-to-point connection No PROFIBUS DP master No • Number of connections, max. 8; For PG/OP communication • Transmission rate, max. 12 Mbit/s • Number of DP slaves, max. 32 Services — PG/OP communication Yes — Routing Yes — Global data communication No	Services	
- Global data communication Yes - S7 basic communication Yes - S7 communication Yes - S7 communication, as client No - S7 communication, as server Yes 2. Interface Interface type Integrated RS 485 interface Physics RS 485 Isolated Yes Power supply to interface (15 to 30 V DC), max. 200 mA Number of connection resources 8 Protocols • MPI No - PROFIBUS DP master Yes - PROFIBUS DP slave Yes - Point-to-point connection No PROFIBUS DP master • Number of connections, max. 8; For PG/OP communication - Transmission rate, max. 12 Mbit/s - Number of DP slaves, max. 32 Services - PG/OP communication Yes - Routing Yes - Global data communication No	— PG/OP communication	Yes
— S7 basic communication — S7 communication — S7 communication, as client — S7 communication, as server Post Physics Interface type Integrated RS 485 interface Physics RS 485 Isolated Power supply to interface (15 to 30 V DC), max. Number of connection resources MPI PROFIBUS DP master PROFIBUS DP slave Point-to-point connection PROFIBUS DP master No No No PROFIBUS DP master No	— Routing	Yes
— S7 communication Yes — S7 communication, as client No — S7 communication, as server Yes 2. Interface Interface type Interface type Physics RS 485 Isolated Power supply to interface (15 to 30 V DC), max. 200 mA Number of connection resources 8 Protocols • MPI No • PROFIBUS DP master Yes • PROFIBUS DP slave Yes • Point-to-point connection No PROFIBUS DP master • Number of connections, max. 8; For PG/OP communication • Transmission rate, max. 12 Mbit/s • Number of DP slaves, max. 32 Services — PG/OP communication Yes — Routing Yes — Global data communication No	 Global data communication 	Yes
— \$7 communication, as client — \$7 communication, as server Yes 2. Interface Interface type Interface type Physics R\$ 485 Isolated Power supply to interface (15 to 30 V DC), max. 200 mA Number of connection resources 8 Protocols • MPI • PROFIBUS DP master • PROFIBUS DP slave • Point-to-point connection No PROFIBUS DP master • Number of connections, max. • Transmission rate, max. • Transmission rate, max. • Number of DP slaves, max. • Number of DP slaves, max. • Ruting - Routing - Routing - Global data communication No	— S7 basic communication	Yes
	— S7 communication	Yes
Interface type Interface type Physics RS 485 Isolated Power supply to interface (15 to 30 V DC), max. Number of connection resources Protocols MPI PROFIBUS DP master Profibus DP slave Point-to-point connection No PROFIBUS DP master Number of connections, max. Transmission rate, max. Number of DP slaves, max. PG/OP communication PROFIO Communication PROFICES PG/OP communication PG/OP communication Pess Pess Pess Pess Pess Pess Pess Pes	— S7 communication, as client	No
Interface type Integrated RS 485 interface Physics RS 485 Isolated Yes Power supply to interface (15 to 30 V DC), max. 200 mA Number of connection resources 8 Protocols • MPI No • PROFIBUS DP master Yes • PROFIBUS DP slave Yes • Point-to-point connection No PROFIBUS DP master • Number of connections, max. 8; For PG/OP communication • Transmission rate, max. 12 Mbit/s • Number of DP slaves, max. 32 Services — PG/OP communication Yes — Routing Yes — Global data communication No	 S7 communication, as server 	Yes
Interface type Integrated RS 485 interface Physics RS 485 Isolated Yes Power supply to interface (15 to 30 V DC), max. 200 mA Number of connection resources 8 Protocols • MPI No • PROFIBUS DP master Yes • PROFIBUS DP slave Yes • Point-to-point connection No PROFIBUS DP master • Number of connections, max. 8; For PG/OP communication • Transmission rate, max. 12 Mbit/s • Number of DP slaves, max. 32 Services — PG/OP communication Yes — Routing Yes — Global data communication No	2 Interface	
Isolated Power supply to interface (15 to 30 V DC), max. Power supply to interface (15 to 30 V DC), max. 200 mA Number of connection resources MPI PROFIBUS DP master PROFIBUS DP slave Point-to-point connection No PROFIBUS DP master Number of connections, max. S; For PG/OP communication Transmission rate, max. 12 Mbit/s Number of DP slaves, max. Services PG/OP communication Yes Routing Global data communication No		Integrated RS 485 interface
Power supply to interface (15 to 30 V DC), max. Number of connection resources Protocols MPI PROFIBUS DP master PROFIBUS DP slave Point-to-point connection PROFIBUS DP master Number of connections, max. S; For PG/OP communication Transmission rate, max. Number of DP slaves, max. PG/OP communication PROFIBUS DP master PG/OP communication Yes PG/OP communication Yes PG/OP communication Yes PG/OP communication No	Physics	RS 485
Number of connection resources Protocols MPI PROFIBUS DP master PROFIBUS DP slave Point-to-point connection No PROFIBUS DP master Number of connections, max. Transmission rate, max. Number of DP slaves, max. PG/OP communication Yes PG/OP communication Yes Routing Global data communication No	Isolated	Yes
Protocols • MPI • PROFIBUS DP master • PROFIBUS DP slave • Point-to-point connection PROFIBUS DP master • Number of connections, max. • Transmission rate, max. • Number of DP slaves, max. • Services - PG/OP communication - Routing - Global data communication No No No No No No No No No	Power supply to interface (15 to 30 V DC), max.	200 mA
 MPI PROFIBUS DP master PROFIBUS DP slave Point-to-point connection No PROFIBUS DP master Number of connections, max. Transmission rate, max. Number of DP slaves, max. Number of DP slaves, max. Services PG/OP communication PG/OP communication PG/OP communication Yes Routing Global data communication No No	Number of connection resources	8
PROFIBUS DP master PROFIBUS DP slave Point-to-point connection No PROFIBUS DP master Number of connections, max. Fransmission rate, max. Number of DP slaves, max. PROFIBUS DP master Profibus DP master Number of connections, max. Services PROFIBUS DP master Number of connections, max. Services PROFIBUS DP master Number of connections, max. Services PROFIBUS DP master PROFIBUS DP master No No No No PROFIBUS DP master Yes No	Protocols	
 PROFIBUS DP slave Point-to-point connection PROFIBUS DP master Number of connections, max. Transmission rate, max. Number of DP slaves, max. Services PG/OP communication Yes Routing Global data communication No 	• MPI	No
 Point-to-point connection PROFIBUS DP master Number of connections, max. Transmission rate, max. Number of DP slaves, max. Services PG/OP communication Yes Routing Global data communication No 	 PROFIBUS DP master 	Yes
PROFIBUS DP master • Number of connections, max. • Transmission rate, max. • Number of DP slaves, max. Services - PG/OP communication - Routing - Global data communication No	 PROFIBUS DP slave 	Yes
 Number of connections, max. Transmission rate, max. Number of DP slaves, max. Services — PG/OP communication — Routing — Global data communication No 	 Point-to-point connection 	No
 Transmission rate, max. Number of DP slaves, max. Services — PG/OP communication — Routing — Global data communication No 	PROFIBUS DP master	
● Number of DP slaves, max. Services — PG/OP communication Yes — Routing Yes — Global data communication No	Number of connections, max.	8; For PG/OP communication
Services PG/OP communication Yes Routing Yes Global data communication No	• Transmission rate, max.	12 Mbit/s
 — PG/OP communication — Routing — Global data communication Yes No 	 Number of DP slaves, max. 	32
 — Routing — Global data communication No 	Services	
— Global data communication No	— PG/OP communication	Yes
	— Routing	Yes
— S7 basic communication Yes	— Global data communication	No
	— S7 basic communication	Yes

— S7 communication	Yes
 — S7 communication, as client 	No
 — S7 communication, as server 	Yes
— Equidistance	Yes
— SYNC/FREEZE	Yes
 Activation/deactivation of DP slaves 	Yes
 Direct data exchange (slave-to-slave communication) 	Yes
— DPV1	Yes
Address area	
— Inputs, max.	1 kbyte
— Outputs, max.	1 kbyte
User data per DP slave	
— Inputs, max.	244 byte
— Outputs, max.	244 byte
PROFIBUS DP slave	
 Number of connections 	8
• GSD file	The latest GSD file is available at: http://www.ad.siemens.de/support in Product Support area
Transmission rate, max.	12 kbit/s
automatic baud rate search	Yes
Address area, max.	32
 User data per address area, max. 	32 byte
Services	
— PG/OP communication	Yes
— Routing	Yes
 Global data communication 	No
 — S7 basic communication 	Yes
— S7 communication	Yes
 S7 communication, as client 	No
 S7 communication, as server 	Yes
 — Direct data exchange (slave-to-slave communication) 	Yes
— DPV1	No
Transfer memory	
— Inputs	244 byte
— Outputs	244 byte
Communication functions	
PG/OP communication	Yes
Global data communication	
• supported	Yes

 Number of GD loops, max. 	4
 Number of GD packets, max. 	4
 Number of GD packets, transmitter, max. 	4
 Number of GD packets, receiver, max. 	4
 Size of GD packets, max. 	22 byte
 Size of GD packet (of which consistent), max. 	22 byte
S7 basic communication	
• supported	Yes
User data per job, max.	76 byte
 User data per job (of which consistent), max. 	76 byte
S7 communication	
• supported	Yes
• as server	Yes
• as client	Yes; Via CP and loadable FB
 User data per job, max. 	180 kbyte
 User data per job (of which consistent), max. 	64 byte
S5 compatible communication	
• supported	Yes; via CP and loadable FC
Number of connections	
• overall	8
 usable for PG communication 	7
 reserved for PG communication 	1
 adjustable for PG communication, min. 	1
 adjustable for PG communication, max. 	7
usable for OP communication	7
 reserved for OP communication 	1
 adjustable for OP communication, min. 	1
 adjustable for OP communication, max. 	7
 usable for S7 basic communication 	4
— reserved for S7 basic communication	4
 adjustable for S7 basic communication, 	0
min.	
 adjustable for S7 basic communication, 	4
max.	
usable for routing	4
S7 message functions	
Number of login stations for message functions, max.	8
Process diagnostic messages	Yes
simultaneously active Alarm-S blocks, max.	20
Test commissioning functions	
Status block	Yes

Single step	Yes
Number of breakpoints	2
Status/control	
Status/control variable	Yes
Variables	Inputs, outputs, memory bits, DB, times, counters
Number of variables, max.	30
of which status variables, max.	30
of which control variables, max.	14
Forcing	
• Forcing	Yes
Forcing, variables	Inputs, outputs
Number of variables, max.	10
Integrated Functions	
Number of counters	3
Counting frequency (counter) max.	30 kHz
Frequency measurement	Yes
Number of frequency meters	3
controlled positioning	No
PID controller	Yes
Number of pulse outputs	3
Limit frequency (pulse)	2.5 kHz
Potential separation	
Potential separation digital inputs	V
Potential separation digital inputs	Yes
between the channels, in groups of	16
between the channels and backplane bus	Yes
Potential separation digital outputs	
• •	V
Potential separation digital outputs	Yes
 Potential separation digital outputs between the channels, in groups of 	8
Potential separation digital outputs	
 Potential separation digital outputs between the channels, in groups of between the channels and backplane bus Configuration	8
 Potential separation digital outputs between the channels, in groups of between the channels and backplane bus Configuration Configuration software	8 Yes
 Potential separation digital outputs between the channels, in groups of between the channels and backplane bus Configuration Configuration software STEP 7 	8
 Potential separation digital outputs between the channels, in groups of between the channels and backplane bus Configuration Configuration software STEP 7 Programming 	8 Yes Yes; V5.1 SP2
Potential separation digital outputs between the channels, in groups of between the channels and backplane bus Configuration Configuration software STEP 7 Programming Command set	8 Yes Yes; V5.1 SP2 see instruction list
 Potential separation digital outputs between the channels, in groups of between the channels and backplane bus Configuration Configuration software STEP 7 Programming Command set Nesting levels 	8 Yes Yes; V5.1 SP2 see instruction list 8
 Potential separation digital outputs between the channels, in groups of between the channels and backplane bus Configuration Configuration software STEP 7 Programming Command set Nesting levels System functions (SFC) 	8 Yes Yes; V5.1 SP2 see instruction list 8 see instruction list
Potential separation digital outputs between the channels, in groups of between the channels and backplane bus Configuration Configuration software STEP 7 Programming Command set Nesting levels System functions (SFC) System function blocks (SFB)	8 Yes Yes; V5.1 SP2 see instruction list 8
 Potential separation digital outputs between the channels, in groups of between the channels and backplane bus Configuration Configuration software STEP 7 Programming Command set Nesting levels System functions (SFC) System function blocks (SFB) Programming language 	Yes; V5.1 SP2 see instruction list 8 see instruction list see instruction list
Potential separation digital outputs between the channels, in groups of between the channels and backplane bus Configuration Configuration software STEP 7 Programming Command set Nesting levels System functions (SFC) System function blocks (SFB)	8 Yes Yes; V5.1 SP2 see instruction list 8 see instruction list

— STL	Yes
— SCL	Yes
— GRAPH	Yes
— HiGraph®	Yes
Know-how protection	
User program protection/password protection	Yes
Dimensions	
Width	120 mm
Height	125 mm
Depth	130 mm
Weights	
Weight, approx.	566 g
last modified:	03/03/2020