## **SIEMENS**

## **Data sheet**

## 6ES7414-2XK05-0AB0



\*\*\*\*\*\*\*\*\*\* Replacement part \*\*\*\*\*\*\*\*\* SIMATIC S7-400, CPU 414-2 Central processing unit with: work memory 1 MB, (0.5 MB code, 0.5 MB data), 1st interface MPI/DP 12 Mbit/s, 2nd interface PROFIBUS DP

Figure similar

Product type designation Product function  Indicates the product function  Suschronous mode Signification Programming package Programming package STEP 7 V5.3 SP2 or higher with HW update  STEP 1 V5 STEP 1	General information	
Product function  ● Isochronous mode  Programming package  STEP 7 V5.3 SP2 or higher with HW update  CIR - Configuration in RUN  CIR synchronization time, basic load  CIR synchronization time, time per I/O byte  Supply voltage  Rated value (DC)  Power supply via system power supply  Input current  from backplane bus 5 V DC, typ.  from backplane bus 5 V DC, max.  from backplane bus 5 V DC, max.  from backplane bus 2 V DC, max.  90 mA; 150 mA per DP interface  Power loss,  From interface 5 V DC, max.  90 mA; At each DP interface  Power loss, typ.  Power loss, typ.  Power loss, max.  5 W  Memory  Type of memory  ● integrated (for drata)  ● integrated (for drata)  ● expandable FEPROM  ● expandable FEPROM, max.  ● expandable FEPROM, max.  ● expandable FEPROM, max.  ● expandable RAM, max.  ● 64 Mbyte		CPU 414-2
• Isochronous mode  Programming package  ©R - Configuration in RUN  CIR synchronization time, basic load  CIR synchronization time, basic load  CIR synchronization time, time per I/O byte  Supply voltage  Rated value (DC)  Power supply via system power supply  Input current  If rom backplane bus 5 ∨ DC, typ.  If rom backplane bus 5 ∨ DC, max.  If nom backplane bus 24 ∨ DC, max.  If rom backplane bus 24 ∨ DC, max.  If rom interface 5 ∨ DC, max.  Power loss  Power loss, typ.  Power loss, typ.  Power loss, max.   Memory  Type of memory  Volve memory  • integrated (for program)  • integrated (for program)  • integrated (for data)  • expandable FEPROM  • expandable FEPROM, max.  • expandable FEPROM, max.  • expandable FEPROM, max.  • expandable FAMM, max.  • expandable RAM, max.		0.02
Engineering with  ● Programming package  CIR - Configuration in RUN  CIR synchronization time, basic load  CIR synchronization time, time per I/O byte  15 µs  Supply voltage  Rated value (DC)  Input current  from backplane bus 5 ∨ DC, typ.  from backplane bus 5 ∨ DC, max.  from backplane bus 2 ∨ DC, max.  from backplane bus 2 ∨ DC, max.  90 mA; 150 mA per DP interface  Fower loss, YD.  Power loss, YD.  Power loss, Typ.  Power loss, max.  5 W  Memory  Type of memory  ● integrated (for drata)  ● expandable (for drad)  ● expandable FEPROM  ● expandable FEPROM  ● expandable FEPROM  ● expandable FEPROM  • expandable FEPROM  • expandable FEPROM  • expandable FEAM  • expandable RAM, max.		Yes: For PROFIBUS only
• Programming package  CIR - Configuration in RUN  CIR synchronization time, basic load  CIR synchronization time, time per I/O byte  15 µs  Supply voltage  Rated value (DC)  Input current  from backplane bus 5 ∨ DC, typ.  from backplane bus 5 ∨ DC, max.  from backplane bus 24 ∨ DC, max.  from backplane bus 24 ∨ DC, max.  from backplane bus 24 ∨ DC, max.  90 mA; At each DP interface  Power loss, typ.  Power loss, typ.  Power loss, max.  Memory  Type of memory  • integrated (for program)  • integrated (for program)  • integrated (for data)  • expandable FEPROM  • expandable FEPROM, max.  • expandable RAM, max.	Engineering with	
CiR - Configuration in RUN  CiR synchronization time, basic load  CiR synchronization time, time per I/O byte  Supply voltage  Rated value (DC)  Power supply via system power supply  Input current  from backplane bus 5 V DC, typ.  from backplane bus 5 V DC, max.  from backplane bus 24 V DC, max.  from backplane bus 24 V DC, max.  from interface 5 V DC, max.  90 mA; At each DP interface  Power loss  Power loss, typ.  Power loss, max.  5 W  Memory  Type of memory  Work memory  integrated (for program)  integrated (for data)  integrated (for data)  expandable FEPROM  expandable FEPROM  expandable FEPROM, max.  integrated RAM, max.  from backplane bus 5 V DC, max.  1.1 A  1.1 A  1.1 A  1.5 W  90 mA; At each DP interface  90 mA; At each		STEP 7 V5.3 SP2 or higher with HW update
CiR synchronization time, time per I/O byte  Supply voltage  Rated value (DC) Input current  from backplane bus 5 V DC, typ. from backplane bus 5 V DC, max. from backplane bus 2 V DC, max.  90 mA; 150 mA per DP interface  power loss Power loss, typ. Power loss, typ. Power loss, max.  5 W  Memory  Type of memory  integrated (for program) integrated (for program) integrated (for data) integrated (for data) expandable  Load memory  expandable FEPROM expandable FEPROM, max. integrated RAM, max. integrated RAM, max. expandable RAM expandable RAM, max.  64 Mbyte		
Rated value (DC) Power supply via system power supply  Input current from backplane bus 5 V DC, typ. from backplane bus 5 V DC, max. from backplane bus 24 V DC, max. from backplane bus 24 V DC, max. 300 mA; 150 mA per DP interface from interface 5 V DC, max.  Power loss Power loss, typ. Power loss, max.  5 W  Memory Type of memory  integrated integrated (for program) integrated (for data) integrated (for data) integrated (for data) expandable EPROM expandable FEPROM, max. integrated RAM, max. expandable RAM expandable RAM expandable RAM, max.  64 Mbyte expandable RAM expandable RAM, max. 64 Mbyte	CiR synchronization time, basic load	100 ms
Rated value (DC)  Input current  from backplane bus 5 V DC, typ.  from backplane bus 5 V DC, max.  from backplane bus 24 V DC, max.  from interface 5 V DC, max.  Power loss  Power loss, typ.  Power loss, max.   ### Memory  Integrated (for program)  integrated (for data)  integrated (for data)  expandable FEPROM  expandable FEPROM, max.  Fower loss, wax.  Power loss, wax.  Power loss, max.  #### August	CiR synchronization time, time per I/O byte	15 µs
Input current  from backplane bus 5 V DC, typ. from backplane bus 5 V DC, max. from backplane bus 24 V DC, max.  from backplane bus 24 V DC, max.  from interface 5 V DC, max.  90 mA; At each DP interface  Power loss  Power loss, typ. Power loss, max.  5 W  Memory  Type of memory  • integrated (for program) • integrated (for data) • expandable • expandable Load memory  • expandable FEPROM • expandable FEPROM, max. • expandable RAM, max. • expandable RAM • expandable RAM, max. • 64 Mbyte	Supply voltage	
from backplane bus 5 V DC, typ.  from backplane bus 5 V DC, max.  from backplane bus 24 V DC, max.  from backplane bus 24 V DC, max.  from interface 5 V DC, max.  90 mA; At each DP interface  Power loss  Power loss, typ.  Power loss, max.  5 W  Memory  Type of memory  • integrated (for program) • integrated (for data) • integrated (for data) • expandable • expandable  Load memory  • expandable FEPROM • expandable FEPROM, max. • expandable RAM, max. • expandable RAM • expandable RAM, max.  64 Mbyte • expandable RAM • expandable RAM, max.  64 Mbyte	Rated value (DC)	Power supply via system power supply
from backplane bus 5 V DC, max.  from backplane bus 24 V DC, max.  from interface 5 V DC, max.  Power loss  Power loss, typ.  Power loss, max.   **Power loss, max.**  **Power loss, typ.  **Power los, typ.  **Power loss, ty	Input current	
from backplane bus 24 V DC, max.  from interface 5 V DC, max.  Power loss  Power loss, typ. Power loss, max.  5 W  Memory  Type of memory  integrated integrated (for program) integrated (for data) expandable FEPROM expandable FEPROM, max.  integrated RAM, max.	from backplane bus 5 V DC, typ.	0.9 A
from interface 5 V DC, max.  Power loss  Power loss, typ.  Power loss, max.  5 W  Memory  Type of memory  integrated  integrated (for program)  integrated (for data)  expandable  Value  Expandable FEPROM  expandable FEPROM, max.  integrated RAM, max.  integrated RAM, max.  expandable RAM  expandable RAM  expandable RAM  expandable RAM  expandable RAM  expandable RAM, max.  64 Mbyte	from backplane bus 5 V DC, max.	1.1 A
Power loss Power loss, typ. 4.5 W Power loss, max. 5 W  Memory  Type of memory RAM  Work memory  integrated 1 Mbyte integrated (for program) 0.5 Mbyte integrated (for data) 0.5 Mbyte expandable No  Load memory  expandable FEPROM Yes; with Memory Card (FLASH) expandable FEPROM, max. 64 Mbyte integrated RAM, max. 512 kbyte expandable RAM expandable RAM expandable RAM, max. 64 Mbyte	from backplane bus 24 V DC, max.	300 mA; 150 mA per DP interface
Power loss, typ.  Power loss, max.  5 W  Memory  Type of memory  integrated  integrated (for program)  integrated (for data)  expandable  expandable  Power loss, typ.  4.5 W  5 W  Memory  RAM  AM  O.5 Mbyte  O.5 Mbyte  No  Load memory  expandable FEPROM  expandable FEPROM  integrated (FLASH)  expandable FEPROM, max.  integrated RAM, max.  expandable RAM  expandable RAM  expandable RAM, max.  64 Mbyte	from interface 5 V DC, max.	90 mA; At each DP interface
Power loss, max.    S W	Power loss	
Type of memory  RAM  Work memory  integrated  integrated (for program)  integrated (for data)  expandable  Load memory  expandable FEPROM  expandable FEPROM, max.  integrated RAM, max.  expandable RAM  expandable RAM, max.  for integrated RAM, max.  fo	Power loss, typ.	4.5 W
Type of memory  Work memory  integrated  integrated (for program)  integrated (for data)  expandable  No  Load memory  expandable FEPROM  expandable FEPROM, max.  integrated RAM, max.  expandable RAM  expandable RAM  expandable RAM, max.  64 Mbyte  Yes; with Memory Card (FLASH)  Yes; with Memory Card (FLASH)  64 Mbyte	Power loss, max.	5 W
Work memory  integrated integrated (for program) integrated (for data) integrated (for data) expandable  No  Load memory expandable FEPROM expandable FEPROM, max. integrated RAM, max. expandable RAM expandable RAM expandable RAM, max.  full Mbyte  1 Mbyte  0.5 Mbyte  No  Yes; with Memory Card (FLASH)  64 Mbyte  512 kbyte  Yes; with Memory Card (RAM)  64 Mbyte	Memory	
<ul> <li>integrated</li> <li>integrated (for program)</li> <li>integrated (for data)</li> <li>expandable</li> <li>Load memory</li> <li>expandable FEPROM</li> <li>expandable FEPROM, max.</li> <li>integrated RAM, max.</li> <li>expandable RAM</li> <li>expandable RAM, max.</li> <li>expandable RAM, max.</li> <li>expandable RAM, max.</li> <li>expandable RAM, max.</li> <li>for data (public data)</li> <li>d. Mbyte</li> <li>for data)</li> <li>for data)<td>Type of memory</td><td>RAM</td></li></ul>	Type of memory	RAM
<ul> <li>integrated (for program)</li> <li>integrated (for data)</li> <li>expandable</li> <li>No</li> </ul> Load memory <ul> <li>expandable FEPROM</li> <li>expandable FEPROM, max.</li> <li>expandable FEPROM, max.</li> <li>integrated RAM, max.</li> <li>expandable RAM</li> <li>expandable RAM</li> <li>expandable RAM, max.</li> </ul> Yes; with Memory Card (FLASH) <ul> <li>64 Mbyte</li> </ul> Yes; with Memory Card (RAM) <ul> <li>expandable RAM, max.</li> <li>64 Mbyte</li> </ul>	Work memory	
<ul> <li>integrated (for data)</li> <li>expandable</li> <li>No</li> </ul> Load memory <ul> <li>expandable FEPROM</li> <li>expandable FEPROM, max.</li> <li>integrated RAM, max.</li> <li>expandable RAM</li> <li>expandable RAM, max.</li> </ul> Yes; with Memory Card (FLASH) <ul> <li>64 Mbyte</li> <li>expandable RAM</li> <li>expandable RAM</li> <li>expandable RAM, max.</li> <li>64 Mbyte</li> </ul> Yes; with Memory Card (RAM) <ul> <li>expandable RAM, max.</li> <li>64 Mbyte</li> </ul>	<ul><li>integrated</li></ul>	1 Mbyte
<ul> <li>expandable</li> <li>Load memory</li> <li>expandable FEPROM</li> <li>expandable FEPROM, max.</li> <li>integrated RAM, max.</li> <li>expandable RAM</li> <li>expandable RAM, max.</li> <li>expandable RAM, max.</li> <li>expandable RAM, max.</li> <li>for the property of the property</li></ul>	<ul><li>integrated (for program)</li></ul>	0.5 Mbyte
Load memory  • expandable FEPROM  • expandable FEPROM, max.  • integrated RAM, max.  • expandable RAM  • expandable RAM  • expandable RAM, max.  • the state of t	<ul><li>integrated (for data)</li></ul>	0.5 Mbyte
<ul> <li>expandable FEPROM</li> <li>expandable FEPROM, max.</li> <li>integrated RAM, max.</li> <li>expandable RAM</li> <li>expandable RAM</li> <li>expandable RAM, max.</li> <li>expandable RAM, max.</li> <li>64 Mbyte</li> <li>Yes; with Memory Card (RAM)</li> <li>expandable RAM, max.</li> <li>64 Mbyte</li> </ul>	expandable	No
<ul> <li>expandable FEPROM, max.</li> <li>integrated RAM, max.</li> <li>expandable RAM</li> <li>expandable RAM, max.</li> <li>expandable RAM, max.</li> <li>64 Mbyte</li> <li>64 Mbyte</li> </ul>	Load memory	
<ul> <li>integrated RAM, max.</li> <li>expandable RAM</li> <li>expandable RAM, max.</li> <li>64 Mbyte</li> </ul>	<ul> <li>expandable FEPROM</li> </ul>	Yes; with Memory Card (FLASH)
<ul> <li>expandable RAM</li> <li>expandable RAM, max.</li> </ul> Yes; with Memory Card (RAM) 64 Mbyte	<ul> <li>expandable FEPROM, max.</li> </ul>	64 Mbyte
• expandable RAM, max. 64 Mbyte	<ul><li>integrated RAM, max.</li></ul>	512 kbyte
	<ul> <li>expandable RAM</li> </ul>	Yes; with Memory Card (RAM)
	expandable RAM, max.	64 Mbyte
васкир	Backup	
• present Yes	• present	Yes
• with battery Yes; all data	<ul><li>with battery</li></ul>	Yes; all data
• without battery No	<ul><li>without battery</li></ul>	No

attery	
Backup battery	
<ul> <li>Backup current, typ.</li> </ul>	125 μA; up to 40 °C
<ul> <li>Backup current, max.</li> </ul>	550 μA
<ul> <li>Backup time, max.</li> </ul>	See reference manual, module data, Chapter 3.3
<ul> <li>Feeding of external backup voltage to CPU</li> </ul>	5 V DC to 15 V DC
PU processing times	
for bit operations, typ.	45 ns
for word operations, typ.	45 ns
for fixed point arithmetic, typ.	45 ns
for floating point arithmetic, typ.	135 ns
PU-blocks	100 110
DB	
	6 000: Number range: 1 to 16000
Number, max.     Size may.	6 000; Number range: 1 to 16000
• Size, max.	64 kbyte
FB	0.000 N. J. 2000
Number, max.	3 000; Number range: 0 to 7999
• Size, max.	64 kbyte
FC Number requi	2 000) Number reason 0 to 7000
Number, max.	3 000; Number range: 0 to 7999
• Size, max.	64 kbyte
OB	
Number, max.	see instruction list
• Size, max.	64 kbyte
Number of free cycle OBs	1; OB 1
<ul> <li>Number of time alarm OBs</li> </ul>	4; OB 10-13
<ul> <li>Number of delay alarm OBs</li> </ul>	4; OB 20-23
<ul> <li>Number of cyclic interrupt OBs</li> </ul>	4; OB 32-35 (shortest cycle that can be set = $500 \mu s$ )
<ul> <li>Number of process alarm OBs</li> </ul>	4; OB 40-43
<ul> <li>Number of DPV1 alarm OBs</li> </ul>	3; OB 55-57
<ul> <li>Number of isochronous mode OBs</li> </ul>	3; OB 61-63
<ul> <li>Number of multicomputing OBs</li> </ul>	1; OB 60
<ul> <li>Number of background OBs</li> </ul>	1; OB 90
<ul> <li>Number of startup OBs</li> </ul>	3; OB 100-102
<ul> <li>Number of asynchronous error OBs</li> </ul>	9; OB 80-88
<ul> <li>Number of synchronous error OBs</li> </ul>	2; OB 121, 122
Nesting depth	
<ul> <li>per priority class</li> </ul>	24
<ul> <li>additional within an error OB</li> </ul>	1
ounters, timers and their retentivity	
S7 counter	
Number	2 048
Retentivity	
— adjustable	Yes
— lower limit	0
— upper limit	2 047
— preset	Z 0 to Z 7
Counting range	23021
— lower limit	0
— upper limit	999
— upper limit IEC counter	<del></del>
	Voc
• present	Yes
• Type	SFB
Number	Unlimited (limited only by RAM capacity)
S7 times	
Number	2 048
Retentivity	
— adjustable	Yes

— lower limit	0
— upper limit	2 047
— preset	No times retentive
Time range	
— lower limit	10 ms
— upper limit	9 990 s
IEC timer	
<ul><li>present</li></ul>	Yes
• Type	SFB
Number	Unlimited (limited only by RAM capacity)
Data areas and their retentivity	
Retentive data area (incl. timers, counters, flags), max.	Total working and load memory (with backup battery)
Flag	
• Size, max.	8 kbyte; Size of bit memory address area
<ul> <li>Retentivity available</li> </ul>	Yes
<ul> <li>Retentivity preset</li> </ul>	MB 0 to MB 15
Number of clock memories	8; in 1 memory byte
Local data	
<ul> <li>adjustable, max.</li> </ul>	16 kbyte
• preset	8 kbyte
Address area	
I/O address area	
Inputs	8 kbyte
Outputs	8 kbyte
Process image	
Inputs, adjustable	8 kbyte
Outputs, adjustable	8 kbyte
Inputs, default	256 byte
Outputs, default	256 byte
consistent data, max.	244 byte
Access to consistent data in process image	Yes
Subprocess images	
Number of subprocess images, max.	15
Digital channels	
Inputs	65 536
— of which central	65 536
<ul> <li>Outputs</li> </ul>	65 536
— of which central	65 536
Analog channels	
Inputs	4 096
— of which central	4 096
<ul><li>Outputs</li></ul>	4 096
of which central	4 096
Hardware configuration	
Integrated power supply	No
Number of expansion units, max.	21
Multicomputing	Yes; 4 CPUs max. (with UR1 or UR2)
Interface modules	. 33, . 31 33 max (mai off of off2)
Number of connectable IMs (total), max.	6
Number of connectable IM 460s, max.	6
Number of connectable IM 463s, max.	4; IM 463-2
Number of DP masters	1, III 100-2
integrated	2
Integrated     via CP	
	10; CP 443-5 Extended 4
<ul> <li>Mixed mode IM + CP permitted</li> </ul>	No; IM 467 not suitable for use with CP 443-5 Ext. and CP 443-1 EX4x, EX20, GX20 (in PROFINET IO mode)
via interface module	0
- The Internation Highligh	

Number of pluggable S5 modules (via adapter	6
capsule in central device), max.	
Number of IO Controllers	
<ul><li>integrated</li></ul>	0
• via CP	4; No mixed operation of CP443-1 EX40 and CP443-1 EX 41/EX20/GX20, max. 4 in central controller
Number of operable FMs and CPs (recommended)	
• FM	Limited by number of slots and number of connections
• CP, PtP	CP 440: Limited by number of slots; CP 441: limited by number of connections
PROFIBUS and Ethernet CPs	14; Of which 10 CPs max. or IMs as DP master, 4 PROFINET controller maximum
Slots	
required slots	1
Time of day	
Clock	
<ul> <li>Hardware clock (real-time)</li> </ul>	Yes
<ul> <li>retentive and synchronizable</li> </ul>	Yes
<ul> <li>Resolution</li> </ul>	1 ms
<ul> <li>Deviation per day (buffered), max.</li> </ul>	1.7 s; Power off
<ul> <li>Deviation per day (unbuffered), max.</li> </ul>	8.6 s; For power On
Operating hours counter	
Number	16
Number/Number range	0 to 15
Range of values	SFCs 2, 3 and 4: 0 to 32767 hours SFC 101: 0 to 2^31 - 1 hours
Granularity	1 h
• retentive	Yes
Clock synchronization	1.00
• supported	Yes
• to MPI, master	Yes
• to MPI, slave	Yes
• to DP, master	Yes
• to DP, slave	Yes
• in AS, master	Yes
• in AS, slave	Yes
on Ethernet via NTP	No; Via CP
Time difference in system when synchronizing via	NO, VIA OF
MPI, max.	200 ms
Interfaces	200 1113
	4. MDVDDGEIDUG DD. 4. DDGEIDUG DD.
Interfaces/bus type	1 x MPI/PROFIBUS DP, 1 x PROFIBUS DP
Number of RS 485 interfaces	2; Combined MPI / PROFIBUS DP and PROFIBUS DP
Optical interface	No
1. Interface	
Interface type	MPI/PROFIBUS DP
Isolated	Yes
Interface types	
• RS 485	Yes
Output current of the interface, max.	150 mA
Protocols	
• MPI	Yes
PROFIBUS DP master	Yes
PROFIBUS DP slave	Yes
MPI	
Number of connections	32; If a diagnostics repeater is used on the line, the number of connection resources on the line is reduced by 1
Transmission rate, max.	12 Mbit/s
Services	
— PG/OP communication	Yes
— Routing	Yes

<ul> <li>Global data communication</li> </ul>	Yes
<ul> <li>S7 basic communication</li> </ul>	Yes
— S7 communication	Yes
<ul> <li>S7 communication, as client</li> </ul>	Yes
<ul> <li>S7 communication, as server</li> </ul>	Yes
PROFIBUS DP master	
Number of connections, max.	16; If a diagnostics repeater is used on the line, the number of connection resources on the line is reduced by 1
<ul> <li>Transmission rate, max.</li> </ul>	12 Mbit/s
<ul> <li>Number of DP slaves, max.</li> </ul>	32
Services	
— PG/OP communication	Yes
— Routing	Yes; S7 routing
<ul> <li>Global data communication</li> </ul>	No
<ul> <li>S7 basic communication</li> </ul>	Yes
— S7 communication	Yes
<ul> <li>S7 communication, as client</li> </ul>	Yes
<ul> <li>S7 communication, as server</li> </ul>	Yes
— Equidistance	Yes
— Isochronous mode	Yes
— SYNC/FREEZE	Yes
Activation/deactivation of DP slaves	Yes
Direct data exchange (slave-to-slave)	Yes
communication)	
— DPV1	Yes
Address area	
— Inputs, max.	2 kbyte
— Outputs, max.	2 kbyte
User data per DP slave	
— User data per DP slave, max.	244 byte
— Inputs, max.	244 byte
— Outputs, max.	244 byte
— Slots, max.	244
— per slot, max.	128 byte
PROFIBUS DP slave	
Number of connections	16
• GSD file	http://support.automation.siemens.com/WW/view/en/113652
Transmission rate, max.	12 Mbit/s
automatic baud rate search	
- automatic bada rate scalon	No
Address area, max.	No 32; Virtual slots
Address area, max.	32; Virtual slots
<ul><li>Address area, max.</li><li>User data per address area, max.</li></ul>	32; Virtual slots 32 byte
Address area, max.	32; Virtual slots
<ul> <li>Address area, max.</li> <li>User data per address area, max.</li> <li>— of which consistent, max.</li> </ul>	32; Virtual slots 32 byte 32 byte
<ul> <li>Address area, max.</li> <li>User data per address area, max.</li> <li>— of which consistent, max.</li> <li>Services</li> <li>— PG/OP communication</li> </ul>	32; Virtual slots 32 byte 32 byte Yes; with interface active
<ul> <li>Address area, max.</li> <li>User data per address area, max.</li> <li>— of which consistent, max.</li> <li>Services</li> </ul>	32; Virtual slots 32 byte 32 byte
<ul> <li>Address area, max.</li> <li>User data per address area, max.         <ul> <li>of which consistent, max.</li> </ul> </li> <li>Services         <ul> <li>PG/OP communication</li> <li>Routing</li> <li>Global data communication</li> </ul> </li> </ul>	32; Virtual slots 32 byte 32 byte  Yes; with interface active Yes; with interface active No
<ul> <li>Address area, max.</li> <li>User data per address area, max.         <ul> <li>of which consistent, max.</li> </ul> </li> <li>Services         <ul> <li>PG/OP communication</li> <li>Routing</li> <li>Global data communication</li> <li>S7 basic communication</li> </ul> </li> </ul>	32; Virtual slots 32 byte 32 byte  Yes; with interface active Yes; with interface active No No
<ul> <li>Address area, max.</li> <li>User data per address area, max.         <ul> <li>of which consistent, max.</li> </ul> </li> <li>Services         <ul> <li>PG/OP communication</li> <li>Routing</li> <li>Global data communication</li> <li>S7 basic communication</li> <li>S7 communication</li> </ul> </li> </ul>	32; Virtual slots 32 byte 32 byte  Yes; with interface active Yes; with interface active No
<ul> <li>Address area, max.</li> <li>User data per address area, max.  — of which consistent, max.</li> <li>Services</li> <li>— PG/OP communication</li> <li>— Routing</li> <li>— Global data communication</li> <li>— S7 basic communication</li> <li>— S7 communication</li> <li>— S7 communication, as client</li> </ul>	32; Virtual slots 32 byte 32 byte  Yes; with interface active Yes; with interface active No No No Yes Yes
<ul> <li>Address area, max.</li> <li>User data per address area, max.  — of which consistent, max.</li> <li>Services</li> <li>— PG/OP communication</li> <li>— Routing</li> <li>— Global data communication</li> <li>— S7 basic communication</li> <li>— S7 communication</li> <li>— S7 communication, as client</li> <li>— S7 communication, as server</li> </ul>	32; Virtual slots 32 byte 32 byte  Yes; with interface active Yes; with interface active No No Yes Yes Yes
<ul> <li>Address area, max.</li> <li>User data per address area, max.  — of which consistent, max.</li> <li>Services</li> <li>— PG/OP communication</li> <li>— Routing</li> <li>— Global data communication</li> <li>— S7 basic communication</li> <li>— S7 communication</li> <li>— S7 communication, as client</li> </ul>	32; Virtual slots 32 byte 32 byte  Yes; with interface active Yes; with interface active No No Yes Yes
<ul> <li>Address area, max.</li> <li>User data per address area, max.  — of which consistent, max.</li> <li>Services</li> <li>— PG/OP communication</li> <li>— Routing</li> <li>— Global data communication</li> <li>— S7 basic communication</li> <li>— S7 communication</li> <li>— S7 communication, as client</li> <li>— S7 communication, as server</li> <li>— Direct data exchange (slave-to-slave)</li> </ul>	32; Virtual slots 32 byte 32 byte  Yes; with interface active Yes; with interface active No No Yes Yes Yes
<ul> <li>Address area, max.</li> <li>User data per address area, max.         <ul> <li>of which consistent, max.</li> </ul> </li> <li>Services         <ul> <li>PG/OP communication</li> <li>Routing</li> <li>Global data communication</li> <li>S7 basic communication</li> <li>S7 communication</li> <li>S7 communication, as client</li> <li>S7 communication, as server</li> <li>Direct data exchange (slave-to-slave communication)</li> </ul> </li> </ul>	32; Virtual slots 32 byte 32 byte  Yes; with interface active Yes; with interface active No No Yes Yes Yes Yes No
Address area, max.  User data per address area, max.  — of which consistent, max.  Services  — PG/OP communication  — Routing  — Global data communication  — S7 basic communication  — S7 communication  — S7 communication  — S7 communication, as client  — S7 communication, as server  — Direct data exchange (slave-to-slave communication)  — DPV1  Transfer memory	32; Virtual slots 32 byte 32 byte  Yes; with interface active Yes; with interface active No No Yes Yes Yes Yes No No No
<ul> <li>Address area, max.</li> <li>User data per address area, max.  — of which consistent, max.</li> <li>Services</li> <li>— PG/OP communication</li> <li>— Routing</li> <li>— Global data communication</li> <li>— S7 basic communication</li> <li>— S7 communication</li> <li>— S7 communication</li> <li>— S7 communication, as client</li> <li>— S7 communication, as server</li> <li>— Direct data exchange (slave-to-slave communication)</li> <li>— DPV1</li> </ul>	32; Virtual slots 32 byte 32 byte  Yes; with interface active Yes; with interface active No No Yes Yes Yes Yes No
<ul> <li>Address area, max.</li> <li>User data per address area, max.  — of which consistent, max.</li> <li>Services</li> <li>— PG/OP communication</li> <li>— Routing</li> <li>— Global data communication</li> <li>— S7 basic communication</li> <li>— S7 communication</li> <li>— S7 communication</li> <li>— S7 communication, as client</li> <li>— S7 communication, as server</li> <li>— Direct data exchange (slave-to-slave communication)</li> <li>— DPV1</li> <li>Transfer memory</li> <li>— Inputs</li> <li>— Outputs</li> </ul>	32; Virtual slots 32 byte 32 byte  Yes; with interface active Yes; with interface active No No Yes Yes Yes Yes Yes Yes About 100 About 1
Address area, max.  User data per address area, max.  — of which consistent, max.  Services  — PG/OP communication  — Routing  — Global data communication  — S7 basic communication  — S7 communication  — S7 communication  — S7 communication, as client  — S7 communication, as server  — Direct data exchange (slave-to-slave communication)  — DPV1  Transfer memory  — Inputs  — Outputs  2. Interface	32; Virtual slots 32 byte  Yes; with interface active Yes; with interface active No No Yes Yes Yes Yes Yes Yes Ao No No No No
<ul> <li>Address area, max.</li> <li>User data per address area, max.  — of which consistent, max.</li> <li>Services</li> <li>— PG/OP communication</li> <li>— Routing</li> <li>— Global data communication</li> <li>— S7 basic communication</li> <li>— S7 communication</li> <li>— S7 communication</li> <li>— S7 communication, as client</li> <li>— S7 communication, as server</li> <li>— Direct data exchange (slave-to-slave communication)</li> <li>— DPV1</li> <li>Transfer memory</li> <li>— Inputs</li> <li>— Outputs</li> </ul>	32; Virtual slots 32 byte 32 byte  Yes; with interface active Yes; with interface active No No Yes Yes Yes Yes Yes Yes About 100 About 1

Interface types	
RS 485	Yes
	Yes 150 mA
Output current of the interface, max.  Protocols	130 IIIA
PROFIBUS DP master	Yes
PROFIBUS DP slave	Yes
PROFIBUS DP master	165
Number of connections, max.	16
Transmission rate, max.	12 Mbit/s
Number of DP slaves, max.	96
Services	30
— PG/OP communication	Yes
— Routing	Yes; S7 routing
Global data communication	No
S7 basic communication	Yes
— S7 communication  — S7 communication	Yes
— S7 communication, as client	Yes
— S7 communication, as server	Yes
— Equidistance	Yes
Equidistance     Isochronous mode	Yes
— SYNC/FREEZE	Yes
Activation/deactivation of DP slaves	Yes
Direct data exchange (slave-to-slave)	Yes
communication)	163
— DPV1	Yes
Address area	
— Inputs, max.	6 kbyte
— Outputs, max.	6 kbyte
User data per DP slave	·
— User data per DP slave, max.	244 byte
— Inputs, max.	244 byte
— Outputs, max.	244 byte
— Slots, max.	244
— per slot, max.	128 byte
PROFIBUS DP slave	
Number of connections	16
GSD file	http://support.automation.siemens.com/WW/view/en/113652
Transmission rate, max.	12 Mbit/s
<ul> <li>Address area, max.</li> </ul>	32
<ul> <li>User data per address area, max.</li> </ul>	32 byte
<ul><li>of which consistent, max.</li></ul>	32 byte
Services	
— Routing	Yes
Transfer memory	
— Inputs	244 byte
— Outputs	244 byte
Protocols	
SIMATIC communication	
S7 routing	Yes
Open IE communication	
• ISO-on-TCP (RFC1006)	Via CP 443-1 and loadable FB
— Data length, max.	1 452 bytes via CP 443-1 Adv.
Web server	
• supported	No
Isochronous mode	
Equidistance	Yes
Number of DP masters with isochronous mode	2
User data per isochronous slave, max.	244 byte
and per reconstructed diare, man.	_ · · ~ / · ·

shortest clock pulse	1 ms; 0.5 ms without use of SFC 126, 127
max. cycle	32 ms
Communication functions	
PG/OP communication	Yes
Number of connectable OPs without message	31
Number of connectable OPs with message	31; When using Alarm_S/SQ and Alarm_D/DQ
Processing  Data record routing	Yes
Data record routing  Global data communication	Tes
supported	Yes
Number of GD loops, max.	8
Number of GD packets, transmitter, max.	8
Number of GD packets, transmitter, max.     Number of GD packets, receiver, max.	16
Size of GD packets, max.	54 byte
	1 variable
Size of GD packet (of which consistent), max.  S7 basic communication	I variable
supported	Yes
<ul><li>User data per job, max.</li><li>User data per job (of which consistent), max.</li></ul>	76 byte 1 variable
S7 communication	1 variable
	Yes
• supported	Yes
as server     as a client	
as client	Yes
User data per job, max.  User data per job (of which consistent), may	64 kbyte
User data per job (of which consistent), max.  S5 compatible communication	462 byte; 1 variable
	Voc. Via EC AC SEND and AC DECV may via 10 CD 443 1 or 443 5
• supported	Yes; Via FC AG_SEND and AG_RECV, max. via 10 CP 443-1 or 443-5
User data per job, max.  User data per job (of which consistent), may	8 kbyte
<ul> <li>User data per job (of which consistent), max.</li> </ul>	240 byte
Standard communication (FMS)	Vec: Via CD and leadable EB
Standard communication (FMS)  • supported	Yes; Via CP and loadable FB
Standard communication (FMS)  • supported  Number of connections	
Standard communication (FMS)  • supported  Number of connections  • overall	32
Standard communication (FMS)  • supported  Number of connections  • overall  • usable for PG communication	
Standard communication (FMS)  • supported  Number of connections  • overall  • usable for PG communication  — reserved for PG communication	32 31 1
Standard communication (FMS)  • supported  Number of connections  • overall  • usable for PG communication  — reserved for PG communication  — adjustable for PG communication, max.	32 31 1 0
Standard communication (FMS)  • supported  Number of connections  • overall  • usable for PG communication  — reserved for PG communication  — adjustable for PG communication, max.  • usable for OP communication	32 31 1 0 31
Standard communication (FMS)  • supported  Number of connections  • overall  • usable for PG communication  — reserved for PG communication  — adjustable for PG communication, max.  • usable for OP communication  — reserved for OP communication	32 31 1 0 31
Standard communication (FMS)  • supported  Number of connections  • overall  • usable for PG communication  — reserved for PG communication  — adjustable for PG communication, max.  • usable for OP communication  — reserved for OP communication  — adjustable for OP communication  — adjustable for OP communication, max.	32 31 1 0 31 1
Standard communication (FMS)  • supported  Number of connections  • overall  • usable for PG communication  — reserved for PG communication  — adjustable for PG communication, max.  • usable for OP communication  — reserved for OP communication  — adjustable for OP communication  — adjustable for OP communication, max.  • usable for S7 basic communication	32 31 1 0 31 1 0 30
Standard communication (FMS)  • supported  Number of connections  • overall  • usable for PG communication  — reserved for PG communication  — adjustable for PG communication, max.  • usable for OP communication  — reserved for OP communication  — adjustable for OP communication  — adjustable for OP communication  — reserved for S7 basic communication  — reserved for S7 basic communication	32 31 1 0 31 1 0 30 0
Standard communication (FMS)  • supported  Number of connections  • overall  • usable for PG communication  — reserved for PG communication  — adjustable for PG communication, max.  • usable for OP communication  — reserved for OP communication  — adjustable for OP communication, max.  • usable for S7 basic communication  — reserved for S7 basic communication  — adjustable for S7 basic communication, max.	32 31 1 0 31 1 0 30 0
Standard communication (FMS)  • supported  Number of connections  • overall  • usable for PG communication  — reserved for PG communication  — adjustable for PG communication, max.  • usable for OP communication  — reserved for OP communication  — adjustable for OP communication, max.  • usable for S7 basic communication  — reserved for S7 basic communication  — reserved for S7 basic communication  — adjustable for S7 basic communication  — adjustable for S7 basic communication, max.  • usable for S7 communication	32 31 1 0 31 1 0 30 0 0
Standard communication (FMS)  • supported  Number of connections  • overall  • usable for PG communication  — reserved for PG communication  — adjustable for PG communication, max.  • usable for OP communication  — reserved for OP communication  — adjustable for OP communication  — adjustable for OP communication  — reserved for S7 basic communication  — reserved for S7 basic communication  — adjustable for S7 basic communication  — adjustable for S7 basic communication  — reserved for S7 communication  — reserved for S7 communication	32 31 1 0 31 1 1 0 30 0 0
Standard communication (FMS)  • supported  Number of connections  • overall  • usable for PG communication  — reserved for PG communication  — adjustable for PG communication, max.  • usable for OP communication  — reserved for OP communication  — adjustable for OP communication, max.  • usable for S7 basic communication  — reserved for S7 basic communication  — adjustable for S7 basic communication  — adjustable for S7 communication  — reserved for S7 communication  — reserved for S7 communication  — adjustable for S7 communication, max.	32 31 1 0 31 1 0 30 0 0 0 30 0
Standard communication (FMS)  • supported  Number of connections  • overall  • usable for PG communication  — reserved for PG communication  — adjustable for PG communication, max.  • usable for OP communication  — reserved for OP communication  — adjustable for OP communication, max.  • usable for S7 basic communication  — reserved for S7 basic communication  — adjustable for S7 basic communication  — adjustable for S7 communication  — reserved for S7 communication  — reserved for S7 communication  — adjustable for S7 communication  — adjustable for S7 communication  — adjustable for S7 communication, max.	32 31 1 0 31 1 0 30 0 0 0 0 30 0 0
Standard communication (FMS)  • supported  Number of connections  • overall  • usable for PG communication  — reserved for PG communication  — adjustable for PG communication, max.  • usable for OP communication  — reserved for OP communication  — adjustable for OP communication, max.  • usable for S7 basic communication  — reserved for S7 basic communication  — adjustable for S7 basic communication  — adjustable for S7 communication  — reserved for S7 communication  — reserved for S7 communication  — adjustable for S7 communication  — reserved for S7 communication, max.	32 31 1 0 31 1 0 30 0 0 0 0 0 0 0
Standard communication (FMS)  • supported  Number of connections  • overall  • usable for PG communication  — reserved for PG communication  — adjustable for PG communication, max.  • usable for OP communication  — reserved for OP communication  — adjustable for OP communication, max.  • usable for S7 basic communication  — reserved for S7 basic communication  — adjustable for S7 basic communication  — reserved for S7 communication  — adjustable for S7 communication  — reserved for S7 communication  — reserved for S7 communication  — adjustable for S7 communication, max.  • usable for routing  — reserved for routing  — adjustable for routing, max.	32 31 1 0 31 1 0 30 0 0 0 0 30 0 0
Standard communication (FMS)  • supported  Number of connections  • overall  • usable for PG communication  — reserved for PG communication  — adjustable for PG communication, max.  • usable for OP communication  — reserved for OP communication  — adjustable for OP communication, max.  • usable for S7 basic communication  — reserved for S7 basic communication  — adjustable for S7 basic communication  — adjustable for S7 communication  — reserved for S7 communication  — reserved for S7 communication  — adjustable for S7 communication, max.  • usable for routing  — reserved for routing  — adjustable for routing, max.  S7 message functions	32 31 1 0 31 1 0 30 0 0 0 0 0 0 15
Standard communication (FMS)  • supported  Number of connections  • overall  • usable for PG communication  — reserved for PG communication  — adjustable for PG communication, max.  • usable for OP communication  — reserved for OP communication  — adjustable for OP communication, max.  • usable for S7 basic communication  — reserved for S7 basic communication  — adjustable for S7 basic communication  — adjustable for S7 communication  — reserved for S7 communication  — reserved for S7 communication  — adjustable for S7 communication, max.  • usable for routing  — reserved for routing  — adjustable for routing, max.  S7 message functions  Number of login stations for message functions, max.	32 31 1 0 31 1 0 30 0 0 0 0 15 0 0 15 0 0 15 0 0 0 17 18 19 19 19 19 19 19 19 19 19 19 19 19 19
Standard communication (FMS)  • supported  Number of connections  • overall  • usable for PG communication  — reserved for PG communication  — adjustable for PG communication, max.  • usable for OP communication  — reserved for OP communication  — adjustable for OP communication, max.  • usable for S7 basic communication  — reserved for S7 basic communication  — adjustable for S7 basic communication  — adjustable for S7 communication  — reserved for S7 communication  — reserved for S7 communication  — adjustable for S7 communication, max.  • usable for routing  — reserved for routing  — adjustable for routing, max.  S7 message functions	32 31 1 0 31 1 0 30 0 0 0 0 15 0 0 15 0 0 0 17 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Standard communication (FMS)  • supported  Number of connections  • overall  • usable for PG communication  — reserved for PG communication  — adjustable for PG communication, max.  • usable for OP communication  — reserved for OP communication  — adjustable for OP communication, max.  • usable for S7 basic communication  — reserved for S7 basic communication  — adjustable for S7 basic communication  — adjustable for S7 communication  — reserved for S7 communication  — reserved for S7 communication  — adjustable for S7 communication, max.  • usable for routing  — reserved for routing  — adjustable for routing, max.  S7 message functions  Number of login stations for message functions, max.	32 31 1 0 31 1 0 30 0 0 0 0 15 0 0 15 0 0 15 0 0 0 17 18 19 19 19 19 19 19 19 19 19 19 19 19 19
Standard communication (FMS)  • supported  Number of connections  • overall  • usable for PG communication  — reserved for PG communication  — adjustable for PG communication, max.  • usable for OP communication  — reserved for OP communication  — adjustable for OP communication, max.  • usable for S7 basic communication  — reserved for S7 basic communication  — adjustable for S7 basic communication  — adjustable for S7 communication  — reserved for S7 communication  — reserved for S7 communication  — reserved for routing  — adjustable for routing  — adjustable for routing, max.  S7 message functions  Number of login stations for message functions, max.	32 31 1 0 31 1 0 30 0 0 0 0 15 0 0 15 0 0 15 0 Ves
Standard communication (FMS)  • supported  Number of connections  • overall  • usable for PG communication  — reserved for PG communication  — adjustable for PG communication, max.  • usable for OP communication  — reserved for OP communication  — adjustable for OP communication, max.  • usable for S7 basic communication  — reserved for S7 basic communication  — adjustable for S7 basic communication  — adjustable for S7 communication  — reserved for S7 communication  — reserved for S7 communication  — adjustable for S7 communication, max.  • usable for routing  — reserved for routing  — adjustable for routing, max.  S7 message functions  Number of login stations for message functions, max.  Symbol-related messages  SCAN procedure	32 31 1 0 31 1 0 30 0 0 0 0 0 15 0 0 0 15 0 0 Version of the state of
Standard communication (FMS)  • supported  Number of connections  • overall  • usable for PG communication  — reserved for PG communication, max.  • usable for OP communication  — reserved for OP communication  — reserved for OP communication  — adjustable for OP communication, max.  • usable for S7 basic communication  — reserved for S7 basic communication  — adjustable for S7 basic communication  — adjustable for S7 communication  — reserved for S7 communication  — reserved for S7 communication  — adjustable for S7 communication, max.  • usable for routing  — reserved for routing  — adjustable for routing, max.  S7 message functions  Number of login stations for message functions, max.  Symbol-related messages  SCAN procedure  Program alarms	32 31 1 0 31 1 0 30 0 0 0 0 0 15 0 0 0 15 0 Ves Yes Yes
Standard communication (FMS)  • supported  Number of connections  • overall  • usable for PG communication  — reserved for PG communication, max.  • usable for OP communication  — reserved for OP communication  — reserved for OP communication  — adjustable for OP communication, max.  • usable for S7 basic communication  — reserved for S7 basic communication  — adjustable for S7 basic communication  — adjustable for S7 communication  — reserved for S7 communication  — reserved for S7 communication  — adjustable for S7 communication  — adjustable for routing  — reserved for routing  — reserved for routing  — adjustable for routing, max.  S7 message functions  Number of login stations for message functions, max.  Symbol-related messages  SCAN procedure  Program alarms  Process diagnostic messages	32 31 1 0 31 1 0 30 0 0 0 0 15 0 0 0 15 0 yes Yes Yes Yes

communication blocks, may	
communication blocks, max.	300
preset, max.  Presess control messages	Yes
Process control messages  Number of archives that can log on simultaneously (SFB	16
37 AR_SEND)	10
Number of messages	
overall, max.	512
● in 100 ms grid, max.	128
● in 500 ms grid, max.	256
● in 1000 ms grid, max.	512
Number of additional values	
with 100 ms grid, max.	1
• with 500, 1000 ms grid, max.	10
Test commissioning functions	
Status block	Yes; Up to 2 simultaneously
Single step	Yes
Number of breakpoints	4
Status/control	
Status/control variable	Yes; Up to 16 variable tables
Variables	Inputs/outputs, memory bits, DBs, distributed I/Os, timers, counters
<ul> <li>Number of variables, max.</li> </ul>	70; Status/control
Forcing	
• Forcing	Yes
Forcing, variables	Inputs, outputs, bit memories, peripheral inputs, peripheral outputs
Number of variables, max.	256
Diagnostic buffer	
• present	Yes
<ul> <li>Number of entries, max.</li> </ul>	400
— adjustable	Yes
— preset	120
Service data	
• can be read out	Yes
Standards, approvals, certificates	
CE mark	Yes
CSA approval	Yes
UL approval	Yes
cULus	Yes
FM approval	
FIVI approval	Yes
	Yes Yes
RCM (formerly C-TICK)	Yes Yes Yes
RCM (formerly C-TICK) KC approval	Yes
RCM (formerly C-TICK) KC approval EAC (formerly Gost-R)	Yes Yes
RCM (formerly C-TICK) KC approval	Yes Yes
RCM (formerly C-TICK) KC approval EAC (formerly Gost-R) Use in hazardous areas  • ATEX	Yes Yes Yes
RCM (formerly C-TICK)  KC approval  EAC (formerly Gost-R)  Use in hazardous areas  • ATEX  Ambient conditions	Yes Yes Yes
RCM (formerly C-TICK)  KC approval  EAC (formerly Gost-R)  Use in hazardous areas  • ATEX  Ambient conditions  Ambient temperature during operation	Yes Yes Yes Yes ATEX II 3G Ex nA IIC T4 Gc
RCM (formerly C-TICK)  KC approval  EAC (formerly Gost-R)  Use in hazardous areas  • ATEX  Ambient conditions  Ambient temperature during operation  • min.	Yes Yes Yes ATEX II 3G Ex nA IIC T4 Gc
RCM (formerly C-TICK)  KC approval  EAC (formerly Gost-R)  Use in hazardous areas  • ATEX  Ambient conditions  Ambient temperature during operation  • min.  • max.	Yes Yes Yes Yes ATEX II 3G Ex nA IIC T4 Gc
RCM (formerly C-TICK)  KC approval  EAC (formerly Gost-R)  Use in hazardous areas  • ATEX  Ambient conditions  Ambient temperature during operation  • min.  • max.  Configuration	Yes Yes Yes ATEX II 3G Ex nA IIC T4 Gc
RCM (formerly C-TICK)  KC approval  EAC (formerly Gost-R)  Use in hazardous areas  • ATEX  Ambient conditions  Ambient temperature during operation  • min.  • max.  Configuration  Configuration software	Yes Yes Yes ATEX II 3G Ex nA IIC T4 Gc  0 °C 60 °C
RCM (formerly C-TICK)  KC approval  EAC (formerly Gost-R)  Use in hazardous areas  • ATEX  Ambient conditions  Ambient temperature during operation  • min.  • max.  Configuration  Configuration software  • STEP 7	Yes Yes Yes ATEX II 3G Ex nA IIC T4 Gc
RCM (formerly C-TICK)  KC approval  EAC (formerly Gost-R)  Use in hazardous areas  • ATEX  Ambient conditions  Ambient temperature during operation  • min.  • max.  Configuration  Configuration software  • STEP 7  Programming	Yes Yes Yes  ATEX II 3G Ex nA IIC T4 Gc  0 °C 60 °C  Yes
RCM (formerly C-TICK)  KC approval  EAC (formerly Gost-R)  Use in hazardous areas  • ATEX  Ambient conditions  Ambient temperature during operation  • min.  • max.  Configuration  Configuration software  • STEP 7  Programming  • Command set	Yes Yes Yes  ATEX II 3G Ex nA IIC T4 Gc  0 °C 60 °C  Yes
RCM (formerly C-TICK)  KC approval  EAC (formerly Gost-R)  Use in hazardous areas  • ATEX  Ambient conditions  Ambient temperature during operation  • min.  • max.  Configuration  Configuration software  • STEP 7  Programming  • Command set  • Nesting levels	Yes Yes Yes  ATEX II 3G Ex nA IIC T4 Gc  0 °C 60 °C  Yes  see instruction list 7
RCM (formerly C-TICK)  KC approval  EAC (formerly Gost-R)  Use in hazardous areas  • ATEX  Ambient conditions  Ambient temperature during operation  • min.  • max.  Configuration  Configuration  Configuration software  • STEP 7  Programming  • Command set  • Nesting levels  • Access to consistent data in process image	Yes Yes Yes  ATEX II 3G Ex nA IIC T4 Gc  0 °C 60 °C  Yes  see instruction list 7 Yes
RCM (formerly C-TICK)  KC approval  EAC (formerly Gost-R)  Use in hazardous areas  • ATEX  Ambient conditions  Ambient temperature during operation  • min.  • max.  Configuration  Configuration software  • STEP 7  Programming  • Command set  • Nesting levels  • Access to consistent data in process image  • System functions (SFC)	Yes Yes Yes  ATEX II 3G Ex nA IIC T4 Gc  0 °C 60 °C  Yes  see instruction list 7 Yes see instruction list
RCM (formerly C-TICK)  KC approval  EAC (formerly Gost-R)  Use in hazardous areas  • ATEX  Ambient conditions  Ambient temperature during operation  • min.  • max.  Configuration  Configuration  Configuration software  • STEP 7  Programming  • Command set  • Nesting levels  • Access to consistent data in process image  • System functions (SFC)  • System function blocks (SFB)	Yes Yes Yes  ATEX II 3G Ex nA IIC T4 Gc  0 °C 60 °C  Yes  see instruction list 7 Yes
RCM (formerly C-TICK)  KC approval  EAC (formerly Gost-R)  Use in hazardous areas  • ATEX  Ambient conditions  Ambient temperature during operation  • min.  • max.  Configuration  Configuration software  • STEP 7  Programming  • Command set  • Nesting levels  • Access to consistent data in process image  • System functions (SFC)	Yes Yes Yes  ATEX II 3G Ex nA IIC T4 Gc  0 °C 60 °C  Yes  see instruction list 7 Yes see instruction list

— FBD	Yes
. ==	
— STL	Yes
— SCL	Yes
— CFC	Yes
— GRAPH	Yes
— HiGraph®	Yes
Number of simultaneously active SFCs	
— DPSYC_FR	2; SFC 11; per interface
— D_ACT_DP	8; SFC 12; per interface
— RD_REC	8; SFC 59; per interface
— WR_REC	8; SFC 58; per interface
— WR_PARM	8; SFC 55; per interface
— PARM_MOD	1; SFC 57; per interface
— WR_DPARM	2; SFC 56; per interface
— DPNRM_DG	8; SFC 13; per interface
— RDSYSST	8
— DP_TOPOL	1; SFC 103; per interface
Number of simultaneously active SFBs	
— RDREC	8; SFB 52; per interface, but not more than 32 across all external interfaces
— WRREC	8; SFB 53; per interface, but not more than 32 across all external interfaces
Know-how protection	
<ul> <li>User program protection/password protection</li> </ul>	Yes
Dimensions	
Width	25 mm
Height	290 mm
Depth	219 mm
Weights	
Weight, approx.	700 g

3/25/2021

last modified: