## SIEMENS

## Data sheet

## 6ES7315-6FF04-0AB0



SIMATIC S7-300, CPU 315F-2DP Fail-safe module with MPI Integr. power supply 24 V DC, Work memory 384 KB, 40 mm width, 2nd interface DP master/slave Micro Memory Card required

Figure similar

General information	
HW functional status	01
Firmware version	V3.3
Product function	
<ul> <li>Isochronous mode</li> </ul>	Yes
Engineering with	
<ul> <li>Programming package</li> </ul>	STEP 7 V5.5 + SP1 or higher or STEP 7 V5.2 + SP1 or higher with HSP 218 + Distributed Safety
Supply voltage	
Rated value (DC)	24 V
permissible range, lower limit (DC)	19.2 V
permissible range, upper limit (DC)	28.8 V
external protection for power supply lines (recommendation)	2 A min.
Mains buffering	
<ul> <li>Mains/voltage failure stored energy time</li> </ul>	5 ms
Repeat rate, min.	1 s
Input current	
Current consumption (rated value)	850 mA
Current consumption (in no-load operation), typ.	150 mA
Inrush current, typ.	3.5 A
l²t	1 A <sup>2</sup> ·s
Power loss	
Power loss, typ.	4.5 W
Memory	
Work memory	
integrated	384 kbyte
expandable	No
Load memory	
<ul> <li>Plug-in (MMC)</li> </ul>	Yes
<ul> <li>Plug-in (MMC), max.</li> </ul>	8 Mbyte
<ul> <li>Data management on MMC (after last programming), min.</li> </ul>	10 a
Backup	
present	Yes; Guaranteed by MMC (maintenance-free)
<ul> <li>without battery</li> </ul>	Yes; Program and data
CPU processing times	
for bit operations, typ.	0.05 µs
for word operations, typ.	0.09 μs

for floating point arithmetic, typ.	0.45 µs
CPU-blocks	
Number of blocks (total)	1 024; (DBs, FCs, FBs); the maximum number of loadable blocks can
	be reduced by the MMC used.
DB	
<ul> <li>Number, max.</li> </ul>	1 024; Number range: 1 to 16000
• Size, max.	64 kbyte
FB	
• Number, max.	1 024; Number range: 0 to 7999
• Size, max. FC	64 kbyte
Number, max.	1 024; Number range: 0 to 7999
Size, max.	64 kbyte
OB OB	of hoyto
Number, max.	see instruction list
• Size, max.	64 kbyte
<ul> <li>Number of free cycle OBs</li> </ul>	1; OB 1
Number of time alarm OBs	1; OB 10
<ul> <li>Number of delay alarm OBs</li> </ul>	2; OB 20, 21
Number of cyclic interrupt OBs	4; OB 32, 33, 34, 35
<ul> <li>Number of process alarm OBs</li> </ul>	1; OB 40
<ul> <li>Number of DPV1 alarm OBs</li> </ul>	3; OB 55, 56, 57
<ul> <li>Number of isochronous mode OBs</li> </ul>	1; OB 61
Number of startup OBs	1; OB 100
<ul> <li>Number of asynchronous error OBs</li> </ul>	5; OB 80, 82, 85, 86, 87
Number of synchronous error OBs	2; OB 121, 122
Nesting depth	40
• per priority class	16
additional within an error OB	4
Counters, timers and their retentivity	
S7 counter	
Number	256
Retentivity	N/
— adjustable	Yes
— lower limit	0 255
— upper limit — preset	205 Z 0 to Z 7
Counting range	
— lower limit	0
— upper limit	999
IEC counter	
• present	Yes
• Type	SFB
• Number	Unlimited (limited only by RAM capacity)
S7 times	
Number	256
Retentivity	
— adjustable	Yes
— lower limit	0
— upper limit	255
— preset	No retentivity
Time range	
— lower limit	10 ms
— upper limit	9 990 s
IEC timer	Vec
• present	Yes
• Type • Number	SFB
	Unlimited (limited only by RAM capacity)
Data areas and their retentivity	
Retentive data area (incl. timers, counters, flags), max.	128 kbyte
Flag	0.040 h.t.
Size, max.	2 048 byte
Retentivity available	Yes; MB 0 to MB 2 047

Retentivity preset	MB 0 to MB 15
Number of clock memories	8; 1 memory byte
Data blocks	
Retentivity adjustable	Yes; via non-retain property on DB
Retentivity preset	Yes
Local data	
<ul> <li>per priority class, max.</li> </ul>	32 kbyte; Max. 2 KB per block
Address area	
I/O address area	
• Inputs	2 048 byte
Outputs	2 048 byte
of which distributed	
— Inputs	2 048 byte
— Outputs	2 048 byte
Process image	
Inputs	2 048 byte
Outputs	2 048 byte
<ul> <li>Inputs, adjustable</li> </ul>	2 048 byte
<ul> <li>Outputs, adjustable</li> </ul>	2 048 byte
<ul> <li>Inputs, default</li> </ul>	384 byte
Outputs, default	384 byte
Subprocess images	
<ul> <li>Number of subprocess images, max.</li> </ul>	1
Digital channels	
Inputs	16 384
— of which central	1 024
Outputs	16 384
— of which central	1 024
Analog channels	
Inputs	1 024
— of which central	256
• Outputs	1 024
— of which central	256
Hardware configuration	
Number of expansion units, max.	3
Number of DP masters	
<ul> <li>integrated</li> </ul>	1
• via CP	4
Number of operable FMs and CPs (recommended)	
• FM	8
• CP, PtP	8
• CP, LAN	10
Rack	
Racks, max.	4
<ul> <li>Modules per rack, max.</li> </ul>	8
Time of day	
Clock	
<ul> <li>Hardware clock (real-time)</li> </ul>	Yes
<ul> <li>retentive and synchronizable</li> </ul>	Yes
Backup time	6 wk; At 40 °C ambient temperature
Deviation per day, max.	10 s; Typ.: 2 s
<ul> <li>Behavior of the clock following POWER-ON</li> </ul>	Clock continues running after POWER OFF
<ul> <li>Behavior of the clock following expiry of backup</li> </ul>	the clock continues at the time of day it had when power was switched
period	off
Operating hours counter • Number	1
	1 0
Number/Number range     Pange of values	
<ul><li>Range of values</li><li>Granularity</li></ul>	0 to 2^31 hours (when using SFC 101) 1 h
Granulanty     retentive	Yes; Must be restarted at each restart
Clock synchronization	
supported	Yes
• to MPI, master	Yes

• to MPI, slave	Yes
• to DP, master	Yes; With DP slave only slave clock
• to DP, slave	Yes
• in AS, master	Yes
• in AS, slave	No
Digital inputs	
Number of digital inputs	0
Digital outputs	
Number of digital outputs	0
Analog inputs	
Number of analog inputs	0
Analog outputs	
Number of analog outputs	0
Interfaces	
Number of industrial Ethernet interfaces	0
Number of PROFINET interfaces	0
Number of RS 485 interfaces	2
Number of RS 422 interfaces	0
1. Interface	
Interface type	Integrated RS 485 interface
Isolated	No
Interface types	
• RS 485	Yes
Output current of the interface, max.	200 mA
Protocols	
• MPI	Yes
<ul> <li>PROFIBUS DP master</li> </ul>	No
PROFIBUS DP slave	No
Point-to-point connection	No
MPI	
<ul> <li>Transmission rate, max.</li> </ul>	187.5 kbit/s
Services	
— PG/OP communication	Yes
— Routing	Yes
Clobal data communication	Yes
— Global data communication	
— S7 basic communication	Yes
<ul><li>— S7 basic communication</li><li>— S7 communication</li></ul>	Yes Yes; Only server, configured on one side
<ul> <li>S7 basic communication</li> <li>S7 communication</li> <li>S7 communication, as client</li> </ul>	Yes Yes; Only server, configured on one side No
<ul> <li>S7 basic communication</li> <li>S7 communication</li> <li>S7 communication, as client</li> <li>S7 communication, as server</li> </ul>	Yes Yes; Only server, configured on one side
<ul> <li>S7 basic communication</li> <li>S7 communication</li> <li>S7 communication, as client</li> <li>S7 communication, as server</li> </ul> 2. Interface	Yes Yes; Only server, configured on one side No Yes
<ul> <li>S7 basic communication</li> <li>S7 communication</li> <li>S7 communication, as client</li> <li>S7 communication, as server</li> </ul> 2. Interface Interface type	Yes Yes; Only server, configured on one side No Yes Integrated RS 485 interface
<ul> <li>S7 basic communication</li> <li>S7 communication</li> <li>S7 communication, as client</li> <li>S7 communication, as server</li> </ul> 2. Interface Interface type Isolated	Yes Yes; Only server, configured on one side No Yes
<ul> <li>S7 basic communication</li> <li>S7 communication</li> <li>S7 communication, as client</li> <li>S7 communication, as server</li> </ul> 2. Interface Interface type Isolated Interface types	Yes Yes; Only server, configured on one side No Yes Integrated RS 485 interface Yes
<ul> <li>S7 basic communication</li> <li>S7 communication</li> <li>S7 communication, as client</li> <li>S7 communication, as server</li> </ul> 2. Interface Interface type Isolated Interface types <ul> <li>RS 485</li> </ul>	Yes Yes; Only server, configured on one side No Yes Integrated RS 485 interface Yes Yes
<ul> <li>S7 basic communication</li> <li>S7 communication</li> <li>S7 communication, as client</li> <li>S7 communication, as server</li> </ul> 2. Interface Interface type Isolated Interface types <ul> <li>RS 485</li> <li>Output current of the interface, max.</li> </ul>	Yes Yes; Only server, configured on one side No Yes Integrated RS 485 interface Yes
<ul> <li>S7 basic communication</li> <li>S7 communication</li> <li>S7 communication, as client</li> <li>S7 communication, as server</li> </ul> 2. Interface Interface type Isolated Interface types <ul> <li>RS 485</li> <li>Output current of the interface, max.</li> </ul> Protocols	Yes Yes; Only server, configured on one side No Yes Integrated RS 485 interface Yes Yes 200 mA
<ul> <li>S7 basic communication</li> <li>S7 communication</li> <li>S7 communication, as client</li> <li>S7 communication, as server</li> </ul> 2. Interface Interface type Isolated Interface types <ul> <li>RS 485</li> <li>Output current of the interface, max.</li> </ul> Protocols <ul> <li>MPI</li> </ul>	Yes Yes; Only server, configured on one side No Yes Integrated RS 485 interface Yes Yes 200 mA
<ul> <li>S7 basic communication</li> <li>S7 communication</li> <li>S7 communication, as client</li> <li>S7 communication, as server</li> </ul> 2. Interface Interface type Isolated Interface types <ul> <li>RS 485</li> <li>Output current of the interface, max.</li> </ul> Protocols	Yes Yes; Only server, configured on one side No Yes Integrated RS 485 interface Yes Yes 200 mA
<ul> <li>S7 basic communication</li> <li>S7 communication</li> <li>S7 communication, as client</li> <li>S7 communication, as server</li> </ul> 2. Interface Interface type <ul> <li>Isolated</li> </ul> Interface types <ul> <li>RS 485</li> <li>Output current of the interface, max.</li> </ul> Protocols <ul> <li>MPI</li> <li>PROFIBUS DP master</li> <li>PROFIBUS DP slave</li> </ul>	Yes Yes; Only server, configured on one side No Yes Integrated RS 485 interface Yes 200 mA
<ul> <li>S7 basic communication</li> <li>S7 communication</li> <li>S7 communication, as client</li> <li>S7 communication, as server</li> </ul> 2. Interface Interface type Isolated Interface types <ul> <li>RS 485</li> <li>Output current of the interface, max.</li> </ul> Protocols <ul> <li>MPI</li> <li>PROFIBUS DP master</li> </ul>	Yes Yes; Only server, configured on one side No Yes Integrated RS 485 interface Yes Yes 200 mA
<ul> <li>S7 basic communication</li> <li>S7 communication</li> <li>S7 communication, as client</li> <li>S7 communication, as server</li> </ul> 2. Interface Interface type <ul> <li>Isolated</li> </ul> Interface types <ul> <li>RS 485</li> <li>Output current of the interface, max.</li> </ul> Protocols <ul> <li>MPI</li> <li>PROFIBUS DP master</li> <li>PROFIBUS DP slave</li> <li>Point-to-point connection</li> </ul>	Yes Yes; Only server, configured on one side No Yes Integrated RS 485 interface Yes Yes 200 mA
<ul> <li>S7 basic communication</li> <li>S7 communication</li> <li>S7 communication, as client</li> <li>S7 communication, as server</li> </ul> 2. Interface Interface type <ul> <li>Isolated</li> </ul> Interface types <ul> <li>RS 485</li> <li>Output current of the interface, max.</li> </ul> Protocols <ul> <li>MPI</li> <li>PROFIBUS DP master</li> <li>PROFIBUS DP slave</li> <li>Point-to-point connection</li> </ul> PROFIBUS DP master <ul> <li>PROFIBUS DP master</li> </ul> PROFIBUS DP master	Yes Yes; Only server, configured on one side No Yes Integrated RS 485 interface Yes Yes 200 mA No Yes Yes No
<ul> <li>S7 basic communication</li> <li>S7 communication</li> <li>S7 communication, as client</li> <li>S7 communication, as server</li> </ul> 2. Interface Interface type <ul> <li>Isolated</li> <li>Interface types</li> <li>RS 485</li> <li>Output current of the interface, max.</li> </ul> Protocols <ul> <li>MPI</li> <li>PROFIBUS DP master</li> <li>PROFIBUS DP slave</li> <li>Point-to-point connection</li> </ul> PROFIBUS DP master <ul> <li>PROFIBUS DP master</li> <li>PROFIBUS DP master</li> <li>Transmission rate, max.</li> </ul>	Yes Yes; Only server, configured on one side No Yes Integrated RS 485 interface Yes Yes 200 mA No Yes Yes Yes No
<ul> <li>S7 basic communication</li> <li>S7 communication</li> <li>S7 communication, as client</li> <li>S7 communication, as server</li> </ul> 2. Interface Interface type <ul> <li>Isolated</li> </ul> Interface types <ul> <li>RS 485</li> <li>Output current of the interface, max.</li> </ul> Protocols <ul> <li>MPI</li> <li>PROFIBUS DP master</li> <li>PROFIBUS DP slave</li> <li>Point-to-point connection</li> </ul> PROFIBUS DP master <ul> <li>Transmission rate, max.</li> <li>Number of DP slaves, max.</li> <li>Services</li> <li>PG/OP communication</li> </ul>	Yes Yes; Only server, configured on one side No Yes Integrated RS 485 interface Yes Yes 200 mA No Yes Yes No 12 Mbit/s 124; Per station
<ul> <li>S7 basic communication</li> <li>S7 communication</li> <li>S7 communication, as client</li> <li>S7 communication, as server</li> </ul> 2. Interface Interface type <ul> <li>Isolated</li> </ul> Interface types <ul> <li>RS 485</li> <li>Output current of the interface, max.</li> </ul> Protocols <ul> <li>MPI</li> <li>PROFIBUS DP master</li> <li>PROFIBUS DP slave</li> <li>Point-to-point connection</li> </ul> PROFIBUS DP master <ul> <li>Transmission rate, max.</li> <li>Number of DP slaves, max.</li> </ul> Services <ul> <li>PG/OP communication</li> <li>Routing</li> </ul>	Yes Yes; Only server, configured on one side No Yes Integrated RS 485 interface Yes Yes 200 mA No Yes Yes No 12 Mbit/s 124; Per station
<ul> <li>S7 basic communication</li> <li>S7 communication</li> <li>S7 communication, as client</li> <li>S7 communication, as server</li> </ul> 2. Interface Interface type <ul> <li>Isolated</li> </ul> Interface types <ul> <li>RS 485</li> <li>Output current of the interface, max.</li> </ul> Protocols <ul> <li>MPI</li> <li>PROFIBUS DP master</li> <li>PROFIBUS DP slave</li> <li>Point-to-point connection</li> </ul> PROFIBUS DP master <ul> <li>Transmission rate, max.</li> <li>Number of DP slaves, max.</li> </ul> Services <ul> <li>PG/OP communication</li> <li>Routing</li> <li>Global data communication</li> </ul>	Yes Yes; Only server, configured on one side No Yes Integrated RS 485 interface Yes Yes 200 mA No Yes Yes No 12 Mbit/s 124; Per station Yes Yes No
<ul> <li>S7 basic communication</li> <li>S7 communication</li> <li>S7 communication, as client</li> <li>S7 communication, as server</li> </ul> 2. Interface Interface type <ul> <li>Isolated</li> </ul> Interface types <ul> <li>RS 485</li> <li>Output current of the interface, max.</li> </ul> Protocols <ul> <li>MPI</li> <li>PROFIBUS DP master</li> <li>PROFIBUS DP slave</li> <li>Point-to-point connection</li> </ul> PROFIBUS DP master <ul> <li>PROFIBUS DP master</li> <li>PROFIBUS DP slave</li> <li>Point-to-point connection</li> </ul> PROFIBUS DP master <ul> <li>PROFIBUS DP master</li> <li>Output current of DP slaves, max.</li> </ul> Services <ul> <li>PG/OP communication</li> <li>Routing</li> <li>Global data communication</li> <li>S7 basic communication</li> </ul>	Yes Yes; Only server, configured on one side No Yes Integrated RS 485 interface Yes Yes 200 mA No Yes Yes No 12 Mbit/s 124; Per station Yes Yes No Yes Yes
<ul> <li>S7 basic communication</li> <li>S7 communication</li> <li>S7 communication, as client</li> <li>S7 communication, as server</li> </ul> 2. Interface Interface type <ul> <li>Isolated</li> </ul> Interface types <ul> <li>RS 485</li> <li>Output current of the interface, max.</li> </ul> Protocols <ul> <li>MPI</li> <li>PROFIBUS DP master</li> <li>PROFIBUS DP slave</li> <li>Point-to-point connection</li> </ul> PROFIBUS DP master <ul> <li>Transmission rate, max.</li> <li>Number of DP slaves, max.</li> </ul> Services <ul> <li>PG/OP communication</li> <li>Services</li> <li>Global data communication</li> <li>S7 basic communication</li> <li>S7 communication</li> <li>S7 communication</li> </ul>	Yes Yes; Only server, configured on one side No Yes Integrated RS 485 interface Yes Yes 200 mA Ves Yes Yes No 12 Mbit/s 124; Per station Yes Yes No Yes Yes No
<ul> <li>S7 basic communication</li> <li>S7 communication</li> <li>S7 communication, as client</li> <li>S7 communication, as server</li> </ul> 2. Interface Interface type <ul> <li>Isolated</li> <li>Interface types</li> <li>RS 485</li> <li>Output current of the interface, max.</li> </ul> Protocols <ul> <li>MPI</li> <li>PROFIBUS DP master</li> <li>PROFIBUS DP slave</li> <li>Point-to-point connection</li> </ul> PROFIBUS DP master <ul> <li>Transmission rate, max.</li> <li>Number of DP slaves, max.</li> </ul> Services <ul> <li>PG/OP communication</li> <li>Solated</li> <li>St basic communication</li> <li>S7 basic communication</li> <li>S7 communication</li> <li>S7 communication</li> <li>S7 communication, as client</li> </ul>	Yes Yes; Only server, configured on one side No Yes Integrated RS 485 interface Yes 200 mA No Yes 200 mA No Yes Yes No Yes Yes No Yes Yes No Yes Yes No
<ul> <li>S7 basic communication</li> <li>S7 communication</li> <li>S7 communication, as client</li> <li>S7 communication, as server</li> </ul> 2. Interface Interface type <ul> <li>Isolated</li> </ul> Interface types <ul> <li>RS 485</li> <li>Output current of the interface, max.</li> </ul> Protocols <ul> <li>MPI</li> <li>PROFIBUS DP master</li> <li>PROFIBUS DP slave</li> <li>Point-to-point connection</li> </ul> PROFIBUS DP master <ul> <li>Transmission rate, max.</li> <li>Number of DP slaves, max.</li> </ul> Services <ul> <li>PG/OP communication</li> <li>Services</li> <li>Global data communication</li> <li>S7 basic communication</li> <li>S7 communication</li> <li>S7 communication</li> </ul>	Yes Yes; Only server, configured on one side No Yes Integrated RS 485 interface Yes Yes 200 mA Ves Yes Yes No 12 Mbit/s 124; Per station Yes Yes No Yes Yes No

<ul> <li>— Isochronous mode</li> </ul>	Yes; OB 61
- SYNC/FREEZE	Yes
<ul> <li>Activation/deactivation of DP slaves</li> </ul>	Yes
— Number of DP slaves that can be	8
simultaneously activated/deactivated, max.	Vee
— DPV1	Yes
Address area	0.040 b.t.
— Inputs, max.	2 048 byte
— Outputs, max.	2 048 byte
User data per DP slave	044 h. ta
— Inputs, max.	244 byte
— Outputs, max.	244 byte
PROFIBUS DP slave	The latest CCD file is susilable at http://www.sigmans.com/arafibus.cod
• GSD file	The latest GSD file is available at: http://www.siemens.com/profibus-gsd
Transmission rate, max.	12 Mbit/s
automatic baud rate search	Yes; only with passive interface
Address area, max.	32
User data per address area, max.	32 byte
Services	Vee
— PG/OP communication	Yes
— Routing	Yes; Only with active interface
— Global data communication	No
- S7 basic communication	No Voe Only conversion figured on one side
- S7 communication	Yes; Only server, configured on one side
- S7 communication, as client	No
— S7 communication, as server	Yes
<ul> <li>— Direct data exchange (slave-to-slave communication)</li> </ul>	Yes
— DPV1	No
Transfer memory	
— Inputs	244 byte
— Outputs	244 byte
— Outputo	
Protocolo	
Protocols	Voc
PROFIsafe	Yes
PROFIsafe communication functions / header	
PROFIsafe communication functions / header PG/OP communication	Yes
PROFIsafe communication functions / header PG/OP communication Data record routing	
PROFIsafe communication functions / header PG/OP communication Data record routing Global data communication	Yes Yes
PROFIsafe communication functions / header PG/OP communication Data record routing Global data communication • supported	Yes Yes Yes
PROFIsafe communication functions / header PG/OP communication Data record routing Global data communication • supported • Number of GD loops, max.	Yes Yes Yes 8
PROFIsafe communication functions / header PG/OP communication Data record routing Global data communication • supported • Number of GD loops, max. • Number of GD packets, max.	Yes Yes Yes 8 8
PROFIsafe communication functions / header PG/OP communication Data record routing Global data communication • supported • Number of GD loops, max. • Number of GD packets, max. • Number of GD packets, transmitter, max.	Yes Yes Yes 8 8 8 8
PROFIsafe communication functions / header PG/OP communication Data record routing Global data communication • supported • Number of GD loops, max. • Number of GD packets, max. • Number of GD packets, transmitter, max. • Number of GD packets, receiver, max.	Yes Yes 8 8 8 8 8 8
PROFIsafe         communication functions / header         PG/OP communication         Data record routing         Global data communication         • supported         • Number of GD loops, max.         • Number of GD packets, max.         • Number of GD packets, receiver, max.         • Number of GD packets, receiver, max.         • Size of GD packets, max.	Yes Yes Yes 8 8 8 8 8 8 8 8 8 22 byte
PROFIsafe         communication functions / header         PG/OP communication         Data record routing         Global data communication         • supported         • Number of GD loops, max.         • Number of GD packets, max.         • Number of GD packets, receiver, max.         • Number of GD packets, receiver, max.         • Size of GD packets, max.         • Size of GD packet (of which consistent), max.	Yes Yes Yes 8 8 8 8 8 8
PROFIsafe         communication functions / header         PG/OP communication         Data record routing         Global data communication         • supported         • Number of GD loops, max.         • Number of GD packets, max.         • Number of GD packets, receiver, max.         • Number of GD packets, receiver, max.         • Size of GD packets, max.         • Size of GD packet (of which consistent), max.         S7 basic communication	Yes Yes Yes 8 8 8 8 8 8 8 8 8 8 8 22 byte 22 byte
PROFIsafe         communication functions / header         PG/OP communication         Data record routing         Global data communication         • supported         • Number of GD loops, max.         • Number of GD packets, max.         • Number of GD packets, transmitter, max.         • Number of GD packets, receiver, max.         • Size of GD packets, max.         • Size of GD packet (of which consistent), max.         S7 basic communication         • supported	Yes Yes Yes 8 8 8 8 8 8 8 8 8 8 8 8 22 byte 22 byte Yes
PROFIsafe         communication functions / header         PG/OP communication         Data record routing         Global data communication         • supported         • Number of GD loops, max.         • Number of GD packets, max.         • Number of GD packets, transmitter, max.         • Number of GD packets, receiver, max.         • Size of GD packets, max.         • Size of GD packet (of which consistent), max.         S7 basic communication         • supported         • User data per job, max.	Yes Yes Yes 8 8 8 8 8 8 8 8 22 byte 22 byte 22 byte 76 byte
PROFIsafe         communication functions / header         PG/OP communication         Data record routing         Global data communication         • supported         • Number of GD loops, max.         • Number of GD packets, max.         • Number of GD packets, transmitter, max.         • Number of GD packets, receiver, max.         • Size of GD packets, max.         • Size of GD packet (of which consistent), max.         S7 basic communication         • supported	Yes Yes Yes 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8
PROFIsafe         communication functions / header         PG/OP communication         Data record routing         Global data communication         • supported         • Number of GD loops, max.         • Number of GD packets, max.         • Number of GD packets, transmitter, max.         • Number of GD packets, receiver, max.         • Size of GD packets, max.         • Size of GD packets, max.         • Size of GD packet (of which consistent), max.         S7 basic communication         • supported         • User data per job, max.         • User data per job (of which consistent), max.	Yes Yes Yes 8 8 8 8 8 8 8 8 22 byte 22 byte 22 byte 76 byte
PROFIsafe         communication functions / header         PG/OP communication         Data record routing         Global data communication         • supported         • Number of GD loops, max.         • Number of GD packets, max.         • Number of GD packets, transmitter, max.         • Number of GD packets, receiver, max.         • Size of GD packets, max.         • Size of GD packet (of which consistent), max.         S7 basic communication         • supported         • User data per job, max.         • User data per job (of which consistent), max.         S7 communication	Yes Yes Yes 8 8 8 8 8 22 byte 22 byte 22 byte 76 byte 76 byte; 76 bytes (with X_SEND or X_RCV); 64 bytes (with X_PUT or X_GET as server)
PROFIsafe         communication functions / header         PG/OP communication         Data record routing         Global data communication         • supported         • Number of GD loops, max.         • Number of GD packets, max.         • Number of GD packets, transmitter, max.         • Number of GD packets, receiver, max.         • Size of GD packets, max.         • Size of GD packets, max.         • Size of GD packet (of which consistent), max.         S7 basic communication         • supported         • User data per job, max.         • User data per job (of which consistent), max.	Yes Yes Yes 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8
PROFIsafe         communication functions / header         PG/OP communication         Data record routing         Global data communication         • supported         • Number of GD loops, max.         • Number of GD packets, max.         • Number of GD packets, transmitter, max.         • Number of GD packets, transmitter, max.         • Number of GD packets, receiver, max.         • Size of GD packets, max.         • Size of GD packets, max.         • Size of GD packet (of which consistent), max.         S7 basic communication         • supported         • User data per job, max.         • User data per job (of which consistent), max.         S7 communication         • supported         • as server	Yes Yes Yes 8 8 8 8 8 8 22 byte 22 byte 22 byte 76 byte 76 byte; 76 bytes (with X_SEND or X_RCV); 64 bytes (with X_PUT or X_GET as server) Yes Yes
PROFIsafe         communication functions / header         PG/OP communication         Data record routing         Global data communication         • supported         • Number of GD loops, max.         • Number of GD packets, max.         • Number of GD packets, transmitter, max.         • Number of GD packets, transmitter, max.         • Number of GD packets, receiver, max.         • Size of GD packets, max.         • Size of GD packet (of which consistent), max.         S7 basic communication         • supported         • User data per job, max.         • User data per job (of which consistent), max.         S7 communication         • supported         • as server         • as client	Yes Yes Yes 8 8 8 8 8 8 22 byte 22 byte 22 byte 76 byte 76 bytes (with X_SEND or X_RCV); 64 bytes (with X_PUT or X_GET as server) Yes Yes Yes; Via CP and loadable FB
PROFIsafe         communication functions / header         PG/OP communication         Data record routing         Global data communication         • supported         • Number of GD loops, max.         • Number of GD packets, max.         • Number of GD packets, transmitter, max.         • Number of GD packets, transmitter, max.         • Number of GD packets, receiver, max.         • Size of GD packets, receiver, max.         • Size of GD packets, max.         • Size of GD packet (of which consistent), max.         S7 basic communication         • supported         • User data per job, max.         • User data per job (of which consistent), max.         S7 communication         • supported         • as server         • as client         • User data per job, max.	Yes Yes Yes 8 8 8 8 8 8 22 byte 22 byte 22 byte 22 byte 76 byte; 76 bytes (with X_SEND or X_RCV); 64 bytes (with X_PUT or X_GET as server) Yes Yes Yes Yes; Via CP and loadable FB 180 byte; With PUT/GET
PROFIsafe         communication functions / header         PG/OP communication         Data record routing         Global data communication         • supported         • Number of GD loops, max.         • Number of GD packets, max.         • Number of GD packets, transmitter, max.         • Number of GD packets, transmitter, max.         • Number of GD packets, receiver, max.         • Number of GD packets, receiver, max.         • Size of GD packets, max.         • Size of GD packet (of which consistent), max.         S7 basic communication         • supported         • User data per job, max.         • User data per job (of which consistent), max.         S7 communication         • supported         • as server         • as client         • User data per job, max.         • User data per job, max.	Yes Yes Yes 8 8 8 8 8 8 22 byte 22 byte 22 byte 76 byte 76 bytes (with X_SEND or X_RCV); 64 bytes (with X_PUT or X_GET as server) Yes Yes Yes; Via CP and loadable FB
PROFIsafe         communication functions / header         PG/OP communication         Data record routing         Global data communication         • supported         • Number of GD loops, max.         • Number of GD packets, max.         • Number of GD packets, transmitter, max.         • Number of GD packets, transmitter, max.         • Number of GD packets, receiver, max.         • Size of GD packets, max.         • Size of GD packets, max.         • Size of GD packet (of which consistent), max.         S7 basic communication         • supported         • User data per job, max.         • User data per job (of which consistent), max.         S7 communication         • supported         • user data per job (of which consistent), max.         S7 communication         • supported         • user data per job, max.         • User data per job, max.         • User data per job, max.         • User data per job (of which consistent), max.         • User data per job (of which consistent), max.         S5 compatible communication	Yes Yes Yes 8 8 8 8 8 22 byte 22 byte 22 byte Yes 76 byte 76 byte; 76 bytes (with X_SEND or X_RCV); 64 bytes (with X_PUT or X_GET as server) Yes Yes Yes Yes; Via CP and loadable FB 180 byte; With PUT/GET 240 byte; as server
PROFIsafe         communication functions / header         PG/OP communication         Data record routing         Global data communication         • supported         • Number of GD loops, max.         • Number of GD packets, max.         • Number of GD packets, transmitter, max.         • Number of GD packets, transmitter, max.         • Number of GD packets, receiver, max.         • Size of GD packets, max.         • Size of GD packet (of which consistent), max.         S7 basic communication         • supported         • User data per job, max.         • User data per job (of which consistent), max.         S7 communication         • supported         • User data per job (of which consistent), max.         S7 communication         • supported         • User data per job, max.         • User data per job (of which consistent), max.         S5 compatible communication         • supported	Yes Yes Yes 8 8 8 8 8 8 22 byte 22 byte 22 byte 22 byte 76 byte; 76 bytes (with X_SEND or X_RCV); 64 bytes (with X_PUT or X_GET as server) Yes Yes Yes Yes; Via CP and loadable FB 180 byte; With PUT/GET
PROFIsafe         communication functions / header         PG/OP communication         Data record routing         Global data communication         • supported         • Number of GD loops, max.         • Number of GD packets, max.         • Number of GD packets, transmitter, max.         • Number of GD packets, transmitter, max.         • Number of GD packets, receiver, max.         • Size of GD packets, max.         • Size of GD packets, max.         • Size of GD packet (of which consistent), max.         S7 basic communication         • supported         • User data per job, max.         • User data per job (of which consistent), max.         S7 communication         • supported         • user data per job (of which consistent), max.         S7 communication         • supported         • user data per job, max.         • User data per job, max.         • User data per job, max.         • User data per job (of which consistent), max.         • User data per job (of which consistent), max.         S5 compatible communication	Yes Yes Yes Yes 8 8 8 8 8 22 byte 22 byte 22 byte 22 byte Yes 76 byte; 76 bytes (with X_SEND or X_RCV); 64 bytes (with X_PUT or X_GET as server) Yes Yes Yes Yes; Via CP and loadable FB 180 byte; With PUT/GET 240 byte; as server
PROFIsafe         communication functions / header         PG/OP communication         Data record routing         Global data communication         • supported         • Number of GD loops, max.         • Number of GD packets, max.         • Number of GD packets, transmitter, max.         • Number of GD packets, transmitter, max.         • Number of GD packets, receiver, max.         • Size of GD packets, max.         • Size of GD packets, max.         • Size of GD packet (of which consistent), max.         S7 basic communication         • supported         • User data per job, max.         • User data per job (of which consistent), max.         S7 communication         • supported         • as server         • as client         • User data per job, max.         • User data per job (of which consistent), max.         S5 compatible communication         • supported         • supported         • User data per job (of which consistent), max.	Yes Yes Yes Yes 8 8 8 8 8 22 byte 22 byte 22 byte Yes 76 byte 76 byte; 76 bytes (with X_SEND or X_RCV); 64 bytes (with X_PUT or X_GET as server) Yes Yes Yes Yes; Via CP and loadable FB 180 byte; With PUT/GET 240 byte; as server Yes; via CP and loadable FC
PROFIsafe         communication functions / header         PG/OP communication         Data record routing         Global data communication         • supported         • Number of GD loops, max.         • Number of GD packets, max.         • Number of GD packets, transmitter, max.         • Number of GD packets, transmitter, max.         • Number of GD packets, receiver, max.         • Size of GD packets, max.         • Size of GD packets, max.         • Size of GD packet (of which consistent), max.         S7 basic communication         • supported         • User data per job, max.         • User data per job (of which consistent), max.         S7 communication         • supported         • as server         • as client         • User data per job, max.         • User data per job (of which consistent), max.         S5 compatible communication         • supported         • user data per job (of which consistent), max.         S5 compatible communication         • supported         • user data per job (of which consistent), max.         S5 compatible communication         • supported         Number of connections         • overall	Yes Yes Yes Yes 8 8 8 8 8 8 22 byte 22 byte 22 byte Yes 76 byte 76 byte; 76 bytes (with X_SEND or X_RCV); 64 bytes (with X_PUT or X_GET as server) Yes Yes Yes Yes; Via CP and loadable FB 180 byte; With PUT/GET 240 byte; as server Yes; via CP and loadable FC
PROFIsafe         communication functions / header         PG/OP communication         Data record routing         Global data communication         • supported         • Number of GD loops, max.         • Number of GD packets, max.         • Number of GD packets, transmitter, max.         • Number of GD packets, receiver, max.         • Number of GD packets, receiver, max.         • Size of GD packets, max.         • Size of GD packets, max.         • Size of GD packet (of which consistent), max.         S7 basic communication         • supported         • User data per job, max.         • User data per job (of which consistent), max.         S7 communication         • supported         • as server         • as client         • User data per job, max.         • User data per job (of which consistent), max.         S5 compatible communication         • supported         • user data per job (of which consistent), max.         S5 compatible communication         • supported         • usable for PG communication         • overall         • usable for PG communication         — reserved for PG communication	Yes Yes Yes Yes 8 8 8 8 2 byte 22 byte Yes 76 byte 76 byte; 76 bytes (with X_SEND or X_RCV); 64 bytes (with X_PUT or X_GET as server) Yes Yes Yes; Via CP and loadable FB 180 byte; With PUT/GET 240 byte; as server Yes; via CP and loadable FC Yes; via CP and loadable FC
PROFIsafe         communication functions / header         PG/OP communication         Data record routing         Global data communication         • supported         • Number of GD loops, max.         • Number of GD packets, max.         • Number of GD packets, transmitter, max.         • Number of GD packets, transmitter, max.         • Number of GD packets, receiver, max.         • Size of GD packets, max.         • Size of GD packets, max.         • Size of GD packet (of which consistent), max.         S7 basic communication         • supported         • User data per job, max.         • User data per job (of which consistent), max.         S7 communication         • supported         • as server         • as client         • User data per job, max.         • User data per job (of which consistent), max.         S5 compatible communication         • supported         • user data per job (of which consistent), max.         S5 compatible communication         • supported         • user data per job (of which consistent), max.         S5 compatible communication         • supported         Number of connections         • overall	Yes Yes Yes Yes 8 8 8 8 8 8 22 byte 22 byte 22 byte Yes 76 byte 76 byte; 76 bytes (with X_SEND or X_RCV); 64 bytes (with X_PUT or X_GET as server) Yes Yes Yes Yes; Via CP and loadable FB 180 byte; With PUT/GET 240 byte; as server Yes; via CP and loadable FC

	a upphic for OD communication	15
<ul> <li>adjustable for OP communication, min.</li> <li>adjustable for SP basic communication, mix.</li> <li>is usable for SP basic communication, mix.</li> <li>adjustable for SP basic communication, mix.</li> <li>adjustable for SP basic communication, mix.</li> <li>adjustable for SP basic communication, mix.</li> <li>ST message functions</li> <li>station for message function, max.</li> <li>St communication message functions, max.</li> <li>St communication</li> <li>adjustable for SP basic communication, max.</li> <li>St communication</li> <li>adjustable for SP basic communication, max.</li> <li>St communication</li> <li>St commu</li></ul>	usable for OP communication	15
<ul> <li>adjustable for OP communication, max.</li> <li>inserved for S7 basic communication, into</li> <li>adjustable for S7 basic communication, into</li> <li>adjustable for S7 basic communication, into</li> <li>adjustable for S7 basic communication, max.</li> <li>S7 messarge functions</li> <li>S7 messarge functions, max.</li> <li>S7 messarge functions for PG/OP and S7 basic communication (max.)</li> <li>S7 messarge functions for PG/OP and S7 basic communication (max.)</li> <li>S7 messarge functions functions</li> <li>Process diagnotic messages</li> <li>S7 messarge functions, max.</li> <li>S7 messarge functions, functions</li> <li>S7 messarge functions</li> <li>S7 messarge functions</li> <li>S7 messarge functions</li> <li>S7</li></ul>		
• usable for 37 basic communication         12           adjustable for 37 basic communication, min.         0           adjustable for 37 basic communication, max.         12           S7 message functions         12           Process diagnostic message functions, max.         300           S7 message functions         4           Status block         Yes           Status block         Inputs, outputs, memory bits, DB, times, counters           Status block         Inputs, outputs           • Number of variables, max.         10           Diagnostic buffer         Yes           • Parent		
S7 message functions     16; Depending on the configured connections for PG/OP and S7 basic communication       Process diagnostic message functions, max.     300       Test commissioning functions     Yes       Status block Single step     Yes       • Status block Single step     Yes       • Variable     Yes       • Variable     Inputs, outputs       • Variable     Inputs, outputs       • Variable     Yes       • Variable     Yes       • Variable     Yes       • Variable     Yes       • Variable     Inputs, outputs       • Variable     Inputs, outputs       • Variable     Inputs, outputs       • Variable     Inputs, outputs       • Orthich status variables, max.     30       - of which control variables, max.     10       Diagnostic Loufer     Opresent       • Forcing, variables     Inputs, outputs       • Number of entries, max.     10       Diagnostic Loufer     No       - of which powerfail proof     100. Only the last 100 entries are retained       • Number of entries readout     Yes       Ambient temperature during operation     0 °C       • min.     0 °C       • oranger adout     Yes       Configuration / header     Sec instruction list	-	
Number of login stations for message functions, max.         16: Depending on the configured connections for PG/OP and S7 basic           Process diagnostic messages         Yes           Status block         Yes; Up to 2 simultaneously           Single step         Yes           Number of breakpoints         4           Status block         Yes; Up to 2 simultaneously           Single step         Yes           Number of breakpoints         4           Status/control         4           Variables         Inputs, outputs, memory bits, DB, times, counters           Number of variables, max.         30           - of which control variables, max.         10           Porcing         Yes           - forcing, variables         Inputs, outputs           - Number of variables, max.         10           Possignatic buffer         Yes           - or which poverfail-proof         100; Only the last 100 entries are retained           - adjustable         No           - end which poverfail-proof         100; Only the last 100 entries are retained           - min.         0 °C           - and puistable         Yes; From 10 to 499           - preset         100; Only the last 100 entries are retained           Configuration / heador	<ul> <li>adjustable for S7 basic communication, max.</li> </ul>	12
Process diagnostic messages stimulaneously active Alarm-S blocks, max. 300 Test commissioning functions Status block Number of breakpoints 4 Status Stock Status Stock Single step Number of breakpoints 4 Status Stock Status Stock Single step Number of breakpoints 4 Status Stock Ves Ves Ves Ves Number of variables, max. - of which status variable variable, which variables, max. - of which status variable variable, max. - of which status variable, which variable, which	S7 message functions	
simulaneous y active Aram S blocks, max. 300  Test commissioning functions  Status block Yes, Ves, Up to 2 simultaneously Single step Yes Yes Ves Variables Ves Ves Ves Variables Ves Ves Ves Variables Nounder of variables, max. 30 - of which control variables, max. 500 - of which powerlap.rood Number of entries, max. 500 - of which powerlap.rood - of which powerla	Number of login stations for message functions, max.	
simulaneously active Aram-S blocks, max. 300  Test commissioning functions  Status block Status block Status block Signite step Number of breakspoints	Process diagnostic messages	Yes
Test commissioning functions           Status block         Yes; Up to 2 simultaneously           Single step         Yes           Number of breakpoints         4           Status/control variables         Yes           • Variables         Inputs, outputs, memory bits, DB, times, counters           • Original variables, max.         30           - of which control variables, max.         30           - of which control variables, max.         14           Forcing         Yes           • Forcing, variables, max.         10           Diagnostic buffer         -           • present         Yes           • Number of variables, max.         10           Diagnostic buffer         -           • present         Yes           • Number of variables max.         500           adjustable         No           - of which powerfail-proof         100, Only the last 100 entries are retained           • Number of entries readable in RUN, max.         -           - adjustable         Yes; From 10 to 499           - preset         0 °C           Ambient conditions         -           Ambient conditions         -           Configuration / Ineader         -      C		300
Status block     Yes: Up to 2 simultaneously       Single step     Yes       Number of breakpoints     4       Status/control variables     Yes       • Status/control variables, max.     30       - of which status variables, max.     30       - of which control variables, max.     30       - of which control variables, max.     30       - of which control variables, max.     10       Diagnostic buffer     Yes       • Forcing, variables, max.     10       Diagnostic buffer     Yes       • Number of variables, max.     10       Diagnostic buffer     Yes       • Number of variables, max.     10       Diagnostic buffer     Yes       • of which powerfail-proof     100; Only the last 100 entries are retained       • Number of entries, max.     10       Status/control     100; Only the last 100 entries are retained       • Number of entries readable in RUN, max.     -       - adjustable     Yes; From 10 to 499       - preset     10       Status/control     Yes; From 10 to 499       - configuration / header     Configuration / header       Configuration / programming header     See instruction list       • Step P     Service     8       • System function blocks (SFB)     see instruction list <td>· ·</td> <td></td>	· ·	
Single step     Yes       Number of breakpoints     4       Status/control     4       Status/control     9       • Variables     Inputs, outputs, memory bits, DB, times, counters       • Number of variables, max.     30       - of which control variables, max.     30       - of which control variables, max.     14       Forcing     Yes       • Forcing, variables, max.     10       Diagnostic buffer     500       - adjustable     No       - of which powerfail-proof     10       Number of entries, max.     500       - adjustable     No       - of which powerfail-proof     10       Number of entries readable in RUN, max.     500       - adjustable     No       - of which powerfail-proof     10       Service data     Yes       - and bread out     Yes       - and bread out     Yes       Ambient conditions		Voc: Un to 2 simultaneously
Number of breakpoints         4           Status/control variable         Yes           • Status/control variables, max.         30           • O which status variables, max.         30           - of which status variables, max.         14           Forcing         Yes           • Forcing, variables, max.         10           Diagnostic buffer         -           • Number of variables, max.         10           Diagnostic buffer         -           • Number of entries, max.         500           • Adjustable         No           - adjustable         No           - of which status variables, max.         100           • Number of entries, max.         500           - adjustable         No           - adjustable         No           - adjustable         Yes, Form 10 to 499           - preset         10           Service data         -           • min.         0 °C           contifications         -           Configuration / header         -           • forcing levels         8           • Signer function blocks (SFB)         see instruction list           • Step 7         Yes           - STL		
Status/control       • Variables         • 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, variables         • Forcing, variables       Inputs, outputs         • Number of entries, max.       10         Diagnostic buffer       •         • ersent       Yes         • of which powerfail-proof       100: Only the last 100 entries are retained         • Number of entries readable in RUN, max.       500         - adjustable       Yes; From 10 to 499         - preset       10         Stervice data       •         • can be read out       Yes         Ambient temperature during operation       0 °C         • onfiguration software       60 °C         • Configuration / programming / header       see instruction list         • System function books (SFD)       see instruction list         • System functions (SFC)       see instruction list         • System functions (SFC)       see instruction list         • System function software       Yes         - CFC       Yes <t< td=""><td></td><td></td></t<>		
• Status/control variable     Yes       • Variables     Inputs, outputs, memory bits, DB, times, counters       • O which status variables, max.     30       - of which status variables, max.     30       - of which status variables, max.     30       • Forcing     Yes       • Forcing, variables     Inputs, outputs       • Number of variables, max.     10       Diagnostic buffer     -       • present     Yes       • of which powerfail-proof     100: Only the last 100 entries are retained       • Number of variables, max.     500       of which powerfail-proof     100: Only the last 100 entries are retained       • Number of entries readable in RUN, max.     -       - adjustable     Yes       - adjustable     Yes       • or on bring readable in gun and the set of the set		4
• Variables     Inputs, outputs, memory bits, DB, times, counters       • Or Which status variables, max.     30       - of which ontrol variables, max.     30       - of which control variables, max.     14       • Forcing     Yes       • Forcing variables, max.     10       Diagnostic buffer     Yes       • Number of variables, max.     10       Diagnostic buffer     Yes       • present     Yes       • Number of entries, max.     500       - of which powerfail-proof     100; Only the last 100 entries are retained       • Number of entries readable in RUN, max.     500       - algustable     Yes; From 10 to 499       - preset     10       Stervice data     -       • can be read out     Yes       Ambient temperature during operation     0 °C       • max.     60 °C       configuration / header     -       • Stervice data     -       • Stervice data     -       • Stervice data     -       • Stervice data     -       • Stervice on stervice     -       • Oringuration / header     -       • Stervice data     -       • Stervice data     -       • Stervice data     -       • Stervice data     -    <		N .
Number of variables, max. <ul> <li>of which status variables, max.</li> <li>of which control variables, max.</li> <li>14</li> </ul> <li>Forcing         <ul> <li>Forcing, variables</li> <li>Inputs, outputs</li> <li>Number of variables, max.</li> <li>Diagnostic buffer</li> </ul> </li> <li>Present         <ul> <li>Present</li> <li>Status of antiables, max.</li> <li>O</li> <li>On (D) (D) (D) (D) (D) (D) (D) (D) (D) (D)</li></ul></li>		
− of which control variables, max.     14       Forcing     Forcing, variables, max.     Inputs, outputs       ● Forcing, variables, max.     10       Diagnostic buffer     Yes       ● risesent     Yes       ● Number of entries, max.     500       - adjustable     No       - adjustable     No       - adjustable     No       - adjustable     Yes; From 10 to 499       - preset     10       Service data        - and be read out     Yes       Amblent conditions     0 °C       Amblent conditions offware     60 °C       Configuration / header     500 °C       configuration software     see instruction list       • STEP 7     Yes; V5.2 SP1 or higher with HW update       Configuration / header     see instruction list       • Ormand set     see instruction list       • System function blocks (SFB)     see instruction list       • System function blocks (SFB)     see instruction list       • System function blocks (SFB)     yes       - SCL     Yes       - Solder     Yes       - Solder     Yes	-	
Forcing     Yes <ul> <li>Forcing, variables, max.</li> <li>Inputs, outputs</li> <li>Number of variables, max.</li> <li>Diagnostic buffer</li> <li>present</li> <li>yes</li> <li>Number of entries, max.</li> <li>500</li> <li>- adjustable</li> <li>No</li> <li>- of which powerfail-proof</li> <li>Number of entries readable in RUN, max.</li> <li>- adjustable</li> <li>Yes; From 10 to 499</li> <li>- preset</li> <li>10</li> <li>Service data</li> <li>- adjustable</li> <li>Yes; From 10 to 499</li> <li>- preset</li> <li>10</li> <li>Service data</li> <li>- adjustable</li> <li>Ves; From 10 to 499</li> <li>- preset</li> <li>0 °C</li> <li>can be read out</li> <li>Yes</li> <li>Ambient temperature during operation</li> <li>min.</li> <li>0 °C</li> <li>on 30 °C</li> <li>configuration / header</li> <li>Configuration software</li> <li>StEP 7</li> <li>Yes; V5.2 SP1 or higher with HW update</li> <li>configuration software</li> <li>System functions (SFC)</li> <li>see instruction list</li> <li>System function blocks (SFB)</li> <li>see instruction list</li> <li>System function blocks (SFB)</li> <li>see instruction list</li> <li>System function blocks (SFB)</li> <li>Sestem in</li></ul>		30
<ul> <li>Forcing, variables, max.</li> <li>Number of variables, max.</li> <li>Diagnostic buffer</li> <li>Number of entries, max.</li> <li>Number of entries, max.</li> <li>Aumber of entries, max.</li> <li>Solo</li> <li></li></ul>	- of which control variables, max.	14
• Forcing, variables, max.     Inputs, outputs       • Number of variables, max.     10       Diagnostic buffer     •       • present     Yes       • Number of entries, max.     500       adjustable     No       of which powerfail-proof     100; Only the last 100 entries are retained       • Number of entries readable in RUN, max.     -       adjustable     No       adjustable     Yes; From 10 to 499       preset     10       Service data     -       • can be read out     Yes       Ambient temperature during operation     0 °C       • min.     0 °C       • max.     60 °C       Configuration / hader     -       • STEP 7     Yes; V52 SP1 or higher with HW update       configuration / programming / header     see instruction list       • STEP 7     Yes; V52 SP1 or higher with HW update       configuration / programming / header     see instruction list       • StEP 7     Yes; V52 SP1 or higher with HW update       configuration / programming / header     see instruction list       • System functions (SFC)     see instruction list       • System function blocks (SFB)     see instruction list       - SCL     Yes       - SCL     Yes       - SCL     Y	Forcing	
Number of variables, max.         10           Diagnostic buffer         -           • present         Yes           • Number of entries, max.         500           adjustable         No           - of which powerfail-proof         100; Only the last 100 entries are retained           • Number of entries readable in RUN, max.         -           - adjustable         Yes; From 10 to 499           - preset         10           Service data         -           • can be read out         Yes           Ambient temperature during operation         0 °C           • max.         60 °C           configuration / header         -           • STEP 7         Yes; V5.2 SP1 or higher with HW update           configuration / programming / header         -           • Command set         see instruction list           • System functions (SFC)         see instruction list           • System function blocks (SFB)         see instruction list           • System function blocks (SFE)         yes           - SCL	• Forcing	Yes
Number of variables, max.         10           Diagnostic buffer         -           • present         Yes           • Number of entries, max.         500           adjustable         No           - of which powerfail-proof         100; Only the last 100 entries are retained           • Number of entries readable in RUN, max.         -           - adjustable         Yes; From 10 to 499           - preset         10           Service data         -           • can be read out         Yes           Ambient temperature during operation         0 °C           • max.         60 °C           configuration / header         -           • STEP 7         Yes; V5.2 SP1 or higher with HW update           configuration / programming / header         -           • Command set         see instruction list           • System functions (SFC)         see instruction list           • System function blocks (SFB)         see instruction list           • System function blocks (SFE)         yes           - SCL	<ul> <li>Forcing, variables</li> </ul>	Inputs, outputs
Diagnostic buffer       Yes <ul> <li>Present</li> <li>Yes</li> <li>Number of entries, max.</li> <li>500</li> <li>- adjustable</li> <li>No</li> <li>- of which powerfail-proof</li> <li>100; Only the last 100 entries are retained</li> <li>Number of entries readable in RUN, max.</li> <li>- adjustable</li> <li>Yes; From 10 to 499</li> <li>- preset</li> <li>10</li> <li>Service data</li> <li>can be read out</li> <li>Yes</li> <li>Ambient conditions</li> <li>Ambient conditions</li> <li>o °C</li> <li>onin.</li> <li>0 °C</li> <li>onin.</li> <li>0 °C</li> <li>configuration flexator</li> <li>configuration software</li> <li>STEP 7</li> <li>Yes; V5.2 SP1 or higher with HW update</li> <li>configuration software</li> <li>System function blocks (SFC)</li> <li>see instruction list</li> <li>System function blocks (SFB)</li> <li>see instruction list</li> <li>System function blocks (SFB)</li> <li>see instruction list</li> <li>System function blocks (SFB)</li> <li>see instruction list</li> <li>Programming language</li> <li>- LAD</li> <li>Yes</li> <li>- SCL</li> <li>Yes</li> <li>- SCL</li> <li>Yes</li> <li>- SCL</li> <li>Yes</li> <li>- GRAPH</li> <li>Yes</li> <li>- GRAPH</li> <li>Yes</li> <li>- GRAPH</li> <li>Ves with S7 block Privacy</li> <li>Other program protection/password protection</li> <li>Yes With S7 block Privacy</li> <li>Othersions</li> <li>Width</li> <li>40 mm</li> </ul>		
<ul> <li>present</li> <li>Yes</li> <li>Number of entrites, max.</li> <li>500</li> <li>- adjustable</li> <li>No</li> <li>- of which powerfail-proof</li> <li>100, Only the last 100 entries are retained</li> <li>Number of entrites readable in RUN, max.</li> <li>- adjustable</li> <li>- adjustable</li> <li>Yes; From 10 to 499</li> <li>- preset</li> <li>10</li> <li>Service data</li> <li>can be read out</li> <li>Yes</li> <li>Ambient conditions</li> <li>Ambient conditions</li> <li>or C</li> <li>configuration / header</li> <li>Configuration / header</li> <li>Configuration / programming / header</li> <li>Command set</li> <li>System functions (SFC)</li> <li>see instruction list</li> <li>System function blocks (SFB)</li> <li>see instruction list</li> <li>System function blocks (SFB)</li> <li>see instruction list</li> <li>System function blocks (SFB)</li> <li>see instruction list</li> <li>Fregramming / header</li> <li>- LAD</li> <li>- FBD</li> <li>Yes</li> <li>- GRAPH</li> <li>Yes</li> <li>- GRAPH</li> <li>Yes</li> <li>- GRAPH</li> <li>Yes</li> <li>- GRAPH</li> <li>Yes (Yes With S7 block Privacy</li> <li>Other program protection/password protection</li> <li>Yes (With S7 block Privacy</li> </ul>		
• Number of entries, max.     500	<u> </u>	Yes
	•	
• Number of entries readable in RUN, max.	-	
		100; Only the last 100 entries are retained
Service data         • can be read out       Yes         Ambient conditions         Ambient conditions         Ambient temperature during operation         • min.       0 °C         configuration / header         Configuration software         • STEP 7         Command set       see instruction list         • Nesting levels       8         • System function blocks (SFD)       see instruction list         • System function blocks (SFB)       see instruction list         Programming language       Yes         - LAD       Yes         - SCL       Yes         - SCL       Yes         - SCL       Yes         - SCL       Yes         - GFC Yes       Yes         - GFC Yes       Yes         - GFAPH       Yes         - HiGraph®       Yes         - HiGraph®       Yes         Width       40 mm	-	
• can be read out     Yes       Ambient conditions     Ambient temperature during operation       • min.     0 °C       • max.     60 °C       configuration / header     Configuration software       • STEP 7     Yes; V5.2 SP1 or higher with HW update       configuration / programming / header     see instruction list       • STEP 7     Yes; V5.2 SP1 or higher with HW update       configuration / programming / header     see instruction list       • Step 10 / programming / header     see instruction list       • Command set     see instruction list       • Nesting levels     8       • System function blocks (SFE)     see instruction list       • System function blocks (SFB)     see instruction list       Programming language     Yes       - LAD     Yes       - STL     Yes       - STL     Yes       - SCL     Yes       - GRAPH     Yes       - HiGraph®     Yes       - HiGraph®     Yes       - HiGraph®     Yes       Width     40 mm	— preset	10
Ambient conditions         Ambient temperature during operation         • min.       0 °C         • max.       60 °C         configuration / header       60 °C         Configuration software       •         • STEP 7       Yes; V5.2 SP1 or higher with HW update         configuration / programming / header       see instruction list         • Command set       see instruction list         • Nesting levels       8         • System functions blocks (SFB)       see instruction list         Programming language       -         - LAD       Yes         - STL       Yes         - SCL       Yes         - SCL       Yes         - GRAPH       Yes         - HiGraph®       Yes         - HiGraph®       Yes         - Block encryption       Yes; With S7 block Privacy         Dimensions       Width       40 mm		
Ambient temperature during operation       0 °C         • max.       60 °C         configuration / header       60 °C         Configuration software       • STEP 7         • STEP 7       Yes; V5.2 SP1 or higher with HW update         configuration / programming / header       see instruction list         • Command set       see instruction list         • Nesting levels       8         • System functions (SFC)       see instruction list         • System functions (SFC)       see instruction list         • System functions (SFB)       see instruction list         Programming language       -         - LAD       Yes         - STL       Yes         - STL       Yes         - SCL       Yes         - GRAPH       Yes         - HiGraph®       Yes         Know-how protection/password protection       Yes; With S7 block Privacy         Dimensions       Width       40 mm	can be read out	Yes
• min.0 °C• max.60 °Cconfiguration / headerConfiguration softwareYes; V5.2 SP1 or higher with HW update• STEP 7Yes; V5.2 SP1 or higher with HW updateconfiguration / programming / headersee instruction list• Command setsee instruction list• Nesting levels8• System function blocks (SFC)see instruction list• System function blocks (SFB)see instruction listProgramming languageYes- LADYes- STLYes- SCLYes- SCLYes- CFCYes- GRAPHYes- HiGraph®YesVidth40 mm	Ambient conditions	
• max.60 °Cconfiguration / header• STEP 7Yes; V5.2 SP1 or higher with HW update• STEP 7Yes; V5.2 SP1 or higher with HW updateconfiguration / programming / headersee instruction list• Command setsee instruction list• Nesting levels8• System functions (SFC)see instruction list• System function blocks (SFB)see instruction list• System function blocks (SFB)see instruction list• Programming languageYes- LADYes- STLYes- SCLYes- SCLYes- GRAPHYes- HiGraph®YesKnow-how protection/password protectionYesVidth40 mm	Ambient temperature during operation	
configuration / header         • STEP 7       Yes; V5.2 SP1 or higher with HW update         configuration / programming / header       see instruction list         • Command set       see instruction list         • Nesting levels       8         • System functions (SFC)       see instruction list         • System function blocks (SFB)       see instruction list         Programming language       -         - LAD       Yes         - FBD       Yes         - SCL       Yes         - SCL       Yes         - GRAPH       Yes         - HiGraph®       Yes         Know-how protection       Yes         • User program protection/password protection       Yes         Width       40 mm	• min.	0 °C
Configuration software         • STEP 7       Yes; V5.2 SP1 or higher with HW update         configuration / programming / header       see instruction list         • Command set       see instruction list         • Nesting levels       8         • System functions (SFC)       see instruction list         • System function blocks (SFB)       see instruction list         • System function blocks (SFB)       see instruction list         Programming language       -         - LAD       Yes         - FBD       Yes         - STL       Yes         - SCL       Yes         - CFC       Yes         - GRAPH       Yes         HiGraph®       Yes         Know-how protection       Yes         Width       40 mm	• max.	60 °C
Configuration software         • STEP 7       Yes; V5.2 SP1 or higher with HW update         configuration / programming / header       see instruction list         • Command set       see instruction list         • Nesting levels       8         • System functions (SFC)       see instruction list         • System function blocks (SFB)       see instruction list         • System function blocks (SFB)       see instruction list         Programming language       -         - LAD       Yes         - FBD       Yes         - STL       Yes         - SCL       Yes         - CFC       Yes         - GRAPH       Yes         HiGraph®       Yes         Know-how protection       Yes         Width       40 mm	configuration / header	
• STEP 7       Yes; V5.2 SP1 or higher with HW update         configuration / programming / header       see instruction list         • Command set       see instruction list         • Nesting levels       8         • System functions (SFC)       see instruction list         • System function blocks (SFB)       see instruction list         Programming language       -         - LAD       Yes         - FBD       Yes         - STL       Yes         - SCL       Yes         - CFC       Yes         - GRAPH       Yes         - HiGraph®       Yes         Know-how protection       Yes         Block encryption       Yes; With S7 block Privacy         Dimensions       40 mm		
configuration / programming / header         • Command set       see instruction list         • Nesting levels       8         • System functions (SFC)       see instruction list         • System function blocks (SFB)       see instruction list         Programming language       -         - LAD       Yes         - FBD       Yes         - STL       Yes         - SCL       Yes         - CFC       Yes         - GRAPH       Yes         - HiGraph®       Yes         Ves program protection/password protection       Yes         Block encryption       Yes; With S7 block Privacy         Dimensions       40 mm	0	Ves: V/5 2 SP1 or higher with LIM undete
• Command setsee instruction list• Nesting levels8• System functions (SFC)see instruction list• System function blocks (SFB)see instruction listProgramming language LADYes- FBDYes- STLYes- SCLYes- CFCYes- GRAPHYes- HiGraph®YesKnow-how protectionYes• Block encryptionYes; With S7 block PrivacyDimensions40 mm		
• Nesting levels8• System functions (SFC)see instruction list• System function blocks (SFB)see instruction listProgramming language LADYes- FBDYes- STLYes- SCLYes- CFCYes- GRAPHYes- HiGraph®Yes- Block encryptionYes- Block encryptionYes; With S7 block PrivacyDimensionsYes; With S7 block PrivacyWidth40 mm		
• System functions (SFC)see instruction list• System function blocks (SFB)see instruction listProgramming language		
• System function blocks (SFB)       see instruction list         Programming language       ////////////////////////////////////	•	
Programming language- LADYes- FBDYes- STLYes- SCLYes- CFCYes- GRAPHYes- HiGraph®YesKnow-how protectionYes• User program protection/password protectionYes• Block encryptionYes; With S7 block PrivacyDimensions40 mm		
− LADYes− FBDYes− STLYes− SCLYes− CFCYes− GRAPHYes− HiGraph®YesFor encryptionYes• User program protection/password protectionYes• Block encryptionYes; With S7 block PrivacyDimensions40 mm	· · · ·	see instruction list
FBDYes STLYes SCLYes CFCYes GRAPHYes HiGraph®Yes HiGraph®Yes Block encryptionYes Block encryptionYes; With S7 block PrivacyDimensions40 mm		
- STL     Yes       - SCL     Yes       - CFC     Yes       - GRAPH     Yes       - HiGraph®     Yes       Know-how protection     Yes       • User program protection/password protection     Yes; With S7 block Privacy       Dimensions     40 mm		
- SCL     Yes       - CFC     Yes       - GRAPH     Yes       - HiGraph®     Yes       Know-how protection     Yes       • User program protection/password protection     Yes; With S7 block Privacy       • Block encryption     Yes; With S7 block Privacy       Dimensions     40 mm	— FBD	Yes
- CFC     Yes       - GRAPH     Yes       - HiGraph®     Yes       Know-how protection     Yes       • User program protection/password protection     Yes; With S7 block Privacy       • Block encryption     Yes; With S7 block Privacy       Dimensions     40 mm	— STL	Yes
- GRAPH     Yes       - HiGraph®     Yes       Know-how protection     Yes       • User program protection/password protection     Yes       • Block encryption     Yes; With S7 block Privacy       Dimensions     40 mm	— SCL	Yes
- GRAPH     Yes       - HiGraph®     Yes       Know-how protection     Yes       • User program protection/password protection     Yes       • Block encryption     Yes; With S7 block Privacy       Dimensions     40 mm	— CFC	Yes
HiGraph®     Yes       Know-how protection     Yes       • User program protection/password protection     Yes       • Block encryption     Yes; With S7 block Privacy       Dimensions     40 mm		
Know-how protection       Yes         • User program protection/password protection       Yes; With S7 block Privacy         • Block encryption       Yes; With S7 block Privacy         Dimensions       40 mm		
• User program protection/password protection     Yes       • Block encryption     Yes; With S7 block Privacy       Dimensions     40 mm	· ·	
Block encryption Yes; With S7 block Privacy  Dimensions  Width 40 mm		Yes
Dimensions       Width     40 mm		
Width     40 mm		100, WILL OF DIOLET IVACY
	Dimensions	
Height 125 mm		
	Width	

Depth	130 mm
Weights	
Weight, approx.	290 g
last modified:	8/24/2021 🖸