

Communication module for XC100/200, 24 V DC, profibus-DP module

Powering Business Worldwide*

Part no. XIOC-NET-DP-S Article no. 286419

Delivery program

Function	Communication modules
	Compact I/O system for connection to XC100/200 Modular PLCs XC100/200 expandable with up to 15 XI/OC modules Optionally, screw terminals or spring-loaded terminals for digital/analog modules
Description	PROFIBUS DP slave module

Technical data

General

Standards			IEC/EN 61131-2 EN 50178
Ambient temperature		°C	0 - +55
Storage	8	°C	-20 - +70
Vibration resistance			10 - 57 Hz ±0.075 mm 57 - 150 Hz ±1.0 mm
Mechanical shock resistance		g	15 Shock duration 11 ms
Impact resistance			500 g/ ²⁰ 50 mm ±25 g
Overvoltage category/pollution degree			11/2
Protection class			1
Degree of Protection			IP20
Emitted interference			DIN/EN 55011/22, Class A
Weight		kg	0.2
Power supply			

Rated voltage	U _e	V DC	24 (12)
Admissible range			20.4 – 28.8 (11.8 – 14.4)
Residual ripple		%	≦ ₅
Neutral poles			
Duration of dip		ms	10
Repetition rate		s	1
Maximum power loss	P_{ν}	W	7.2

Interfaces

Interfaces			
Built-in interfaces			PROFIBUS DP, RS485, EN 50170
Protocol			PROFIBUS DP slave
Data transfer rate		kBit/s	9.6 to 12000
Function			Slave
Potential isolation			Yes
Transmit/receive data			Max. 244 Byte
Bus terminating resistors			Switchable
Plug arrangement			9-pole Sub-D socket
Current consumption	l _e	mA	300
Baud rate/length		kBd	9.6 KBit/s with 1200 m 19.2 KBit/s with 1200 m 93.75 KBit/s with 1200 m 187.5 KBit/s with 1000 m 187.5 KBit/s with 400 m 1500 KBit/s with 200 m 3000 KBit/s with 100 m 6000 KBit/s with 100 m 12000 KBit/s with 100 m
Bus diagnostics			LED
Number of modules			XC100: 1

		XC200: 3
Slots		1, 2, 3
Interface modules		
Operating mode Transparent mode		
Data transfer rate	kBit/s	9.6 to 12000
Operating mode		
Message format		PROFIBUS-DP-0
Transmit/receive data		Max. 244 Byte

Design verification as per IEC/EN 61439

Technical data for design verification			
Rated operational current for specified heat dissipation	In	Α	0
Heat dissipation per pole, current-dependent	P _{vid}	W	0
Equipment heat dissipation, current-dependent	P _{vid}	W	0
Static heat dissipation, non-current-dependent	P _{vs}	W	7.2
Heat dissipation capacity	P _{diss}	W	0
Operating ambient temperature min.		°C	0
Operating ambient temperature max.		°C	55
IEC/EN 61439 design verification			
10.2 Strength of materials and parts			
10.2.2 Corrosion resistance			Meets the product standard's requirements.
10.2.3.1 Verification of thermal stability of enclosures			Meets the product standard's requirements.
10.2.3.2 Verification of resistance of insulating materials to normal heat			Meets the product standard's requirements.
10.2.3.3 Verification of resistance of insulating materials to abnormal heat and fire due to internal electric effects			Meets the product standard's requirements.
10.2.4 Resistance to ultra-violet (UV) radiation			Meets the product standard's requirements.
10.2.5 Lifting			Does not apply, since the entire switchgear needs to be evaluated.
10.2.6 Mechanical impact			Does not apply, since the entire switchgear needs to be evaluated.
10.2.7 Inscriptions			Meets the product standard's requirements.
10.3 Degree of protection of ASSEMBLIES			Meets the product standard's requirements.
10.4 Clearances and creepage distances			Meets the product standard's requirements.
10.5 Protection against electric shock			Does not apply, since the entire switchgear needs to be evaluated.
10.6 Incorporation of switching devices and components			Does not apply, since the entire switchgear needs to be evaluated.
10.7 Internal electrical circuits and connections			Is the panel builder's responsibility.
10.8 Connections for external conductors			Is the panel builder's responsibility.
10.9 Insulation properties			
10.9.2 Power-frequency electric strength			Is the panel builder's responsibility.
10.9.3 Impulse withstand voltage			Is the panel builder's responsibility.
10.9.4 Testing of enclosures made of insulating material			Is the panel builder's responsibility.
10.10 Temperature rise			The panel builder is responsible for the temperature rise calculation. Eaton will provide heat dissipation data for the devices.
10.11 Short-circuit rating			Is the panel builder's responsibility.
10.12 Electromagnetic compatibility			Is the panel builder's responsibility.
10.13 Mechanical function			The device meets the requirements, provided the information in the instruction leaflet (IL) is observed.

Technical data ETIM 6.0

ectric engineering, automation, process control engineering / Control / Programmable logic control (SPS) / SPS communication module (ecl@ss8.1-27-24-22-08 [AKE531011]) umber of HW-interfaces industrial Ethernet 0 umber of HW-interfaces PR0FINET 0 umber of HW-interfaces RS-232 0 umber of HW-interfaces RS-422 0 umber of HW-interfaces RS-485		
umber of HW-interfaces industrial Ethernet 0 umber of HW-interfaces PROFINET 0 umber of HW-interfaces RS-232 0 umber of HW-interfaces RS-422 0 umber of HW-interfaces RS-485 1	PLC's (EG000024) / PLC communication module (EC001423)	
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umber of HW-interfaces RS-485	Number of HW-interfaces RS-232	0
	Number of HW-interfaces RS-422	0
umber of HW-interfaces serial TTY 0	Number of HW-interfaces RS-485	1
	Number of HW-interfaces serial TTY	0
umber of HW-interfaces USB 0	Number of HW-interfaces USB	0

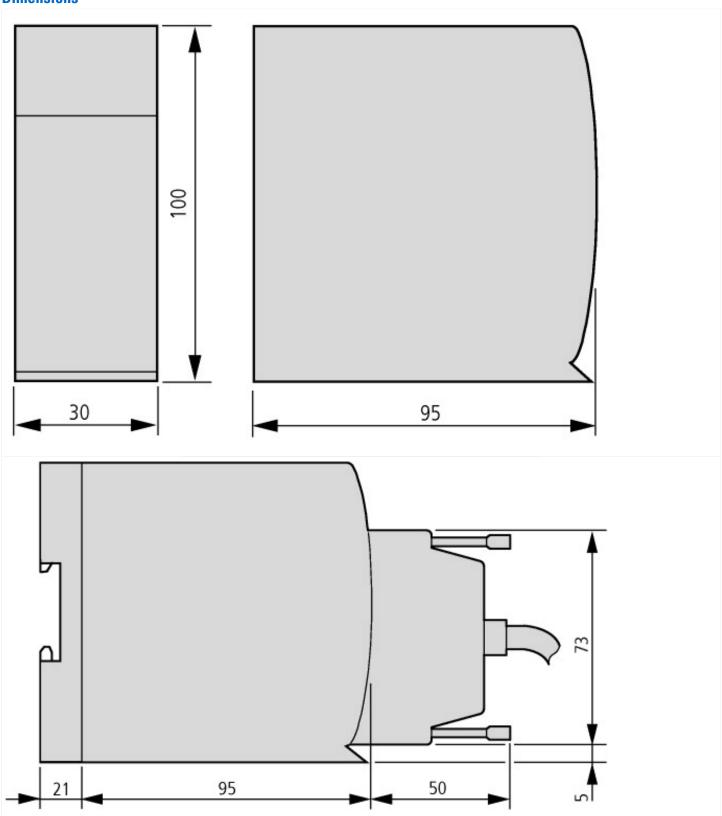
Number of HW-interfaces parallel		0
Number of HW-interfaces Wireless		0
Number of HW-interfaces other		0
With optical interface		No
Supporting protocol for TCP/IP		No
Supporting protocol for PROFIBUS		Yes
Supporting protocol for CAN		No
Supporting protocol for INTERBUS		No
Supporting protocol for ASI		No
Supporting protocol for KNX		No
Supporting protocol for MODBUS		No
Supporting protocol for Data-Highway		No
Supporting protocol for DeviceNet		No
Supporting protocol for SUCONET		No
Supporting protocol for LON		No
Supporting protocol for PROFINET IO		No
Supporting protocol for PROFINET CBA		No
Supporting protocol for SERCOS		No
Supporting protocol for Foundation Fieldbus		No
Supporting protocol for EtherNet/IP		No
Supporting protocol for AS-Interface Safety at Work		No
Supporting protocol for DeviceNet Safety		No
Supporting protocol for INTERBUS-Safety		No
Supporting protocol for PROFIsafe		No
Supporting protocol for SafetyBUS p		No
Supporting protocol for other bus systems		No
Radio standard Bluetooth		No
Radio standard WLAN 802.11		No
Radio standard GPRS		No
Radio standard GSM		No
Radio standard UMTS		No
IO link master		No
Redundancy		No
Type of data transmission		Serial
Transmission rate	kBit/s	12000
With potential separation		No
Category according to EN 954-1		
SIL according to IEC 61508		None
Suitable for safety functions		No
Performance level acc. to EN ISO 13849-1		None
Appendant operation agent (Ex ia)		No
Appendant operation agent (Ex ib)		No
Explosion safety category for gas		None
Explosion safety category for dust		None
Width	mm	30
Height	mm	100
Depth	mm	95

Approvals

IEC: see Technical Data; UL508; CSA-C22.2 No. 0-M; CSA-C22.2 No. 142-M; CE marking
E135462
NRAQ
012528
2252-01
UL listed, CSA certified

Specially designed for North America	No
Current Limiting Circuit-Breaker	No
Degree of Protection	IEC: IP20, UL/CSA Type: -

Dimensions



Additional product information (links)

MN05002002Z (AWB2725-1452) XIOC signal mo	dules
MN05002002Z (AWB2725-1452) XIOC- Signalmodule - Deutsch	ftp://ftp.moeller.net/DOCUMENTATION/AWB_MANUALS/MN05002002Z_DE.pdf
MN05002002Z (AWB2725-1452) XIOC signal modules - English	ftp://ftp.moeller.net/DOCUMENTATION/AWB_MANUALS/MN05002002Z_EN.pdf