



Fieldbus connection, profibus-DPV1-Slave

Part no. NZM-XDMI-DPV1
Article no. 270333

Delivery program

Product range		Accessories
Accessories		Diagnostics, communication
Description		Connection to the DMI module <ul style="list-style-type: none"> • Transfer of phase currents, parameter data, status data and diagnostics data. • Transfer of circuit-breaker position (wiring of auxiliary contacts to DMI inputs). • Actuation of the DMI motor starter functions and the NZM remote operator. • Detection of digital inputs and actuation via field Bus. • PROFIBUS-DPV1-Slave fieldbus interface. Can be operated with class 1 and class 2 masters. Addresses available: 1 to 126.
Bus protocol		PROFIBUS-DP
Notes		
Connected to the DMI module and has the same contour appearance.		

Technical data

General

Standards		EN 55011, EN 55022, IEC/EN 61000-4, IEC 60068-2-6, IEC 60068-2-27
Dimensions (W x H x D)	mm	35.5 x 90 x 58 (2 PE)
Weight	kg	0.15
Mounting		Top-hat rail IEC/EN 60715, 35 mm or screw fixing using fixing brackets ZB4-101-GF1 (accessories)

Terminal capacities

Solid	mm ²	0.2 ... 4 (AWG 22 ... 12)
Flexible with ferrule	mm ²	0.2 ... 2.5 (AWG 22 ... 12)
Standard screwdriver	mm	3.5 x 0.8
Max. tightening torque	Nm	0.6

Climatic environmental conditions

Operating ambient temperature	°C	-25 to 55, cold as per IEC 60068-2-1, heat as per IEC 60068-2-2
Condensation		Take appropriate measures to prevent condensation
Storage	°C	- 40 - 70
Relative humidity, non-condensing (IEC/EN 60068-2-30)	%	5 - 95
Air pressure (operation)	hPa	795 - 1080
Corrosion resistance	cm ³ /m ³	
IEC/EN 60068-2-42	4 days SO ₂	cm ³ /m ³ 10
IEC/EN 60068-2-43	4 days H ₂ S	cm ³ /m ³ 1

Ambient conditions, mechanical

Pollution degree		2
Protection type (IEC/EN 60529, EN50178, VBG 4)		IP20
Vibrations (IEC/EN 60068-2-6)	Hz	
Constant amplitude 0.15 mm	Hz	10 - 57
Constant acceleration 2 g	Hz	57 - 150
Mechanical shock resistance (IEC/EN 60068-2-27) semi-sinusoidal 15 g/11 ms	Impacts	18
Drop to IEC/EN 60068-2-31	Drop height	mm 50
Free fall, packaged (IEC/EN 60068-2-32)	m	1
Mounting position		Vertical or horizontal

Electromagnetic compatibility (EMC)

Electrostatic discharge (IEC/EN 61000-4-2, Level 3, ESD)	kV	
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Air discharge		kV	8
Contact discharge		kV	6
Electromagnetic fields (RFI) to IEC EN 61000-4-3		V/m	10
Radio interference suppression			EN 55011 Class B, EN 55022 Class B
Burst Impulse (IEC/EN 61000-4-4, Level 3)			
Supply cable		kV	2
Signal lines		kV	2
power pulses (surge) (IEC/EN 61000-4-5, level 2)		kV	0.5 (supply cables, symmetrical)
Immunity to line-conducted interference to (IEC/EN 61000-4-6)		V	10

Insulation resistance

Clearance in air and creepage distances			EN 50178, UL 508, CSA C22.2, No. 142
Insulation resistance			EN 50178

Power supply

Rated operational voltage	U _e	V	24 (-15/+20 %)
Admissible range		V DC	20.4 - 28.8
Residual ripple		%	< 5
at 24 V DC		mA	Normally 200
Voltage dips		ms	≤ 10
Heat dissipation at 24 V DC		W	4.8

Protection against polarity reversal

AS-I power supply			Yes
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LEDs

Supply			Power LED (POW): green
LED display			PROFIBUS-DP LED (BUS): red

Network

Connection technique			SUB-D 9 pole, socket
Potential isolation			Between bus and power supply (simple), between bus and power supply and NZM-XDMI612 (safe isolation)
Function			PROFIBUS-DP slave
Interface			RS485
Bus protocol			PROFIBUS-DP
Baud rates			Automatic search up to 12 Mbit/s
Bus terminating resistors			Separate external bus termination required
Bus addresses			1 ... 126 via DMI
Services			
Cyclic			Status ON/OFF/tripped (detailed), load early warnings, phase currents I ₁ /I ₂ /I ₃ [A], remote operator actuation, display/operation NZM-XDMI612 inputs/outputs, motor starter functions
Acyclic			Display/match protection settings, event list, identification, hours of operation, switching operations, time

Design verification as per IEC/EN 61439

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			Does not apply, since the entire switchgear needs to be evaluated.

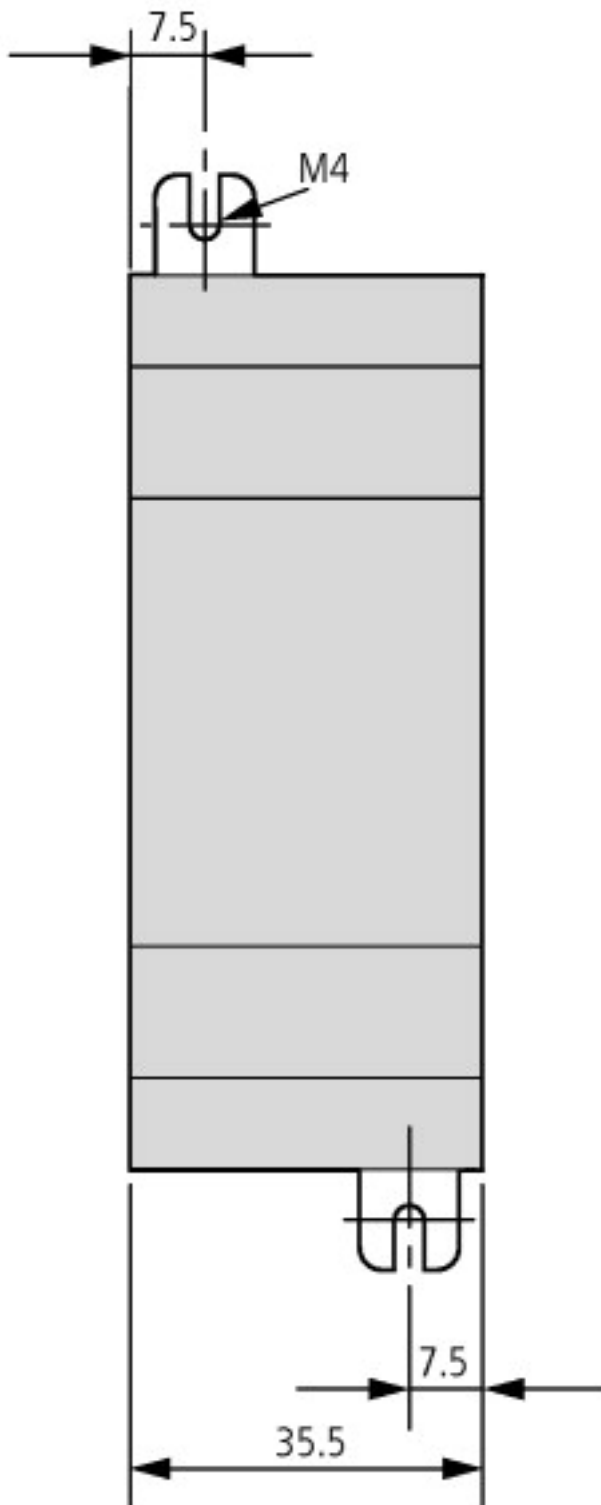
10.4 Clearances and creepage distances		Meets the product standard's requirements.
10.5 Protection against electric shock		Does not apply, since the entire switchgear needs to be evaluated.
10.6 Incorporation of switching devices and components		Does not apply, since the entire switchgear needs to be 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. The specifications for the switchgear must be observed.
10.12 Electromagnetic compatibility		Is the panel builder's responsibility. The specifications for the switchgear must be observed.
10.13 Mechanical function		The device meets the requirements, provided the information in the instruction leaflet (IL) is observed.

Technical data ETIM 6.0

PLC's (EG000024) / Fieldbus, decentr. periphery - communication module (EC001604)		
Electric engineering, automation, process control engineering / Control / Field bus, decentralized peripheral / Field bus, decentralized peripheral - communications module (ecl@ss8.1-27-24-26-08 [BAA073010])		
Supply voltage AC 50 Hz	V	0 - 0
Supply voltage AC 60 Hz	V	0 - 0
Supply voltage DC	V	0 - 0
Voltage type of supply voltage		DC
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 SERCOS		No
Supporting protocol for PROFINET IO		No
Supporting protocol for PROFINET CBA		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
System accessory		Yes
Degree of protection (IP)		IP20
With potential separation		No

Fieldbus connection over separate bus coupler possible			No
Rail mounting possible			Yes
Wall mounting/direct mounting			No
Front build in possible			Yes
Rack-assembly possible			No
Suitable for safety functions			No
Category according to EN 954-1			-
SIL according to IEC 61508			None
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			-
Width		mm	35
Height		mm	90
Depth		mm	55

Dimensions



NZM-XDMI-DPV1
EASY2...

Additional product information (links)

IL01219007Z (AWA1230-2123) Field Bus Connection PROFIBUS-DP

IL01219007Z (AWA1230-2123) Field Bus Connection PROFIBUS-DP ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL01219007Z2010_11.pdf

MN01219002Z (AWB1230-1441) Communications system circuit-breakers

MN01219002Z (AWB1230-1441) Kommunikations-System Leistungsschalter - Deutsch ftp://ftp.moeller.net/DOCUMENTATION/AWB_MANUALS/MN01219002Z_DE.pdf

MN01219002Z (AWB1230-1441) Communications system circuit-breakers - English ftp://ftp.moeller.net/DOCUMENTATION/AWB_MANUALS/MN01219002Z_EN.pdf

