DATASHEET - NZM-XDMI-DPV1



Fieldbus connection, profibus-DPV1-Slave

Part no. NZM-XDMI-DPV1 Catalog No. 270333

EL-Nummer (Norway) 0004359055



Delivery program

Product range	Accessories
Accessories	Diagnostics, communication
Description	Connection to the DMI module 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	0.8 x 3.5
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		cm³/m³	
IEC/EN 60068-2-42	4 days SO ₂	$\mathrm{cm}^3/\mathrm{m}^3$	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

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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

Electrostatic discharge (IEC/EN 61000-4-2, Level 3, ESD)		kV	
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)			2.1.000.1.0.100.2.7, 2.1.000.2.2.0.100.2
Supply cable		kV	2
			2
Signal lines		kV	
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 Power supply			EN 50178
Rated operational voltage	U _e	V	24 (-15/+20 %)
	O _e		
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 LEDs			Yes
Supply			Power LED (POW): green
LED display			PROFIBUS-DP LED (BUS): red
Network			PROFIDUS-DE LED (BUS). 180
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.

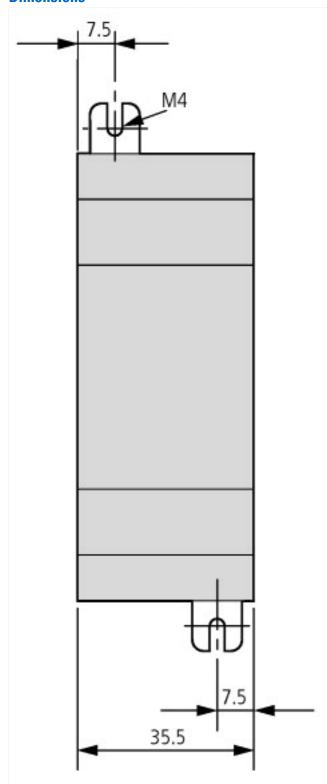
10.2.7 Inscriptions	Meets the product standard's requirements.
10.3 Degree of protection of ASSEMBLIES	Does not apply, since the entire switchgear needs to be evaluated.
10.4 Clearances and creepage distances	Meets the product standard's requirements.
10.5 Protection against electric shock	Does not apply, 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 7.0

PLC's (EG000024) / Fieldbus, decentr. periphery - communication module (EC001604)	
Electric engineering, automation, process control engineering / Control / Field bus, (ecl@ss10.0.1-27-24-26-08 [BAA073013])	decentralized peripher	al / Field bus, decentralized peripheral - communications module
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. 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		Other
Width	mm	36
Height	mm	90
Depth	mm	60

Dimensions



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Additional product information (links)

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IL01219007Z (AWA1230-2123) Field Bus Connection PROFIBUS-DP		
IL01219007Z (AWA1230-2123) Field Bus Connection PROFIBUS-DP	https://es-assets.eaton.com/DOCUMENTATION/AWA_INSTRUCTIONS/IL01219007Z2010_11.pdf	
MN01219002Z (AWB1230-1441) Communications system circuit-breakers		
MN01219002Z (AWB1230-1441) Kommunikationssystem-Leistungsschalter - Deutsch	https://es-assets.eaton.com/D0CUMENTATION/AWB_MANUALS/MN01219002Z_DE.pdf	
MN01219002Z (AWB1230-1441) Communications system circuit-breakers - English	https://es-assets.eaton.com/DOCUMENTATION/AWB_MANUALS/MN01219002Z_EN.pdf	