



NZM-XDMI-DPV1 - Fieldbus connection, profibus-DPV1 -Slave



270333
NZM-XDMI-DPV1

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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 DM 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)

35.5 x 90 x 58 (2 PE) mm

Weight

0.15 kg

Mounting

Top-hat rail IEC/EN 60715, 35 mm or screw fixing using fixing brackets ZB4-101-GF1 (accessories)

Terminal capacities

Solid

0.2 ... 4 (AWG 22 ... 12) mm²

Flexible with ferrule

0.2 ... 2.5 (AWG 22 ... 12) mm²

Standard screw driver

0.8 x 3.5 mm

Max. tightening torque

0.6 Nm

Climatic environmental conditions

Operating ambient temperature

-25 to 55, cold as per IEC 60068-2-1, heat as per IEC 60068-2-2 °C

Condensation
Take appropriate measures to prevent
condensation

Storage
- 40 - 70 °C

Relative humidity, non-condensing (IEC/EN 60068-
2-30)
5 - 95 %

Air pressure (operation)
795 - 1080 hPa

Corrosion resistance
IEC/EN 60068-2-42 [4 days SO₂]
10 cm³/m³

Corrosion resistance
IEC/EN 60068-2-43 [4 days H₂S]
1 cm³/m³

Ambient conditions, mechanical

Pollution degree
2

Protection type (IEC/EN 60529, EN50178, VBG 4)
IP20

Vibrations (IEC/EN 60068-2-6)
Constant amplitude 0.15 mm
10 - 57 Hz

Vibrations (IEC/EN 60068-2-6)
Constant acceleration 2 g
57 - 150 Hz

Mechanical shock resistance (IEC/EN 60068-2-27)
semi-sinusoidal 15 g/11 ms
18 Impacts

Drop to IEC/EN 60068-2-31 [Drop height]
50 mm

Free fall, packaged (IEC/EN 60068-2-32)
1 m

Mounting position
Vertical or horizontal

Electromagnetic compatibility (EMC)

Electrostatic discharge (IEC/EN 61000-4-2, Level 3, ESD)
Air discharge
8 kV

Electrostatic discharge (IEC/EN 61000-4-2, Level 3, ESD)
Contact discharge
6 kV

Electromagnetic fields (RFI) to IEC EN 61000-4-3
10 V/m

Radio interference suppression
EN 55011 Class B, EN 55022 Class B

Burst Impulse (IEC/EN 61000-4-4, Level 3)
Supply cable
2 kV

Burst Impulse (IEC/EN 61000-4-4, Level 3)
Signal lines
2 kV

power pulses (surge) (IEC/EN 61000-4-5, level 2)
0.5 (supply cables, symmetrical) kV

Immunity to line-conducted interference to (IEC/EN 61000-4-6)
10 V

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]
24 (-15/+20 %) V

Admissible range
20.4 - 28.8 V DC

Residual ripple
< 5 %

at 24 V DC
Normally 200 mA

Voltage dips
 ≤ 10 ms

Heat dissipation at 24 V DC
4.8 W

Protection against polarity reversal

AS-I power supply
Yes

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-
XDM612 (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 DM

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-XDM612 inputs/outputs,

motor starter functions

Services
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 Strength of materials and parts
10.2.3.1 Verification of thermal stability of enclosures
Meets the product standard's requirements.

10.2 Strength of materials and parts
10.2.3.2 Verification of resistance of insulating materials to normal heat
Meets the product standard's requirements.

10.2 Strength of materials and parts
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 Strength of materials and parts
10.2.4 Resistance to ultra-violet (UV) radiation
Meets the product standard's requirements.

10.2 Strength of materials and parts
10.2.5 Lifting
Does not apply, since the entire switchgear needs to be evaluated.

10.2 Strength of materials and parts
10.2.6 Mechanical impact
Does not apply, since the entire switchgear needs to be evaluated.

10.2 Strength of materials and parts
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 Insulation properties
10.9.3 Impulse withstand voltage
Is the panel builder's responsibility.

10.9 Insulation properties
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

PLCs (EG000024) / Fieldbus, decentr. periphery - communication module (EC001604)

Electric engineering, automation, process control engineering / Control / Field bus, decentralized peripheral / Field bus, decentralized peripheral - communications module (ec@ss10.0.1-27-24-26-08 [BAA073013])

Supply voltage AC 50 Hz
0 - 0 V

Supply voltage AC 60 Hz
0 - 0 V

Supply voltage DC
0 - 0 V

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

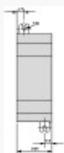
Explosion safety category for dust
Other

Width
36 mm

Height
90 mm

Depth
60 mm

DIMENSIONS



NZM-XDM-DPV1
EASY2...



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