DATASHEET - NZM-XSWD-704

Connection, SmartWire-DT, for NZM

Part no. NZM-XSWD-704
Catalog No. 135530

Powering Business Worldwide

Delivery program

Product range			SmartWire-DT slave
Subrange			SmartWire-DT module NZM circuit-breakers
Product range			Accessories
Standard/Approval			IEC
Construction size			NZM2/3/4
Accessories			Accessories, diagnostics & communication
Function			The module implements the data connection between the NZM2/3/4 with electronic release and SmartWire-DT.
Description			A switch with a remote operator can also be remotely operated with the module. Two digital inputs for the switch status 2 transistor outputs for remote switching Retentive memory for energy data (kWh) Energy data is transmitted through digital input (S0) from an external energy measuring module NZN...-XMC-S0.
Messages			Status data NZM: ON/OFF/TRIPPED Load warnings Reason for last trip Actual current value in A Switch type Actual settings of the rotary coding switches
Information about equipment supplied			A connection cable (1.90 m) for the circuit-breaker and two NZM auxiliary contacts (1 x NO, 1 x NC) are included as standard.
For use with			SmartWire-DT interface for NZM circuit-breakers
Connection to SmartWire-DT			yes

Technical data

General

Standards			IEC/EN 61131-2 EN 50178
Approvals			
shipping classification			BV LRS
			BUREAU VERITAS 1828 BUREAU VERITAS Lloyd's Register TYPE APPROVED
Dimensions (W x H x D)		mm	35 x 90 x 101
Weight		kg	0.1
Mounting			Top-hat rail IEC/EN 60715, 35 mm
Mounting position			Vertical

Climatic environmental conditions

Relative humidity			
Condensation			Take appropriate measures to prevent condensation
Relative humidity, non-condensing (IEC/EN 60068-2-30)		%	5 - 95

Ambient conditions, mechanical

Protection type (IEC/EN 60529, EN50178, VBG 4)			IP20
Vibrations (IEC/EN 61131-2:2008)			
Constant amplitude 3,5 mm		Hz	5 - 8.4

Constant acceleration 1 g		Hz	8.4 - 150
Mechanical shock resistance (IEC/EN 60068-2-27) semi-sinusoidal 15 g/11 ms		Impacts	9
Drop to IEC/EN 60068-2-31	Drop height	mm	50
Free fall, packaged (IEC/EN 60068-2-32)		m	0.3

Electromagnetic compatibility (EMC)

Overvoltage category			II
Pollution degree			2
Electrostatic discharge (IEC/EN 61131-2:2008)			
Air discharge (Level 3)		kV	8
Contact discharge (Level 2)		kV	4
Electromagnetic fields (IEC/EN 61131-2:2008)			
80 - 1000 MHz		V/m	10
1.4 - 2 GHz		V/m	3
2 - 2.7 GHz		V/m	1
Radio interference suppression (SmartWire-DT)			EN 55011 Class A
Burst (IEC/EN 61131-2:2008, Level 3)			
Supply cable		kV	2
Signal lines		kV	1
SmartWire-DT cables		kV	1
Radiated RFI (IEC/EN 61131-2:2008, Level 3)		V	10

SmartWire-DT network

Station type			SmartWire-DT slave
Setting the baud rate			automatic
Status SmartWire-DT		LED	Green
Connection			Plug, 8-pole Connection plug: External device plug SWD4-8SF2-5
Current consumption (15 V SWD supply)			

Electricity consumption	Bus	AUX 24 V With active remote operator	AUX 24 V with remote operator inactive
	mA	mA	mA
NZM-XSWD-704	35	300	100

Connection supply and I/O

Terminal for I/O sensor			
Connection type			Push in terminals
Solid		mm^2	0.2 - 1.5 (AWG 24 - 16)
Flexible with ferrule		mm^2	0.25 - 1.5

Digital inputs

Quantity			8
Input current		mA	Normally 4 at 24 V DC
Limit value type 1			Low < 5V DC;High > 15V DC
Input delay			High->Low < 0.2 ms Low -> High typ. < 0,2 ms
Status display inputs		LED	yellow

Digital semi-conductor outputs

Quantity			4
Output current		A	Normally 0.5 at 24 V DC
Short-circuit tripping current		A	max. 1.2 over 3 ms
Lamp load	R_{LL}	W	≦ ≤ 3
Overload proof			yes, with diagnostics
Switching capacity			EN 60947-5-1 utilization category DC-13

Potential isolation

Inputs for SmartWire-DT			Yes
Outputs to SmartWire-DT			Yes

Design verification as per IEC/EN 61439

Technical data for design verification		
Operating ambient temperature min.	°C	-25
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		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, decentralized peripheral / Field bus, decentralized peripheral - communications module (ecl@ss10.0.1-27-24-26-08 [BAA073013])

Supply voltage AC 50 Hz	V	0 - 0
Supply voltage AC 60 Hz	V	0 - 0
Supply voltage DC	V	24 - 24
Voltage type of supply voltage		DC
Supporting protocol for TCP/IP		No
Supporting protocol for PROFIBUS		No
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			Yes
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			Yes
Fieldbus connection over separate bus coupler possible			Yes
Rail mounting possible			Yes
Wall mounting/direct mounting			Yes
Front build in possible			No
Rack-assembly possible			No
Suitable for safety functions			No
Category according to EN 954-1			B
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			None
Width		mm	35
Height		mm	102
Depth		mm	90

Approvals

North America Certification			Request filed for UL and CSA

Dimensions