

## Connection, SmartWire-DT, for NZM

**Part no.**                    **NZM-XSWD-704**  
**135530**  
**EL Number**                **4520017**  
**(Norway)**

<b>General specifications</b>	
Product name	Eaton Moeller series NZM electronic accessory
Part no.	NZM-XSWD-704
EAN	4015081323166
Product Length/Depth	90 millimetre
Product height	102 millimetre
Product width	35 millimetre
Product weight	0.18 kilogram
Compliances	IEC RoHS conform
Certifications	IEC/EN 61131-2 UL CSA08 (request filed) EN 50178
Product Tradename	NZM
Product Type	Accessories
Product Sub Type	Electronic accessory
<b>Delivery program</b>	
Type	Accessory
Accessory/spare part type	Diagnostics and communication
Features	Fieldbus connection over separate bus coupler possible
Special features	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 NZM...-XMC-S0. Connection cable (1.90 m) for the circuit breaker and two NZM auxiliary contacts (1 x NO, 1 x NC) are included as standard. EN 55011 Class A (electromagnetic compatibility (EMC), radio interference suppression) EN 60947-5-1 utilization category DC-13 (switching capacity, digital semi-conductor outputs) Status display inputs: yellow Take appropriate measures to prevent condensation
Frame	NZM2/3/4
Fitted with:	Potential separation
Used with	SmartWire-DT interface for NZM circuit breakers
<b>Technical Data - Electrical</b>	
Voltage type	DC
Supply voltage at AC, 50 Hz - min	0 V
Supply voltage at AC, 50 Hz - max	0 V
Supply voltage at AC, 60 Hz - min	0 V
Supply voltage at AC, 60 Hz - max	0 V
Supply voltage at DC - min	24 V
Supply voltage at DC - max	24 V
Voltage range of type 1 digital inputs	Low ≤ 5V DC; High ≥ 15V DC
Input current of digital inputs	4 mA
Output current of digital semiconductor outputs	Normally 0.5 A at 24 V DC
Short-circuit tripping current	Max. 1.2 over 3 ms (digital semi-conductor outputs)
EMC of electromagnetic fields at 1.4 - 2 GHz (IEC/EN 61131-2:2008)	3 V/m
EMC of electromagnetic fields at 2 - 2.7 GHz (IEC/EN 61131-2:2008)	1 V/m
EMC of electromagnetic fields at 80 - 1000 MHz (IEC/EN 61131-2:2008)	10 V/m
EMC of electrostatic air discharge level 3 (IEC/EN 61131-2:2008)	8 kV
EMC of electrostatic contact discharge level 2 (IEC/EN 61131-2:2008)	4 kV

EMC of radiated RFI level 3 (IEC/EN 61131-2:2008)		10 V
Isolation		Outputs to SmartWire-DT (potential isolation) Inputs for SmartWire-DT (potential isolation)
Burst impulse		2 kV 1 kV
Digital input delay		High to low < 0.2 ms Low to High typ. < 0.2 ms
Overvoltage category		II
Pollution degree		2 (EMC)
<b>Technical Data - Communication</b>		
Protocol		Other bus systems
Messages		Actual current value in A Load warnings Actual settings of the rotary coding switches Reason for last trip Switch type Status data NZM: ON/OFF/TRIPPED
Connection to SmartWire-DT		Plug, 8-pole connection Connection to SmartWire-DT Green LED (status SmartWire-DT) Automatic setting the baud rate SmartWire-DT slave (station type) Connection plug: external device plug SWD4-8SF2-5
Overload proof of digital semi-conductor outputs		Yes, with diagnostics
Lamp load of digital semi-conductor outputs		3 W
<b>Technical Data - Mechanical</b>		
Dimensions		35 mm x 90 mm x 101 mm
Mounting position		Vertical
Degree of protection		IP20
Shock resistance		9 impacts (IEC 60068-2-27)
Number of inputs (digital)		8
Number of outputs (semiconductor)		4
Drop height (IEC/EN 60068-2-31)		50 mm
Packaged free fall height (IEC/EN 60068-2-32)		0.3 m
Vibrations at constant amplitude 3.5 mm (IEC/EN 61131-2:2008)		5 Hz - 8.4 Hz
Relative humidity		5 - 95 %
Explosion safety category for dust		None
Explosion safety category for gas		None
Special features		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 NZM...-XMC-SO. Connection cable (1.90 m) for the circuit breaker and two NZM auxiliary contacts (1 x NO, 1 x NC) are included as standard. EN 55011 Class A (electromagnetic compatibility (EMC), radio interference suppression) EN 60947-5-1 utilization category DC-13 (switching capacity, digital semi-conductor outputs) Status display inputs: yellow Take appropriate measures to prevent condensation
<b>Technical Data - Mechanical - Terminals</b>		
Terminal connection for I/O sensor		Push in terminals
Terminal capacity (cable)		0.25 mm <sup>2</sup> - 1.5 mm <sup>2</sup> with ferrule
Terminal capacity (solid wire)		0.2 mm <sup>2</sup> - 1.5 mm <sup>2</sup> (AWG 24 - AWG 16)
<b>Design verification as per IEC/EN 61439 - technical data</b>		
Ambient operating temperature - min		-25 °C
Ambient operating temperature - max		55 °C
<b>Design verification as per IEC/EN 61439</b>		
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 Resist. of insul. mat. to abnormal heat/fire by internal elect. 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.
10.9.2 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.
<b>Additional information</b>		
Functions		SmartWire-DT module NZM circuit breakers SmartWire-DT slave (product range) The module implements the data connection between the NZM2/3/4 with electronic release and SmartWire-DT.
Category (EN 954-1)		B
SIL (IEC 61508)		None

## Technical data ETIM 9.0

Programmable logic controllers PLC (EG000024) / Fieldbus, decentr. periphery - communication module (EC001604)		
Electric engineering, automation, process control engineering / Control, Process Control System (PCS) / Field bus, decentralized peripheral / Field bus, decentralized peripheral - communications module (ecl@ss13-27-24-26-08 [BAA073018])		
Supply voltage AC 50 Hz	V	0 - 0
Supply voltage AC 60 Hz	V	0 - 0
Supply voltage DC	V	24 - 24
Voltage type (supply voltage)		DC
Number of HW-interfaces CAN		
Number of HW-interfaces industrial Ethernet		
Number of interfaces PROFINET		
Number of HW-interfaces RS-232		
Number of HW-interfaces RS-422		
Number of HW-interfaces RS-485		
Number of HW-interfaces serial TTY		
Number of HW-interfaces USB		
Number of HW-interfaces parallel		
Number of HW-interfaces wireless		
Number of HW-interfaces other		
Supporting protocol for EtherCAT		No
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 eGPRS		No
Radio standard GSM		No
Radio standard LTE		No
Radio standard UMTS		No
IO link master		No
System accessory		No
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 built-in possible		No
Rack-assembly possible		No
Suitable for safety functions		No
SIL according to IEC 61508		None
Performance level according 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
Certified for UL hazardous location class I		No
Certified for UL hazardous location class II		No
Certified for UL hazardous location class III		No
Certified for UL hazardous location division 1		No
Certified for UL hazardous location division 2		No
Certified for UL hazardous location group A (acetylene)		No
Certified for UL hazardous location group B (hydrogen)		No
Certified for UL hazardous location group C (ethylene)		No
Certified for UL hazardous location group D (propane)		No
Certified for UL hazardous location group E (metal dusts)		No
Certified for UL hazardous location group F (carbonaceous dusts)		No
Certified for UL hazardous location group G (non-conductive dusts)		No
Width	mm	35
Height	mm	102
Depth	mm	90