

Eaton 135530

Catalog Number: 135530

Eaton Moeller series NZM - Molded Case Circuit Breaker.
Connection, SmartWire-DT, for NZM

General specifications



Product Name	Catalog Number
Eaton Moeller series NZM electronic accessory	135530
	EAN
	4015081323166
Product Length/Depth	Product Height
90 mm	102 mm
Product Width	Product Weight
35 mm	0.18 kg
Compliances	Certifications
IEC	UL CSA08 (request filed)
RoHS conform	IEC/EN 61131-2
	EN 50178

Product specifications

Used with

SmartWire-DT interface for NZM circuit breakers

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 semiconductor outputs)

Status display inputs: yellow

Take appropriate measures to prevent condensation

Type

Accessory

Features

Fieldbus connection over separate bus coupler possible

10.10 Temperature rise

The panel builder is responsible for the temperature rise calculation. Eaton will provide heat dissipation data for the devices.

Resources

Brochures

[eaton-feerum-the-whole-grain-solution-success-story-en-us.pdf](#)

[eaton-digital-nzm-brochure-br013003en-en-us.pdf](#)

Catalogs

[eaton-digital-nzm-catalog-ca013003en-en-us.pdf](#)

Drawings

[eaton-modular-plc-eu5e-input-module-dimensions.eps](#)

[eaton-modular-plc-eu5e-i-o-module-dimensions.eps](#)

[eaton-modular-plc-swd-eu5e-i-o-module-3d-drawing.eps](#)

eCAD model

[DA-CE-ETN.NZM-XSWD-704](#)

Installation instructions

[IL05006005Z](#)

Installation videos

[Introduction of the new digital circuit breaker NZM](#)

[The new digital NZM Range](#)

mCAD model

[nzm_xswd_704.stp](#)

[nzm_xswd_704.dwg](#)

Sales notes

[eaton-rmq-chemical-resistance-flyer-fl047011en-en-us.pdf](#)

Technical data sheets

[eaton-nzm-technical-information-sheet](#)

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.

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.

Fitted with:

Potential separation

Frame

NZM2/3/4

Pollution degree

2 (EMC)

Burst impulse

2 kV

1 kV

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

Isolation

Outputs to SmartWire-DT (potential isolation)

Inputs for SmartWire-DT (potential isolation)

Accessory/spare part type

Diagnostics and communication

Category (EN 954-1)

B

Explosion safety category for dust

None

Explosion safety category for gas

None

Mounting method

Top-hat rail IEC/EN 60715, 35 mm

Wall mounting/direct mounting

Rail mounting possible

Voltage type

DC

Mounting position

Vertical

Overvoltage category

II

Dimensions

35 mm x 90 mm x 101 mm

Safety performance level (EN ISO 13849-1)

None

SIL (IEC 61508)

None

Terminal connection for I/O sensor

Push in terminals

Vibrations at constant acceleration 1 g (IEC/EN 61131-2:2008)

8.4 Hz - 150 Hz

Vibrations at constant amplitude 3.5 mm (IEC/EN 61131-2:2008)

5 Hz - 8.4 Hz

Voltage range of type 1 digital inputs

Low \leq 5V DC; High \geq 15V DC

Ambient operating temperature - max

55 °C

Ambient operating temperature - min

-25 °C

Drop height (IEC/EN 60068-2-31)

50 mm

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

Input current of digital inputs

4 mA

Relative humidity

5 - 95 %

Degree of protection

IP20

Overload proof of digital semi-conductor outputs

Yes, with diagnostics

Terminal capacity (cable)

0.25 mm² - 1.5 mm² with ferrule

Terminal capacity (solid wire)

0.2 mm² - 1.5 mm² (AWG 24 - AWG 16)

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.

Digital input delay

High to low < 0.2 ms

Low to High typ. < 0.2 ms

Shock resistance

9 impacts (IEC 60068-2-27)

Short-circuit tripping current

Max. 1.2 over 3 ms (digital semi-conductor outputs)

System accessory

No

Number of inputs (digital)

8

Protocol

Other bus systems

Lamp load of digital semi-conductor outputs

3 W

Number of outputs (semiconductor)

Packaged free fall height (IEC/EN 60068-2-32)

0.3 m

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

Output current of digital semiconductor outputs

Normally 0.5 A at 24 V DC

Supply voltage at AC, 50 Hz - max

0 V

Supply voltage at AC, 50 Hz - min

0 V

Supply voltage at AC, 60 Hz - max

0 V

Supply voltage at AC, 60 Hz - min

0 V

Supply voltage at DC - max

24 V

Supply voltage at DC - min

24 V