Specifications

Eaton 116012



Catalog Number: 116012

Eaton Moeller® series M22 Function element, for combination with RMQ-Titan operating elements M22-..., 2 changeover contact, Base fixing, red

General specifications

Product Name
Eaton Moeller® series M22 Function element

Catalog Number
116012

EAN
4015081157525

Product Length/Depth
45 mm

Product Height
42 mm

Product Width
17 mm

Product Weight
0.013 kg

Certifications
CSA File No.: 2324643
EN 50178
UL
UL File No.: E29184
CSA
UL Category Control No.: NKCR
IEC/EN 61131-2
CSA Class No.: 3211-07

Powering Business Worldwide

Features & Functions

Electric connection type

Flat plug-in connection

Functions

For combination with RMQ-Titan operating elements M22-...

Diagnosis function

General

Degree of protection

IP20

Model

Top mounting

Mounting method

Front fastening

Overvoltage category

Not applicable

Pollution degree

2

Product category

SmartWire-DT RMQ connections

Ambient conditions, mechanical

Constant acceleration

1 g, 8.4 - 150 Hz, according to IEC/EN 61131-2, Vibrations

Constant amplitude

3,5 mm, 5 - 8.4 Hz, according to IEC/EN 61131-2, Vibrations

Drop and topple

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

Height of fall (IEC/EN 60068-2-32) - max

0.3 m

Mounting position

As required

Shock resistance

15 g, Mechanical, according to IEC/EN 60068-2-27, Half-sinusoidal shock 11 ms, 9 Impacts

Climatic environmental conditions

Ambient operating temperature - min

-30 °C

Ambient operating temperature - max

70 °C

Ambient storage temperature - min

-40 °C

Ambient storage temperature - max

80 °C

Environmental conditions

Condensation: prevent with appropriate measures

Relative humidity

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

Electro magnetic compatibility

Air discharge

8 kV, according to IEC 61131-2, level 3, ESD

Burst impulse

1 kV, SmartWire-DT cable, according to IEC/EN 61131-2, Level 3

2 kV, Supply cable, according to IEC/EN 61131-2, Level 3

Contact discharge

4 kV, according to IEC/EN 61131-2, Level 2, ESD

Electromagnetic fields

1 V/m at 2.0 - 2.7 GHz (according to IEC/EN 61131-2:2008)

10 V/m at 80 - 1000 MHz (according to IEC/EN 61131-2:2008)

3 V/m at 1.4 - 2 GHz (according to IEC/EN 61131-2:2008)

Radiated RFI

10 V (IEC/EN 61131-2:2008, Level 3)

Radio interference class

Class A (EN 55011)

Electrical rating

Rated operational current (Ie) at AC-15, 220 V, 230 V, 240 V

0 A

Communication

Addressing

Address set automatically

Connection

SmartWire-DT plug connector M22-SWD-I…LP

Connection to SmartWire-DT

Yes

Connection type

SWD: Plug, 8-pole

Base fixing

LED indicator

Status indication of SmartWire-DT network: Green LED

Status indication of Switching state: Yellow LED

Station

SmartWire-DT slave, SmartWire-DT network

Contacts

Number of contacts (change-over contacts)

0

Number of contacts (normally closed contacts)

2

Number of contacts (normally open contacts)

2

Design verification

Equipment heat dissipation, current-dependent Pvid

0 W

Heat dissipation capacity Pdiss

0 W

Heat dissipation per pole, current-dependent Pvid

0 W

Rated operational current for specified heat dissipation (In)

0 A

Static heat dissipation, non-current-dependent Pvs

0.3 W

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

Resources

Catalogs

eaton-rmq-titan-brochure-br047004en-en-us.pdf

eaton-pushbuttons-signal-towers-sensors-assortment-overview-catalog-ca047003en-en-us.pdf

Flip catalog - Product Range Catalog - Command and indication

Declarations of conformity

DA-DC-00003974.pdf

DA-DC-00003551.pdf

Drawings

eaton-operating-function-m22-function-element-3d-drawing.eps

eaton-operating-button-symbol-006.eps

eaton-operating-m22-function-element-flow-diagram-002.eps

eCAD model

ETN.116012.edz

Installation instructions

IL04716004Z2021_10.pdf

Installation videos

RMQ Flat Design

Manuals and user guides

MN05006001Z_EN

MN05006002Z_EN

mCAD model

DA-CD-funktionselement_k22_led_boden

DA-CS-funktionselement_k22_led_boden

Multimedia

easyE4 SmartWire-DT module with Remote Touch Display and RMQ multi color indicator

MCI Multicolor Light Indicator M22 with SmartWire-DT

MCI MultiColor Light Indicator RMQ compact solution

RMQ small E-Stop emergency-stop button

Sales notes

eaton-rmq-chemical-resistance-flyer-fl047011en-en-us.pdf

eaton-rmq-flat-enclosure-flyer-fl047003en-en-us.pdf

eaton-rmq-small-e-stop-flyer-fl047006en-en-us.pdf

eaton-rmq-mci-multi-color-light-indicator-flyer-fl047005en-en-us.pdf

eaton-control circuit-devices rmq-titan-fl144090en-en-us.pdf

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.

System overview

Pilot devices - selection aid

Wiring diagrams

eaton-modular-plc-m22-function-element-wiring-diagram-002.eps

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