Product specifications

Eaton 216378

Catalog Number: 216378

Eaton Moeller® series M22 Contact element, Screw terminals, Front fixing, 1 NC, 24 V 3 A, 220 V 230 V 240 V 6 A M22-K01

General specifications

Product Name
Eaton Moeller® series M22 Accessory Contact element

Catalog Number
216378

Model Code
M22-K01

EAN
4015082163785

Product Length/Depth
38 mm

Product Height
10 mm

Product Width
32 mm

Product Weight
0.01 kg

Compliances
CE Marked

Certifications
CSA Std. C22.2 No. 14-05
IEC 60947-5
CSA Std. C22.2 No. 94-91
UL 508
EN 60947-5
VDE
CSA-C22.2 No. 94-91
IEC
IEC 60947-5-1
CSA
CSA Class No.: 3211-03
CSA-C22.2 No. 14-05
CSA File No.: 012528
UL
UL Category Control No.: NKCR
UL File No.: E29184
CE

Powering Business Worldwide

Features & Functions

Electric connection type

Screw connection

General

Degree of protection

IP20

Lifespan, electrical

1,200,000 Operations (at 12 V, DC-13, 2.8 A)
1,600,000 Operations (at 230 V, 0.5 A)
700,000 Operations (at 230 V, AC-15, 3 A)
1,000,000 Operations (at 230 V, AC-15, 1 A)

Lifespan, mechanical

5,000,000 Operations

Model

Top mounting and integrable

Mounting method

Front fastening

Operating frequency

3600 Operations/h

Operating torque

0.8 Nm

Overvoltage category

III

Pollution degree

3

Product category

Accessories

Rated impulse withstand voltage (Uimp)

6000 V AC

Type

Auxiliary contact

Used with

Can be used with NZM3, 4 circuit-breaker: up to three standard auxiliary contacts can be clipped into the circuit-breaker.
Can be used with NZM4 circuit-breaker: up to two standard auxiliary contacts can be clipped into the circuit-breaker.
Can be used with NZM1, 2, 3 circuit-breaker: a trip-indicating auxiliary contact can be clipped into the circuit-breaker.
Can be used with NZM2 size circuit-breaker: a standard auxiliary contact can be clipped into the circuit-breaker.
Can be used with NZM1 circuit-breaker: a standard auxiliary contact can be clipped into the circuit-breaker.

Ambient conditions, mechanical

Shock resistance

30 g, Mechanical, According to IEC/EN 60068-2-27, Sinusoidal shock 11 ms

Climatic environmental conditions

Ambient operating temperature - min

-25 °C

Ambient operating temperature - max

70 °C

Climatic proofing

Damp heat, cyclic, to IEC 60068-2-30

Damp heat, constant, to IEC 60068-2-78

Terminal capacities

Terminal capacity (flexible with ferrule)

0.5 - 1.5 mm²

Terminal capacity (solid)

0.75 - 2.5 mm²

Terminal capacity (solid/flexible with ferrule)

2 x (0,5 - 0,75) mm²

1 x (0,75 - 2,5) mm²

Terminal capacity (stranded)

0.5 - 2.5 mm²

Electrical rating

Conventional thermal current ith of auxiliary contacts (1-pole, open)

4 A

Rated insulation voltage (Ui)

500 V

Rated operational current (Ie)

5 A – 600 V AC

1 A - 250 V DC

Rated operational current (Ie) at AC-15, 115 V

6 A

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

6 A

Rated operational current (Ie) at AC-15, 380 V, 400 V, 415 V

4 A

Rated operational current (Ie) at AC-15, 500 V

2 A

Rated operational current (Ie) at DC-13, 110 V

0.6 A

Rated operational current (Ie) at DC-13, 220 V, 230 V

0.3 A

Rated operational current (Ie) at DC-13, 24 V

3 A

Rated operational current (Ie) at DC-13, 42 V

1.7 A

Rated operational current (Ie) at DC-13, 60 V

1.2 A

Rated operational voltage (Ue) at AC - max

500 V

Rated operational voltage (Ue) at DC - max

220 V

Short-circuit rating

Rated conditional short-circuit current (Iq)

1 kA

Short-circuit protection

PKZM0-10/FAZ-B6/1, Contacts, Max. short-circuit protective device, Fuseless

Short-circuit protection rating

Max. 10 A gG/gL, Fuse, Contacts

Max. 10 A gG/gL, Fuse, Auxiliary contacts

Communication

Connection to SmartWire-DT

No

Connection type

Front fixing

Single contact

Actuator

Actuating force - max

5 N

Actuator travel and actuation force (DIN EN 60947-5-1)

4.8 mm

Knob travel

5.7 mm

Contacts

Control circuit reliability

1 failure per 5,000,000 switching operations (statistically determined, at 5 V DC/1 mA)

1 failure per 10,000,000 switching operations (Statistically determined, at 24 V DC/5 mA)

Force for positive opening - min

15 N

Number of contacts (change-over contacts)

0

Number of contacts (normally closed contacts)

1

Design verification

Equipment heat dissipation, current-dependent Pvid

0 W

Heat dissipation capacity Pdiss

0 W

Heat dissipation per pole, current-dependent Pvid

0.11 W

Rated operational current for specified heat dissipation (In)

6 A

Static heat dissipation, non-current-dependent Pvs

0 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 calculation. Eaton will provide heat dissipation data for the devices.

10.11 Short-circuit rating

Resources

Brochures

RMQ Titan - brochure

RMQ Titan emergency stop push button - Flyer

RMQ Flat Enclosure - Flyer

RMQ Small E-Stop - Flyer

RMQ MCI - Flyer

Catalogues

Product Range Catalog Command and Indication Control Circuit Devices, Signal Towers

Flip catalog - Product Range Catalog - Command and indication

Certification reports

DA-DC-00004176.pdf

DA-DC-00004135.pdf

DA-DC-00004134.pdf

DA-DC-00004141.pdf

DA-DC-00004157.pdf

DA-DC-00004180.pdf

000Z425

Drawings

eaton-operating-actuation-m22-led-element-dimensions.eps

eaton-circuit-breaker-release-nzm-mccb-dimensions.eps

eaton-general-standards-000Z425.jpg

eaton-operating-contact-m22-contact-element-3d-drawing-004.eps

eaton-operating-adapter-m22-contact-element-flow-diagram-002.eps

eaton-operating-devices-adapter-flow-diagram-003.eps

eCAD model

ETN.M22-K01

Installation instructions

eaton-operating-devices-rmq-titan-m22-instruction-leaflet-il047018zu.pdf

IL04716002Z

Installation videos

RMQ Flat Design

mCAD model

DA-CD-kontaktelement_schraube_front

DA-CS-kontaktelement_schraube_front

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-circuit-breaker-contact-m22-contact-element-wiring-diagram.eps

eaton-operating-contact-m22-contact-element-wiring-diagram-003.eps

eaton-circuit-breaker-contact-m22-contact-element-wiring-diagram-008.eps

Eaton Corporation plc
Eaton House
30 Pembroke Road
Dublin 4, Ireland
Eaton.com

Eaton.com/socialmedia