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

Product specifications

Contact configuration

1 NC

Rated operational current for specified heat dissipation (In)

6 A

Terminal capacity (flexible with ferrule)

0.5 - 1.5 mm²

10.11 Short-circuit rating

Is the panel builder's responsibility. The specifications for the switchgear must be observed.

Lamp holder

None

10.4 Clearances and creepage distances

Meets the product standard's requirements.

10.12 Electromagnetic compatibility

Is the panel builder's responsibility. The specifications for the switchgear must be observed.

Mounting method

Front fastening

Operating torque

0.8 Nm

10.2.5 Lifting

Does not apply, since the entire switchgear needs to be evaluated.

Switching time

NZM1, PN1, N(S)1: approx. 20 ms (with manual operation)
NZM2, PN2, N(S)2: approx. 20 ms (with manual operation)
NZM3, PN3, N(S)3: approx. 20 ms (with manual operation)
NZM4, N(S)4: approx. 90 ms, the HIV does not feature early break (with manual operation)

10.2.3.1 Verification of thermal stability of enclosures

Meets the product standard's requirements.

Force for positive opening - min

15 N

10.8 Connections for external conductors

Is the panel builder's responsibility.

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

4.8 mm

Resources

Brochures

RMQ Titan - brochure

RMQ Titan emergency stop push button - Flyer

RMQ Small E-Stop - Flyer

RMQ Flat Enclosure - Flyer

RMQ MCI - Flyer

Catalogs

Flip catalog - Product Range Catalog - Command and indication

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

Certification reports

DA-DC-00004176.pdf

DA-DC-00004135.pdf

DA-DC-00004157.pdf

000Z425

DA-DC-00004141.pdf

DA-DC-00004180.pdf

DA-DC-00004134.pdf

Drawings

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

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

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

eaton-general-standards-000Z425.jpg

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

eaton-operating-adapter-m22-contact-element-flow-diagram-002.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-CS-kontaktelement_schraube_front

DA-CD-kontaktelement_schraube_front

Rated conditional short-circuit current (Iq)

1 kA

Terminal capacity (stranded)

0.5 - 2.5 mm²

Ambient operating temperature - max

70 °C

Climatic proofing

Damp heat, cyclic, to IEC 60068-2-30
Damp heat, constant, to IEC 60068-2-78

Knob travel

5.7 mm

Connection to SmartWire-DT

No

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)

Static heat dissipation, non-current-dependent Pvs

0 W

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

2 A

10.9.3 Impulse withstand voltage

Is the panel builder's responsibility.

Ambient operating temperature - min

-25 °C

10.6 Incorporation of switching devices and components

Does not apply, since the entire switchgear needs to be evaluated.

10.5 Protection against electric shock

Does not apply, since the entire switchgear needs to be evaluated.

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

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

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.

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

6 A

Electric connection type

Screw connection

10.13 Mechanical function

The device meets the requirements, provided the information in the instruction leaflet (IL) is observed.

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

1.7 A

10.2.6 Mechanical impact

Does not apply, since the entire switchgear needs to be evaluated.

10.9.4 Testing of enclosures made of insulating material

Is the panel builder's responsibility.

Number of contacts (normally closed contacts)

1

10.3 Degree of protection of assemblies

Does not apply, since the entire switchgear needs to be evaluated.

Heat dissipation per pole, current-dependent Pvid

0.11 W

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

4 A

Operating frequency

3600 Operations/h

Terminal capacity (solid/flexible with ferrule)

2 x (0,5 - 0,75) mm²
1 x (0,75 - 2,5) mm²

Short-circuit protection

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

Product category

Accessories

Number of switches (fault signal)

0

Equipment heat dissipation, current-dependent Pvid

0 W

Heat dissipation capacity Pdiss

0 W

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

1.2 A

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

Terminal capacity (solid)

0.75 - 2.5 mm²

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.

Connection type

Front fixing

Single contact

Lifespan, mechanical

5,000,000 Operations

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

0.3 A

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

4 A

10.9.2 Power-frequency electric strength

Is the panel builder's responsibility.

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)

Overvoltage category

III

Degree of protection

IP20

Rated operational voltage (Ue) at DC - max

220 V

Rated operational voltage (Ue) at AC - max

500 V

Pollution degree

3

10.7 Internal electrical circuits and connections

Is the panel builder's responsibility.

Actuating force - max

5 N

Rated impulse withstand voltage (Uimp)

6000 V AC

10.10 Temperature rise

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

Type

Auxiliary contact

10.2.2 Corrosion resistance

Meets the product standard's requirements.

10.2.4 Resistance to ultra-violet (UV) radiation

Meets the product standard's requirements.

10.2.7 Inscriptions

Meets the product standard's requirements.

Number of contacts (normally open contacts)

0

Short-circuit protection rating

Max. 10 A gG/gL, Fuse, Contacts

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

Model

Top mounting and integrable

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

0.6 A

Number of contacts (change-over contacts)

0

Shock resistance

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

Rated insulation voltage (Ui)

500 V

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

3 A

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