

- German
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- Norwegian Bokmål

Worldwide English



M22-AK12SMC10 - Contact element 2 N/C 1 N/O, front mount, screw connection, self-monitoring



173027 M22-AK12SMC10

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## 173027 M22-AK12SMC10

Contact element 2 N/C 1 N/O, front mount, screw connection, self-monitoring

Alternate Catalog No.

M22-K12SMC10

EL-Nummer (Norway)

4315276

Contact element, Connection technique: Screw terminals, Fixing: Front fixing, Description: Combination of contact element and self-monitoring contact element M22-K01SMC10 with screw terminals, M22-A mounting adapter, and M22-XSMC signaling contact actuator., The N/O in the self-monitoring contact element is actuated when mounted with M22-XSMC., Contacts N/O = Normally open: 2 N/O, Contacts N/C = Normally closed: 2 NC, Contacts Notes: = safety function, by positive opening to IEC/EN 60947-5-1, Degree of Protection: IP20, Connection to SmartWire-DT: no, Standards: IEC 60947-5-1



- Delivery program
- Technical data
- Design verification as per IEC/EN 61439
- Technical data ETIM 7.0
- Approvals

### Delivery program

Basic function accessories

Self-monitoring contact elements

Description

Combination of contact element and self-monitoring contact element M22-K01SMC10 with screw terminals, M22-A mounting adapter, and M22-XSMC signaling contact actuator.

The N/O in the self-monitoring contact element is actuated when mounted with M22-XSMC.

Connection technique

Screw terminals

Fixing

Front fixing

Degree of Protection

IP20

Connection to SmartWire-DT

no

Approval



Contacts

N/O = Normally open

2 N/O

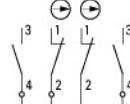
N/C = Normally closed

2 NC

Notes

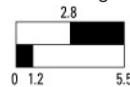
= safety function, by positive opening to IEC/EN 60947-5-1

Contact sequence



Contact travel diagram, stroke in connection with front element

Contact diagram



Connection technique

Screw terminals

### Technical data

General  
 Standards  
 IEC 60947-5-1  
 Actuating force  
 15 N  
 Operating torque (screw terminals)  
 0.8 Nm  
 Degree of Protection  
 IP20  
 Climatic proofing  
 Damp heat, constant, to IEC 60068-2-78  
 Damp heat, cyclic, to IEC 60068-2-30  
 Ambient temperatureOpen  
 -25 - +70 °C  
 Terminal capacitiesSolid  
 0.75 - 2.5 mm<sup>2</sup>  
 Terminal capacitiesStranded  
 0.5 - 2.5 mm<sup>2</sup>  
 Terminal capacitiesFlexible with ferrule  
 0.5 - 1.5 mm<sup>2</sup>  
 Contacts  
 Rated impulse withstand voltage [U<sub>imp</sub>]  
 6000 V AC  
 Rated insulation voltage [U]  
 500 V  
 Overvoltage category/pollution degree  
 III/3  
 Max. short-circuit protective deviceFuseless  
 PKZMD-10/FAZ-B6/1 Type  
 Max. short-circuit protective deviceFuse [gG/gL]  
 10 A  
 Switching capacity  
 Rated operational current [I<sub>e</sub>]AC-15115 V [I<sub>e</sub>]  
 6 A  
 Rated operational current [I<sub>e</sub>]AC-15220 V 230 V 240 V [I<sub>e</sub>]  
 6 A  
 Rated operational current [I<sub>e</sub>]AC-15380 V 400 V 415 V [I<sub>e</sub>]  
 4 A  
 Rated operational current [I<sub>e</sub>]AC-15500 V [I<sub>e</sub>]  
 2 A  
 Rated operational current [I<sub>e</sub>]DC-13 24 V [I<sub>e</sub>]  
 3 A  
 Rated operational current [I<sub>e</sub>]DC-13 42 V [I<sub>e</sub>]  
 1.7 A  
 Rated operational current [I<sub>e</sub>]DC-13 60 V [I<sub>e</sub>]  
 1.2 A  
 Rated operational current [I<sub>e</sub>]DC-13 110 V [I<sub>e</sub>]  
 0.6 A  
 Rated operational current [I<sub>e</sub>]DC-13 220 V [I<sub>e</sub>]  
 0.3 A

## Design verification as per IEC/EN 61439

Technical data for design verification  
 Rated operational current for specified heat dissipation [I<sub>h</sub>]  
 6 A  
 Heat dissipation per pole, current-dependent [P<sub>vid</sub>]  
 0.11 W  
 Equipment heat dissipation, current-dependent [P<sub>id</sub>]  
 0 W  
 Static heat dissipation, non-current-dependent [P<sub>is</sub>]  
 0 W  
 Heat dissipation capacity [P<sub>diss</sub>]  
 0 W  
 Operating ambient temperature min.  
 -25 °C  
 Operating ambient temperature max.  
 +70 °C  
 IEC/EN 61439 design verification  
 10.2 Strength of materials and parts 10.2.2 Corrosion resistance  
 Meets the product standard's requirements.  
 10.2 Strength of materials and parts 10.2.3.1 Verification of thermal stability of enclosures  
 Meets the product standard's requirements.  
 10.2 Strength of materials and parts 10.2.3.2 Verification of resistance of insulating materials to normal heat  
 Meets the product standard's requirements.  
 10.2 Strength of materials and parts 10.2.3.3 Verification of resistance of insulating materials to abnormal heat and fire due to internal electric effects  
 Meets the product standard's requirements.  
 10.2 Strength of materials and parts 10.2.4 Resistance to ultra-violet (UV) radiation  
 Meets the product standard's requirements.  
 10.2 Strength of materials and parts 10.2.5 Lifting  
 Does not apply, since the entire switchgear needs to be evaluated.  
 10.2 Strength of materials and parts 10.2.6 Mechanical impact  
 Does not apply, since the entire switchgear needs to be evaluated.  
 10.2 Strength of materials and parts 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 Insulation properties 10.9.2 Power-frequency electric strength  
Is the panel builder's responsibility.
- 10.9 Insulation properties 10.9.3 Impulse withstand voltage  
Is the panel builder's responsibility.
- 10.9 Insulation properties 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.

## Technical data ETIM 7.0

- Low-voltage industrial components (EG000017) / Auxiliary contact block (EC000041)
- Electric engineering, automation, process control engineering / Low-voltage switch technology / Component for low-voltage switching technology / Auxiliary switch block (ecl@ss10.0.1-27-37-13-02 [AKNB42013])
- Number of contacts as change-over contact  
0
- Number of contacts as normally open contact  
1
- Number of contacts as normally closed contact  
2
- Number of fault-signal switches  
0
- Rated operation current Ie at AC-15, 230 V  
6 A
- Type of electric connection  
Screw connection
- Model
- Top mounting
- Mounting method
- Front fastening
- Lamp holder
- None

## Approvals

- Product Standards  
IEC/EN 60947-5; UL 508; CSA-C22.2 No. 14-05; CSA-C22.2 No. 94-91; CE marking
- UL File No.  
E340491
- UL Category Control No.  
NISD
- CSA File No.  
012528\_C\_000
- CSA Class No.  
3211-03
- North America Certification  
UL listed, CSA certified

## IL04716002Z RMQ-Titan System

- [IL04716002Z RMQ-Titan System  
\(PDF\)](#)

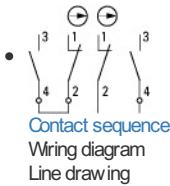
## Additional product information

- [DGLV Test Mark Customer Information  
\(PDF\)](#)

## Declaration of Conformity

- [DA-DC-00003256  
Declaration of Conformity  
\(PDF\)](#)
- [DA-DC-00003298  
Declaration of Conformity  
\(PDF\)](#)
- [DA-DC-00003323  
Declaration of Conformity  
\(PDF\)](#)

## Wiring diagram



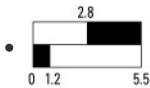
Wiring diagram  
Line drawing

## Product photo



Photo  
Product photo  
Photo

## Flow diagram Contact travel diagram



Contact diagram  
Contact travel diagram complete components  
Flow diagram  
Contact travel diagram  
Coordinate visualization

## Instruction Leaflet

- IL04716005Z2020\_01  
IL04716005Z RMQ-Titan: Emergency-Stop buttons, Emergency-Switching-Off buttons  
Instruction Leaflet  
(PDF, International)
- RMQ-Titan: Emergency-Stop buttons, Emergency-Switching-Off buttons (IL04716005Z2019\_05)  
Instruction Leaflet  
(PDF, International)

## Standards



Approval  
Certification: DGUV ET16107  
Standards  
Logo

## Download-Center

- Download-Center (this item)  
Eaton EMEA Download-Center - download data for this item
- Download-Center  
Eaton EMEA Download-Center

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