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Powering Business Worldwide

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 N/C, 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



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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

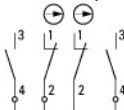
N/C = Normally closed

2 N/C

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 mm²
 Terminal capacitiesStranded
 0.5 - 2.5 mm²
 Terminal capacitiesFlexible with ferrule
 0.5 - 1.5 mm²
 Contacts
 Rated impulse withstand voltage [U_{imp}]
 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_b]AC-15115 V [I_b]
 6 A
 Rated operational current [I_b]AC-15220 V 230 V 240 V [I_b]
 6 A
 Rated operational current [I_b]AC-15380 V 400 V 415 V [I_b]
 4 A
 Rated operational current [I_b]AC-15500 V [I_b]
 2 A
 Rated operational current [I_b]DC-13 24 V [I_b]
 3 A
 Rated operational current [I_b]DC-13 42 V [I_b]
 1.7 A
 Rated operational current [I_b]DC-13 60 V [I_b]
 1.2 A
 Rated operational current [I_b]DC-13 110 V [I_b]
 0.6 A
 Rated operational current [I_b]DC-13 220 V [I_b]
 0.3 A

Design verification as per IEC/EN 61439

Technical data for design verification
 Rated operational current for specified heat dissipation [I_n]
 6 A
 Heat dissipation per pole, current-dependent [P_{vd}]
 0.11 W
 Equipment heat dissipation, current-dependent [P_{vd}]
 0 W
 Static heat dissipation, non-current-dependent [P_{vs}]
 0 W
 Heat dissipation capacity [P_{diss}]
 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 parts10.2.2 Corrosion resistance
 Meets the product standard's requirements.
 10.2 Strength of materials and parts10.2.3.1 Verification of thermal stability of enclosures
 Meets the product standard's requirements.
 10.2 Strength of materials and parts10.2.3.2 Verification of resistance of insulating materials to normal heat
 Meets the product standard's requirements.
 10.2 Strength of materials and parts10.2.3.3 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 parts10.2.4 Resistance to ultra-violet (UV) radiation
 Meets the product standard's requirements.
 10.2 Strength of materials and parts10.2.5 Lifting
 Does not apply, since the entire switchgear needs to be evaluated.
 10.2 Strength of materials and parts10.2.6 Mechanical impact
 Does not apply, since the entire switchgear needs to be evaluated.
 10.2 Strength of materials and parts10.2.7 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 I_e 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)

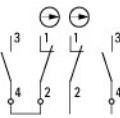
Additional product information

- [DGUV 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)

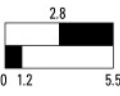
Wiring diagram

- 
Contact sequence
Wiring diagram
Line drawing

Product photo

- 
Photo
Product photo
Photo

Flow diagramContact 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
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