



121720
M22-KC02SMC10

Overview

Specifications

Resources



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
The NO is actuated when mounted on the
pushbutton.

Connection technique
Screw terminals

Fixing
Base fixing

Degree of Protection
IP20

Connection to SmartWire-DT
no

Approval



Contacts

N/O = Normally open
1 NO

N/C = Normally closed
2 NC □

Notes

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

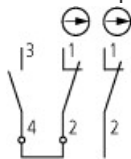
Actuator travel and actuation force as per DIN EN 60947-5-1, K.5.4.1

[mm]
4.8

Maximum travel [mm]
5.7

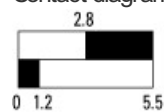
Minimum force for positive opening [N]
30

Contact sequence



Contact travel diagram, stroke in connection with front element

Contact diagram



Configuration



Connection technique
Screw terminals

TECHNICAL DATA

General

Standards
IEC 60947-5-1

Actuating force
☐ 10 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 temperature
Open
-25 - +70 °C

Terminal capacities
Solid
0.75 - 2.5 mm²

Terminal capacities
Stranded
0.5 - 2.5 mm²

Terminal capacities
Flexible with ferrule
0.5 - 1.5 mm²

Contacts

Rated impulse withstand voltage [U_{imp}]
6000 V AC

Rated insulation voltage [U_i]
500 V

Overvoltage category/pollution degree
III/3

Max. short-circuit protective device
Fuseless
PKZMD-10/FAZ-B6/1 Type

Max. short-circuit protective device
Fuse [gG/gL]
10 A

Switching capacity

Rated operational current [I_e]
AC-15
115 V [I_e]
6 A

Rated operational current [I_e]
AC-15
220 V 230 V 240 V [I_e]
6 A

Rated operational current [I_e]
AC-15
380 V 400 V 415 V [I_e]
4 A

Rated operational current [I_e]
AC-15
500 V [I_e]
2 A

Rated operational current [I_e]
DC-13
24 V [I_e]
3 A

Rated operational current [I_e]
DC-13
42 V [I_e]

1.7 A

Rated operational current [I_e]
DC-13
60 V [I_e]
1.2 A

Rated operational current [I_e]
DC-13
110 V [I_e]
0.6 A

Rated operational current [I_e]
DC-13
220 V [I_e]
0.3 A

Auxiliary contacts

Rated conditional short-circuit current [I_q]
1 kA

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_{id}]
0.11 W

Equipment heat dissipation, current-dependent
[P_{id}]
0 W

Static heat dissipation, non-current-dependent [P_{is}]
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 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 [AKN342013])

Number of contacts as change-over contact
0

Number of contacts as normally open contact
0

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
Floor 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.
N1SD

CSA File No.
012528_C_000

CSA Class No.
3211-03

North America Certification
UL listed, CSA certified

Degree of Protection
UL/CSA Type: -



