



216380  
M22-KC10

Overview

Specifications

Resources



Delivery program

Technical data

Design verification as  
per IEC/EN 61439

Technical data ETIM 7.0

Approvals

Dimensions

## DELIVERY PROGRAM

Basic function accessories  
Contact elements

Connection technique  
Screw terminals

Fixing  
Base fixing

Degree of Protection  
IP20

Connection to SmartWire-DT  
no

Approval



## Contacts

NO = Normally open  
1 NO

Contact sequence

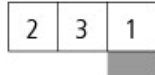


## Contact travel diagram, stroke in connection with front element

Contact diagram



Configuration



Connection type  
Single contact

Connection technique  
Screw terminals

### Notes

Up to 3 off per enclosure base

## TECHNICAL DATA

### General

Standards  
IEC 60947-5-1

Lifespan, mechanical [Operations]  
> 5 x 10<sup>6</sup>

Operating frequency [Operations/h]

3600

Actuating force

5 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

Mechanical shock resistance to IEC 60068-2-27

Shock duration 11 ms, half-sinusoidal

> 30 g

Terminal capacities

Solid

0.75 - 2.5 mm<sup>2</sup>

Terminal capacities

Stranded

0.5 - 2.5 mm<sup>2</sup>

Terminal capacities

Flexible with ferrule

0.5 - 1.5 mm<sup>2</sup>

## Contacts

Rated impulse withstand voltage [ $U_{imp}$ ]

6000 V AC

Rated insulation voltage [ $U_i$ ]

500 V

Overvoltage category/pollution degree  
III/3

Control circuit reliability  
at 24 V DC/5 mA [ $I_{\text{F}}$ ]  
<  $10^{-7}$  (i.e. 1 failure to  $10^7$  operations) Fault  
probability

Control circuit reliability  
at 5 V DC/1 mA [ $I_{\text{F}}$ ]  
<  $5 \times 10^{-6}$  (i.e. 1 failure in  $5 \times 10^6$  operations) Fault  
probability

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

Lifespan, electrical  
AC-15  
230 V/0.5 A [Operations]  
 $1.6 \times 10^6$

Lifespan, electrical  
AC-15  
230 V/1.0 A [Operations]  
 $1 \times 10^6$

Lifespan, electrical  
AC-15  
230 V/3.0 A [Operations]  
 $0.7 \times 10^6$

Lifespan, electrical  
DV-13  
12 V/2.8 A [Operations]  
 $1.2 \times 10^6$

## 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 [ $P_{vs}$ ]  
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 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

1

Number of contacts as normally closed contact

0

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.  
E29184

UL Category Control No.  
NKCR

CSA File No.  
012528

CSA Class No.  
3211-03

North America Certification  
UL listed, CSA certified

Degree of Protection  
UL/CSA Type: -

## DIMENSIONS



Pushbutton with M22-(C)K...  
Pushbutton with M22-(C) LED... + M22-XLED...

