



**216503**  
**M22-AK01**

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## DELIVERY PROGRAM

Basic function accessories  
Contact elements

Description  
Assembly of contact element with screw terminals and fixing adapter

Connection technique  
Screw terminals

Fixing  
Front fixing

Degree of Protection  
IP20

Connection to SmartWire-DT  
no

[Contacts](#)

NC = Normally closed

1 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

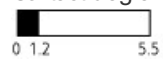
Minimum force for positive opening [ N ]  
15

Contact sequence

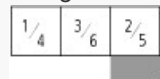


### Contact travel diagram, stroke in connection with front element

Contact diagram



Configuration



Connection technique  
Screw terminals

## TECHNICAL DATA

### General

Standards  
IEC 60947-5-1

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

Operating frequency [Operations/h]  
□ 3600

Actuating force  
□ 5 n

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 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 [H+] ]  
< 10<sup>-7</sup>, < 1 fault in 10<sup>7</sup> operations Fault probability

Control circuit reliability  
at 5 V DC/1 mA [H+] ]  
< 5 x 10<sup>-6</sup>, < 1 failure in 5 x 10<sup>6</sup> 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<sub>e</sub> ]  
AC-15  
115 V [I<sub>e</sub> ]  
6 A

Rated operational current [I<sub>e</sub> ]  
AC-15  
220 V 230 V 240 V [I<sub>e</sub> ]  
6 A

Rated operational current [I<sub>e</sub> ]  
AC-15  
380 V 400 V 415 V [I<sub>e</sub> ]  
4 A

Rated operational current [I<sub>e</sub> ]  
AC-15  
500 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 [ $I_e$ ]  
DC-13  
60 V [ $I_e$ ]  
1.2 A

Rated operational current [ $I_e$ ]  
DC-13  
110 V [ $I_e$ ]  
0.8 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]  
 $1.2 \times 10^6$

### 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 [ $P_{vid}$ ]  
0.11 W

Equipment heat dissipation, current-dependent  
[ $P_{vid}$ ]  
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  
0

Number of contacts as normally closed contact  
1

Number of fault-signal switches  
0



Rated operation current le 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.  
E29184

UL Category Control No.  
NKCR

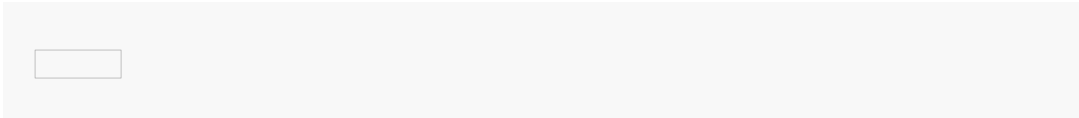
CSA File No.  
012528

CSA Class No.  
3211-03

North America Certification  
UL listed, CSA certified

Degree of Protection  
UL/CSA Type: -

# DIMENSIONS



A = 37.2

