216504
M22-AK10

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

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

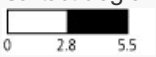
Contacts

N/O = Normally open
1 N/O

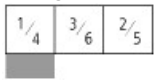
Contact sequence

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 10^6

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 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

Control circuit reliability
at 24 V DC/5 mA [H_F]
< 10^{-7}, < 1 fault in 10^7 operations Fault probability

Control circuit reliability
at 5 V DC/1 mA [H_F]
< 5 x 10^{-6}, < 1 failure in 5 x 10^6 operations Fault probability

Max. short-circuit protective device
Fuseless
PKZM0-10/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]
0.8 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]
1.6×10^6

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

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

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

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_{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
1

Number of contacts as normally closed contact
0

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.
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