



216387
M22-CKC01

[Overview](#)

[Specifications](#)

[Resources](#)



[Delivery program](#)

[Technical data](#)

[Design verification as per IEC/EN 61439](#)

[Technical data ETIM7.0](#)

[Approvals](#)

[Dimensions](#)

DELIVERY PROGRAM

Basic function accessories
Contact elements

Description
Cage Clamp is a registered trademark of Wago Kontakttechnik GmbH/Minden, Germany

Connection technique
Cage Clamp

Fixing
Base fixing

Degree of Protection
IP20

Connection to SmartWire-DT
no

Approval



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

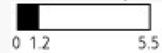
Minimum force for positive opening [N]
15

Contact sequence



Contact travel diagram, stroke in connection with front element

Contact diagram



Configuration



Connection type
Single contact

Connection technique
Cage Clamp

Notes

Up to 3 off per enclosure base

TECHNICAL DATA

General

Standards
IEC 60947-5-1

Lifespan, mechanical [Operations]
> 5 x 10⁶

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

Mechanical shock resistance to IEC 60068-2-27
Shock duration 11 ms, half-sinusoidal
> 30 g

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 (i.e. 1 failure to 10⁷ operations) Fault
probability

Control circuit reliability
at 5 V DC/1 mA [H_F]
< 5 x 10⁻⁶ (i.e. 1 failure in 5 x 10⁶ 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]
0.8 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 x 10⁶

Lifespan, electrical
AC-15
230 V/1.0 A [Operations]
1 x 10⁶

Lifespan, electrical
AC-15

230 V/3.0 A [Operations]
0.7 x 10⁶

Lifespan, electrical
DV-13
12 V/2.8 A [Operations]
1.2 x 10⁶

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
1

Number of fault-signal switches
0

Rated operation current I_e at AC-15, 230 V
6 A

Type of electric connection
Spring clamp 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...



