216382 M22-KC01		
Overview	Specific	ations Resources
Delivery program		DELIVERY PROGRAM
Technical data		Basic function accessories Contact elements
Design verification as per IEC/EN 61439 Technical data ETIM 7.0		Connection technique Screw terminals
		Fixing Base fixing
Approvals Dimensions		Degree of Protection IP20
		Connection to SmartWire-DT no
		Approval

Contacts

N/C = 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

Mnimumforce for positive opening [N] 15

Contact sequence



Contact travel diagram, stroke in connection with front element

Contact diagram



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] $> 5 \times 10^6$

Operating frequency [Operations/h]

Actuating force \Box 5 n

Operating torque (screw terminals) \Box 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 mm²

Terminal capacities Stranded 0.5 - 2.5 mm² Terminal capacities Rexible with ferrule 0.5 - 1.5 mm²

Contacts

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

Rated insulation voltage [U,] 500 V

 $\label{eq:constraint} \begin{aligned} & \text{Overvoltage category/pollution degree} \\ & \text{III}/3 \end{aligned}$

Control circuit reliability at 24 V DC/5 mA [H=] < 10⁻⁷ (i.e. 1 failure to 10⁷ operations) Fault probability

Control circuit reliability at 5 V DC/1 mA [H=] $< 5 \times 10^{-6}$ (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 [le] AC-15 115 V [le] 6 A

Rated operational current [le] AC-15 220 V 230 V 240 V [le] 6 A Rated operational current [le] AC-15 380 V 400 V 415 V [le] 4 A

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

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

Rated operational current [le] DC-13 42 V [le] 1.7 A

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

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

Rated operational current [Ie] DC-13 220 V [Ie] 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 [la] 1 kA

DESIGN VERIFICATION AS PER IEC/EN 61439

Technical data for design verification

Rated operational current for specified heat dissipation [In] 6 A

Heat dissipation per pole, current-dependent [Pvid] 0.11 W

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

Static heat dissipation, non-current-dependent [Pvs] 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. 6/11

10.2 Strength of materials and parts10.2.3.1 Verification of thermal stability of enclosuresMeets the product standard's requirements.

10.2 Strength of materials and parts10.2.3.2 Verification of resistance of insulating materials to normal heatMeets 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 parts10.2.4 Resistance to ultra-violet (UV) radiationMeets the product standard's requirements.

10.2 Strength of materials and parts10.2.5 LiftingDoes not apply, since the entire switchgear needs to be evaluated.

10.2 Strength of materials and parts10.2.6 Mechanical impactDoes not apply, since the entire switchgear needs to be evaluated.

10.2 Strength of materials and parts10.2.7 InscriptionsMeets the product standard's requirements.

10.3 Degree of protection of ASSEVBLIES 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 properties10.9.2 Power-frequency electric strength Is the panel builder's responsibility.

10.9 Insulation properties10.9.3 Impulse withstand voltageIs the panel builder's responsibility.

10.9 Insulation properties10.9.4 Testing of enclosures made of insulating materialIs 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 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...



X

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