#### **DATASHEET - M22-KC10**



Contact element, Screw terminals, Base fixing, 1 N/O, 24 V 3 A, 220 V 230 V 240 V 6 A



Powering Business Worldwide

Part no. M22-KC10 Catalog No. 216380 Alternate Catalog M22-KC100

No.

**EL-Nummer** 4355365

(Norway)

| Dolivery program  |   |
|---|---|
| Delivery program  Basic function accessories                    | Contact elements                          |
| Connection technique  | Screw terminals                           |
| Fixing  | Base fixing                               |
| Degree of Protection  | IP20                                      |
| Connection to SmartWire-DT                                      |   |
| Approval  | no  |
| Αμμιοναί  | ET 16107 Sicherheit geprüft tested safety |
| Contacts  |   |
| N/O = Normally open   | 1 N/O                                     |
|   | 1.3                                       |
| Contact travel diagram, stroke in connection with front element |   |
| Contact diagram   | 0 2.8 5.5                                 |
| Configuration   | 2 3 1                                     |
| 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     | x 10 <sup>6</sup>   | >5   |
| Operating frequency   | Operations/h   |                     | ≦ 3600   |
| Actuating force   |                | n                   | ≦5   |
| Operating torque (screw terminals)  |                | Nm                  | ≦ 0.8  |
| Degree of Protection  |                |                     | IP20   |
| Climatic proofing   |                |                     | Damp heat, constant, to IEC 60068-2-78<br>Damp heat, cyclic, to IEC 60068-2-30 |
| Ambient temperature   |                |                     |  |
| Open  |                | °C                  | -25 - +70  |
| Mechanical shock resistance to IEC 60068-2-27 Shock duration 11 ms, half-sinusoidal |                | g                   | > 30   |
| Terminal capacities   |                | $\mathrm{mm}^2$     |  |
| Solid   |                | mm <sup>2</sup>     | 0.75 - 2.5   |
| Stranded  |                | $\text{mm}^2$       | 0.5 - 2.5  |
| Flexible with ferrule   |                | $mm^2$              | 0.5 - 1.5  |
| Contacts  |                |                     |  |
| Rated impulse withstand voltage   | $U_{imp}$      | V AC                | 6000   |
| Rated insulation voltage  | Ui             | V                   | 500  |
| Overvoltage category/pollution degree   |                |                     | III/3  |
| Control circuit reliability   |                |                     |  |
| at 24 V DC/5 mA   | H <sub>F</sub> | Fault<br>probabilit | < 10 <sup>-7</sup> (i.e. 1 failure to 10 <sup>7</sup> operations)              |
| at 5 V DC/1 mA  | H <sub>F</sub> | Fault<br>probabilit | $< 5 \times 10^{-6}$ (i.e. 1 failure in 5 x $10^{6}$ operations) ty            |
| Max. short-circuit protective device  |                |                     |  |
| Fuseless  |                | Туре                | PKZM0-10/FAZ-B6/1  |
| Fuse  | gG/gL          | Α                   | 10   |
| Switching capacity  |                |                     |  |
| Rated operational current   | I <sub>e</sub> | Α                   |  |
| AC-15   |                |                     |  |
| 115 V   | l <sub>e</sub> | Α                   | 6  |
| 220 V 230 V 240 V   | l <sub>e</sub> | Α                   | 6  |
| 380 V 400 V 415 V   | l <sub>e</sub> | Α                   | 4  |
| 500 V   | l <sub>e</sub> | Α                   | 2  |
| DC-13   |                |                     |  |
| 24 V  | l <sub>e</sub> | Α                   | 3  |
| 42 V  | I <sub>e</sub> | Α                   | 1.7  |

# Design verification as per IEC/EN 61439

60 V

110 V

220 V

Lifespan, electrical AC-15

230 V/0.5 A

230 V/1.0 A

230 V/3.0 A

12 V/2.8 A

DV-13

| Technical data for design verification                   |           |   |      |
|--|-----------|---|------|
| Rated operational current for specified heat dissipation | In        | Α | 6    |
| Heat dissipation per pole, current-dependent             | $P_{vid}$ | W | 0.11 |

Α

Α

Α

x 10<sup>6</sup>

x 10<sup>6</sup>

x 10<sup>6</sup>

Ie

Operations

Operations

Operations

Operations

1.2

0.6

0.3

1.6

1

0.7

1.2

| Equipment heat dissipation, current-dependent  | P <sub>vid</sub>  | W  | 0  |
|--|-------------------|----|--|
| Static heat dissipation, non-current-dependent   | P <sub>vs</sub>   | W  | 0  |
| Heat dissipation capacity  | P <sub>diss</sub> | W  | 0  |
| Operating ambient temperature min.   |                   | °C | -25  |
| Operating ambient temperature max.   |                   | °C | 70   |
| IEC/EN 61439 design verification   |                   |    |  |
| 10.2 Strength of materials and parts   |                   |    |  |
| 10.2.2 Corrosion resistance  |                   |    | Meets the product standard's requirements.   |
| 10.2.3.1 Verification of thermal stability of enclosures   |                   |    | Meets the product standard's requirements.   |
| 10.2.3.2 Verification of resistance of insulating materials to normal heat   |                   |    | Meets the product standard's requirements.   |
| 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.   |
| 10.2.4 Resistance to ultra-violet (UV) radiation   |                   |    | Meets the product standard's requirements.   |
| 10.2.5 Lifting   |                   |    | Does not apply, since the entire switchgear needs to be evaluated.   |
| 10.2.6 Mechanical impact   |                   |    | Does not apply, since the entire switchgear needs to be evaluated.   |
| 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.   |
| 10.9.3 Impulse withstand voltage   |                   |    | Is the panel builder's responsibility.   |
| 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 switch<br>gear must be observed. $\label{eq:constraint}$       |
| 10.12 Electromagnetic compatibility  |                   |    | Is the panel builder's responsibility. The specifications for the switch<br>gear must be observed. $\label{eq:constraint}$       |
| 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)

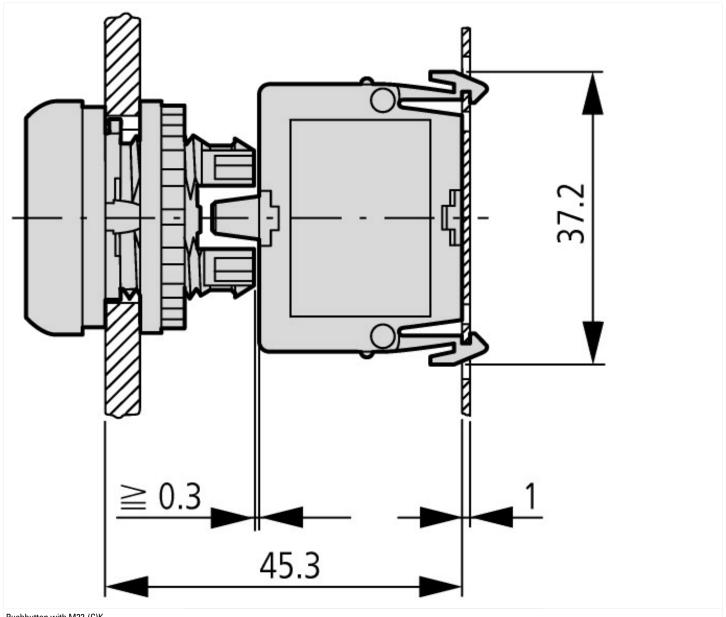
Electric engineering, automation, process control engineering / Low-voltage switch technology / Component for low-voltage switching technology / Auxiliary switch block (ect@ss10.0.1-27-37-13-02 (AKN342013))

| (eci@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 le at AC-15, 230 V    | Α | 6                |
| 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...