





Contact element, 1 N/C, front mount, 6. contact, spring clamp connection

Part no. **M22-CK01**
Article no. **216385**
Catalog No. **M22-CK01Q**

Delivery program


| | | |
|----------------------------|--|--|
| Product range | | Accessories |
| Standard/Approval | | UL/CSA, IEC |
| Construction size | | NZM1/2/3/4 |
| Single unit/Complete unit | | Element |
| Basic function accessories | | Contact elements |
| Connection technique | | Cage Clamp |
| Fixing | | Front fixing |
| Description | | Cage Clamp is a registered trademark of Wago Kontakttechnik GmbH/Minden, Germany |


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 |
| Minimum force for positive opening | N | 15 |

| | | |
|------------------|--|--|
| Contact sequence | |  |
|------------------|--|--|

| | | |
|---|--|--|
| Contact travel diagram, stroke in connection with front element | |  |
|---|--|--|

| | | | |
|--|--|--|--|
| Configuration | | | <div> <div>1 4</div> <div>3 6</div> <div>2 5</div> </div> |
| Degree of Protection | | | IP20 |
| Connection to SmartWire-DT | | | no |
| Connection type | | | Single contact |
| Description of HIA trip-indicating auxiliary contact | | | <p>General trip indication '+', when tripped by shunt release, overload release, short-circuit release or by the residual-current release due to residual-current.</p> <p>Can be used with NZM1, 2, 3 circuit-breaker: a trip-indicating auxiliary contact can be clipped into the circuit-breaker.</p> <p>Can be used with NZM4 circuit-breaker: up to two standard auxiliary contacts can be clipped into the circuit-breaker.</p> <p>Any combinations of the auxiliary contact types are possible.</p> <p>Not in combination with switch-disconnector PN...</p> <p>Marking on switch: HIA</p> <p>Labeling in FI-Block: HIAFI.</p> <p>If the trip-indicating auxiliary switch in the fault current block is used, the NC contacts operates as a N/O contact and the NC contact operates as an N/O contact.</p> |
| Description standard auxiliary contact HIN | | | <p>Switching with the main contacts Used for indicating and interlocking tasks.</p> <p>Can be used with NZM1 circuit-breaker: a standard auxiliary contact can be clipped into the circuit-breaker.</p> <p>Can be used with NZM2 size circuit-breaker: a standard auxiliary contact can be clipped into the circuit-breaker.</p> <p>Can be used with NZM3, 4 circuit-breaker: up to three standard auxiliary contacts can be clipped into the circuit-breaker.</p> <p>Any combinations of the auxiliary contact types are possible.</p> <p>Marking on switch: HIN.</p> <p>On combination with remote operator NZM-XR... the right mounting location of standard auxiliary contact HIN can be fitted only with individual contacts.</p> |
| For use with | | | <p>NZM1(-4), 2(-4), 3(-4), 4(-4)</p> <p>PN1(-4), 2(-4), 3(-4)</p> <p>N(S)1(-4), 2(-4), 3(-4), 4(-4)</p> |

Technical data

General

| | | | |
|-----------------------|--------------|-----------------|---|
| Standards | | | IEC 60947-5-1 |
| Lifespan, mechanical | Operations | $\times 10^6$ | > 5 |
| Operating frequency | Operations/h | | ≈ 3600 |
| Actuating force | | n | ≈ 5 |
| Degree of Protection | | | IP20 |
| Climatic proofing | | | <p>Damp heat, constant, to IEC 60068-2-78</p> <p>Damp heat, cyclic, to IEC 60068-2-30</p> |
| Ambient temperature | | | |
| Open | | °C | -25 - +70 |
| Terminal capacities | | mm ² | |
| Solid | | mm ² | 0.75 - 2.5 |
| Stranded | | 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 | U _i | V | 500 |
| Overvoltage category/pollution degree | | | III/3 |
| Control circuit reliability | | | |
| at 24 V DC/5 mA | H _F | Fault probability | < 10 ⁻⁷ (i.e. 1 failure to 10 ⁷ operations) |
| at 5 V DC/1 mA | H _F | Fault probability | < 5 x 10 ⁻⁶ (i.e. 1 failure in 5 x 10 ⁶ operations) |
| Max. short-circuit protective device | | | |
| Fuseless | | Type | PKZM0-10/FAZ-B6/1 |
| Fuse | gG/gL | A | 10 |

Switching capacity

| | | | |
|---------------------------|----------------|---|---|
| Rated operational current | I _e | A | |
| AC-15 | | | |
| 115 V | I _e | A | 6 |

Design verification as per IEC/EN 61439

| | | | |
|--|-------------------|----|--|
| Technical data for design verification | | | |
| Rated operational current for specified heat dissipation | I _n | A | 6 |
| Heat dissipation per pole, current-dependent | P _{vid} | W | 0.11 |
| Equipment heat dissipation, current-dependent | P _{vid} | W | 0 |
| Static heat dissipation, non-current-dependent | P _{vs} | W | 0 |
| Heat dissipation capacity | P _{diss} | 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 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 6.0

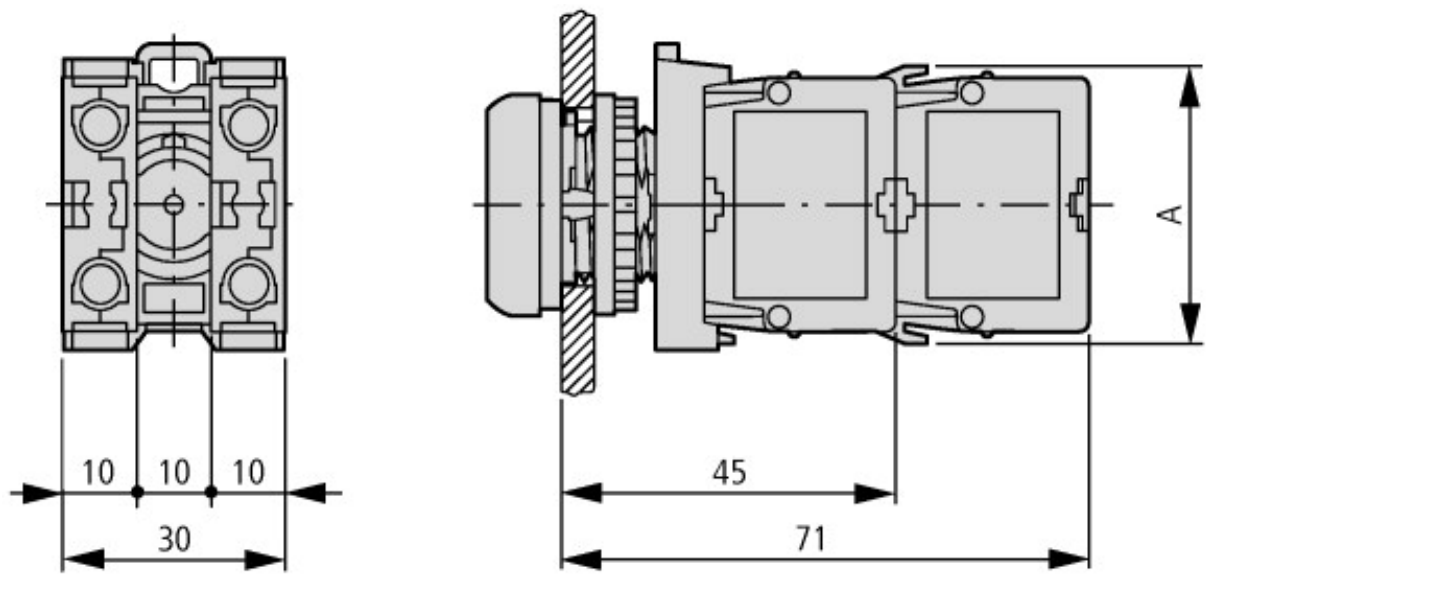
| | | | |
|---|--|---|-----------------------------|
| Low-voltage industrial components (EG000017) / Auxiliary contact block (EC000041) | | | |
| Electric engineering, automation, process control engineering / Low-voltage switch technology / Component for low-voltage switching technology / Auxiliary switch block (ecI@ss8.1-27-37-13-02 [AKN342010]) | | | |
| Number of contacts as change-over contact | | | 0 |
| Number of contacts as normally open contact | | | 0 |
| Number of contacts as normally closed contact | | | 1 |
| Rated operation current I _e at AC-15, 230 V | | A | 6 |
| Type of electric connection | | | Spring clamp connection |
| Model | | | Top mounting and integrable |
| Mounting method | | | Front fastening |

Approvals

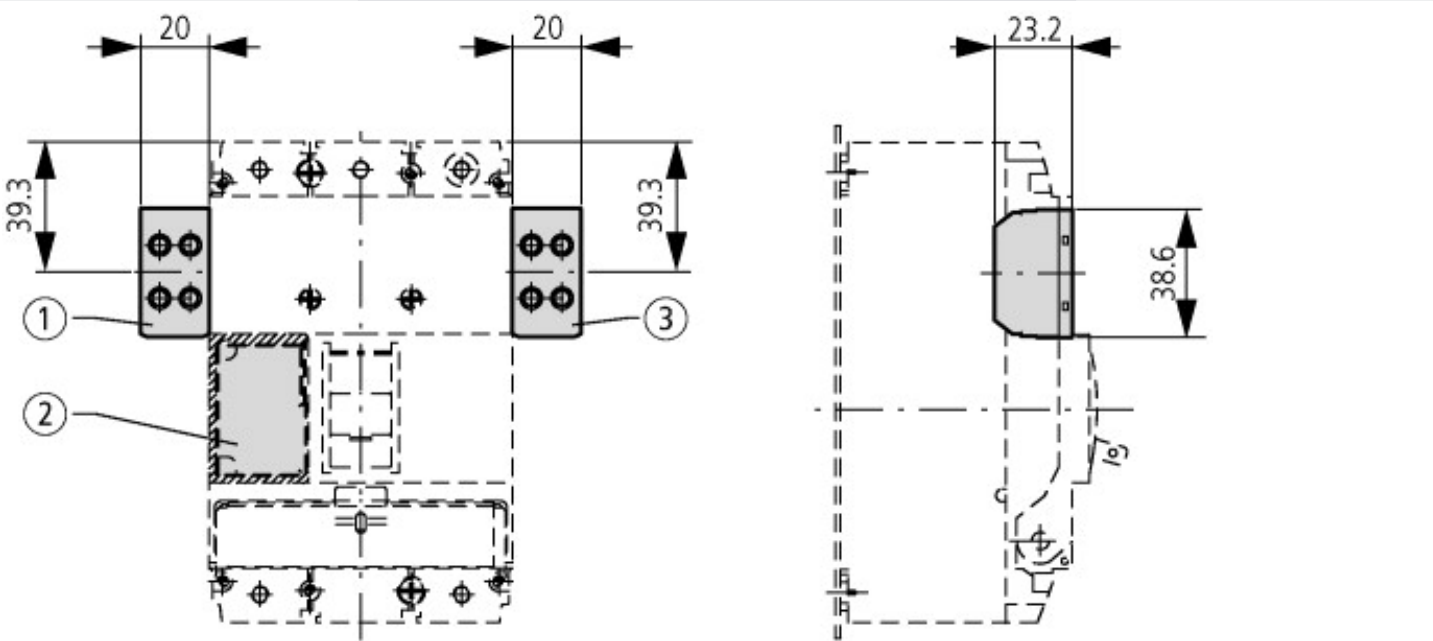
| | | | |
|-------------------------|--|--|--|
| Product Standards | | | IEC/EN 60947-5; UL 508; CSA-C22.2 No. 14-05; CSA-C22.2 No. 94-91; CE marking |
| UL File No. | | | E29184 |
| UL Category Control No. | | | NKCR |
| CSA File No. | | | 012528 |
| CSA Class No. | | | 3211-03 |

| | | |
|-----------------------------|--|--------------------------|
| North America Certification | | UL listed, CSA certified |
| Degree of Protection | | UL/CSA Type: - |

Dimensions



A = 39



Pushbutton with M22-(C)K...
 Pushbutton with M22-(C) LED... + M22-XLED...

Additional product information (links)

| | |
|--|---|
| IL04716002Z (AWA1160-1745) RMQ-Titan System | |
| IL04716002Z (AWA1160-1745) RMQ-Titan System | ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL04716002Z2016_09.pdf |
| Maximum equipment and position of the internal accessories | http://ecat.moeller.net/flip-cat/?edition=HPLEN&startpage=17.178 |