
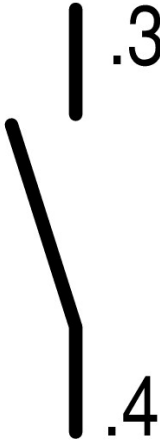






**Contact element, 1N/O, front mount, 6. contact, screw connection**

**Part no.** M22-K10  
**Catalog No.** 216376  
**Eaton Catalog No.** M22-K10Q  
**EL-Nummer (Norway)** 4355363




**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   |
| Approval  |   |   |
| Connection technique  |   | Screw terminals  |
| Fixing  |   | Front fixing   |
| <b>Contacts</b>   |   |  |
| N/O = Normally open   |   | 1 N/O  |
| <b>Actuator travel and actuation force as per DIN EN 60947-5-1, K.5.4.1</b> |   |  |
| Minimum force for positive opening  | N | 0  |
| Contact sequence  |   |  |
| Contact travel diagram, stroke in connection with front element             |   |  |
| Configuration   |   |  |
| 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. 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. 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   |  |  | NZM1(-4), 2(-4), 3(-4), 4(-4)<br>PN1(-4), 2(-4), 3(-4)<br>N(S)1(-4), 2(-4), 3(-4), 4(-4)  |
| <b>Notes</b>   |  |  |   |
| For Std. pack:                                       |  |  |   |
| M22-(C)K... : Std. pack = 20 off                     |  |  |   |

## Technical data

### General

|   |              |                 |  |
|---|--------------|-----------------|--|
| Standards   |              |                 | IEC 60947-5-1  |
| Lifespan, mechanical  | Operations   | $\times 10^6$   | > 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   |              | mm <sup>2</sup> |  |
| Solid   |              | mm <sup>2</sup> | 0.75 - 2.5   |
| Stranded  |              | mm <sup>2</sup> | 0.5 - 2.5  |
| Flexible with ferrule   |              | mm <sup>2</sup> | 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 | $< 5 \times 10^{-6}$ (i.e. 1 failure in $5 \times 10^6$ 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 |

|                      |            |               |     |
|----------------------|------------|---------------|-----|
| 220 V 230 V 240 V    | $I_e$      | A             | 6   |
| 380 V 400 V 415 V    | $I_e$      | A             | 4   |
| 500 V                | $I_e$      | A             | 2   |
| DC-13                |            |               |     |
| 24 V                 | $I_e$      | A             | 3   |
| 42 V                 | $I_e$      | A             | 1.7 |
| 60 V                 | $I_e$      | A             | 1.2 |
| 110 V                | $I_e$      | A             | 0.6 |
| 220 V                | $I_e$      | A             | 0.3 |
| Lifespan, electrical |            |               |     |
| AC-15                |            |               |     |
| 230 V/0.5 A          | Operations | $\times 10^6$ | 1.6 |
| 230 V/1.0 A          | Operations | $\times 10^6$ | 1   |
| 230 V/3.0 A          | Operations | $\times 10^6$ | 0.7 |
| DV-13                |            |               |     |
| 12 V/2.8 A           | Operations | $\times 10^6$ | 1.2 |

### Auxiliary contacts

|  |                |         |  |                            |                    |                          |      |  |                    |                          |      |  |  |  |  |                            |  |  |  |  |  |  |                              |  |  |  |  |  |       |    |       |   |   |   |   |  |   |     |       |   |   |   |   |  |   |     |       |   |   |   |   |  |   |     |       |   |   |   |   |  |   |     |       |   |   |   |   |  |        |    |       |   |     |   |     |  |   |    |       |   |     |     |     |  |   |     |       |   |     |     |     |  |   |     |       |   |     |     |     |  |   |  |  |  |  |  |  |
|--|----------------|---------|--|----------------------------|--------------------|--------------------------|------|--|--------------------|--------------------------|------|--|--|--|--|----------------------------|--|--|--|--|--|--|------------------------------|--|--|--|--|--|-------|----|-------|---|---|---|---|--|---|-----|-------|---|---|---|---|--|---|-----|-------|---|---|---|---|--|---|-----|-------|---|---|---|---|--|---|-----|-------|---|---|---|---|--|--------|----|-------|---|-----|---|-----|--|---|----|-------|---|-----|-----|-----|--|---|-----|-------|---|-----|-----|-----|--|---|-----|-------|---|-----|-----|-----|--|---|--|--|--|--|--|--|
| Rated operational voltage  | $U_e$          | V       |  |                            |                    |                          |      |  |                    |                          |      |  |  |  |  |                            |  |  |  |  |  |  |                              |  |  |  |  |  |       |    |       |   |   |   |   |  |   |     |       |   |   |   |   |  |   |     |       |   |   |   |   |  |   |     |       |   |   |   |   |  |   |     |       |   |   |   |   |  |        |    |       |   |     |   |     |  |   |    |       |   |     |     |     |  |   |     |       |   |     |     |     |  |   |     |       |   |     |     |     |  |   |  |  |  |  |  |  |
| Rated operational voltage  | $U_e$          | V AC    | 500  |                            |                    |                          |      |  |                    |                          |      |  |  |  |  |                            |  |  |  |  |  |  |                              |  |  |  |  |  |       |    |       |   |   |   |   |  |   |     |       |   |   |   |   |  |   |     |       |   |   |   |   |  |   |     |       |   |   |   |   |  |   |     |       |   |   |   |   |  |        |    |       |   |     |   |     |  |   |    |       |   |     |     |     |  |   |     |       |   |     |     |     |  |   |     |       |   |     |     |     |  |   |  |  |  |  |  |  |
| Rated operational voltage, max.  | $U_e$          | V DC    | 220  |                            |                    |                          |      |  |                    |                          |      |  |  |  |  |                            |  |  |  |  |  |  |                              |  |  |  |  |  |       |    |       |   |   |   |   |  |   |     |       |   |   |   |   |  |   |     |       |   |   |   |   |  |   |     |       |   |   |   |   |  |   |     |       |   |   |   |   |  |        |    |       |   |     |   |     |  |   |    |       |   |     |     |     |  |   |     |       |   |     |     |     |  |   |     |       |   |     |     |     |  |   |  |  |  |  |  |  |
| Conventional thermal current   | $I_{th} = I_e$ | CSA     | 4  |                            |                    |                          |      |  |                    |                          |      |  |  |  |  |                            |  |  |  |  |  |  |                              |  |  |  |  |  |       |    |       |   |   |   |   |  |   |     |       |   |   |   |   |  |   |     |       |   |   |   |   |  |   |     |       |   |   |   |   |  |   |     |       |   |   |   |   |  |        |    |       |   |     |   |     |  |   |    |       |   |     |     |     |  |   |     |       |   |     |     |     |  |   |     |       |   |     |     |     |  |   |  |  |  |  |  |  |
| Rated operational current  | $I_e$          | A       |  |                            |                    |                          |      |  |                    |                          |      |  |  |  |  |                            |  |  |  |  |  |  |                              |  |  |  |  |  |       |    |       |   |   |   |   |  |   |     |       |   |   |   |   |  |   |     |       |   |   |   |   |  |   |     |       |   |   |   |   |  |   |     |       |   |   |   |   |  |        |    |       |   |     |   |     |  |   |    |       |   |     |     |     |  |   |     |       |   |     |     |     |  |   |     |       |   |     |     |     |  |   |  |  |  |  |  |  |
| <b>Different rated operational currents</b> when used as auxiliary contact for NZM circuit-breaker |                |         |  |                            |                    |                          |      |  |                    |                          |      |  |  |  |  |                            |  |  |  |  |  |  |                              |  |  |  |  |  |       |    |       |   |   |   |   |  |   |     |       |   |   |   |   |  |   |     |       |   |   |   |   |  |   |     |       |   |   |   |   |  |   |     |       |   |   |   |   |  |        |    |       |   |     |   |     |  |   |    |       |   |     |     |     |  |   |     |       |   |     |     |     |  |   |     |       |   |     |     |     |  |   |  |  |  |  |  |  |
|  |                |         | <table border="0"> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td>M22-<br/>(C)K10(01)</td> <td>M22-<br/>CK11(02)<br/>(20)</td> <td>XHIV</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td>bei<br/>AC =<br/>50/60<br/>Hz</td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td>Bemessungs-<br/>betriebsstrom</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>AC-15</td> <td>15</td> <td><math>I_e</math></td> <td>A</td> <td>4</td> <td>4</td> <td>4</td> </tr> <tr> <td></td> <td>V</td> <td>230</td> <td><math>I_e</math></td> <td>A</td> <td>4</td> <td>4</td> <td>4</td> </tr> <tr> <td></td> <td>V</td> <td>400</td> <td><math>I_e</math></td> <td>A</td> <td>2</td> <td>-</td> <td>2</td> </tr> <tr> <td></td> <td>V</td> <td>500</td> <td><math>I_e</math></td> <td>A</td> <td>1</td> <td>-</td> <td>1</td> </tr> <tr> <td></td> <td>V</td> <td>124</td> <td><math>I_e</math></td> <td>A</td> <td>3</td> <td>3</td> <td>3</td> </tr> <tr> <td></td> <td>DC-124</td> <td>42</td> <td><math>I_e</math></td> <td>A</td> <td>1.7</td> <td>1</td> <td>1.5</td> </tr> <tr> <td></td> <td>V</td> <td>60</td> <td><math>I_e</math></td> <td>A</td> <td>1.2</td> <td>0.8</td> <td>0.8</td> </tr> <tr> <td></td> <td>V</td> <td>110</td> <td><math>I_e</math></td> <td>A</td> <td>0.6</td> <td>0.5</td> <td>0.5</td> </tr> <tr> <td></td> <td>V</td> <td>220</td> <td><math>I_e</math></td> <td>A</td> <td>0.3</td> <td>0.2</td> <td>0.2</td> </tr> <tr> <td></td> <td>V</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table> |                            |                    |                          |      |  | M22-<br>(C)K10(01) | M22-<br>CK11(02)<br>(20) | XHIV |  |  |  |  | bei<br>AC =<br>50/60<br>Hz |  |  |  |  |  |  | Bemessungs-<br>betriebsstrom |  |  |  |  |  | AC-15 | 15 | $I_e$ | A | 4 | 4 | 4 |  | V | 230 | $I_e$ | A | 4 | 4 | 4 |  | V | 400 | $I_e$ | A | 2 | - | 2 |  | V | 500 | $I_e$ | A | 1 | - | 1 |  | V | 124 | $I_e$ | A | 3 | 3 | 3 |  | DC-124 | 42 | $I_e$ | A | 1.7 | 1 | 1.5 |  | V | 60 | $I_e$ | A | 1.2 | 0.8 | 0.8 |  | V | 110 | $I_e$ | A | 0.6 | 0.5 | 0.5 |  | V | 220 | $I_e$ | A | 0.3 | 0.2 | 0.2 |  | V |  |  |  |  |  |  |
|  |                |         |  |                            | M22-<br>(C)K10(01) | M22-<br>CK11(02)<br>(20) | XHIV |  |                    |                          |      |  |  |  |  |                            |  |  |  |  |  |  |                              |  |  |  |  |  |       |    |       |   |   |   |   |  |   |     |       |   |   |   |   |  |   |     |       |   |   |   |   |  |   |     |       |   |   |   |   |  |   |     |       |   |   |   |   |  |        |    |       |   |     |   |     |  |   |    |       |   |     |     |     |  |   |     |       |   |     |     |     |  |   |     |       |   |     |     |     |  |   |  |  |  |  |  |  |
|  |                |         |  | bei<br>AC =<br>50/60<br>Hz |                    |                          |      |  |                    |                          |      |  |  |  |  |                            |  |  |  |  |  |  |                              |  |  |  |  |  |       |    |       |   |   |   |   |  |   |     |       |   |   |   |   |  |   |     |       |   |   |   |   |  |   |     |       |   |   |   |   |  |   |     |       |   |   |   |   |  |        |    |       |   |     |   |     |  |   |    |       |   |     |     |     |  |   |     |       |   |     |     |     |  |   |     |       |   |     |     |     |  |   |  |  |  |  |  |  |
|  |                |         | Bemessungs-<br>betriebsstrom   |                            |                    |                          |      |  |                    |                          |      |  |  |  |  |                            |  |  |  |  |  |  |                              |  |  |  |  |  |       |    |       |   |   |   |   |  |   |     |       |   |   |   |   |  |   |     |       |   |   |   |   |  |   |     |       |   |   |   |   |  |   |     |       |   |   |   |   |  |        |    |       |   |     |   |     |  |   |    |       |   |     |     |     |  |   |     |       |   |     |     |     |  |   |     |       |   |     |     |     |  |   |  |  |  |  |  |  |
|  | AC-15          | 15      | $I_e$  | A                          | 4                  | 4                        | 4    |  |                    |                          |      |  |  |  |  |                            |  |  |  |  |  |  |                              |  |  |  |  |  |       |    |       |   |   |   |   |  |   |     |       |   |   |   |   |  |   |     |       |   |   |   |   |  |   |     |       |   |   |   |   |  |   |     |       |   |   |   |   |  |        |    |       |   |     |   |     |  |   |    |       |   |     |     |     |  |   |     |       |   |     |     |     |  |   |     |       |   |     |     |     |  |   |  |  |  |  |  |  |
|  | V              | 230     | $I_e$  | A                          | 4                  | 4                        | 4    |  |                    |                          |      |  |  |  |  |                            |  |  |  |  |  |  |                              |  |  |  |  |  |       |    |       |   |   |   |   |  |   |     |       |   |   |   |   |  |   |     |       |   |   |   |   |  |   |     |       |   |   |   |   |  |   |     |       |   |   |   |   |  |        |    |       |   |     |   |     |  |   |    |       |   |     |     |     |  |   |     |       |   |     |     |     |  |   |     |       |   |     |     |     |  |   |  |  |  |  |  |  |
|  | V              | 400     | $I_e$  | A                          | 2                  | -                        | 2    |  |                    |                          |      |  |  |  |  |                            |  |  |  |  |  |  |                              |  |  |  |  |  |       |    |       |   |   |   |   |  |   |     |       |   |   |   |   |  |   |     |       |   |   |   |   |  |   |     |       |   |   |   |   |  |   |     |       |   |   |   |   |  |        |    |       |   |     |   |     |  |   |    |       |   |     |     |     |  |   |     |       |   |     |     |     |  |   |     |       |   |     |     |     |  |   |  |  |  |  |  |  |
|  | V              | 500     | $I_e$  | A                          | 1                  | -                        | 1    |  |                    |                          |      |  |  |  |  |                            |  |  |  |  |  |  |                              |  |  |  |  |  |       |    |       |   |   |   |   |  |   |     |       |   |   |   |   |  |   |     |       |   |   |   |   |  |   |     |       |   |   |   |   |  |   |     |       |   |   |   |   |  |        |    |       |   |     |   |     |  |   |    |       |   |     |     |     |  |   |     |       |   |     |     |     |  |   |     |       |   |     |     |     |  |   |  |  |  |  |  |  |
|  | V              | 124     | $I_e$  | A                          | 3                  | 3                        | 3    |  |                    |                          |      |  |  |  |  |                            |  |  |  |  |  |  |                              |  |  |  |  |  |       |    |       |   |   |   |   |  |   |     |       |   |   |   |   |  |   |     |       |   |   |   |   |  |   |     |       |   |   |   |   |  |   |     |       |   |   |   |   |  |        |    |       |   |     |   |     |  |   |    |       |   |     |     |     |  |   |     |       |   |     |     |     |  |   |     |       |   |     |     |     |  |   |  |  |  |  |  |  |
|  | DC-124         | 42      | $I_e$  | A                          | 1.7                | 1                        | 1.5  |  |                    |                          |      |  |  |  |  |                            |  |  |  |  |  |  |                              |  |  |  |  |  |       |    |       |   |   |   |   |  |   |     |       |   |   |   |   |  |   |     |       |   |   |   |   |  |   |     |       |   |   |   |   |  |   |     |       |   |   |   |   |  |        |    |       |   |     |   |     |  |   |    |       |   |     |     |     |  |   |     |       |   |     |     |     |  |   |     |       |   |     |     |     |  |   |  |  |  |  |  |  |
|  | V              | 60      | $I_e$  | A                          | 1.2                | 0.8                      | 0.8  |  |                    |                          |      |  |  |  |  |                            |  |  |  |  |  |  |                              |  |  |  |  |  |       |    |       |   |   |   |   |  |   |     |       |   |   |   |   |  |   |     |       |   |   |   |   |  |   |     |       |   |   |   |   |  |   |     |       |   |   |   |   |  |        |    |       |   |     |   |     |  |   |    |       |   |     |     |     |  |   |     |       |   |     |     |     |  |   |     |       |   |     |     |     |  |   |  |  |  |  |  |  |
|  | V              | 110     | $I_e$  | A                          | 0.6                | 0.5                      | 0.5  |  |                    |                          |      |  |  |  |  |                            |  |  |  |  |  |  |                              |  |  |  |  |  |       |    |       |   |   |   |   |  |   |     |       |   |   |   |   |  |   |     |       |   |   |   |   |  |   |     |       |   |   |   |   |  |   |     |       |   |   |   |   |  |        |    |       |   |     |   |     |  |   |    |       |   |     |     |     |  |   |     |       |   |     |     |     |  |   |     |       |   |     |     |     |  |   |  |  |  |  |  |  |
|  | V              | 220     | $I_e$  | A                          | 0.3                | 0.2                      | 0.2  |  |                    |                          |      |  |  |  |  |                            |  |  |  |  |  |  |                              |  |  |  |  |  |       |    |       |   |   |   |   |  |   |     |       |   |   |   |   |  |   |     |       |   |   |   |   |  |   |     |       |   |   |   |   |  |   |     |       |   |   |   |   |  |        |    |       |   |     |   |     |  |   |    |       |   |     |     |     |  |   |     |       |   |     |     |     |  |   |     |       |   |     |     |     |  |   |  |  |  |  |  |  |
|  | V              |         |  |                            |                    |                          |      |  |                    |                          |      |  |  |  |  |                            |  |  |  |  |  |  |                              |  |  |  |  |  |       |    |       |   |   |   |   |  |   |     |       |   |   |   |   |  |   |     |       |   |   |   |   |  |   |     |       |   |   |   |   |  |   |     |       |   |   |   |   |  |        |    |       |   |     |   |     |  |   |    |       |   |     |     |     |  |   |     |       |   |     |     |     |  |   |     |       |   |     |     |     |  |   |  |  |  |  |  |  |
| Short-circuit protection   |                |         |  |                            |                    |                          |      |  |                    |                          |      |  |  |  |  |                            |  |  |  |  |  |  |                              |  |  |  |  |  |       |    |       |   |   |   |   |  |   |     |       |   |   |   |   |  |   |     |       |   |   |   |   |  |   |     |       |   |   |   |   |  |   |     |       |   |   |   |   |  |        |    |       |   |     |   |     |  |   |    |       |   |     |     |     |  |   |     |       |   |     |     |     |  |   |     |       |   |     |     |     |  |   |  |  |  |  |  |  |
| max. fuse  |                | A gG/gL | 10   |                            |                    |                          |      |  |                    |                          |      |  |  |  |  |                            |  |  |  |  |  |  |                              |  |  |  |  |  |       |    |       |   |   |   |   |  |   |     |       |   |   |   |   |  |   |     |       |   |   |   |   |  |   |     |       |   |   |   |   |  |   |     |       |   |   |   |   |  |        |    |       |   |     |   |     |  |   |    |       |   |     |     |     |  |   |     |       |   |     |     |     |  |   |     |       |   |     |     |     |  |   |  |  |  |  |  |  |
| Max. miniature circuit-breaker   |                | A       | FAZ-B6/B1  |                            |                    |                          |      |  |                    |                          |      |  |  |  |  |                            |  |  |  |  |  |  |                              |  |  |  |  |  |       |    |       |   |   |   |   |  |   |     |       |   |   |   |   |  |   |     |       |   |   |   |   |  |   |     |       |   |   |   |   |  |   |     |       |   |   |   |   |  |        |    |       |   |     |   |     |  |   |    |       |   |     |     |     |  |   |     |       |   |     |     |     |  |   |     |       |   |     |     |     |  |   |  |  |  |  |  |  |
| Operating times  |                |         | <p>Early-make time of the HIV compared to the main contacts during with make and break switching.</p> <p>(switch times with manual operation):</p> <p>NZM1, PN1, N(S)1: ca. 20 ms</p> <p>NZM2, PN2, N(S)2: ca. 20 ms</p> <p>NZM3, PN3, N(S)3: ca. 20 ms</p> <p>NZM4, N(S)4: approx. 90 ms, the HIV switch early <b>Offswitching not</b> forward.</p>   |                            |                    |                          |      |  |                    |                          |      |  |  |  |  |                            |  |  |  |  |  |  |                              |  |  |  |  |  |       |    |       |   |   |   |   |  |   |     |       |   |   |   |   |  |   |     |       |   |   |   |   |  |   |     |       |   |   |   |   |  |   |     |       |   |   |   |   |  |        |    |       |   |     |   |     |  |   |    |       |   |     |     |     |  |   |     |       |   |     |     |     |  |   |     |       |   |     |     |     |  |   |  |  |  |  |  |  |
| Terminal capacities  |                | $mm^2$  |  |                            |                    |                          |      |  |                    |                          |      |  |  |  |  |                            |  |  |  |  |  |  |                              |  |  |  |  |  |       |    |       |   |   |   |   |  |   |     |       |   |   |   |   |  |   |     |       |   |   |   |   |  |   |     |       |   |   |   |   |  |   |     |       |   |   |   |   |  |        |    |       |   |     |   |     |  |   |    |       |   |     |     |     |  |   |     |       |   |     |     |     |  |   |     |       |   |     |     |     |  |   |  |  |  |  |  |  |
| Solid or flexible conductor, with ferrule  |                | $mm^2$  | 1 x (0,75 - 2,5)<br>2 x (0,75 - 2,5)   |                            |                    |                          |      |  |                    |                          |      |  |  |  |  |                            |  |  |  |  |  |  |                              |  |  |  |  |  |       |    |       |   |   |   |   |  |   |     |       |   |   |   |   |  |   |     |       |   |   |   |   |  |   |     |       |   |   |   |   |  |   |     |       |   |   |   |   |  |        |    |       |   |     |   |     |  |   |    |       |   |     |     |     |  |   |     |       |   |     |     |     |  |   |     |       |   |     |     |     |  |   |  |  |  |  |  |  |
| UL/CSA   |                |         |  |                            |                    |                          |      |  |                    |                          |      |  |  |  |  |                            |  |  |  |  |  |  |                              |  |  |  |  |  |       |    |       |   |   |   |   |  |   |     |       |   |   |   |   |  |   |     |       |   |   |   |   |  |   |     |       |   |   |   |   |  |   |     |       |   |   |   |   |  |        |    |       |   |     |   |     |  |   |    |       |   |     |     |     |  |   |     |       |   |     |     |     |  |   |     |       |   |     |     |     |  |   |  |  |  |  |  |  |
| Rated operational current  | $I_e$          | A       | 5 A – 600 V AC<br>1 A - 250 V DC   |                            |                    |                          |      |  |                    |                          |      |  |  |  |  |                            |  |  |  |  |  |  |                              |  |  |  |  |  |       |    |       |   |   |   |   |  |   |     |       |   |   |   |   |  |   |     |       |   |   |   |   |  |   |     |       |   |   |   |   |  |   |     |       |   |   |   |   |  |        |    |       |   |     |   |     |  |   |    |       |   |     |     |     |  |   |     |       |   |     |     |     |  |   |     |       |   |     |     |     |  |   |  |  |  |  |  |  |
| Other technical data (sheet catalogue)   |                |         | Maximum equipment and position of the internal accessories   |                            |                    |                          |      |  |                    |                          |      |  |  |  |  |                            |  |  |  |  |  |  |                              |  |  |  |  |  |       |    |       |   |   |   |   |  |   |     |       |   |   |   |   |  |   |     |       |   |   |   |   |  |   |     |       |   |   |   |   |  |   |     |       |   |   |   |   |  |        |    |       |   |     |   |     |  |   |    |       |   |     |     |     |  |   |     |       |   |     |     |     |  |   |     |       |   |     |     |     |  |   |  |  |  |  |  |  |

## 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.                         |

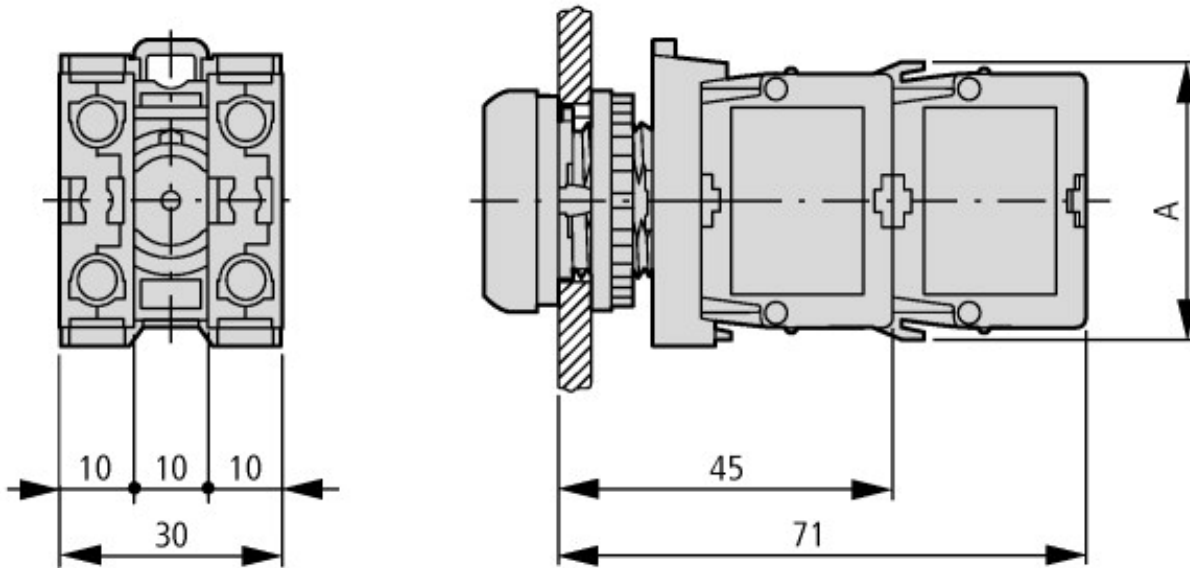
## Technical data ETIM 6.0

| 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 (ecl@ss8.1-27-37-13-02 [AKN342010]) |  |   |                             |
| Number of contacts as change-over contact   |  |   | 0                           |
| Number of contacts as normally open contact   |  |   | 1                           |
| Number of contacts as normally closed contact   |  |   | 0                           |
| Rated operation current $I_e$ at AC-15, 230 V   |  | A | 6                           |
| Type of electric connection   |  |   | Screw connection            |
| Model   |  |   | Top mounting and integrable |
| Mounting method   |  |   | Front fastening             |

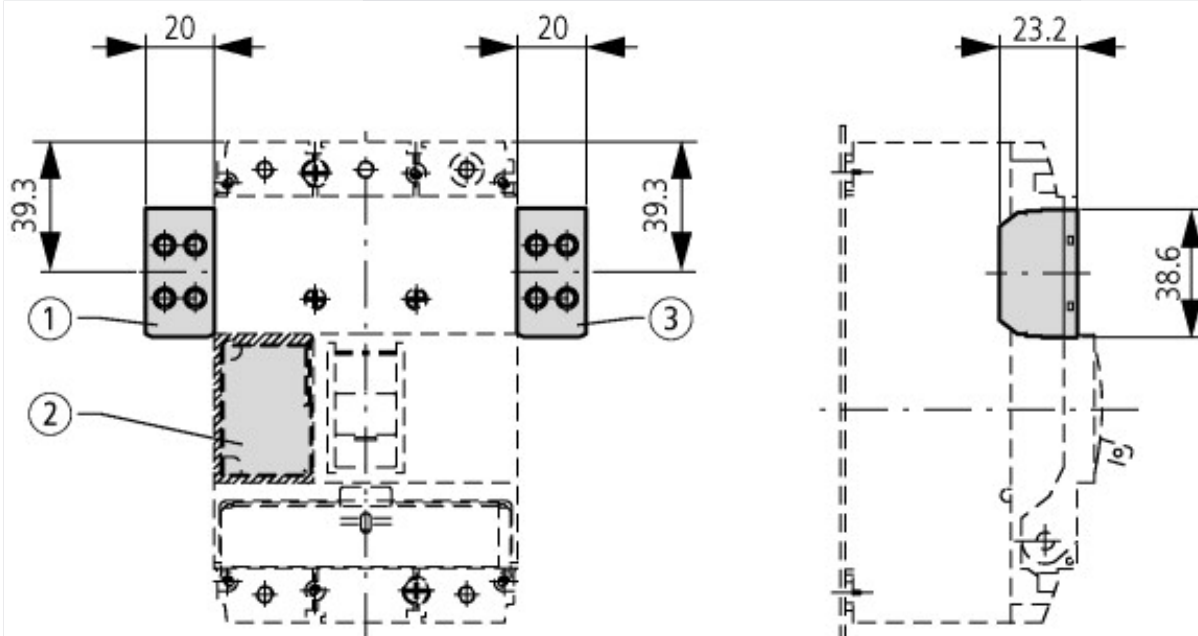
## Approvals

|                         |  |  |  |
|-------------------------|--|--|--|
| 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  |

## Dimensions



A = 37.2



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/IL04716002Z2017\\_01.pdf](ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL04716002Z2017_01.pdf)

DGUV Test Mark Customer Information

[http://www.dguv.de/medien/dguv-test-medien/\\_pdf\\_zip\\_doc\\_ppt/agb-und-pzo/dguv\\_test\\_zeichen\\_infoblatt\\_kunden.pdf](http://www.dguv.de/medien/dguv-test-medien/_pdf_zip_doc_ppt/agb-und-pzo/dguv_test_zeichen_infoblatt_kunden.pdf)

Maximum equipment and position of the internal accessories

<http://ecat.moeller.net/flip-cat/?edition=HPLEN&startpage=17.178>