

Contact element, Cage Clamp, Front fixing, 1 N/O, 1 NC, 24 V 3 A, 220 V 230 V 240 V 4 A



Powering Business Worldwide™

Part no. M22-CK11

107940

EL Number

4355492

(Norway)

| General specifications                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
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| Product name                           | Eaton Moeller® series M22 Accessory Contact element                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Part no.                               | M22-CK11                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| EAN                                    | 4015081075379                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Product Length/Depth                   | 43 millimetre                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Product height                         | 10 millimetre                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Product width                          | 38 millimetre                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Product weight                         | 0.012 kilogram                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Compliances                            | CE Marked                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Certifications                         | IEC 60947-5<br>UL 508<br>CSA Std. C22.2 No. 94-91<br>EN 60947-5<br>CSA Std. C22.2 No. 14-05<br>IEC 60947-5-1<br>CE<br>UL/CSA<br>UL File No.: E29184<br>CSA-C22.2 No. 94-91<br>UL Category Control No.: NKCR<br>CSA-C22.2 No. 14-05<br>CSA Class No.: 3211-03<br>CSA File No.: 012528<br>IEC/EN 60947-5<br>UL<br>CSA<br>IEC                                                                                                                                                                                                                                                                                                                                     |
| Product Tradename                      | M22                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Product Type                           | Accessory                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Product Sub Type                       | Contact element                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Catalog Notes                          | Any combinations of the auxiliary contact types are possible.<br>Contacts with safety function, by positive opening to IEC/EN 60947-5-1<br>General trip indication '+', when tripped by shunt release, overload release, short-circuit release or by the residual-current release due to residual-current.<br>Not in combination with switch-disconnector PN...<br>On combination with remote operator NZM-XR... the right mounting location of standard auxiliary contact HIN can be fitted only with individual contacts.<br>Suitable for NZM1/2/3/4<br>When using emergency switching off actuators M22-PV... max. 2 contact elements = 4 NC / N/O contacts |
| Features & Functions                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Electric connection type               | Spring clamp connection                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| General information                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Degree of protection                   | IP20                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Model                                  | Top mounting and integrable                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Mounting method                        | Front fastening                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Operating frequency                    | 3600 Operations/h                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Overvoltage category                   | III                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Pollution degree                       | 3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Product category                       | Accessories                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Rated impulse withstand voltage (Uimp) | 4000 V AC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Type                                   | Auxiliary contact                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Used with                              | Can be used with NZM1 circuit-breaker: a standard auxiliary contact can be clipped into the circuit-breaker.<br>Can be used with NZM4 circuit-breaker: up to two standard auxiliary contacts can be clipped into the circuit-breaker.<br>Can be used with NZM3, 4 circuit-breaker: up to three standard auxiliary contacts can be clipped into the circuit-breaker.<br>Can be used with NZM1, 2, 3 circuit-breaker: a trip-indicating auxiliary contact can be clipped into the circuit-breaker.                                                                                                                                                               |

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|                                                                                   |  | Can be used with NZM2 size circuit-breaker: a standard auxiliary contact can be clipped into the circuit-breaker.                                                                    |
| <b>Climatic environmental conditions</b>                                          |  |                                                                                                                                                                                      |
| Ambient operating temperature - min                                               |  | -25 °C                                                                                                                                                                               |
| Ambient operating temperature - max                                               |  | 70 °C                                                                                                                                                                                |
| Climatic proofing                                                                 |  | Damp heat, cyclic, to IEC 60068-2-30<br>Damp heat, constant, to IEC 60068-2-78                                                                                                       |
| <b>Terminal capacities</b>                                                        |  |                                                                                                                                                                                      |
| Terminal capacity (AWG)                                                           |  | 1 x (20 - 18)<br>2 x (20 - 18)                                                                                                                                                       |
| Terminal capacity (flexible with ferrule)                                         |  | 0.5 - 1.5 mm <sup>2</sup>                                                                                                                                                            |
| Terminal capacity (solid)                                                         |  | 0.5 - 1.5 mm <sup>2</sup>                                                                                                                                                            |
| Terminal capacity (solid/flexible with ferrule)                                   |  | 2 x (0,5 - 0,75) mm <sup>2</sup><br>1 x (0,5 - 1,5) mm <sup>2</sup>                                                                                                                  |
| Terminal capacity (stranded)                                                      |  | 0.5 - 1.5 mm <sup>2</sup>                                                                                                                                                            |
| <b>Electrical rating</b>                                                          |  |                                                                                                                                                                                      |
| Conventional thermal current I <sub>th</sub> of auxiliary contacts (1-pole, open) |  | 4 A                                                                                                                                                                                  |
| Rated insulation voltage (U <sub>i</sub> )                                        |  | 250 V                                                                                                                                                                                |
| Rated operational current (I <sub>e</sub> ) at AC-15, 115 V                       |  | 4 A                                                                                                                                                                                  |
| Rated operational current (I <sub>e</sub> ) at AC-15, 220 V, 230 V, 240 V         |  | 6 A                                                                                                                                                                                  |
| Rated operational current (I <sub>e</sub> ) at DC-13, 110 V                       |  | 0.5 A                                                                                                                                                                                |
| Rated operational current (I <sub>e</sub> ) at DC-13, 220 V, 230 V                |  | 0.3 A                                                                                                                                                                                |
| Rated operational current (I <sub>e</sub> ) at DC-13, 24 V                        |  | 3 A                                                                                                                                                                                  |
| Rated operational current (I <sub>e</sub> ) at DC-13, 42 V                        |  | 1 A                                                                                                                                                                                  |
| Rated operational current (I <sub>e</sub> ) at DC-13, 60 V                        |  | 0.8 A                                                                                                                                                                                |
| Rated operational voltage (U <sub>e</sub> ) at AC - max                           |  | 230 V                                                                                                                                                                                |
| Rated operational voltage (U <sub>e</sub> ) at DC - max                           |  | 220 V                                                                                                                                                                                |
| <b>Short-circuit rating</b>                                                       |  |                                                                                                                                                                                      |
| Rated conditional short-circuit current (I <sub>q</sub> )                         |  | 1 kA                                                                                                                                                                                 |
| Short-circuit protection                                                          |  | PKZM0-10/FAZ-B6/1, Contacts, Max. short-circuit protective device, Fuseless                                                                                                          |
| Short-circuit protection rating                                                   |  | Max. 10 A gG/gL, Fuse, Contacts<br>Max. 10 A gG/gL, Fuse, Auxiliary contacts                                                                                                         |
| <b>Communication</b>                                                              |  |                                                                                                                                                                                      |
| Connection to SmartWire-DT                                                        |  | No                                                                                                                                                                                   |
| Connection type                                                                   |  | Double contact<br>Front fixing<br>Cage Clamp                                                                                                                                         |
| <b>Actuator</b>                                                                   |  |                                                                                                                                                                                      |
| Actuating force - max                                                             |  | 10 N                                                                                                                                                                                 |
| Actuator travel and actuation force (DIN EN 60947-5-1)                            |  | 4.8 mm                                                                                                                                                                               |
| Knob travel                                                                       |  | 5.7 mm                                                                                                                                                                               |
| <b>Contacts</b>                                                                   |  |                                                                                                                                                                                      |
| Control circuit reliability                                                       |  | 1 failure per 5,000,000 switching operations (statistically determined, at 5 V DC/1 mA)<br>1 failure per 10,000,000 switching operations (Statistically determined, at 24 V DC/5 mA) |
| Force for positive opening - min                                                  |  | 20 N                                                                                                                                                                                 |
| Number of contacts (change-over contacts)                                         |  | 0                                                                                                                                                                                    |
| Number of contacts (normally closed contacts)                                     |  | 1                                                                                                                                                                                    |
| Number of contacts (normally open contacts)                                       |  | 1                                                                                                                                                                                    |
| <b>Design verification</b>                                                        |  |                                                                                                                                                                                      |
| Equipment heat dissipation, current-dependent P <sub>vid</sub>                    |  | 0 W                                                                                                                                                                                  |
| Heat dissipation capacity P <sub>diss</sub>                                       |  | 0 W                                                                                                                                                                                  |
| Heat dissipation per pole, current-dependent P <sub>vid</sub>                     |  | 0.05 W                                                                                                                                                                               |
| Rated operational current for specified heat dissipation (I <sub>n</sub> )        |  | 4 A                                                                                                                                                                                  |
| Static heat dissipation, non-current-dependent P <sub>vs</sub>                    |  | 0 W                                                                                                                                                                                  |
| 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.                                                                                                                                           |

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| 10.2.3.2 Verification of resistance of insulating materials to normal heat       |  |  | Meets the product standard's requirements.                                                                                       |
| 10.2.3.3 Resist. of insul. mat. to abnormal heat/fire by internal elect. 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.                                                                                           |
| 10.9.2 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 9.0

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| 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@ss13-27-37-13-02 [AKN342018]) |  |   |                             |
| Number of contacts as change-over contact                                                                                                                                                                  |  |   | 0                           |
| Number of contacts as normally open contact                                                                                                                                                                |  |   | 1                           |
| Number of contacts as normally closed contact                                                                                                                                                              |  |   | 1                           |
| Number of fault-signal switches                                                                                                                                                                            |  |   | 0                           |
| Rated operation current I <sub>e</sub> at AC-15, 230 V                                                                                                                                                     |  | A | 6                           |
| Type of electric connection                                                                                                                                                                                |  |   | Spring clamp connection     |
| Model                                                                                                                                                                                                      |  |   | Top mounting and integrable |
| Mounting method                                                                                                                                                                                            |  |   | Front fastening             |
| Lamp holder                                                                                                                                                                                                |  |   | None                        |