# Specifications

## Eaton 107940

Eaton Moeller® series M22 Contact element, Cage Clamp, Front fixing, 1 N/O, 1 NC, 24 V 3 A, 220 V 230 V 240 V 4 A

| General specifications | |
|---|---|
| **PRODUCT NAME** | Eaton Moeller® series M22 contact element |
| **CATALOG NUMBER** | 107940 |
| **MODEL CODE** | M22-CK11 |
| **EAN** | 4015081075379 |
| **PRODUCT LENGTH/DEPTH** | 43 mm |
| **PRODUCT HEIGHT** | 10 mm |
| **PRODUCT WIDTH** | 38 mm |
| **PRODUCT WEIGHT** | 0.012 kg |
| **COMPLIANCES** | CE Marked |
| **CERTIFICATIONS** | CSA Std. C22.2 No. 94-91<br>IEC 60947-5<br>CSA Std. C22.2 No. 14-05<br>EN 60947-5<br>UL 508<br>CSA<br>IEC 60947-5-1<br>CSA File No.: 012528<br>UL File No.: E29184<br>CE<br>CSA-C22.2 No. 94-91<br>UL Category Control No.: NKCR<br>CSA Class No.: 3211-03<br>IEC/EN 60947-5<br>IEC<br>CSA-C22.2 No. 14-05<br>UL/CSA<br>UL |
| **GLOBAL CATALOG** | 107940 |
| **PRODUCT TYPE** | Contact element |

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## Product specifications

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| **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.<br>Can be used with NZM2 size circuit-breaker: a standard auxiliary contact can be clipped into the circuit-breaker. |
| **TYPE** | Auxiliary contact |
| **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. |
| **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** | Meets the product standard's requirements. |

## Resources

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| CATALOGS | eaton-pushbuttons-signal-towers-sensors-assortment-overview-catalog-ca047003en-en-us.pdf |
| CERTIFICATION REPORTS | 000Z425 |
| CONTROL TRAVEL DIAGRAM | eaton-operating-diagram-m22-contact-element-contact-travel-diagram-005.eps |
| DECLARATIONS OF CONFORMITY | eaton-accessory-declaration-of-conformity-uk251351en.pdf<br>eaton-contact-element-declaration-of-conformity-eu251487en.pdf |
| DRAWINGS | eaton-operating-actuation-m22-contact-element-dimensions.eps<br>eaton-circuit-breaker-release-nzm-mccb-dimensions.eps<br>eaton-operating-rmq-m22-contact-element-3d-drawing.eps<br>eaton-general-standards-000Z425.jpg |
| ECAD MODEL | ETN.107940.edz |
| INSTALLATION INSTRUCTIONS | IL04716002Z |
| MCAD MODEL | doppelkontaktelement_cage_front<br>doppelkontaktelement_cage_front.stp |
| PEP ECO-PASSPORT | eaton-contact-blocks-pep-eato-00317-v0101-en.pdf |
| WIRING DIAGRAMS | eaton-circuit-breaker-contact-m22-contact-element-wiring-diagram-002.eps<br>eaton-circuit-breaker-diagram-m22-contact-element-wiring-diagram.eps<br>eaton-operating-contact-m22-contact-element-wiring-diagram-006.eps |

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| **TO NORMAL HEAT** | |
| **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. |
| **ELECTRIC CONNECTION TYPE** | Spring clamp connection |
| **OPERATING FREQUENCY** | 3600 Operations/h |
| **POLLUTION DEGREE** | 3 |
| **CLIMATIC PROOFING** | Damp heat, cyclic, to IEC 60068-2-30<br>Damp heat, constant, to IEC 60068-2-78 |
| **ACTUATING FORCE - MAX** | 10 N |
| **ACTUATOR TRAVEL AND** | 4.8 mm |

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| **ACTUATION FORCE (DIN EN 60947-5-1)** | |
| **AMBIENT OPERATING TEMPERATURE - MAX** | 70 °C |
| **AMBIENT OPERATING TEMPERATURE - MIN** | -25 °C |
| **AMBIENT STORAGE TEMPERATURE - MAX** | 85 °C |
| **AMBIENT STORAGE TEMPERATURE - MIN** | -25 °C |
| **CONVENTIONAL THERMAL CURRENT ITH OF AUXILIARY CONTACTS (1-POLE, OPEN)** | 4 A |
| **EQUIPMENT HEAT DISSIPATION, CURRENT-DEPENDENT PVID** | 0 W |
| **FORCE FOR POSITIVE OPENING - MIN** | 20 N |
| **HEAT DISSIPATION CAPACITY PDISS** | 0 W |
| **HEAT DISSIPATION PER POLE, CURRENT-DEPENDENT PVID** | 0.05 W |
| **KNOB TRAVEL** | 5.7 mm |
| **NUMBER OF CONTACTS (CHANGE-OVER CONTACTS)** | 0 |
| **NUMBER OF CONTACTS (NORMALLY CLOSED CONTACTS)** | 1 |
| **NUMBER OF CONTACTS (NORMALLY OPEN CONTACTS)** | 1 |
| **NUMBER OF SWITCHES (FAULT SIGNAL)** | 0 |
| **CONNECTION TO SMARTWIRE-DT** | No |
| **RATED IMPULSE WITHSTAND VOLTAGE (UIMP)** | 4000 V AC |
| **CONTACT CONFIGURATION** | 1 NO, 1 NC |
| **RATED CONDITIONAL SHORT-CIRCUIT CURRENT (IQ)** | 1 kA |
| **CONNECTION TYPE** | Double contact<br>Front fixing<br>Cage Clamp |
| **MOUNTING METHOD** | Front fastening |
| **OVERVOLTAGE** | III |

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| **CATEGORY** | |
| **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) |
| **DEGREE OF PROTECTION** | IP20 |
| **MODEL** | Top mounting and integrable |
| **LAMP HOLDER** | None |
| **TERMINAL CAPACITY (AWG)** | 1 x (20 - 18)<br>2 x (20 - 18) |
| **TERMINAL CAPACITY (SOLID/FLEXIBLE WITH FERRULE)** | 2 x (0,5 - 0,75) mm²<br>1 x (0,5 - 1,5) mm² |
| **TERMINAL CAPACITY (STRANDED)** | 0.5 - 1.5 mm² |
| **SHORT-CIRCUIT PROTECTION** | PKZM0-10/FAZ-B6/1, Contacts, Max. short-circuit protective device, Fuseless |
| **STATIC HEAT DISSIPATION, NON-CURRENT-DEPENDENT PVS** | 0 W |
| **PRODUCT CATEGORY** | Accessories |
| **SHORT-CIRCUIT PROTECTION RATING** | Max. 10 A gG/gL, Fuse, Contacts<br>Max. 10 A gG/gL, Fuse, Auxiliary contacts |
| **RATED INSULATION VOLTAGE (UI)** | 250 V |
| **RATED OPERATIONAL CURRENT (IE) AT AC-15, 115 V** | 4 A |
| **RATED OPERATIONAL CURRENT (IE) AT AC-15, 220 V, 230 V, 240 V** | 6 A |
| **RATED OPERATIONAL CURRENT (IE) AT DC-13, 110 V** | 0.6 A |
| **RATED OPERATIONAL CURRENT (IE) AT DC-13, 220 V, 230 V** | 0.3 A |
| **RATED OPERATIONAL CURRENT (IE) AT DC-13, 24 V** | 3 A |
| **RATED OPERATIONAL CURRENT (IE) AT DC-13,** | 1 A |

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| **60 V** | |
| **RATED OPERATIONAL CURRENT FOR SPECIFIED HEAT DISSIPATION (IN)** | 4 A |
| **RATED OPERATIONAL VOLTAGE (UE) AT AC - MAX** | 230 V |
| **RATED OPERATIONAL VOLTAGE (UE) AT DC - MAX** | 220 V |
| **TERMINAL CAPACITY (FLEXIBLE WITH FERRULE)** | 0.5 - 1.5 mm² |
| **TERMINAL CAPACITY (SOLID)** | 0.5 - 1.5 mm² |

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| **PROJECT NAME:** | |
| **PROJECT NUMBER:** | |
| **PREPARED BY:** | |
| **DATE:** | |

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