

Transformer-protective circuit-breaker, 3p, Ir=0.1-0.16A, screw connection**Part no.** PKZM0-0,16-T

088907

**EL Number
(Norway)**

4315151

| General specifications | | |
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| Product name | | Eaton Moeller® series PKZM0 Transformer-protective circuit-breaker |
| Part no. | | PKZM0-0,16-T |
| EAN | | 4015080889076 |
| Product Length/Depth | | 76 millimetre |
| Product height | | 93 millimetre |
| Product width | | 45 millimetre |
| Product weight | | 0.246 kilogram |
| Certifications | | IEC/EN 60947 VDE 0660 |
| Product Tradename | | PKZM0 |
| Product Type | | Transformer-protective circuit-breaker |
| Product Sub Type | | None |
| Catalog Notes | | IE3-ready devices are identified by the logo on their packaging. |
| Features & Functions | | |
| Actuator type | | Turn button |
| Features | | Phase-failure sensitivity (according to IEC/EN 60947-4-1, VDE 0660 Part 102) Complete device with protection unit |
| Fitted with: | | Switched-off indicator |
| Functions | | For the protection of transformers with a high inrush current Transformer protection |
| Number of poles | | Three-pole |
| General information | | |
| Connection | | Screw terminals |
| Degree of protection | | Terminals: IP00 IP20 |
| Lifespan, electrical | | 100,000 operations |
| Lifespan, mechanical | | 100,000 Operations |
| Mounting position | | Can be snapped on to IEC/EN 60715 top-hat rail with 7.5 or 15 mm height. |
| Operating frequency | | 40 Operations/h |
| Overvoltage category | | III |
| Pollution degree | | 3 |
| Product category | | Transformer protective circuit breaker |
| Protection | | Finger and back-of-hand proof, Protection against direct contact when actuated from front (EN 50274) |
| Rated impulse withstand voltage (Uimp) | | 6000 V AC |
| Shock resistance | | 25 g, Mechanical, according to IEC/EN 60068-2-27, Half-sinusoidal shock 10 ms |
| Suitable for | | Also motors with efficiency class IE3 DIN rail (top hat rail) mounting |
| Temperature compensation | | -25 - 55 °C, Operating range ≤ 0.25 %/K, residual error for T > 40° -5 - 40 °C to IEC/EN 60947, VDE 0660 |
| Climatic environmental conditions | | |
| Altitude | | Max. 2000 m |
| Ambient operating temperature - min | | -25 °C |
| Ambient operating temperature - max | | 55 °C |
| Ambient operating temperature (enclosed) - min | | 25 °C |
| Ambient operating temperature (enclosed) - max | | 40 °C |
| Ambient storage temperature - min | | 40 °C |
| Ambient storage temperature - max | | 80 °C |

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| Climatic proofing | | Damp heat, cyclic, to IEC 60068-2-30 Damp heat, constant, to IEC 60068-2-78 |
| Terminal capacities | | |
| Terminal capacity (flexible with ferrule) | | 2 x (1 - 6) mm ² , ferrule to DIN 46228 1 x (1 - 6) mm ² , ferrule to DIN 46228 |
| Terminal capacity (solid) | | 1 x (1 - 6) mm ² 2 x (1 - 6) mm ² |
| Terminal capacity (solid/stranded AWG) | | 18 - 10 |
| Stripping length (main cable) | | 10 mm |
| Tightening torque | | 1.7 Nm, Screw terminals, Main cable 1 Nm, Screw terminals, Control circuit cables |
| Electrical rating | | |
| Rated frequency - min | | 50 Hz |
| Rated frequency - max | | 60 Hz |
| Rated operational current (Ie) | | 0.16 A |
| Rated operational voltage (Ue) - min | | 690 V |
| Rated operational voltage (Ue) - max | | 690 V |
| Rated uninterrupted current (Iu) | | 0.16 A |
| Short-circuit rating | | |
| Rated short-circuit breaking capacity Icu at 400 V AC | | 150 kA |
| Rated short-circuit breaking capacity Ics at 400 V AC | | 150 kA |
| Rated short-circuit breaking capacity Icu at 440 V AC | | 150 kA |
| Rated short-circuit breaking capacity Ics at 440 V AC | | 150 kA |
| Rated short-circuit breaking capacity Icu at 500 V AC | | 150 kA |
| Rated short-circuit breaking capacity Ics at 500 V AC | | 150 kA |
| Rated short-circuit breaking capacity Icu at 690 V AC | | 150 kA |
| Rated short-circuit breaking capacity Ics at 690 V AC | | 150 kA |
| Short-circuit current | | 60 kA DC, up to 250 V DC, Main conducting paths |
| Short-circuit current rating (group protection) | | 50 kA, 600 V High Fault, Fuse, SCCR (UL/CSA) with 600 A, 600 V High Fault, Fuse, SCCR (UL/CSA) 50 kA, 600 V High Fault, CB, SCCR (UL/CSA) with 600 A, 600 V High Fault, CB, SCCR (UL/CSA) |
| Short-circuit current rating (type E) | | 65 kA, 240 V, SCCR (UL/CSA) 65 kA, 480 Y/277 V, SCCR (UL/CSA) Accessories required BK25/3-PKZ0-E 50 kA, 600 Y/347 V, SCCR (UL/CSA) |
| Short-circuit release | | Basic device, fixed 20 x Iu, Trip Blocks ± 20% tolerance, Trip blocks 2.4 A, Irm, Setting range max. |
| Switching capacity | | |
| Switching capacity | | 0.16 A (3 contacts in series), DC-5 up to 250V 0.16 A, AC-3 up to 690 V |
| Contacts | | |
| Number of auxiliary contacts (change-over contacts) | | 0 |
| Number of auxiliary contacts (normally closed contacts) | | 0 |
| Number of auxiliary contacts (normally open contacts) | | 0 |
| Trip blocks | | |
| Overload release current setting - min | | 0.1 A |
| Overload release current setting - max | | 0.16 A |
| Design verification | | |
| Equipment heat dissipation, current-dependent Pvid | | 5.39 W |
| Heat dissipation capacity Pdiss | | 0 W |
| Heat dissipation per pole, current-dependent Pvid | | 1.8 W |
| Rated operational current for specified heat dissipation (In) | | 0.16 A |
| Static heat dissipation, non-current-dependent Pvs | | 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. |
| 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. |

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| 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) / Power circuit-breaker for trafo/generator/installation protection (EC000228) | | |
| Electric engineering, automation, process control engineering / Low-voltage switch technology / Circuit breaker (LV < 1 kV) / Circuit breaker for power transformer, generator and system protection (ecl@ss13-27-37-04-09 [AJZ716018]) | | |
| Rated permanent current I _u | A | 0.16 |
| Rated voltage | V | 690 - 690 |
| Rated short-circuit breaking capacity I _{cu} at 400 V, 50 Hz | kA | 150 |
| Overload release current setting | A | 0.1 - 0.16 |
| Adjustment range short-term delayed short-circuit release | A | 0 - 0 |
| Adjustment range undelayed short-circuit release | A | 2.4 - 2.4 |
| Power loss | W | 5.39 |
| Device construction | | Built-in device fixed built-in technique |
| Integrated earth fault protection | | No |
| Type of electrical connection of main circuit | | Screw connection |
| Suitable for DIN rail (top hat rail) mounting | | Yes |
| DIN rail (top hat rail) mounting optional | | Yes |
| Number of auxiliary contacts as normally closed contact | | 0 |
| Number of auxiliary contacts as normally open contact | | 0 |
| Number of auxiliary contacts as change-over contact | | 0 |
| With switched-off indicator | | Yes |
| With integrated under voltage release | | No |
| Number of poles | | 3 |
| Position of connection for main current circuit | | Other |
| Type of control element | | Turn button |
| Complete device with protection unit | | Yes |
| Motor drive integrated | | No |
| Motor drive optional | | No |
| Degree of protection (IP) | | IP20 |