## Specifications



## Photo is representative





## Eaton 199167

Eaton Moeller® series PKZM0 Transformer-protective circuit-breaker, 0.63 - 1 A, Push in terminals

| General specifications  |  |
|-------------------------|--|
| PRODUCT NAME            | Eaton Moeller® series<br>PKZM0 Transformer-<br>protective circuit-breaker  |
| CATALOG NUMBER          | 199167   |
| MODEL CODE              | PKZM0-1-T-PI   |
| EAN                     | 4015081972517  |
| PRODUCT<br>LENGTH/DEPTH | 75 mm  |
| PRODUCT HEIGHT          | 109 mm   |
| PRODUCT WIDTH           | 45 mm  |
| PRODUCT WEIGHT          | 0.298 kg   |
| CERTIFICATIONS          | VDE 0660 IEC/EN 60947 CE UL CSA IEC/EN 60947-4-1 CSA Class No.: 3211-05 CSA File No.: 165628 CSA-C22.2 No. 60947-4-1-14 UL 60947-4-1 UL Category Control No.: NLRV UL File No.: E36332 |



| Product specification  | S  |
|--|--|
| FEATURES   | Phase-failure sensitivity<br>(according to IEC/EN<br>60947-4-1, VDE 0660 Part<br>102)  |
| 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<br>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<br>FUNCTION   | The device meets the requirements, provided the information in the instruction leaflet (IL) is observed.                         |
| 10.2.2 CORROSION<br>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.   |
| 10.2.4 RESISTANCE TO<br>ULTRA-VIOLET (UV)<br>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<br>IMPACT  | Does not apply, since the entire switchgear needs to be evaluated.   |
| 10.2.7 INSCRIPTIONS  | Meets the product standard's requirements.   |

| Resources                        |  |
|----------------------------------|--|
| BROCHURES                        | eaton-motor-starters-system-xstart-<br>brochure-br03407001en-en-us.pdf                           |
|                                  | eaton-switching-and-protecting-<br>motors-product-range-catalog-<br>ca034001en-en-us.pdf         |
| CATALOGS                         | Product Range Catalog Switching and protecting motors  |
|                                  | eaton-product-overview-for-<br>machinery-catalogue-<br>ca08103003zen-en-us.pdf                   |
| DECLARATIONS<br>OF<br>CONFORMITY | DA-DC-00004916.pdf  DA-DC-00004316.pdf   |
|                                  | DA-DC-00004885.pdf   |
| DRAWINGS                         | <u>eaton-manual-motor-starters-pkzm-pkzm0-dimensions.eps</u>                                     |
| ECAD MODEL                       | ETN.199167.edz   |
| INSTALLATION INSTRUCTIONS        | <u>IL122024ZU</u>  |
| INSTALLATION VIDEOS              | WIN-WIN with push-in technology  |
| MCAD MODEL                       | pkzm0_pi.stp   |
| WICAD WIODEL                     | motorschutzschalter bis 32a pi.dwg   |
| SALES NOTES                      | <u>eaton-link-module-for-motor-</u><br><u>starters-pkz-flyer-fl034003en-en-</u><br><u>us.pdf</u> |

| 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<br>AGAINST ELECTRIC<br>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   | ls the panel builder's responsibility.  |
| 10.9.2 POWER-<br>FREQUENCY ELECTRIC<br>STRENGTH  | Is the panel builder's responsibility.  |
| 10.9.3 IMPULSE<br>WITHSTAND VOLTAGE  | ls the panel builder's responsibility.  |
| 10.9.4 TESTING OF<br>ENCLOSURES MADE OF<br>INSULATING MATERIAL   | ls the panel builder's responsibility.  |
| OPERATING FREQUENCY  | 40 Operations/h   |
|  | 40 Operations/11  |
| POLLUTION DEGREE   | 3   |
| -  | ·   |
| POLLUTION DEGREE   | 3  DIN rail (top hat rail)  |
| POLLUTION DEGREE  MOUNTING METHOD  | DIN rail (top hat rail) mounting optional  Damp heat, constant, to IEC 60068-2-78  Damp heat, cyclic, to IEC  |
| POLLUTION DEGREE  MOUNTING METHOD  CLIMATIC PROOFING   | DIN rail (top hat rail) mounting optional  Damp heat, constant, to IEC 60068-2-78  Damp heat, cyclic, to IEC 60068-2-30   |
| POLLUTION DEGREE  MOUNTING METHOD  CLIMATIC PROOFING  ACTUATOR TYPE  TRIPPING  | DIN rail (top hat rail) mounting optional  Damp heat, constant, to IEC 60068-2-78 Damp heat, cyclic, to IEC 60068-2-30  Turn button  Overload trigger: tripping                 |
| POLLUTION DEGREE  MOUNTING METHOD  CLIMATIC PROOFING  ACTUATOR TYPE  TRIPPING CHARACTERISTIC  ADJUSTMENT RANGE SHORT-TERM DELAYED SHORT-CIRCUIT RELEASE  | DIN rail (top hat rail) mounting optional  Damp heat, constant, to IEC 60068-2-78 Damp heat, cyclic, to IEC 60068-2-30  Turn button  Overload trigger: tripping class 10 A      |
| POLLUTION DEGREE  MOUNTING METHOD  CLIMATIC PROOFING  ACTUATOR TYPE  TRIPPING CHARACTERISTIC  ADJUSTMENT RANGE SHORT-TERM DELAYED SHORT-CIRCUIT RELEASE - MAX  ADJUSTMENT RANGE SHORT-TERM DELAYED SHORT-TERM DELAYED SHORT-TERM DELAYED SHORT-CIRCUIT RELEASE | DIN rail (top hat rail) mounting optional  Damp heat, constant, to IEC 60068-2-78 Damp heat, cyclic, to IEC 60068-2-30  Turn button  Overload trigger: tripping class 10 A  0 A |

| AMBIENT OPERATING TEMPERATURE - MAX  | 55 °C  |
|--|--|
| AMBIENT OPERATING TEMPERATURE - MIN  | -25 °C   |
| AMBIENT OPERATING<br>TEMPERATURE<br>(ENCLOSED) - MAX                           | 40 °C  |
| AMBIENT OPERATING<br>TEMPERATURE<br>(ENCLOSED) - MIN                           | -25 °C   |
| AMBIENT STORAGE<br>TEMPERATURE - MAX   | 80 °C  |
| AMBIENT STORAGE<br>TEMPERATURE - MIN   | -40 °C   |
| EQUIPMENT HEAT DISSIPATION, CURRENT- DEPENDENT PVID                            | 5.33 W   |
| HEAT DISSIPATION CAPACITY PDISS  | 0 W  |
| HEAT DISSIPATION PER<br>POLE, CURRENT-<br>DEPENDENT PVID                       | 1.8 W  |
| RATED IMPULSE WITHSTAND VOLTAGE (UIMP)   | 6000 V AC  |
| ALTITUDE   | Max. 2000 m  |
| DEVICE CONSTRUCTION  | Built-in device fixed built-<br>in technique                         |
| CONNECTION   | Push in terminals  |
| ELECTRICAL CONNECTION TYPE OF MAIN CIRCUIT                                     | Spring clamp connection  |
| MOUNTING POSITION  | Can be snapped on to   |
| WOONTHING FOSITION   | IEC/EN 60715 top-hat rail with 7.5 or 15 mm height.                  |
| LIFESPAN, MECHANICAL   | •  |
|  | with 7.5 or 15 mm height.  |
| LIFESPAN, MECHANICAL OVERVOLTAGE   | with 7.5 or 15 mm height.  100,000 Operations                        |
| LIFESPAN, MECHANICAL OVERVOLTAGE CATEGORY                                      | with 7.5 or 15 mm height.  100,000 Operations                        |
| LIFESPAN, MECHANICAL OVERVOLTAGE CATEGORY DEGREE OF PROTECTION                 | with 7.5 or 15 mm height.  100,000 Operations  III  IP20             |
| LIFESPAN, MECHANICAL OVERVOLTAGE CATEGORY DEGREE OF PROTECTION NUMBER OF POLES | with 7.5 or 15 mm height.  100,000 Operations  III  IP20  Three-pole |

|   | inrush current                                    |
|---|---|
| TERMINAL CAPACITY (SOLID/STRANDED AWG)                              | 18 - 8  |
| POSITION OF CONNECTION FOR MAIN CURRENT CIRCUIT                     | Other   |
| SWITCHING CAPACITY  | 1 A, AC-3 up to 690 V                             |
| NUMBER OF AUXILIARY<br>CONTACTS (CHANGE-<br>OVER CONTACTS)          | 0   |
| NUMBER OF AUXILIARY CONTACTS (NORMALLY CLOSED CONTACTS)             | 0   |
| NUMBER OF AUXILIARY CONTACTS (NORMALLY OPEN CONTACTS)               | 0   |
| OVERLOAD RELEASE<br>CURRENT SETTING - MAX                           | 1 A   |
| OVERLOAD RELEASE<br>CURRENT SETTING - MIN                           | 0.63 A  |
| RATED FREQUENCY -<br>MAX  | 60 Hz   |
| RATED FREQUENCY - MIN   | 50 Hz   |
| RATED OPERATIONAL<br>VOLTAGE (UE) - MAX                             | 690 V   |
| RATED OPERATIONAL VOLTAGE (UE) - MIN                                | 690 V   |
| RATED OPERATIONAL<br>CURRENT FOR SPECIFIED<br>HEAT DISSIPATION (IN) | 1 A   |
| RATED OPERATIONAL<br>POWER AT AC-3, 220/230<br>V, 50 HZ             | 0.12 kW   |
| RATED OPERATIONAL<br>POWER AT AC-3, 380/400<br>V, 50 HZ             | 0.25 kW   |
| RATED UNINTERRUPTED CURRENT (IU)                                    | 1 A   |
| STATIC HEAT DISSIPATION, NON- CURRENT-DEPENDENT PVS                 | 0 W   |
| STRIPPING LENGTH<br>(MAIN CABLE)                                    | 12 mm   |
| PRODUCT CATEGORY  | Transformer protective circuit breaker            |
| PROTECTION  | Finger and back-of-hand proof, Protection against |

|   | direct contact when<br>actuated from front (EN<br>50274)    |
|---|---|
| RATED OPERATIONAL<br>POWER AT AC-3, 440 V, 50<br>HZ           | 0.25 kW   |
| RATED OPERATIONAL<br>POWER AT AC-3, 500 V, 50<br>HZ           | 0.37 kW   |
| RATED OPERATIONAL<br>POWER AT AC-3, 690 V, 50<br>HZ           | 0.55 kW   |
| TERMINAL CAPACITY (FLEXIBLE WITH UNISOLATED FERRULE)          | 1 x (1 - 6) mm <sup>2</sup><br>2 x (1 - 6) mm <sup>2</sup>  |
| RATED SHORT-CIRCUIT<br>BREAKING CAPACITY ICU<br>AT 400 V AC   | 150 kA  |
| RATED SHORT-CIRCUIT<br>BREAKING CAPACITY ICS<br>AT 400 V AC   | 150 kA  |
| RATED SHORT-CIRCUIT<br>BREAKING CAPACITY ICU<br>AT 440 V AC   | 150 kA  |
| RATED SHORT-CIRCUIT<br>BREAKING CAPACITY ICS<br>AT 440 V AC   | 150 kA  |
| RATED SHORT-CIRCUIT<br>BREAKING CAPACITY ICU<br>AT 500 V AC   | 150 kA  |
| RATED SHORT-CIRCUIT<br>BREAKING CAPACITY ICS<br>AT 500 V AC   | 150 kA  |
| RATED SHORT-CIRCUIT<br>BREAKING CAPACITY ICU<br>AT 690 V AC   | 150 kA  |
| RATED SHORT-CIRCUIT<br>BREAKING CAPACITY ICS<br>AT 690 V AC   | 150 kA  |
| TERMINAL CAPACITY (FLEXIBLE WITH ULTRASONIC WELDED CABLE END) | 1 x (1 - 10) mm <sup>2</sup><br>2 x (1 - 6) mm <sup>2</sup> |
| SUITABLE FOR  | Also motors with efficiency class IE3                       |
| SHORT-CIRCUIT RELEASE   | Basic device, fixed 20 x lu<br>± 20% tolerance<br>20 A, Irm |
| TERMINAL CAPACITY (SOLID)                                     | 1 x (1 - 6) mm², Push-in<br>terminals                       |

|   | 2 x (1 - 6) mm², Push-in<br>terminals<br>1 x (1 - 6) mm²<br>2 x (1 - 6) mm²   |
|---|---|
| RATED OPERATIONAL CURRENT (IE)                        | 1 A   |
| TEMPERATURE<br>COMPENSATION                           | -25 - 55 °C, Operating range ≤ 0.25 %/K, residual error for T > 40° -5 - 40 °C to IEC/EN 60947, VDE 0660  |
| SHORT-CIRCUIT CURRENT<br>RATING (GROUP<br>PROTECTION) | 50 kA, 600 V High Fault,<br>Fuse, SCCR (UL/CSA) with<br>600 A, 600 V High Fault,<br>Fuse, SCCR (UL/CSA)<br>50 kA, 600 V High Fault,<br>CB, SCCR (UL/CSA) with<br>600 A, 600 V High Fault,<br>CB, SCCR (UL/CSA)                              |
| SWITCH OFF TECHNIQUE                                  | Thermomagnetic  |
| TERMINAL CAPACITY<br>(FLEXIBLE WITH<br>FERRULE)       | 1 x (1 - 6) mm², Push-in terminals, ferrule to DIN 46228-1 2 x (1 - 6) mm², Push-in terminals, ferrule to DIN 46228-1 1 x (1 - 6) mm², Push-in terminals, ferrule to DIN 46228-4 2 x (1 - 4) mm², Push-in terminals, ferrule to DIN 46228-4 |
|   | 1 x (1 - 6) mm², Push-in<br>terminals   |
| TERMINAL CAPACITY<br>(FLEXIBLE)                       | 2 x (1 - 6) mm <sup>2</sup> , Push-in<br>terminals<br>1 x (1 - 6) mm <sup>2</sup><br>2 x (1 - 6) mm <sup>2</sup>  |
|   | terminals<br>1 x (1 - 6) mm²  |

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



## **Eaton Corporation plc**

Eaton House 30 Pembroke Road Dublin 4, Ireland Eaton.com

© 2025 Eaton. All Rights Reserved.

Follow us on social media to get the latest product and support information.









