

**PKZ MOTOR PROTECTION CIRCUIT
BREAKER**
046988


Overview


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046988

Eaton Moeller® series PKZM0 Motor-protective circuit breaker, 100 A, Screw terminals

[How to buy](#)

- [Learn about our Push-in terminals](#)
- [Configure Motor Start Combination](#)

Photo is representative

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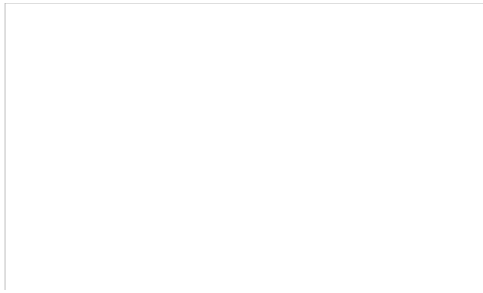


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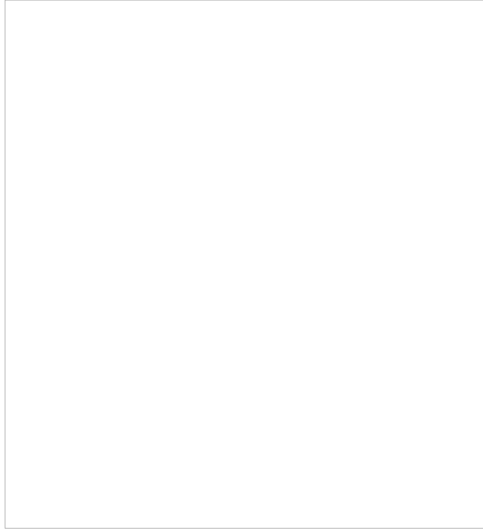


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Designed to work together

Discover other Eaton products and accessories built to enhance this product.

082882

Eaton Moeller® series NHI Standard auxiliary contact, NHI-E, 1 N/O, 1 NC, Can be fitted to the front, Screw terminals

072896

Eaton Moeller® series NHI Standard auxiliary contact, 1 N/O, 1 NC, Can be retrofitted on the right side of motor-protective circuit-breakers, Screw terminals

032720

Eaton Moeller® series PKZ Extension terminal, 3p, 25mm² BK25/3-PKZ0

219654

Eaton Moeller® series CI-K Insulation enclosure, for PKZ0, 160 x 100 mm, +rotary handle, black/grey

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GENERAL SPECIFICATIONS

General specifications >

PRODUCT NAME Eaton Moeller® series PKZM0 Motor-protective circuit breaker**CATALOG NUMBER** 046988

Product specifications >

MODEL CODE PKZM0-20**EAN** 4015080469889**PRODUCT LENGTH/DEPTH** 76 mm**PRODUCT HEIGHT** 93 mm**PRODUCT WIDTH** 45 mm**PRODUCT WEIGHT** 0.296 kg

CERTIFICATIONS

IEC/EN 60947

CSA File No.: 165628

IEC/EN 60947-4-1

CSA-C22.2 No. 60947-4-1-14

UL 60947-4-1

CE

UL Category Control No.: NLRV

VDE 0660

CSA Class No.: 3211-05

UL File No.: E36332

UL

CSA

PRODUCT SPECIFICATIONS

RATED OPERATIONAL CURRENT FOR SPECIFIED HEAT DISSIPATION (IN) 20 A**TERMINAL CAPACITY (FLEXIBLE WITH FERRULE)** 2 x (1 - 6) mm², ferrule to DIN 46228
1 x (1 - 6) mm², ferrule to DIN 46228**10.11 SHORT-CIRCUIT RATING** Is the panel builder's responsibility. The specifications must be observed.**AMBIENT OPERATING TEMPERATURE (ENCLOSED) - MIN** 25 °C**RATED OPERATIONAL POWER AT AC-3, 380/400 V, 50 HZ** 9 kW**SHORT-CIRCUIT CURRENT RATING (TYPE E)** 18 kA, 240 V, SCCR (UL/CSA)
18 kA, 480 Y/277 V, SCCR (UL/CSA)
Accessories required BK25/3-PKZ0-E**RATED SHORT-CIRCUIT BREAKING CAPACITY ICS AT** 3 kA

440 V AC	
10.4 CLEARANCES AND CREEPAGE DISTANCES	Meets the product standard's requirements.
10.12 ELECTROMAGNETIC COMPATIBILITY	Is the panel builder's responsibility. The specifications must be observed.
10.2.5 LIFTING	Does not apply, since the entire switchgear needs to be lifted.
SWITCHING CAPACITY	20 A (3 contacts in series), DC-5 up to 250V 20 A, AC-3 up to 690 V
STRIPPING LENGTH (MAIN CABLE)	10 mm
AMBIENT OPERATING TEMPERATURE (ENCLOSED) - MAX	40 °C
RATED SHORT-CIRCUIT BREAKING CAPACITY ICU AT 400 V AC	50 kA
10.2.3.1 VERIFICATION OF THERMAL STABILITY OF ENCLOSURES	Meets the product standard's requirements.
AMBIENT STORAGE TEMPERATURE - MIN	40 °C
ADJUSTMENT RANGE UNDELAYED SHORT-CIRCUIT RELEASE - MAX	310 A
10.8 CONNECTIONS FOR EXTERNAL CONDUCTORS	Is the panel builder's responsibility.
ASSIGNED MOTOR POWER AT 575/600 V, 60 HZ, 3-PHASE	15 HP
PROTECTION	Finger and back-of-hand proof Protection against dirt actuated from front (EN 50274)
ACTUATOR TYPE	Turn button
RATED OPERATIONAL POWER AT AC-3, 440 V, 50 HZ	11 kW
AMBIENT OPERATING TEMPERATURE - MAX	55 °C
RATED OPERATIONAL POWER AT AC-3, 220/230 V, 50 HZ	5.5 kW
ASSIGNED MOTOR POWER AT 115/120 V, 60 HZ, 1-PHASE	1.5 HP
CLIMATIC PROOFING	Damp heat, constant, to IEC 60068-2-78 Damp heat, cyclic, to IEC 60068-2-30
DEVICE CONSTRUCTION	Built-in device fixed built-in technique
FEATURES	Phase-failure sensitivity (according to IEC/EN 60947-1 Part 102)
LIFESPAN, ELECTRICAL	100,000 operations
STATIC HEAT DISSIPATION, NON-CURRENT-DEPENDENT PVS	0 W
ELECTRICAL CONNECTION TYPE OF MAIN CIRCUIT	Screw connection
10.9.3 IMPULSE WITHSTAND VOLTAGE	Is the panel builder's responsibility.

NUMBER OF POLES	Three-pole
RATED SHORT-CIRCUIT BREAKING CAPACITY ICU AT 690 V AC	3 kA
AMBIENT OPERATING TEMPERATURE - MIN	-25 °C
10.6 INCORPORATION OF SWITCHING DEVICES AND COMPONENTS	Does not apply, since the entire switchgear needs to
10.5 PROTECTION AGAINST ELECTRIC SHOCK	Does not apply, since the entire switchgear needs to
MOUNTING POSITION	Can be snapped on to IEC/EN 60715 top-hat rail with height.
RATED UNINTERRUPTED CURRENT (IU)	20 A
TRIPPING CHARACTERISTIC	Overload trigger: tripping class 10 A
SHORT-CIRCUIT RELEASE	Basic device fixed 15.5 x I _u , Trip Blocks 310 A, I _{rm} , Setting range max. ± 20% tolerance, Trip blocks
10.13 MECHANICAL FUNCTION	The device meets the requirements, provided the instruction leaflet (IL) is observed.
10.2.6 MECHANICAL IMPACT	Does not apply, since the entire switchgear needs to
10.9.4 TESTING OF ENCLOSURES MADE OF INSULATING MATERIAL	Is the panel builder's responsibility.
10.3 DEGREE OF PROTECTION OF ASSEMBLIES	Does not apply, since the entire switchgear needs to
HEAT DISSIPATION PER POLE, CURRENT-DEPENDENT PVID	1.94 W
OPERATING FREQUENCY	40 Operations/h
PRODUCT CATEGORY	Motor protective circuit breaker
SHORT-CIRCUIT CURRENT RATING (GROUP PROTECTION)	125 A, 600 V High Fault, max. CB, SCCR (UL/CSA) 10 kA, 600 V High Fault, CB, SCCR (UL/CSA) 18 kA, 600 V High Fault, Fuse with CL, SCCR (UL/CSA) 600 A, 600 V High Fault, max. CB with CL, SCCR (UL/CSA) 600 A, 600 V High Fault, max. Fuse with CL, SCCR (UL/CSA) 10 kA, 600 V High Fault, Fuse, SCCR (UL/CSA) 150 A, 600 V High Fault, max. Fuse, SCCR (UL/CSA) 18 kA, 600 V High Fault, CB with CL, SCCR (UL/CSA)
OVERLOAD RELEASE CURRENT SETTING - MIN	16 A
RATED OPERATIONAL POWER AT AC-3, 690 V, 50 HZ	15 kW
RATED SHORT-CIRCUIT BREAKING CAPACITY ICS AT 400 V AC	38 kA
RATED SHORT-CIRCUIT BREAKING CAPACITY ICU AT 440 V AC	10 kA
EQUIPMENT HEAT DISSIPATION, CURRENT-DEPENDENT PVID	5.82 W
HEAT DISSIPATION CAPACITY PDISS	0 W

ASSIGNED MOTOR POWER AT 200/208 V, 60 HZ, 3-PHASE	5 HP
RATED OPERATIONAL CURRENT (IE)	20 A
SUITABLE FOR	Also motors with efficiency class IE3 Branch circuit: Manual type E if used with terminal installations, (UL/CSA)
INTERNAL RESISTANCE	5 mΩ
TEMPERATURE COMPENSATION	≤ 0.25 %/K, residual error for T > 40° -25 - 55 °C, Operating range -5 - 40 °C to IEC/EN 60947, VDE 0660
TERMINAL CAPACITY (SOLID)	1 x (1 - 6) mm ² 2 x (1 - 6) mm ²
RATED FREQUENCY - MIN	50 Hz
SHORT-CIRCUIT CURRENT	40 kA DC, up to 250 V DC, Main conducting path
POWER LOSS	5.82 W
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.
LIFESPAN, MECHANICAL	100,000 Operations
TERMINAL CAPACITY (SOLID/STRANDED AWG)	18 - 10
OVERLOAD RELEASE CURRENT SETTING - MAX	20 A
10.9.2 POWER-FREQUENCY ELECTRIC STRENGTH	Is the panel builder's responsibility.
RATED SHORT-CIRCUIT BREAKING CAPACITY ICS AT 500 V AC	3 kA
OVERVOLTAGE CATEGORY	III
DEGREE OF PROTECTION	IP20 Terminals: IP00
RATED FREQUENCY - MAX	60 Hz
SWITCH OFF TECHNIQUE	Thermomagnetic
AMBIENT STORAGE TEMPERATURE - MAX	80 °C
ADJUSTMENT RANGE UNDELAYED SHORT-CIRCUIT RELEASE - MIN	310 A
POLLUTION DEGREE	3
10.7 INTERNAL ELECTRICAL CIRCUITS AND CONNECTIONS	Is the panel builder's responsibility.
RATED IMPULSE WITHSTAND VOLTAGE (UIMP)	6000 V AC
CONNECTION	Screw terminals

10.10 TEMPERATURE RISE	The panel builder is responsible for the temperature Eaton will provide heat dissipation data for the device
FUNCTIONS	Motor protection Phase failure sensitive
TIGHTENING TORQUE	1 Nm, Screw terminals, Control circuit cables 1.7 Nm, Screw terminals, Main cable
RATED SHORT-CIRCUIT BREAKING CAPACITY ICU AT 500 V AC	3 kA
RATED OPERATIONAL VOLTAGE (UE) - MIN	690 V
ASSIGNED MOTOR POWER AT 230/240 V, 60 HZ, 1-PHASE	3 HP
EXPLOSION SAFETY CATEGORY FOR DUST	ATEX dust-ex-protection, PTB 10, ATEX 3013, E
10.2.2 CORROSION RESISTANCE	Meets the product standard's requirements.
10.2.4 RESISTANCE TO ULTRA-VIOLET (UV) RADIATION	Meets the product standard's requirements.
10.2.7 INSCRIPTIONS	Meets the product standard's requirements.
RATED SHORT-CIRCUIT BREAKING CAPACITY ICS AT 690 V AC	1 kA
RATED OPERATIONAL POWER AT AC-3, 500 V, 50 HZ	12.5 kW
SHOCK RESISTANCE	25 g, Mechanical, according to IEC/EN 60068-2-27 shock 10 ms
RATED OPERATIONAL VOLTAGE (UE) - MAX	690 V
ALTITUDE	Max. 2000 m

Brochures

Catalogs

Certification reports

Characteristic curve

Declarations of conformity

Drawings

eCAD model

Installation instructions

Installation videos

Manuals and user guides

mCAD model

Wiring diagrams

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