

**PKZ MOTOR PROTECTION CIRCUIT
BREAKER**

278492



Overview



Specifications



Resources

How to buy

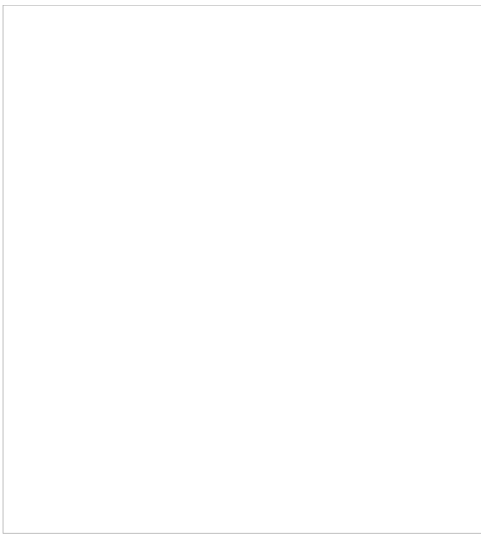


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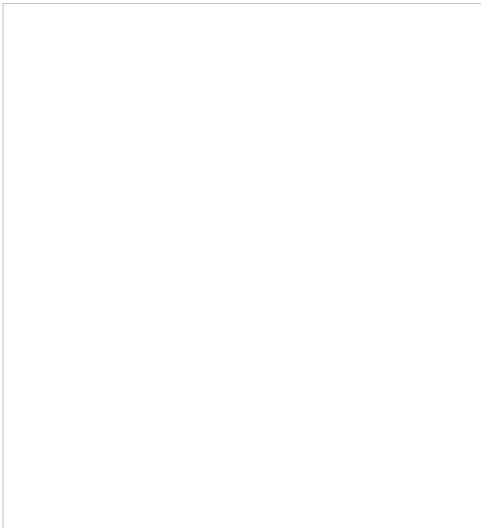


Photo is representative

278492

Eaton Moeller® series PKZM0 Transformer-protected
12A

How to buy



Learn about our Push-in terminals



Configure Motor Start Combination

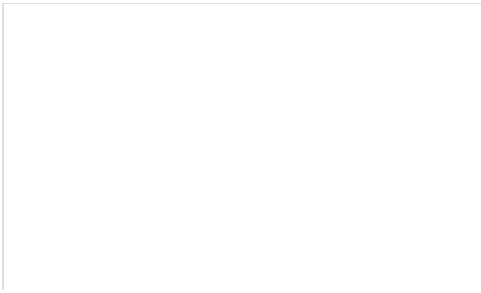


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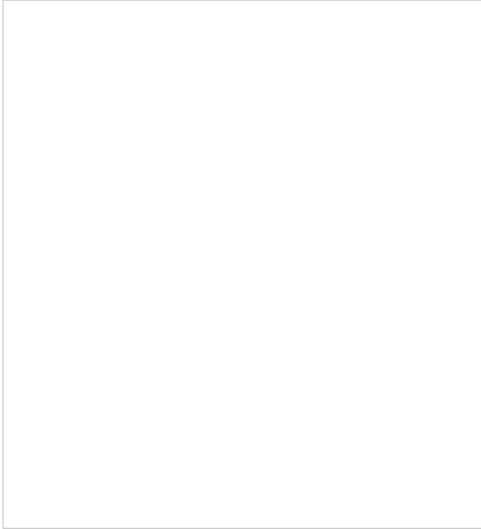


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Designed to work together

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 Transformer-protect**CATALOG NUMBER** 278492

Product specifications >

MODEL CODE PKZM0-12-T**EAN** 4015082784928**PRODUCT LENGTH/DEPTH** 76 mm**PRODUCT HEIGHT** 93 mm**PRODUCT WIDTH** 45 mm**PRODUCT WEIGHT** 0.29 kg**CERTIFICATIONS** VDE 0660
IEC/EN 60947

PRODUCT SPECIFICATIONS

RATED OPERATIONAL CURRENT FOR SPECIFIED HEAT DISSIPATION (IN) 12 A**TERMINAL CAPACITY (FLEXIBLE WITH FERRULE)** 1 x (1 - 6) mm², ferrule to DIN 46228
2 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 SHORT-CIRCUIT BREAKING CAPACITY ICS AT 440 V AC** 12 kA**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.**MOUNTING METHOD** DIN rail (top hat rail) mounting optional**10.2.5 LIFTING** Does not apply, since the entire switchgear needs to**ADJUSTMENT RANGE SHORT-TERM DELAYED SHORT-CIRCUIT RELEASE - MAX** 0 A**SWITCHING CAPACITY** 12 A (3 contacts in series), DC-5 up to 250V
12 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
FITTED WITH:	Switched-off indicator
ADJUSTMENT RANGE UNDELAYED SHORT-CIRCUIT RELEASE - MAX	224 A
10.8 CONNECTIONS FOR EXTERNAL CONDUCTORS	Is the panel builder's responsibility.
ADJUSTMENT RANGE SHORT-TERM DELAYED SHORT-CIRCUIT RELEASE - MIN	0 A
PROTECTION	Finger and back-of-hand proof, Protection against dirt actuated from front (EN 50274)
ACTUATOR TYPE	Turn button
AMBIENT OPERATING TEMPERATURE - MAX	55 °C
POSITION OF CONNECTION FOR MAIN CURRENT CIRCUIT	Other
CLIMATIC PROOFING	Damp heat, cyclic, to IEC 60068-2-30 Damp heat, constant, to IEC 60068-2-78
DEVICE CONSTRUCTION	Built-in device fixed built-in technique
FEATURES	Phase-failure sensitivity (according to IEC/EN 60947-1 Part 102) Complete device with protection unit
LIFESPAN, ELECTRICAL	100,000 operations (at 400V, AC-3)
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 be tested
10.5 PROTECTION AGAINST ELECTRIC SHOCK	Does not apply, since the entire switchgear needs to be tested
MOUNTING POSITION	Can be snapped on to IEC/EN 60715 top-hat rail with

MOUNTING POSITION	height.
RATED UNINTERRUPTED CURRENT (IU)	12 A
SHORT-CIRCUIT RELEASE	224 A, I _{rm} , Setting range max. Basic device, fixed 20 x I _u , Trip Blocks ± 20% tolerance, Trip blocks
10.13 MECHANICAL FUNCTION	The device meets the requirements, provided the inf 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	2.21 W
OPERATING FREQUENCY	40 Operations/h
PRODUCT CATEGORY	Transformer protective circuit breaker
OVERLOAD RELEASE CURRENT SETTING - MIN	8 A
RATED SHORT-CIRCUIT BREAKING CAPACITY ICS AT 400 V AC	38 kA
RATED SHORT-CIRCUIT BREAKING CAPACITY ICU AT 440 V AC	15 kA
EQUIPMENT HEAT DISSIPATION, CURRENT-DEPENDENT PVID	6.37 W
HEAT DISSIPATION CAPACITY PDISS	0 W
RATED OPERATIONAL CURRENT (IE)	12 A
SUITABLE FOR	Also motors with efficiency class IE3 DIN rail (top hat rail) mounting
TEMPERATURE COMPENSATION	≤ 0.25 %/K, residual error for T > 40° -5 - 40 °C to IEC/EN 60947, VDE 0660 -25 - 55 °C, Operating range
TERMINAL CAPACITY (SOLID)	1 x (1 - 6) mm ² 2 x (1 - 6) mm ²
NUMBER OF AUXILIARY CONTACTS (NORMALLY CLOSED CONTACTS)	0
RATED FREQUENCY - MIN	50 Hz
SHORT-CIRCUIT CURRENT	60 kA DC, up to 250 V DC, Main conducting path
POWER LOSS	6.37 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 (Main conducting paths)
TERMINAL CAPACITY (SOLID/STRANDED AWG)	18 - 10
OVERLOAD RELEASE CURRENT SETTING - MAX	12 A
10.9.2 POWER-FREQUENCY ELECTRIC STRENGTH	Is the panel builder's responsibility.
RATED SHORT-CIRCUIT BREAKING CAPACITY ICS AT 500 V AC	4 kA
OVERVOLTAGE CATEGORY	III
DEGREE OF PROTECTION	IP20 Terminals: IP00
RATED FREQUENCY - MAX	60 Hz
NUMBER OF AUXILIARY CONTACTS (CHANGE-OVER CONTACTS)	0
AMBIENT STORAGE TEMPERATURE - MAX	80 °C
ADJUSTMENT RANGE UNDELAYED SHORT-CIRCUIT RELEASE - MIN	224 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	For the protection of transformers with a high inrush Transformer protection
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	15 kA
RATED OPERATIONAL VOLTAGE (UE) - MIN	690 V
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.
NUMBER OF AUXILIARY CONTACTS (NORMALLY OPEN CONTACTS)	0
RATED SHORT-CIRCUIT BREAKING CAPACITY ICS AT 690 V AC	2 kA

SHOCK RESISTANCE	shock 10 ms
RATED OPERATIONAL VOLTAGE (UE) - MAX	690 V
ALTITUDE	Max. 2000 m

Brochures

Catalogs

Characteristic curve

Declarations of conformity

Drawings

eCAD model

Installation instructions

Installation videos

Manuals and user guides

mCAD model

Wiring diagrams

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Eaton is an intelligent power management company dedicated to improving the quality of life and protecting the environment for people everywhere. We are guided by our commitment to do business right, to operate sustainably and to

help our customers manage power — today and well into the future. By capitalizing on the global growth trends of electrification and digitalization, we're accelerating the planet's transition to renewable energy and helping to solve the world's most urgent power management challenges.