

**PKZ MOTOR PROTECTION CIRCUIT  
BREAKER**

**278484**



Overview



Specifications



Resources

How to buy

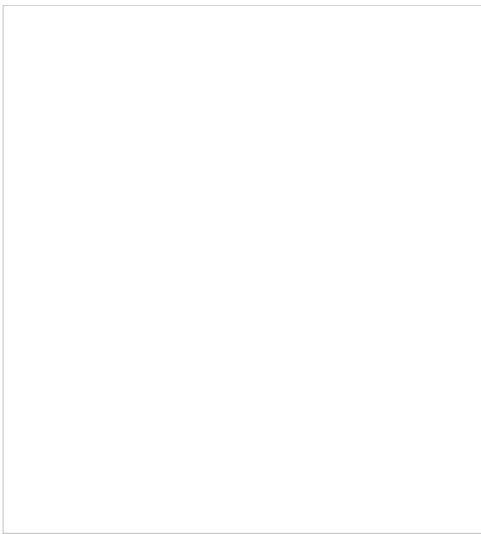


Photo is representative

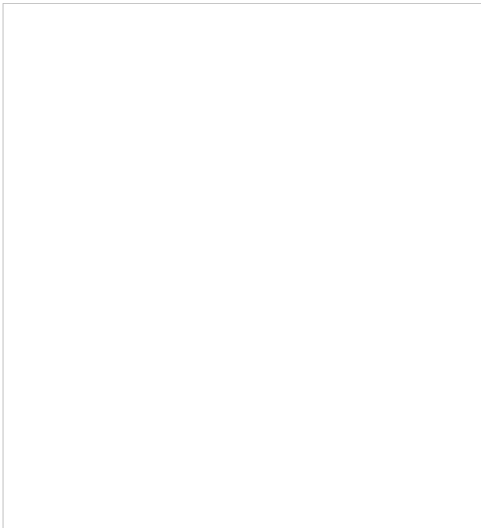


Photo is representative

**278484**

Eaton Moeller® series PKZM01 Motor-protective  
7.5 kW, I<sub>r</sub>= 6.3 - 10 A, IP20 PKZM01-10

**How to buy**



Learn about our Push-in terminals



Configure Motor Start Combination

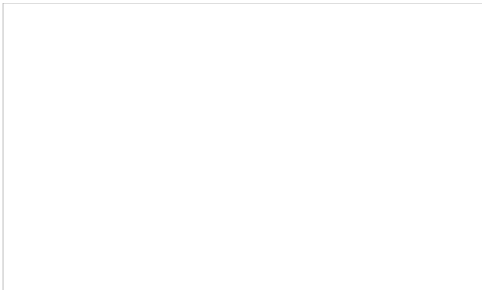


Photo is representative

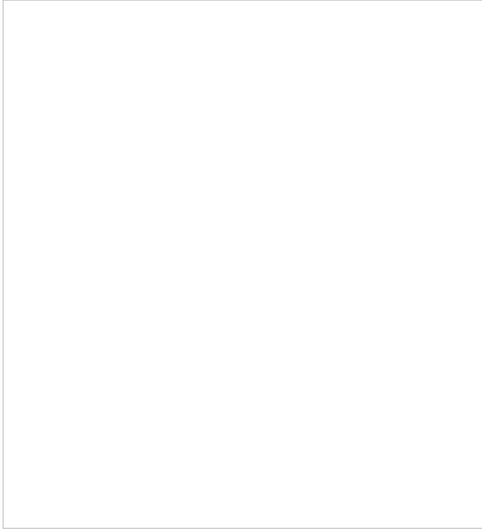


Photo is representative



## 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, 25mm<sup>2</sup> BK25/3-PKZ0

---

**072894**

Eaton Moeller® series NHI Standard auxiliary contact, 2N/O+1N/C, screw connection

[View more](#)[View less](#)

## GENERAL SPECIFICATIONS

General specifications	>	<b>PRODUCT NAME</b>	Eaton Moeller® series PKZM01 Motor-protective c
		<b>CATALOG NUMBER</b>	278484
Product specifications	>	<b>MODEL CODE</b>	PKZM01-10
		<b>UPC</b>	782116361052
		<b>EAN</b>	4015082784843
		<b>PRODUCT LENGTH/DEPTH</b>	93 mm
		<b>PRODUCT HEIGHT</b>	90 mm
		<b>PRODUCT WIDTH</b>	45 mm
		<b>PRODUCT WEIGHT</b>	0.304 kg

## CERTIFICATIONS

CE  
CSA File No.: 165628  
IEC/EN 60947  
UL Category Control No.: NLRV  
UL File No.: E36332  
CSA-C22.2 No. 60947-4-1-14  
UL 60947-4-1  
VDE 0660  
CSA Class No.: 3211-05  
UL  
CSA  
IEC/EN 60947-4-1

## PRODUCT SPECIFICATIONS

<b>RATED OPERATIONAL CURRENT FOR SPECIFIED HEAT DISSIPATION (IN)</b>	10 A
<b>TERMINAL CAPACITY (FLEXIBLE WITH FERRULE)</b>	1 x (1 - 6) mm <sup>2</sup> , ferrule to DIN 46228 2 x (1 - 6) mm <sup>2</sup> , ferrule to DIN 46228
<b>10.11 SHORT-CIRCUIT RATING</b>	Is the panel builder's responsibility. The specifications must be observed.
<b>AMBIENT OPERATING TEMPERATURE (ENCLOSED) - MIN</b>	-25 °C
<b>RATED OPERATIONAL POWER AT AC-3, 380/400 V, 50 HZ</b>	4 kW
<b>10.4 CLEARANCES AND CREEPAGE DISTANCES</b>	Meets the product standard's requirements.
<b>10.12 ELECTROMAGNETIC COMPATIBILITY</b>	Is the panel builder's responsibility. The specifications

	must be observed.
<b>10.2.5 LIFTING</b>	Does not apply, since the entire switchgear needs to
<b>SWITCHING CAPACITY</b>	10 A (3 contacts in series), DC-5 up to 250V 10 A, AC-3 up to 440 V
<b>STRIPPING LENGTH (MAIN CABLE)</b>	10 mm
<b>AMBIENT OPERATING TEMPERATURE (ENCLOSED) - MAX</b>	40 °C
<b>RATED SHORT-CIRCUIT BREAKING CAPACITY ICU AT 400 V AC</b>	50 kA
<b>10.2.3.1 VERIFICATION OF THERMAL STABILITY OF ENCLOSURES</b>	Meets the product standard's requirements.
<b>AMBIENT STORAGE TEMPERATURE - MIN</b>	-40 °C
<b>ADJUSTMENT RANGE UNDELAYED SHORT-CIRCUIT RELEASE - MAX</b>	155 A
<b>10.8 CONNECTIONS FOR EXTERNAL CONDUCTORS</b>	Is the panel builder's responsibility.
<b>ASSIGNED MOTOR POWER AT 575/600 V, 60 HZ, 3-PHASE</b>	10 HP
<b>PROTECTION</b>	Finger and back-of-hand proof, Protection against direct contact, actuated from front (EN 50274)
<b>ACTUATOR TYPE</b>	Push button
<b>RATED OPERATIONAL POWER AT AC-3, 440 V, 50 HZ</b>	4 kW
<b>AMBIENT OPERATING TEMPERATURE - MAX</b>	55 °C
<b>RATED OPERATIONAL POWER AT AC-3, 220/230 V, 50 HZ</b>	2.2 kW
<b>ASSIGNED MOTOR POWER AT 115/120 V, 60 HZ, 1-PHASE</b>	0.5 HP
<b>CLIMATIC PROOFING</b>	Damp heat, cyclic, to IEC 60068-2-30 Damp heat, constant, to IEC 60068-2-78
<b>DEVICE CONSTRUCTION</b>	Built-in device fixed built-in technique
<b>FEATURES</b>	Phase-failure sensitivity (according to IEC/EN 60947-1 Part 102)
<b>LIFESPAN, ELECTRICAL</b>	50,000 operations (at 400V, AC-3)
<b>STATIC HEAT DISSIPATION, NON-CURRENT-DEPENDENT PVS</b>	0 W
<b>ELECTRICAL CONNECTION TYPE OF MAIN CIRCUIT</b>	Screw connection
<b>10.9.3 IMPULSE WITHSTAND VOLTAGE</b>	Is the panel builder's responsibility.
<b>NUMBER OF POLES</b>	Three-pole
<b>AMBIENT OPERATING TEMPERATURE - MIN</b>	-25 °C

<b>10.6 INCORPORATION OF SWITCHING DEVICES AND COMPONENTS</b>	Does not apply, since the entire switchgear needs to
<b>10.5 PROTECTION AGAINST ELECTRIC SHOCK</b>	Does not apply, since the entire switchgear needs to
<b>MOUNTING POSITION</b>	Can be snapped on to IEC/EN 60715 top-hat rail with height.
<b>RATED UNINTERRUPTED CURRENT (IU)</b>	10 A
<b>TRIPPING CHARACTERISTIC</b>	Overload trigger: tripping class 10 A
<b>SHORT-CIRCUIT RELEASE</b>	155 A, I <sub>rn</sub> , Setting range max. Basic device fixed 15.5 x I <sub>u</sub> , Trip Blocks ± 20% tolerance, Trip blocks
<b>10.13 MECHANICAL FUNCTION</b>	The device meets the requirements, provided the instruction leaflet (IL) is observed.
<b>10.2.6 MECHANICAL IMPACT</b>	Does not apply, since the entire switchgear needs to
<b>10.9.4 TESTING OF ENCLOSURES MADE OF INSULATING MATERIAL</b>	Is the panel builder's responsibility.
<b>10.3 DEGREE OF PROTECTION OF ASSEMBLIES</b>	Does not apply, since the entire switchgear needs to
<b>HEAT DISSIPATION PER POLE, CURRENT-DEPENDENT PVID</b>	2.16 W
<b>OPERATING FREQUENCY</b>	25 Operations/h
<b>PRODUCT CATEGORY</b>	Motor protective circuit breaker
<b>SHORT-CIRCUIT CURRENT RATING (GROUP PROTECTION)</b>	30 kA, 600 V High Fault, CB, SCCR (UL/CSA) 30 kA, 600 V High Fault, Fuse, SCCR (UL/CSA) 600 A, 600 V High Fault, max. Fuse, SCCR (UL/CSA) 600 A, 600 V High Fault, max. CB, SCCR (UL/CSA)
<b>OVERLOAD RELEASE CURRENT SETTING - MIN</b>	6.3 A
<b>EQUIPMENT HEAT DISSIPATION, CURRENT-DEPENDENT PVID</b>	6.48 W
<b>HEAT DISSIPATION CAPACITY PDISS</b>	0 W
<b>ASSIGNED MOTOR POWER AT 200/208 V, 60 HZ, 3-PHASE</b>	3 HP
<b>RATED OPERATIONAL CURRENT (IE)</b>	10 A
<b>ASSIGNED MOTOR POWER AT 460/480 V, 60 HZ, 3-PHASE</b>	7.5 HP
<b>SUITABLE FOR</b>	Branch circuit: Manual type E if used with terminal installations, (UL/CSA) Also motors with efficiency class IE3
<b>INTERNAL RESISTANCE</b>	21 mΩ
<b>TEMPERATURE COMPENSATION</b>	-25 - 55 °C, Operating range ≤ 0.25 %/K, residual error for T > 40° -5 - 40 °C to IEC/EN 60947, VDE 0660
<b>TERMINAL CAPACITY (SQUARED)</b>	1 x (1 - 6) mm <sup>2</sup>

<b>TERMINAL CAPACITY (SOLID)</b>	2 x (1 - 6) mm <sup>2</sup>
<b>RATED FREQUENCY - MIN</b>	50 Hz
<b>SHORT-CIRCUIT CURRENT</b>	60 kA DC, up to 250 V DC, Main conducting path
<b>POWER LOSS</b>	6.48 W
<b>10.2.3.2 VERIFICATION OF RESISTANCE OF INSULATING MATERIALS TO NORMAL HEAT</b>	Meets the product standard's requirements.
<b>10.2.3.3 RESIST. OF INSUL. MAT. TO ABNORMAL HEAT/FIRE BY INTERNAL ELECT. EFFECTS</b>	Meets the product standard's requirements.
<b>LIFESPAN, MECHANICAL</b>	50,000 Operations (Main conducting paths)
<b>TERMINAL CAPACITY (SOLID/STRANDED AWG)</b>	18 - 10
<b>OVERLOAD RELEASE CURRENT SETTING - MAX</b>	10 A
<b>10.9.2 POWER-FREQUENCY ELECTRIC STRENGTH</b>	Is the panel builder's responsibility.
<b>OVERVOLTAGE CATEGORY</b>	III
<b>DEGREE OF PROTECTION</b>	Terminals: IP00 IP20
<b>RATED FREQUENCY - MAX</b>	60 Hz
<b>SWITCH OFF TECHNIQUE</b>	Thermomagnetic
<b>AMBIENT STORAGE TEMPERATURE - MAX</b>	80 °C
<b>ADJUSTMENT RANGE UNDELAYED SHORT-CIRCUIT RELEASE - MIN</b>	155 A
<b>POLLUTION DEGREE</b>	3
<b>10.7 INTERNAL ELECTRICAL CIRCUITS AND CONNECTIONS</b>	Is the panel builder's responsibility.
<b>RATED IMPULSE WITHSTAND VOLTAGE (UIMP)</b>	6000 V AC
<b>CONNECTION</b>	Screw terminals
<b>10.10 TEMPERATURE RISE</b>	The panel builder is responsible for the temperature Eaton will provide heat dissipation data for the device
<b>FUNCTIONS</b>	Phase failure sensitive Motor protection
<b>TIGHTENING TORQUE</b>	1.7 Nm, Screw terminals, Main cable
<b>RATED OPERATIONAL VOLTAGE (UE) - MIN</b>	690 V
<b>ASSIGNED MOTOR POWER AT 230/240 V, 60 HZ, 1-PHASE</b>	1.5 HP
<b>10.2.2 CORROSION RESISTANCE</b>	Meets the product standard's requirements.
<b>10.2.4 RESISTANCE TO ULTRA-VIOLET (UV) RADIATION</b>	Meets the product standard's requirements.
<b>10.2.7 INSCRIPTIONS</b>	Meets the product standard's requirements.

MECHANICAL WEIGHT	Meets the product standard's requirements.
SHOCK RESISTANCE	25 g, Mechanical, according to IEC/EN 60068-2-27 shock 10 ms
RATED OPERATIONAL VOLTAGE (UE) - MAX	690 V
ASSIGNED MOTOR POWER AT 230/240 V, 60 HZ, 3-PHASE	3 HP
ALTITUDE	Max. 2000 m

Brochures

---

Catalogs

---

Characteristic curve

---

Declarations of conformity

---

Drawings

---

eCAD model

---

Installation instructions

---

Installation videos

---

Manuals and user guides

---

mCAD model

---

278484



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.