

## Transformer-protective circuit-breaker, 4 - 6.3 A, Push in terminals

**Part no.**                    **PKZM0-6,3-T-PI**  
**199171**

<b>General specifications</b>	
Product name	Eaton Moeller® series PKZM0 Transformer-protective circuit-breaker
Part no.	PKZM0-6,3-T-PI
EAN	4015081972555
Product Length/Depth	75 millimetre
Product height	109 millimetre
Product width	45 millimetre
Product weight	0.346 kilogram
Certifications	VDE 0660 IEC/EN 60947
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.
<b>Features &amp; Functions</b>	
Actuator type	Turn button
Features	Phase-failure sensitivity (according to IEC/EN 60947-4-1, VDE 0660 Part 102)
Functions	Transformer protection For the protection of transformers with a high inrush current
Number of poles	Three-pole
<b>General information</b>	
Connection	Push in terminals
Degree of protection	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
Temperature compensation	≤ 0.25 %/K, residual error for T > 40° -5 - 40 °C to IEC/EN 60947, VDE 0660 -25 - 55 °C, Operating range
<b>Climatic environmental conditions</b>	
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
Climatic proofing	Damp heat, constant, to IEC 60068-2-78 Damp heat, cyclic, to IEC 60068-2-30
<b>Terminal capacities</b>	
Terminal capacity (flexible)	1 x (1 - 6) mm <sup>2</sup>

Terminal capacity (solid/stranded AWG)		18 - 8
Stripping length (main cable)		12 mm
<b>Electrical rating</b>		
Rated frequency - min		50 Hz
Rated frequency - max		60 Hz
Rated operational current (Ie)		6.3 A
Rated operational power at AC-3, 220/230 V, 50 Hz		1.1 kW
Rated operational power at AC-3, 380/400 V, 50 Hz		2.2 kW
Rated operational voltage (Ue) - min		690 V
Rated operational voltage (Ue) - max		690 V
Rated uninterrupted current (Iu)		6.3 A
<b>Short-circuit rating</b>		
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		42 kA
Rated short-circuit breaking capacity Ics at 500 V AC		42 kA
Rated short-circuit breaking capacity Icu at 690 V AC		3 kA
Rated short-circuit breaking capacity Ics at 690 V AC		2 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) 600 A, 600 V High Fault, max. Fuse, SCCR (UL/CSA) 50 kA, 600 V High Fault, CB, SCCR (UL/CSA) 600 A, 600 V High Fault, max. CB, SCCR (UL/CSA)
Short-circuit release		141 A, I <sub>rm</sub> , Setting range max. ± 20% tolerance, Trip blocks Basic device, fixed 20 x I <sub>u</sub> , Trip Blocks
<b>Switching capacity</b>		
Switching capacity		6.3 A, AC-3 up to 690 V
<b>Motor rating</b>		
Assigned motor power at 115/120 V, 60 Hz, 1-phase		0.25 HP
Assigned motor power at 200/208 V, 60 Hz, 3-phase		1 HP
Assigned motor power at 230/240 V, 60 Hz, 1-phase		0.5 HP
Assigned motor power at 230/240 V, 60 Hz, 3-phase		1.5 HP
Assigned motor power at 460/480 V, 60 Hz, 3-phase		3 HP
Assigned motor power at 575/600 V, 60 Hz, 3-phase		5 HP
<b>Contacts</b>		
Number of auxiliary contacts (change-over contacts)		0
Number of auxiliary contacts (normally closed contacts)		0
Number of auxiliary contacts (normally open contacts)		0
<b>Trip blocks</b>		
Overload release current setting - min		6.3 A
Overload release current setting - max		6.3 A
Tripping characteristic		Overload trigger: tripping class 10 A
<b>Design verification</b>		
Equipment heat dissipation, current-dependent P <sub>vid</sub>		5.68 W
Heat dissipation capacity P <sub>diss</sub>		0 W
Heat dissipation per pole, current-dependent P <sub>vid</sub>		0 W
Static heat dissipation, non-current-dependent P <sub>vs</sub>		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.
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 8.0

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@ss10.0.1-27-37-04-09 [AJZ716013])		
Rated permanent current I <sub>u</sub>	A	6.3
Rated voltage	V	690 - 690
Rated short-circuit breaking capacity I <sub>cu</sub> at 400 V, 50 Hz	kA	150
Overload release current setting	A	6.3 - 6.3
Adjustment range short-term delayed short-circuit release	A	0 - 0
Adjustment range undelayed short-circuit release	A	141 - 141
Integrated earth fault protection		No
Type of electrical connection of main circuit		Spring clamp connection
Device construction		Built-in device fixed built-in technique
Suitable for DIN rail (top hat rail) mounting		No
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		No
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		No
Motor drive integrated		No
Motor drive optional		No
Degree of protection (IP)		IP20