## Motor-protective circuit-breaker, 0.09 kW, 0.25 - 0.4 A, Screw terminals



Part no. PKZM0-0,4 072732

**EL Number** 4355123

(Norway)

Powering Business Worldwide™

General specifications	
Product name	Eaton Moeller® series PKZM0 Motor-protective circuit-breaker
Part no.	PKZM0-0,4
EAN	4015080727323
Product Length/Depth	76 millimetre
Product height	93 millimetre
Product width	45 millimetre
Product weight	0.243 kilogram
Certifications	CE UL File No.: E36332 UL Category Control No.: NLRV UL 60947-4-1 CSA IEC/EN 60947-4-1 UL IEC/EN 60947 CSA Class No.: 3211-05 CSA File No.: 165628 CSA-C22.2 No. 60947-4-1-14 VDE 0660 CSA UL
Product Tradename	PKZM0
Product Type	Motor-protective circuit-breaker
Product Sub Type	None
Catalog Notes	Calculate assigned motor power according to rated current (NEC Table 430-150) IE3-ready devices are identified by the logo on their packaging.
Features & Functions	
Actuator type	Turn button
Features	Phase-failure sensitivity (according to IEC/EN 60947-4-1, VDE 0660 Part 102)
Functions	Phase failure sensitive Motor protection
Number of poles	Three-pole
General information	
Connection	Screw terminals
Degree of protection	IP20 Terminals: IP00
Explosion safety category for dust	ATEX dust-ex-protection, PTB 10, ATEX 3013, Ex II(2) GD
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	Motor 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 Branch circuit: Manual type E if used with terminal, or suitable for group installations, (UL/CSA)
Temperature compensation	≤ 0.25 %/K, residual error for T > 40° -5 - 40 °C to IEC/EN 60947, VDE 0660 -25 - 55 °C, Operating range
Climatic environmental conditions	

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, cyclic, to IEC 60068-2-30
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Terminal capacities	
Terminal capacity (flexible with ferrule)	2 x (1 - 6) mm <sup>2</sup> , ferrule to DIN 46228 1 x (1 - 6) mm <sup>2</sup> , ferrule to DIN 46228
Terminal capacity (solid)	2 x (1 - 6) mm <sup>2</sup> 1 x (1 - 6) mm <sup>2</sup>
Terminal capacity (solid/stranded AWG)	18 - 10
Stripping length (main cable)	10 mm
Tightening torque	1.7 Nm, Screw terminals, Main cable 1 Nm, Screw terminals, Control circuit cables
Electrical rating	
Rated frequency - min	50 Hz
Rated frequency - max	60 Hz
Rated operational current (le)	0.4 A
Rated operational power at AC-3, 220/230 V, 50 Hz	0.06 kW
Rated operational power at AC-3, 380/400 V, 50 Hz	0.09 kW
Rated operational power at AC-3, 440 V, 50 Hz	0.12 kW
Rated operational power at AC-3, 500 V, 50 Hz	0.12 kW
Rated operational power at AC-3, 690 V, 50 Hz	0.18 kW
Rated operational voltage (Ue) - min	690 V
Rated operational voltage (Ue) - max	690 V
Rated uninterrupted current (Iu)	0.4 A
Short-circuit rating	
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	150 kA
Rated short-circuit breaking capacity Ics at 500 V AC	150 kA
Rated short-circuit breaking capacity Icu at 690 V AC	150 kA
Rated short-circuit breaking capacity Ics at 690 V AC	150 kA
Short-circuit current	60 kA DC, up to 250 V DC, Main conducting paths
Short-circuit current rating (type E)	50 kA, 600 Y/347 V, SCCR (UL/CSA) 65 kA, 240 V, SCCR (UL/CSA) Accessories required BK25/3-PKZ0-E 65 kA, 480 Y/277 V, SCCR (UL/CSA)
Short-circuit release	6.2 A, Irm, Setting range max. ± 20% tolerance, Trip blocks Basic device fixed 15.5 x lu, Trip Blocks
Switching capacity	
Switching capacity	0.4 A, AC-3 up to 690 V 0.4 A (3 contacts in series), DC-5 up to 250V
Trip blocks	
Overload release current setting - min	0.25 A
Overload release current setting - max	0.4 A
Tripping characteristic	Overload trigger: tripping class 10 A
Design verification	
Equipment heat dissipation, current-dependent Pvid	5.22 W
Heat dissipation capacity Pdiss	0 W
Heat dissipation per pole, current-dependent Pvid	1.74 W

Rated operational current for specified heat dissipation (In)	0.4 A
Static heat dissipation, non-current-dependent Pvs	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 b observed.
10.12 Electromagnetic compatibility	Is the panel builder's responsibility. The specifications for the switchgear must b observed.
10.13 Mechanical function	The device meets the requirements, provided the information in the instruction leaflet (IL) is observed.

## **Technical data ETIM 9.0**

Low-voltage industrial components (EG000017) / Motor protection circuit-breaker (EC000074)

Electric engineering, automation, process control engineering / Low-voltage switch technology / Circuit breaker (LV < 1 kV) / Motor protection circuit-breaker (ecl@ss13-27-37-04-01 [AGZ529021])

Overload release current setting	Α	0.25 - 0.4
Adjustment range undelayed short-circuit release	Α	6.2 - 6.2
With thermal overload protection		No
Phase failure sensitive		Yes
Switch off technique		Thermomagnetic
Rated operating voltage	V	690 - 690
Rated permanent current lu	Α	0.4
Rated operation power at AC-3, 230 V	kW	0.06
Rated operation power at AC-3, 400 V	kW	0.09
Power loss	W	5.22
Type of electrical connection of main circuit		Screw connection
Type of control element		Turn button
Device construction		Built-in device fixed built-in technique
With integrated auxiliary switch		No
With integrated under voltage release		No
Number of poles		3
Rated short-circuit breaking capacity Icu at 400 V, AC	kA	150
Degree of protection (IP)		IP20
Height	mm	93
Width	mm	45
Depth	mm	76