DATASHEET - PKZM01-0,4-G

Motor-protective circuit-breaker, 440 V: 0.18 kW, Ir= 0.25 - 0.4 A, IP20



PKZM01-0,4-G 286080

General specifications	
Product name	Eaton Moeller® series PKZM01 Motor-protective circuit-breaker
Part no.	PKZM01-0,4-G
EAN	4015082860806
Product Length/Depth	158 millimetre
Product height	80 millimetre
Product width	117 millimetre
Product weight	0.564 kilogram
Compliances	CE Marked
Certifications	CSA Std. C22.2 No. 14 UL 508 IEC 60947-4-1 VDE VDE 0660 IEC/EN 60947
Product Tradename	PKZM01
Product Type	Motor-protective circuit-breaker
Product Sub Type	None
Catalog Notes	IE3-ready devices are identified by the logo on their packaging.
Features & Functions	
Actuator type	Push button
Features	Phase-failure sensitivity (according to IEC/EN 60947-4-1, VDE 0660 Part 102)
Fitted with:	Operating membrane
Functions	Phase failure sensitive Motor protection
Number of poles	Three-pole
General information	
Connection	Screw terminals
Degree of protection	IP65
Lifespan, electrical	50,000 operations (at 400V, AC-3)
Lifespan, mechanical	50,000 Operations (Main conducting paths)
Mounting position	Can be snapped on to IEC/EN 60715 top-hat rail with 7.5 or 15 mm height.
Operating frequency	25 Operations/h
Overvoltage category	
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
Climatic environmental conditions	
Altitude	Max. 2000 m
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
Terminal capacities	
Terminal capacity (flexible with ferrule)	1 x (1 - 6) mm², ferrule to DIN 46228 2 x (1 - 6) mm², ferrule to DIN 46228
Terminal capacity (solid)	1 x (1 - 6) mm ² 2 x (1 - 6) mm ²

Terminal capacity (solid/stranded AWG)	18 - 10
Stripping length (main cable)	10 mm
Tightening torque	1.7 Nm, Screw terminals, Main cable
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	0.09 kW
Rated operational power at AC-3, 380/400 V, 50 Hz	0.12 kW
Rated operational power at AC-3, 440 V, 50 Hz	0.12 kW
Rated operational voltage (Ue) - min	690 V
Rated operational voltage (Ue) - max	690 V
Rated uninterrupted current (Iu)	0.63 A
Short-circuit rating	
Rated short-circuit breaking capacity Icu at 400 V AC	50 kA
Short-circuit current	60 kA DC, up to 250 V DC, Main conducting paths
Short-circuit release	± 20% tolerance, Trip blocks 6.2 A, Irm, Setting range max. Basic device fixed 15.5 x lu, Trip Blocks
Switching capacity	
Switching capacity	0.4 A (3 contacts in series), DC-5 up to 250V 0.4 A, AC-3 up to 440 V
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 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 9.0

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

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		А	0.25 - 0.4		
Adjustment range undelayed short-circuit release		А	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	0.63		
Rated operation power at AC-3, 230 V		kW	0.09		
Rated operation power at AC-3, 400 V		kW	0.12		
Power loss		W	5.22		
Type of electrical connection of main circuit			Screw connection		
Type of control element			Push button		
Device construction			Complete device in housing		
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	50		
Degree of protection (IP)			IP65		
Height		mm	80		
Width		mm	117		
Depth		mm	158		