DATASHEET - PKZM01-16-G

Motor-protective circuit-breaker, 660 V 690 V: 12.5 kW, Ir= 10 - 16 A, IP20

Part no. **PKZM01-16-G**
286089

Product name	Eaton Moeller® series PKZM01 Motor-protective circuit-breaker
Part no.	PKZM01-16-G
EAN	4015082860899
Product Length/Depth	158 millimetre
Product height	80 millimetre
Product width	117 millimetre
Product weight	0.59 kilogram
Compliances	CE Marked
Certifications	IEC 60947-4-1 UL 508 CSA Std. C22.2 No. 14 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.
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
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	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
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 capacity (flexible with ferrule)	2 x (1 - 6) mm^2, ferrule to DIN 46228 1 x (1 - 6) mm^2, ferrule to DIN 46228
Terminal capacity (solid)	2 x (1 - 6) mm^2 1 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
Rated frequency - min	50 Hz
Rated frequency - max	60 Hz
Rated operational current (Ie)	16 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	9 kW
Rated operational power at AC-3, 500 V, 50 Hz	9 kW
Rated operational power at AC-3, 690 V, 50 Hz	12.5 kW
Rated operational voltage (Ue) - min	690 V
Rated operational voltage (Ue) - max	690 V
Rated uninterrupted current (Iu)	0.63 A
Short-circuit current	60 kA DC, up to 250 V DC, Main conducting paths
Short-circuit release	± 20% tolerance, Trip blocks Basic device fixed 15.5 x Iu, Trip Blocks 248 A, Irm, Setting range max.
Switching capacity	16 A, AC-3 up to 690 V 16 A (3 contacts in series), DC-5 up to 250V
Connection	Screw terminals
Overload release current setting - min	10 A
Overload release current setting - max	16 A
Tripping characteristic	Overload trigger: tripping class 10 A
Equipment heat dissipation, current-dependent Pvid	6.43 W
Heat dissipation capacity Pdiss	0 W
Heat dissipation per pole, current-dependent Pvid	2.14 W
Rated operational current for specified heat dissipation (In)	16 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 8.0

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@ss10.0.1-27-37-04-01 [AGZ529016])

Overload release current setting	A	10 - 16
Adjustment range undelayed short-circuit release	A	248 - 248
With thermal protection		No
Phase failure sensitive		Yes
Switch off technique		Thermomagnetic
Rated operating voltage	V	690 - 690
Rated permanent current Iu	A	0.63
Rated operation power at AC-3, 230 V	kW	0.09
Rated operation power at AC-3, 400 V	kW	0.12
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

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