Motor-Protective Circuit-Breakers, 3-pole, Ir=10 - 16 A, screw/spring clamp connection, rotary handle lockable



Part no. PKZM0-16-SC/AK 265355

Product name	Eaton Moeller® series PKZM0 Motor-protective circuit-breaker
Part no.	PKZM0-16-SC/AK
EAN	4015082653552
Product Length/Depth	77 millimetre
Product height	93 millimetre
Product width	45 millimetre
Product weight	0.33 kilogram
Certifications	UL File No.: E36332 IEC/EN 60947 CSA-C22.2 No. 60947-4-1-14 CE CSA File No.: 165628 VDE 0660 UL IEC/EN 60947-4-1 UL Category Control No.: NLRV CSA CSA Class No.: 3211-05 UL 60947-4-1
Product Tradename	PKZM0
Product Type	Motor-protective circuit-breaker
Product Sub Type	None
Catalog Notes	This item can only be ordered until December 31, 2023 with a maximum deliver date of May 31, 2024.
eatures & Functions	
Actuator type	Turn button
Features	Phase-failure sensitivity (according to IEC/EN 60947-4-1, VDE 0660 Part 102)
Functions	Motor protection Phase failure sensitive
Number of poles	Three-pole Three-pole
eneral information	
Connection	Screw terminals on feed side Spring-cage terminals on output side
Degree of protection	Terminals: IP00 IP20
Explosion safety category for dust	ATEX dust-ex-protection, PTB 10, ATEX 3013, Ex II(2) GD
Lifespan, electrical	100,000 operations (at 400V, AC-3)
Lifespan, mechanical	100,000 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	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 actuat 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	-25 - 55 °C, Operating range \leq 0.25 %/K, residual error for T > 40° -5 - 40 °C to IEC/EN 60947, VDE 0660
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	90 °C
Climatic proofing	Damp heat, constant, to IEC 60068-2-78 Damp heat, cyclic, to IEC 60068-2-30
Terminal capacities	
Terminal capacity (flexible with ferrule)	1 x (1 - 6) mm², ferrule to DIN 46228, Screw terminals $2 \times (1 - 6)$ mm², ferrule to DIN 46228, Screw terminals
Terminal capacity (flexible) Terminal capacity (solid)	$1 \times (0.75 - 2.5) \text{ mm}^2$, without ferrule, Spring-loaded terminals $2 \times (0.75 - 2.5) \text{ mm}^2$, ferrule to DIN 46228, Spring-loaded terminals $1 \times (0.75 - 2.5) \text{ mm}^2$, ferrule to DIN 46228, Spring-loaded terminals $2 \times (0.75 - 2.5) \text{ mm}^2$, without ferrule, Spring-loaded terminals $1 \times (0.75 - 2.5) \text{ mm}^2$, Spring-loaded terminals
Terminal capacity (Solid)	2 x (0.75 - 2.5) mm², Spring-loaded terminals
Terminal capacity (solid/stranded AWG)	18 - 14
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 (Ie)	16 A
Rated operational power at AC-3, 220/230 V, 50 Hz	4 kW
Rated operational power at AC-3, 380/400 V, 50 Hz	7.5 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)	16 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	248 A, Irm, Setting range max. ± 20% tolerance, Trip blocks Basic device fixed 15.5 x lu, Trip Blocks
Switching capacity	
Switching capacity	16 A (3 contacts in series), DC-5 up to 250V 16 A, AC-3 up to 690 V
Trip blocks	
Overload release current setting - min	10 A
Overload release current setting - max	16 A
Design verification	
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 9.0

Low-voltage industrial components (EG000017) / Motor protection circuit-breaker (EC000074)
Flactric anging automation process control anging gring / Low-voltage switch technology / Circuit breaker (LV < 1 kV) / Motor protection circuit-breaker (acl@cs12-27-27-04-01

Overload release current setting A A 10-16 Adjustment range undelayed short-circuit release A 248-248 With thermal overload protection IV No Phase failure sensitive IV Yes Switch off technique IV Thermonagnetic Rated operating voltage IV 80-690 Rated permanent current lu A 16 Rated operation power at AC-3,230 V KW 4 Power loss KW 5.3 Type of electrical connection of main circuit IV 5.2 Type of control element IV 5.2 Device contruction IV 10.4 With integrated auxiliary switch IV 10.4 With integrated under voltage release IV 10.4 Number of poles IV 10.4 Rated short-circuit breaking capacity Icu at 400 V, AC IV 10.2 Beight IV 10.2 Height IV 10.2 Beight IV 10.2 Beight IV 10.2 Beight IV <td< th=""><th colspan="6">[AGZ529021])</th></td<>	[AGZ529021])					
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Phase failure sensitive Switch off technique Rated operating voltage Rated operating voltage Rated operating nower at AC-3, 230 V Rated operation power at AC-3, 400 V Rated operation power at AC-3, 400 V Rower loss V Power loss V Five of electrical connection of main circuit V V V V V V V V V V V V V V V V V V V	Adjustment range undelayed short-circuit release	А	248 - 248			
Switch off technique Rated operating voltage Rated operation power at AC-3, 230 V Rated operation power at AC-3, 230 V Rated operation power at AC-3, 400 V Rated operation power at AC-3, 400 V Rower loss VW 6.43 Type of electrical connection of main circuit Type of control element Urbe of control element Urbe of control element Vith integrated auxiliary switch Vith integrated auxiliary switch Vith integrated under voltage release No No Number of poles Rated short-circuit breaking capacity Icu at 400 V, AC Degree of protection (IP) Reight Vith Integrated Auxiliary switch Vith Integrated under voltage release Rated short-circuit breaking capacity Icu at 400 V, AC Rated Short-circuit b	With thermal overload protection		No			
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Rated permanent current Iu Rated operation power at AC-3, 230 V Rated operation power at AC-3, 230 V Rated operation power at AC-3, 400 V Rated operation power at AC-3, 400 V Rower loss V	Switch off technique		Thermomagnetic			
Rated operation power at AC-3, 230 V Rated operation power at AC-3, 400 V Rower loss Type of electrical connection of main circuit Type of control element Device construction With integrated auxiliary switch With integrated under voltage release No Number of poles Rated short-circuit breaking capacity Icu at 400 V, AC Degree of protection (IP) Height Width KW 4 4 4 4 6.43 Screw connection Turn button Built-in device fixed built-in technique No No No Rated short-circuit breaking capacity Icu at 400 V, AC RATED	Rated operating voltage	V	690 - 690			
Rated operation power at AC-3, 400 V Power loss W 6.43 Type of electrical connection of main circuit Type of control element Device construction With integrated auxiliary switch With integrated under voltage release Number of poles Rated short-circuit breaking capacity lcu at 400 V, AC Degree of protection (IP) Height Width Width Rated short-circuit breaking capacity lcu at 400 V, AC Height Width MWITH INTEGRATED AND AND AND AND AND AND AND AND AND AN	Rated permanent current lu	Α	16			
Power loss Type of electrical connection of main circuit Type of control element Device construction With integrated auxiliary switch With integrated under voltage release Number of poles Rated short-circuit breaking capacity Icu at 400 V, AC Degree of protection (IP) Height Width	Rated operation power at AC-3, 230 V	kW	4			
Type of electrical connection of main circuit Type of control element Device construction With integrated auxiliary switch With integrated under voltage release No Number of poles Rated short-circuit breaking capacity Icu at 400 V, AC Degree of protection (IP) Height Width Screw connection Screw connection Screw connection Built-in device fixed built-in technique No No No No KA 50 IP20 Height mm 93 Width	Rated operation power at AC-3, 400 V	kW	7.5			
Type of control element Device construction With integrated auxiliary switch With integrated under voltage release No Number of poles Rated short-circuit breaking capacity Icu at 400 V, AC Degree of protection (IP) Height Width Turn button Built-in device fixed built-in technique No No No 1 3 4 50 IP20 Height mm 93 Width	Power loss	W	6.43			
Device construction With integrated auxiliary switch With integrated under voltage release No Number of poles Rated short-circuit breaking capacity Icu at 400 V, AC Degree of protection (IP) Height Width Built-in device fixed built-in technique No No No No L PO PO PO PO PO PO PO WA SO PO PO PO PO WH PO	Type of electrical connection of main circuit		Screw connection			
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With integrated under voltage release No Number of poles Rated short-circuit breaking capacity Icu at 400 V, AC Degree of protection (IP) Height Mm 93 Width	Device construction		Built-in device fixed built-in technique			
Number of poles Rated short-circuit breaking capacity Icu at 400 V, AC Degree of protection (IP) Height mm 93 Width mm 45	With integrated auxiliary switch		No			
Rated short-circuit breaking capacity Icu at 400 V, AC Degree of protection (IP) Height mm 93 Width mm 45	With integrated under voltage release		No			
Degree of protection (IP) IP20 Height mm 93 Width mm 45	Number of poles		3			
Height 93 Width mm 45	Rated short-circuit breaking capacity Icu at 400 V, AC	kA	50			
Width mm 45	Degree of protection (IP)		IP20			
	Height	mm	93			
Depth mm 77	Width	mm	45			
	Depth	mm	77			