DATASHEET - PKZM4-16-CB

Circuit-breaker, Ir= 10 - 16 A, Screw terminals, Terminations: IP2X

Part no. **PKZM4-16-CB**
132591

Powering Business Worldwide™

General specifications

Product name	Eaton Moeller® series PKZM4 Motor-protective circuit-breaker
Part no.	PKZM4-16-CB
EAN	4015081295265
Product Length/Depth	160 millimetre
Product height	165 millimetre
Product width	55 millimetre
Product weight	1.18 kilogram
Compliances	CE Marked
Certifications	UL 489 CE CSA File No.: 165628 UL CSA-C22.2 No. 5-09 UL File No.: E31593 VDE 0660 CSA UL Category Control No.: DIVQ CSA Class No.: 1432-01 IEC/EN 60947-2
Product Tradename	PKZM4
Product Type	Motor-protective circuit-breaker
Product Sub Type	None
Catalog Notes	Not usable as a main switch

Features & Functions

Actuator type	Turn button
Features	Complete device with protection unit
Functions	Line and cable protection For protection of cables and conductors
Number of poles	Three-pole

General information

Connection	Screw terminals
Degree of protection	Terminals: IP2X IP20
Lifespan, electrical	30,000 operations (at 400V, AC-3)
Lifespan, mechanical	30,000 Operations (Main conducting paths)
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	15 g, Mechanical, According to IEC/EN 60068-2-27, Half-sinusoidal shock 10 ms
Suitable for	DIN rail (top hat rail) mounting Feeder and branch circuit as BCPD, (UL/CSA)
Temperature compensation	-5 - 40 °C to IEC/EN 60947, VDE 0660 ≤ 0.25 %/K, residual error for T > 40° -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, constant, to IEC 60068-2-78 Damp heat, cyclic, to IEC 60068-2-30
Terminal capacities	
Terminal capacity (flexible with ferrule)	1 x (0.75 - 16) mm^2, ferrule to DIN 46228 2 x (0.75 - 16) mm^2
Terminal capacity (flexible with ferrule AWG)	14 - 8
Terminal capacity (solid)	2 x (0.75 - 16) mm^2 1 x (0.75 - 16) mm^2
Terminal capacity (solid/stranded AWG)	14 - 6
Stripping length (main cable)	14 mm
Tightening torque	3.3 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 voltage (Ue) - min	600 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	65 kA
Short-circuit current	60 kA DC, up to 250 V DC, Main conducting paths
Short-circuit current rating (UL 489 CSA 22.2-5.09)	65 kA, 480 Y/277 V, SCCR (UL/CSA) 22 kA, 600 Y/347 V, SCCR (UL/CSA)
Short-circuit release	248 A, Irm, Setting range max. Basic device fixed 15.5 x Iu, Trip Blocks ± 20% tolerance, Trip blocks
Switching capacity	
Switching capacity	16 A, AC-3 up to 690 V 16 A (3 contacts in series), DC-5 up to 250V
Contacts	
Number of auxiliary contacts (change-over contacts)	0
Number of auxiliary contacts (normally closed contacts)	0
Number of auxiliary contacts (normally open contacts)	0
Trip blocks	
Overload release current setting - min	0 A
Overload release current setting - max	16 A
Design verification	
Equipment heat dissipation, current-dependent Pvid	14.1 W
Heat dissipation capacity Pdiss	0 W
Heat dissipation per pole, current-dependent Pvid	4.7 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) / 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@ss13-27-37-04-09 [AJZ716018])

Rated permanent current Iu		A	16
Rated voltage		V	600 - 690
Rated short-circuit breaking capacity Icu at 400 V, 50 Hz		kA	65
Overload release current setting		A	0 - 16
Adjustment range short-term delayed short-circuit release		A	0 - 0
Adjustment range undelayed short-circuit release		A	0 - 224
Power loss		W	14.1
Device construction			Built-in device fixed built-in technique
Integrated earth fault protection			No
Type of electrical connection of main circuit			Screw connection
Suitable for DIN rail (top hat rail) mounting			Yes
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			Yes
Motor drive integrated			No
Motor drive optional			No
Degree of protection (IP)			IP20

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