DATASHEET - PKZM4-32-CB/AK

Circuit-breaker, Ir= 24 - 32 A, Screw terminals, Terminations: IP2X

Part no. **PKZM4-32-CB/AK**
150624

Product name	Eaton Moeller® series PKZM4 Motor-protective circuit-breaker
Part no.	PKZM4-32-CB/AK
EAN	4015081468751
Product Length/Depth	171 millimetre
Product height	165 millimetre
Product width	55 millimetre
Product weight	1.187 kilogram
Certifications	CSA File No.: 165628 CSA UL CSA-C22.2 No. 5-09 CE CSA Class No.: 1432-01 UL File No.: E31593 UL Category Control No.: DIVQ VDE 0660 UL 489 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
Actuator type	Turn button
Features	Complete device with protection unit
Functions	For protection of cables and conductors Line and cable protection
Number of poles	Three-pole
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	Feeder and branch circuit as BCPD, (UL/CSA) DIN rail (top hat rail) mounting
Temperature compensation	-5 - 40 °C to IEC/EN 60947, VDE 0660 -25 - 55 °C, Operating range ≤ 0.25 %/K, residual error for T > 40°
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 capacity (flexible with ferrule)	1 x (0.75 - 16) mm², ferrule to DIN 46228 2 x (0.75 - 16) mm²
Terminal capacity (flexible with ferrule AWG)	14 - 8
Terminal capacity (solid)	1 x (0.75 - 16) mm² 2 x (0.75 - 16) mm²
Terminal capacity (solid/stranded AWG)	14 - 6
Stripping length (main cable)	14 mm
Tightening torque	3.3 Nm, Screw terminals, Main cable
Rated frequency - min	50 Hz
Rated frequency - max	60 Hz
Rated operational current (Ie)	32 A
Rated operational voltage (Ue) - min	600 V
Rated operational voltage (Ue) - max	690 V
Rated uninterrupted current (Iu)	32 A
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	Basic device fixed 15.5 x Iu, Trip Blocks 496 A, Irm, Setting range max. ± 20% tolerance, Trip blocks
Switching capacity	32 A, AC-3 up to 690 V 32 A (3 contacts in series), DC-5 up to 250V
Connection	Screw terminals
Number of auxiliary contacts (change-over contacts)	0
Number of auxiliary contacts (normally closed contacts)	0
Number of auxiliary contacts (normally open contacts)	0
Overload release current setting - min	0 A
Overload release current setting - max	32 A
Equipment heat dissipation, current-dependent Pvid	18 W
Heat dissipation capacity Pdiss	0 W
Heat dissipation per pole, current-dependent Pvid	6 W
Rated operational current for specified heat dissipation (In)	32 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) / 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@ss10.0.1-27-37-04-09 [AJZ716013])		
Rated permanent current Iu	A	32
Rated voltage	V	600 - 690
Rated short-circuit breaking capacity Icu at 400 V, 50 Hz	kA	65
Overload release current setting	A	0 - 32
Adjustment range short-term delayed short-circuit release	A	0 - 0
Adjustment range undelayed short-circuit release	A	0 - 448
Integrated earth fault protection		No
Type of electrical connection of main circuit		Screw connection
Device construction		Built-in device fixed built-in technique
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

© 04/2023 by Eaton Industries GmbH