

Eaton 039428

Eaton Moeller® series PKZM0 Motor-protective circuit-breaker, 3p+1N/O+1N/C, Ir=1-1.6A, screw connection

PRODUCT NAME	Eaton Moeller® series PKZM0 Motor-protective circuit-breaker
CATALOG NUMBER	039428
PRODUCT LENGTH/DEPTH	76 mm
PRODUCT HEIGHT	93 mm
PRODUCT WIDTH	54 mm
PRODUCT WEIGHT	0.323 kg
CERTIFICATIONS	IEC/EN 60947-4-1 UL IEC/EN 60947 CSA File No.: 165628 CSA-C22.2 No. 60947-4-1-14 CE UL File No.: E36332 UL Category Control No.: NLRV UL 60947-4-1 CSA VDE 0660 CSA Class No.: 3211-05

FEATURES	Phase-failure sensitivity (according to IEC/EN 60947-4-1, VDE 0660 Part 102)
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.
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.

CHARACTERISTIC CURVE	eaton-manual-motor-starters-characteristic-characteristic-curve-006.eps
	eaton-manual-motor-starters-characteristic-characteristic-curve-008.eps
	IL03402034Z
	IL03407011Z.pdf
	eaton-manual-motor-starters-circuit-breaker-pkzm0-3d-drawing.eps
	eaton-manual-motor-starters-pkzm0-3d-drawing-008.eps

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.
FITTED WITH:	Auxiliary switch
OPERATING FREQUENCY	40 Operations/h
POLLUTION DEGREE	3
CLIMATIC PROOFING	Damp heat, constant, to IEC 60068-2-78 Damp heat, cyclic, to IEC 60068-2-30
ACTUATOR TYPE	Turn button
TRIPPING CHARACTERISTIC	Overload trigger: tripping class 10 A
ADJUSTMENT RANGE UNDELAYED SHORT-CIRCUIT RELEASE - MAX	25 A
ADJUSTMENT RANGE UNDELAYED SHORT-CIRCUIT RELEASE - MIN	25 A
AMBIENT OPERATING TEMPERATURE - MAX	55 °C
AMBIENT OPERATING TEMPERATURE - MIN	-25 °C
AMBIENT OPERATING TEMPERATURE (ENCLOSED) - MAX	40 °C
AMBIENT OPERATING	-25 °C

TEMPERATURE (ENCLOSED) - MIN	
AMBIENT STORAGE TEMPERATURE - MAX	80 °C
AMBIENT STORAGE TEMPERATURE - MIN	-40 °C
ASSIGNED MOTOR POWER AT 230/240 V, 60 HZ, 1-PHASE	0.1 HP
ASSIGNED MOTOR POWER AT 460/480 V, 60 HZ, 3-PHASE	0.75 HP
ASSIGNED MOTOR POWER AT 575/600 V, 60 HZ, 3-PHASE	0.75 HP
EQUIPMENT HEAT DISSIPATION, CURRENT- DEPENDENT PVID	5.36 W
HEAT DISSIPATION CAPACITY PDISS	0 W
HEAT DISSIPATION PER POLE, CURRENT- DEPENDENT PVID	1.79 W
INTERNAL RESISTANCE	700 mΩ
RATED IMPULSE WITHSTAND VOLTAGE (UIMP)	6000 V AC
ALTITUDE	Max. 2000 m
DEVICE CONSTRUCTION	Built-in device fixed built- in technique
EXPLOSION SAFETY CATEGORY FOR DUST	PTB 10, ATEX 3013 Ex II (2) G [Ex eb Gb] [Ex db Gb] [Ex pxb Gb] Ex II (2) D [Ex tb Db] [Ex pxb Db]
CONNECTION	Screw terminals
ELECTRICAL CONNECTION TYPE OF MAIN CIRCUIT	Screw connection
MOUNTING POSITION	Can be snapped on to IEC/EN 60715 top-hat rail with 7.5 or 15 mm height.
LIFESPAN, MECHANICAL	100,000 Operations
OVERVOLTAGE CATEGORY	III
DEGREE OF PROTECTION	Terminals: IP00 IP20
NUMBER OF POLES	Three-pole

LIFESPAN, ELECTRICAL	100,000 operations
SHOCK RESISTANCE	25 g, Mechanical, according to IEC/EN 60068-2-27, Half- sinusoidal shock 10 ms
FUNCTIONS	Phase failure sensitive Motor protection
TERMINAL CAPACITY (SOLID/STRANDED AWG)	18 - 10 18 - 14
SWITCHING CAPACITY	5 A, 600 V AC, A600 Pilot Duty, General use UL/CSA 1 A, General use UL/CSA 1.6 A, AC-3 up to 690 V 1.6 A (3 contacts in series), DC-5 up to 250V 1 A, 250 V DC, Q300 Pilot Duty, General use UL/CSA
NUMBER OF AUXILIARY CONTACTS (CHANGE- OVER CONTACTS)	0
NUMBER OF AUXILIARY CONTACTS (NORMALLY CLOSED CONTACTS)	1
NUMBER OF AUXILIARY CONTACTS (NORMALLY OPEN CONTACTS)	1
OVERLOAD RELEASE CURRENT SETTING - MAX	1.6 A
OVERLOAD RELEASE CURRENT SETTING - MIN	1 A
RATED FREQUENCY - MAX	60 Hz
RATED FREQUENCY - MIN	50 Hz
RATED OPERATIONAL VOLTAGE (UE) - MAX	690 V
RATED OPERATIONAL VOLTAGE (UE) - MIN	690 V
RATED OPERATIONAL CURRENT FOR SPECIFIED HEAT DISSIPATION (IN)	1.6 A
RATED OPERATIONAL POWER AT AC-3E, 220/230 V, 50 HZ	0.25 kW
RATED OPERATIONAL POWER AT AC-3E, 380/400 V, 50 HZ	0.55 kW
RATED UNINTERRUPTED CURRENT (IU)	1.6 A
STATIC HEAT	0 W

DISSIPATION, NON-CURRENT-DEPENDENT PVS	
STRIPPING LENGTH (MAIN CABLE)	10 mm
PRODUCT CATEGORY	Motor protective circuit breaker
PROTECTION	Finger and back-of-hand proof, Protection against direct contact when actuated from front (EN 50274)
RATED OPERATIONAL POWER AT AC-3E, 440 V, 50 HZ	0.55 kW
RATED OPERATIONAL POWER AT AC-3E, 500 V, 50 HZ	0.75 kW
RATED OPERATIONAL POWER AT AC-3E, 690 V, 50 HZ	1.1 kW
RATED SHORT-CIRCUIT BREAKING CAPACITY ICU AT 400 V AC	150 kA
RATED SHORT-CIRCUIT BREAKING CAPACITY ICS AT 400 V AC	150 kA
RATED SHORT-CIRCUIT BREAKING CAPACITY ICU AT 440 V AC	150 kA
RATED SHORT-CIRCUIT BREAKING CAPACITY ICS AT 440 V AC	150 kA
RATED SHORT-CIRCUIT BREAKING CAPACITY ICU AT 500 V AC	150 kA
RATED SHORT-CIRCUIT BREAKING CAPACITY ICS AT 500 V AC	150 kA
RATED SHORT-CIRCUIT BREAKING CAPACITY ICU AT 690 V AC	150 kA
RATED SHORT-CIRCUIT BREAKING CAPACITY ICS AT 690 V AC	150 kA
SUITABLE FOR	Also motors with efficiency class IE3 Branch circuit: Manual type E if used with terminal, or suitable for

	group installations, (UL/CSA)
SHORT-CIRCUIT RELEASE	Basic device fixed 15.5 x lu ± 20% tolerance 24.8 A, I _{rm}
TERMINAL CAPACITY (SOLID)	1 x (0.75 - 2.5) mm ² , Control circuit cables 2 x (0.75 - 2.5) mm ² , Control circuit cables
RATED OPERATIONAL CURRENT (IE)	1.6 A
TEMPERATURE COMPENSATION	-25 - 55 °C, Operating range ≤ 0.25 %/K, residual error for T > 40° -5 - 40 °C to IEC/EN 60947, VDE 0660
SHORT-CIRCUIT CURRENT	60 kA DC, up to 250 V DC, Main conducting paths
SHORT-CIRCUIT CURRENT RATING (GROUP PROTECTION)	50 kA, 600 V High Fault, Fuse, SCCR (UL/CSA) with 600 A, 600 V High Fault, Fuse, SCCR (UL/CSA) 50 kA, 600 V High Fault, CB, SCCR (UL/CSA) with 600 A, 600 V High Fault, CB, SCCR (UL/CSA)
SHORT-CIRCUIT CURRENT RATING (TYPE E)	50 kA, 600 Y/347 V, SCCR (UL/CSA) 65 kA, 240 V, SCCR (UL/CSA) 65 kA, 480 Y/277 V, SCCR (UL/CSA) Accessories required BK25/3-PKZ0-E
TIGHTENING TORQUE	1 Nm, Screw terminals, Control circuit cables 1.7 Nm, Screw terminals, Main cable
SWITCH OFF TECHNIQUE	Thermomagnetic
TERMINAL CAPACITY (FLEXIBLE WITH FERRULE)	1 x (0.75 - 1.5) mm ² 2 x (0.75 - 1.5) mm ²
POWER LOSS	5.36 W

PROJECT NAME:
PROJECT NUMBER:
PREPARED BY:
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