Eaton 278478

Eaton Moeller® series PKZM01 Motor-protective circuit-breaker, 440 V: 0.18 kW, Ir = 0.4 - 0.63 A, IP20

PRODUCT NAME	Eaton Moeller® series PKZM01 Motor-protective circuit-breaker
CATALOG NUMBER	278478
PRODUCT LENGTH/DEPTH	93 mm
PRODUCT HEIGHT	90 mm
PRODUCT WIDTH	45 mm
PRODUCT WEIGHT	0.263 kg
CERTIFICATIONS	CE IEC/EN 60947-4-1 UL Category Control No.: NLRV IEC/EN 60947 CSA Class No.: 3211-05 UL CSA File No.: 165628 CSA-C22.2 No. 60947-4-1-14 UL 60947-4-1 CSA UL File No.: E36332 VDE 0660

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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.
10.3 DEGREE OF PROTECTION OF	Does not apply, since the entire switchgear needs to

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CHARACTERISTIC CURVE	eaton-manual-motor-starters-characteristic-characteristic-curve-008.eps eaton-manual-motor-starters-characteristic-characteristic-curve-004.eps
DECLARATIONS OF CONFORMITY	eaton-motor-protective-circuit-breaker-declaration-of-conformity-uk251175en.pdf
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ASSEMBLIES	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.
OPERATING FREQUENCY	25 Operations/h
POLLUTION DEGREE	3
LIFESPAN, MECHANICAL	50,000 Operations (Main conducting paths)
CLIMATIC PROOFING	Damp heat, constant, to IEC 60068-2-78 Damp heat, cyclic, to IEC 60068-2-30
ACTUATOR TYPE	Push button
TRIPPING CHARACTERISTIC	Overload trigger: tripping class 10 A
ADJUSTMENT RANGE UNDELAYED SHORT-CIRCUIT RELEASE - MAX	9.8 A
ADJUSTMENT RANGE UNDELAYED SHORT-CIRCUIT RELEASE - MIN	9.8 A
AMBIENT OPERATING TEMPERATURE - MAX	55 °C
AMBIENT OPERATING TEMPERATURE - MIN	-25 °C
AMBIENT OPERATING TEMPERATURE (ENCLOSED) - MAX	40 °C
AMBIENT OPERATING TEMPERATURE (ENCLOSED) - MIN	-25 °C
AMBIENT STORAGE TEMPERATURE - MAX	80 °C

AMBIENT STORAGE TEMPERATURE - MIN	-40 °C
EQUIPMENT HEAT DISSIPATION, CURRENT-DEPENDENT PVID	5.16 W
HEAT DISSIPATION CAPACITY PDISS	0 W
HEAT DISSIPATION PER POLE, CURRENT-DEPENDENT PVID	1.72 W
INTERNAL RESISTANCE	4200 mΩ
RATED IMPULSE WITHSTAND VOLTAGE (UIMP)	6000 V AC
ALTITUDE	Max. 2000 m
DEVICE CONSTRUCTION	Built-in device fixed built-in technique
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.
OVERVOLTAGE CATEGORY	III
DEGREE OF PROTECTION	Terminals: IP00 IP20
NUMBER OF POLES	Three-pole
LIFESPAN, ELECTRICAL	50,000 operations (at 400V, AC-3)
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
SWITCHING CAPACITY	0.63 A (3 contacts in series), DC-5 up to 250V 0.63 A, AC-3 up to 440 V
OVERLOAD RELEASE CURRENT SETTING - MAX	0.63 A
OVERLOAD RELEASE CURRENT SETTING - MIN	0.4 A
RATED FREQUENCY - MAX	60 Hz
RATED FREQUENCY - MIN	50 Hz
RATED OPERATIONAL	440 V

VOLTAGE (UE) - MAX	
RATED OPERATIONAL VOLTAGE (UE) - MIN	440 V
RATED OPERATIONAL CURRENT FOR SPECIFIED HEAT DISSIPATION (IN)	0.63 A
RATED OPERATIONAL POWER AT AC-3E, 220/230 V, 50 HZ	0.09 kW
RATED OPERATIONAL POWER AT AC-3E, 380/400 V, 50 HZ	0.12 kW
RATED UNINTERRUPTED CURRENT (IU)	0.63 A
STATIC HEAT DISSIPATION, NON-CURRENT-DEPENDENT PVS	0 W
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	0.18 kW
RATED SHORT-CIRCUIT BREAKING CAPACITY ICU AT 400 V AC	50 kA
RATED SHORT-CIRCUIT BREAKING CAPACITY ICS AT 400 V AC	50 kA
RATED SHORT-CIRCUIT BREAKING CAPACITY ICU AT 440 V AC	50 kA
RATED SHORT-CIRCUIT BREAKING CAPACITY ICS AT 440 V AC	50 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 Iu ± 20% tolerance 9.8 A, Irm

TERMINAL CAPACITY (SOLID)	2 x (1 - 6) mm² 1 x (1 - 6) mm²
RATED OPERATIONAL CURRENT (IE)	0.63 A
TEMPERATURE COMPENSATION	-25 - 55 °C, Operating range -5 - 40 °C to IEC/EN 60947, VDE 0660 ≤ 0.25 %/K, residual error for T > 40°
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)
TIGHTENING TORQUE	1.7 Nm, Screw terminals, Main cable
SWITCH OFF TECHNIQUE	Thermomagnetic
TERMINAL CAPACITY (FLEXIBLE WITH FERRULE)	1 x (1 - 6) mm², ferrule to DIN 46228 2 x (1 - 6) mm², ferrule to DIN 46228
POWER LOSS	5.16 W

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