



Zdjęcie jest reprezentatywne



Eaton 046988

Eaton Moeller® series PKZM0 Motor-protective circuit-breaker, 9 kW, 16 - 20 A, Screw terminals

General specifications

PRODUCT NAME	Eaton Moeller® series PKZM0 Motor-protective circuit-breaker
CATALOG NUMBER	046988
EAN	4015080469889
PRODUCT LENGTH/DEPTH	76 mm
PRODUCT HEIGHT	93 mm
PRODUCT WIDTH	45 mm
PRODUCT WEIGHT	0.296 kg
CERTIFICATIONS	IEC/EN 60947 CSA File No.: 165628 IEC/EN 60947-4-1 CSA-C22.2 No. 60947-4-1-14 UL 60947-4-1 CE UL Category Control No.: NLRV VDE 0660 CSA Class No.: 3211-05 UL File No.: E36332 UL CSA
MODEL CODE	PKZM0-20

Features & 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

General

CONNECTION	Screw terminals
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]
LIFESPAN, ELECTRICAL	100,000 operations
LIFESPAN, MECHANICAL	100,000 Operations
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 actuated 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 Branch circuit: Manual type E if used with terminal, or suitable for group installations, (UL/CSA)
TEMPERATURE COMPENSATION	$\leq 0.25\%/K$, residual error for $T > 40^\circ$ -25 - 55 °C, Operating range -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	80 °C
CLIMATIC PROOFING	Damp heat, constant, to IEC 60068-2-78 Damp heat, cyclic, to IEC 60068-2-30

Electrical rating

RATED FREQUENCY - MIN	50 Hz
RATED FREQUENCY - MAX	60 Hz
RATED OPERATIONAL CURRENT (IE)	20 A
RATED OPERATIONAL POWER AT AC-3, 220/230 V, 50 HZ	5.5 kW
RATED OPERATIONAL POWER AT AC-3, 380/400 V, 50 HZ	9 kW
RATED OPERATIONAL VOLTAGE (UE) - MIN	690 V
RATED OPERATIONAL VOLTAGE (UE) - MAX	690 V
RATED UNINTERRUPTED CURRENT (IU)	20 A

Terminal capacities

TERMINAL CAPACITY (SOLID)	1 x (1 - 6) mm ² 2 x (1 - 6) mm ²
TERMINAL CAPACITY (SOLID/STRANDED AWG)	18 - 10
STRIPPING LENGTH (MAIN CABLE)	10 mm
TIGHTENING TORQUE	1 Nm, Screw terminals, Control circuit cables 1.7 Nm, Screw terminals, Main cable

Short-circuit rating

SHORT-CIRCUIT CURRENT	40 kA DC, up to 250 V DC, Main conducting paths
SHORT-CIRCUIT CURRENT RATING (GROUP PROTECTION)	10 kA, 600 V High Fault, Fuse, SCCR (UL/CSA) with 150 A, 600 V High Fault, Fuse, SCCR (UL/CSA) 10 kA, 600 V High Fault, CB, SCCR (UL/CSA) with 125 A, 600 V High Fault, CB, SCCR (UL/CSA) 18 kA, 600 V High Fault, Fuse with CL, SCCR (UL/CSA) with 600 A, 600 V High Fault, Fuse with CL, SCCR (UL/CSA) 18 kA, 600 V High Fault, CB with CL, SCCR (UL/CSA) with 600 A, 600 V High Fault, CB with CL, SCCR (UL/CSA)
SHORT-CIRCUIT CURRENT RATING (TYPE E)	18 kA, 480 V High Fault, CB, SCCR (UL/CSA) with 600 A, 480 V High Fault, CB, SCCR (UL/CSA) 18 kA, 480 V High Fault, Fuse, SCCR (UL/CSA) with 600 A, 480 V High Fault, Fuse, SCCR (UL/CSA)
SHORT-CIRCUIT CURRENT RATING (TYPE E)	18 kA, 240 V, SCCR (UL/CSA) 18 kA, 480 Y/277 V, SCCR (UL/CSA) Accessories required BK25/3-PKZ0-E
SHORT-CIRCUIT RELEASE	Basic device fixed 15.5 x I _u ± 20% tolerance 310 A, I _{rm}
RATED SHORT-CIRCUIT BREAKING CAPACITY	38 kA

ICS AT 400 V AC

RATED SHORT-CIRCUIT BREAKING CAPACITY ICU AT 400 V AC	50 kA
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RATED SHORT-CIRCUIT BREAKING CAPACITY ICU AT 440 V AC	10 kA
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RATED SHORT-CIRCUIT BREAKING CAPACITY ICS AT 440 V AC	3 kA
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RATED SHORT-CIRCUIT BREAKING CAPACITY ICU AT 500 V AC	3 kA
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RATED SHORT-CIRCUIT BREAKING CAPACITY ICS AT 500 V AC	3 kA
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RATED SHORT-CIRCUIT BREAKING CAPACITY ICU AT 690 V AC	3 kA
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RATED SHORT-CIRCUIT BREAKING CAPACITY ICS AT 690 V AC	1 kA
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Motor rating

ASSIGNED MOTOR POWER AT 115/120 V, 60 HZ, 1-PHASE	1.5 HP
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ASSIGNED MOTOR POWER AT 200/208 V, 60 HZ, 3-PHASE	5 HP
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ASSIGNED MOTOR POWER AT 230/240 V, 60 HZ, 1-PHASE	3 HP
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ASSIGNED MOTOR POWER AT 575/600 V, 60 HZ, 3-PHASE	15 HP
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Trip blocks

OVERLOAD RELEASE CURRENT SETTING - MIN	16 A
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OVERLOAD RELEASE CURRENT SETTING - MAX	20 A
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TRIPPING CHARACTERISTIC	Overload trigger: tripping class 10 A
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Design verification

EQUIPMENT HEAT DISSIPATION, CURRENT-DEPENDENT PVID	5.82 W
HEAT DISSIPATION CAPACITY PDISS	0 W
HEAT DISSIPATION PER POLE, CURRENT-DEPENDENT PVID	1.94 W
RATED OPERATIONAL CURRENT FOR SPECIFIED HEAT DISSIPATION (IN)	20 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.

Zasoby

CHARACTERISTIC CURVE	eaton-manual-motor-starters-characteristic-characteristic-curve-008.eps
DEKLARACJE ZGODNOŚCI	DA-DC-00005040.pdf DA-DC-00005041.pdf eaton-manual-motor-starters-pkz-dimensions-002.eps eaton-manual-motor-starters-pkzm0-dimensions-003.eps
DWG	eaton-manual-motor-starters-pkz-dimensions.eps eaton-manual-motor-starters-pkzm0-3d-drawing-008.eps eaton-manual-motor-starters-pkzm0-3d-drawing-004.eps
ECAD MODEL	ETN.046988.edz
INSTRUKCJE MONTAŻU	IL03407011Z.pdf IL03402034Z
INSTRUKCJE OBSŁUGI	IL122023ZU
MCAD MODEL	DA-CS-pkzm0 DA-CD-pkzm0 eaton-manual-motor-starters-transformer-pkzm0-wiring-diagram.eps eaton-manual-motor-starters-starter-nzm-mccb-wiring-diagram.eps
SCHEMATY POŁĄCZEŃ	

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.

PROJECT NAME:

PROJECT NUMBER:

PREPARED BY:

DATA:



Eaton Corporation plc
Eaton House
30 Pembroke Road
Dublin 4, Ireland
Eaton.com

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