

Specifications

Photo is representative

Eaton 278489

Eaton Moeller® series PKZM0 Motor-protective circuit-breaker, 3p, Ir=25-32A

General specifications

PRODUCT NAME	Eaton Moeller® series PKZM0 Motor-protective circuit-breaker
CATALOG NUMBER	278489
EAN	4015082784898
PRODUCT LENGTH/DEPTH	76 mm
PRODUCT HEIGHT	93 mm
PRODUCT WIDTH	45 mm
PRODUCT WEIGHT	0.288 kg
CERTIFICATIONS	CSA File No.: 165628 CSA-C22.2 No. 60947-4-1-14 IEC/EN 60947 UL 60947-4-1 VDE 0660 CE UL Category Control No.: NLRV UL File No.: E36332 IEC/EN 60947-4-1 CSA Class No.: 3211-05 UL CSA
MODEL CODE	PKZM0-32

Features & Functions

ACTUATOR TYPE	Turn button
FEATURES	Phase-failure sensitivity (according to IEC/EN 60947-4-1, VDE 0660 Part 102)
FUNCTIONS	Phase failure sensitive Motor protection
NUMBER OF POLES	Three-pole

General

LIFESPAN, ELECTRICAL	100,000 operations (at 400V, AC-3)
LIFESPAN, MECHANICAL	100,000 Operations (Main conducting paths)
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: Suitable for group installations, (UL/CSA)
TEMPERATURE COMPENSATION	-25 - 55 °C, Operating range -5 - 40 °C to IEC/EN 60947, VDE 0660 ≤ 0.25 %/K, residual error for T > 40°

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 POWER AT AC-3, 220/230 V, 50 HZ	7.5 kW
RATED OPERATIONAL POWER AT AC-3, 380/400 V, 50 HZ	15 kW
RATED OPERATIONAL VOLTAGE (UE) - MIN	690 V
RATED OPERATIONAL VOLTAGE (UE) - MAX	690 V
RATED UNINTERRUPTED CURRENT (IU)	32 A

Terminal capacities

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

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, CB with CL, SCCR (UL/CSA) with 600 A, 600 V High Fault, CB with CL, 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, 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)

Motor rating

**ASSIGNED MOTOR
POWER AT 200/208 V, 60
HZ, 3-PHASE** 7.5 HP

**ASSIGNED MOTOR
POWER AT 230/240 V, 60
HZ, 1-PHASE** 5 HP

**ASSIGNED MOTOR
POWER AT 230/240 V, 60
HZ, 3-PHASE** 10 HP

**ASSIGNED MOTOR
POWER AT 460/480 V, 60
HZ, 3-PHASE** 20 HP

**ASSIGNED MOTOR
POWER AT 575/600 V, 60
HZ, 3-PHASE** 25 HP

Trip blocks

**OVERLOAD RELEASE
CURRENT SETTING - MIN** 25 A

**OVERLOAD RELEASE
CURRENT SETTING - MAX** 32 A

**TRIPPING
CHARACTERISTIC** Overload trigger: tripping
class 10 A

SHORT-CIRCUIT RELEASE

Basic device fixed 15.5 x lu

± 20% tolerance
496 A, I_{rm}

Communication

CONNECTION Screw terminals

Design verification

**EQUIPMENT HEAT
DISSIPATION, CURRENT-
DEPENDENT PVID** 9.56 W

**HEAT DISSIPATION
CAPACITY PDISS** 0 W

**HEAT DISSIPATION PER
POLE, CURRENT-
DEPENDENT PVID** 3.19 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.

Resources

BROCHURES

[eaton-motor-starters-system-xstart-brochure-br03407001en-en-us.pdf](#)

CATALOGUES

[Product Range Catalog Switching and protecting motors](#)

[eaton-switching-and-protecting-motors-product-range-catalog-ca034001en-en-us.pdf](#)

[eaton-product-overview-for-machinery-catalogue-ca08103003zen-en-us.pdf](#)

CHARACTERISTIC CURVE

[eaton-manual-motor-starters-characteristic-characteristic-curve-008.eps](#)

[eaton-manual-motor-starters-tripping-characteristic-pkzm0-characteristic-curve.eps](#)

[eaton-manual-motor-starters-characteristic-characteristic-curve-009.eps](#)

DECLARATIONS OF CONFORMITY

[DA-DC-00005040.pdf](#)

[DA-DC-00005041.pdf](#)

DRAWINGS

[eaton-manual-motor-starters-pkzm0-dimensions-003.eps](#)

[eaton-manual-motor-starters-pkz-dimensions-002.eps](#)

[eaton-manual-motor-starters-pkz-dimensions.eps](#)

[eaton-manual-motor-starters-mounting-3d-drawing-002.eps](#)

[eaton-manual-motor-starters-pkzm0-3d-drawing-008.eps](#)

[eaton-manual-motor-starters-pkzm0-3d-drawing-004.eps](#)

	eaton-general-ie-ready-dilm-contactor-standards.eps
ECAD MODEL	ETN.278489.edz
INSTALLATION INSTRUCTIONS	IL03402034Z IL03407011Z.pdf
INSTALLATION VIDEOS	WIN-WIN with push-in technology
MANUALS AND USER GUIDES	IL122023ZU
MCAD MODEL	DA-CD-pkzm0 DA-CS-pkzm0
SALES NOTES	eaton-link-module-for-motor-starters-pkz-flyer-fl034003en-en-us.pdf
WIRING DIAGRAMS	eaton-manual-motor-starters-starter-nzm-mccb-wiring-diagram.eps eaton-manual-motor-starters-transformer-pkzm0-wiring-diagram.eps

PROJECT NAME:
PROJECT NUMBER:
PREPARED BY:
DATE:



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