

Eaton 072731

Catalog Number: 072731

Eaton Moeller® series PKZM0 Motor-protective circuit-breaker, 0.06 kW, 0.16 - 0.25 A, Screw terminals



General specifications

Product Name

Eaton Moeller® series PKZM0 Motor-protective circuit-breaker

Catalog Number

072731

Model Code

PKZM0-0,25

EAN

4015080727316

Product Length/Depth

76 mm

Product Height

93 mm

Product Width

45 mm

Product Weight

0.243 kg

Certifications

IEC/EN 60947

VDE 0660

CSA-C22.2 No. 60947-4-1-14

UL 60947-4-1

IEC/EN 60947-4-1

CSA Class No.: 3211-05

UL

CE

UL Category Control No.: NLRV

UL File No.: E36332

CSA

CSA File No.: 165628

Product specifications

Rated operational current for specified heat dissipation (In)

0.25 A

Terminal capacity (flexible with ferrule)

2 x (1 - 6) mm², ferrule to DIN 46228

1 x (1 - 6) mm², ferrule to DIN 46228

10.11 Short-circuit rating

Is the panel builder's responsibility. The specifications for the switchgear must be observed.

Ambient operating temperature (enclosed) - min

-25 °C

Rated operational power at AC-3, 380/400 V, 50 Hz

0.06 kW

Short-circuit current rating (type E)

50 kA, 600 Y/347 V, SCCR (UL/CSA)

65 kA, 480 Y/277 V, SCCR (UL/CSA)

Accessories required BK25/3-PKZ0-E

65 kA, 240 V, SCCR (UL/CSA)

Rated short-circuit breaking capacity Ics at 440 V AC

150 kA

10.4 Clearances and creepage distances

Meets the product standard's requirements.

10.12 Electromagnetic compatibility

Is the panel builder's responsibility. The specifications for the switchgear must be observed.

10.2.5 Lifting

Does not apply, since the entire switchgear needs to be evaluated.

Switching capacity

0.25 A, AC-3 up to 690 V

0.25 A (3 contacts in series), DC-5 up to 250V

Stripping length (main cable)

10 mm

Ambient operating temperature (enclosed) - max

40 °C

Rated short-circuit breaking capacity Icu at 400 V AC

150 kA

10.2.3.1 Verification of thermal stability of enclosures

Resources

Brochures

Motor Starters in System xStart - brochure

Save time and space thanks to the new link module PKZM0-XDM32ME

Catalogs

Product Range Catalog Switching and protecting motors

Switching and protecting motors - catalog

Characteristic curve

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

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

[eaton-manual-motor-starters-characteristic-characteristic-curve-002.eps](#)

Declarations of conformity

[DA-DC-00004892.pdf](#)

[DA-DC-00004921.pdf](#)

Drawings

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

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

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

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

[eaton-general-ie-ready-dilm-contactor-standards.eps](#)

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

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

eCAD model

[DA-CE-ETN.PKZM0-0,25](#)

Installation instructions

[IL03407011Z](#)

[IL03402034Z](#)

Installation videos

[WIN-WIN with push-in technology](#)

Manuals and user guides

[IL122023ZU](#)

[eaton-motor-protective-circuit-breaker-pkzm0-overload-monitoring-exe-manual-mn03402003z-de-de-en-us.pdf](#)

mCAD model

[DA-CS-pkzm0](#)

[DA-CD-pkzm0](#)

Wiring diagrams

Meets the product standard's requirements.

[eaton-manual-motor-starters-starter-nzm-mccb-wiring-diagram.eps](#)

Ambient storage temperature - min

[eaton-manual-motor-starters-transformer-pkzm0-wiring-diagram.eps](#)

-40 °C

Adjustment range undelayed short-circuit release - max

3.9 A

10.8 Connections for external conductors

Is the panel builder's responsibility.

Protection

Finger and back-of-hand proof, Protection against direct contact when actuated from front (EN 50274)

Actuator type

Turn button

Rated operational power at AC-3, 440 V, 50 Hz

0.06 kW

Ambient operating temperature - max

55 °C

Rated operational power at AC-3, 220/230 V, 50 Hz

0 kW

Climatic proofing

Damp heat, cyclic, to IEC 60068-2-30

Damp heat, constant, to IEC 60068-2-78

Device construction

Built-in device fixed built-in technique

Features

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

Lifespan, electrical

100,000 operations

Static heat dissipation, non-current-dependent Pvs

0 W

Electrical connection type of main circuit

Screw connection

10.9.3 Impulse withstand voltage

Is the panel builder's responsibility.

Number of poles

Three-pole

Rated short-circuit breaking capacity Icu at 690 V AC

150 kA

Ambient operating temperature - min

-25 °C

10.6 Incorporation of switching devices and components

Does not apply, since the entire switchgear needs to be evaluated.

10.5 Protection against electric shock

Does not apply, since the entire switchgear needs to be evaluated.

Mounting position

Can be snapped on to IEC/EN 60715 top-hat rail with 7.5 or 15 mm height.

Rated uninterrupted current (I_u)

0.25 A

Tripping characteristic

Overload trigger: tripping class 10 A

Short-circuit release

3.9 A, I_{rm}, Setting range max.

Basic device fixed 15.5 x I_u, Trip Blocks

± 20% tolerance, Trip blocks

10.13 Mechanical function

The device meets the requirements, provided the information in the instruction leaflet (IL) is observed.

10.2.6 Mechanical impact

Does not apply, since the entire switchgear needs to be evaluated.

10.9.4 Testing of enclosures made of insulating material

Is the panel builder's responsibility.

10.3 Degree of protection of assemblies

Does not apply, since the entire switchgear needs to be evaluated.

Heat dissipation per pole, current-dependent P_{vid}

1.72 W

Operating frequency

40 Operations/h

Product category

Motor protective circuit breaker

Short-circuit current rating (group protection)

600 A, 600 V High Fault, max. Fuse, SCCR (UL/CSA)

600 A, 600 V High Fault, max. CB, SCCR (UL/CSA)

50 kA, 600 V High Fault, CB, SCCR (UL/CSA)
50 kA, 600 V High Fault, Fuse, SCCR (UL/CSA)

Overload release current setting - min

0.16 A

Rated operational power at AC-3, 690 V, 50 Hz

0.12 kW

Rated short-circuit breaking capacity Ics at 400 V AC

150 kA

Rated short-circuit breaking capacity Icu at 440 V AC

150 kA

Equipment heat dissipation, current-dependent Pvid

5.15 W

Heat dissipation capacity Pdis

0 W

Rated operational current (Ie)

0.25 A

Suitable for

Branch circuit: Manual type E if used with terminal, or suitable for group installations, (UL/CSA)

Also motors with efficiency class IE3

Internal resistance

26500 mΩ

Temperature compensation

≤ 0.25 %/K, residual error for T > 40°

-5 - 40 °C to IEC/EN 60947, VDE 0660

-25 - 55 °C, Operating range

Terminal capacity (solid)

1 x (1 - 6) mm²

2 x (1 - 6) mm²

Rated frequency - min

50 Hz

Short-circuit current

60 kA DC, up to 250 V DC, Main conducting paths

Power loss

5.15 W

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.

Lifespan, mechanical

100,000 Operations

Terminal capacity (solid/stranded AWG)

18 - 10

Overload release current setting - max

0.25 A

10.9.2 Power-frequency electric strength

Is the panel builder's responsibility.

Rated short-circuit breaking capacity Ics at 500 V AC

150 kA

Overvoltage category

III

Degree of protection

IP20

Terminals: IP00

Rated frequency - max

60 Hz

Switch off technique

Thermomagnetic

Ambient storage temperature - max

80 °C

Adjustment range undelayed short-circuit release - min

3.9 A

Pollution degree

3

10.7 Internal electrical circuits and connections

Is the panel builder's responsibility.

Rated impulse withstand voltage (Uimp)

6000 V AC

Connection

Screw terminals

10.10 Temperature rise

The panel builder is responsible for the temperature rise calculation. Eaton will provide heat dissipation data for the devices.

Functions

Phase failure sensitive

Motor protection

Tightening torque

1.7 Nm, Screw terminals, Main cable

1 Nm, Screw terminals, Control circuit cables

Rated short-circuit breaking capacity I_{cu} at 500 V AC

150 kA

Rated operational voltage (U_e) - min

690 V

Explosion safety category for dust

ATEX dust-ex-protection, PTB 10, ATEX 3013, Ex II(2) GD

10.2.2 Corrosion resistance

Meets the product standard's requirements.

10.2.4 Resistance to ultra-violet (UV) radiation

Meets the product standard's requirements.

10.2.7 Inscriptions

Meets the product standard's requirements.

Rated short-circuit breaking capacity I_{cs} at 690 V AC

150 kA

Rated operational power at AC-3, 500 V, 50 Hz

0.06 kW

Shock resistance

25 g, Mechanical, according to IEC/EN 60068-2-27, Half-sinusoidal shock 10 ms

Rated operational voltage (U_e) - max

690 V

Altitude

Max. 2000 m



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