Product specifications

Eaton 278479

Catalog Number: 278479

Eaton Moeller® series PKZM01 Motor-protective circuit-breaker, 660 V 690 V: 0.55 kW, Ir= 0.63 - 1 A, IP20 PKZM01-1

Photo is representative

General specifications

Product Name
Eaton Moeller® series PKZM01 Motor-protective circuit-breaker

Catalog Number
278479

Model Code
PKZM01-1

EAN
4015082784799

Product Length/Depth
93 mm

Product Height
90 mm

Product Width
45 mm

Product Weight
0.261 kg

Certifications
UL
UL File No.: E36332
CE
CSA Class No.: 3211-05
VDE 0660
CSA File No.: 165628
IEC/EN 60947
UL Category Control No.: NLRV
CSA
UL 60947-4-1
IEC/EN 60947-4-1
CSA-C22.2 No. 60947-4-1-14

Powering Business Worldwide

defaultTaxonomyAttributeLabel

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 assemblies

Does not apply, since the entire switchgear needs to be

Resources

Catalogs

eaton-link-module-for-motor-starters-pkz-flyer-fl034003en-en-us.pdf

eaton-product-overview-for-machinery-catalogue-ca08103003zen-en-us.pdf

Product Range Catalog Switching and protecting motors

Switching and protecting motors - catalog

eaton-motor-starters-system-xstart-brochure-br03407001en-en-us.pdf

Characteristic curve

eaton-manual-motor-starters-characteristic-characteristic-curve-009.eps

eaton-manual-motor-starters-characteristic-characteristic-curve-005.eps

eaton-manual-motor-starters-characteristic-characteristic-curve-008.eps

Declarations of conformity

DA-DC-00004884.pdf

DA-DC-00004914.pdf

Drawings

eaton-manual-motor-starters-circuit-breaker-pkzm01-dimensions.eps

eaton-general-ie-ready-dilm-contactor-standards.eps

eaton-manual-motor-starters-circuit-breaker-pkzm01-3d-drawing-002.eps

eaton-manual-motor-starters-mounting-3d-drawing-002.eps

eCAD model

ETN.278479.edz

Installation instructions

IL03407011Z.pdf

IL122012ZU

IL03402034Z

Installation videos

WIN-WIN with push-in technology

Manuals and user guides

IL122023ZU

mCAD model

DA-CD-pkzm01

DA-CS-pkzm01

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

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

15.5 A

Adjustment range undelayed short-circuit release - min

15.5 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

5.33 W

Heat dissipation capacity Pdiss

0 W

Heat dissipation per pole, current-dependent Pvid

1.78 W

Internal resistance

1700 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.

Lifespan, mechanical

50,000 Operations (Main conducting paths)

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

1 A (3 contacts in series), DC-5 up to 250V
1 A, AC-3 up to 440 V

Overload release current setting - max

1 A

Overload release current setting - min

0.63 A

Rated frequency - max

60 Hz

Rated frequency - min

50 Hz

Rated operational voltage (Ue) - max

440 V

Rated operational voltage (Ue) - min

440 V

Rated operational current for specified heat dissipation (In)

1 A

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

0.12 kW

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

0.25 kW

Rated uninterrupted current (Iu)

1 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-3, 440 V, 50 Hz

0.25 kW

Rated short-circuit breaking capacity Icu at 400 V AC

50 kA

Suitable for

Branch circuit: Manual type E if used with terminal, or suitable for group installations, (UL/CSA)
Also motors with efficiency class IE3

Short-circuit release

± 20% tolerance, Trip blocks
Basic device fixed 15.5 x Iu, Trip Blocks
15.5 A, Irm, Setting range max.

Rated operational current (Ie)

1 A

Temperature compensation

≤ 0.25 %/K, residual error for T > 40°
-5 - 40 °C to IEC/EN 60947, VDE 0660
-25 - 55 °C, Operating range

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

Terminal capacity (solid)

1 x (1 - 6) mm²
2 x (1 - 6) mm²

Power loss

5.33 W

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