Product specifications

Eaton 278489

Catalog Number: 278489

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

Photo is representative

General specifications

Product Name
Eaton Moeller® series PKZM0 Motor-protective circuit-breaker

Catalog Number
278489

Model Code
PKZM0-32

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

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

Product Range Catalog Switching and protecting motors

Switching and protecting motors - catalog

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

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

eaton-motor-starters-system-xstart-brochure-br03407001en-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-00004892.pdf

DA-DC-00004921.pdf

Drawings

eaton-manual-motor-starters-pkz-dimensions.eps

eaton-manual-motor-starters-pkzm0-dimensions-003.eps

eaton-manual-motor-starters-pkz-dimensions-002.eps

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

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

eaton-manual-motor-starters-pkzm0-3d-drawing-004.eps

eaton-manual-motor-starters-pkzm0-3d-drawing-008.eps

eCAD model

ETN.PKZM0-32

Installation instructions

IL03402034Z

IL03407011Z.pdf

Installation videos

WIN-WIN with push-in technology

Manuals and user guides

IL122023ZU

mCAD model

DA-CS-pkzm0

DA-CD-pkzm0

Wiring diagrams

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

40 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

Turn button

Tripping characteristic

Overload trigger: tripping class 10 A

Adjustment range undelayed short-circuit release - max

496 A

Adjustment range undelayed short-circuit release - min

496 A

Ambient operating temperature - max

55 °C

Ambient operating temperature - min

-25 °C

eaton-manual-motor-starters-starter-nzm-mccb-wiring-diagram.eps

eaton-manual-motor-starters-transformer-pkzm0-wiring-diagram.eps

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

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

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

Internal resistance

3 m Ω

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

100,000 Operations (Main conducting paths)

Overvoltage category

III

Degree of protection

Terminals: IP00

IP20

Number of poles

Three-pole

Lifespan, electrical

100,000 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

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

32 A, AC-3 up to 690 V

Overload release current setting - max

32 A

Overload release current setting - min

25 A

Rated frequency - max

60 Hz

Rated frequency - min

50 Hz

Rated operational voltage (Ue) - max

690 V

Rated operational voltage (Ue) - min

690 V

Rated operational current for specified heat dissipation (In)

32 A

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 uninterrupted current (Iu)

32 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

15 kW

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

22 kW

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

30 kW

Rated short-circuit breaking capacity Icu at 400 V AC

40 kA

Rated short-circuit breaking capacity Ics at 400 V AC

10 kA

Rated short-circuit breaking capacity Icu at 440 V AC

10 kA

Rated short-circuit breaking capacity Ics at 440 V AC

3 kA

Rated short-circuit breaking capacity Icu at 500 V AC

3 kA

Rated short-circuit breaking capacity Ics at 500 V AC

3 kA

Rated short-circuit breaking capacity Icu at 690 V AC

3 kA

Rated short-circuit breaking capacity Ics at 690 V AC

1 kA

Conventional thermal current ith (3-pole, enclosed)

30 A

Suitable for

Also motors with efficiency class IE3

Branch circuit: Suitable for group installations, (UL/CSA)

Short-circuit release

± 20% tolerance, Trip blocks

Basic device fixed 15.5 x Iu, Trip Blocks

496 A, Irm, Setting range max.

Rated operational current (Ie)

32 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

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)

Tightening torque

1.7 Nm, Screw terminals, Main cable

1 Nm, Screw terminals, Control circuit cables

Switch off technique

Thermomagnetic

Terminal capacity (flexible with ferrule)

2 x (1 - 6) mm², ferrule to DIN 46228

1 x (1 - 6) mm², ferrule to DIN 46228

Terminal capacity (solid)

2 x (1 - 6) mm²

1 x (1 - 6) mm²

Power loss

9.56 W

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30 Pembroke Road
Dublin 4, Ireland
Eaton.com

Eaton.com/socialmedia