Product specifications

Eaton 222352

Catalog Number: 222352

Eaton Moeller® series PKZM4 Motor-protective circuit-breaker, Ir= 16 - 25 A, Screw terminals, Terminations: IP00 PKZM4-25

Photo is representative

General specifications

Product Name
Eaton Moeller® series PKZM4 Motor-protective circuit-breaker

Catalog Number
222352

Model Code
PKZM4-25

EAN
4015082223526

Product Length/Depth
160 mm

Product Height
140 mm

Product Width
55 mm

Product Weight
1.136 kg

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

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

Switching and protecting motors - catalog

Characteristic curve

eaton-manual-motor-starters-characteristic-pkzm4-characteristic-curve.eps

eaton-manual-motor-starters-pkzm4-characteristic-curve-002.eps

eaton-manual-motor-starters-characteristic-pkzm4-characteristic-curve-002.eps

eaton-manual-motor-starters-pkz-pkzm4-characteristic-curve.eps

Declarations of conformity

DA-DC-00004953.pdf

DA-DC-00004960.pdf

Drawings

eaton-manual-motor-starters-pkzm4-dimensions.eps

eaton-manual-motor-starters-circuit-breaker-pkzm4-dimensions.eps

eaton-manual-motor-starters-pkzm4-3d-drawing.eps

eaton-manual-motor-starters-circuit-breaker-pkzm4-3d-drawing.eps

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

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

eCAD model

ETN.222352.edz

Installation instructions

eaton-motors-starters-pkzm4-motor-protective-circuit-breaker-instruction-leaflet-il03407012z.pdf

Installation videos

WIN-WIN with push-in technology

Manuals and user guides

eaton-motor-protective-circuit-breaker-pkzm4-overload-monitoring-exe-manual-mn03402002z-de-de-en-us.pdf

mCAD model

DA-CS-pkzm4

DA-CD-pkzm4

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, cyclic, to IEC 60068-2-30
Damp heat, constant, to IEC 60068-2-78

Actuator type

Turn button

Tripping characteristic

Overload trigger: tripping class 10 A

Adjustment range undelayed short-circuit release - max

388 A

Adjustment range undelayed short-circuit release - min

388 A

Ambient operating temperature - max

55 °C

Ambient operating temperature - min

-25 °C

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

eaton-manual-motor-starters-starter-nzm-mccb-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 115/120 V, 60 Hz, 1-phase

2 HP

Assigned motor power at 200/208 V, 60 Hz, 3-phase

5 HP

Assigned motor power at 230/240 V, 60 Hz, 1-phase

3 HP

Assigned motor power at 230/240 V, 60 Hz, 3-phase

7.5 HP

Assigned motor power at 460/480 V, 60 Hz, 3-phase

15 HP

Assigned motor power at 575/600 V, 60 Hz, 3-phase

20 HP

Equipment heat dissipation, current-dependent Pvid

14.7 W

Heat dissipation capacity Pdiss

0 W

Heat dissipation per pole, current-dependent Pvid

4.9 W

Internal resistance

12 mΩ

Rated impulse withstand voltage (Uimp)

6000 V AC

Altitude

Max. 2000 m

Device construction

Built-in device fixed built-in technique

Explosion safety category for dust

ATEX dust-ex-protection, PTB 10, ATEX 3012, Ex II(2) G

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

30,000 Operations (Main conducting paths)

Overvoltage category

III

Degree of protection

IP20

Terminals: IP00

Number of poles

Three-pole

Lifespan, electrical

30,000 operations (at 400V, AC-3)

Shock resistance

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

Functions

Motor protection

Phase failure sensitive

Terminal capacity (solid/stranded AWG)

14 - 2

Switching capacity

25 A, AC-3 up to 690 V

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

Overload release current setting - max

25 A

Overload release current setting - min

16 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)

25 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

12.5 kW

Rated uninterrupted current (Iu)

25 A

Static heat dissipation, non-current-dependent Pvs

0 W

Stripping length (main cable)

14 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

12.5 kW

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

15 kW

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

22 kW

Rated short-circuit breaking capacity Icu at 400 V AC

150 kA

Suitable for

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

Short-circuit release

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

Rated operational current (Ie)

25 A

Temperature compensation

-5 - 40 °C to IEC/EN 60947, VDE 0660

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

-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)

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

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

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

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

Short-circuit current rating (type E)

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

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

Accessories required BK50/3-PKZ4-E

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

Tightening torque

3.3 Nm, Screw terminals, Main cable

Switch off technique

Thermomagnetic

Terminal capacity (flexible with ferrule)

1 x (0.75 - 35) mm², Main cables

2 x (0.75 - 25) mm², Main cables

Terminal capacity (solid)

1 x (0.75 - 16) mm², Main cables

2 x (0.75 - 16) mm²

Power loss

14.7 W

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