# Eaton 120937

## Catalog Number: 120937

Eaton Moeller® series PKZ-SOL String circuit-breaker, DC current, 2p, 12A

### General specifications



Product Name Catalog Number

Eaton Moeller® series PKZ-SOL String 120937

circuit-breaker

Model Code PKZ-SOL12

EAN Product Length/Depth

4015081187676 93 mm

Product Height Product Width

76 mm 58 mm

Product Weight Certifications

0.308 kg IEC 60947-2

EN 60947-2 IEC/EN 60947-2 TÜV-certified



#### Features & Functions

Actuator type

Turn button

Design

Open

**Features** 

Complete device with protection unit

Number of poles

Two-pole

#### General

Application

Open areas

Utility buildings

Degree of protection

IP20

Mounting Method

DIN rail (top hat rail) mounting optional

Top-hat rail fixing (according to IEC/EN 60715, 35 mm)

Overload release current setting - min

8 A

Overload release current setting - max

12 A

**Product category** 

String circuit-breakers

Switchgear for photovoltaic

systems

Protection class

2

Suitable for

DIN rail (top hat rail) mounting

#### Climatic environmental conditions

Ambient operating temperature - min

-25 °C

Ambient operating temperature - max

60 °C

Climatic proofing

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

## Terminal capacities

Terminal capacity (flexible with ferrule)

2 x (1 - 6) mm<sup>2</sup>, ferrule to DIN 46228

1 x (1 - 6) mm<sup>2</sup>, ferrule to DIN 46228

Terminal capacity (solid/stranded AWG)

18 - 14

#### Electrical rating

Internal resistance

 $31\,m\,\Omega$ 

Rated operational current (le)

12 A at AC-21A

Rated operational voltage (Ue) - min

900 V

Rated operational voltage (Ue) - max

900 V

Rated uninterrupted current (Iu)

12 A

Short-circuit current

5 - 9 A, Ics, Admissible short-circuit current for solar modules

Short-circuit release

6 x le, Electromagnetic trip block

#### Contacts

Number of auxiliary contacts (change-over contacts)

0

Number of auxiliary contacts (normally closed contacts)

0

Number of auxiliary contacts (normally open contacts)

0

## Design verification

Equipment heat dissipation, current-dependent Pvid

4.5 W

Heat dissipation capacity Pdiss

0 W

Heat dissipation per pole, current-dependent Pvid

1.5 W

Rated operational current for specified heat dissipation (In)

12 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

#### Catalogues

Switching and protecting motors - catalog

Product Range Catalog Switching and protecting motors

Brochure - SOL30-Safety. How to use renewables in a meaningful and efficient manner

#### Characteristic curve

eaton-motor starters-pkz-sol-string-circuit-breaker-characteristic-curve. eps

#### Declarations of conformity

DA-DC-00004069.pdf

DA-DC-00004230.pdf

#### **Drawings**

eaton-contactors-mounting-pkz-sol-string-circuit-breaker-dimensions.eps

eaton-manual-motor-starters-mounting-pkz-sol-string-circuit-breaker-dimensions.eps

 $eaton-manual-motor-starters-pkz-sol-string-circuit-breaker-\\ dimensions.eps$ 

 $eaton-manual-motor-starters-pkz-sol-string-circuit-breaker-3 d-\\ drawing.eps$ 

#### eCAD model

ETN.120937.edz

#### Installation instructions

IL03402020Z

#### mCAD model

DA-CD-p\_sol20

DA-CS-p\_sol20



Eaton Corporation plc Eaton House 30 Pembroke Road Dublin 4, Ireland Eaton.com

© 2024 Eaton. All rights reserved.

Eaton is a registered trademark.

All other trademarks are property of their respective owners.



Eaton.com/socialmedia