

Specifications



Photo is representative



Eaton 120939

Eaton Moeller® series PKZ-SOL String circuit-breaker, 2p, 30 A, 900 V DC

General specifications

PRODUCT NAME	Eaton Moeller® series PKZ-SOL String circuit-breaker
CATALOG NUMBER	120939
MODEL CODE	PKZ-SOL30
EAN	4015081187690
PRODUCT LENGTH/DEPTH	93 mm
PRODUCT HEIGHT	76 mm
PRODUCT WIDTH	58 mm
PRODUCT WEIGHT	0.309 kg
CERTIFICATIONS	IEC/EN 60947-2

Climatic environmental conditions

AMBIENT OPERATING TEMPERATURE - MAX	60 °C
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AMBIENT OPERATING TEMPERATURE - MIN	-25 °C
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CLIMATIC PROOFING	Damp heat, cyclic, to IEC 60068-2-30
	Damp heat, constant, to IEC 60068-2-78

Contacts

NUMBER OF AUXILIARY CONTACTS (CHANGE-OVER CONTACTS)	0
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NUMBER OF AUXILIARY CONTACTS (NORMALLY CLOSED CONTACTS)	0
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NUMBER OF AUXILIARY CONTACTS (NORMALLY OPEN CONTACTS)	0
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Design verification

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 evaluated.
10.4 CLEARANCES AND CREEPAGE DISTANCES	Meets the product standard's requirements.
10.5 PROTECTION	Does not apply, since the

Electrical rating

INTERNAL RESISTANCE	7 mΩ
RATED OPERATIONAL CURRENT (IE)	30 A at AC-21A
RATED OPERATIONAL VOLTAGE (UE) - MAX	900 VDC
RATED OPERATIONAL VOLTAGE (UE) - MIN	900 VDC
RATED UNINTERRUPTED CURRENT (IU)	30 A
SHORT-CIRCUIT RELEASE	6 x Ie
SHORT-CIRCUIT CURRENT	5 - 9 A, Ics, Admissible short-circuit current for solar modules

AGAINST ELECTRIC SHOCK	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.
EQUIPMENT HEAT DISSIPATION, CURRENT-DEPENDENT PVID	6.3 W
HEAT DISSIPATION CAPACITY PDISS	0 W
HEAT DISSIPATION PER POLE, CURRENT-DEPENDENT PVID	2.1 W
RATED OPERATIONAL CURRENT FOR SPECIFIED HEAT DISSIPATION (IN)	30 A
STATIC HEAT DISSIPATION, NON-CURRENT-DEPENDENT PVS	0 W

Features & functions

ACTUATOR TYPE	Turn button
DESIGN	Open
FEATURES	Complete device with protection unit
NUMBER OF POLES	Three-pole

General information

APPLICATION	• Open areas • Utility buildings
DEGREE OF PROTECTION	IP00
MOUNTING METHOD	DIN rail (top hat rail) mounting optional Top-hat rail fixing (according to IEC/EN 60715, 35 mm)
OVERLOAD RELEASE CURRENT SETTING - MAX	30 A
OVERLOAD RELEASE CURRENT SETTING - MIN	23 A
PRODUCT CATEGORY	• String circuit-

Terminal capacities

**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/STRANDED AWG)** 18 - 14

- breakers
 - Switchgear for photovoltaic systems

PROTECTION CLASS 2

SUITABLE FOR DIN rail (top hat rail)
mounting

Resources

CATALOGUES [Brochure - SOL30-Safety. How to use renewables in a meaningful and efficient manner](#)

CHARACTERISTIC CURVE [eaton-motorstarters-pkz-sol-string-circuit-breaker-characteristic-curve.eps](#)

DECLARATIONS OF CONFORMITY [eaton-string-circuit-breaker-declaration-of-conformity-uk251263en.pdf](#)

[eaton-string-circuit-breaker-declaration-of-conformity-eu251530en.pdf](#)

DRAWINGS [eaton-contactors-mounting-pkz-sol-string-circuit-breaker-dimensions.eps](#)
[eaton-manual-motor-starters-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-3d-drawing.eps](#)

ECAD MODEL [ETN.120939.edz](#)

INSTALLATION INSTRUCTIONS [IL03402020Z](#)

MCAD MODEL [eaton-cam-switches-mcad-drawings-p-sol20.dwg](#)
[DA-CS-p_sol20](#)

PEP ECO-PASSPORT [eaton-motor-protective-circuit-breakers-pep-eato-00222-v0101-en.pdf](#)

PROJECT NAME:
PROJECT NUMBER:
PREPARED BY:
DATE:



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