

String circuit-breaker, DC current, 2p, 20A

Part no. **PKZ-SOL20**
120938
 EL Number **4300317**
 (Norway)

General specifications	
Product name	Eaton Moeller® series PKZ-SOL String circuit-breaker
Part no.	PKZ-SOL20
EAN	4015081187683
Product Length/Depth	93 millimetre
Product height	76 millimetre
Product width	58 millimetre
Product weight	0.305 kilogram
Certifications	IEC/EN 60947-2 TÜV-certified
Product Tradename	PKZ-SOL
Product Type	String circuit-breaker
Product Sub Type	None
Features & Functions	
Actuator type	Turn button
Design	Open
Features	Complete device with protection unit
Number of poles	Two-pole
General information	
Application	Open areas Utility buildings
Degree of protection	IP00
Mounting Method	Top-hat rail fixing (according to IEC/EN 60715, 35 mm) DIN rail (top hat rail) mounting optional
Overload release current setting - min	14 A
Overload release current setting - max	20 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 ² , ferrule to DIN 46228 1 x (1 - 6) mm ² , ferrule to DIN 46228
Terminal capacity (solid/stranded AWG)	18 - 14
Electrical rating	
Internal resistance	12 mΩ
Rated operational current (Ie)	20 A at AC-21A
Rated operational voltage (Ue) - min	900 V
Rated operational voltage (Ue) - max	900 V
Rated uninterrupted current (Iu)	20 A
Short-circuit current	9 - 15 A, Ics, Admissible short-circuit current for solar modules
Short-circuit release	6 x Ie, 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 P _{vid}		4.8 W
Heat dissipation capacity P _{diss}		0 W
Heat dissipation per pole, current-dependent P _{vid}		1.6 W
Rated operational current for specified heat dissipation (I _n)		20 A
Static heat dissipation, non-current-dependent P _{vs}		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.

Technical data ETIM 9.0

Low-voltage industrial components (EG000017) / Power circuit-breaker for trafo/generator/installation protection (EC000228)		
Electric engineering, automation, process control engineering / Low-voltage switch technology / Circuit breaker (LV < 1 kV) / Circuit breaker for power transformer, generator and system protection (ecf@ss13-27-37-04-09 [AJZ716018])		
Rated permanent current I _u	A	20
Rated voltage	V	900 - 900
Rated short-circuit breaking capacity I _{cu} at 400 V, 50 Hz	kA	0
Overload release current setting	A	14 - 20
Adjustment range short-term delayed short-circuit release	A	0 - 0
Adjustment range undelayed short-circuit release	A	120 - 120
Power loss	W	4.8
Device construction		Built-in device fixed built-in technique
Integrated earth fault protection		No
Type of electrical connection of main circuit		Screw connection
Suitable for DIN rail (top hat rail) mounting		Yes
DIN rail (top hat rail) mounting optional		Yes
Number of auxiliary contacts as normally closed contact		0
Number of auxiliary contacts as normally open contact		0
Number of auxiliary contacts as change-over contact		0
With switched-off indicator		No
With integrated under voltage release		No
Number of poles		2
Position of connection for main current circuit		Other

Type of control element		Turn button
Complete device with protection unit		Yes
Motor drive integrated		No
Motor drive optional		No
Degree of protection (IP)		IP00