Solarline string combiner box SOL-SC-3ST-0-DC-1MPPT-1005AL

Order-No. 1216523

Data sheet
109593_en_00

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1 Description

The Solarline string combiner boxes (SCBs) are used in both small rooftop systems and large ground-mounted systems. Their functions include collecting and protecting strings and, if necessary, separating the panels from the rest of the system by means of a fire service or switch disconnectors.

2 Features

String combiner box for photovoltaic systems up to 1000V DC for the connection of 1 x 3 strings.

With surge protection (type 1/2) and cable glands for the input and output side. Direct connection of the inverter to the terminal via aluminum or copper conductor.

3 Technical data

System parameter	
System voltage	1000 V DC (U_{max})
Number of string inputs	3
Current per string	25 A (I_{max})
Number of outputs	1
Number of supported MPP trackers	1
Safety equipment	
Surge protective device	T1/T2
Protection level U_p	≤ 3.5 kV
Total discharge current I_{total} (8/20) µs	40 kA
Total discharge current I_{total} (10/350) µs	5 kA
Cable entry	
Type of cable entry	Cable gland
Cable cross section string input	4 mm^2 ... 16 mm^2
Sealing area string input	5 mm ... 10 mm
Cable cross section output	6 mm^2 ... 50 mm^2 (aluminum conductor) 2.5 mm^2 ... 35 mm^2 (copper conductor)
Sealing area output	M16 cable gland: 5 mm ... 10 mm M20 cable gland: 6 mm ... 12 mm M25 cable gland: 11 ... 17 ,mm
Cable cross section grounding	16 mm^2 (2 x)
Sealing area grounding	6 mm ... 12 mm (2 x)
General data	
Housing material	Polycarbonate
Material cover/door	Polycarbonate (transparent)
Degree of protection	IP65
Protection class	II
Dimensions	
Width	361
Height	254
Depth	111
Note on dimensions	Housing dimensions
Ambient conditions	
Ambient temperature (operation)	-20°C ... 55°C

4 Documentation

Type/description	Designation	Order No.
Package Slip for SOL-SC-xST-0-ACDC-xMPPT-xxx0/5	PACKB SOL-SC-xST-0-AC/DC-xMPPT-xxx0/5	107714

Important: Read the instruction manual carefully before mounting, installing, and starting up the Solarline string combiner box. Pay particular attention to the safety notes in this document.

For additional information about the Solarline products, visit phoenixcontact.com.

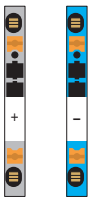
5 Drawings



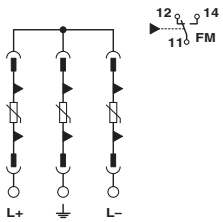
Connection of the protective grounding conductor



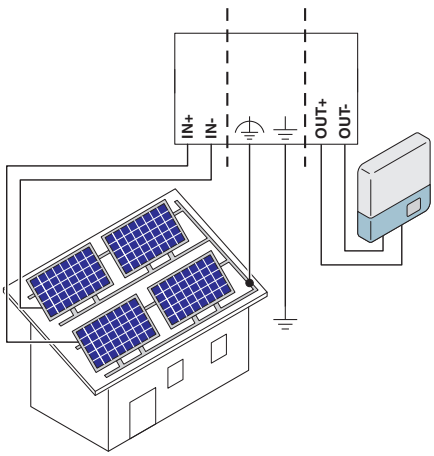
Connection of the protective equipotential bonding conductor



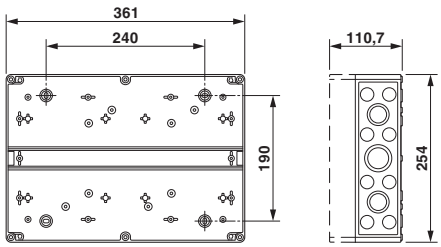
Connection of the PV strings



Connection of the remote indication contact on the surface protection



Schematic application drawing



Housing dimensions