

# Solarline string combiner box

## SOL-SC-3ST-0-DC-1MPPT-1005EQ

Order-No. 1197151

Data sheet  
109517\_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.

### 3 Technical data

System parameter	
System voltage	1000 V DC ( $U_{max}$ )
Number of string inputs	3 (per MPP tracker)
Current per string	25 A ( $I_{max}$ )
Number of outputs	3 (per MPP tracker)
Number of supported MPP trackers	1
Safety equipment	
Surge protective device	T1/T2
Protection level $U_p$	$\leq 3.5$ kV
Total discharge current $I_{total}$ (8/20) $\mu$ s	40 kA
Total discharge current $I_{total}$ (10/350) $\mu$ s	5 kA
Cable entry	
Type of cable entry	Cable gland
Cable cross section string input	4 mm <sup>2</sup> ... 6 mm <sup>2</sup>
Sealing area string input	5 mm ... 10 mm
Cable cross section output	4 mm <sup>2</sup> ... 16 mm <sup>2</sup>
Sealing area output	5 mm ... 10 mm
Cable cross section grounding	16 mm <sup>2</sup> (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	254
Height	180
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	PACKB SOL-SC-xST-0-AC/DC-xMPPT-xxx0	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](http://phoenixcontact.com).

## 5 Drawings



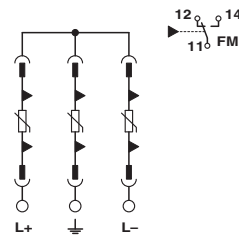
Connection of the protective grounding conductor



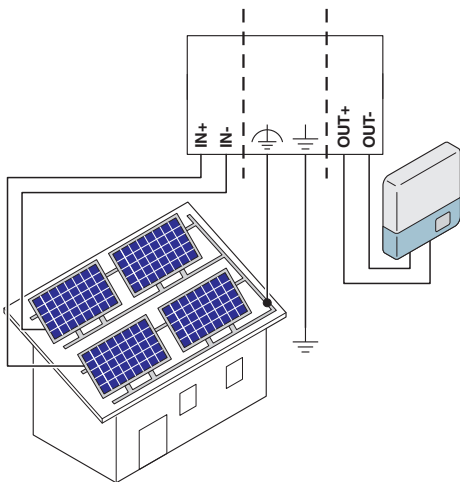
Connection of the protective equipotential bonding conductor



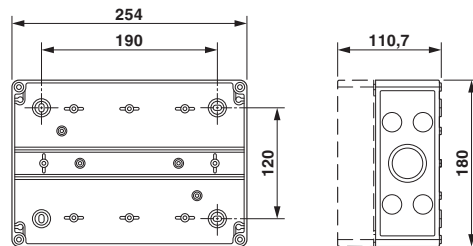
Connection of the PV strings, as well as connection to the inverter



Connection of the remote indication contact on the surge protection



Schematic application drawing



Housing dimensions