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String combiner box (SCB) - SOL-SC-4ST-0-DC-1MPPT-1001UD - 1052860

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String combiner box for photovoltaic systems up to 1000 V DC for the connection of 1x 4 strings. With surge protection and SUNCLIX DC connector for the input and output side.

Product 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 switch disconnector or fire service switch disconnector.

Your advantages

- ☑ Fast installation and startup
- ☑ Large portfolio of string combiner boxes in stock
- ☑ Application-oriented consultation
- ☑ Standard-compliant switchgear and controlgear assembly, thanks to use of DIN EN 61439

RoHS

Key Commercial Data

Packing unit	1
GTIN	4 055626 677811
GTIN	4055626677811
Custom tariff number	85363030

Technical data

System parameter

No-load voltage (U_{OC})	max. 1100 V DC
MPP voltage (U_n)	max. 1000 V DC
Number of string inputs	4

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Technical data

System parameter

Current per string (max.)	10 A (I_{max})
Number of outputs	1 (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) µs	40 kA
Total discharge current I_{total} (10/350) µs	5 kA

Cable entry

Type of cable entry	SUNCLIX
Cable cross section string input	2.5 mm² ... 6 mm²
Cable cross section output	2.5 mm² ... 6 mm²
Cable cross section grounding	16 mm² (2x)
Sealing area grounding	6 mm ... 12 mm (2x)

General data

Material cover/door	Polycarbonate (transparent)
Housing material	Polycarbonate
Weight	2400 g
Degree of protection	IP65
Protection class	II

Dimensions

Outer dimensions: width, height, depth	180 mm x 180 mm x 111 mm (Housing dimensions)

Ambient conditions

Ambient temperature (operation)	-20 °C ... 55 °C

Drawings

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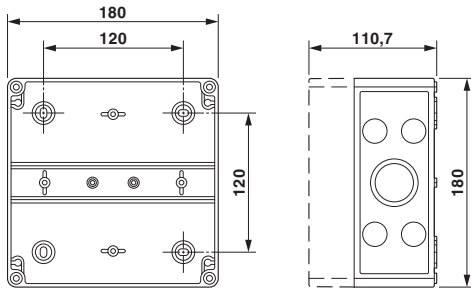# String combiner box (SCB) - SOL-SC-4ST-0-DC-1MPPT-1001UD - 1052860

Schematic diagram

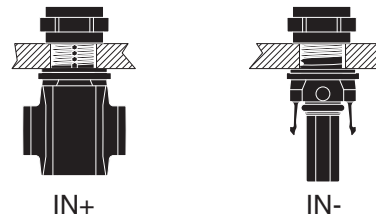Connection of the protective grounding conductor

Schematic diagram

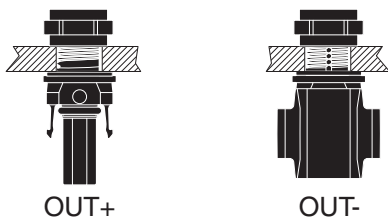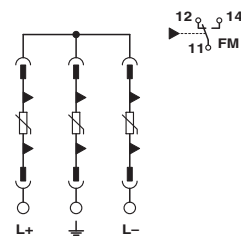Connection of the protective equipotential bonding conductor

Dimensional drawing

180
120
110,7
120
180

Housing dimensions

Schematic diagram

IN+   IN-

Connection of the PV strings

Schematic diagram

OUT+   OUT-

Connection to the inverter

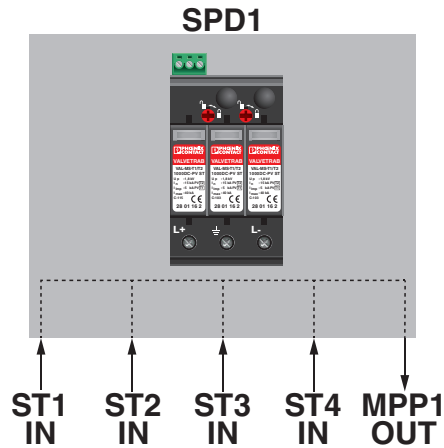Circuit diagram

12   14
11   FM

L+   L-

Connection of the remote indication contact on the surge protection

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Connection diagram

SPD1

ST1 IN ST2 IN ST3 IN ST4 IN MPP1 OUT

Schematic application drawing

Classifications

eCl@ss

eCl@ss 10.0.1	27142422
eCl@ss 11.0	27142422
eCl@ss 5.1	27371890
eCl@ss 7.0	27142422
eCl@ss 9.0	27142422

ETIM

ETIM 4.0	EC000816
ETIM 6.0	EC000268
ETIM 7.0	EC000268