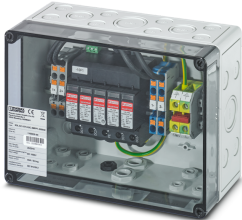


String combiner box (SCB) - SOL-SC-1ST-0-DC-2MPPT-2000SE - 1105828

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String combiner box for photovoltaic systems up to 1000 V DC for the connection of 2x 1 string. With surge protection and Push-in connection 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 disconnect or fire service switch disconnect.

Your advantages

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



Key Commercial Data

Packing unit	1 pc
GTIN	 4 055626 990507
GTIN	4055626990507
Weight per Piece (excluding packing)	2,262.000 g
Weight per piece (including packing)	2,262.000 g
Custom tariff number	85363030
Country of origin	Germany
Sales Key	R1 - Housing+Switch Boxes

Technical data

System parameter

Open-circuit voltage (U_{OC})	max. 1100 V DC
MPP voltage (U_n)	max. 1000 V DC

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Technical data

System parameter

Number of string inputs	1 (per MPP tracker)
Current per string (max.)	40 A ($I_{\max}$)
Number of outputs	1 (per MPP tracker)
Number of supported MPP trackers	2

Safety equipment

Surge protective device	T2
Protection level U_p	≤ 3.7 kV
Total discharge current $I_{\text{total}} (8/20) \mu\text{s}$	40 kA

Cable entry

Type of cable entry	Cable gland
Cable cross section string input	2.5 mm ² ... 6 mm ²
Sealing area string input	3 mm ... 6.5 mm
Cable cross section output	2.5 mm ² ... 6 mm ²
Sealing area output	3 mm ... 6.5 mm
Cable cross section grounding	16 mm ² (2 x)
Sealing area grounding	6 mm ... 12 mm (2x)

General data

Material cover/door	Polycarbonate (transparent)
Housing material	Polycarbonate
Weight	2262 g
Degree of protection	IP65
Protection class	II

Dimensions

Outer dimensions: width, height, depth	254 mm x 180 mm x 111 mm (Housing dimensions)
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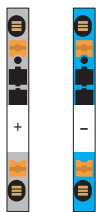
Ambient conditions

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

String combiner box (SCB) - SOL-SC-1ST-0-DC-2MPPT-2000SE - 1105828

Schematic diagram



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

Schematic diagram



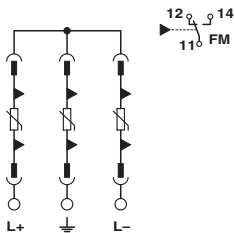
Connection of the protective grounding conductor

Schematic diagram



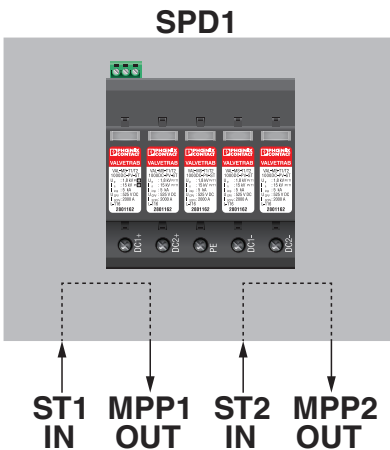
Connection of the protective equipotential bonding conductor

Circuit diagram

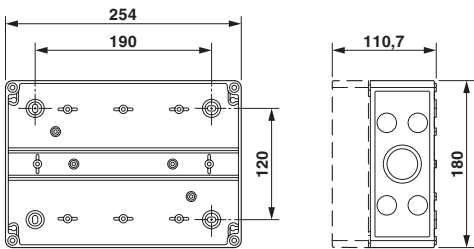


Connection of the remote indication contact on the surge protection

Connection diagram



Dimensional drawing



Housing dimensions

Schematic application drawing

Classifications

eCI@ss

eCI@ss 10.0.1	27142422
eCI@ss 11.0	27142422

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Classifications

eCl@ss

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

UNSPSC

UNSPSC 18.0	39121116
UNSPSC 19.0	39121116
UNSPSC 20.0	39121116
UNSPSC 21.0	39121116

Accessories

Accessories

Replacement plug

Type 1/2 surge protection plug - VAL-MS-T1/T2 1000DC-PV-ST - 2801162



Replacement plug for PV arrester combinations from the VAL-MS-T1/T2 1000DC-PV-... product range

Sealing plugs

Closing cap - SEALING PLUG 8X16 RD - 1400257



Closing cap, material: PA, color: red

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Accessories

Closing cap - SEALING PLUG 5X12 RD - 1400253



Closing cap, material: PA, color: red

Tool set

Tool set - TOOL-KIT SOLAR - 1212071



Tool case, equipped with: crimping pliers, pressing dies for MC3, MC4 and SOLARLOK connectors, stripping tool for commercially available solar cables, stripping tool for SUNCLIX, VDE cable cutter, VDE screwdriver: PH1, PH2, 0.6x3.5 and 0.8x4.0 slots.