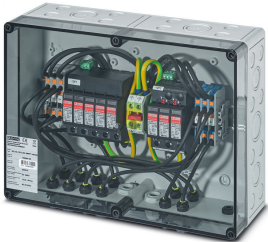


String combiner box (SCB) - SOL-SC-1ST-0-DC-3MPPT-1004SE - 1096461

Please be informed that the data shown in this PDF Document is generated from our Online Catalog. Please find the complete data in the user's documentation. Our General Terms of Use for Downloads are valid (<http://phoenixcontact.com/download>)



String combiner box for photovoltaic systems up to 1000 V DC for the connection of 3x 1 string. 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 disconnecter or fire service switch disconnecter.

Your advantages

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



Key Commercial Data

Packing unit	1
GTIN	 4 055626 932323
GTIN	4055626932323
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	1 (per MPP tracker)
Current per string (max.)	40 A (I_{max})

String combiner box (SCB) - SOL-SC-1ST-0-DC-3MPPT-1004SE - 1096461

Technical data

System parameter

Number of outputs	1 (per MPP tracker)
Number of supported MPP trackers	3

Safety equipment

Surge protective device	T1 / T2
Protection level U_p	≤ 3.5 kV
Total discharge current I_{total} (8/20) μ s	40 kA
Total discharge current I_{total} (10/350) μ s	5 kA

Cable entry

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

General data

Material cover/door	Polycarbonate (transparent)
Housing material	Polycarbonate
Weight	6000 g
Degree of protection	IP65
Protection class	II

Dimensions

Outer dimensions: width, height, depth	361 mm x 254 mm x 111 mm (Housing dimensions)
--	---

Ambient conditions

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

Drawings

String combiner box (SCB) - SOL-SC-1ST-0-DC-3MPPT-1004SE - 1096461

Schematic diagram



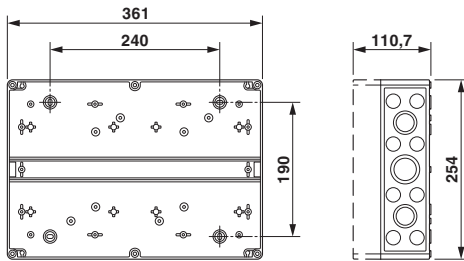
Connection of the protective grounding conductor

Schematic diagram



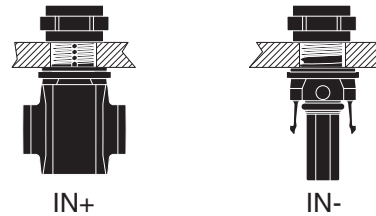
Connection of the protective equipotential bonding conductor

Dimensional drawing



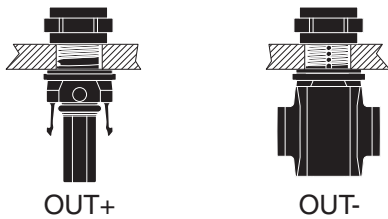
Housing dimensions

Schematic diagram



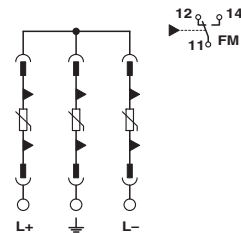
Connection of the PV strings

Schematic diagram



Connection to the inverter

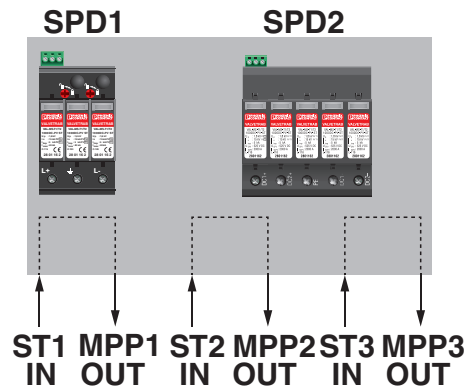
Circuit diagram



Connection of the remote indication contact on the surge protection

String combiner box (SCB) - SOL-SC-1ST-0-DC-3MPPT-1004SE - 1096461

Connection diagram



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