

SOL-SC-1ST-0-DC-1MPPT-1300FS - String combiner box (SCB)



1137053

<https://www.phoenixcontact.com/us/products/1137053>

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 documentation. Our general terms of use for downloads are valid.



String combiner box for photovoltaic systems up to 1000 V DC for connecting 1x 1 string. With surge protection (type 1/2), DC fire service switch disconnecter with remote access 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. The main tasks of the SCBs are the surge protection of the PV system, collecting strings (if necessary), and looping through the protective equipotential bonding conductor for the local equipotential bonding.

Further functions are optional and depend on the equipment.

Examples of optional functions include protecting the strings with string fuses and disconnecting the strings via DC switch disconnectors or DC fire department switches.

You can determine the full scope of functions of the SCB from its item designation (see type key in the SCB packing slip, which can be downloaded in the "Downloads" area).

Your advantages

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

Commercial data

Item number	1137053
Packing unit	1 pc
Minimum order quantity	1 pc
Product key	DTHTCA
GTIN	4063151074302
Weight per piece (including packing)	8,650 g
Weight per piece (excluding packing)	8,650 g
Country of origin	DE

SOL-SC-1ST-0-DC-1MPPT-1300FS - String combiner box (SCB)



1137053

<https://www.phoenixcontact.com/us/products/1137053>

Technical data

Product properties

Product type	String combiner box (SCB)
Design	DC fire department switch

Insulation characteristics

Protection class	I
------------------	---

Electrical properties

General

MPP voltage U_n	max. 1000 V DC
Non-load voltage U_{OC}	max. 1100 V DC
Current per string I_{max}	max. 40 A

Fire department switch

Rated operating current DC-21B	40 A
Rated operating current DC-PV1	40 A
Power supply	230 V AC
Signal level Remote indication contact	24 V DC (floating)

Surge protection

EN type	T1
IEC test classification	T1
Protection level U_p	≤ 3.5 kV
Total discharge current I_{total} (10/350) μ s	5 kA
Total discharge current I_{total} (8/20) μ s	40 kA
Short-circuit current rating I_{SCPV}	40 A

Input data

DC

Number of inputs: Strings	1 (per MPP tracker)
Number of supported MPP trackers	1

Output data

DC

Number of outputs: MPP tracker	1
Number of outputs: \pm	1 (per MPP tracker)

Connection data

DC input

Type of cable entry	Cable gland
---------------------	-------------

SOL-SC-1ST-0-DC-1MPPT-1300FS - String combiner box (SCB)



1137053

<https://www.phoenixcontact.com/us/products/1137053>

Connection method	Push-in connection
Cable cross section	2.5 mm ² ... 6 mm ²
External cable diameter	3 mm ... 6.5 mm

Protective bonding and protective grounding conductor

Type of cable entry	Cable gland
Connection method	Screw connection
Cable cross section	2x 16 mm ²
External cable diameter	2x 6 mm ... 12 mm

Fire department switch (emergency switching off)

Type of cable entry	Cable gland
Connection method	Push-in connection
Cable cross section	3x 0.14 mm ² ... 2.5 mm ² (100 V AC ... 240 V AC)
External cable diameter	6 mm ... 12 mm

Fire department switch (remote indication contact)

Type of cable entry	Cable gland
Connection method	Push-in connection
Cable cross section	2x 0.14 mm ² ... 2.5 mm ² (floating, max. 24 V DC)
External cable diameter	6 mm ... 12 mm

DC output

Type of cable entry	Cable gland
Connection method	Push-in connection
Cable cross section	2.5 mm ² ... 6 mm ²
External cable diameter	3 mm ... 6.5 mm

Dimensions

Housing

Width	400 mm
Height	400 mm
Depth	200 mm

Material specifications

Material Housing	Polyester fiberglass reinforced
Material Cover/door	Polyester fiberglass reinforced

Environmental and real-life conditions

Ambient conditions

Degree of protection	IP65
Ambient temperature (operation)	-20 °C ... 40 °C

Standards and regulations

SOL-SC-1ST-0-DC-1MPPT-1300FS - String combiner box (SCB)



1137053

<https://www.phoenixcontact.com/us/products/1137053>

Standard designation	Low-voltage switchgear and controlgear assemblies - Part 2: Power switchgear and controlgear assemblies
Standards/specifications	EN 61439-2

SOL-SC-1ST-0-DC-1MPPT-1300FS - String combiner box (SCB)



1137053

<https://www.phoenixcontact.com/us/products/1137053>

Classifications

ECLASS

ECLASS-11.0	27142422
ECLASS-13.0	27171490

ETIM

ETIM 9.0	EC003857
----------	----------

UNSPSC

UNSPSC 21.0	39121100
-------------	----------

SOL-SC-1ST-0-DC-1MPPT-1300FS - String combiner box (SCB)



1137053

<https://www.phoenixcontact.com/us/products/1137053>

Environmental product compliance

China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

Phoenix Contact 2024 © - all rights reserved
<https://www.phoenixcontact.com>

Phoenix Contact USA
586 Fulling Mill Road
Middletown, PA 17057, United States
(+717) 944-1300
info@phoenixcon.com