

SOL-SC1-16ST-0-F1-SD-21 - String combiner box (SCB)



1053594

<https://www.phoenixcontact.com/pc/products/1053594>

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String combiner box for photovoltaic systems up to 1000 V DC for connecting up to 16 strings. With one-sided protection via fuse holder and DC disconnecter. Cable entry via multiple cable gland. Including 15 A fuse-links.

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

- Standard-compliant switchgear and controlgear assembly, thanks to use of DIN EN 61439
- Application-oriented analysis and consultation
- Large portfolio of string combiner boxes in stock
- Durable and error-free operation, thanks to comprehensively tested solutions
- Use of the best connection technologies and suitable components

Commercial data

Item number	1053594
Packing unit	1 pc
Minimum order quantity	10 pc
Product key	DTHAAA
GTIN	4055626685762
Weight per piece (including packing)	16.3 kg
Weight per piece (excluding packing)	16.3 kg
Customs tariff number	85363090
Country of origin	DE

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Technical data

Product properties

Product type	String combiner box (SCB)
Installation location	Outdoor installation, roofed area, no direct sunlight
Number of outputs	1

Insulation characteristics

Protection class	II
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Electrical properties

System voltage	1000 V DC (U_{max})
Switching capacity	250 A

Input data

String

Number of string inputs	16
Current per string Typ.	9 A (I_{nc})
Current per string max.	12.5 A (I_{max} , with limited temperature range)
String fuse	10.3 x 38 mm (in scope of delivery)

Dimensions

External dimensions

Width / Height / Depth	500 mm / 600 mm / 230 mm (Housing dimensions)
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Material specifications

Material Housing	Fiberglass-reinforced plastic
Impact strength	IK10

Cable/line

Cable entry

Type of cable entry	Cable gland
Cable cross section string input	4 mm ² ... 6 mm ²
Sealing area string input	5 mm ... 7 mm
Cable cross section output	120 mm ²
Sealing area output	16 mm ... 28 mm

Environmental and real-life conditions

Ambient conditions

Degree of protection	IP65
Impact strength	IK10
Ambient temperature (operation)	-20 °C ... 45 °C

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Standards and regulations

Standards/specifications

IEC 61439-2

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Classifications

ECLASS

ECLASS-13.0	27171490
ECLASS-11.0	27142422

ETIM

ETIM 9.0	EC003857
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UNSPSC

UNSPSC 21.0	39121100
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Environmental product compliance

China RoHS

Environment friendly use period (EFUP)	EFUP-E
	No hazardous substances above the limits

EU REACH SVHC

REACH candidate substance (CAS No.)	No substance above 0.1 wt%
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Accessories

TOOL-KIT SOLAR - Tool set

1212071

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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.

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