

SOL-SC1-18ST-0-F1-SD-21 - String combiner box (SCB)



1053600

<https://www.phoenixcontact.com/us/products/1053600>

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 up to 18 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
- Use of the best connection technologies and suitable components
- Application-oriented analysis and consultation
- Large portfolio of string combiner boxes in stock
- Durable and error-free operation, thanks to comprehensively tested solutions

Commercial data

Item number	1053600
Packing unit	1 pc
Minimum order quantity	10 pc
Product key	DTHAAA
GTIN	4055626685854
Weight per piece (including packing)	16.5 kg
Weight per piece (excluding packing)	15 kg
Country of origin	DE

SOL-SC1-18ST-0-F1-SD-21 - String combiner box (SCB)



1053600

<https://www.phoenixcontact.com/us/products/1053600>

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
------------------	----

Electrical properties

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

Input data

String

Number of string inputs	18
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)
------------------------	---

Material specifications

Material Housing	Fiberglass-reinforced plastic
------------------	-------------------------------

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

Standards and regulations

SOL-SC1-18ST-0-F1-SD-21 - String combiner box (SCB)



1053600

<https://www.phoenixcontact.com/us/products/1053600>

Standards/specifications

IEC 61439-2

SOL-SC1-18ST-0-F1-SD-21 - String combiner box (SCB)



1053600

<https://www.phoenixcontact.com/us/products/1053600>

Classifications

ECLASS

ECLASS-13.0

27171490

ETIM

ETIM 9.0

EC003857

UNSPSC

UNSPSC 21.0

39121100

SOL-SC1-18ST-0-F1-SD-21 - String combiner box (SCB)



1053600

<https://www.phoenixcontact.com/us/products/1053600>

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%
-------------------------------------	----------------------------

Phoenix Contact 2026 © - 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