

## Level 1 Combiner Box

PV Combiner Box Level 1 to bundle the output lines of individual strings and to connect them to the inverter or optionally to a Level 2 Combiner Box.

Smart design customized for each customer's application.

Advanced surge-protection devices, fuse links and switch disconnectors keep the correct operation and protection of the system.

Additionally, PV Combiner Box fulfills the standard IEC/EN 61439-2 to offer a high reliability on the units supplied.

- 18 String input
- fuse holders in string input (+/-) including fuse links
- surge protection device for DC system voltage
- string input with multiple-wires cable glands
- direct wall mount + plastic wall mount lugs



(Example of Combiner Box. Picture may differ from product)

**PV 218S0F0V003TXPX15PWW**

Order reference 8000050557 Rev 0

## Technical Data

### APPLICATION DATA

Operating ambient temperature range	-20 °C to +50 °C
Intended installation location	protected outdoors (>1 km from sea)
Conformity with norms	IEC 61439-2 ed 2.0 / EN 61439-2:2011
Altitude above sea level	up to 3000m

### ELECTRICAL CHARACTERISTICS

Rated DC voltage (Un)	1500 VDC
Rated DC current per input (Inc)	9,4
Rated DC current per input (10h short-circuit at main output)	1.25 · Inc
DC earthing system	floating positive and negative
Switch-disconnector breaking & making capacity (acc. to IEC 60947-3)	400 A (DC21B 1500 V)
Circuit breaker breaking & making capacity (acc. to IEC 60947-2)	N/A
Contactors breaking & making capacity (acc. to IEC 60947 4-1)	N/A
Switch-disconnector / Circuit breaker / Contactor handle location	direct handle (inside enclosure)
Surge protection on DC ports	1500V DC, type II, I <sub>max</sub> = 40 kA, U <sub>p</sub> ≤ 5.0 kV, no aux. contact
Surge protection on monitoring supply ports	N/A
Surge protection on EIA RS 485 ports	N/A

### ENCLOSURE

Enclosure dimensions (H x W x D)	835 x 635 x 300 mm
Material	glass-fiber reinforced polyester (GFRP)
Degree of protection (acc. to IEC 60529)	IP65
Form factor	cabinet with hinged door(s)
Fixing system	plastic wall mount lugs

## INPUTS

Number of DC inputs (+ & – being one input)	18
Positive DC input wires' to be connected to / cross section (stranded)	screw connection / 0.75 - 25 mm <sup>2</sup>
Negative DC input wires' to be connected to / cross section (stranded)	screw connection / 0.75 - 25 mm <sup>2</sup>
Positive / Negative DC input wires' outer diameter	6 - 8 mm
Fuses	fuse-links and fuse-disconnectors
Location of fuses	positive and negative inputs
Fuse-link rated current (In)	15 A
Fuse form factor	10 x 85 mm
Fuse-link time-current characteristic	gPV (EN 60269-6)

## OUTPUTS

Number of DC outputs (+ & – being one output)	1
DC output wires' to be connected to / cross section (stranded)	M12 bolt and nut connection / ≤ 300 mm <sup>2</sup>
DC output wires' outer diameter	22 - 32 mm

## EARTHING CONNECTION

Earth wire to be connected to / cross section (stranded)	screw connection / 1.5 - 25 mm <sup>2</sup>
Earth wire outer diameter	6 - 12 mm

## OTHERS

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