

PVC DC 1IF 10 2MPP SPD1R EVO 10

Weidmüller Interface GmbH & Co. KG
 Klingenbergstraße 26
 D-32758 Detmold
 Germany

www.weidmuller.com



PV Next combiner boxes for inverters with 1 to 12 MPP trackers are used to protect the DC side of a photovoltaic system. The combiner boxes protect the inverter against overvoltages and thus comply with the European Directive CLC/TS 5 1643-32. In addition, these products offer the possibility to protect the system against reverse currents and the possibility to combine strings to save cables during installation.

General ordering data

Version	Photovoltaics, Combiner Box, PV Next, 2 MPP's, 1 Input / 1 Output per MPP, Surge protection I / II, With fuse holder, 1000 V, MC4-Evo 2
Order No.	8000137868
Type	PVC DC 1IF 10 2MPP SPD1R EVO 10
GTIN (EAN)	4099987194167
Qty.	1 items

PVC DC 1IF 10 2MPP SPD1R EVO 10

Weidmüller Interface GmbH & Co. KG
 Klingenbergstraße 26
 D-32758 Detmold
 Germany

www.weidmueller.com

Technical data

Approvals

Approvals



ROHS Conform

Dimensions and weights

Depth	132 mm	Depth (inches)	5.1968 inch
Depth with add-on components	132 mm	Height	340 mm
Height (inches)	13.3858 inch	Width	200 mm
Width (inches)	7.874 inch	Net weight	2797 g

Temperatures

Ambient temperature -20 °C...50 °C Humidity 5...95 %, no condensation

Environmental Product Compliance

RoHS Compliance Status	Compliant with exemption
RoHS Exemption (if applicable/known)	6c
REACH SVHC	Lead 7439-92-1
SCIP	bdab5698-6a20-4370-8e28-8810d882d01a

Included in delivery

Included accessories	Article	Mounting foot
	Quantity	4
	Article	Sealing plug
	Quantity	1

Guarantee

Time interval 5 years

Electrical characteristics

Rated DC voltage	1000 V
Rated short-term current resistance	Rated current 25 A
Current per Maximum Power Point, max. 20 A	
Rated DC current per connection	Current per string, max. 20.00 A

Enclosure

Cover	with cover	Insulating material	Polyester glass-fibre reinforced, Polycarbonate
Type of mounting	Wall mounting	Impact resistance	IK08 in accordance with IEC 62208, IK10 in accordance with IEC 62262
Enclosure attachment	Via mounting feet	Protection class	II
Connection type string	Plug MC4-Evo 2		

PVC DC 1IF 10 2MPP SPD1R EVO 10

Weidmüller Interface GmbH & Co. KG
 Klingenbergstraße 26
 D-32758 Detmold
 Germany

www.weidmueller.com

Technical data

General data

Standards	EN 61643-31	Protection degree	IP65
Installation location	Protected outdoor area (>1 km from sea)		

Inputs

Cartridge fuse	10 x 38 mm		
Fused poles of string	+/-		
Fuse-link standard	gPV (EN 60269-6)		
Amount of maximum power points (MPP)	2		
Functional earth connector	Cable entry	Number of cable entries	1
		Cable diameter, min.	2.5 mm
		Cable diameter, max.	25 mm
	Wire connection	Type of connection	Tension-clamp connection
DC Input + & -	Wire connection	Type of connection	Stäubli MC4-Evo 2 connector
		Compatible cable crosssection	TÜV 2 Pfg1169/08.07
		Wire cross-section, min.	2.5 mm ²
		Wire cross-section, max.	16 mm ²
	Cable entry	Number of cable entries	1
Fuse type	Empty fuse holder		
Max. number of DC inputs	per Maximum Power Point 1 input		
Number of string inputs per MPP	1		
Surge protection auxiliary contact	Cable entry	Number of cable entries	1
		Cable diameter, min.	0.13 mm
		Cable diameter, max.	1.5 mm
Number of inputs	1		

Outputs

Max. number of DC outputs	per Maximum Power Point 1 output		
DC Output + & -	Wire connection	Type of connection	Stäubli MC4-Evo 2 connector
		Compatible cable crosssection	TÜV 2 Pfg1169/08.07
		Wire cross-section, min.	2.5 mm ²
		Wire cross-section, max.	16 mm ²

Surge protection DC side

Standards	EN 61643-31	Lightning test current Iimp (10/350 μs)	5 kA
Protection level Up (+/-, -/PE, +/-PE)	≤ 3.8 kV	Standby power consumption PC	<0.2 W
Short-circuit current ISCPV	11000 A	Total discharge current Itotal (8/20 μs)	50 kA
Discharge current In (8/20 μs)	20 kA	Requirements class	Type I/II
Total discharge current Itotal (10/350 μs)	10 kA	Protection level Up (-/PE)	≤ 3.8 kV
Protection level Up (+/-)	≤ 3.8 kV	Protection level Up (+/PE)	≤ 3.8 kV

PVC DC 1IF 10 2MPP SPD1R EVO 10

Weidmüller Interface GmbH & Co. KG
 Klingenbergstraße 26
 D-32758 Detmold
 Germany

www.weidmueller.com

Technical data

PV system voltage, max. Ucpv	1100 V	Surge protection DC side	1000 V type I + II
Maximum continuous operating voltage DC UCPV mode +/-, -/PE, +/PE	1100 V		

DC load break switch

Voltage type	DC	Switch disconnecter execution	no switch
--------------	----	-------------------------------	-----------

Classifications

ETIM 8.0	EC003857	ETIM 9.0	EC003857
ETIM 10.0	EC003857	ECLASS 14.0	22-57-02-92
ECLASS 15.0	22-57-02-92		

Tender specification sheets

Long specification	<p>Combiner box for inverters with 2 MPP tracker, suitable for protecting the DC side of a photovoltaic system according to DIN CLC/TS 51643-32. MPP1: 1 input, connection via WM4 C connector, compatible with cable type TÜV 2 Pfg1169/08.07 / EN 50618:2063</p> <p>1 output, connection via WM4 C connector, compatible with cable type TÜV 2 Pfg1169/08.07 / EN 50618:2063</p> <p>MPP2: identical to MPP1</p> <p>Max. string voltage Uoc: 1000 VDC</p> <p>1 class/type I + II combined arrester with signal contact</p> <p>Fuse holders for inputs and outputs (fuses 10x38 to be ordered separately)</p> <p>Connection of the signal contact via M16 cable glands (Clamping range 5-10 mmØ) max. conductor cross-section: 1.5 mm²</p> <p>Connection of the functional earth via M16 cable glands (Clamping range 5-10 mmØ) Conductor cross-section: ≥ 16 mm²</p> <p>Protection class: IP65</p> <p>All built into a glass fibre reinforced polyester housing. Dimensions HxWxD: 340x200x132 mm</p> <p>Approval according to low voltage switchgear and controlgear IEC 61439-1 and EN 61439-2</p>
--------------------	---

PVC DC 1IF 10 2MPP SPD1R EVO 10

Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 26
D-32758 Detmold
Germany

www.weidmueller.com

Drawings



PVC DC 1IF 10 2MPP SPD1R EVO 10

Weidmüller Interface GmbH & Co. KG
 Klingenbergstraße 26
 D-32758 Detmold
 Germany

www.weidmueller.com

Accessories

PV Sun Covers



General ordering data

Type	PV SUNCOVER 30/20/13	Version	
Order No.	8000143245		Photovoltaics, Sun cover
GTIN (EAN)	4099987 111843		
Qty.	1 ST		

Spare Arrester



General ordering data

Type	VPU PV I+II O 1000 E	Version	
Order No.	2530530000		Surge voltage arrester, Low voltage, Accessories, Surge protection I /
GTIN (EAN)	4050118540741		II, Spare arrester
Qty.	9 ST		