Data sheet

PVI DC 1I 1O 2MPP SPD1 MC4 10

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

www.weidmueller.com



The compact PV combiner box PV Inline with SPD Type I +II is used in rooftop PV installations.
It protects the PV system from overvoltages, including lightning strikes.
In the event of an overvoltage, it creates a ground connection.
The space-saving surge protection device (SPD) is particularly suitable for confined spaces.
It can be integrated into cable channels or mounted behind PV modules.

General ordering data

Version	Photovoltaics, PV Inline, 1100 V, 2 MPP's, 1 Input / 1 Output per MPP, Surge protection I / II, MC4
Order No.	3108230000
Type	PVI DC 1I 1O 2MPP SPD1 MC4 10
GTIN (EAN)	4099987179782
Qty.	1 items

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Technical data

Approvals

Approvals	
ROHS	Conform

Dimensions and weights

Depth	52 mm	Depth (inches)	2.0472 inch
Height	280 mm	Height (inches)	11.0236 inch
Width	60 mm	Width (inches)	2.3622 inch
Net weight	956 g		

Temperatures

Ambient temperature	-40 °C...85 °C	Humidity	5 - 95% rel. humidity

Environmental Product Compliance

RoHS Compliance Status	Compliant without exemption
REACH SVHC	No SVHC above 0.1 wt%

Included in delivery

Included accessories	Article	Mounting foot
	Quantity	2

Approvals and norms

Approvals	IEC 61439-2, EN 61439-2:2020

Guarantee

Time interval	5 years

Electrical characteristics

Rated DC voltage	1100 V	
Rated short-term current resistance	Rated current	48.75 A
Current per maximum power point, max.	39 A	
Rated DC current per connection	Current per string, max.	39.00 A
	Rated current	39 A

Enclosure

Cover	with cover	Insulating material	ABS
Type of mounting	Wall mounting	Impact resistance	IK06
Enclosure attachment	Via mounting foots	Protection class	II
Connection type string	Plug MC4		

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Technical data

General data

Standards	EN 61643-11, EN 50539-11, EN 61643-31	Protection degree	IP65
Installation location	Protected outdoor area (>1 km from sea)		

Inputs

Amount of maximum power points (MPP)	2		
Functional earth connector	Wire connection	Type of connection	Pre-assembled cable
		Flexible, max. H05(07) V-K	16 mm²
		w. wire end ferrule, DIN 46228 pt 1, max.	16 mm²
Number of conduit inlets	0		
DC Input + & -	Wire connection	Type of connection	Stäubli MC4 connector
		Compatible cable crossection	TÜV 2 Pfg1169/08.07, EN 50618:2015
		Wire cross-section, min.	4 mm²
		Wire cross-section, max.	6 mm²
Fuse type	Neither fuse cartridge nor holder		
Fuses	No		
Max. number of DC inputs	per Maximum Power Point 1 input		
Number of string inputs per MPP	1		
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 connector
		Compatible cable crossection	TÜV 2 Pfg1169/08.07, EN 50618:2015
		Wire cross-section, min.	4 mm²
		Wire cross-section, max.	6 mm²

Surge protection DC side

Standards	EN 61643-11, EN 50539-11, EN 61643-31	Lightning test current limp (10/350 µs)	5 kA
Discharge current (8 / 20 µs), max.	40 kA	Protection level Up (+/- , -/PE , +/PE)	≤ 4.4 kV
Short-circuit curent (ISCPV)	6000 A	Total discharge current (Itotal) (8 / 20 µs)	40 kA
Discharge current In (8/20 µs)	20 kA	Requirements class	Type I/II
Total discharge current (Itotal) (10 / 350 µs)	5 kA	PV system voltage (Ucpv), max.	1100 V
Surge protection DC side	1000 V type I + II	Maximum continuous operating voltage, DC UCPV mode (+ / -), (- / PE), (+ / PE)	1100 V

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		

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Technical data

Tender specification sheets

Long specification	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 MC4 connector, compatible with cable type TÜV 2 Pfg1169/08.07 / EN 50618:2063 1 output, connection via MC4 connector, compatible with cable type TÜV 2 Pfg1169/08.07 / EN 50618:2063 MPP2: identical to MPP1 Max. string voltage Uoc: 1100 VDC 1 class/type I + II combined arrester Connection of the functional earth via pre-assembled cable, Conductor cross-section: 16 mm² Protection class: IP65 All built into a polyester housing. Dimensions HxWxD: 280x60x52 mm Approval according to low voltage switchgear and controlgear IEC 61439-1 and EN 61439-2

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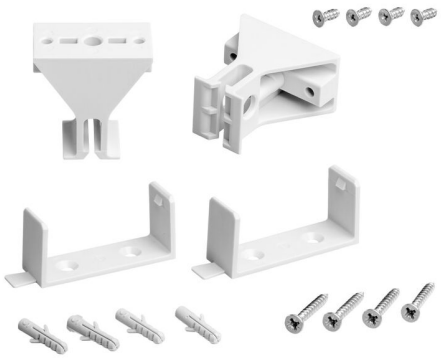
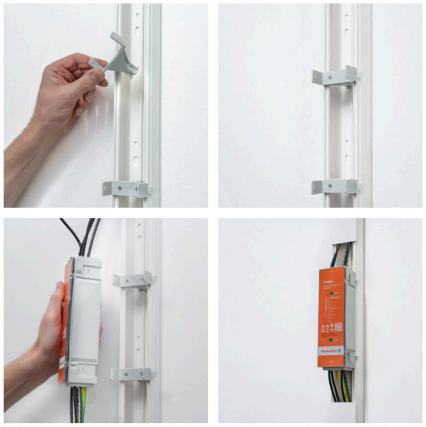
Drawings









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Accessories

Potential equalisation terminal block

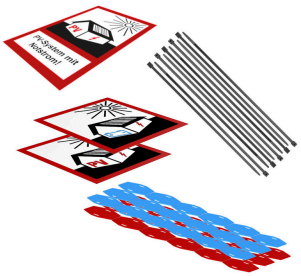


Our potential equalisation terminal blocks allow you to achieve reliably integrated potential equalisation, even in extended systems.

General ordering data

Type	EBB 25-50/16	Version
Order No.	1547490000	Potential distributor terminal, Screw connection, Brass coloured, 50
GTIN (EAN)	4050118387438	mm², 0 A, Number of connections: 3, Number of levels: 1
Qty.	10 ST	

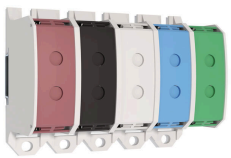
PV marking sets



General ordering data

Type	PV MARKER 1-3 MPP	Version
Order No.	8000149520	Photovoltaics, Device markers, Accessories, Conductor and cable
GTIN (EAN)	4099987229197	markers, Cable ties, Marking set, Warning label, Cable marker, Self-
Qty.	1 ST	adhesive

Aluminium terminal blocks



Klippon® Connect power feed-in terminal blocks WPD allow for an easy and safe installation of aluminium and copper conductors on a small footprint. A power supply or monitoring connection can also be used as an option. Customers can use the power feed-in terminal blocks WPD, regardless of the conductor material. They can be mounted either directly or on DIN rail TS35.

General ordering data

Type	WPD 230 2X50/2X50 GN	Version
Order No.	2502600000	Potential distributor terminal, Screw connection, green, 50 mm², 150
GTIN (EAN)	4050118516425	A, 1000 V, Number of connections: 4, Number of levels: 1
Qty.	5 ST	

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Accessories

Mounting accessories



General ordering data

Type	PV INLINE MOUTINGPLATE ...	Version
Order No.	8000180947	Photovoltaics
GTIN (EAN)	4099987963794	
Qty.	1 ST	

Replacement parts



General ordering data

Type	PVI DC CHANNEL GUIDE	Version
Order No.	3110270000	Photovoltaics, Mounting foot
GTIN (EAN)	4099987189507	
Qty.	1 ST	

Type	PVI DC WALL BRACKET	Version
Order No.	3110320000	Photovoltaics, Mounting foot
GTIN (EAN)	4099987189514	
Qty.	1 ST	