

PVC DC 2I 10 6MPP SPD1R EVO 11

Weidmüller Interface GmbH & Co. KG
 Klingenbergstraße 26
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 Germany

www.weidmueller.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, 1100 V, 6 MPP´s, 2 Inputs / 1 Output per MPP, Surge protection I / II, MC4-Evo 2
Order No.	3131290000
Type	PVC DC 2I 10 6MPP SPD1R EVO 11
GTIN (EAN)	4099987324243
Qty.	1 items

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Technical data

Approvals

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ROHS Conform

Dimensions and weights

Depth	132 mm	Depth (inches)	5.1968 inch
Depth with add-on components	132 mm	Height	336 mm
Height (inches)	13.2283 inch	Width	400 mm
Width (inches)	15.748 inch	Net weight	6288 g

Temperatures

Ambient temperature	-40 °C...50 °C	Humidity	5 to 95 % (non-condensing)
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Environmental Product Compliance

RoHS Compliance Status	Compliant with exemption
RoHS Exemption (if applicable/known)	6c
REACH SVHC	Lead 7439-92-1

DC string monitoring

Monitoring function	Non monitored
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Included in delivery

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

Guarantee

Time interval	5 years
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Electrical characteristics

Rated DC voltage	1100 V
Rated short-term current resistance	Rated current 51.25 A
Current per Maximum Power Point, max. 41 A	
Rated DC current per connection	Current per string, max. 41.00 A
	Rated current 41 A

Enclosure

Cover	removeable	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

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Enclosure attachment	Via mounting foots	Protection class	II
Connection type string	Plug MC4-Evo 2		

General data

Standards	EN 61439-2	Protection degree	IP65
Installation location	Protected outdoor area (Land and Sea)		

Inputs

Amount of maximum power points (MPP)	6			
Functional earth connector	Cable entry	Number of cable entries	1	
		Cable diameter, min.	5 mm	
		Cable diameter, max.	10 mm	
	Cable gland	M 16		
	Wire connection	Type of connection	PUSH IN with actuator	
		Flexible, max. H05(07) V-K	25 mm ²	
w. wire end ferrule, DIN 46228 pt 1, max.		16 mm ²		
DC Input + & -	Wire connection	Type of connection	Stäubli MC4-Evo 2 connector	
		Wire cross-section, min.	4 mm ²	
		Wire cross-section, max.	6 mm ²	
Fuse type	Neither fuse cartridge nor holder			
Fuses	No			
Max. number of DC inputs	per Maximum Power Point 2 inputs connected in parallel			
Number of string inputs per MPP	≤ 2			
Surge protection auxiliary contact	Cable entry	Number of cable entries	1	
		Cable diameter, min.	5 mm	
		Cable diameter, max.	10 mm	
	Cable gland	M 16		
	Wire connection	Type of connection	PUSH IN with actuator	
		Flexible, max. H05(07) V-K	1.5 mm ²	
w. wire end ferrule, DIN 46228 pt 1, max.		1.5 mm ²		
Number of inputs	12			

Surge protection DC side

Standards	EN 61439-2	Lightning test current Iimp (10/350 μs)	6.25 kA
Discharge current, max. (8/20 μs)	40 kA	Protection level Up (+/-, -/PE, +/-PE)	≤ 3.8 kV
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)	6.25 kA	Protection level Up (-/PE)	≤ 3.8 kV
Protection level Up (+/-)	≤ 3.8 kV	Protection level Up (+/PE)	≤ 3.8 kV
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		

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DC load break switch

Voltage type	DC	Switch disconnector execution	no switch
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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 6 MPP tracker, suitable for protecting the DC side of a photovoltaic system according to DIN CLC/TS 51643-32. MPP1: 2 inputs, connection via MC4-Evo 2 connector, compatible with cable type TÜV 2 Pfg1 169/08.07 / EN 50618:2063</p> <p>1 output, connection via MC4-Evo 2 connector, compatible with cable type TÜV 2 Pfg1 169/08.07 / EN 50618:2063</p> <p>MPP2 to 6: identical to MPP1 Max. string voltage U_{oc}: 1100 VDC</p> <p>1 class/type I + II combined arrester with signal contact</p> <p>Connection of the signal contact via M16 cable glands (Clamping range 5-10 mm\varnothing) max. conductor cross-section: 1.5 mm²</p> <p>Connection of the functional earth via M16 cable glands (Clamping range 5-10 mm\varnothing) Conductor cross-section: ≥ 16 mm²</p> <p>Protection class: IP65</p> <p>All built into a glass fibre reinforced polyester housing. Dimensions HxWxD: 336x400x132 mm</p> <p>Approval according to low voltage switchgear and controlgear IEC 61439-1 and EN 61439-2</p>
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Drawings

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Accessories

PV Sun Covers



General ordering data

Type	PV SUNCOVER 30/40/13	Version	
Order No.	8000143253	Photovoltaics, Sun cover	
GTIN (EAN)	4099987 111928		
Qty.	1 ST		

Cutting tools



Cutting tools for conductors up to 8 mm, 12 mm, 14 mm and 22 mm outside diameter. The special blade geometry allows pinch-free cutting of copper and aluminium conductors with minimum physical effort. The cutting tools (KT 8 to KT 22) also come with VDE and GS-tested protective insulation up to 1,000 V in accordance with EN/IEC 60900.

General ordering data

Type	KT 14	Version	
Order No.	1157820000	Cutting tools, Cutting tool for one-hand operation	
GTIN (EAN)	4032248945344		
Qty.	1 ST		

Tools



- For flexible and solid conductors with special insulating materials
- High-quality stripping for industrial applications (complies with aircraft industry requirements)
- Specially shaped blades enable stripping of special types of insulation and conductor configurations
- Stripping length adjustable via end stop
- Very versatile thanks to interchangeable stripping units
- Stripping results reproduced accurately over and over again
- No damage to the conductor
- A long-lasting, reliable tool thanks to its sturdy design
- Integrated cutting function

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Accessories

General ordering data

Type	MULTI-STRIPAX PV	Version	
Order No.	1190490000	Photovoltaics, Plug-in connector	
GTIN (EAN)	4032248973262		
Qty.	1 ST		

Slotted screwdriver



VDE insulated slot-head screwdriver, SDI DIN 7437, ISO 2380/2, drive output acc. to DIN 5264, ISO 2380/1. SoftFinish grip

General ordering data

Type	SDIS 0.6X3.5X100	Version	
Order No.	2749810000	Screwdriver, Blade width (B): 3.5 mm, Blade length: 100 mm, Blade thickness (A): 0.6 mm	
GTIN (EAN)	4050118897012		
Qty.	1 ST		
Type	SDIS 1.0X5.5X125	Version	
Order No.	2749850000	Screwdriver, Blade width (B): 5.5 mm, Blade length: 125 mm, Blade thickness (A): 1 mm	
GTIN (EAN)	4050118897050		
Qty.	1 ST		

UV-resistant cable ties



UV-resistant polyamide 6.6 ensures long durability of our special cable ties even with strong UV radiation. Ideal for continuous outdoor use.

General ordering data

Type	CB-UVR 290/4,5 BK	Version	
Order No.	2659350000	Cable ties, 4.5 x 290 mm, Polyamide 66, 220 N	
GTIN (EAN)	4050118682816		
Qty.	100 ST		

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Accessories

Spare Arrester



General ordering data

Type	VPU PV I+II O 1000	Version	
Order No.	2530600000	Surge voltage arrester, Low voltage, Accessories, Surge protection I /	
GTIN (EAN)	4050118540819	II, Spare arrester	
Qty.	9 ST		
Type	VPU PV I+II OM 1000	Version	
Order No.	2534300000	Surge voltage arrester, Low voltage, Surge protection I / II, Spare	
GTIN (EAN)	4050118545906	arrester	
Qty.	9 ST		