

**PVN DC 2I 1O 3MPP SPD1R EVO 11****Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

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 51643-32. 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, 3 MPP's, 2 Inputs / 1 Output per MPP, Surge protection I / II, MC4-Evo 2, 1100 V
Order No.	<a href="#">2975530000</a>
Type	PVN DC 2I 1O 3MPP SPD1R EVO 11
GTIN (EAN)	4099986823129
Qty.	1 pc(s).
Replacement parts	<a href="#">2530600000</a> <a href="#">2534300000</a>

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## Technical data

## Dimensions and weights

Depth	132 mm	Depth (inches)	5.197 inch
Height	240 mm	Height (inches)	9.449 inch
Width	400 mm	Width (inches)	15.748 inch
Net weight	3,418 g		

## Temperatures

Ambient temperature	-40 °C...50 °C	Humidity	5...95 %, no condensation
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## Approvals and norms

Approvals	EN 61439-2:2020
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## Guarantee

Time interval	5 years
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## Electrical characteristics

Current per Maximum Power Point, max. 45 A

Rated DC voltage		1,100 V
Rated short-term current resistance	Rated current	56.25 A

## Enclosure

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

## General data

Installation location	Protected outdoor area (Land and Sea)	Protection degree	IP65
Standards	EN 61439-2, EN 61643-31		

## Inputs

Amount of maximum power points (MPP)	3		
DC Input + & -	Wire connection	Type of connection	Stäubli MC4-Evo 2 connector
		Compatible cable cross-section	TÜV 2 Pfg 1169/08.07
		Wire cross-section, min.	2.5 mm <sup>2</sup>
		Wire cross-section, max.	16 mm <sup>2</sup>

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Functional earth connector	Cable entry	Number of cable entries	2
	Wire connection	Type of connection	Screw connection
		Flexible, max. H05(07) V-K	25 mm <sup>2</sup>
		w. wire end ferrule, DIN 46228 pt 1, max.	16 mm <sup>2</sup>
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	Wire connection	Type of connection	Tension clamp connection with actuator
		Flexible, max. H05(07) V-K	1.5 mm <sup>2</sup>
		w. wire end ferrule, DIN 46228 pt 1, max.	1.5 mm <sup>2</sup>
	Cable entry	Number of cable entries	2
Number of inputs	2		

**Outputs**

DC Output + & -	Wire connection	Type of connection	Stäubli MC4-Evo 2 connector
		Compatible cable cross-section	TÜV 2 Pfg 1169/08.07
		Wire cross-section, min.	2.5 mm <sup>2</sup>
		Wire cross-section, max.	16 mm <sup>2</sup>
Max. number of DC outputs	per Maximum Power Point 1 output		

**Surge protection DC side**

Discharge current $I_n$ (8/20 μs)	20 kA	Discharge current, max. (8/20 μs)	40 kA
Lightning test current $I_{imp}$ (10/350 μs)	6.25 kA	Maximum continuous operating voltage DC UCPV mode +/-, -/PE, +/-PE	1,100 V
PV system voltage, max. $U_{cpv}$	1,100 V	Protection level $U_p$ (+/-, -/PE, +/-PE)	≤ 3.8 kV
Protection level $U_p$ (+/-)	≤ 3.8 kV	Protection level $U_p$ (+/PE)	≤ 3.8 kV
Protection level $U_p$ (-/PE)	≤ 3.8 kV	Requirements class	Type I/II
Short-circuit current $I_{SCPv}$	11,000 A	Standards	EN 61439-2, EN 61643-31
Standby power consumption $P_c$	<0.2 W	Surge protection DC side	1000 V type I + II
Total discharge current $I_{total}$ (8/20 μs)	50 kA	Total discharge current $I_{total}$ (10/350 μs)	12.5 kA

**DC load break switch**

Switch disconnector execution	no switch	Voltage type	DC
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### Classifications

ETIM 6.0	EC002928	ETIM 7.0	EC002928
ETIM 8.0	EC003857	ETIM 9.0	EC003857
ETIM 10.0	EC003857	ECLASS 9.0	22-57-92-03
ECLASS 9.1	22-57-02-90	ECLASS 10.0	22-57-02-90
ECLASS 11.0	22-57-02-92	ECLASS 12.0	22-57-02-92
ECLASS 13.0	22-57-02-92	ECLASS 14.0	22-57-02-92
ECLASS 15.0	22-57-02-92		

### Approvals

Approvals



Approvals MAMID

[https://mdcop.weidmueller.com/mediadelivery/rendition/900\\_319222/-T1z1mm-S800/](https://mdcop.weidmueller.com/mediadelivery/rendition/900_319222/-T1z1mm-S800/)

ROHS

Conform

### Environmental Product Compliance

RoHS Compliance Status	Compliant
REACH SVHC	Lead 7439-92-1
SCIP	bdab5698-6a20-4370-8e28-8810d882d01a

### Important note

Product information

The SCIP number was assigned due to a lead content of more than 0.1 % of the net weight.

Safe use instruction according to ECHA:

The identification of the hazardous substance is sufficient to allow safe use of the article throughout its life cycle, including the service life, disassembly and waste/recycling phase

### Downloads

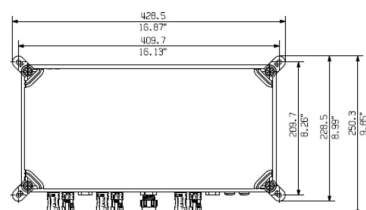
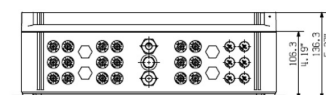
Approval/Certificate/Document of Conformity	<a href="#">EU Declaration of Conformity</a>
Technical Documentation	<a href="#">Customer drawing PVN DC 2I 10 3MPP SPD1R EVO 11 Dimensions</a>
User Documentation	<a href="#">Manual PV Next Mini 3/4MPP</a>
Catalogues	<a href="#">Catalogues in PDF-format</a>

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## Drawings



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[www.weidmueller.com](http://www.weidmueller.com)**Replacement parts****Spare Arrester****General ordering data**

Type	VPU PV I+II O 1000	Version
Order No.	<a href="#">2530600000</a>	Surge voltage arrester, Low voltage, Accessories, Surge protection I /
GTIN (EAN)	4050118540819	II, Spare arrester
Qty.	9 pc(s).	
Type	VPU PV I+II OM 1000	Version
Order No.	<a href="#">2534300000</a>	Surge voltage arrester, Low voltage, Surge protection I / II, Spare
GTIN (EAN)	4050118545906	arrester
Qty.	9 pc(s).	

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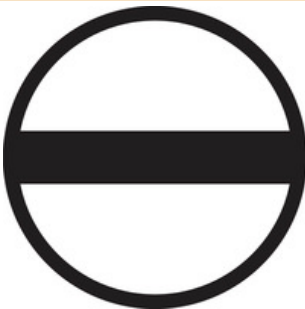
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[www.weidmueller.com](http://www.weidmueller.com)**Accessories****UV-resistant cable ties**

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.	<a href="#">2659350000</a>	Cable ties, 4,5 x 290 mm, Polyamide 66, 220 N
GTIN (EAN)	4050118682816	
Qty.	100 pc(s).	

**Slotted screwdriver**

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

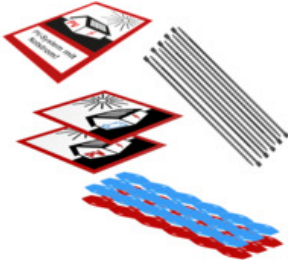
**General ordering data**

Type	SDIS 0.6X3.5X100	Version
Order No.	<a href="#">2749810000</a>	Screwdriver, Blade width (B): 3.5 mm, Blade length: 100 mm, Blade thickness (A): 0.6 mm
GTIN (EAN)	4050118897012	
Qty.	1 pc(s).	
Type	SDIS 1.0X5.5X125	Version
Order No.	<a href="#">2749850000</a>	Screwdriver, Blade width (B): 5.5 mm, Blade length: 125 mm, Blade thickness (A): 1 mm
GTIN (EAN)	4050118897050	
Qty.	1 pc(s).	

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**Accessories****PV marking sets****General ordering data**

Type	PV MARKER 1-3 MPP	Version	Packaging
Order No.	<a href="#">8000149520</a>	Photovoltaics, Device markers, Accessories, Conductor and cable	Plastic bag
GTIN (EAN)	4099987229197	markers, Cable ties, Marking set, Warning label, Cable marker	
Qty.	1 pc(s).		

**External fixing lugs**

External attachment lugs 4-part set

**General ordering data**

Type	MF FPC	Version
Order No.	<a href="#">9536040000</a>	FPC (polycarbonate empty enclosure), Mounting foot, Fixing lugs,
GTIN (EAN)	4032248009442	Height: 40 mm, Width: 19 mm, Depth: 35.5 mm, Material: Polyamide,
Qty.	1 pc(s).	Light Grey



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## Accessories

### Sealing sets



#### General ordering data

Type	BLINDPLUG SET50 7X28MM	Version
Order No.	<a href="#">3077650000</a>	Photovoltaics, Blind plug, Accessories, Blind plug, 50 pieces
GTIN (EAN)	4099987081870	
Qty.	1 pc(s).	
Type	SL SET PV NEXT	Version
Order No.	<a href="#">2729230000</a>	Photovoltaics
GTIN (EAN)	4050118804508	
Qty.	1 pc(s).	
Type	BLINDPLUG SET5 7X28MM	Version
Order No.	<a href="#">3077670000</a>	Photovoltaics, Blind plug
GTIN (EAN)	4099987081894	
Qty.	1 pc(s).	

### Crosshead screwdriver Phillips



VDE insulated crosshead screwdriver, for Phillips screws, SDIK PH DIN 7438, ISO 8764/2-PH, output to ISO 8764-PH, SoftFinish grip

#### General ordering data

Type	SDIK PH3 X 150	Version
Order No.	<a href="#">2749910000</a>	Screwdriver, Blade width (B): 3 mm, 150 mm, Blade thickness (A): 3
GTIN (EAN)	4050118897210	
Qty.	1 pc(s).	

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## Accessories

### 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

### General ordering data

Type	MULTI-STRIPAX PV	Version
Order No.	<a href="#">1190490000</a>	Photovoltaics, Plug-in connector
GTIN (EAN)	4032248973262	
Qty.	1 pc(s).	

### Y-Connector Cables



The Y cable is used for the parallel connection of several strings in a PV system, e.g. for splitting a line in front of an inverter.

The cables are available in different connection variants.

### General ordering data

Type	PVHYM+M+XXXX6W-11	Version
Order No.	<a href="#">2877860000</a>	Photovoltaics, Y-Connector Cable, 1x WM4 C Male, 2x MC4 Female,
GTIN (EAN)	4064675666424	6mm², 1100 V
Qty.	1 pc(s).	
Type	PVHYM-M-XXXX6W+11	Version
Order No.	<a href="#">2877850000</a>	Photovoltaics, Y-Connector Cable, 1x WM4 C Female, 2x MC4 Male,
GTIN (EAN)	4064675666417	6mm², 1100 V
Qty.	1 pc(s).	

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[www.weidmueller.com](http://www.weidmueller.com)**Accessories****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.	<a href="#">1157820000</a>	Cutting tools, Cutting tool for one-hand operation
GTIN (EAN)	4032248945344	
Qty.	1 pc(s).	