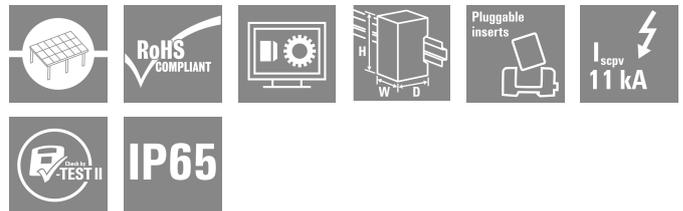


## PVC DC 2I 2O 12MPP SPD1R WM4 11

**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 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, 12 MPP's, 2 Inputs / 2 Outputs per MPP, Surge protection I / II, WM4C
Order No.	<a href="#">8000115469</a>
Type	PVC DC 2I 2O 12MPP SPD1R WM4 11
GTIN (EAN)	4099986879126
Qty.	1 items

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## Technical data

### Approvals

Approvals



ROHS Conform

### Dimensions and weights

Depth	257 mm	Depth (inches)	10.1181 inch
Height	488.2 mm	Height (inches)	19.2204 inch
Width	600 mm	Width (inches)	23.622 inch
Net weight	19130 g		

### Temperatures

Ambient temperature -20 °C...50 °C Humidity 5 - 90 %, no condensation

### Environmental Product Compliance

RoHS Compliance Status	Compliant with exemption
RoHS Exemption (if applicable/known)	7a, 7cl
REACH SVHC	Lead 7439-92-1
SCIP	bdab5698-6a20-4370-8e28-8810d882d01a

### DC string monitoring

Monitoring function Non monitored

### Included in delivery

Included accessories	Article	Mounting foot
	Quantity	4
	Article	Dustcap VSSO
	Quantity	48
	Article	Sealing plug
	Quantity	3

### Approvals and norms

Approvals EN 61439-2, IEC 61439-2

### Guarantee

Time interval 5 years

### Electrical characteristics

Rated DC voltage	1100 V
Rated short-term current resistance	Rated current 43.75 A
Current per Maximum Power Point, max.	35 A
Rated DC current per connection	Current per string, max. 35.00 A

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**Technical data**

**Enclosure**

Insulating material	Polyester glass-fibre reinforced, Polycarbonate	Type of mounting	Fixing lugs
Impact resistance	IK10 in accordance with IEC 62262	Enclosure attachment	Via mounting feet
Protection class	II	Connection type string	Plug WM4C

**General data**

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

**Inputs**

Amount of maximum power points (MPP)	12		
Functional earth connector	Cable entry	Number of cable entries	1
	Wire connection	Type of connection	PUSH IN with actuator
		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>
Number of conduit inlets	24		
DC Input + & -	Wire connection	Type of connection	WM4C plug-in connector
		Compatible cable crosssection	TÜV 2 Pfg1169/08.07
		Wire cross-section, min.	4 mm <sup>2</sup>
		Wire cross-section, max.	6 mm <sup>2</sup>
	Cable entry	Number of cable entries	24
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
	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>
Number of inputs	24		

**Outputs**

Max. number of DC outputs	per Maximum Power Point 2 outputs connected in parallel		
DC Output + & -	Wire connection	Type of connection	WM4C plug-in connector
		Compatible cable crosssection	TÜV 2 Pfg1169/08.07
		Wire cross-section, min.	4 mm <sup>2</sup>

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**Technical data**

Wire cross-section, 6 mm<sup>2</sup>  
 max.

**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
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
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**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
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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	Combiner box for inverters with 12 MPP tracker, suitable for protecting the DC side of a photovoltaic system according to DIN CLC/TS 51643-32. MPP1: 2 inputs, connection via WM4 C connector, compatible with cable type TÜV 2 Pfg1169/08.07 / EN 50618:2063 1 output, connection via WM4 C connector, compatible with cable type TÜV 2 Pfg1169/08.07 / EN 50618:2063 MPP2 to 12: identical to MPP1 Max. string voltage Uoc: 1100 VDC 1 class/type I + II combined arrester with signal contact Connection of the signal contact via M16 cable glands (Clamping range 5-10 mmØ) max.
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## Technical data

conductor cross-section:  
1.5 mm<sup>2</sup>  
Connection of the  
functional earth via M16  
cable glands (Clamping  
range 5-10 mmØ)  
Conductor cross-section:  
≥ 16 mm<sup>2</sup>  
Protection class: IP65  
All built into a glas fibre  
reinforced polyester  
housing. Dimensions  
HxWxD: 467x600x250  
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

### 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 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

### General ordering data

Type	MULTI-STRIPAX PV	Version	
Order No.	<a href="#">1190490000</a>	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

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## Accessories

### 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 ST		
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 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.	<a href="#">2659350000</a>	Cable ties, 4.5 x 290 mm, Polyamide 66, 220 N	
GTIN (EAN)	4050118682816		
Qty.	100 ST		

### PV-Stick field connectors



Faster is better. This also applies to the cabling of solar systems. Our handy connectors stay firmly in your grip even in frosty temperatures and can be installed very quickly and easily without a crimping tool.

You don't need crimp contacts and crimping tools and you avoid assembly errors. This saves up to 50% installation time – without affecting quality. The new photovoltaic connectors are TÜV-approved and comply with IEC 62852.

Our "SNAP IN" technology enables safe connections with minimal effort – insert, turn: current!

- 1.500 V DC (DE) / 1,500 V DC (EN)
- SNAP IN technology
- Standard-compliant quality in accordance with IEC 62852
- Ergonomic, prize-winning design
- Fastest PV connector currently available
- Reliable latching

### General ordering data

Type	PV-STICK SET	Version	
Order No.	<a href="#">1422030000</a>	Photovoltaics, Plug-in connector	
GTIN (EAN)	4050118225723		
Qty.	1 ST		

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### Accessories

Type	PV-STICK+ VPE10	Version
Order No.	<a href="#">1303450000</a>	Photovoltaics, Plug-in connector
GTIN (EAN)	4050118102468	
Qty.	10 ST	
Type	PV-STICK- VPE10	Version
Order No.	<a href="#">1303490000</a>	Photovoltaics, Plug-in connector
GTIN (EAN)	4050118102529	
Qty.	10 ST	
Type	PV-STICK+ VPE50	Version
Order No.	<a href="#">1303460000</a>	Photovoltaics, Plug-in connector
GTIN (EAN)	4050118102383	
Qty.	50 ST	
Type	PV-STICK- VPE50	Version
Order No.	<a href="#">1303500000</a>	Photovoltaics, Plug-in connector
GTIN (EAN)	4050118102536	
Qty.	50 ST	
Type	PV-STICK+ VPE200	Version
Order No.	<a href="#">1303470000</a>	Photovoltaics, Plug-in connector
GTIN (EAN)	4050118102543	
Qty.	200 ST	
Type	PV-STICK- VPE200	Version
Order No.	<a href="#">1303510000</a>	Photovoltaics, Plug-in connector
GTIN (EAN)	4050118102390	
Qty.	200 ST	

### 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="#">2877850000</a>	Photovoltaics, Y-Connector Cable, 1x WM4 C Female, 2x MC4 Male,
GTIN (EAN)	4064675666417	6mm <sup>2</sup> , 1100 V
Qty.	1 ST	
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	6mm <sup>2</sup> , 1100 V
Qty.	1 ST	

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## Accessories

### Sealing sets



#### General ordering data

Type	BLINDPLUG SET5 7X28MM	Version	
Order No.	<a href="#">3077670000</a>	Photovoltaics, Blind plug	
GTIN (EAN)	4099987081894		
Qty.	1 ST		

Type	BLINDPLUG SET50 7X28MM	Version	
Order No.	<a href="#">3077650000</a>	Photovoltaics, Blind plug, Accessories, Blind plug, 50 pieces	
GTIN (EAN)	4099987081870		
Qty.	1 ST		

### Spare Arrester



#### General ordering data

Type	VPU PV I+II 5 O 1000	Version	
Order No.	<a href="#">2857000000</a>		
GTIN (EAN)	4064675537366		
Qty.	9 ST		

Type	VPU PV I+II 5 OM 1000	Version	
Order No.	<a href="#">2856650000</a>		
GTIN (EAN)	4064675536581		
Qty.	9 ST		

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**Accessories**

**Replacement parts**



**General ordering data**

Type	BRES REPLACEMENT HINGE	Version	
Order No.	<a href="#">3098500000</a>		Photovoltaics, Spare part, Hinge pin, 10 MPP's, 12 MPP's
GTIN (EAN)	4099987 129831		
Qty.	1 ST		
Type	BRES BO-OFM-14-B44-86 W...	Version	
Order No.	<a href="#">3139420000</a>		Photovoltaics, Mounting foot, Spare part, Mounting foot, 10 MPP's,
GTIN (EAN)	4099987378390		12 MPP's
Qty.	1 ST		