

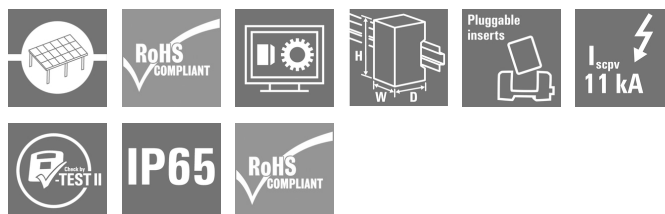
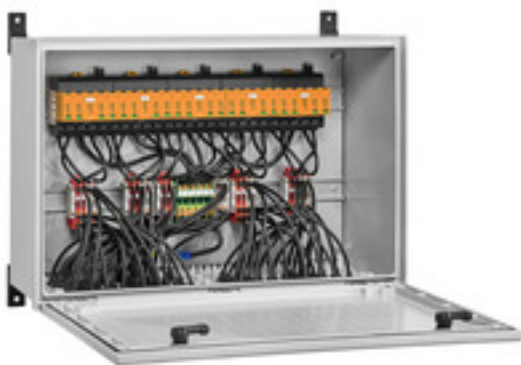
PVC DC 2I 1O 10MPP SPD1R WM4 11
Weidmüller Interface GmbH & Co. KG

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 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, 1100 V, 10 MPP's, 2 Inputs / 1 Output per MPP, Surge protection I / II, WM4C
Order No.	8000112516
Type	PVC DC 2I 1O 10MPP SPD1R WM4 11
GTIN (EAN)	4099986850019
Qty.	1 pc(s).
Replacement parts	2530600000 2534300000 3020600000 3098500000

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Technical data

Dimensions and weights

Depth	256 mm	Depth (inches)	10.079 inch
Height	470 mm	Height (inches)	18.504 inch
Width	600 mm	Width (inches)	23.622 inch
Net weight	15,588.679 g		

Temperatures

Ambient temperature	-25 °C...50 °C	Humidity	5 - 90 %, no condensation
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Approvals and norms

Approvals	EN 61439-2, IEC 61439-2
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Guarantee

Time interval	5 years
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Electrical characteristics

Current per Maximum Power Point, max. 35 A

Rated DC voltage	1,100 V
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Rated short-term current resistance	Rated current	43.75 A
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Enclosure

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

General data

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

Inputs

Amount of maximum power points (MPP)	10		
DC Input + & -	Wire connection	Type of connection	WM4C plug-in connector
		Compatible cable crosssection	EN 50618:2015
		Wire cross-section, min.	4 mm ²
		Wire cross-section, max.	6 mm ²
	Cable entry	Number of cable entries	20

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Technical data

Functional earth connector	Cable entry	Number of cable entries	2
	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
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 conduit inlets	20		
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 ²
	Cable entry	Number of cable entries	1
Number of inputs	20		

Outputs

DC Output + & -	Wire connection	Type of connection	WM4C plug-in connector
		Compatible cable cross-section	TÜV 2 Pfg 1169/08.07
		Wire cross-section, min.	4 mm ²
		Wire cross-section, max.	6 mm ²
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 61643-31
Standby power consumption P_C	<0.2 W	Surge protection DC side	1000 V type I + II
Total discharge current I_{total} (8/20µs)	50 kA	Total discharge current I_{total} (10/350µs)	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		

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Technical data

Tender specification sheets

Long specification

Combiner box for inverters with 10 MPP tracker, suitable for protecting the DC side of a photovoltaic system according to EN 51543-32.

MPP1:

2 inputs, connection via WM4 C connector, compatible with cable type TÜV 2 Pfg 1169/08.07 / EN 50618:2063

1 output, connection via WM4 C connector, compatible with cable type TÜV 2 Pfg 1169/08.07 / EN 50618:2063

MPP2 to 10:

identical to MPP1

Max. string voltage Uoc: 1100V

1 class/type I + II combined arrester with signal contact

Connection of the signal contact via cable glands (8-12mmØ) max. conductor cross-section: 1.5mm²

Connection of the functional earth via cable glands (8-12mmØ) Conductor cross-section: 16-25mm²

Protection class: IP65

All built into a glass fibre reinforced polyester housing. Dimensions HxWxD: 467x600x250 mm

Approval according to low voltage switchgear and controlgear IEC 61439-1:2011 and EN 61439-2:2011

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

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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Technical data

Approvals

Approvals



Approvals MAMID

https://mdcop.weidmueller.com/mediadelivery/rendition/900_319222/-T1z1mm-S800/

ROHS

Conform

Downloads

Approval/Certificate/Document of Conformity

[Declaration of Conformity](#)

Engineering Data

[CAD data – STEP](#)

Technical Documentation

[Schematic diagram](#)

User Documentation

[Manual PV Next String Combiner Box](#)[MANUAL PV NEXT IT/ES/FR](#)

White paper

[Fact Sheet DE PV CB Wie man Gebäude gegen Blitzeinschläge schützt](#)[Fact Sheet DE PV Wie man die Lebensdauer eines GAK verlängert](#)[Fact Sheet DE PV CB Wann Sicherungen zu installieren sind](#)[Fact Sheet EN PV CB When DC fuses are mandatory to install](#)[Fact Sheet EN PV How to protect buildings against lightning strikes](#)[Fact Sheet EN PV How to extend the life time of a Combiner Box](#)[Fact Sheet DE CB PV Strings kombinieren](#)[Fact Sheet EN CB Combining PV strings](#)[Fact Sheet EN PV Combiner Box earthing](#)[Fact Sheet DE PV Combiner Box Erdung](#)

Catalogues

[Catalogues in PDF-format](#)

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Drawings



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Accessories

Sealing sets



General ordering data

Type	BLINDPLUG SET50 7X28MM	Version
Order No.	3077650000	Photovoltaics, Blind plug, Accessories, Blind plug, 50 pieces
GTIN (EAN)	4099987081870	
Qty.	1 pc(s).	
Type	BLINDPLUG SET5 7X28MM	Version
Order No.	3077670000	Photovoltaics, Blind plug
GTIN (EAN)	4099987081894	
Qty.	1 pc(s).	

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 pc(s).	

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Accessories

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.	1422030000	Photovoltaics, Plug-in connector
GTIN (EAN)	4050118225723	
Qty.	1 pc(s).	
Type	PV-STICK+ VPE200	Version
Order No.	1303470000	Photovoltaics, Plug-in connector
GTIN (EAN)	4050118102543	
Qty.	200 pc(s).	
Type	PV-STICK+ VPE50	Version
Order No.	1303460000	Photovoltaics, Plug-in connector
GTIN (EAN)	4050118102383	
Qty.	50 pc(s).	
Type	PV-STICK- VPE10	Version
Order No.	1303490000	Photovoltaics, Plug-in connector
GTIN (EAN)	4050118102529	
Qty.	10 pc(s).	
Type	PV-STICK- VPE200	Version
Order No.	1303510000	Photovoltaics, Plug-in connector
GTIN (EAN)	4050118102390	
Qty.	200 pc(s).	
Type	PV-STICK- VPE50	Version
Order No.	1303500000	Photovoltaics, Plug-in connector
GTIN (EAN)	4050118102536	
Qty.	50 pc(s).	
Type	PV-STICK+ VPE10	Version
Order No.	1303450000	Photovoltaics, Plug-in connector
GTIN (EAN)	4050118102468	
Qty.	10 pc(s).	

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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.	1157820000	Cutting tools, Cutting tool for one-hand operation
GTIN (EAN)	4032248945344	
Qty.	1 pc(s).	

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.	1190490000	Photovoltaics, Plug-in connector
GTIN (EAN)	4032248973262	
Qty.	1 pc(s).	

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Accessories

Y-Connector Cables



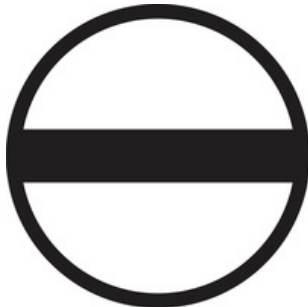
The Y cable is used for the parallel connection of several strings in a PV system, e.g. for splitting a line in front of an inverter.

The cables are available in different connection variants.

General ordering data

Type	PVHYM-M-XXXX6W+11	Version
Order No.	2877850000	Photovoltaics, Y-Connector Cable, 1x WM4 C Female, 2x MC4 Male,
GTIN (EAN)	4064675666417	6mm², 1100 V
Qty.	1 pc(s).	
Type	PVHYM+M+XXXX6W-11	Version
Order No.	2877860000	Photovoltaics, Y-Connector Cable, 1x WM4 C Male, 2x MC4 Female,
GTIN (EAN)	4064675666424	6mm², 1100 V
Qty.	1 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.	2749810000	Screwdriver, Blade width (B): 3.5 mm, Blade length: 100 mm, Blade
GTIN (EAN)	4050118897012	thickness (A): 0.6 mm
Qty.	1 pc(s).	
Type	SDIS 1.0X5.5X125	Version
Order No.	2749850000	Screwdriver, Blade width (B): 5.5 mm, Blade length: 125 mm, Blade
GTIN (EAN)	4050118897050	thickness (A): 1 mm
Qty.	1 pc(s).	

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Replacement parts**Replacement parts****General ordering data**

Type	BRES REPLACEMENT HINGE	Version
Order No.	3098500000	Photovoltaics, Spare part, Hinge pin, 10 MPP's, 12 MPP's
GTIN (EAN)	4099987129831	
Qty.	1 pc(s).	
Type	BRES OFM-14 WALLMOUNT	Version
Order No.	3020600000	Photovoltaics, Mounting foot, 10 MPP's, 12 MPP's
GTIN (EAN)	4099986933705	
Qty.	1 pc(s).	

Spare Arrester**General ordering data**

Type	VPU PV I+II 0 1000	Version
Order No.	2530600000	Surge voltage arrester, Low voltage, Accessories, Surge protection I /
GTIN (EAN)	4050118540819	II, Spare arrester
Qty.	9 pc(s).	
Type	VPU PV I+II 0M 1000	Version
Order No.	2534300000	Surge voltage arrester, Low voltage, Surge protection I / II, Spare
GTIN (EAN)	4050118545906	arrester
Qty.	9 pc(s).	