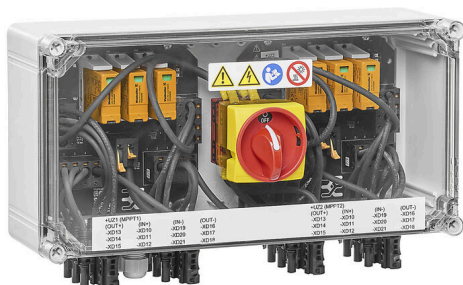


PVN DC 3I 3O 2MPP SW SPD1R EVO 11

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 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, 2 MPP's, 3 Inputs / 3 Outputs per MPP, Surge protection I / II, Switch disconnecter, MC4-Evo 2
Order No.	2890360000
Type	PVN DC 3I 3O 2MPP SW SPD1R EVO 11
GTIN (EAN)	4064675878209
Qty.	1 items

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Technical data

Approvals

Approvals



ROHS Conform

Dimensions and weights

Depth	172 mm	Depth (inches)	6.7716 inch
Height	240 mm	Height (inches)	9.4488 inch
Width	400 mm	Width (inches)	15.748 inch
Net weight	4170 g		

Temperatures

Ambient temperature -40 °C...50 °C Humidity 5...95 %, no condensation

Environmental Product Compliance

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

Included in delivery

Included accessories	Article	Mounting foot
	Quantity	4

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	50 A
Current per Maximum Power Point, max.	45 A	
Rated DC current per connection	Current per string, max.	37.50 A
	Current per string, max.	45.00 A

Enclosure

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

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General data

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

Inputs

Amount of maximum power points (MPP)	2		
Functional earth connector	Cable entry	Number of cable entries	2
		Wire connection	Type of connection Screw connection
	Wire connection	Flexible, max. H05(07) V-K	25 mm ²
		w. wire end ferrule, DIN 46228 pt 1, max.	16 mm ²
Number of conduit inlets	2		
DC Input + & -	Wire connection	Type of connection	Stäubli MC4-Evo 2 connector
		Compatible cable crosssection	TÜV 2 Pfg1169/08.07
		Wire cross-section, min.	2.5 mm ²
		Wire cross-section, max.	16 mm ²
Fuse type	Neither fuse cartridge nor holder		
Fuses	No		
Max. number of DC inputs	per Maximum Power Point 3 inputs connected in parallel		
Number of string inputs per MPP	≤ 3		
Surge protection auxiliary contact	Cable entry	Number of cable entries	2
		Wire connection	Type of connection Tension clamp connection with actuator
	Wire connection	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	3		

Outputs

Max. number of DC outputs	per Maximum Power Point 3 outputs connected in parallel		
DC Output + & -	Wire connection	Type of connection	Stäubli MC4-Evo 2 connector
		Compatible cable crosssection	TÜV 2 Pfg1169/08.07
		Wire cross-section, min.	2.5 mm ²
		Wire cross-section, max.	16 mm ²

Surge protection DC side

Standards	EN 61643-31	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
Standby power consumption PC	<0.2 W	Short-circuit current ISCP	11000 A
Total discharge current Itotal (8/20 μs)	50 kA	Discharge current In (8/20 μs)	20 kA

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Requirements class	Type I/II	Total discharge current I _{total} (10/350µs)	12.5 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. U _{cpv}	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

Rated impulse withstand voltage	8 kV	Switch disconnecter execution	switch in cover
Switching disconnecter capacity	DC-PV1, IEC 60947-3	Motor drive available	No
Rated short-circuit making current	1.4 A	Number of breaking operation cycles at rated current	300
Number of operating cycles	10000		

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	<p>Combiner box for inverters with 2 MPP tracker, suitable for protecting the DC side of a photovoltaic system according to EN 51543-32. MPP1: 3 inputs, connection via MC4-Evo 2 connector, compatible with cable type TÜV 2 Pfg1169/08.07 / EN 50618:2063</p> <p>3 outputs, connection via MC4-Evo 2 connector, compatible with cable type TÜV 2 Pfg1169/08.07 / EN 50618:2063</p> <p>MPP2: identical to MPP1 Max. string voltage U_{oc}: 1100V 1 class/type I + II combined arrester with signal contact With load break switch for safe separation of the string lines 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)</p>
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Conductor cross-section:
16-25mm²
Protection class: IP65
All built into a glas fibre
reinforced polyester
housing. Dimensions
HxWxD: 240x200x172
mm
Approval according to
low voltage switchgear
and controlgear IEC
61439-1:2011 and EN
61439-2:2011

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Drawings

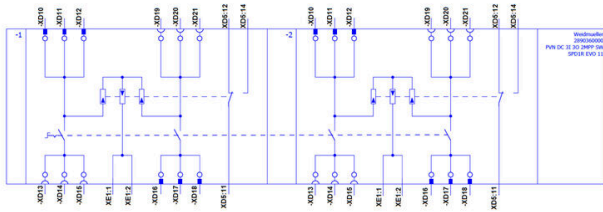


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Accessories

PV Weather protection



General ordering data

Type	PV SUNCOVER 20/40/13 SW	Version	
Order No.	8000143248	Photovoltaics, Sun cover, Switch disconnecter	
GTIN (EAN)	4099987 111874		
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		

Crosshead screwdriver Phillips



Crosshead screwdriver, Phillips, SDK PH DIN 5262, ISO 8764/2-PH, output to ISO 8764-PH, ChromTop tip, SoftFinish grip

General ordering data

Type	SDK PH3	Version	
Order No.	9008500000	Screwdriver, Screwdriver	
GTIN (EAN)	4032248056491		
Qty.	1 ST		

Slotted screwdriver



Slotted screwdriver with rounded blade SD DIN 5265, ISO 2380/2, output to DIN 5264, ISO 2380/1. ChromTop tip, SoftFinish grip

General ordering data

Type	SDS 0.6X3.5X100	Version	
Order No.	9008330000	Screwdriver, Screwdriver	
GTIN (EAN)	4032248056286		
Qty.	1 ST		
Type	SDS 1.0X5.5X150	Version	
Order No.	9008350000	Screwdriver, Screwdriver	
GTIN (EAN)	4032248056316		
Qty.	1 ST		

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Accessories

Accessories



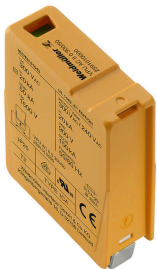
The dust protection cap "Dustcap VSSO" protects the Weidmüller and type 4 solar connectors against dust and dirt.

The "SafetyClip" protects the Weidmüller solar connectors against unintentional opening and can only be released using the special multi-tool.

General ordering data

Type	VSSO WM4 C	Version	
Order No.	1254870000	Photovoltaics, Flat design	
GTIN (EAN)	4050118047479		
Qty.	100 ST		

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

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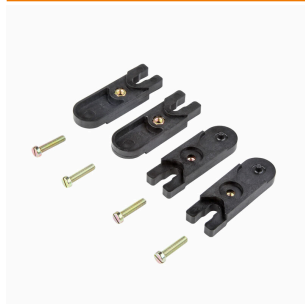
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Accessories

General ordering data

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

External fixing lugs



External attachment lugs 4-part set

General ordering data

Type	MF FPC	Version	
Order No.	9536040000	Version	FPC (polycarbonate empty enclosure), Mounting foot, Fixing lugs,
GTIN (EAN)	4032248009442	Version	Height: 40 mm, Width: 19 mm, Depth: 35.5 mm, Basic material:
Qty.	1 ST	Version	Polyamide, Polyamide 66, Light Grey

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	Version	Photovoltaics, Y-Connector Cable, 1x WM4 C Female, 2x MC4 Male,
GTIN (EAN)	4064675666417	Version	6mm ² , 1100 V
Qty.	1 ST		
Type	PVHYM+M+XXXX6W-11	Version	
Order No.	2877860000	Version	Photovoltaics, Y-Connector Cable, 1x WM4 C Male, 2x MC4 Female,
GTIN (EAN)	4064675666424	Version	6mm ² , 1100 V
Qty.	1 ST		

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Accessories

Sealing sets



General ordering data

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