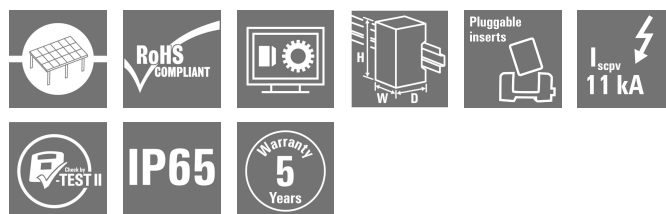


**PVN1M6I4SXFV101TXPX10**
**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

[www.weidmueller.com](http://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, 1000 V, 6 MPP's, 2 Inputs / 1 Output per MPP, Surge protection I / II, WM4C
Order No.	<a href="#">2737620000</a>
Type	PVN1M6I4SXFV101TXPX10
GTIN (EAN)	4050118824896
Qty.	1 items

# PVN1M6I4SXFV101TXPX10

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## Technical data

### Approvals

Approvals



ROHS Conform

### Dimensions and weights

Depth	175 mm	Depth (inches)	6.8898 inch
Height	334 mm	Height (inches)	13.1496 inch
Width	558 mm	Width (inches)	21.9685 inch
Net weight	6947 g		

### Temperatures

Ambient temperature -40 °C...50 °C Humidity 5 - 90 %, 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	1000 V
Rated short-term current resistance	Rated current 37.5 A
Current per Maximum Power Point, max.	30 A
Rated DC current per connection	Current per string, max. 30.00 A

### Enclosure

Insulating material	Polyester glass-fibre reinforced, Polycarbonate	Type of mounting	Wall mounting, 4 screws
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 WM4C

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**Technical data**
**General data**

Standards	EN 61643-31	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	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>
Number of conduit inlets	12		
DC Input + & -	Wire connection	Type of connection	WM4C plug-in connector
		Compatible cable crossection	EN 50618:2015
		Wire cross-section, min.	4 mm <sup>2</sup>
		Wire cross-section, max.	6 mm <sup>2</sup>
	Cable entry	Number of cable entries	12
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	Cable diameter, min.	5 mm
		Cable diameter, max.	10 mm
		Cable gland	M 16
	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	12		

**Outputs**

Max. number of DC outputs	per Maximum Power Point 1 output		
DC Output + & -	Wire connection	Type of connection	WM4C plug-in connector
		Compatible cable crossection	TÜV 2 Pfg 1169/08.07
		Wire cross-section, min.	4 mm <sup>2</sup>
		Wire cross-section, max.	6 mm <sup>2</sup>

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## Technical data

### 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 I <sub>total</sub> (8/20 µs)	50 kA	Discharge current I <sub>n</sub> (8/20 µs)	20 kA
Requirements class	Type I/II	Total discharge current I <sub>total</sub> (10/350 µs)	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 <sub>cpv</sub>	1100 V
Maximum continuous operating voltage DC UCPV mode +/-, -/PE, +/PE	1100 V		

### DC load break switch

Switch disconnecter execution	no switch
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### Important note

Product information	<p>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:</p> <p>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</p>
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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 EN 51543-32. MPP1:</p> <p>2 inputs, connection via WM4 C connector, compatible with cable type TÜV 2 Pfg1169/08.07 / EN 50618:2063</p> <p>1 output, connection via WM4 C connector, compatible with cable type TÜV 2 Pfg1169/08.07 / EN 50618:2063</p> <p>MPP2 to 6: identical to MPP1 Max. string voltage U<sub>oc</sub>: 1000V</p> <p>1 class/type I + II combined arrester with signal contact</p> <p>Connection of the signal contact via cable glands (8-12mmØ) max. conductor cross-section: 1.5mm<sup>2</sup></p> <p>Connection of the functional earth via cable glands (8-12mmØ)</p>
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## Technical data

Conductor cross-section:  
16-25mm<sup>2</sup>  
Protection class: IP65  
All built into a glas fibre  
reinforced polyester  
housing. Dimensions  
HxWxD: 334x558x175  
mm  
Approval according to  
low voltage switchgear  
and controlgear IEC  
61439-1:2011 and EN  
61439-2:2011

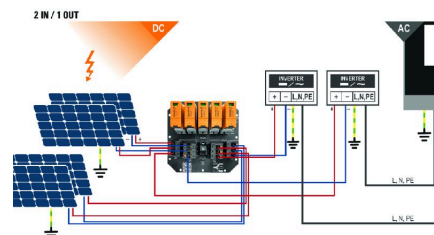
## PVN1M6I4SXFV101TXPX10

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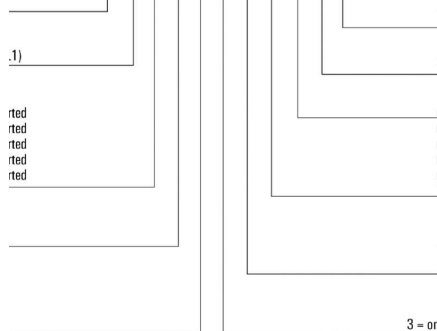
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# Drawings

## PCB design



PVN 1 M2 I6 S0 F3 V1 01 TX PX 10

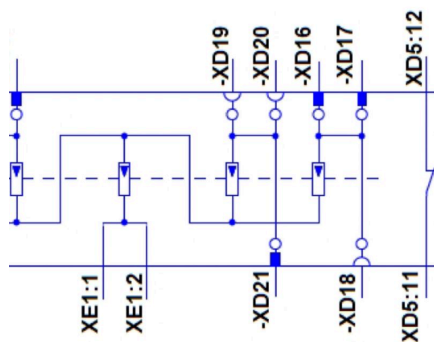


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# Drawings



**PVN1M6I4SXFV101TXPX10**
**Weidmüller Interface GmbH & Co. KG**

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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 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	

**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



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## Accessories

### 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 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.	<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	

### External fixing lugs



The enclosures of the TBF series are made of extremely tough glass fibre-reinforced polyester. These enclosures are ideal for applications that call for low weight coupled with high shock resistance. The weather-resistant TBF enclosures are designed for a wide range of applications. Together with their comprehensive range of accessories, they provide universal solutions for accommodating built-in items such as regulators, measuring instruments, valves and other equipment.

#### Features:

- 9 sizes in 2 versions, with grey and transparent lids
- Cover with nylon screws
- Fixing holes outside the sealed area
- Thread for fitting to terminal rails and mounting plates
- Comprehensive accessories
- Weidmüller can manufacture and supply this enclosure to match customer specifications, fitted with all necessary terminals and cable glands.

### General ordering data

Type	MF TBF	Version
Order No.	<a href="#">0360800000</a>	TBF (polyester empty enclosure), Mounting foot, Fixing lugs, Height: 72.5 mm, Width: 24 mm, Depth: 12 mm, Basic material: Polyamide, Polyamide 66, Deep black
GTIN (EAN)	4008190108595	
Qty.	1 ST	

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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+ 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	

### 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.	<a href="#">1254870000</a>	Photovoltaics, Flat design
GTIN (EAN)	4050118047479	
Qty.	100 ST	

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## Accessories

### UV-resistant cable ties

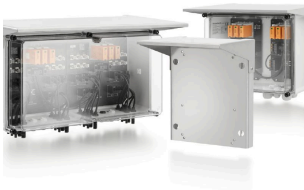


UV-resistant polyamide 6.6 ensures long durability of our special cable ties even with strong UV radiation. Ideal for continuous outdoor use.

#### 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 ST		

### PV Sun Covers



#### General ordering data

Type	PV SUN COVER 56/30/21	Version	
Order No.	<a href="#">8000087025</a>	Photovoltaics	
GTIN (EAN)	4064675845188		
Qty.	1 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	6mm², 1100 V	
Qty.	1 ST		

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## Accessories

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	

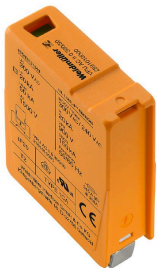
## Sealing sets



### 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 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 ST	
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 ST	

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## Counterpart

### PV-Stick field connectors



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