

PVN1M2I6S0FXV100TXPX10**Weidmüller Interface GmbH & Co. KG**Klingenbergsstraße 26
D-32758 Detmold
Germanywww.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, 1000 V, 2 MPP's, 3 Inputs / 3 Outputs per MPP, Surge protection I / II, Switch disconnector, Cable gland
Order No.	2683150000
Type	PVN1M2I6S0FXV100TXPX10
GTIN (EAN)	4050118700060
Qty.	1 items
Delivery status	This article will no longer be available in the future.
Available until	2023-07-31T00:00:00+02:00
Alternative product	PVN DC 3I 3O 2MPP SW SPD1R CG 11

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Technical data

Approvals

Approvals



ROHS Conform

Dimensions and weights

Depth	214 mm	Depth (inches)	8.4252 inch
Depth with add-on components	215 mm	Height	330 mm
Height (inches)	12.9921 inch	Width	372 mm
Width (inches)	14.6456 inch	Net weight	4600 g

Temperatures

Ambient temperature	-40 °C...50 °C	Humidity	5 - 90 %, no condensation
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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

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

Rated DC voltage	1000 V		
Rated short-term current resistance	Rated current	56.25 A	
Current per Maximum Power Point, max. 45 A			
Rated DC current per connection	Current per string, max.	45.00 A	

Enclosure

Cover	with cover, removable	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 foots	Connection type string	Internal terminal (with cable gland feed-through)

General data

Protection degree	IP65	Installation location	Protected outdoor area (Land and Sea)
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Inputs

Amount of maximum power points (MPP)	2		
Functional earth connector	Cable entry	Number of cable entries	2
		Cable diameter, min.	5 mm
Number of conduit inlets	Wire connection	Cable diameter, max.	10 mm
		Cable gland	M 16
DC Input + & -	Wire connection	Type of connection	Screw connection
		Flexible, max. H05(07) 25 mm ² V-K	
Fuse type	Neither fuse cartridge nor holder	w. wire end ferrule, DIN 46228 pt 1, max.	16 mm ²
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
		Cable diameter, min.	5 mm
Number of inputs	Wire connection	Cable diameter, max.	10 mm
		Cable gland	M 16
	Type of connection	Tension clamp connection with actuator	
		Flexible, max. H05(07) 1.5 mm ² V-K	
	w. wire end ferrule, DIN 46228 pt 1, max.		1.5 mm ²

Number of inputs 6

Outputs

Max. number of DC outputs	per Maximum Power Point 3 outputs connected in parallel		
DC Output + & -	Wire connection	Type of connection	PUSH IN

Surge protection DC side

Lightning test current limp (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 ISCPV	11000 A	Total discharge current Itotal (8/20µs)	50 kA
Discharge current In (8/20 µs)	20 kA	Requirements class	Type I/II
Total discharge current Itotal (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

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PV system voltage, max. Ucpv	1100 V	Maximum continuous operating voltage 1100 V DC UCPV mode +/-, -/PE, +/PE
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DC load break switch

Switch disconnector execution	switch in cover	Switching disconnector capacity	DC-PV1, IEC 60947-3
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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 2 MPP tracker, suitable for protecting the DC side of a photovoltaic system according to EN 51543-32. MPP1: 3 inputs, connection via M25 cable gland with 3x7mm Ø cable entry. PUSH IN connection / 2.5 - 6mm ² single-wire, multi-wire, with/without ferrule. 3 outputs, connection via M25 cable gland with 3x7mm Ø cable entry. PUSH IN connection / 2.5 - 6mm ² single-wire, multi-wire, with/without ferrule. MPP2: identical to MPP1 Max. string voltage Uoc: 1000V 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: 1.5mm ² Connection of the functional earth via cable glands (8-12mmØ) Conductor cross-section: 16-25mm ² Protection class: IP65 All built into a glass fibre reinforced polyester housing. Dimensions
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HxWxD: 330x372x214

mm

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

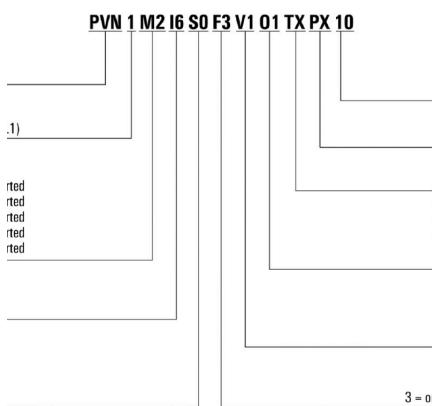
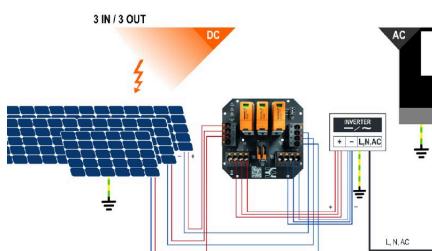
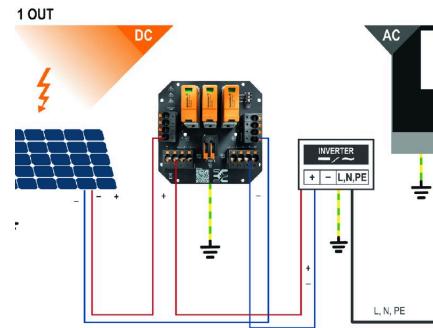
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Drawings

PCB design



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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.	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

General ordering data

Type	MULTI-STRIPAX PV	Version
Order No.	1190490000	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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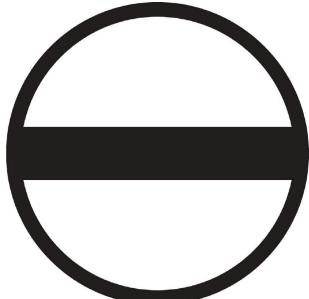
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Accessories

General ordering data

Type	SDIK PH3 X 150	Version
Order No.	2749910000	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.	2749810000	Screwdriver, Blade width (B): 3.5 mm, Blade length: 100 mm, Blade
GTIN (EAN)	4050118897012	thickness (A): 0.6 mm
Qty.	1 ST	
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 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.	0360800000	TBF (polyester empty enclosure), Mounting foot, Fixing lugs, Height:
GTIN (EAN)	4008190108595	72.5 mm, Width: 24 mm, Depth: 12 mm, Basic material: Polyamide,
Qty.	1 ST	Polyamide 66, Deep black

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Accessories



General ordering data

Type	SL SET PV NEXT	Version
Order No.	2729230000	Photovoltaics
GTIN (EAN)	4050118804508	
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.	2659350000	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 37/30/18	Version
Order No.	8000087024	Photovoltaics
GTIN (EAN)	4064675845171	
Qty.	1 ST	

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