Data sheet

PVN1M6I4SXFXV1O1TXPX10

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, 1000 V, 6 MPP´s, 2 Inputs / 1 Output per MPP, Surge protection I / II, WM4C
Order No.	2737620000
Type	PVN1M6I4SXFXV1O1TXPX10
GTIN (EAN)	4050118824896
Qty.	1 items

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Technical data

Approvals

Approvals	CE
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 foots
Protection class	II	Connection type string	Plug WM4C

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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)	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 mm²
		w. wire end ferrule, DIN 46228 pt 1, max.	16 mm²
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 mm²
		Wire cross-section, max.	6 mm²
	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 mm²
		w. wire end ferrule, DIN 46228 pt 1, max.	1.5 mm²
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 Pfg1169/08.07
		Wire cross-section, min.	4 mm²
		Wire cross-section, max.	6 mm²

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Surge protection DC side

Standards	EN 61643-31	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 curent 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	PV system voltage, max. Ucpv	1100 V
Maximum continuous operating voltage DC UCPV mode +/-, -/PE, +/PE	1100 V		

DC load break switch

Switch disconnector execution	no switch

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

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 6 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 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 6: identical to MPP1 Max. string voltage Uoc: 1000V 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)

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	Conductor cross-section: 16-25mm² 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

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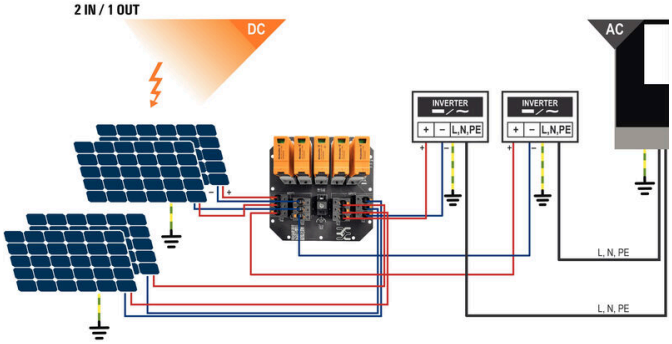
Drawings

PCB design



PVN 1 M2 I6 S0 F3 V1 O1 TX PX 10

Series
PVN = PV Next
VPU = PV Protect

Level
1 = DC trunk box (L1)

Series
1 = 1 MPPT supported
2 = 2 MPPT supported
3 = 3 MPPT supported
4 = 4 MPPT supported
6 = 6 MPPT supported

Inputs
1...12 inputs

Switch
x = n/a
0 = manual switch
1 = remote switch

Voltage
10 = 1kV
11 = 1,1kV
15 = 1,5kV

Powersupply
x = n/a

Monitoring
x = n/a

Output Type
0 = CG
1 = WM4C
2 = MC4-Evo 2

SPD
2/0 = TYP II
1 = TYP I+II
X = No SPD

Fuses
x = n/a
3 = only fuse holders

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