

PVN1M2I6SXFV2O0TXPX10**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, 1000 V, 2 MPP's, 3 Inputs / 3 Outputs per MPP, Surge protection II, Cable gland
Order No.	2683320000
Type	PVN1M2I6SXFV2O0TXPX10
GTIN (EAN)	4050118700008
Qty.	1 pc(s).
Delivery status	Discontinued
Available until	2023-07-31
Replacement parts	2530660000
Alternative product	2890570000

Creation date July 4, 2025 3:02:21 AM CEST

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Technical data
Dimensions and weights

Depth	175 mm	Depth (inches)	6.89 inch
Height	330 mm	Height (inches)	12.992 inch
Width	372 mm	Width (inches)	14.646 inch
Net weight	5,917 g		

Temperatures

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

Monitoring function	Non monitored
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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. 30 A

Rated DC voltage		1,000 V
Rated short-term current resistance	Rated current	37.5 A

Enclosure

Connection type string	Internal terminal (with cable gland feed-through)	Cover	with cover, removeable
Enclosure attachment	Via mounting foots	Impact resistance	IK08 in accordance with IEC 62208, IK10 in accordance with IEC 62262
Insulating material	Polyester glass-fibre reinforced, Polycarbonate	Type of mounting	Wall mounting, 4 screws

General data

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

Amount of maximum power points (MPP)		2	
DC Input + & -	Wire connection	Type of connection	PUSH IN
		Compatible cable crossection	EN 50618:2015, TÜV 2 Pfg 1169/08.07
		Wire cross-section, min.	2.5 mm ²
		Wire cross-section, max.	16 mm ²

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Functional earth connector	Cable entry	Number of cable entries	2
		Cable diameter, min.	5
		Cable diameter, max.	10
		Cable glands	M 16
	Wire connection	Type of connection	Screw connection
		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 3 inputs connected in parallel		
Number of string inputs per MPP	≤ 3		
Surge protection auxiliary contact	Wire connection	Type of connection	Tension clamp connection with actuator
		Flexible, max. H05(07) V-K	1.5 mm ²
		w. wire end ferrule, DIN 46228 pt 1, max.	1.5 mm ²
	Cable entry	Number of cable entries	2
		Cable diameter, min.	5
		Cable diameter, max.	10
		Cable glands	M 16
Number of inputs	6		

Outputs

DC Output + & -	Wire connection	Type of connection	PUSH IN
		Compatible cable crossection	TÜV 2 Pfg 1169/08.07, EN 50618:2015
		Wire cross-section, min.	2.5 mm ²
		Wire cross-section, max.	16 mm ²
Max. number of DC outputs	per Maximum Power Point 3 outputs connected in parallel		

Surge protection DC side

Discharge current I_n (8/20 µs)	20 kA	Discharge current, max. (8/20 µs)	40 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 (+/-)	≤ 3.8 kV	Protection level U_p (+/PE)	≤ 3.8 kV
Protection level U_p (-/PE)	≤ 3.8 kV	Requirements class	Type II
Short-circuit current I_{SCPv}	11,000 A	Standby power consumption P_C	< 0.2 W
Total discharge current I_{total} (8/20 µs)	50		

DC load break switch

Switch disconnector execution	no switch
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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		

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 - 6mm² single-wire, multi-wire, with/without ferrule.

3 outputs, connection via M25 cable gland with 3x7mm Ø cable entry. PUSH IN connection / 2.5 - 6mm² single-wire, multi-wire, with/without ferrule.

MPP2:

identical to MPP1

Max. string voltage Uoc: 1000V

1 class/type II 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: 330x372x175 mm

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

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Approvals

Approvals



Approvals MAMID

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

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

Important note

Product information	<p>The SCIP number was assigned due to a lead content of more than 0.1 % of the net weight.</p> <p>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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Downloads

Approval/Certificate/Document of Conformity	EU Declaration of Conformity
Engineering Data	CAD data – PV Next Schematic Diagram CAD data – STEP
Technical Documentation	customer drawing
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 DE CB PV NEXT Fact Sheet EN PV CB When DC fuses are mandatory to install Fact Sheet EN CB PV NEXT 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

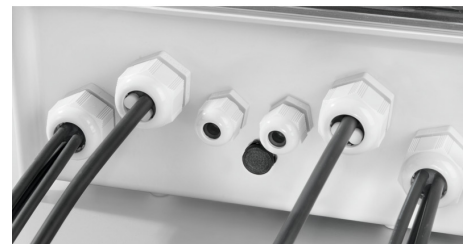
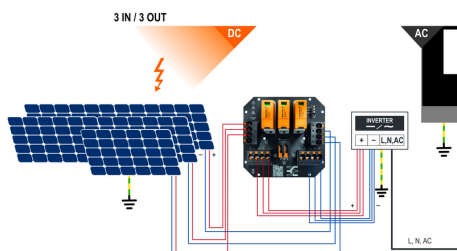
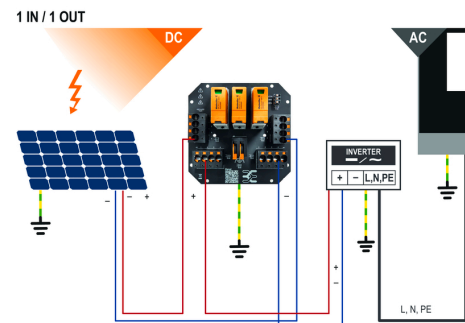
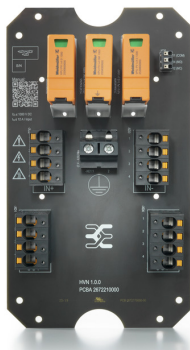
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Drawings

PCB design



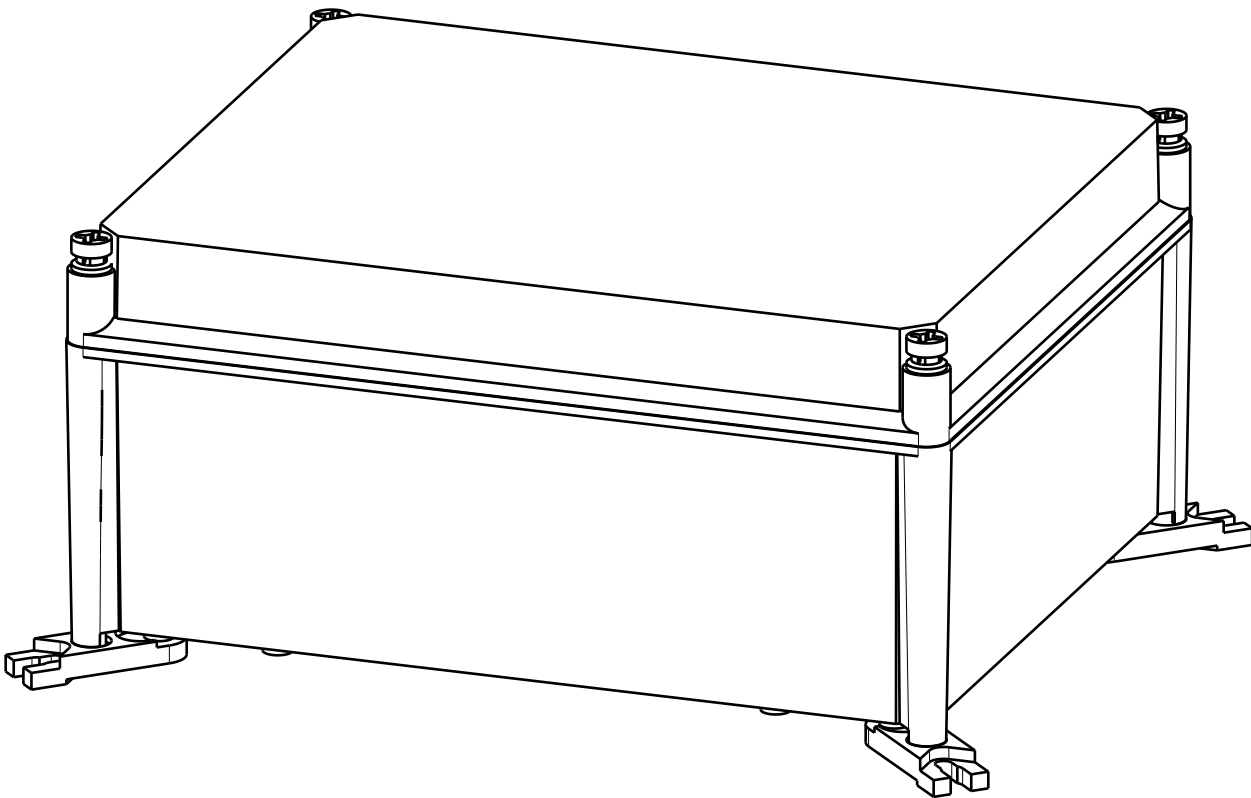
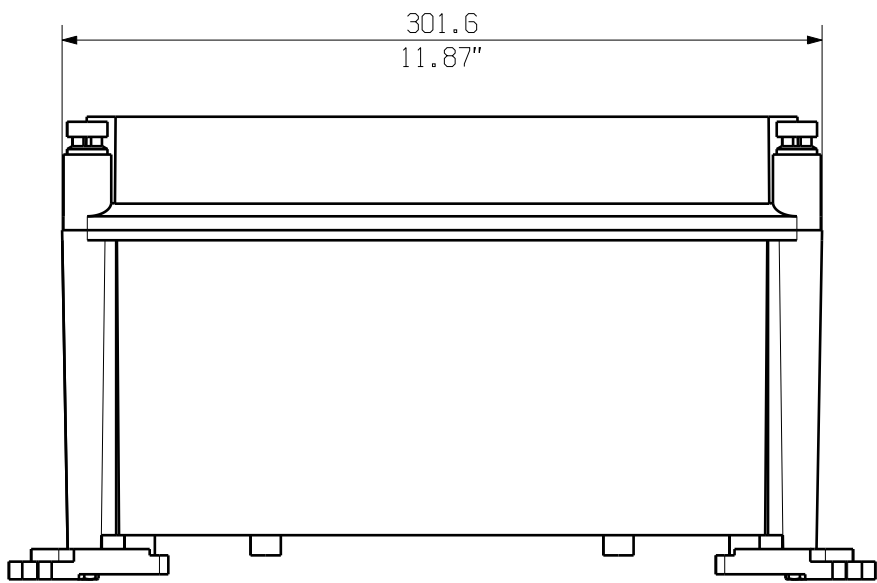
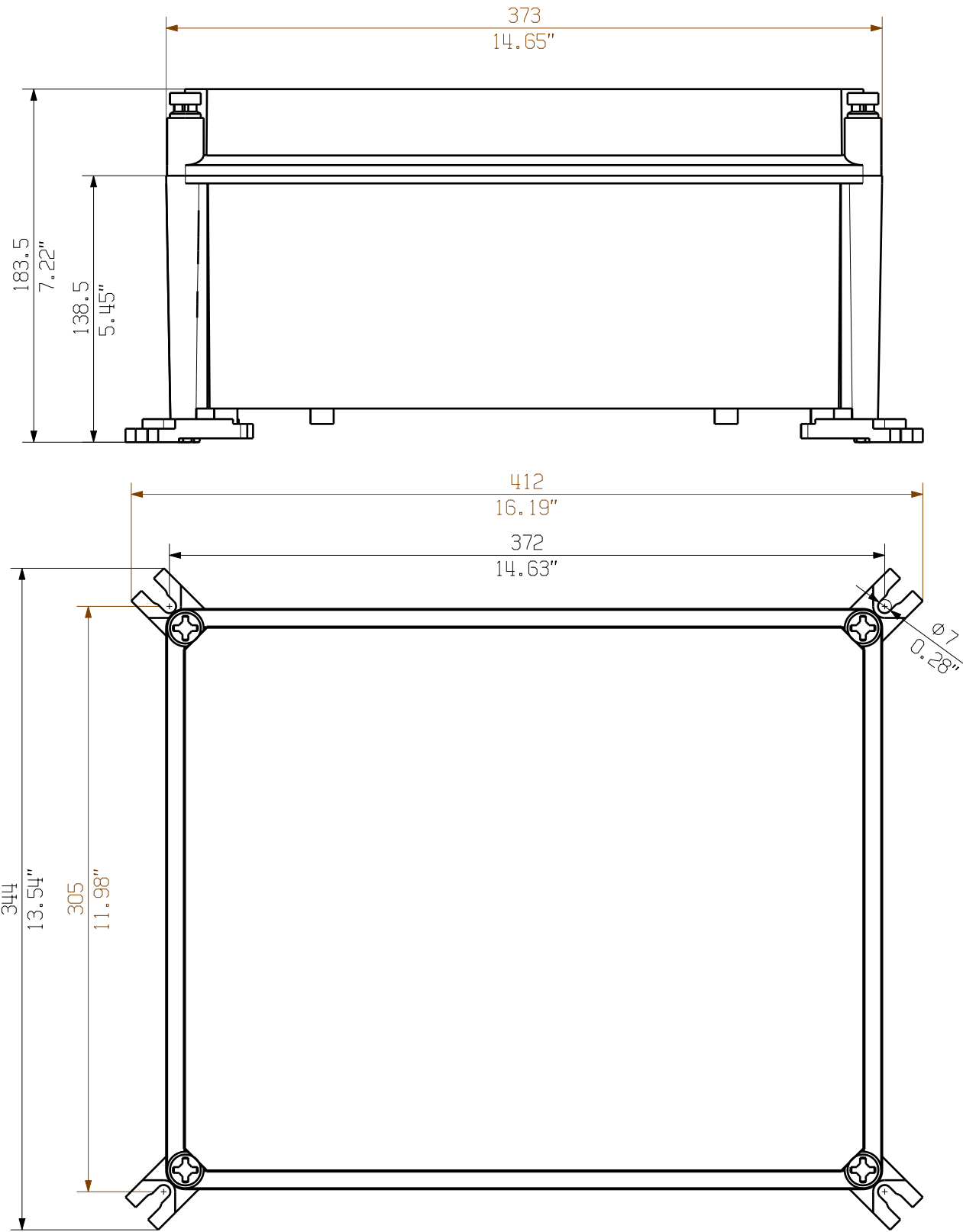
PVN 1 M2 I6 S0 F3 V1 Q1 TX PX 10									
Series		Voltage		Powersupply		Monitoring		Output Type	
PVN = PV Next		10 ~ 1kV		x = n/a		x = n/a		0 = GG	
VPU = PV Protect		11 ~ 1.1kV						1 = VMAC	
Level		Inputs		Switch		Fuses			
1 = DC trunk box (L1)		1..12 inputs		x = n/a		3 = only fuse holders			
Series		SPD							
1 = 1 MPPT supported		0 = TYP II							
2 = 2 MPPT supported		1 = TYP I+II							
3 = 3 MPPT supported		X = No SPD							
4 = 4 MPPT supported									
6 = 6 MPPT supported									

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Dimensions without tolerances are no check dimensions

The English version is binding



Darstellung mit Zubehoer
Shown with accessory 0360800000 MF TBF

Nicht im Lieferumfang enthalten!
Not included in delivery!

		Prim PLM Part No.: 1175097		Prim ERP Part No.:	
First Issue Date 29.01.2020	Max. nos.		Weidmüller 		71729 Drawing no. Issue no. Sheet 01 of 01 sheets
	Modification				
		Date	Name	PVN TBF 373018 COMBINERBOX RESIDENTIAL/COMMERCIAL COMBINERBOX RESIDENTIAL/COMMERCIAL	
	Drawn	29.01.2020	Brüntrup, Anna		
Responsible		Wohlgemuth, Kl			
Approved	31.01.2020	Püschner, Klau			
Scale: 1/3 Size: A3				Product file:	
Drawings Customer					