

PVN1M1I3S0F3V2O0TXPX10

Weidmüller Interface GmbH & Co. KG
 Klingenbergstraße 26
 D-32758 Detmold
 Germany

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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 EN 51543-32. 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, 1 MPP, 3 Inputs / 3 Outputs per MPP, With fuse holder, Surge protection II, Switch disconnecter, Cable gland
Order No.	2683250000
Type	PVN1M1I3S0F3V2O0TXPX10
GTIN (EAN)	4050118700183
Qty.	1 pc(s).
Delivery status	This article will no longer be available in the future.
Available until	2024-03-31
Alternative product	2683050000

Creation date July 7, 2023 10:29:26 AM CEST

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Technical data

Dimensions and weights

Depth	214 mm	Depth (inches)	8.425 inch
Depth with add-on components	215 mm	Height	330 mm
Height (inches)	12.992 inch	Width	302 mm
Width (inches)	11.89 inch	Net weight	3,244 g

Temperatures

Ambient temperature	-40 °C...+45 °C	Humidity	5 - 90 %, no condensation
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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 current per connection	Current per string, max.	30 A
Rated short-term current resistance	Rated current	37.5 A
Rated DC voltage	1,000 V	
Switching disconnecter capacity	DC-PV1, IEC 60947-3	

Enclosure

Connection type String	Internal terminal (with cable gland feed-through)	Cover	with cover, removeable
Enclosure attachment		Impact resistance	IK08 in accordance with IEC 62208, IK10 in accordance with IEC 62262
Insulating material	Via mounting foots Polyester glass-fibre reinforced, Polycarbonate	Switch disconnecter execution	switch in cover
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	1 MPP		
DC Input + & -	Wire connection	Type of connection	PUSH IN
		Compatible cable cross-section	TÜV 2 Pfg 1169/08.07, EN 50618:2015
		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	Empty fuse holder			
Fuse-link standard	IEC 60269-1, IEC 60269-6, gPV (EN 60269-6)			
Max. number of DC inputs	per Maximum Power Point 3 inputs connected in parallel			
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		

Outputs

DC Output + & -	Wire connection	Type of connection	PUSH IN
		Compatible cable crossection	TÜV 2 Pfg1169/08.07, 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 μ s)	20 kA	Discharge current, max. (8/20 μ s)	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 μ s)	50 kA		

Classifications

ETIM 6.0	EC002928	ETIM 7.0	EC002928
ETIM 8.0	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

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Tender specification sheets

Long specification

Combiner box for inverters with 1 Mpp-tracker, used to protect the DC side. Max. String voltage Uoc: 1000 V

MPPT1:
 Up to 3 inputs, connection via M25 cable gland with 3x7mm Ø cable entry (for positive and negative one each)
 PUSH IN connection / 2.5 - 6mm² single-wire, multi-wire, with/without ferrule
 6 Fuse holder (order fuses 10x38 separately)
 Up to 3 outputs, connection via M25 cable gland with 3x7mm Ø cable entry (for positive and negative one each)
 PUSH IN connection / 2.5 - 6mm² single-wire, multi-wire, with/without ferrule

with DC switch
 1 surge protection 1000 V type II with remote contact

Connection of the signal contact via cable glands (8-12mmØ) max. cable cross-section: 1.5mm²
 Connection of functional earth via cable glands (8-12mmØ) cable cross-section: 16mm²
 Protection class: IP65
 Plastic enclosure
 Dimensions HxWxD: 302x302x175 mm

According to standard, Low-voltage switchgear assemblies - Part 1: General specifications, (IEC 61439-1:2011), BS EN 61439-2:2033

Important note

Product information Fuses are not included

Approvals

Approvals



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Technical data
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 07_PV-Fact-Sheet-CB-Lasttrennschalter_DE.pdf 06_PV-Fact-Sheet-CB-PV-Strings-kombinieren-DE.pdf 05_PV-Fact-Sheet-CB-Richtig-verbinden_DE.pdf 07_PV-Fact-Sheet-CB-Load-break-switch_EN.pdf 06_PV-Fact-Sheet-CB-Combining-PV-strings_EN.pdf 05_PV-Fact-Sheet-CB-Connection_EN.pdf
Catalogues	Catalogues in PDF-format

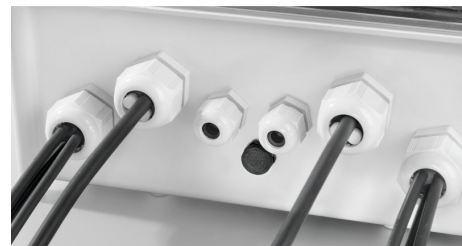
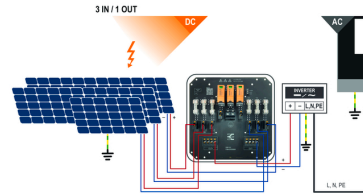
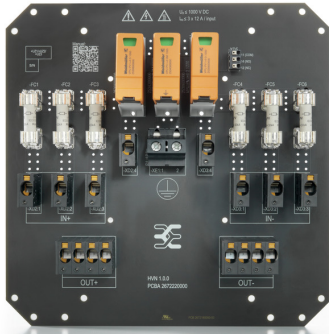
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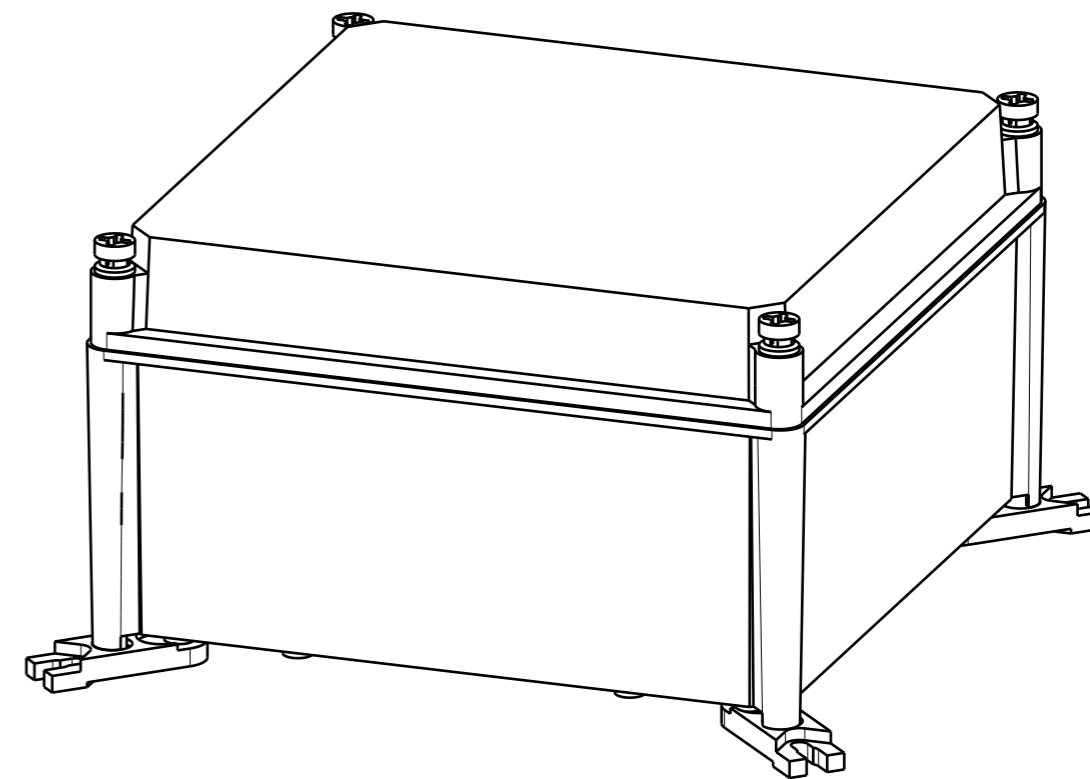
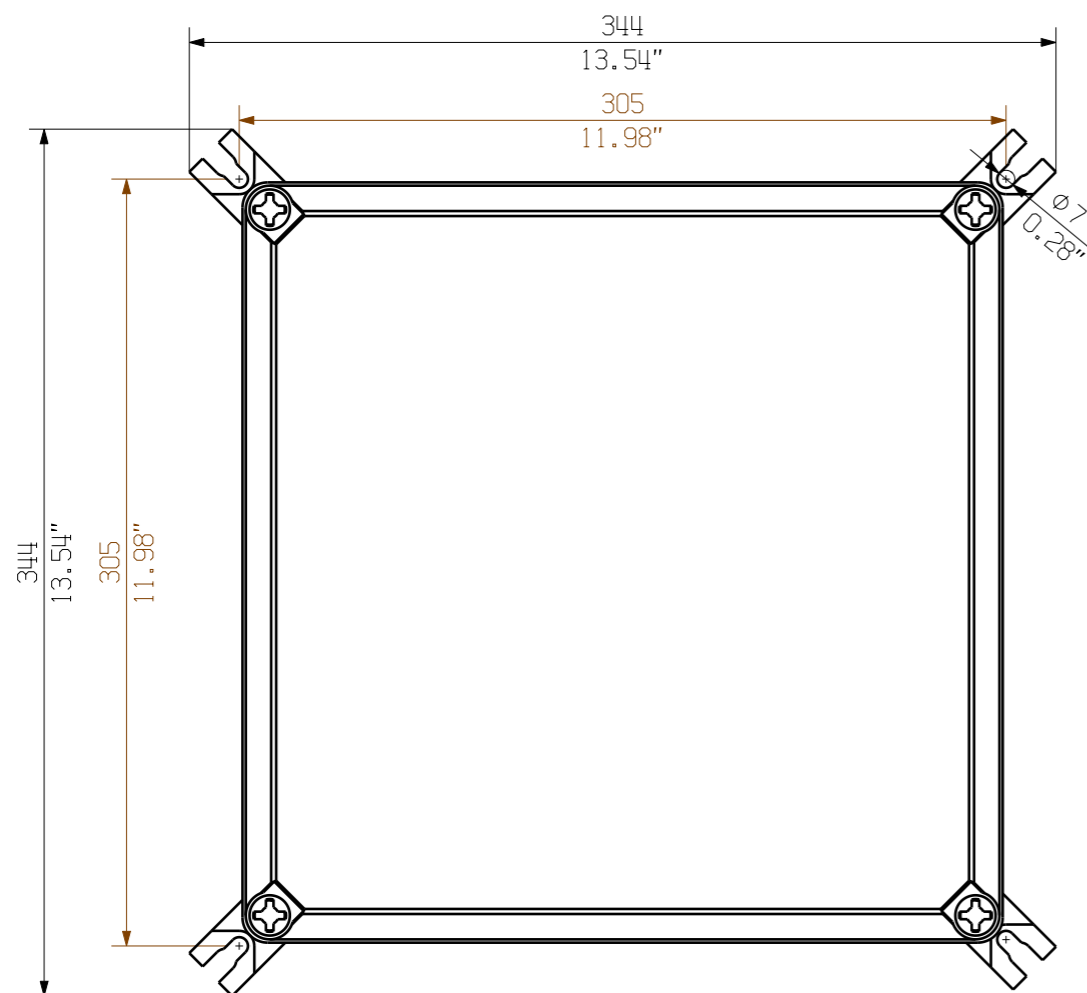
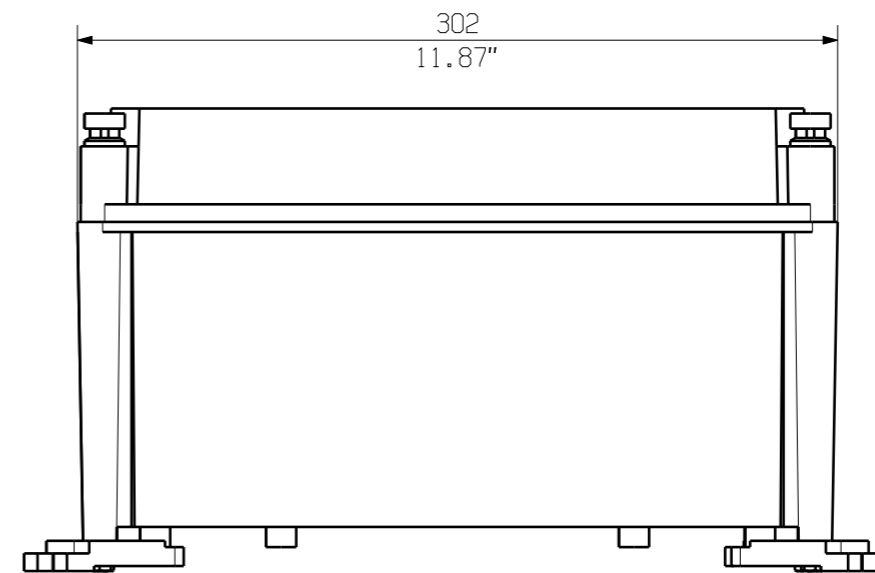
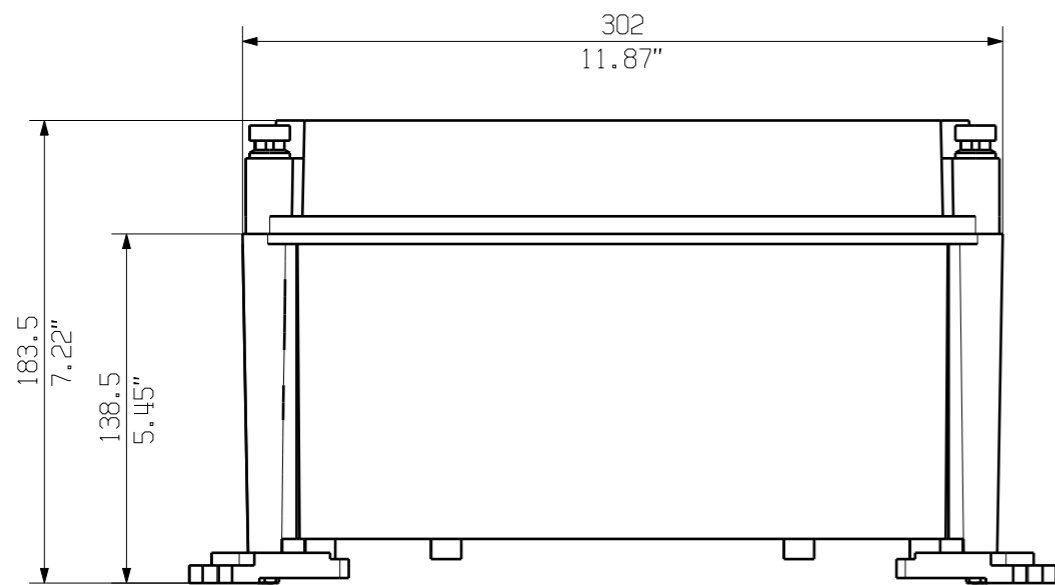
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Drawings

PCB design



PVN 1 M2 I6 S0 F3 V1 Q1 TX PX 10	
Series	Voltage
PVN = PV Next	10 = 1kV
VPU = PV Protect	11 = 1.1kV
	15 = 1.5kV
Level	Power supply
1 = DC trunk box (L1)	x = n/a
Series	Monitoring
1 = 1 MPPT supported	x = n/a
2 = 2 MPPT supported	
3 = 3 MPPT supported	Output Type
4 = 4 MPPT supported	0 = EG
6 = 6 MPPT supported	1 = VMAC
	2 = MCA-Exp 2
Inputs	SPD
1..12 inputs	0 = TYP II
Switch	1 = TYP I+II
x = n/a	X = No SPD
0 = manual switch	Fuses
1 = remote switch	x = n/a
	3 = only fuse holders



Darstellung mit Zubehoer
Shown with accessory 036080000 MF TBF

Nicht im Lieferumfang enthalten!
Not included in delivery!

First Issue Date 29.01.2020		Max. nos. Modification		Prim PLM Part No.: 1174506		Prim ERP Part No.:	
Scale: 1/3		Size: A3				71730 Drawing no. Issue no. 0 Sheet 01 of 01 sheets	
Drawings Customer		Drawn: 29.01.2020, Brüntrup, Anna Responsible: Wohlgemuth, Kl Approved: 31.01.2020, Püschner, Klau		PVN TBF 303018 COMBINERBOX RESIDENTIAL/COMMERCIAL COMBINERBOX RESIDENTIAL/COMMERCIAL			
				Product file:			

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