

PVN1M2I6SXFV2O0TXPX10
Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com



PV Next: PV-Next, PV generator junction box for combination of 1-6 strings (input and output side) and connection to the inverter. Intelligent innovative design individual for every customer application. Advanced overvoltage protection, optional fuses and switch-disconnectors for optimum operation and safety for the system. In addition, all PV generator junction boxes comply with IEC/EN 61439-2 for maximum reliability of each component.

General ordering data

Version	Photovoltaics, Combiner Box, 1000 V, 2 MPPT's, 3 Inputs / 3 Outputs per MPPT, Surge protection II, Cable gland
Order No.	2683320000
Type	PVN1M2I6SXFV2O0TXPX10
GTIN (EAN)	4050118700008
Qty.	1 pc(s).
Replacement parts	2530660000

Creation date September 18, 2022 1:16:22 AM CEST

Catalogue status 09.09.2022 / We reserve the right to make technical changes.

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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	5,964 g		

Temperatures

Ambient temperature	-25 °C...+50 °C	Humidity	5 - 90 %, no condensation
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Environmental Product Compliance

REACH SVHC	Lead 7439-92-1	SCIP	bdab5698-6a20-4370-8e28-8810d88
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Guarantee

Time interval	5 years
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Electrical characteristics

Current per MPPT, max.		30 A	
Rated DC current per connection	Current per string, max.	30 A	
	Ambient temperature	-25 °C...+50 °C	
	Short-circuit at main output	Factor	1.25 * I _{nc}
		Duration	10 h
Rated DC voltage		1,000 V DC	

Enclosure

Connection type String	Internal terminal (with cable gland feed-through)	Cover	with cover, removeable
Enclosure attachment	Via the four holes under the cover screws	Insulating material	Polyester glass-fibre reinforced, Polycarbonate
Switch disconnecter execution	no switch	Type of mounting	Wall mounting, 4 screws

General data

Installation location	Protected outdoor area (>1 km from sea)	Protection degree	IP65
Standards	IEC 61439-2 ed 2.0, EN 61439-2:2011		

Inputs

Amount of Maximum Power Point Tracking	2 MPPT		
DC Input + & -	Wire connection	Type of connection	PUSH IN
		Compatible cable crossection	EN 50618:2015, TÜV 2 Pfg1169/08.07
		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		
Max. number of DC inputs	per Maximum Power Point Tracking 3 inputs connected in parallel		
Surge protection auxiliary contact	Cable entry	Number of cable entries	2
		Cable diameter, min.	5
		Cable diameter, max.	10
		Cable glands	M 16
	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

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 Tracking 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 UCPV mode +/-, -/PE, +/-PE	1,100 V DC	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	Standards	IEC 61439-2 ed 2.0, EN 61439-2:2011
Standby power consumption P_C	< 0.2 W	Surge protection DC side	1000 V type II with remote contact, 1000 V type II
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 2 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

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

MPPT 2 is identical to
MPPT 1

without DC switch
2 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:
372x302x175 mm

According to standard,
Low-voltage switchgear
assemblies -
Part 1: General
specifications, (IEC
61439-1:2011), BS EN
61439-2:2040

Approvals

Approvals



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www.weidmueller.com**Technical data****Downloads**Approval/Certificate/Document of
Conformity[EU Declaration of Conformity](#)

Engineering Data

[CAD data – PV Next Schematic Diagram](#)[CAD data – STEP](#)[Application notes – Fact Sheet DE PV CB Wie man Gebäude gegen Blitzeinschläge schützt](#)[Application notes – Fact Sheet DE PV Wie man die Lebensdauer eines GAK verlängert](#)[Application notes – Fact Sheet DE PV CB Wann Sicherungen zu installieren sind](#)[Application notes – Fact Sheet DE CB PV NEXT](#)[Application notes – Fact Sheet EN PV CB When DC fuses are mandatory to install](#)[Application notes – Fact Sheet EN CB PV NEXT](#)[Application notes – Fact Sheet EN PV How to protect buildings against lightning strikes](#)[Application notes – Fact Sheet EN PV How to extend the life time of a Combiner Box](#)

Technical Documentation

[customer drawing](#)

User Documentation

[Manual PV Next String Combiner Box](#)[MANUAL PV NEXT IT/ES/FR](#)

Catalogues

[Catalogues in PDF-format](#)

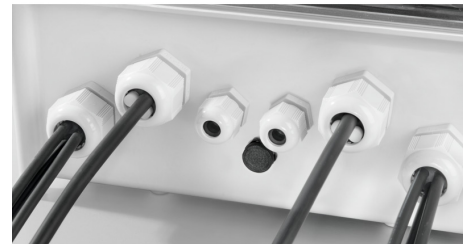
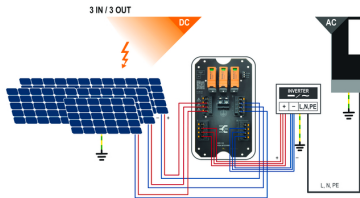
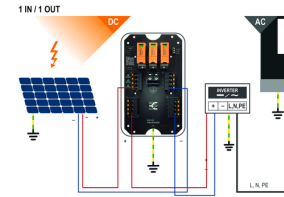
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Drawings

PCB design



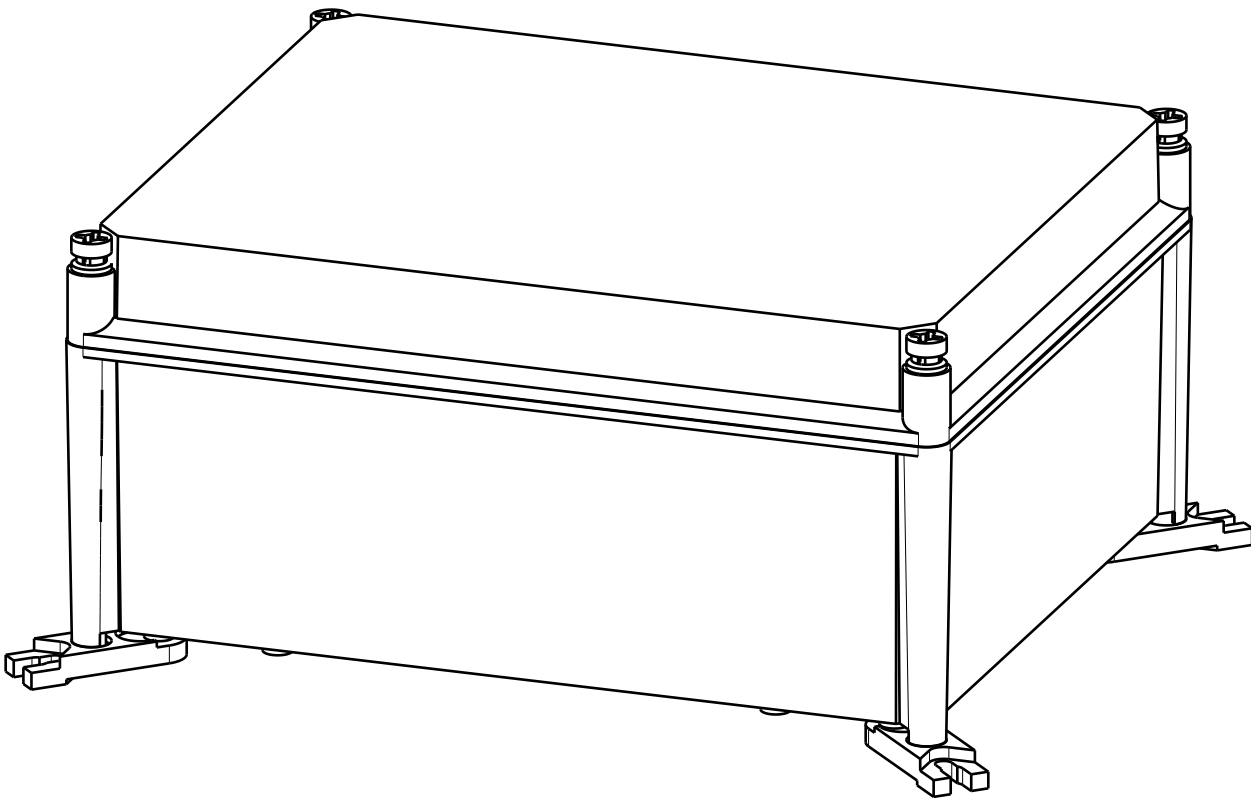
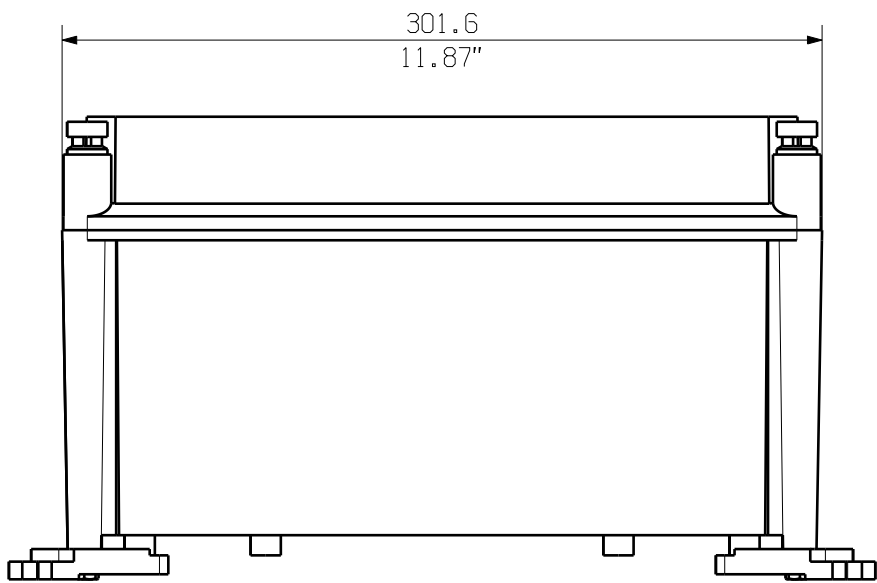
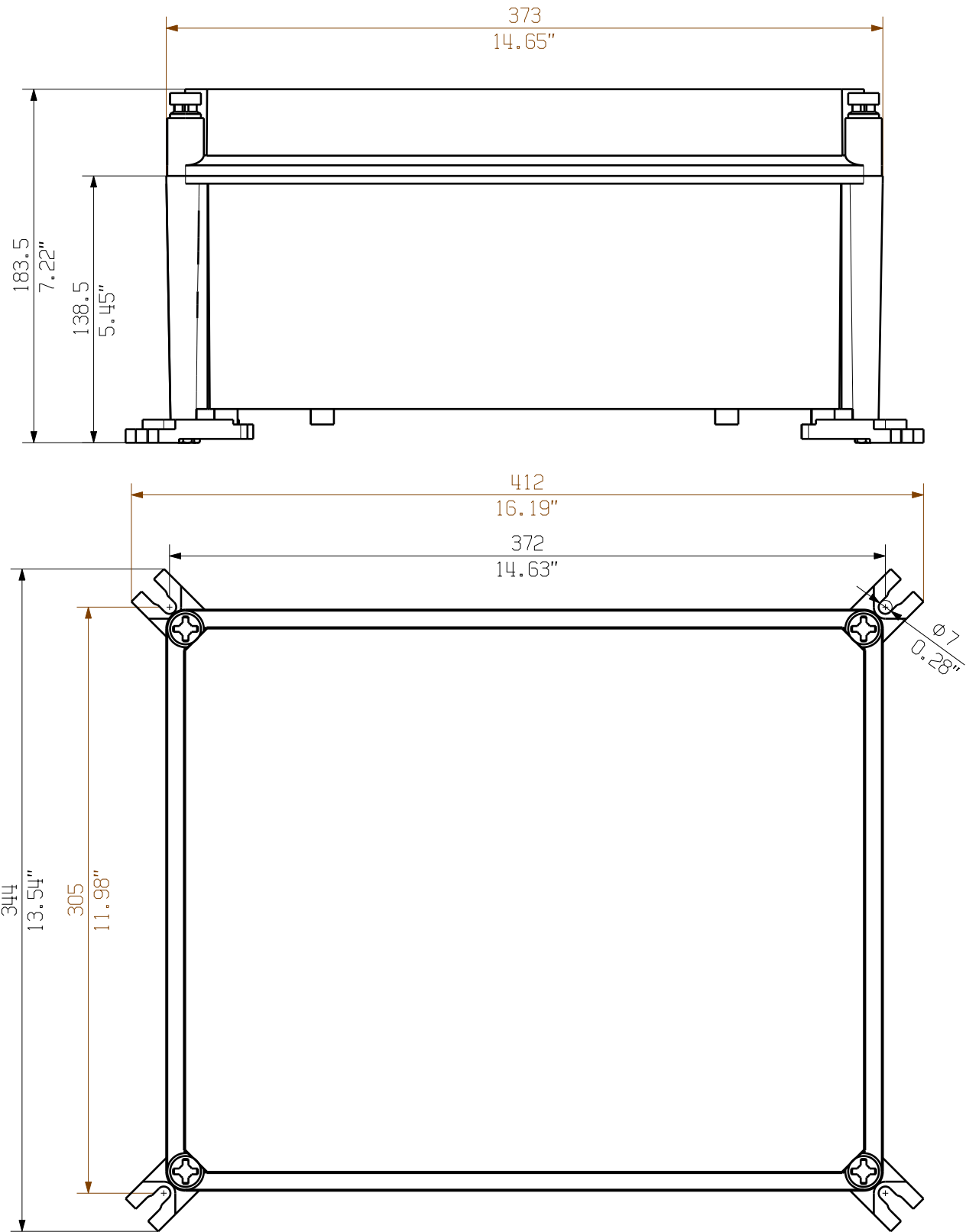
PVN 1 M2 I6 S0 F3 V1 Q1 TX PX 10									
Series		Voltage		Powersupply		Monitoring		Output Type	
PVN = PV Next		10 ~ 1kV		x = n/a		x = n/a		0 = GG	
VPU = PV Protect		11 ~ 1.1kV						1 = VMAC	
		15 ~ 1.5kV						2 = MCA-5m 2	
Level		Inputs		Switch		SPD		Fuses	
1 = DC trunk box (L1)		1..12 inputs		x = n/a		0 = TYP II		x = n/a	
Series				0 = manual switch		1 = TYP I-II		3 = only fuse holders	
1 = 1 MPPT supported				1 = remote switch		X = No SPD			
2 = 2 MPPT supported									
3 = 3 MPPT supported									
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			
		Modification				Drawing no.		Issue no.	
				Date		Name		PVN TBF 373018 COMBINERBOX RESIDENTIAL/COMMERCIAL COMBINERBOX RESIDENTIAL/COMMERCIAL	
		Drawn		29.01.2020		Brüntrup, Anna			
		Responsible				Wohlgemuth, Kl			
Scale: 1/3		Size: A3		Approved		31.01.2020			
Drawings Customer				Product file:					

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