

PVN1M1I3SXFV100TXPX10

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, 1 MPPT, 3 Inputs / 3 Outputs per MPPT, Surge protection I / II, Cable gland
Order No.	2683110000
Type	PVN1M1I3SXFV100TXPX10
GTIN (EAN)	4050118699722
Qty.	1 pc(s).

Creation date April 16, 2021 8:05:47 AM CEST

Catalogue status 09.04.2021 / 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	186 mm	Height (inches)	7.323 inch
Net weight	3,816 g	Width	302 mm
Width (inches)	11.89 inch		

Temperatures

Ambient temperature	-25 °C...+50 °C
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Electrical characteristics

Rated DC current per connection	Rated current	10 A	
	Ambient temperature	-25 °C...+50 °C	
	Short-circuit at main output	Duration	10 h
		Factor	1.25 * I _{nc}
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

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	1 MPPT		
DC Input + & -	Wire connection	Type of connection	PUSH IN
		Compatible cable cross-section	EN 50618:2015, TÜV 2 Pfg 1169/08.07
		Wire cross-section, min.	2.5 mm ²
		Wire cross-section, max.	16 mm ²
Functional earth connector	Cable entry	Number of cable entries	1
		Cable diameter, min.	5 mm
		Cable diameter, max.	10 mm
		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		

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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	1
		Cable diameter, min.	5 mm
		Cable diameter, max.	10 mm
		Cable glands	M 16

Outputs

DC Output + & -	Wire connection	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
Lightning test current I_{imp} (10/350 μ s)	6.25 kA	PV system voltage, max. U_{cpv}	1,100 V
Protection level U_p mode (+/-, -/PE, +/- PE)	≤ 3.8 kV	Protection level U_p mode (+/-)	≤ 3.8 kV
Protection level U_p mode (-/PE)	≤ 3.8 kV	Protection level U_p mode (+/PE)	≤ 3.8 kV
Requirements class	Type I/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 I + II with remote contact, 1000 V type I + II	Total discharge current I_{total} (8/20 μ s)	50 kA
Total discharge current I_{total} (10/350 μ s)	12.5 kA		

Classifications

ETIM 6.0	EC002928	ETIM 7.0	EC002928
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

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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
 U_{oc}: 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
 without DC switch
 1 surge protection 1000
 V type I + 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:
 186x302x175 mm
 According to standard,
 Low-voltage switchgear
 assemblies -
 Part 1: General
 specifications, (IEC
 61439-1:2011), BS EN
 61439-2:2019

Downloads

Approval/Certificate/Document of Conformity	EU Declaration of Conformity
Engineering Data	PV Next Schematic Diagram STEP
Technical Documentation	customer drawing
User Documentation	Manual PV Next String Combiner Box MANUAL PV NEXT IT/ES/FR
Brochure/Catalogue	Catalogues in PDF-format

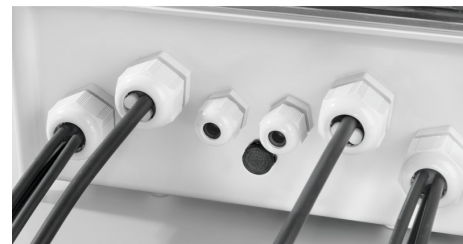
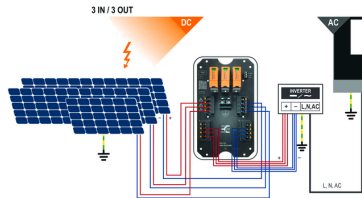
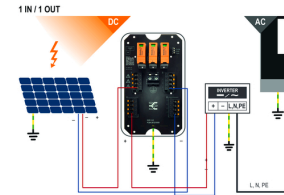
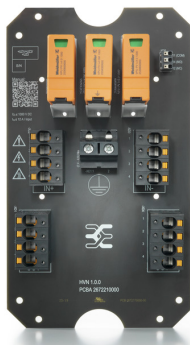
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Drawings

PCB design



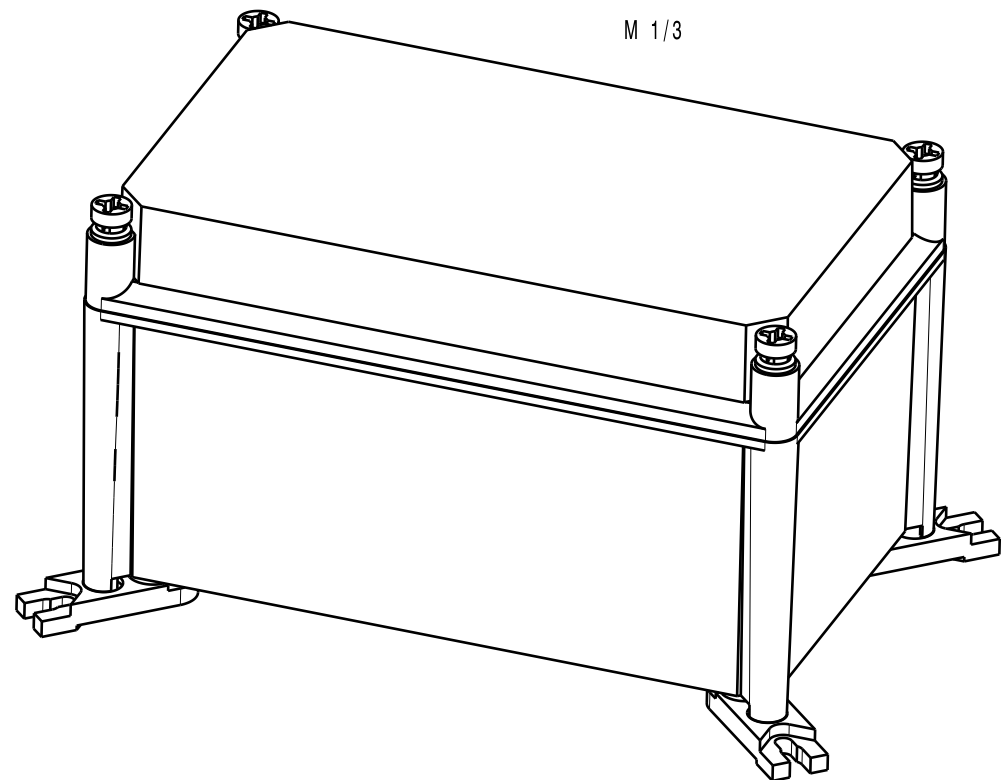
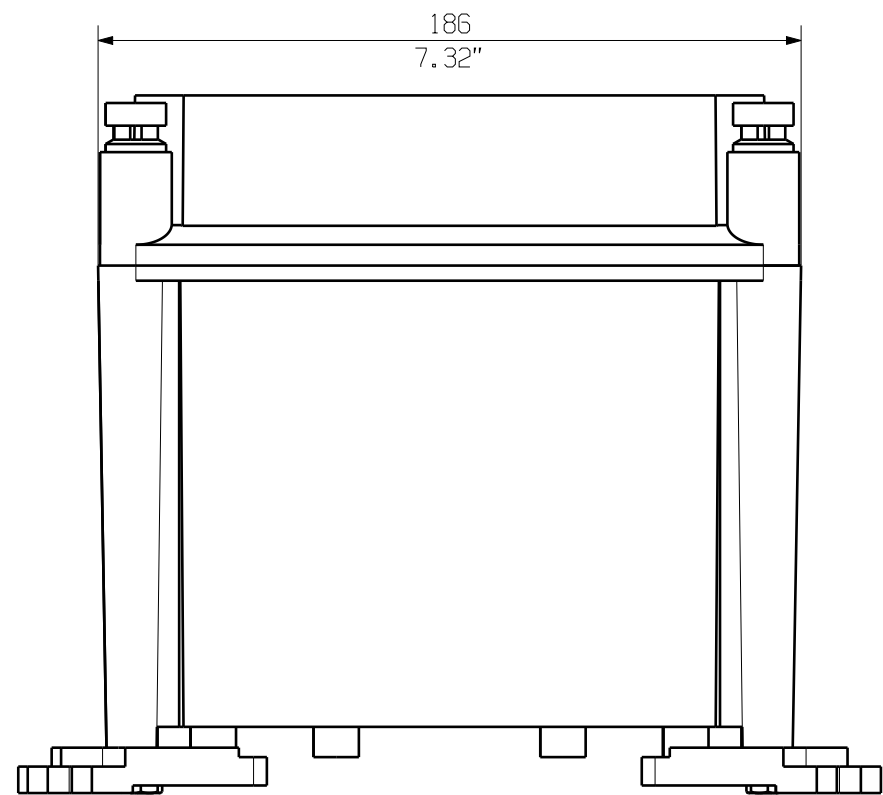
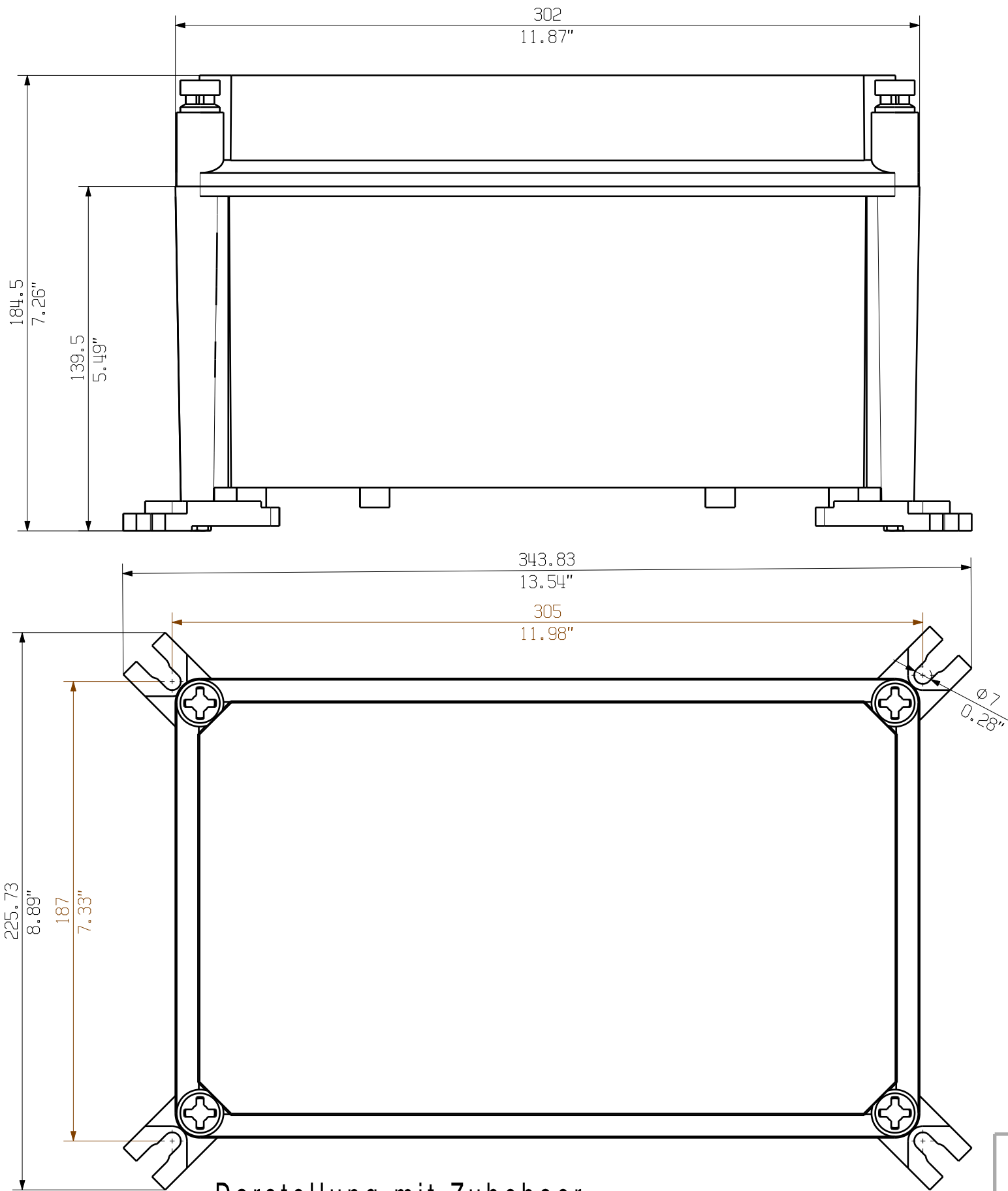
PVN 1 M2 I6 S0 F3 V1 01 TX PX 10	
Series PVN = PV Next VPU = PV Protect	Voltage 10 = 10V 15 = 15.5kV
Level 1 = DC trunk box (L1)	Powersupply x = n/a
Series 1 = 1 MPPT supported 2 = 2 MPPT supported 3 = 3 MPPT supported 4 = 4 MPPT supported 5 = 5 MPPT supported 6 = 6 MPPT supported	Monitoring x = n/a
Inputs 1..12 inputs	Output Type 0 = CG 1 = WMAC
Switch x = n/a 0 = manual switch	SPD 2 = TYP II 1 = TYP I+II
	Fuses x = n/a 3 = only fuse holders

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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.: 1215112		Prim ERP Part No.:	
First Issue Date 29.01.2020	Max. nos.		Weidmüller 		71728 Drawing no. Issue no. Sheet 01 of 01 sheets
	Modification				
		Date	Name		
	Drawn	29.01.2020	Brüntrup, Anna		
	Responsible		Wohlgemuth, Kl		
Scale: 1/2 Size: A3	Approved	31.01.2020	Püschner, Klau		
Drawings Customer			Product file:		
			PVN TBF 301918 COMBINERBOX RESIDENTIAL/COMMERCIAL COMBINERBOX RESIDENTIAL/COMMERCIAL		