

PVN1M1I3SXFV101TXPX10**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

Product image

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, WM4C
Order No.	2683170000
Type	PVN1M1I3SXFV101TXPX10
GTIN (EAN)	4050118700077
Qty.	1 pc(s).

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Technical data

Dimensions and weights

Depth	175 mm	Depth (inches)	6.89 inch
Height	302 mm	Height (inches)	11.89 inch
Net weight	2,340 g	Width	186 mm
Width (inches)	7.323 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	Plug WM4C	Cover	with cover, removeable
Enclosure attachment	Via the four holes under the cover screws	Insulating material	Ployester 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	WM4C plug-in connector
		Compatible cable crossection	EN 50618:2015, TÜV 2 Pfg 1169/08.07
		Wire cross-section, min.	2.5 mm ²
		Wire cross-section, max.	6 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	Type of connection	WM4C plug-in connector
		Compatible cable cross-section	TÜV 2 Pfg 1169/08.07, EN 50618:2015
		Wire cross-section, min.	4 mm ²
		Wire cross-section, max.	6 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_{SCP}	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
Uoc: 1000 V

MPPT1:
Up to 3 inputs, connection
via WM4 C connector
compatible with cable type
TÜV 2 Pfg1169/08.07 /
EN 50618:2029
Up to 3 outputs,
connection via WM4 C
connector compatible
with cable type TÜV 2
Pfg1169/08.07 / EN
50618:2029

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
61439-2:2025

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](#)

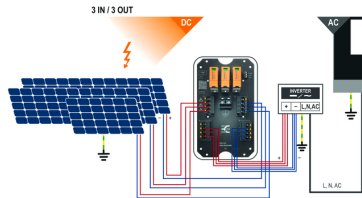
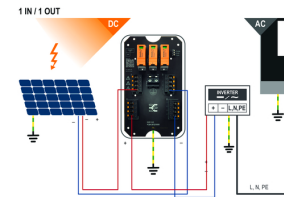
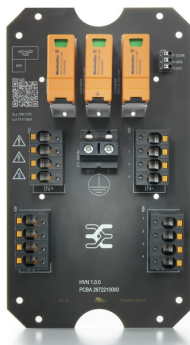
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Drawings

PCB design



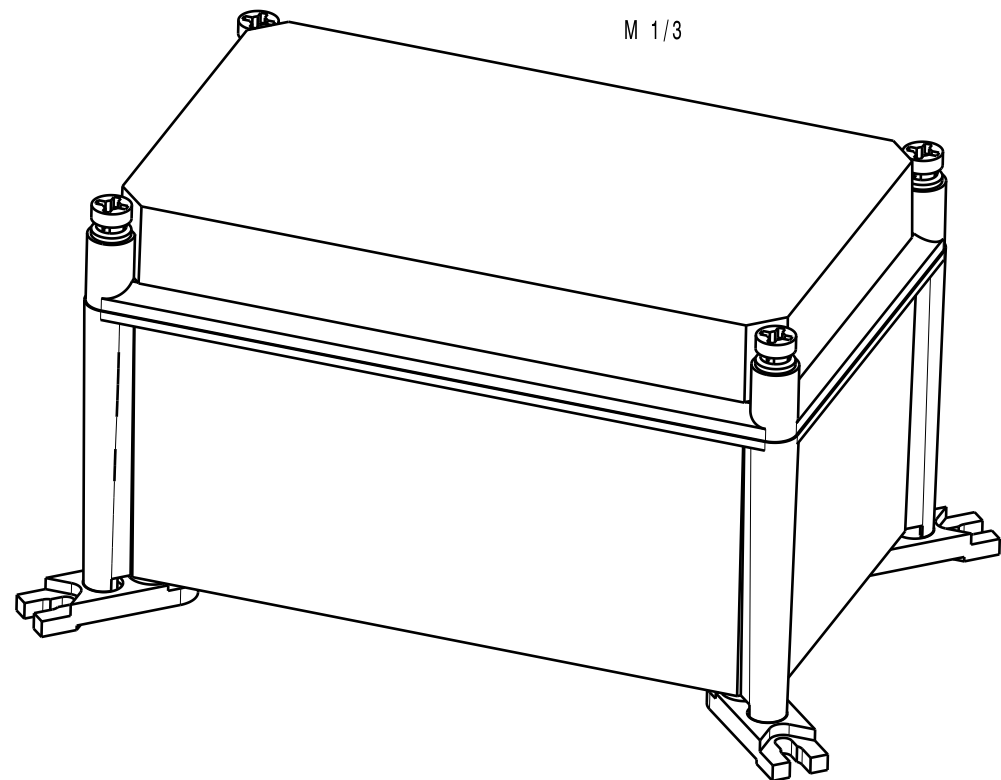
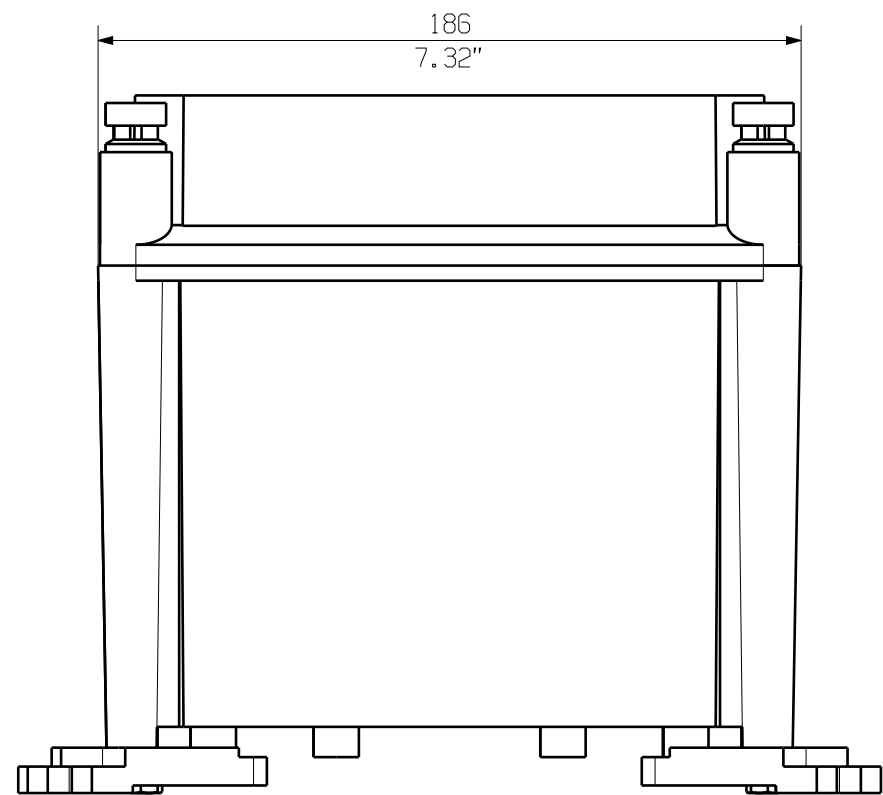
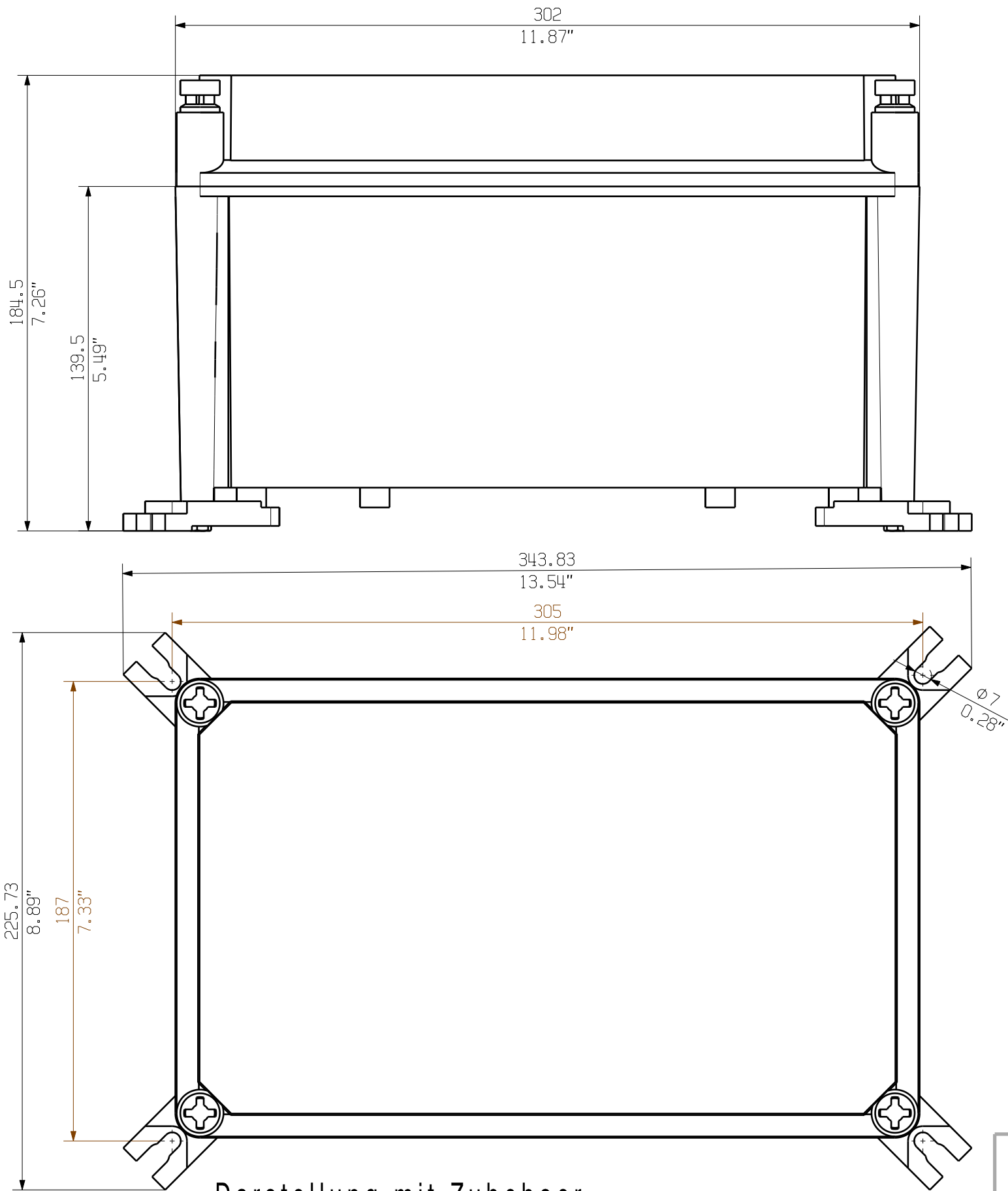
PVN 1 M2 I6 S0 F3 V1 01 TX PX 10									
Series PVN = PV Next VPU = PV Protect									Voltage 10 = 10V 15 = 15kV
Level 1 = DC trunk box (L1)									Powersupply x = n/a
Series 1 = 1 MPPT supported 2 = 2 MPPT supported 3 = 3 MPPT supported 4 = 4 MPPT supported 5 = 5 MPPT supported 6 = 6 MPPT supported									Monitoring x = n/a
Inputs 1...12 inputs									Output Type 0 = GG 1 = WMAAC
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	
	Modification			Drawing no.	Issue no.
		Drawn	Date 29.01.2020	Name Brüntrup, Anna	0
		Responsible		Wohlgemuth, Kl	
Scale: 1/2	Size: A3	Approved	31.01.2020	Püschner, Klau	
Drawings Customer				Product file:	
				Sheet 01 of 01 sheets	

PVN TBF 301918
COMBINERBOX RESIDENTIAL/COMMERCIAL
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