

PVN1M3I9S0FXV101TXPX10**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

Product image

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, PV Next, 1000 V, 3 MPP's, 3 Inputs / 3 Outputs per MPP, Surge protection I / II, Switch disconnecter, WM4C
Order No.	2683220000
Type	PVN1M3I9S0FXV101TXPX10
GTIN (EAN)	4050118700084
Qty.	1 pc(s).
Delivery status	This article will no longer be available in the future.
Available until	2025-12-31
Replacement parts	2530600000 2534300000

Creation date April 22, 2025 10:20:44 PM CEST

Catalogue status 22.04.2025 / We reserve the right to make technical changes.

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Technical data
Dimensions and weights

Depth	249 mm	Depth (inches)	9.803 inch
Depth with add-on components	250 mm	Height	334 mm
Height (inches)	13.15 inch	Width	558 mm
Width (inches)	21.968 inch	Net weight	6,900 g

Temperatures

Ambient temperature	-40 °C...50 °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. 45 A

Rated DC voltage	1,000 V
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Rated short-term current resistance	Rated current	56.25 A
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Enclosure

Connection type string	Plug WM4C	Cover	with cover, removeable
Enclosure attachment		Impact resistance	IK08 in accordance with IEC 62208, IK10 in accordance with IEC 62262
	Via mounting foots		
Insulating material	Polyester glass-fibre reinforced, Polycarbonate	Protection class	II
Type of mounting	Wall mounting, 4 screws		

General data

Installation location	Protected outdoor area (Land and Sea)	Protection degree	IP65
Standards	EN 61643-31		

Inputs

Amount of maximum power points (MPP)	3		
DC Input + & -	Wire connection	Type of connection	WM4C plug-in connector
		Compatible cable crossection	EN 50618:2015
		Wire cross-section, min.	2.5 mm ²
		Wire cross-section, max.	6 mm ²

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Functional earth connector	Cable entry	Number of cable entries	2
		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		
Fuses	No		
Max. number of DC inputs	per Maximum Power Point 3 inputs connected in parallel		
Number of conduit inlets	9		
Number of string inputs per MPP	≤ 3		
Surge protection auxiliary contact	Cable entry	Number of cable entries	2
		Cable diameter, min.	5 mm
		Cable diameter, max.	10 mm
		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
Number of inputs	9		

Outputs

DC Output + & -	Wire connection	Type of connection	WM4C plug-in connector
		Compatible cable cross-section	TÜV 2 Pfg 1169/08.07
		Wire cross-section, min.	4 mm ²
		Wire cross-section, max.	6 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
Lightning test current I_{imp} (10/350 μ s)	6.25 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 (+/-, -/PE, +/PE)	≤ 3.8 kV
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 I/II
Short-circuit current I_{SCPv}	11,000 A	Standards	EN 61643-31
Standby power consumption P_C	<0.2 W	Total discharge current I_{total} (8/20 μ s)	50 kA
Total discharge current I_{total} (10/350 μ s)	12.5 kA		

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DC load break switch

Motor drive available	No	Number of breaking operation cycles at rated current	300
Number of operating cycles	10,000	Rated impulse withstand voltage	8 kV
Rated short-circuit making current	1.4 A	Switch disconnector execution	switch in cover
Switching disconnector capacity	DC-PV1, IEC 60947-3		

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		

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Technical data

Tender specification sheets

Long specification

Combiner box for inverters with 3 MPP tracker, suitable for protecting the DC side of a photovoltaic system according to EN 51543-32.

MPP1:

3 inputs, connection via WM4 C connector, compatible with cable type TÜV 2 Pfg1 169/08.07 / EN 50618:2063

3 outputs, connection via WM4 C connector, compatible with cable type TÜV 2 Pfg1 169/08.07 / EN 50618:2063

MPP2 to 3:
identical to MPP1

Max. string voltage Uoc:
1000V

1 class/type I + II combined arrester with signal contact

With load break switch for safe separation of the string lines

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 glas fibre reinforced polyester housing. Dimensions HxWxD: 334x558x249 mm

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

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

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Important note

Product information	The SCIP number was assigned due to a lead content of more than 0.1 % of the net weight. Safe use instruction according to ECHA: 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
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Approvals

Approvals



Approvals MAMID	https://mdcop.weidmueller.com/mediadelivery/rendition/900_319222/-T1z1mm-S800/
ROHS	Conform

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 PV CB Lastentrennschalter Fact Sheet DE CB PV Strings kombinieren Fact-Sheet EN PV CB Load break switch 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

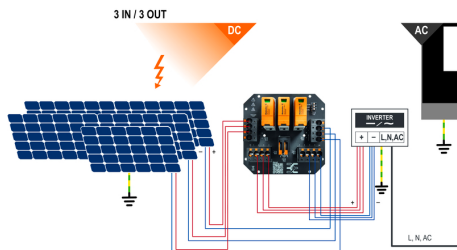
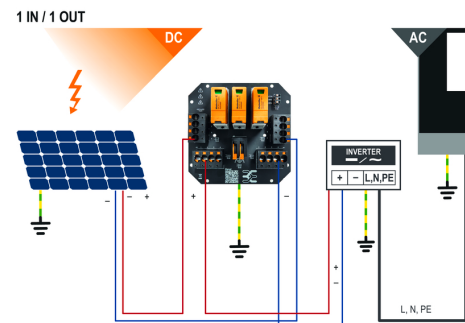
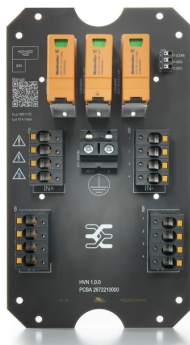
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Drawings

PCB design



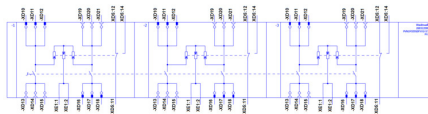
PVN 1 M2 I6 S0 F3 V1 01 TX PX 10									
Series		Voltage		Powersupply		Monitoring		Output Type	
PVN = PV Next		10 = 1kV		x = n/a		x = n/a		0 = GG	
VPV = PV Protect		11 = 1.1kV						1 = VMAC	
		15 = 1.5kV						2 = MCA-Exp 2	
Level		Inputs		Switch		Fuses		SPD	
1 = DC trunk box (L1)		1...12 inputs		x = n/a		3 = only fuse holders		0 = TYP II	
Series				0 = manual switch				1 = TYP I+II	
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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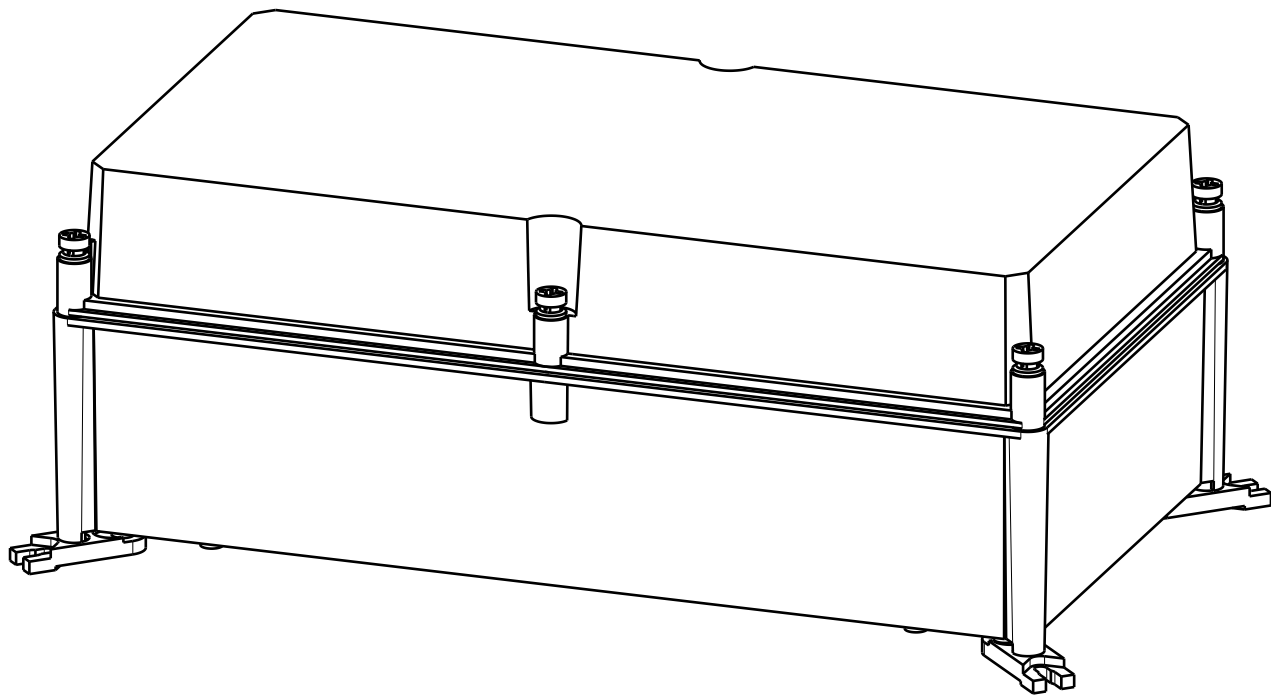
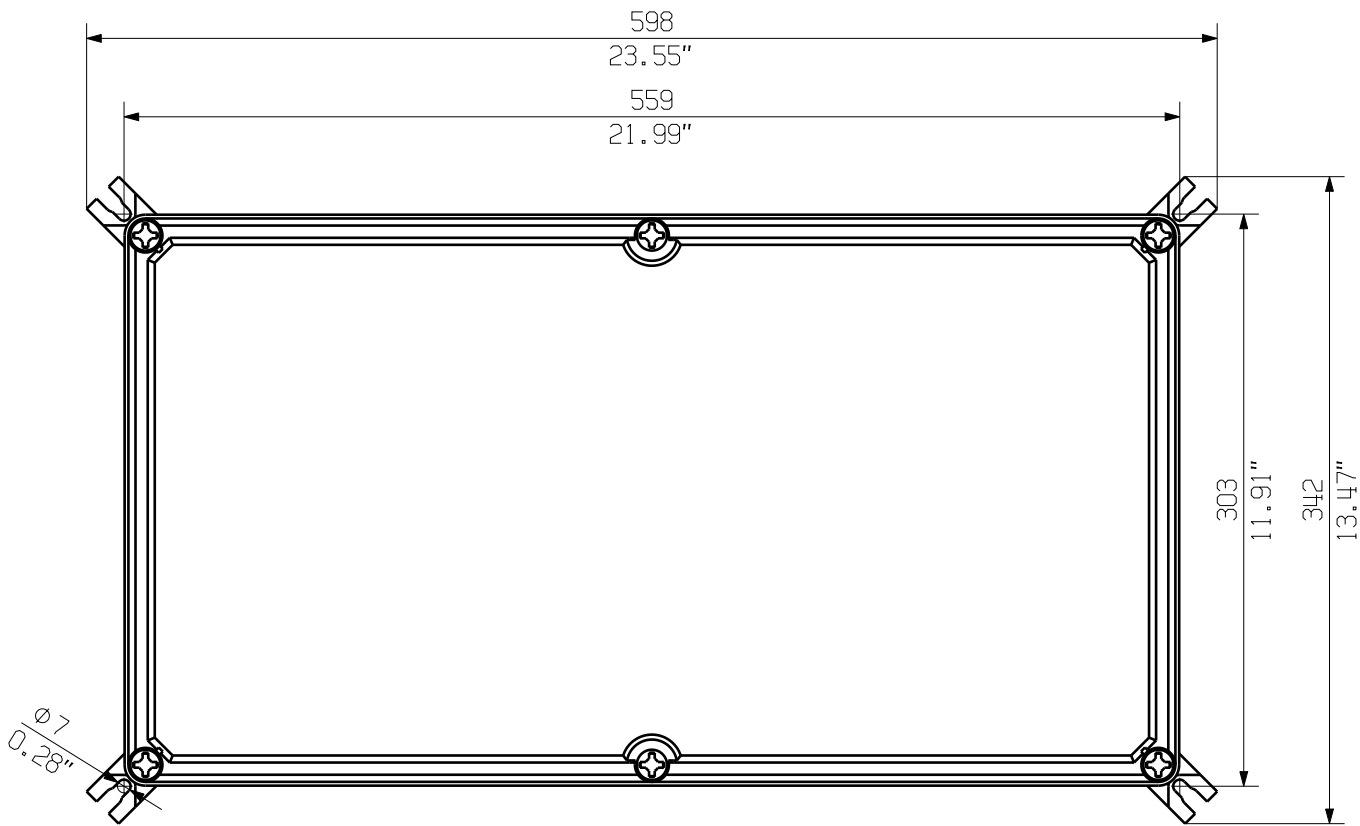
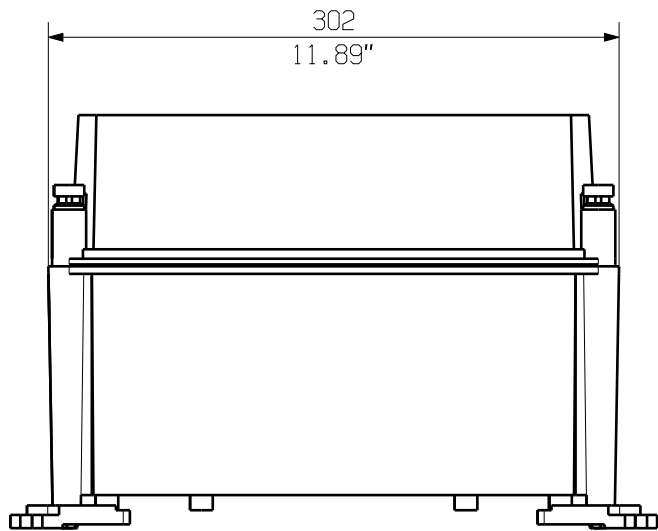
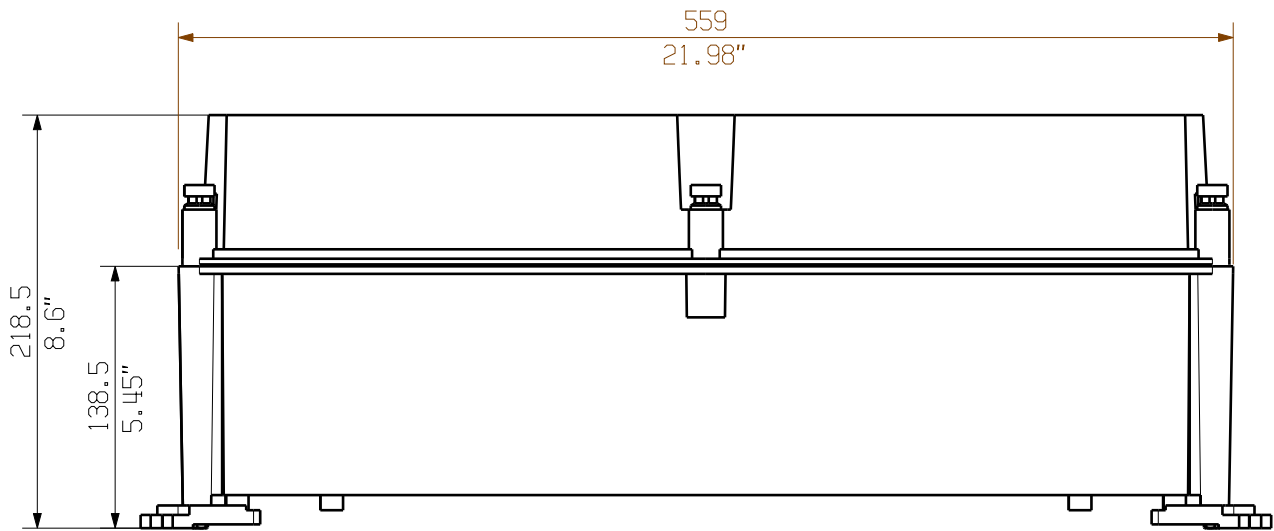


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Dimensions without tolerances are no check dimensions

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.: 1214838		Prim ERP Part No.:	
First Issue Date 28.01.2020	Max. nos.		Weidmüller 		71727 Drawing no. Issue no.
	Modification				
		Date	Name	PVN TBF 563021 COMBINERBOX RESIDENTIAL/COMMERCIAL COMBINERBOX RESIDENTIAL/COMMERCIAL	
	Drawn	28.01.2020	Brüntrup, Anna		
	Responsible		Wohlgemuth, KI		
Scale: 1/4 Size: A3	Approved	31.01.2020	Püschner, Klau	Product file:	
Drawings Customer					
				Sheet 01 of 01 sheets	