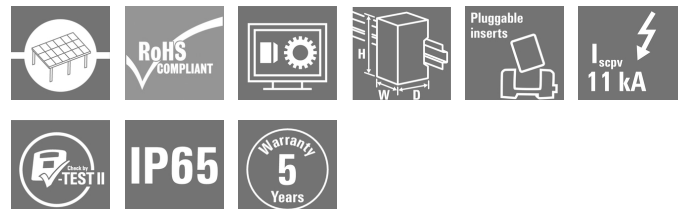


PVN1M1I3SXFV101TXPX10**Weidmüller Interface GmbH & Co. KG**

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 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, Surge protection I / II, WM4C
Order No.	2683170000
Type	PVN1M1I3SXFV101TXPX10
GTIN (EAN)	4050118700077
Qty.	1 pc(s).
Delivery status	Discontinued
Available until	2023-03-31
Alternative product	2890440000
Replacement parts	2530600000 2534300000

Creation date May 8, 2024 7:10:28 PM CEST

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

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

Technical data**Dimensions and weights**

Depth	175 mm	Depth (inches)	6.89 inch
Height	334 mm	Height (inches)	13.15 inch
Width	186 mm	Width (inches)	7.323 inch
Net weight	3,870.261 g		

Temperatures

Ambient temperature	-40 °C...+50 °C	Humidity	5 - 90 %, no condensation
---------------------	-----------------	----------	---------------------------

DC string monitoring

Monitoring function	Non monitored
---------------------	---------------

Approvals and norms

Approvals	EN 61439-2, IEC 61439-2
-----------	-------------------------

Guarantee

Time interval	5 years
---------------	---------

Electrical characteristics

Current per Maximum Power Point, max. 45 A

Rated DC current per connection	Current per string, max.	35 A
Rated short-term current resistance	Rated current	56.25 A
Rated DC voltage	1,000 V	

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 feet		
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 (Land and Sea)	Protection degree	IP65
-----------------------	---------------------------------------	-------------------	------

Inputs

Amount of maximum power points	1 MPP		
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

PVN1M1I3SXFV101TXPX10
Weidmüller Interface GmbH & Co. KG

 Klingenbergstraße 26
 D-32758 Detmold
 Germany

www.weidmueller.com
Technical data

Functional earth connector	Cable entry	Number of cable entries	1
		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 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
		Number of cable entries	1
	Cable entry	Cable diameter, min.	5
		Cable diameter, max.	10
		Cable glands	M 16

Outputs

DC Output + & -	Wire connection	Type of connection	WM4C plug-in connector
		Compatible cable crossection	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 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	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

Classifications

ETIM 6.0	EC002928	ETIM 7.0	EC002928
ETIM 8.0	EC003857	ETIM 9.0	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

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

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com**Technical data****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, connec-
tion via WM4 C connector
compatible with cable type
TÜV 2 Pfg1169/08.07 /
EN 50618:2029
Up to 3 outputs, connec-
tion 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 con-
tact

Connection of the signal
contact via cable glands
(8-12mmØ) max. cable
cross-section: 1.5mm²
Connection of function-
al 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 as-
semblies -
Part 1: General specifica-
tions, (IEC 61439-1:2011),
BS EN 61439-2:2025

Approvals

Approvals



PVN1M1I3SXFV101TXPX10

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

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](#)

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 CB PV Strings kombinieren](#)[Fact Sheet DE PV CB Richtig verbinden](#)[Fact Sheet EN CB Combining PV strings](#)[Fact Sheet EN PV CB connection](#)[Fact Sheet EN PV Combiner Box earthing](#)[Fact Sheet DE PV Combiner Box Erdung](#)

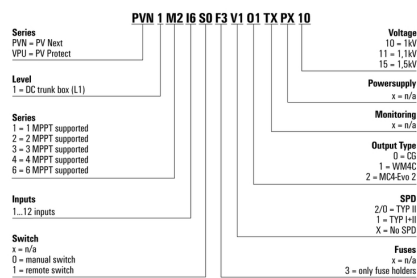
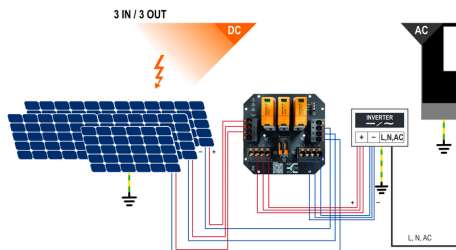
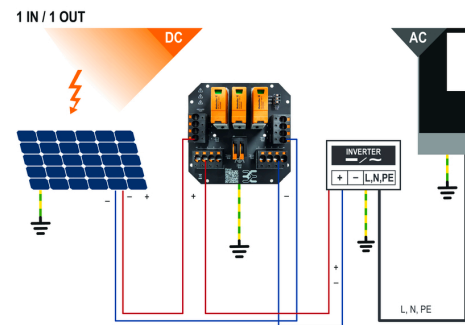
Catalogues

[Catalogues in PDF-format](#)

PVN1M1I3SXFV101TXPX10

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

www.weidmueller.com

Drawings
PCB design


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

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com**Accessories****PV Sun Covers****General ordering data**

Type	PV SUN COVER 30/19/18	Version
Order No.	8000086576	Photovoltaics
GTIN (EAN)	4064675845164	
Qty.	1 pc(s).	

Crosshead screwdriver Phillips

VDE insulated crosshead screwdriver, for Phillips screws, SDIK PH DIN 7438, ISO 8764/2-PH, output to ISO 8764-PH, SoftFinish grip

General ordering data

Type	SDIK PH3 X 150	Version
Order No.	2749910000	Screwdriver, Blade width (B): 3 mm, 150 mm, Blade thickness (A): 3
GTIN (EAN)	4050118897210	
Qty.	1 pc(s).	

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

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com**Accessories****Accessories**

The dust protection cap "Dustcap VSSO" protects the Weidmüller and type 4 solar connectors against dust and dirt.

The "SafetyClip" protects the Weidmüller solar connectors against unintentional opening and can only be released using the special multi-tool.

General ordering data

Type	VSSO WM4 C	Version
Order No.	1254870000	Photovoltaics, Flat design
GTIN (EAN)	4050118047479	
Qty.	100 pc(s).	

Tools

- For flexible and solid conductors with special insulating materials
- High-quality stripping for industrial applications (complies with aircraft industry requirements)
- Specially shaped blades enable stripping of special types of insulation and conductor configurations
- Stripping length adjustable via end stop
- Very versatile thanks to interchangeable stripping units
- Stripping results reproduced accurately over and over again
- No damage to the conductor
- A long-lasting, reliable tool thanks to its sturdy design
- Integrated cutting function

General ordering data

Type	MULTI-STRIPAX PV	Version
Order No.	1190490000	Photovoltaics, Plug-in connector
GTIN (EAN)	4032248973262	
Qty.	1 pc(s).	

PVN1M1I3SXFV101TXPX10

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

Accessories

UV-resistant cable ties

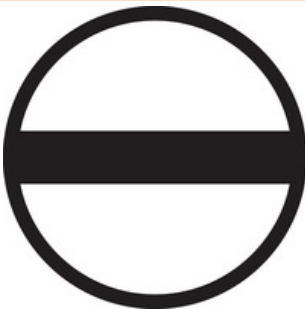


UV-resistant polyamide 6.6 ensures long durability of our special cable ties even with strong UV radiation. Ideal for continuous outdoor use.

General ordering data

Type	CB-UVR 290/4,5 BK	Version
Order No.	2659350000	Cable ties, 4.5 x 290 mm, Polyamide 66, 220 N
GTIN (EAN)	4050118682816	
Qty.	100 pc(s).	

Slotted screwdriver



VDE insulated slot-head screwdriver, SDI DIN 7437, ISO 2380/2, drive output acc. to DIN 5264, ISO 2380/1. SoftFinish grip

General ordering data

Type	SDIS 0.6X3.5X100	Version
Order No.	2749810000	Screwdriver, Blade width (B): 3.5 mm, Blade length: 100 mm, Blade thickness (A): 0.6 mm
GTIN (EAN)	4050118897012	
Qty.	1 pc(s).	
Type	SDIS 1.0X5.5X125	Version
Order No.	2749850000	Screwdriver, Blade width (B): 5.5 mm, Blade length: 125 mm, Blade thickness (A): 1 mm
GTIN (EAN)	4050118897050	
Qty.	1 pc(s).	

PVN1M1I3SXFV101TXPX10

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

Accessories

Cutting tools



Cutting tools for conductors up to 8 mm, 12 mm, 14 mm and 22 mm outside diameter. The special blade geometry allows pinch-free cutting of copper and aluminium conductors with minimum physical effort. The cutting tools (KT 8 to KT 22) also come with VDE and GS-tested protective insulation up to 1,000 V in accordance with EN/IEC 60900.

General ordering data

Type	KT 14	Version
Order No.	1157820000	Cutting tools, Cutting tool for one-hand operation
GTIN (EAN)	4032248945344	
Qty.	1 pc(s).	

PV-Stick field connectors



Faster is better. This also applies to the cabling of solar systems. Our handy connectors stay firmly in your grip even in frosty temperatures and can be installed very quickly and easily without a crimping tool.

You don't need crimp contacts and crimping tools and you avoid assembly errors. This saves up to 50% installation time – without affecting quality. The new photovoltaic connectors are TÜV-approved and comply with IEC 62852.

Our "PUSH IN" technology enables safe connections with minimal effort – insert, turn: current!

- 1,500 V DC (DE) / 1,500 V DC (EN)
- PUSH IN technology
- Standard-compliant quality in accordance with IEC 62852
- Ergonomic, prize-winning design
- Fastest PV connector currently available
- Reliable latching

General ordering data

Type	PV-STICK- VPE10	Version
Order No.	1303490000	Photovoltaics, Plug-in connector, PUSH IN connection, male
GTIN (EAN)	4050118102529	
Qty.	10 pc(s).	

Type	PV-STICK+ VPE10	Version
Order No.	1303450000	Photovoltaics, Plug-in connector, PUSH IN connection, female
GTIN (EAN)	4050118102468	
Qty.	10 pc(s).	

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

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com**Accessories****External fixing lugs**

The enclosures of the TBF series are made of extremely tough glass fibre-reinforced polyester. These enclosures are ideal for applications that call for low weight coupled with high shock resistance. The weather-resistant TBF enclosures are designed for a wide range of applications. Together with their comprehensive range of accessories, they provide universal solutions for accommodating built-in items such as regulators, measuring instruments, valves and other equipment.

Features:

- 9 sizes in 2 versions, with grey and transparent lids
- Cover with nylon screws
- Fixing holes outside the sealed area
- Thread for fitting to terminal rails and mounting plates
- Comprehensive accessories
- Weidmüller can manufacture and supply this enclosure to match customer specifications, fitted with all necessary terminals and cable glands.

General ordering data

Type	MF TBF	Version
Order No.	0360800000	TBF (polyester empty enclosure), Mounting foot, Fixing lugs, Height:
GTIN (EAN)	4008190108595	72.5 mm, Width: 24 mm, Depth: 12 mm, Material: Polyamide, Deep
Qty.	1 pc(s).	black

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

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com**Replacement parts****Spare Arrester****General ordering data**

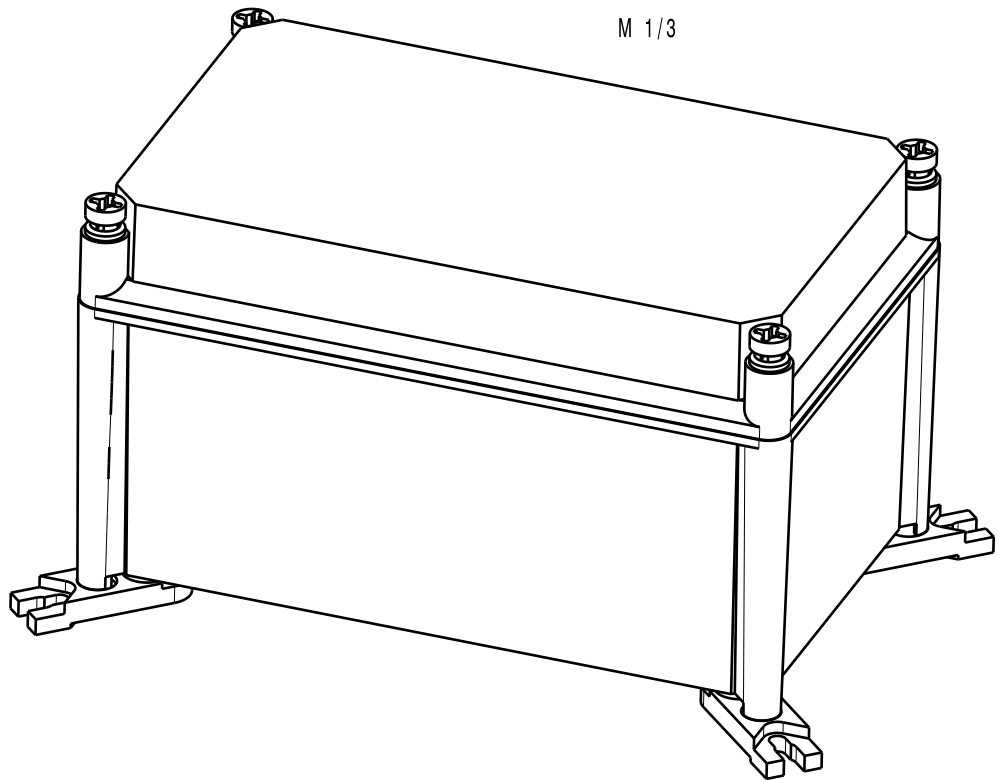
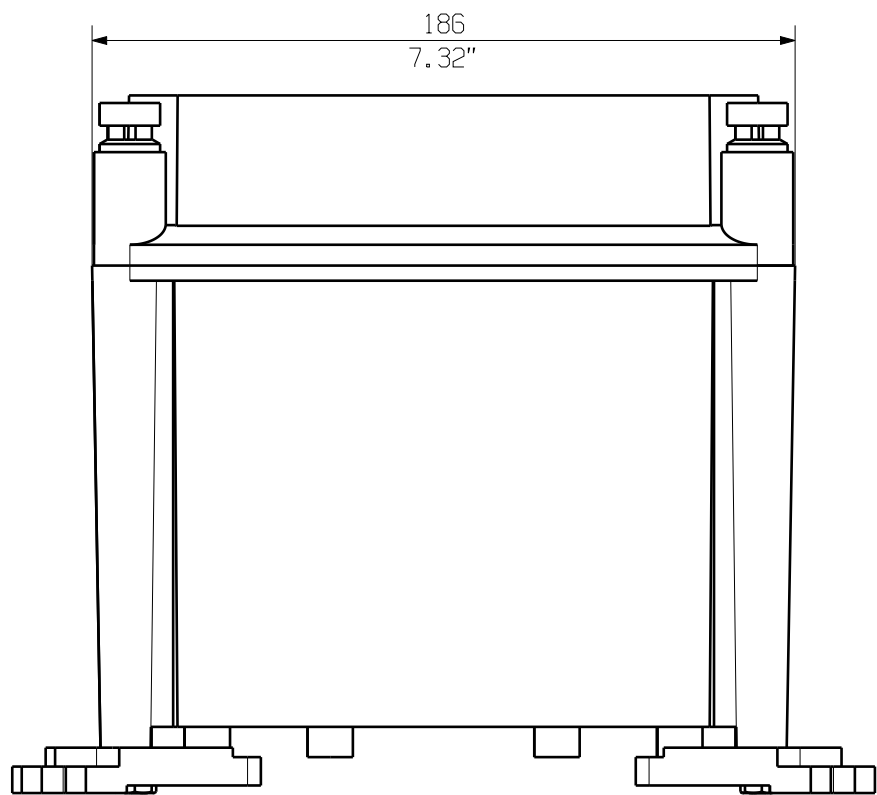
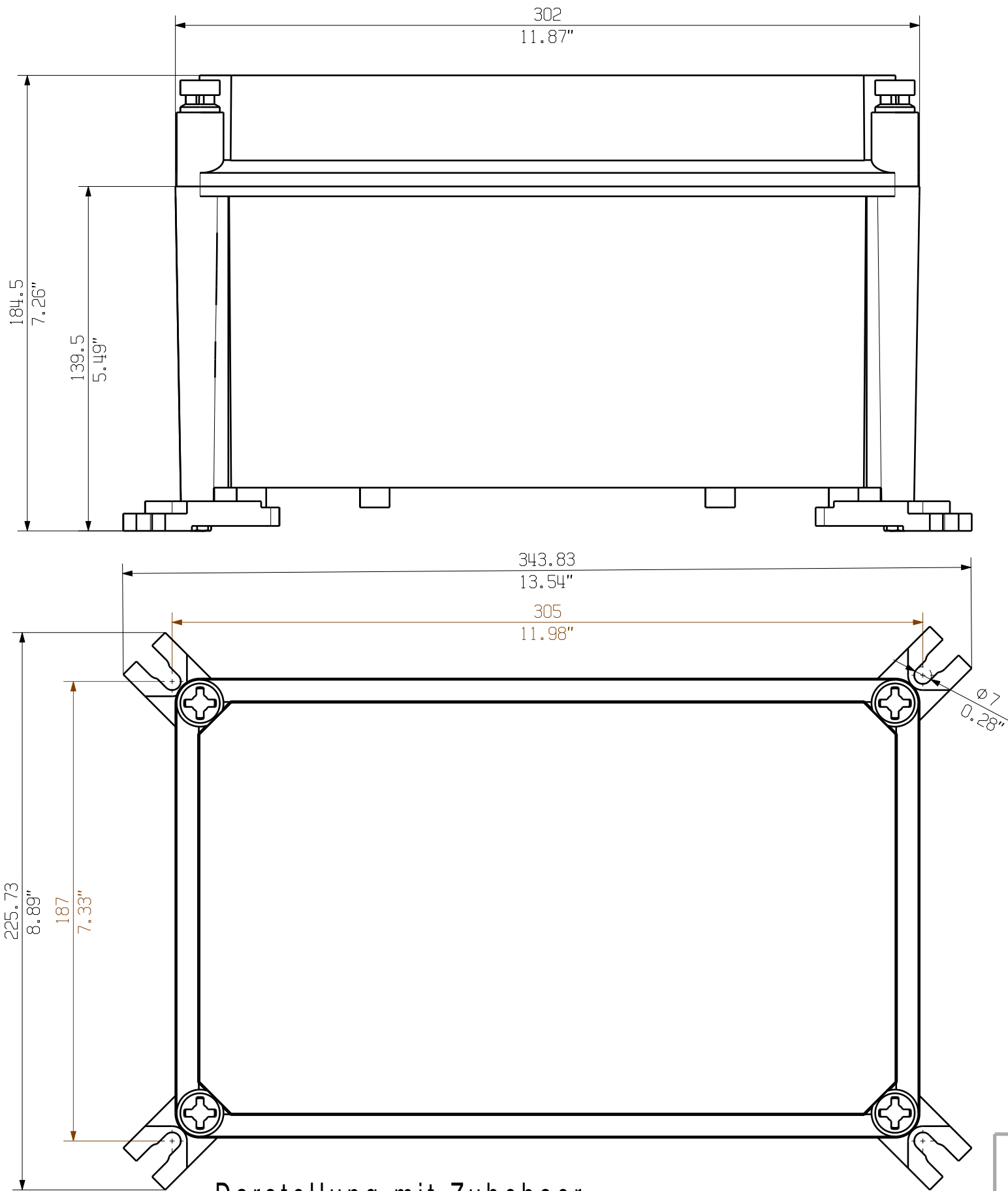
Type	VPU PV I+II O 1000	Version
Order No.	2530600000	Surge voltage arrester, Low voltage, Accessories, Surge protection I /
GTIN (EAN)	4050118540819	II, Spare arrester
Qty.	9 pc(s).	
Type	VPU PV I+II OM 1000	Version
Order No.	2534300000	Surge voltage arrester, Low voltage, Surge protection I / II, Spare
GTIN (EAN)	4050118545906	arrester
Qty.	9 pc(s).	

The reproduction, distribution and utilization of this document as well as the communication of its contents to others without explicit authorization is prohibited.
Offenders will be held liable for the payment of damages. Weidmüller exclusively reserves the right to file for patents, utility models or designs.

© Weidmüller Interface GmbH & Co. KG



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.		<div><div>Weidmüller</div><div></div></div> <div>71728</div> <div>Issue no. <div>0</div></div>	
		Modification			
				Sheet 01 of 01 sheets	
		Date		Name	
		Drawn		29.01.2020	
		Responsible		Wohlgemuth, Kl	
Scale: 1/2		Approved		31.01.2020	
Size: A3		Püschner, Klau			
Drawings Customer				Product file:	
<div><div>PVN TBF 301918</div><div>COMBINERBOX RESIDENTIAL/COMMERCIAL</div><div>COMBINERBOX RESIDENTIAL/COMMERCIAL</div></div>					