

## PVN DC 3I 3O 2MPP SW SPD1R EVO 11

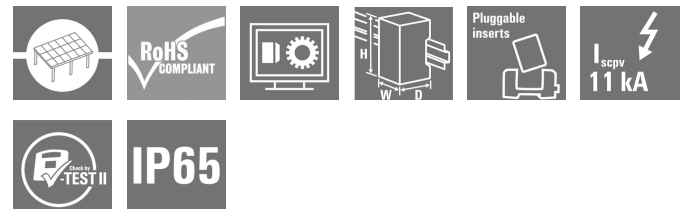
**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

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[www.weidmueller.com](http://www.weidmueller.com)



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, 1100 V, 2 MPP's, 3 Inputs / 3 Outputs per MPP, Surge protection I / II, Switch disconnecter, MC4-Evo 2
Order No.	<a href="#">2890360000</a>
Type	PVN DC 3I 3O 2MPP SW SPD1R EVO 11
GTIN (EAN)	4064675878209
Qty.	1 pc(s).

Creation date March 1, 2024 11:28:45 AM CET

Catalogue status 24.02.2024 / We reserve the right to make technical changes.

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**Technical data**
**Dimensions and weights**

Depth	172 mm	Depth (inches)	6.772 inch
Height	240 mm	Height (inches)	9.449 inch
Width	400 mm	Width (inches)	15.748 inch
Net weight	999 g		

**Temperatures**

Ambient temperature	-40 °C...+50 °C	Humidity	5...95 %, 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. 37.5 A			
Rated DC current per connection	Current per string, max.	37.5 A	
Rated short-term current resistance	Rated current	50 A	
Rated DC voltage	1,100 V		
Switching disconnecter capacity	DC-PV1, IEC 60947-3		

**Enclosure**

Connection type string	Plug MC4-Evo 2	Enclosure attachment	Via mounting feet
Impact resistance	IK08 in accordance with IEC 62208, IK10 in accordance with IEC 62262	Insulating material	Polyester glass-fibre reinforced, Polycarbonate, Polycarbonate
Switch disconnecter execution	switch in cover	Type of mounting	Wall mounting

**General data**

Installation location	Protected outdoor area (Land and Sea)	Protection degree	IP65
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**Inputs**

Amount of maximum power points	2 MPP		
DC Input + & -	Wire connection	Wire cross-section, min.	2.5 mm <sup>2</sup>
		Wire cross-section, max.	6 mm <sup>2</sup>
Functional earth connector	Cable entry	Number of cable entries	2
		Wire connection	Type of connection Screw connection
	w. wire end ferrule, DIN 46228 pt 1, max.	Flexible, max. H05(07) V-K	25 mm <sup>2</sup>
			16 mm <sup>2</sup>
Fuse type	Neither fuse cartridge nor holder		
Max. number of DC inputs	per Maximum Power Point 3 inputs connected in parallel		

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**Technical data**

Surge protection auxiliary contact	Cable entry	Number of cable entries	2
	Wire connection	Type of connection	Tension clamp connection with actuator
		Flexible, max. H05(07) V-K	1.5 mm <sup>2</sup>
		w. wire end ferrule, DIN 46228 pt 1, max.	1.5 mm <sup>2</sup>

**Outputs**

DC Output + & -	Wire connection	Type of connection	Stäubli MC4-Evo 2 connector
		Wire cross-section, min.	2.5 mm <sup>2</sup>
		Wire cross-section, max.	6 mm <sup>2</sup>

Max. number of DC outputs per Maximum Power Point 3 outputs connected in parallel

**Surge protection DC side**

Discharge current $I_n$ (8/20 $\mu$ s)	20 kA	Discharge current, max. (8/20 $\mu$ s)	40 kA
Lightning test current $I_{imp}$ (10/350 $\mu$ 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)	$\leq 3.8$ kV
Protection level $U_p$ (+/-)	$\leq 3.8$ kV	Protection level $U_p$ (+/PE)	$\leq 3.8$ kV
Protection level $U_p$ (-/PE)	$\leq 3.8$ 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 $\mu$ s)	50 kA	Total discharge current $I_{total}$ (10/350 $\mu$ 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

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## Technical data

### Tender specification sheets

#### Long specification

Combiner box for inverters with 2 MPP tracker, suitable for protecting the DC side of a photovoltaic system according to EN 51543-32.

MPP1:  
3 inputs, connection via MC4-Evo 2 connector, compatible with cable type TÜV 2 Pfg1 169/08.07 / EN 50618:2063  
3 outputs, connection via MC4-Evo 2 connector, compatible with cable type TÜV 2 Pfg1 169/08.07 / EN 50618:2063  
MPP2:  
identical to MPP1

Max. string voltage Uoc:  
1100V  
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: 1.5mm<sup>2</sup>  
Connection of the functional earth via cable glands (8-12mmØ)  
Conductor cross-section: 16-25mm<sup>2</sup>  
Protection class: IP65  
All built into a glass fibre reinforced polyester housing. Dimensions  
HxWxD: 240x200x172 mm

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

### Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
SCIP	bdab5698-6a20-4370-8e28-8810d882d01a

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## Technical data

## Approvals

Approvals



## Downloads

Engineering Data	<a href="#">CAD data – PV Next Schematic Diagram</a> <a href="#">CAD data – STEP</a>
Technical Documentation	<a href="#">2932710000_00_03-2023_DRILL-TEMP_PV-Next_20-40</a>
User Documentation	<a href="#">Manual PV Next String Combiner Box</a> <a href="#">MANUAL PV NEXT IT/ES/FR</a> <a href="#">Instruction leaflet PV NEXT MINI</a>
White paper	<a href="#">Fact Sheet DE PV CB Wie man Gebäude gegen Blitzeinschläge schützt</a> <a href="#">Fact Sheet DE PV Wie man die Lebensdauer eines GAK verlängert</a> <a href="#">Fact Sheet DE PV CB Wann Sicherungen zu installieren sind</a> <a href="#">Fact Sheet DE CB PV NEXT</a> <a href="#">Fact Sheet EN PV CB When DC fuses are mandatory to install</a> <a href="#">Fact Sheet EN CB PV NEXT</a> <a href="#">Fact Sheet EN PV How to protect buildings against lightning strikes</a> <a href="#">Fact Sheet EN PV How to extend the life time of a Combiner Box</a> <a href="#">Fact Sheet DE PV CB Lastentrennschalter</a> <a href="#">Fact Sheet DE CB PV Strings kombinieren</a> <a href="#">Fact Sheet DE PV CB Richtig verbinden</a> <a href="#">Fact-Sheet EN PV CB Load break switch</a> <a href="#">Fact Sheet EN CB Combining PV strings</a> <a href="#">Fact Sheet EN PV CB connection</a> <a href="#">Fact Sheet EN PV Combiner Box earthing</a> <a href="#">Fact Sheet DE PV Combiner Box Erdung</a>
Catalogues	<a href="#">Catalogues in PDF-format</a>

**Data sheet**

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**Drawings**



**Data sheet**

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**Drawings**

