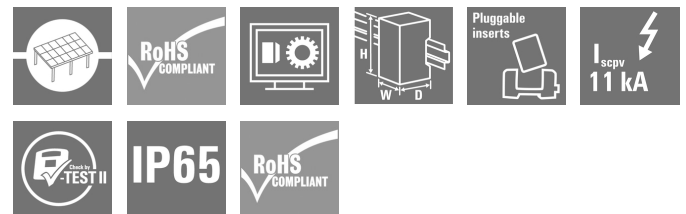


PVN DC 3I 3O 2MPP SPD1R EVO 11

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

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 CLC/TS 5 1643-32. 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, MC4-Evo 2
Order No.	2890330000
Type	PVN DC 3I 3O 2MPP SPD1R EVO 11
GTIN (EAN)	4064675877974
Qty.	1 pc(s).

Creation date July 4, 2024 2:52:20 PM CEST

Catalogue status 29.06.2024 / We reserve the right to make technical changes.

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Technical data

Dimensions and weights

Depth	132 mm	Depth (inches)	5.197 inch
Height	240 mm	Height (inches)	9.449 inch
Width	400 mm	Width (inches)	15.748 inch
Net weight	3,850 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. 50.25 A

Rated DC current per connection	Current per string, max.	45 A
Rated short-term current resistance	Rated current	67 A
Rated DC voltage	1,100 V	

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
Protection class	II	Switch disconnecter execution	no switch
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 ²
		Wire cross-section, max.	6 mm ²
Functional earth connector	Cable entry	Number of cable entries	2
		Wire connection	Type of connection Screw connection
	Wire 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		

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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	
	Cable entry	w. wire end ferrule, DIN 46228 pt 1, max.	1.5 mm ²	Number of cable entries

Outputs

DC Output + & -	Wire connection	Type of connection	Stäubli MC4-Evo 2 connector
		Wire cross-section, min.	2.5 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

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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
 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 glass fibre reinforced polyester housing. Dimensions HxWxD: 240x200x132 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

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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Technical data

Approvals

Approvals



ROHS

Conform

Downloads

Engineering Data	CAD data – PV Next Schematic Diagram CAD data – STEP
Technical Documentation	2932710000_00_03-2023_DRILL-TEMP_PV-Next_20-40
User Documentation	Manual PV Next String Combiner Box MANUAL PV NEXT IT/ES/FR Instruction leaflet PV NEXT MINI
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

Data sheet

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Drawings



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Drawings

