

PVC DC 2I 2O 12MPP RD EVO 11

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

www.weidmueller.com



For safe remote shutdown Rooftop photovoltaic systems can require a disconnection device at the point where the cables enter into the building, that is connected to the power grid in the building. This allows the fire brigade to carry out their work in an emergency without being unnecessarily endangered. When the power supply is restored, the PV Next Fireman Switch automatically reconnects the PV strings.

General ordering data

Version	Photovoltaics, Combiner Box, Fireman's switch, PV Next, 12 MPP's, 2 Inputs / 2 Outputs per MPP, Remote disconnecter, MC4-Evo 2, 1100 V
Order No.	8000130054
Type	PVC DC 2I 2O 12MPP RD EVO 11
GTIN (EAN)	4099987125000
Qty.	1 items

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Technical data

Approvals

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ROHS Conform

Dimensions and weights

Depth	255 mm	Depth (inches)	10.0394 inch
Height	485 mm	Height (inches)	19.0944 inch
Width	600 mm	Width (inches)	23.622 inch
Net weight	17350 g		

Temperatures

Ambient temperature -20 °C...50 °C Humidity 5 - 90 %, no condensation

Environmental Product Compliance

RoHS Compliance Status Compliant without exemption
 REACH SVHC No SVHC above 0.1 wt%

Included in delivery

Included accessories	Article	Mounting foot
	Quantity	4
	Article	Dustcap VSSO
	Quantity	48
	Article	Sealing plug
	Quantity	3

Guarantee

Time interval 5 years

Electrical characteristics

Rated DC voltage	1100 V	
Rated short-term current resistance	Rated current	51.25 A
Current per Maximum Power Point, max. 41 A		
Rated DC current per connection	Current per string, max.	41.00 A
	Rated current	41 A

Enclosure

Cover	Hinged door	Insulating material	Polyester glass-fibre reinforced, Polycarbonate
Type of mounting	Wall mounting	Impact resistance	IK08 in accordance with IEC 62262
Enclosure attachment	Fixing lugs, Via mounting foets	Protection class	II
Connection type string	Plug MC4-Evo 2		

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Technical data

General data

Standards	EN 61439-2, OVE-Directive R 11-1:2022-05-01	Protection degree	IP65
Installation location	Protected outdoor area (Land and Sea)		

Inputs

Amount of maximum power points (MPP)	12		
Number of conduit inlets	4		
DC Input + & -	Wire connection	Type of connection	Stäubli MC4-Evo 2 connector
		Compatible cable cross-section	TÜV 2 Pfg1169/08.07
		Wire cross-section, min.	2.5 mm ²
		Wire cross-section, max.	16 mm ²
Fuses	No		
Max. number of DC inputs	per Maximum Power Point 2 inputs connected in parallel		
Number of string inputs per MPP	≤ 2		
Number of inputs	24		

Outputs

Max. number of DC outputs	per Maximum Power Point 2 outputs connected in parallel		
DC Output + & -	Wire connection	Type of connection	Stäubli MC4-Evo 2 connector
		Compatible cable cross-section	TÜV 2 Pfg1169/08.07
		Wire cross-section, min.	2.5 mm ²
		Wire cross-section, max.	16 mm ²

Remote disconnecter

Automatic reclosing after voltage drop	Yes		
Number of operating cycles	10000		
Control voltage	100 V AC - 250 V AC 50/60Hz		
Remote disconnecter auxiliary contact	Cable entry	Number of cable entries	1
		Wire connection	Type of connection PUSH IN with actuator
	Wire connection	Flexible, max. H05(07) V-K	2.5 mm ²
		w. wire end ferrule, DIN 46228 pt 1, max.	2.5 mm ²
Remote disconnecter control contact	Cable entry	Number of cable entries	1
		Wire connection	Type of connection PUSH IN with actuator
	Wire connection	Flexible, max. H05(07) V-K	2.5 mm ²
		w. wire end ferrule, DIN 46228 pt 1, max.	2.5 mm ²
Type of power circuit disconnection	Under voltage tripping		
Turn-off time	1.5 s		
Current consumption of switch	Type of switch	Fireman switch	

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	Current consumption, note	The Peak current only arises for a short time when the capacitors of the fireman switch were previously completely discharged.
	Current consumption peak	900 mA
	Current consumption continuous	90 mA
Number of breaking operation cycles at rated current	300	
Switch disconnecter execution	Remote disconnecter inside enclosure	
Switching disconnecter capacity	DC-PV1	

Surge protection DC side

Standards	EN 61439-2, OVE-Directive R 11-1:2022-05-01	Surge protection DC side	No surge protection
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Classifications

ETIM 8.0	EC003857	ETIM 9.0	EC003857
ETIM 10.0	EC003857	ECLASS 14.0	22-57-02-92
ECLASS 15.0	22-57-02-92		

Tender specification sheets

Long specification	<p>Combiner box for inverters with Fireman switch for the connection to 12 MPP tracker.</p> <p>Suitable for remote disconnection of the DC side by the fire department according to VDE-AR-E2100-712.</p> <p>Max. string voltage Uoc: 1100 VDC MPP1: 2 inputs, connection via MC4-Evo 2 connector, compatible with cable type TÜV 2 Pfg 1169/08.07 / EN 50618:2063</p> <p>2 outputs, connection via MC4-Evo 2 connector, compatible with cable type TÜV 2 Pfg 1169/08.07 / EN 50618:2063</p> <p>MPP2 to 12: identical to MPP1 DC fireman switch: Switching off by undervoltage tripping. Switching off by reaching a temperature of ≥ 100 °C in the housing. Automatic reconnection after the control voltage (230 V AC) is applied again. With signal contact. Connection of the fireman switch control line 230 VAC via M16 cable glands (Clamping range 5-10 mmØ) max. conductor cross-section: 1.5 mm².</p>
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Connection of the signal contact 24 VDC (max. 300 mA) via M16 cable glands (Clamping range 5-10 mm \varnothing) max. conductor cross-section: 1.5 mm². Protection class: IP65. All built into a glass fibre reinforced polyester housing. Dimensions HxWxD: 485x600x250 mm. Approval according to low voltage switchgear IEC 61439-1 and EN 61439-2

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Drawings

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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 ST		

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 ST		

Crosshead screwdriver Phillips



Crosshead screwdriver, Phillips, SDK PH DIN 5262, ISO 8764/2-PH, output to ISO 8764-PH, ChromTop tip, SoftFinish grip

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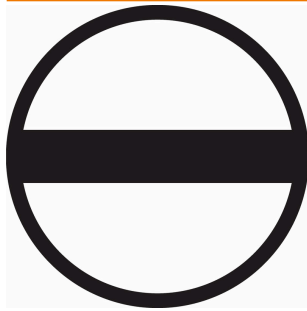
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Accessories

General ordering data

Type	SDK PH3	Version	
Order No.	9008500000	Screwdriver, Screwdriver	
GTIN (EAN)	4032248056491		
Qty.	1 ST		

Slotted screwdriver



Slotted screwdriver with rounded blade SD DIN 5265, ISO 2380/2, output to DIN 5264, ISO 2380/1. ChromTop tip, SoftFinish grip

General ordering data

Type	SDS 0.6X3.5X100	Version	
Order No.	9008330000	Screwdriver, Screwdriver	
GTIN (EAN)	4032248056286		
Qty.	1 ST		
Type	SDS 1.0X5.5X150	Version	
Order No.	9008350000	Screwdriver, Screwdriver	
GTIN (EAN)	4032248056316		
Qty.	1 ST		

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 ST		

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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 ST		

Y-Connector Cables



The Y cable is used for the parallel connection of several strings in a PV system, e.g. for splitting a line in front of an inverter.
 The cables are available in different connection variants.

General ordering data

Type	PVHYM+XXM-XX06M-11	Version	
Order No.	3032110000		Photovoltaics, Y-Connector Cable, 1x MC4 Female, 2x MC4 Male, 6mm ² , 1100 V
GTIN (EAN)	4099986981171		
Qty.	1 ST		
Type	PVHYM-XXM+XX06M+11	Version	
Order No.	3032100000		Photovoltaics, Y-Connector Cable, 1x MC4 Male, 2x MC4 Female, 6mm ² , 1100 V
GTIN (EAN)	4099986981164		
Qty.	1 ST		

Emergency stop button



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Accessories

General ordering data

Type	AC SB E 5A 1POL PO 06KV	Version	
Order No.	3077660000	Photovoltaics, Emergency stop button, 1 pole, 600 V AC, 5 A,	
GTIN (EAN)	4099987081887	Complete enclosure	
Qty.	1 ST		

Sealing sets



General ordering data

Type	BLINDPLUG SET5 7X28MM	Version	
Order No.	3077670000	Photovoltaics, Blind plug	
GTIN (EAN)	4099987081894		
Qty.	1 ST		

Type	BLINDPLUG SET50 7X28MM	Version	
Order No.	3077650000	Photovoltaics, Blind plug, Accessories, Blind plug, 50 pieces	
GTIN (EAN)	4099987081870		
Qty.	1 ST		

Replacement parts



General ordering data

Type	BRES REPLACEMENT HINGE	Version	
Order No.	3098500000	Photovoltaics, Spare part, Hinge pin, 10 MPP's, 12 MPP's	
GTIN (EAN)	4099987129831		
Qty.	1 ST		

Type	BRES BO-OFM-14-B WALLMO...	Version	
Order No.	3139430000	Photovoltaics, Mounting foot, Spare part, Mounting foot, 10 MPP's,	
GTIN (EAN)	4099987378406	12 MPP's	
Qty.	1 ST		