

PVC DC 2I 2O 12MPP RD SPD1R 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, Surge protection I / II, Remote disconnecter, MC4-Evo 2, 1100 V
Order No.	8000130056
Type	PVC DC 2I 2O 12MPP RD SPD1R EVO 11
GTIN (EAN)	4099987231794
Qty.	1 pc(s).
Replacement parts	2530600000 2534300000 3020600000 3098500000

Creation date May 11, 2025 11:06:04 PM CEST

Catalogue status 26.04.2025 / We reserve the right to make technical changes.

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Technical data

Dimensions and weights

Depth	307 mm	Depth (inches)	12.087 inch
Height	640 mm	Height (inches)	25.197 inch
Width	800 mm	Width (inches)	31.496 inch
Net weight	32,800 g		

Temperatures

Ambient temperature	-25 °C...50 °C	Humidity	5 - 90 %, no condensation
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Guarantee

Time interval	5 years
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Electrical characteristics

Current per Maximum Power Point, max. 41 A

Rated DC voltage 1,100 V

Rated short-term current resistance | Rated current 51.25 A

Enclosure

Connection type string	Plug MC4-Evo 2	Cover	Hinged door
Enclosure attachment	Via mounting feet	Impact resistance	IK 10 in accordance with IEC 62262
Insulating material	Polyester glass-fibre reinforced, Polycarbonate	Protection class	II
Type of mounting	Wall mounting		

General data

Installation location	Protected outdoor area (>1 km from sea)	Protection degree	IP65
Standards	EN 61439-2, OVE-Directive R 11-1:2022-05-01, EN 61643-31		

Inputs

Amount of maximum power points (MPP)	12		
DC Input + & -	Wire connection	Type of connection	Stäubli MC4-Evo 2 connector
		Compatible cable cross-section	TÜV 2 Pfg 1169/08.07
		Wire cross-section, min.	2.5 mm ²
		Wire cross-section, max.	16 mm ²
Functional earth connector	Cable entry	Number of cable entries	2
	Wire connection	Type of connection	PUSH IN with actuator
		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		

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Max. number of DC inputs	per Maximum Power Point 2 inputs connected in parallel		
Number of conduit inlets	24		
Number of string inputs per MPP	≤ 2		
Surge protection auxiliary contact	Cable entry	Number of cable entries	1
	Wire connection	Type of connection	PUSH IN 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	24		

Outputs

DC Output + & -	Wire connection	Type of connection	Stäubli MC4-Evo 2 connector
		Compatible cable cross-section	TÜV 2 Pfg 1169/08.07
		Wire cross-section, min.	2.5 mm ²
		Wire cross-section, max.	16 mm ²

Max. number of DC outputs per Maximum Power Point 2 outputs connected in parallel

Remote disconnecter

Automatic reclosing after voltage drop	Yes		
Number of operating cycles	10,000		
Control voltage	100 V AC - 250 V AC 50/60Hz		
Remote disconnecter auxiliary contact	Cable entry	Number of cable en-tries	1
	Wire connection	Type of connection	PUSH IN with actuator
		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 en-tries	1
	Wire connection	Type of connection	PUSH IN with actuator
		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	
	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		

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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 61439-2, OVE-Directive R 11-1:2022-05-01, EN 61643-31
Standby power consumption P_c	<0.2 W	Surge protection DC side	1000 V type I + II
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
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		

Environmental Product Compliance

RoHS Compliance Status	Compliant
REACH SVHC	No SVHC above 0.1 wt%

Approvals

Approvals



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

Downloads

Approval/Certificate/Document of Conformity	Declaration of conformity for PV fireman switches
Engineering Data	CAD data – STEP
Technical Documentation	Schematic diagram Customer drawing
User Documentation	Manual PV Next String Combiner Box MANUAL PV NEXT RD DE/EN
Catalogues	Catalogues in PDF-format

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Drawings



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Accessories

UV-resistant cable ties

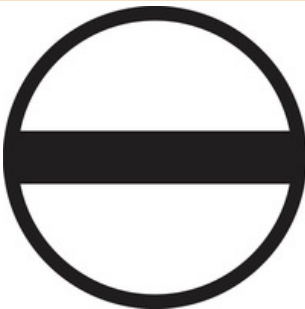


UV-resistant polyamide 6.6 ensures long durability of our special cable ties even with strong UV radiation. Ideal for continuous outdoor use.

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 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).	

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

Emergency stop button**General ordering data**

Type	AC SB E 5A 1POL PO 06KV	Version
Order No.	3077660000	Photovoltaics
GTIN (EAN)	4099987081887	
Qty.	1 pc(s).	

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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 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).	

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www.weidmueller.com**Accessories****Sealing sets****General ordering data**

Type	BLINDPLUG SET50 7X28MM	Version
Order No.	3077650000	Photovoltaics, Blind plug, Accessories, Blind plug, 50 pieces
GTIN (EAN)	4099987081870	
Qty.	1 pc(s).	
Type	BLINDPLUG SET5 7X28MM	Version
Order No.	3077670000	Photovoltaics, Blind plug
GTIN (EAN)	4099987081894	
Qty.	1 pc(s).	

External fixing lugs

External attachment lugs 4-part set

**General ordering data**

Type	MF FPC	Version
Order No.	9536040000	FPC (polycarbonate empty enclosure), Mounting foot, Fixing lugs,
GTIN (EAN)	4032248009442	Height: 40 mm, Width: 19 mm, Depth: 35.5 mm, Material: Polyamide,
Qty.	1 pc(s).	Light Grey

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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).	

Replacement parts**General ordering data**

Type	BRES OFM-14 WALLMOUNT	Version
Order No.	3020600000	Photovoltaics, Mounting foot, 10 MPP's, 12 MPP's
GTIN (EAN)	4099986933705	
Qty.	1 pc(s).	
Type	BRES REPLACEMENT HINGE	Version
Order No.	3098500000	Photovoltaics, Spare part, Hinge pin, 10 MPP's, 12 MPP's
GTIN (EAN)	4099987129831	
Qty.	1 pc(s).	