

PVC DC 2I 1O 2MPP RD SPD1R WM4 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, 1100 V, 2 MPP's, 2 Inputs / 1 Output per MPP, Surge protection I / II, Remote disconnect, WM4C
Order No.	8000114374
Type	PVC DC 2I 1O 2MPP RD SPD1R WM4 11
GTIN (EAN)	4099986766976
Qty.	1 pc(s).
Replacement parts	2530600000 2534300000

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Technical data

Dimensions and weights

Depth	132 mm	Depth (inches)	5.197 inch
Height	238 mm	Height (inches)	9.37 inch
Width	300 mm	Width (inches)	11.811 inch
Net weight	5,179.674 g		

Temperatures

Ambient temperature	-20 °C...50 °C	Humidity	5...95 %, no condensation
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Approvals and norms

Approvals	EN 61439-2, IEC 61439-2, OVE-Directive R 11-1:2022-05-01
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Guarantee

Time interval	5 years
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Electrical characteristics

Current per Maximum Power Point, max. 35 A

Rated DC voltage		1,100 V
Rated short-term current resistance	Rated current	43.75 A

Enclosure

Connection type string	Plug WM4C	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
Protection class	II	Type of mounting	Fixing lugs

General data

Installation location	Protected outdoor area (>1 km from sea)	Protection degree	IP65
Standards	EN 61643-31		

Inputs

Amount of maximum power points (MPP)	2		
DC Input + & -	Wire connection	Type of connection	WM4C plug-in connector
		Compatible cable crosssection	EN 50618:2015
		Wire cross-section, min.	4 mm²
		Wire cross-section, max.	6 mm²
	Cable entry	Number of cable entries	4

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Functional earth connector	Cable entry	Number of cable entries	1
	Wire connection	Type of connection	Tension clamp connection with actuator
		Flexible, max. H05(07) V-K	25 mm ²
Fuse type	Neither fuse cartridge nor holder		
Max. number of DC inputs	per Maximum Power Point 2 inputs connected in parallel		
Number of conduit inlets	3		
Number of string inputs per MPP	≤ 2		
Surge protection auxiliary contact	Cable entry	Number of cable entries	1
	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 inputs	4		

Outputs

DC Output + & -	Wire connection	Type of connection	WM4C plug-in connector
		Compatible cable cross-section	TÜV 2 Pfg1169/08.07
		Wire cross-section, min.	4 mm ²
		Wire cross-section, max.	6 mm ²
Max. number of DC outputs	per Maximum Power Point 1 output		

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 entries	1
	Wire connection	Type of connection	Screw terminal connectors
		Flexible, max. H05(07) V-K	1.5 mm ²
		w. wire end ferrule, DIN 46228 pt 1, max.	1.5 mm ²
Remote disconnecter control contact	Cable entry	Number of cable entries	1
	Wire connection	Type of connection	Screw terminal connectors
		Flexible, max. H05(07) V-K	1.5 mm ²
		w. wire end ferrule, DIN 46228 pt 1, max.	1.5 mm ²
Type of power circuit disconnection	Under voltage tripping		
Turn-off time	1.5 s		

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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	300 mA
	Current consumption continuous	30 mA

Number of breaking operation cycles at rated current 300

Switch disconnecter execution Remote disconnecter inside enclosure

Switching disconnecter capacity DC-PV1, IEC 60947-3

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	
PV system voltage, max. U_{cpv}	1,100 V	DC UCPV mode +/-, -/PE, +/-PE	1,100 V
Protection level U_p (+/-)	≤ 3.8 kV	Protection level U_p (+/-, -/PE, +/-PE)	≤ 3.8 kV
Protection level U_p (-/PE)	≤ 3.8 kV	Protection level U_p (+/PE)	≤ 3.8 kV
Short-circuit current I_{SCP}	11,000 A	Requirements class	Type I/II
Standby power consumption P_C	<0.2 W	Standards	EN 61643-31
Total discharge current I_{total} (8/20 μ s)	50 kA	Surge protection DC side	1000 V type I + II
		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 with exemption
RoHS Exemption (if applicable/known)	7a, 7cl
REACH SVHC	Lead 7439-92-1
SCIP	bdab5698-6a20-4370-8e28-8810d882d01a

Approvals

Approvals



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

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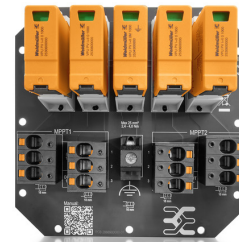
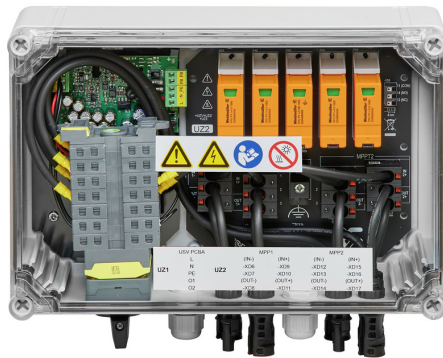
Approval/Certificate/Document of Conformity	Declaration of Conformity Declaration of conformity for PV fireman switches
Engineering Data	Schematic diagram CAD data – STEP
Technical Documentation	8000114374 Customer drawing
User Documentation	Manual PV Next String Combiner Box MANUAL PV NEXT IT/ES/FR MANUAL PV NEXT RD DE/EN
White paper	Fact Sheet DE PV CB Lastentrennschalter Fact-Sheet EN PV CB Load break switch Fact Sheet DE PV Feuerwehrscharter Fact Sheet EN PV Fireman switch
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).	

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

- 1.500 V DC (DE) / 1,500 V DC (EN)
- SNAP 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.	1303450000	Photovoltaics, Plug-in connector
GTIN (EAN)	4050118102468	
Qty.	10 pc(s).	

Type	PV-STICK- VPE10	Version
Order No.	1303490000	Photovoltaics, Plug-in connector
GTIN (EAN)	4050118102529	
Qty.	10 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).	

Crosshead screwdriver Phillips

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

General ordering data

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

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Accessories

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).	

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).	

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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).	

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-M-XXXX6W+11	Version
Order No.	2877850000	Photovoltaics, Y-Connector Cable, 1x WM4 C Female, 2x MC4 Male,
GTIN (EAN)	4064675666417	6mm², 1100 V
Qty.	1 pc(s).	
Type	PVHYM+M+XXXX6W-11	Version
Order No.	2877860000	Photovoltaics, Y-Connector Cable, 1x WM4 C Male, 2x MC4 Female,
GTIN (EAN)	4064675666424	6mm², 1100 V
Qty.	1 pc(s).	

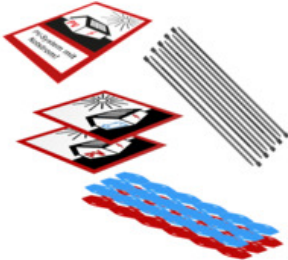
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Accessories

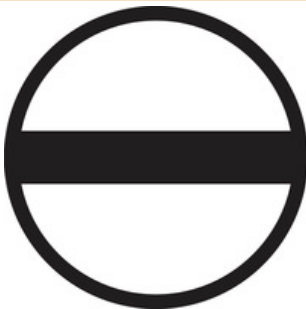
PV marking sets



General ordering data

Type	PV MARKER 1-3 MPP	Version	Packaging
Order No.	8000149520	Photovoltaics, Device markers, Accessories, Conductor and cable	Plastic bag
GTIN (EAN)	4099987229197	markers, Cable ties, Marking set, Warning label, Cable marker	
Qty.	1 pc(s).		

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

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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).	

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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).	