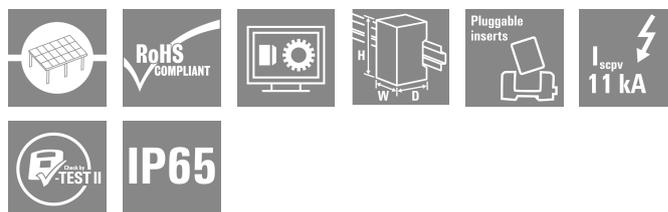


PVN DC 3I 3O 2MPP SW SPD1R WM4 11

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, PV Next, 1100 V, 2 MPP's, 3 Inputs / 3 Outputs per MPP, Surge protection I / II, Switch disconnecter, WM4C |
| Order No. | 2890480000 |
| Type | PVN DC 3I 3O 2MPP SW SPD1R WM4 11 |
| GTIN (EAN) | 4064675878322 |
| Qty. | 1 items |

PVN DC 3I 30 2MPP SW SPD1R WM4 11

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

www.weidmueller.com

Technical data
Approvals

Approvals



ROHS Conform

Dimensions and weights

| | | | |
|------------|--------|-----------------|-------------|
| Depth | 172 mm | Depth (inches) | 6.7716 inch |
| Height | 240 mm | Height (inches) | 9.4488 inch |
| Width | 400 mm | Width (inches) | 15.748 inch |
| Net weight | 4335 g | | |

Temperatures

Ambient temperature -40 °C...50 °C Humidity 5...95 %, no condensation

Environmental Product Compliance

| | |
|------------------------|--------------------------------------|
| RoHS Compliance Status | Compliant |
| REACH SVHC | Lead 7439-92-1 |
| SCIP | bdab5698-6a20-4370-8e28-8810d882d01a |

Included in delivery

| | | |
|----------------------|----------|---------------|
| Included accessories | Article | Mounting foot |
| | Quantity | 4 |

Approvals and norms

Approvals EN 61439-2, IEC 61439-2

Guarantee

Time interval 5 years

Electrical characteristics

| | |
|---------------------------------------|----------------------------------|
| Rated DC voltage | 1100 V |
| Rated short-term current resistance | Rated current 62.5 A |
| Current per Maximum Power Point, max. | 50 A |
| Rated DC current per connection | Current per string, max. 35.00 A |

Enclosure

| | | | |
|---------------------|--|------------------------|-------------------|
| Insulating material | Polyester glass-fibre reinforced, Polycarbonate, Polycarbonate | Type of mounting | Wall mounting |
| Impact resistance | IK08 in accordance with IEC 62208, IK10 in accordance with IEC 62262 | Enclosure attachment | Via mounting feet |
| Protection class | II | Connection type string | Plug WM4C |

PVN DC 3I 30 2MPP SW SPD1R WM4 11

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

www.weidmueller.com

Technical data

General data

| | | | |
|-----------------------|---------------------------------------|-------------------|------|
| Standards | EN 61643-31 | Protection degree | IP65 |
| Installation location | Protected outdoor area (Land and Sea) | | |

Inputs

| | | | |
|--------------------------------------|--|---|--|
| Amount of maximum power points (MPP) | 2 | | |
| Functional earth connector | Cable entry | Number of cable entries | 2 |
| | Wire connection | Type of connection | Screw connection |
| | | Flexible, max. H05(07) V-K | 25 mm ² |
| | | w. wire end ferrule, DIN 46228 pt 1, max. | 16 mm ² |
| Number of conduit inlets | 2 | | |
| DC Input + & - | Wire connection | Compatible cable cross-section | EN 50618:2015 |
| | | Wire cross-section, min. | 4 mm ² |
| | | Wire cross-section, max. | 6 mm ² |
| Fuse type | Neither fuse cartridge nor holder | | |
| Fuses | No | | |
| Max. number of DC inputs | per Maximum Power Point 3 inputs connected in parallel | | |
| Number of string inputs per MPP | ≤ 3 | | |
| 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 ² |
| | | w. wire end ferrule, DIN 46228 pt 1, max. | 1.5 mm ² |
| Number of inputs | 3 | | |

Outputs

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

Surge protection DC side

| | | | |
|--|-------------|--|----------|
| Standards | EN 61643-31 | Lightning test current Iimp (10/350 μs) | 6.25 kA |
| Discharge current, max. (8/20 μs) | 40 kA | Protection level Up (+/-, -/PE, +/PE) | ≤ 3.8 kV |
| Standby power consumption PC | <0.2 W | Short-circuit current ISCPV | 11000 A |
| Total discharge current Itotal (8/20 μs) | 50 kA | Discharge current In (8/20 μs) | 20 kA |
| Requirements class | Type I/II | Total discharge current Itotal (10/350 μs) | 12.5 kA |
| Protection level Up (-/PE) | ≤ 3.8 kV | Protection level Up (+/-) | ≤ 3.8 kV |

PVN DC 3I 30 2MPP SW SPD1R WM4 11

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

www.weidmueller.com

Technical data

| | | | |
|----------------------------|--------------------|--|--------|
| Protection level Up (+/PE) | ≤ 3.8 kV | PV system voltage, max. Ucpv | 1100 V |
| Surge protection DC side | 1000 V type I + II | Maximum continuous operating voltage DC UCPV mode +/-, -/PE, +/-PE | 1100 V |

DC load break switch

| | | | |
|------------------------------------|---------------------|--|-----------------|
| Rated impulse withstand voltage | 8 kV | Switch disconnecter execution | switch in cover |
| Switching disconnecter capacity | DC-PV1, IEC 60947-3 | Motor drive available | No |
| Rated short-circuit making current | 1.4 A | Number of breaking operation cycles at rated current | 300 |
| Number of operating cycles | 10000 | | |

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 |
|---------------------|---|

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 2 MPP tracker, suitable for protecting the DC side of a photovoltaic system according to EN 51543-32. MPP1: 3 inputs, connection via WM4 C connector, compatible with cable type TÜV 2 Pfg1 169/08.07 / EN 50618:2063</p> <p>3 outputs, connection via WM4 C connector, compatible with cable type TÜV 2 Pfg1 169/08.07 / EN 50618:2063</p> <p>MPP2: identical to MPP1</p> <p>Max. string voltage Uoc: 1100V</p> <p>1 class/type I + II combined arrester with signal contact</p> <p>With load break switch for safe separation of the string lines</p> <p>Connection of the signal contact via cable glands (8-12mmØ) max. conductor cross-section: 1.5mm²</p> <p>Connection of the functional earth via cable glands (8-12mmØ)</p> <p>Conductor cross-section: 16-25mm²</p> <p>Protection class: IP65</p> |
|--------------------|--|

PVN DC 3I 30 2MPP SW SPD1R WM4 11

Technical data

All built into a glas 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

PVN DC 3I 30 2MPP SW SPD1R WM4 11

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

Drawings

www.weidmueller.com

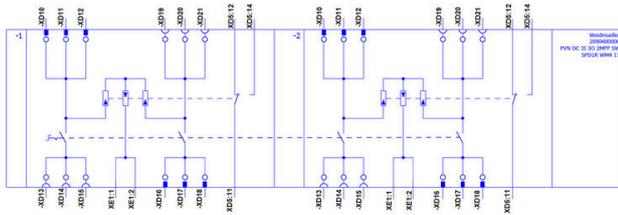


PVN DC 3I 30 2MPP SW SPD1R WM4 11

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

Drawings

www.weidmueller.com



PVN DC 3I 30 2MPP SW SPD1R WM4 11

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

www.weidmueller.com

Accessories

PV Sun Covers



General ordering data

| | | | |
|------------|----------------------------|---|--|
| Type | PV SUNCOVER 20/40/13 SW | Version | |
| Order No. | 8000143248 | Photovoltaics, Sun cover, Switch disconnecter | |
| GTIN (EAN) | 4099987 111874 | | |
| Qty. | 1 ST | | |

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

PVN DC 3I 30 2MPP SW SPD1R WM4 11

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

www.weidmueller.com

Accessories

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

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 | | |

PVN DC 3I 30 2MPP SW SPD1R WM4 11

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

www.weidmueller.com

Accessories

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

PVN DC 3I 30 2MPP SW SPD1R WM4 11

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

www.weidmueller.com

Accessories

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 ST | | |

| | | | |
|------------|----------------------------|---|--|
| 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 ST | | |

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 | | |

External fixing lugs



External attachment lugs 4-part set

PVN DC 3I 30 2MPP SW SPD1R WM4 11

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

www.weidmueller.com

Accessories

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, Basic material: | |
| Qty. | 1 ST | Polyamide, Polyamide 66, Light Grey | |

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