

DATA SHEET

ITEM NO. 10019463

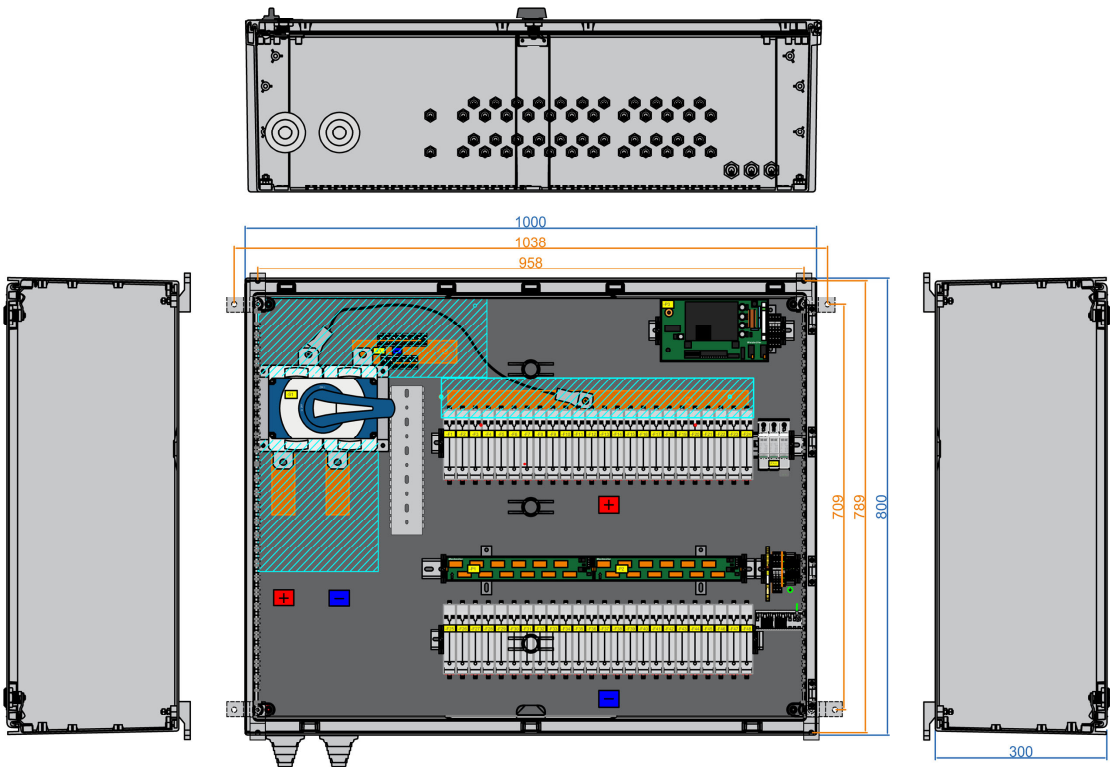
DC generator terminal box
Solarconnect 1500

All values in [mm]
Dimensions "blue"
Fastening points "orange"

Internal arrangement and components may differ depending on the variant!

Minimum distances

| | |
|---------|------|
| above | 200 |
| below | 200 |
| lateral | 100 |
| front | 1200 |



SCOPE OF DELIVERY

| Quantity | Designation |
|----------|--|
| 1 | GAK |
| 1 | Installation instructions GAK-Standard |
| 1 | Circuit diagram |
| 1 | Wall mounting bracket set |
| | |
| | |
| | |

| Quantity | Designation |
|----------|--------------------------------|
| 48 | M16 cable gland incl. locknut |
| 3 | M20 cable gland incl. lock nut |
| 2 | Cable grommet M63 |
| 1 | Blanking plug BS 13 |
| | |
| | |
| | |

Status: April 2025
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DC generator terminal box

Solarconnect 1500

TECHNICAL DATA

| NOMINAL VALUES | • applicable / - not applicable | |
|--|---------------------------------|------|
| Rated insulation voltage U_i | [VDC] | 1500 |
| Rated operating voltage U_e | [VDC] | 1500 |
| Rated current $I_{nA} (\Sigma I_{SC STC})$ | [ACD] | 396 |
| Design current* $I_{SC MAX} (= \Sigma I_{SC STC} \times 1.25)$ | [ACD] | 495 |
| Number of independent MPP inputs | | 1 |
| Max. Number of PV strings IN/OUT | | 24/1 |

| PRO STRANG | | |
|---|-------|------|
| Rated current $I_{nc} (= I_{SC STC})$ | [ADC] | 16,5 |
| Design current* $I_{SC MAX} (= I_{SC STC} \times 1.25)$ | [ADC] | 20,6 |

| SURGE PROTECTION DEVICE | | |
|---|-------|---------|
| surge protection PV | | |
| Test class according to EN 61643-11 (type) | | I+II/BC |
| Highest permissible continuous voltage U_{cpv} | [VDC] | 1500 |
| For type 1: Lightning impulse current max. $I_{imp} 10/350$ | [nA] | 5 |

| SURGE PROTECTION DEVICE | | |
|---|-------|-------|
| surge protection communication | | |
| Test class according to EN 61643-11 (type) | | II/P1 |
| Highest permissible continuous voltage U_{cpv} | [VDC] | 8,5 |
| For type 1: Lightning impulse current max. $I_{imp} 10/350$ | [nA] | - |

| SWITCH-DISCONNECTOR | | |
|--|-----|--------|
| Thermal current I_{th} at 60°C | [A] | 500 |
| Utilisation category according to DIN EN 60947-3 | | DC-21B |

* the design current ISC MAX according to VDE 0100-712:2016-10 includes the factor 1.25 for ISC STC of the PV module or PV string.

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| INPUT (TO THE PV GENERATOR) | | • applicable / - not applicable |
|-------------------------------------|-------|--|
| Cable entries | | |
| Fittings (EN 62444) | | M16 |
| Clamping range (from - to) | [Ømm] | 5 - 10 |
| Connections | | |
| Connection type | | Spring clamp directly on the fuse holder |
| Stripping length | [mm] | 14 |
| Tightening torque | [Nm] | - |
| Conductor cross-section (from - to) | | |
| Fine copper wire with ferrule | [mm²] | 2,5 - 16 |
| Fine-stranded copper | [mm²] | 2,5 - 16 |
| Solid or stranded copper wire | [mm²] | - |

| OUTPUT (TO THE PV INVERTER) | | |
|--------------------------------------|-------|----------------------------|
| Cable entries | | |
| Fittings (EN 62444) | | Cable grommet M63 |
| Clamping range (from - to) | [Ømm] | 23 - 55 |
| Connections | | |
| Connection type | | Cable lug M16 [#] |
| Stripping length | [mm] | - |
| Tightening torque | [Nm] | 70 [*] |
| Conductor cross-section (from - to) | | |
| Fine copper wire with ferrule | [mm²] | - |
| Fine-stranded copper | [mm²] | - |
| Cu/Al [*] solid or stranded | [mm²] | max. 400 |

[#] Bimetal cable lugs must be used for aluminium cables! When connecting aluminium conductors, the customary processing guidelines must be observed! The contact surfaces of the aluminium conductors must be cleaned, brushed and treated with suitable grease.

^{*} Attention: The nut must be held against the back with a spanner!

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| EARTHING CONNECTION | • applicable / - not applicable | |
|-------------------------------------|---------------------------------|----------------|
| Cable entries | | |
| Fittings (EN 62444) | | M20 |
| Clamping range (from - to) | [Ømm] | 7 - 13 |
| Connections | | |
| Connection type | | Screw terminal |
| Stripping length | [mm] | 19 |
| Tightening torque | [Nm] | 2,5 |
| Conductor cross-section (from - to) | | |
| Fine copper wire with ferrule | [mm²] | 1,5 - 16 |
| Fine-stranded copper | [mm²] | - |
| Solid or stranded copper wire | [mm²] | 2,5 - 25 |

| COMMUNICATION AND MONITORING | | |
|--|-------|--|
| Channels/channels occupied | | 24/24 |
| Single line monitoring | | 24 |
| Board (operating instructions under www.weidmueller.de) | | 2 x Weidmüller SOLAR SMS SLAVE 12IN25A + Weidmüller SOLAR SMS MASTER |
| Communication protocol | | Modbus RS485 |
| Supply board | | self-powered (incl. DC/DC converter) |
| Cable entries | | |
| Fittings (EN 62444) | | M20 |
| Clamping range (from - to) | [Ømm] | 7 - 13 |
| Connections | | |
| Connection type | | Spring clamp |
| Stripping length | [mm] | 10 - 12 |
| Tightening torque | [Nm] | - |
| Conductor cross-section (from - to) | | |
| Fine copper wire with ferrule | [mm²] | 0,25 - 2,5 |
| Fine-stranded copper | [mm²] | 0,25 - 4 |
| Solid or stranded copper wire | [mm²] | 0,25 - 4 |

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| GENERAL | | • applicable / - not applicable |
|---|------|---------------------------------|
| Dimensions WxHxD (without screw connections) | [mm] | 1000 x 800 x 300 |
| Weight, approx. | [kg] | 46,5 |
| Operating temperature range | [°C] | -25...+35 |
| Temperature - transport/storage (24 hours 70°C) | [°C] | -25...+35 |
| Humidity - condensing permitted | | - |
| Humidity - permissible range | [%] | 5...95 |
| max. installation height above N.N. | [m] | 2000 |
| Protection class IP (EN 60529) _{ta} = 40°C | | 65 |
| Outdoor suitability (protected area) | | • |
| Protection class (EN 61140) | | II |
| Housing material | | Polyester |
| RoHS-compliant (2011/65/EU) | | •- |
| Housing colour | | similar to RAL 7035 |
| Lid | | Hinged door |
| Mounting type | | Wall mounting |
| Closure type | | Double-bit closure |

| OTHER | |
|-----------------------|----------|
| Customs tariff number | 85372091 |