# DATA SHEET

## ITEM NO. 10012235

**Santon Load Disconnector "Fireman's Switch"**

**Santon-1000-4x2R-T50-BC-PES-V4**

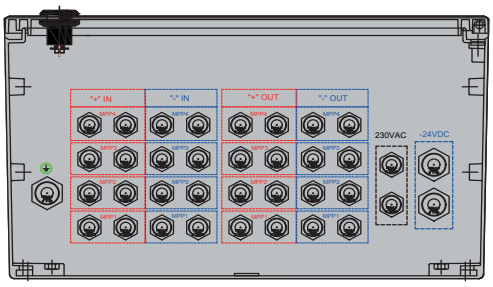
enwitec
greenLink Group
Scherrwies 2 | 84329 Wurmannsquick
info@enwitec.eu

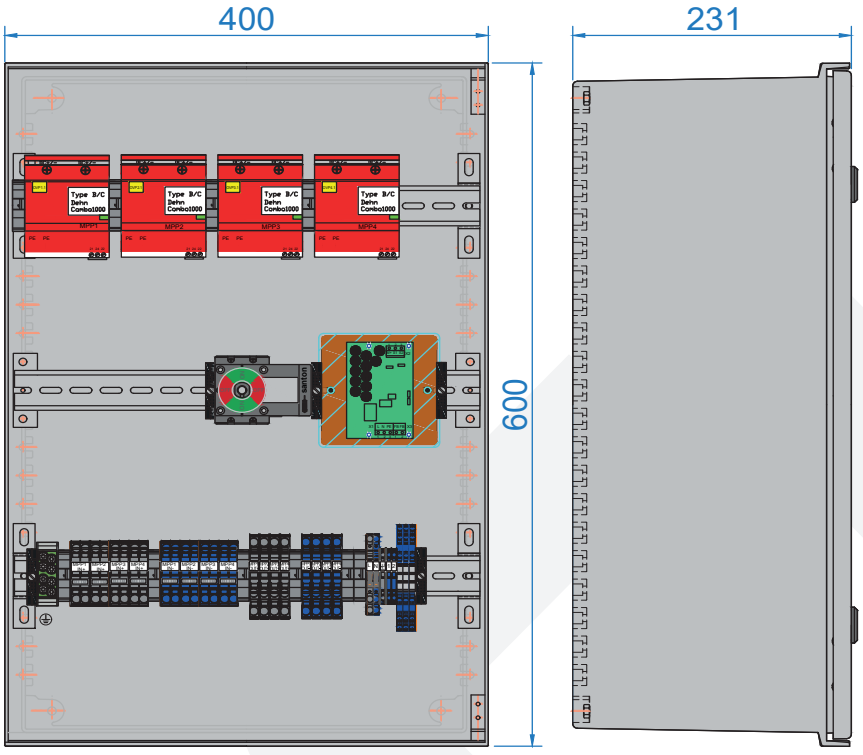
**All values in [mm]**
**Dimensions "blue"**
**Fastening points "orange"**

**Internal arrangement and components may differ depending on the variant!**

**Minimum distances**

| | |
|---|---|
| above | 200 |
| below | 200 |
| lateral | 100 |
| front | 800 |




## SCOPE OF DELIVERY

| Quantity | Designation |
|---|---|
| 1 | Santon Load disconnector "Fireman's switch" |
| 1 | General installation instructions PV-RSS |
| 1 | Installation instructions GAK-Standard |
| 1 | enwitec EWS concept with Santon |
| 1 | Circuit diagram |
| 1 | Schematic UPS board |
| 1 set | Wall mounting brackets |

| Quantity | Designation |
|---|---|
| 36 | Cable gland M16 |
| 3 | Cable gland M20 incl. locknut |
| 34 | Lock nut M16 |
| 2 | Reduction M20/M16 |
| 1 | Diaphragm insert EMT 16 |
| 2 | Diaphragm insertion EMT 20 |
| | |

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## TECHNICAL DATA

| NOMINAL VALUES | | • applicable / - not applicable |
|---|---|---|
| Rated insulation voltage $U_i$ | [VDC] | 1000 |
| Rated operating voltage $U_e$ | [VDC] | 1000 |
| Rated current $I_{nA}$ ($\Sigma I_{S\,CSTC}$) | [ACD] | 128 |
| Rated current* $I_{nA}$ ($=\Sigma I_{SC\,STC}$ x 1.25) | [ACD] | 160 |
| Number of independent MPP inputs | | 4 |
| Max. Number of PV strings IN/OUT | | 8/8 |
| Parallel connected inputs/outputs | | 2 |

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

| SURGE PROTECTION DEVICE | | |
|---|---|---|
| Test class according to EN 61643-11 (type) | | I+II |
| Highest permissible continuous voltage $U_{cpv}$ | [VDC] | 1000 |
| For type 1: Lightning impulse current max. $I_{imp}$ 10/350 | [nA] | 5 |

| SWITCH-DISCONNECTOR | | |
|---|---|---|
| Thermal current $I_{th}$ at 60°C | [A] | 50/MPP |
| Utilisation category according to DIN EN 60947-3 | | DC-21B |
| Manufacturer and type designation | | Santon XC100.50..Q3A/8pole with undervoltage release<br>230 VAC and automatic<br>Restart function after power failure |

* the design current $I_{SC\,MAX}$ 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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## TECHNICAL DATA

| INPUT (TO THE PV GENERATOR) | | • applicable / - not applicable |
|---|---|---|
| Cable entries | | |
| Fittings (EN 62444) | | M16 |
| Clamping range (from - to) | [Ømm] | 16 x 5 - 10 |
| Connections | | |
| Connection type | | Spring clamp |
| Stripping length | [mm] | 13 - 15 |
| Tightening torque | [Nm] | - |
| Conductor cross-section (from - to) | | |
| Fine copper wire with ferrule | [mm²] | 0,5 - 6 |
| Fine-stranded copper | [mm²] | 0,5 - 10 |
| Cu-stranded | [mm²] | 0,5 - 10 |

| OUTPUT (TO THE PV INVERTER) | | |
|---|---|---|
| Cable entries | | |
| Fittings (EN 62444) | | M16 |
| Clamping range (from - to) | [Ømm] | 16 x 5 - 10 |
| Connections | | |
| Connection type | | Spring clamp |
| Stripping length | [mm] | 13 - 15 |
| Tightening torque | [Nm] | - |
| Conductor cross-section (from - to) | | |
| Fine copper wire with ferrule | [mm²] | 0,5 - 6 |
| Fine-stranded copper | [mm²] | 0,5 - 10 |
| Cu-stranded | [mm²] | 0,5 - 10 |



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## TECHNICAL DATA

| EARTH CONNECTION | | • applicable / - not applicable |
|---|---|---|
| Cable entries | | |
| Fittings (EN 62444) | | M20 |
| Clamping range (from - to) | [Ømm] | 6 - 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 | | |
|---|---|---|
| Interface available | | • |
| Interface type | | Undervoltage release and feedback loop |
| Cable entries | | |
| Fittings (EN 62444) | | M16/M20 |
| Clamping range (from - to) | [Ømm] | 2 x 5 - 10<br>2 x 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 |
| Cu-stranded | [mm²] | 0,25 - 4 |



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## TECHNICAL DATA

| GENERAL | | • applicable / - not applicable |
|---|---|---|
| Dimensions WxHxD (without screw connections) | [mm] | 400 x 600 x 230 |
| Weight, approx. | [kg] | 13 |
| Operating temperature range | [°C] | -20...+40 |
| Temperature - transport/storage (24 hours 70°C) | [°C] | -20...+50 |
| 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 | 85371098 |

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