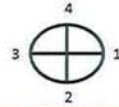


# Data Sheet

Santon X-Type switch X60.16BKS1-(A)

Suitable as photovoltaic disconnect switch in accordance with Article 690 of NFPA 70 (NEC) UL 508, including the requirements for PV application  
CSA C22.2 No. 0, - CSA C22.2 No. 14



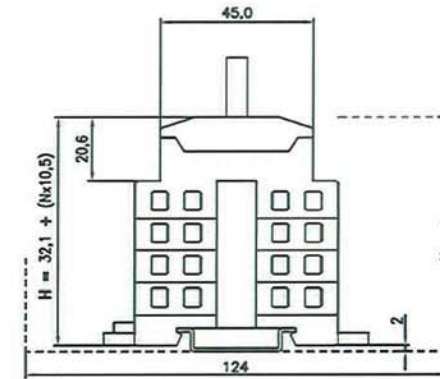
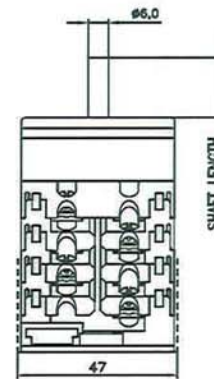
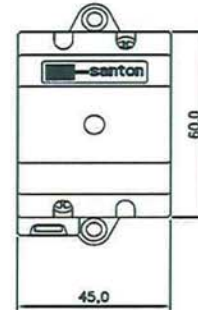
| Terminals Scheme |            |       |        |           |       |              |   |   |   |
|------------------|------------|-------|--------|-----------|-------|--------------|---|---|---|
| Layer No.        | Front Side |       | Symbol | Rear Side |       | On Positions |   |   |   |
|                  | Left       | Right |        | Left      | Right | 1            | 2 | 3 | 4 |
| 2                |            |       |        |           |       |              |   | X | X |
| 1                |            |       | empty  |           |       |              |   | X | X |

Contacts are made in "X" marked position.  
Symbols for interconnection: [

| Technical data                            | Symbol  | Unit | Value |
|---|---|------|-------|
| nominal voltage (DC poles)                | U   | V dc | 600   |
| nominal current (DC poles)                | I   | A dc | 16    |
| method of mounting                        | DIN rail and or Base mounting [B]                 |      |       |
| number of poles, DC single pole switching |   |      | 1     |
| utilization category DC                   | Photovoltaic disconnect switch                    |      |       |
| actuator                                  | ordered without a knob                            |      |       |
| method of operation                       | independent manual operation                      |      |       |
| positions                                 | OFF at 3 hr, ON at 6 hr, OFF at 9 hr, ON at 12 hr |      |       |
| rated impulse withstand voltage           | U <sub>imp</sub>                                  | kV   | 8     |
| insulation voltage                        | U <sub>i</sub>                                    | V    | 600   |
| rated thermal current uninterrupted duty  | I <sub>u</sub>                                    | A    | 16    |
| rated short-time withstand current (1s)   | I <sub>cw</sub>                                   | A    | 750   |

|   |                      |                 |               |
|---|----------------------|-----------------|---------------|
| suitable for use on a circuit capable of delivery not more than 5.000 rms symmetrical Amperes, 600 Vdc max, when protected by fuses |                      |                 |               |
| rated conditional short-circuit current   |                      | kA              | 5             |
| max power dissipation   |                      | W               | 1             |
| minimum required dimensions of enclosures L x W x H*  |                      | mm              | 124 x 47 x 53 |
| * see the drawing for the height of the switch. The number of layers N is:  |                      |                 | 2             |
| tightening torque terminal screws M4, min. - max.   |                      | Nm              | 1,5 - 1,7     |
|   |                      | Lb.In           | 13 - 15       |
| tightening torque M3 screw in the standard black knob, min. - max.  |                      | Nm              | 0,5 - 0,7     |
|   |                      | Lb.In           | 5 - 6         |
| tightening torque for the nut on the single hole mounting knob, min. - max.   |                      | Nm              | 1,8 - 2,0     |
|   |                      | Lb.In           | 16 - 18       |
| wire size, "Use 75°C Copper Wire Only", minimum required fine wire cross-section:   |                      | mm <sup>2</sup> | 2,5           |
|   |                      | AWG             | 12            |
| ambient temperature allowed between   |                      | °C              | - 20 to + 70  |
| storage temperature allowed between   |                      | °C              | - 40 to + 80  |
| maximum relative humidity, without condensation at 20 °C  |                      | %               | 90            |
| nominal voltage (AC poles)  | U                    | V ac            |               |
| nominal current (AC poles)  | I                    | A ac            |               |
| number of AC poles  |                      |                 |               |
| auxiliary contact:  | No auxiliary contact |                 |               |
| weight  |                      | g               | 157           |
| accessories:  |                      |                 |               |

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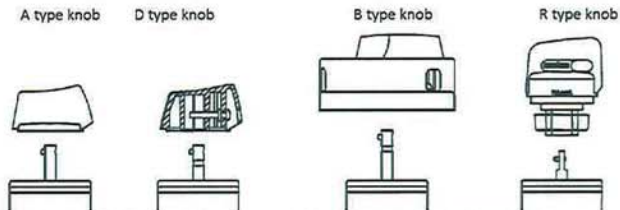
## Mounting instructions

In the application all ratings have to be respected. The switch is designed for Use on a Flat Surface of a Type 1 Enclosure or equivalent. The minimum dimensions of the enclosure must be respected according to the applicable standards. The position of the handle of the switch shall be marked with a Position Indication plate or direct on the surface of the enclosure to guide proper indication. The "On" and "Off" position may be marked using the symbols "I" and "O" according IEC 417 Symbols 5007 and 5008. The terminals, without interconnection can take copper wires up to 6 mm<sup>2</sup>. The recommended Spade Tongue Terminals may have a maximum width of 9 mm. For CSA and UL applications, registered Spade Tongue Terminals must be used. The registration numbers are UL: E13288 and CSA: LR7189 (for instance type 165015 from Tyco). After mounting, the wiring must be checked and the switch must operate smoothly.

## Maintenance

The X type switches are designed for a very long life but it is advised to do some simple yearly maintenance.

- Check the installation for signs of overload or overheating. The terminals may not exceed the limit of 85°C under full load.
- By operating the switch a few times (5x) the contacts will clean themselves and the switch will have a longer life.



Dimensions, specifications and data shown could be subject to change without notice.

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