# THE SANTON
# X-TYPE
## SWITCH DISCONNECT

FOR PHOTOVOLTAIC INSTALLATIONS

JD Auspice CO.,Ltd. Tel: 02-2595-9780 Fax: 02-2595-9412 Mail: service@jdauspice.com Web: http://www.jdauspice.com

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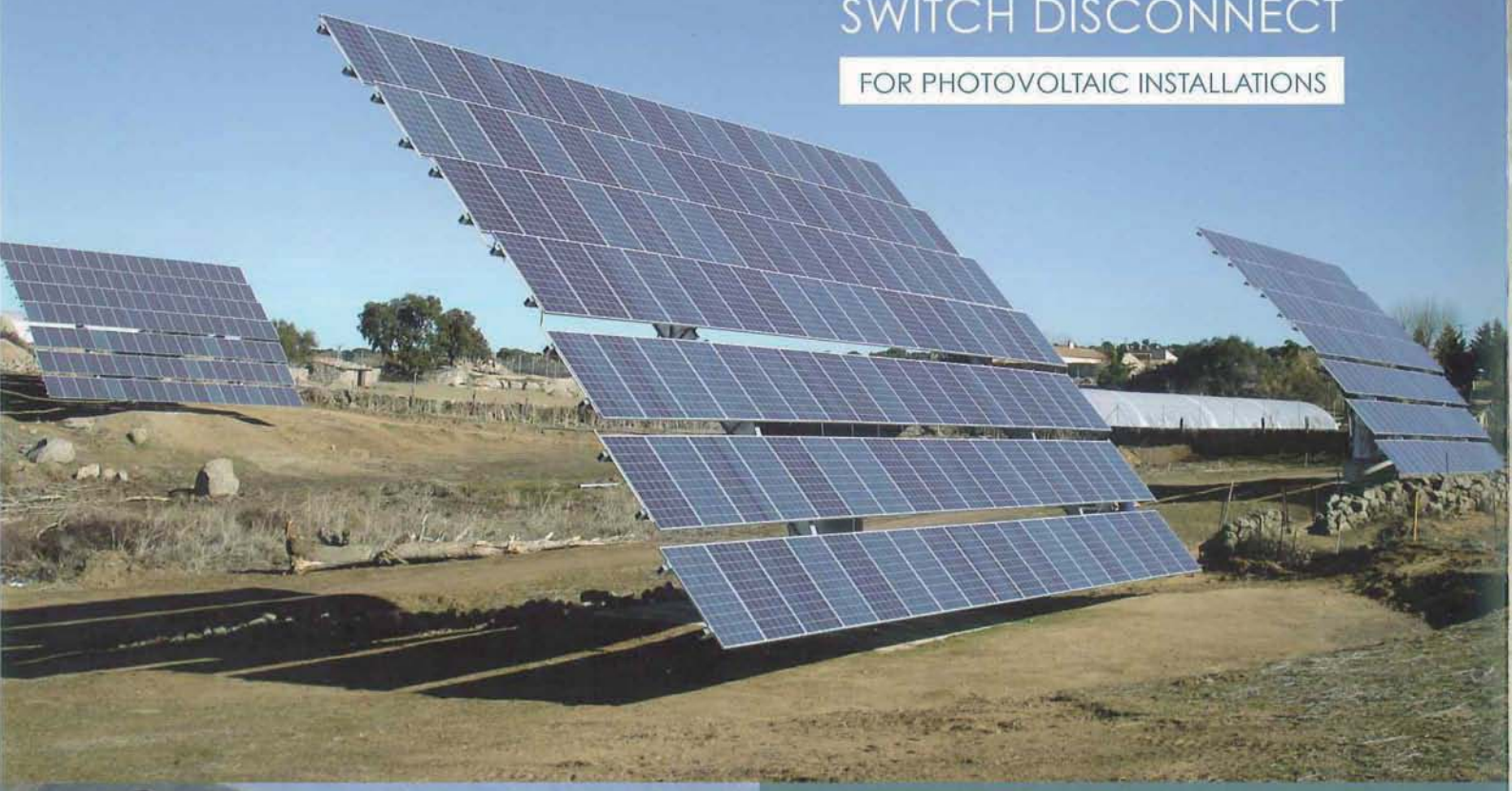

Santon succesfully added the X-Type switch to its range, which is specially designed as a DC isolating switch for the Solar industry. The Santon X-type switch is of optimum size in order to make it suitable for building into inverters and is optimised to meet a number of standard electrical specifications. The switching range is from 16Amp through to 32Amp, with operational voltages from 600Volt through to 1,000Volt.

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The operating principle of the Santon X-type is identical to the existing successful Santon DC switches which have been used throughout the world where DC switching is required as for example in the rail and shipbuilding industry. The prime characteristic for the Santon DC switch is its short switching time of approximately 3 ms, which reduces the arc forming to a minimum.

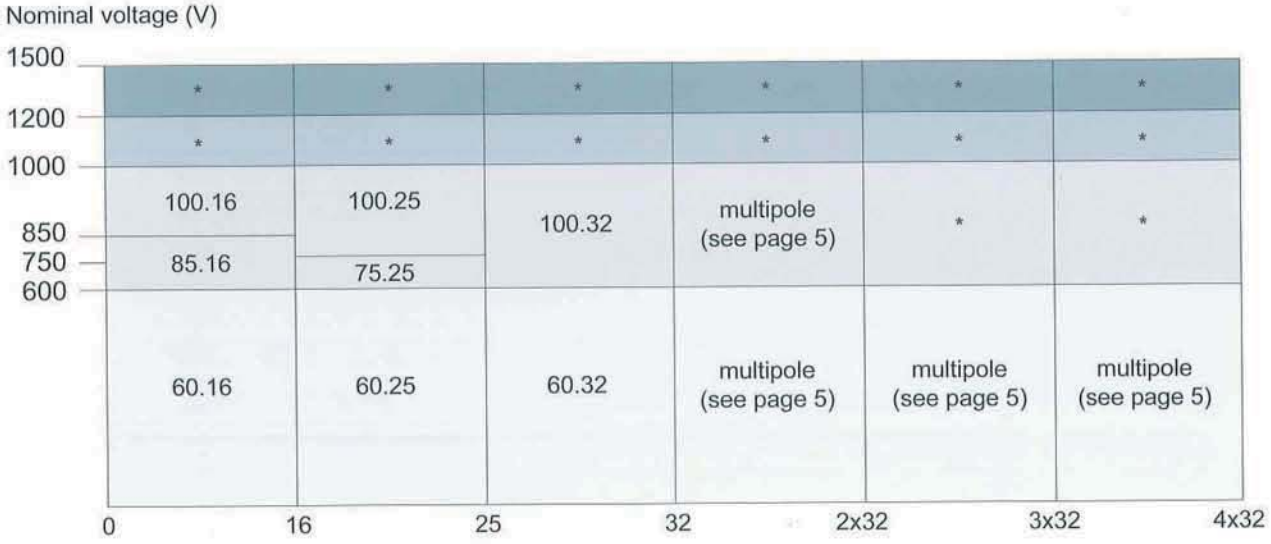
The Santon X-type switch is of a modular design which enables a variety of combinations in construction. Combinations of DC and AC in one switch are available, for example for switching both sides of the inverter simultaneously if required.

The Santon X-type switch has many modes of fixing: panel mounting by single hole mounting, base mounting (screw fix) or Din rail mounting. All terminals are easily accessible from the rear or the front of the switch (depending on the model).

A variety of accessories is available for the Santon X-type switch, amongst others, consisting of various knobs, padlocking handles and IP65 waterproof seals.

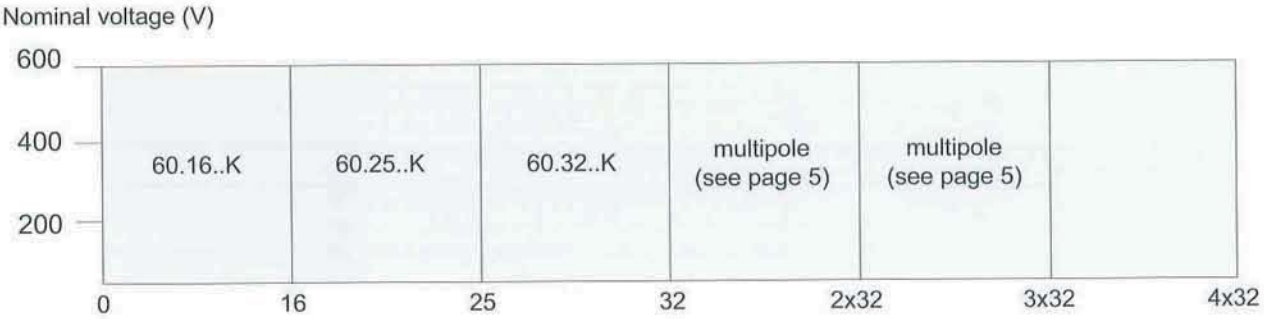
# STANDARD SWITCH CONFIGURATIONS

## STANDARD COMBINATIONS ACCORDING TO IEC60947-1/3-DC21




* on request

## STANDARD COMBINATIONS ACCORDING TO UL508




**Notes:**

1. Voltages above 1000 Volt are available on request.
2. For multipole switches see page 5.
3. Combined AC/DC switches are available on request.

## IEC60947 RATED SWITCHES

| Voltage (V) DC21 IEC 60947 1* | Current (A) | Poles 2* | H 3* | Product type code | | | |
|---|---|---|---|---|---|---|---|
| | | | | | *Single hole mounting* | | |
| | | | | Bottom mounting B | Panel mounting P | Reversed contacts R | Double mounting D |
| 600 | 16 | 2 | 2 | X60.16B2 | X60.16P2 | X60.16R2 | X60.16D2 |
| 600 | 16 | 4 | 4 | X60.16B4 | X60.16P4 | X60.16R4 | X60.16D4 |
| 600 | 16 | 6 | 6 | X60.16B6 | X60.16P6 | X60.16R6 | X60.16D6 |
| 600 | 16 | 8 | 8 | X60.16B8 | X60.16P8 | X60.16R8 | X60.16D8 |
| 850 | 16 | 2 | 2 | X85.16B2 | X85.16P2 | X85.16R2 | X85.16D2 |
| 850 | 16 | 4 | 4 | X85.16B4 | X85.16P4 | X85.16R4 | X85.16D4 |
| 850 | 16 | 6 | 6 | X85.16B6 | X85.16P6 | X85.16R6 | X85.16D6 |
| 850 | 16 | 8 | 8 | X85.16B8 | X85.16P8 | X85.16R8 | X85.16D8 |
| 1000 | 16 | 2 | 3 | X100.16B2 | X100.16P2 | X100.16R2 | X100.16D2 |
| 1000 | 16 | 4 | 6 | X100.16B4 | X100.16P4 | X100.16R4 | X100.16D4 |
| 1000 | 16 | 6 | 9 | X100.16B6 | X100.16P6 | X100.16R6 | X100.16D6 |
| 600 | 25 | 2 | 2 | X60.25B2 | X60.25P2 | X60.25R2 | X60.25D2 |
| 600 | 25 | 4 | 4 | X60.25B4 | X60.25P4 | X60.25R4 | X60.25D4 |
| 600 | 25 | 6 | 6 | X60.25B6 | X60.25P6 | X60.25R6 | X60.25D6 |
| 600 | 25 | 8 | 8 | X60.25B8 | X60.25P8 | X60.25R8 | X60.25D8 |
| 750 | 25 | 2 | 2 | X75.25B2 | X75.25P2 | X75.25R2 | X75.25D2 |
| 750 | 25 | 4 | 4 | X75.25B4 | X75.25P4 | X75.25R4 | X75.25D4 |
| 750 | 25 | 6 | 6 | X75.25B6 | X75.25P6 | X75.25R6 | X75.25D6 |
| 750 | 25 | 8 | 8 | X75.25B8 | X75.25P8 | X75.25R8 | X75.25D8 |
| 1000 | 25 | 2 | 3 | X100.25B2 | X100.25P2 | X100.25R2 | X100.25D2 |
| 1000 | 25 | 4 | 6 | X100.25B4 | X100.25P4 | X100.25R4 | X100.25D4 |
| 1000 | 25 | 6 | 9 | X100.25B6 | X100.25P6 | X100.25R6 | X100.25D6 |
| 600 | 32 | 2 | 2 | X60.32B2 | X60.32P2 | X60.32R2 | X60.32D2 |
| 600 | 32 | 4 | 4 | X60.32B4 | X60.32P4 | X60.32R4 | X60.32D4 |
| 600 | 32 | 6 | 6 | X60.32B6 | X60.32P6 | X60.32R6 | X60.32D6 |
| 1000 | 32 | 2 | 3 | X100.32B2 | X100.32P2 | X100.32R2 | X100.32D2 |
| 1000 | 32 | 4 | 6 | X100.32B4 | X100.32P4 | X100.32R4 | X100.32D4 |

## UL508 RATED SWITCHES (cCSAus)

| Voltage (V) UL508 | Current (A) | H 3* | Poles *Double pole switching* | Bottom mounting 4* B | Panel mounting 4* P | Poles *Single pole switching* | Bottom mounting 4* B | Panel mounting 4* P |
|---|---|---|---|---|---|---|---|---|
| 600 | 16 | 2 | 2 | X60.16BK2 | X60.16PK2 | 1 | X60.16BKS1 | X60.16PKS1 |
| 600 | 16 | 4 | 4 | X60.16BK4 | X60.16PK4 | 2 | X60.16BKS2 | X60.16PKS2 |
| 600 | 16 | 6 | 6 | X60.16BK6 | X60.16PK6 | 3 | X60.16BKS3 | X60.16PKS3 |
| 600 | 16 | 8 | 8 | X60.16BK8 | X60.16PK8 | 4 | X60.16BKS4 | X60.16PKS4 |
| 600 | 25 | 2 | 2 | X60.25BK2 | X60.25PK2 | 1 | X60.25BKS1 | X60.25PKS1 |
| 600 | 25 | 4 | 4 | X60.25BK4 | X60.25PK4 | 2 | X60.25BKS2 | X60.25PKS2 |
| 600 | 25 | 6 | 6 | X60.25BK6 | X60.25PK6 | 3 | X60.25BKS3 | X60.25PKS3 |
| 600 | 25 | 8 | 8 | X60.25BK8 | X60.25PK8 | 4 | X60.25BKS4 | X60.25PKS4 |
| 600 | 32 | 2 | 2 | X60.32BK2 | X60.32PK2 | 1 | X60.32BKS1 | X60.32PKS1 |
| 600 | 32 | 4 | 4 | X60.32BK4 | X60.32PK4 | 2 | X60.32BKS2 | X60.32PKS2 |
| 600 | 32 | 6 | 6 | X60.32BK6 | X60.32PK6 | 3 | X60.32BKS3 | X60.32PKS3 |
| 600 | 32 | 8 | 8 | X60.32BK8 | X60.32PK8 | 4 | X60.32BKS4 | X60.32PKS4 |

*1 Switches with combined DC and AC poles are also available.

*2 The number of main poles without auxiliary contacts.

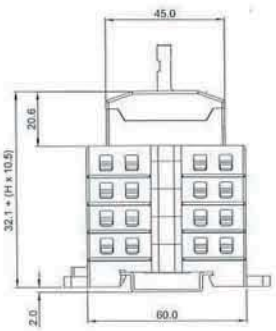
*3 With the total number of layers "H", the total height of the switch can be determined. For mounting type B and D "H" has to be increased with one. See drawings on page 6.

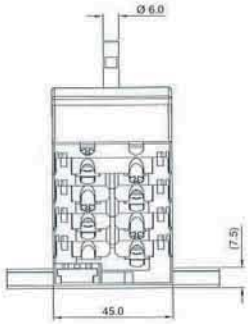
*4 Fixing method "R" and "D" (see page 6) are also certified.

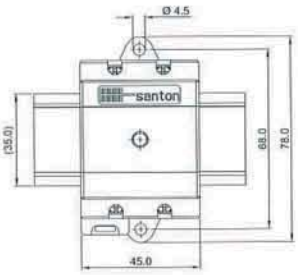
**Auxiliary contacts**

For position indication or for motor driven switches auxiliary contacts are available. The auxiliary contacts are rated 16A at 250V AC and DC. Add one extra layer for every auxiliary contact to determine the height of the switch.

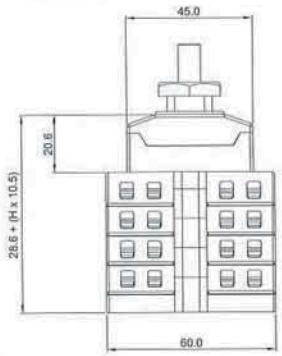
# TYPES & MEASURES

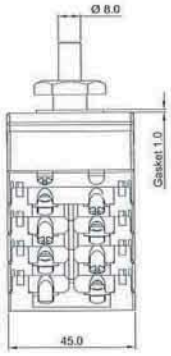


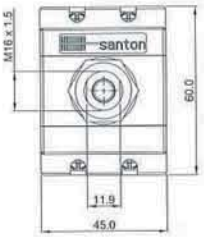



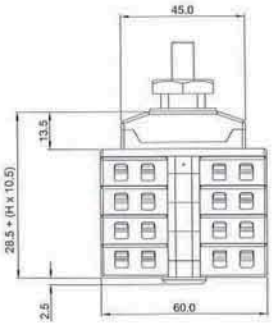

Din Rail Type **[B]**

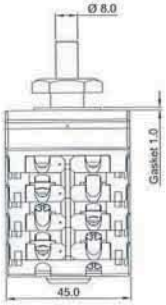


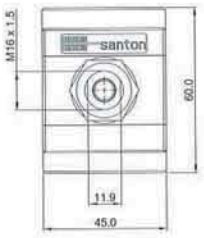



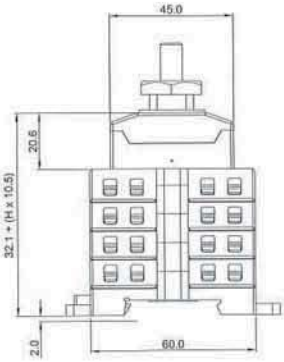

Single Hole Mounting **[P]**

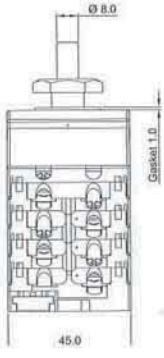


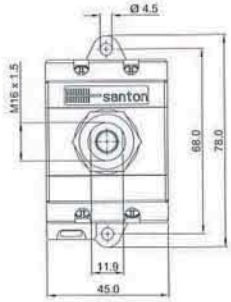




Single Hole Mounting
Reversed Contacts **[R]**



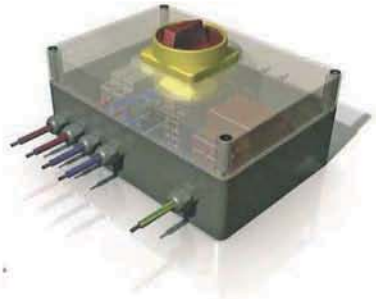




Single Hole Mounting
and Din Rail Clip **[D]**

# FLEXIBILITY

The motor driven switch can be used for remote switching on and off by means of a central control unit. Also, the motor driven switch can be operated by means of a local electronic device near to the switch, or by means of a local electric switching device (e.g. relays). For maintenance purposes, the motor driven switch can also be operated manually.



Santon can assemble complete solutions (IEC certified) on request, assembled using standard or tailor made components such as, fuse holders, overvoltage protection units, spring terminals, motor drives (for switches), electronics, PLC's, enclosures, etc.

Standard black knob

Padlockable knob for single hole mounting switch

Padlockable interlock knob for bottom mounting switch

- Specially designed for the solar industry
- Smallest design possible
- Extremely short power shut off time of approx. 3ms
- Wide electrical range up to 32 Amp per pole
- Multi-pole solutions (AC and DC) due to modular concept
- Models available for DIN rail mounting as well as for single hole mounting
- Many accessories available
- Meets standards IEC60947-1/3 and UL508