



THE SANTON  
**X-TYPE**  
SWITCH DISCONNECT  
FOR PHOTOVOLTAIC INSTALLATIONS



**SANTON SUCCESSFULLY 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.**



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.

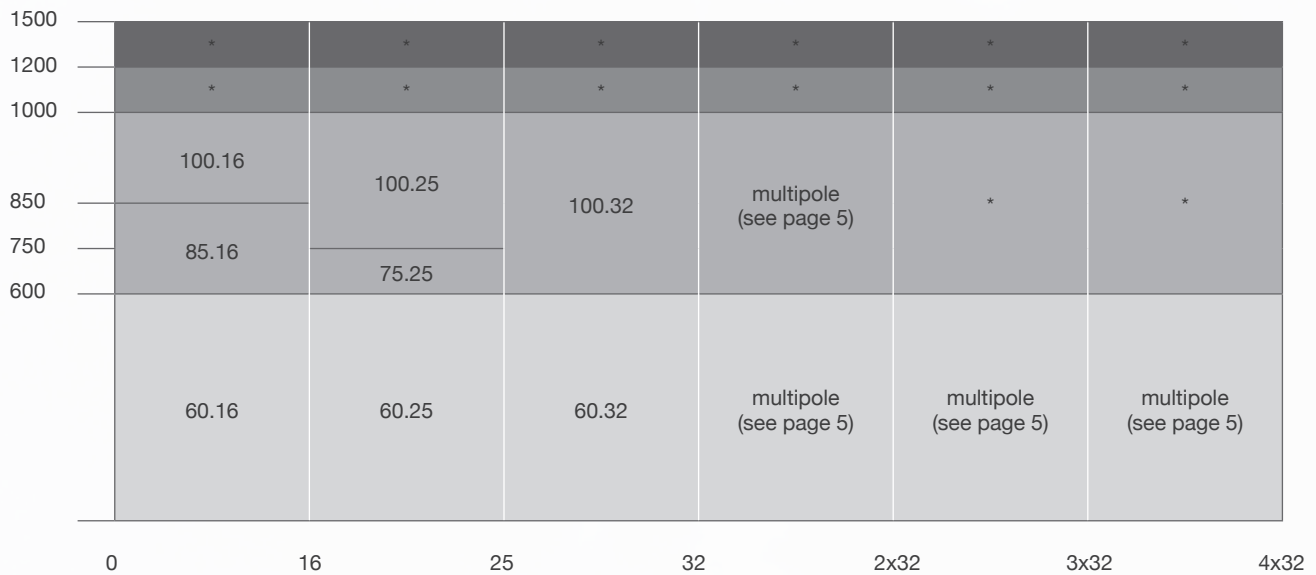
The Santon X-type switch has many modes of fixing: panel mounting by single hole mounting, base mounting (screw fix) or Din rail mounting. All terminals are easily accessible from the rear or the front of the switch (depending on the model).

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

Nominal voltage (V)

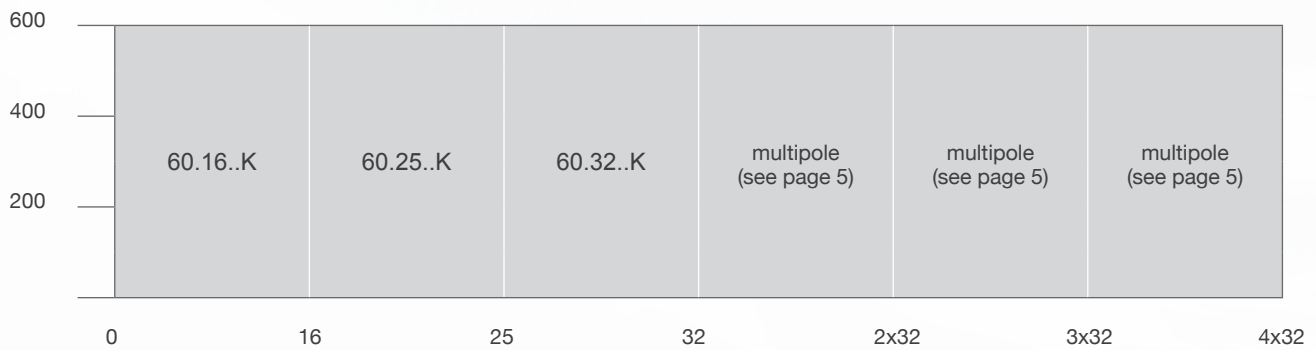


Nominal current (A)

\* on request

## STANDARD COMBINATIONS ACCORDING TO CSA C22.2 NO. 0 AND 14, UL508 FOR PV \*

Nominal voltage (V)



Nominal current (A)

\* 32 Amp rating according to CSA is 30 Amp according to UL

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	Current (A)	Poles	H	Product type code			
				Bottom mounting	Single hole mounting		
					Panel mounting	Reversed contacts	Double mounting
*1		*2	*3	B	P	R	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

## CSA/UL RATED SWITCHES \*5

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.

\*5 32 Amp rated switches according to CSA are 30 Amp according to UL

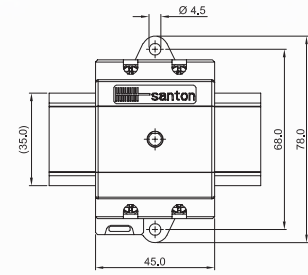
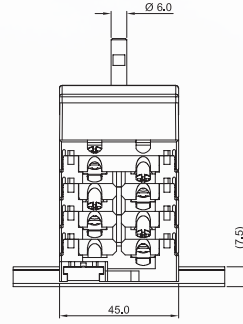
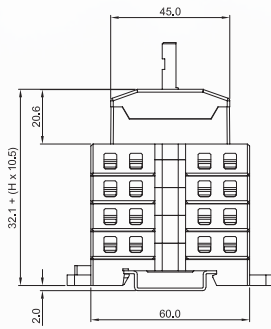
### Auxiliary contacts

For position indication or for motor driven switches auxiliary contacts are available. The auxiliary contacts are rated 16A at 250V AC and DC.

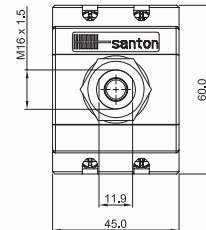
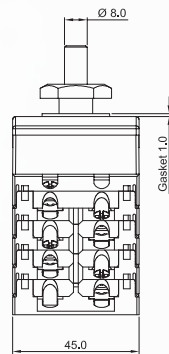
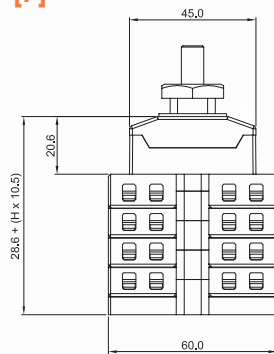
Add one extra layer for every auxiliary contact to determine the height of the switch.

# TYPES & MEASURES

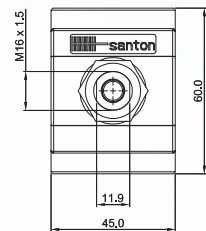
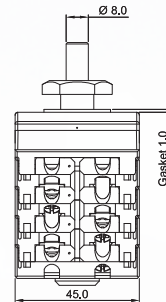
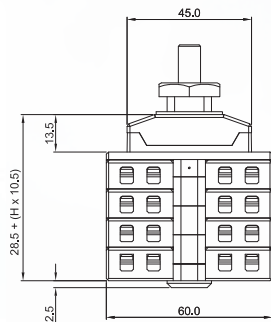
## DIN RAIL / BOTTOM MOUNTING [B]



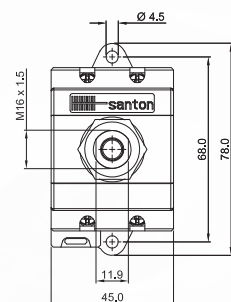
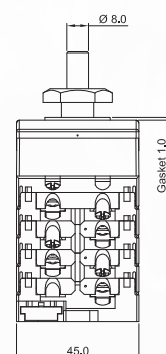
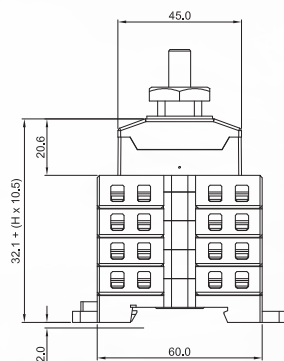
## SINGLE HOLE MOUNTING [P]



## SINGLE HOLE MOUNTING REVERSED CONTACTS [R]

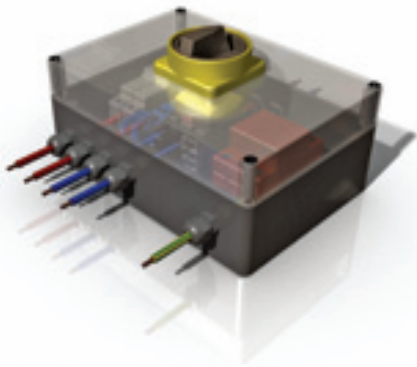


## SINGLE HOLE MOUNTING AND DIN RAIL CLIP [D]



# 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 (A-type)



Padlockable knob for single hole mounting switch (O-type)



Padlockable interlock knob for bottom mounting switch (R-type)

- 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 (for PV)



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