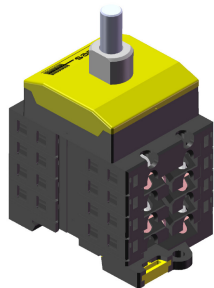# Data Sheet

Santon X-Type switch   X100.36DC.U4-B

Suitable as photovoltaic disconnect switch in accordance with Article 690 of NFPA 70 (NEC)
UL 508i, (including the requirements for PV application)
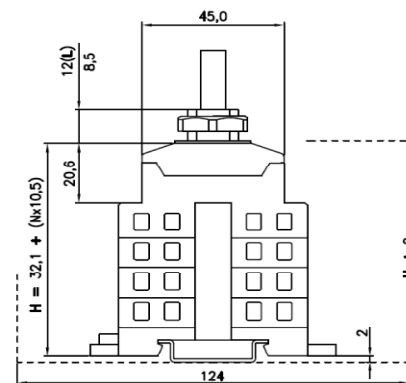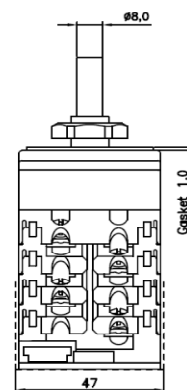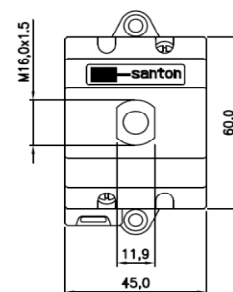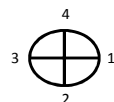UL 508i by UL

Terminals Scheme

Layer No.	Front Side Left	Front Side Right	Symbol	Rear Side Left	Rear Side Right	On Positions 1	On Positions 2	On Positions 3	On Positions 4
9			+2					X	X
8					+2			X	X
7			-2					X	X
6					-2			X	X
5			-1					X	X
4					-1			X	X
3			+1					X	X
2					+1			X	X
1			empty						

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

| Technical data	Symbol	Merit	Unit
nominal voltage (DC poles)	U	1000	V dc
nominal current (DC poles)	I	36	A dc
method of mounting		both bottom and single hole mounting [D]	
number of poles, dubble pole switching		4	
utilization category DC		Photovoltaic disconnect switch	
actuator		knob with padlocking, grey/grey [B]	
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	Uimp	8	kV
insulation voltage	Ui	1000	V
rated thermal current uninterrupted duty	Iu	36	A
rated short-time withstand current (1s)	Icw	750	A
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		5	kA
max power dissipation		4	W
minimum required dimensions of enclosures L x W x H*		124 x 47 x 126.5	mm
Shaft length			mm
Enclosure depth from inside bottom to outside top, required for the switch and knob		159.5	mm
* see the drawing for the height of the switch. The number of layers N is:		9	
tightening torque terminal screws M4 , min. - max.		1.5	1.7	Nm
		13	15	Lb.In
tightening torque M3 screw in the standard black knob, min. - max.		0.5	0.7	Nm
		5	6	Lb.In
tightening torque for the nut on the single hole mounting knob, min. - max.		1.8	2.0	Nm
		16	18	Lb.In
wire size, "Use 75°C Copper Wire Only", minimum required fine wire cross-section:		2x6	mm2
		8	AWG
ambient temperature allowed between		- 20 to + 70 °C	°C
storage temperature allowed between		- 40 to + 80 °C	°C
maximum relative humidity, without condensation at 20˚C		90	%
rated operational voltage (AC poles)	U		V ac
rated operational current (AC poles)	I		A ac
number of AC poles			
wire size, "Use 75°C Copper Wire Only", minimum required fine wire cross-section:			mm2
			AWG
auxiliary contact		No auxiliary contact	
weight		384	g
accessories:	-		
	-		

Mounting instructions

In the application all ratings have to be respected. The switch is designed for use on a flat surfface of at least a Type 1 Enclosure or equivelent. 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 thesurface of the enclosure to guide proper indication. The "On" and "Off" position may be marked using the symbols "I" and "0" according IEC 417 Symbols 5007 and 5008. The terminals, without interconnection can take copper wires up to 6 mm^2. 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.
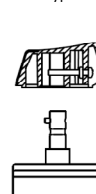
Maintenance

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 85ºC under full load.
- By operating the switch a few times (5x) the contacts will clean themselves and the switch will have a longer life.
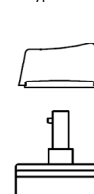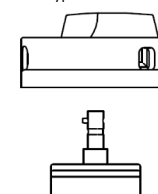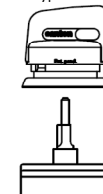
A type knob	D type knob	B type knob	O type knob

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

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