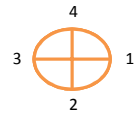
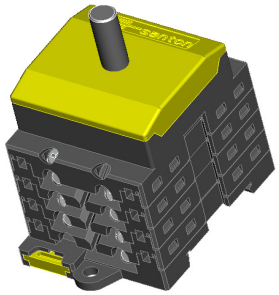
THE NEW SANTON X-TYPE SWITCH

TECHNICAL SPECIFICATIONS AND INSTRUCTIONS FOR USE

SANTON X-TYPE SWITCH: **X60.16B6E-AE**



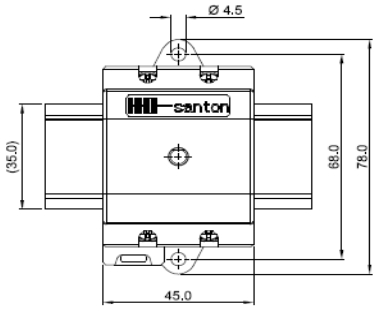
Switch disconnector for solar application according to IEC 60947-1&3



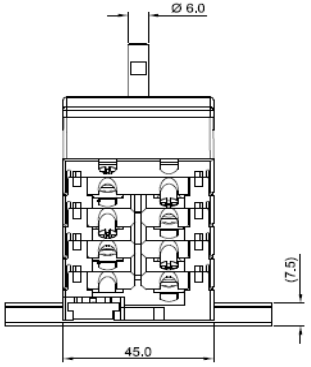
	Contact scheme			Positions			
	Marking	Symbol	Marking	1	2	3	4
12							
11							
10							
9							
8							
7							
6	-3		-3	X			
5	+3		+3	X			
4	+2		+2	X			
3	-2		-2	X			
2	-1		-1	X			
1	+1		+1	X			

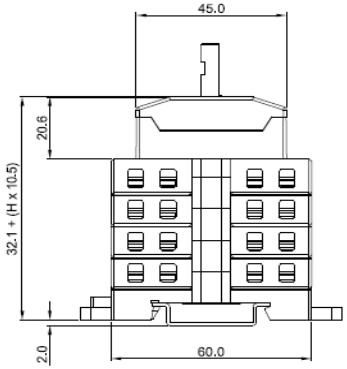
Contacts are made in "X" marked position.
Symbols for interconnection: [ ]

Technical data	Symbol		Unit
nominal voltage (DC poles)	Ue	600	V dc
nominal current (DC poles)	Ie	16	A dc
nominal voltage (second rating DC poles, if requested)	Ue		V dc
nominal current (second rating DC poles, if requested)	Ie		A dc
method of mounting	DIN rail and or Base mounting [B]		
number of DC poles		6	
utilization category DC		DC-21B	
actuator	standard black [A],		
positions	OFF at 12 hr, ON at 3 hr [E]		
rated impulse withstand voltage	Uimp	8	kV
insulation voltage	Ui	600	V
rated thermal current uninterrupted duty	Iu	16	A
rated short-time withstand current (1s)	Icw	480	A
rated short-circuit making capacity	Icm	1,4	kA
rated conditional short-circuit current		5	kA
max. cut-off current			kA
max power dissipation		1,6	W
method of operation	independent manual operation		
minimum required dimensions of enclosures l x w x h*		124 x 47 x 84,5	mm
* see the drawing for the height of the switch. The number of layers H is:		5	
tightening torque terminal screws M4 , min. - max.	1,5	1,7	Nm
tightening torque M3 screw in the standard black knob, min. - max.	0,5	0,7	Nm
minimum required fine wire cross-section: IEC60947-1, table 9		2,5	mm^2
ambient temperature allowed between		- 5 and + 40	˚C
storage temperature allowed between		- 40 and + 80	˚C
maximum relative humidity, without condensation at 20˚C		90	%
pollution degree		2	
IP rating terminals		IP20	
IP rating gland of the shaft in case of single hole panel mounting			
nominal voltage (AC poles)	Ue	0	V AC
nominal current (AC poles)	Ie	0	A AC
number of DC poles		0	
auxiliary contact, nominal current 16A at 250 V, AC15	No auxiliary contact		
weight		254	g
accessories:	0		
	0		



H is the number of layers in the switch





Mounting instructions
In the application all ratings have to be respected. When building the switch in an enclosure, the space envelope must be respected. 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 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.