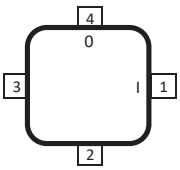
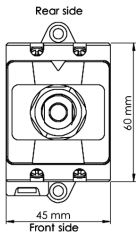
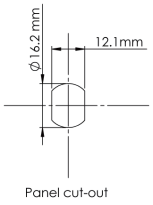
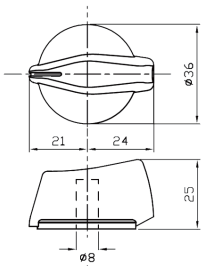
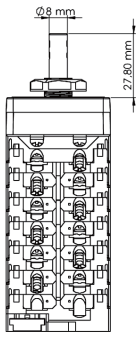
Data Sheet XB0210/2

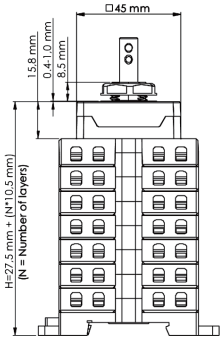


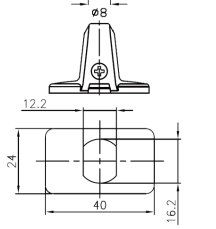


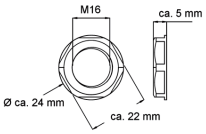












Technical data	Symbol	Ratings:	I	II	III	IV	V	Unit
Rated operational voltage	Ue		1000	850	800	650	400	V dc
Rated operational current	Ie		16	20	25	30	45	A dc
Required fine wire cross-section (minimal)*:			2,5	4,0	4,0	6,0	10,0	mm²
*IEC60947-1, table 9								
Number of DC poles							2	
Utilization category DC							DC-21B	
Pollution degree							2	
IP rating terminals							IP20	
Tightening torque terminal screws M4 (min. - max.)						1,5	– 1,7	Nm
Method of mounting								
IP rating of the shaft in case of single hole and four hole panel mounting							IP65	
Positions			12 (OFF) and 3 o'clock (ON)					
Actuator			Standard A knob with long screw to fix in shaft					
Method of operation			Independent manual operation					
Actuator operation force (max.)							1,4	Nm
Tightening torque M3 screw in the actuator (min. - max.)						0,2	– 0,4	Nm
Rated impulse withstand voltage			Uimp				8	kV
Insulation voltage			Ui				850	V
Rated thermal current uninterrupted duty			Iu				45	A
Rated short-time withstand current (1s)			Icw				700	A
Rated short-circuit making capacity			Icm				1,4	kA
Rated conditional short-circuit current			Isc				5	kA
Minimum required dimensions of enclosures L x W x D* {space envelope}							124 x 47 x 50	mm
* see the drawing for the height of the switch. The number of layers N is:							2	
Weight							ca. 149	g
Allowed ambient temperature (min. - max.)			$T_{ambient}$				-40 – 70	°C
Allowed storage temperature (min. - max.)			$T_{storage}$				-40 – 85	°C
Relative humidity (max.), without condensation at 20°C			RH				90	%

Terminals Scheme									
Layer No.	Front Side		Symbol	Rear Side		Positions			
	Left	Right		Left	Right	1	2	3	4
7									
6									
5									
4									
3	-1			-1		I			0
2		+1			+1	I			0
1			Empty						

(I = Contact is closed, O = Contact is open)

Mounting instructions
In the application all ratings according to the datasheet have to be respected. After mounting, the wiring must be checked and the switch must operate smoothly. When building the switch in an enclosure, the space envelope must be respected according to the applicable standards.

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.

Connection
The terminals, can take copper wires up to 6 mm2.
The recommended Spade Tongue Terminals may have a maximum width of 9 mm (see table for recommendations)

Recommend Manufacturer	Type number	Wire size (AWG)	Wire size (mm²)	Color
JST	FVD2-YS4A	AWG 16 – AWG 14	1,0 – 2,5 mm²	Blue
TE connectivity	C-165012	AWG 16 – AWG 14	1,0 – 2,5 mm²	Blue
Vogt	3635c	AWG 16 – AWG 14	1,5 – 2,5 mm²	Blue
TE connectivity	C-165015	AWG 12 - AWG 10	3,0 - 6,0 mm²	Yellow
Vogt	3652c / 3653c	AWG 12 - AWG 10	3,0 - 6,0 mm²	Yellow
Santon (JST)	52A1256.35	AWG 8 - AWG 10	10,5mm²-16mm² *1	*²

*1 16mm² only with fine stranded wire (or two times 6mm²)

*² Optional: A yellow finger safe sleeve for the Spade Tongue Terminal (Santon 52A1256.35) can be ordered under item number 52A1564.00