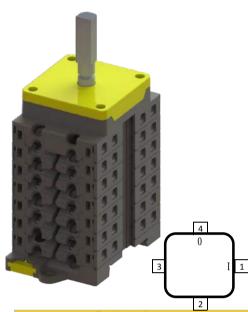


Rated operational voltage	Ue	1000	850	800	650	1	400	V dc
Rated operational current	le	16	20	25	32		45	A dc
Required fine wire cross-section (minimal)*:		2,5	4,0	4,0	6,0		10,0	mm²
*IEC60947-1, table 9					$\setminus$ $\setminus$			
Number of DC poles					$\sim$		4	
Utilization category DC						DC	C-21B	
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								
Tightening torque panel mounting nut (min	· max.)				2,0	-	2,5	Nm
Panel thickness between					1	-	4	mm
Positions	sitions 12 (OFF) and 3 o'clock (ON)							
Actuator	ctuator Standard knob with top screw, black [E],							
Method of operation Independent manual operation								
Actuator operation force (max.)							1,4	Nm
Tightening torque M3 screw in the actuator (r	nin max.)				1,3	-	1,5	Nm
Rated impulse withstand voltage		Uimp					8	kV
Insulation voltage		Ui					1000	V
Rated thermal current uninterrupted duty		lu					0	Α
Rated short-time withstand current (1s)		lcw					700	Α
Rated short-circuit making capacity		lcm					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	Х	71	mm
* see the drawing for the height of the switch. The number of layers N is:								
Weight						ca	. 258	g
Allowed ambient temperature (min max.)		_			40		70	°C
, , ,		$T_{ambient}$			-40	-	70	C

Recommend Manufacturer	Type number	Wire size (AWG)	Wire size (mm²)	Color
JST	FVD2-YS4A	AWG 16 – AWG 14	1,0 – 2,5 mm <sup>2</sup>	Blue
TE connectivity	C-165012	AWG 16 – AWG 14	1,0 - 2,5 mm <sup>2</sup>	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 mm <sup>2</sup>	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

RH





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

(I = Contact is closed, 0 = Contact is open)

## ${\tt Mounting\ instructions}$

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.

## ${\tt Maintenance}$

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

90

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)

- \*1  $16 \text{mm}^2$  only with fine stranded wire (or two times  $6 \text{mm}^2$ )
- \*2 Optional: A yellow finger safe sleeve for the Spade Tongue Terminal (Santon 52A1256.35) can be ordered under item number 52A1564.00

Relative humidity (max.), without condensation at 20°C