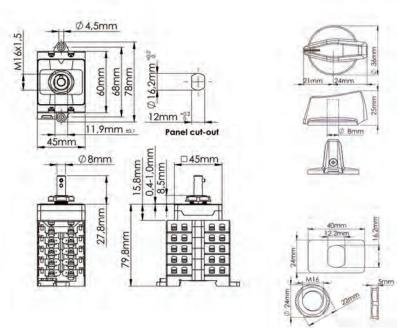
Technical data

Rated operational voltage





Ue

1100

1000

800

500 V dc

25 Rated operational current le 10 16 50 A dc Required fine wire cross-section (minimal)*: 2.5 2,5 4 10 mm² *IEC60947-1, table 9 Number of DC poles Utilization category DC Pollution degree IP rating terminals IP20 Tightening torque terminal screws M4 (min. - max.) 1,7 Nm

| Method of mounting | | | | | |
|--|-----------------------------|-----|---|------|----|
| IP rating of the shaft in case of single hole mounting | | | | IP65 | |
| Tightening torque panel mounting nut (min max.) | | 2,0 | - | 2,5 | Nm |
| Panel thickness between | | 1 | - | 4 | mm |
| Positions | 12 (OFF) and 3 o'clock (ON) | | | | |

| Panel thickness between | | L | _ | 4 | mm | | |
|---|---|---|---|------|----|--|--|
| 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.) | 0,5 | 0 | - | 0,70 | Nm | | |
| | | | | | | | |
| Rated impulse withstand voltage | Uimp | | | 8 | kV | | |
| Insulation voltage | Ui | | 1 | 1100 | V | | |
| Rated thermal current uninterrupted duty | lu | | | 50 | Α | | |
| Rated short-time withstand current (1s) | Icw | | | 700 | Α | | |
| Rated short-circuit making capacity | Icm | | | 1 | kA | | |
| Rated conditional short-circuit current | Isc | | | 5 | kA | | |

| Minimum required dimensions of enclosures L x W x D* {space envelope} | | | х | 47 | х | 71 | mm |
|--|----------|--|---|-----|-----|-----|----|
| * see the drawing for the height of the switch. The number of layers N is: | | | | | | 4 | |
| Weight | | | | | ca. | 211 | g |
| Allowed ambient temperature (min max.) | Tambient | | | -40 | - | 70 | °C |
| Allowed storage temperature (min max.) | Tstorage | | | -40 | - | 85 | °C |
| Relative humidity (max.), without condensation at 20°C | RH | | | | | 90 | % |

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



| Terminals Scheme | | | | | | | | | | |
|---|------|--------|--------------|----------------|-------|------|-----------|---|---|---|
| Layer | Fron | t Side | Complete | Side Rear Side | | Side | Positions | | | S |
| No. | Left | Right | Symbol | Left | Right | 1 | 2 | 3 | 4 | |
| | | | | | | | | | | |
| 9 | | | | | | | | | | |
| 8 | | | | | | | | | | |
| 7 | | | | | | | | | | |
| 6 | | | | | | | | | | |
| 5 | +2 | | | +2 | | 1 | | | 0 | |
| 4 | | -2 | | | -2 | 1 | | | 0 | |
| 3 | -1 | | _ | -1 | | 1 | | | 0 | |
| 2 | | +1 | | | +1 | 1 | | | 0 | |
| 1 | | | Empty | | | | | | | |
| (I = Contact is closed O = Contact is open) | | | | | | | | | | |

(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)

*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