

Safety switch, Telemecanique Safety switches  
XCS, metal XCSLF, 4NC+2 NO, slow break, 3  
entries tapped M20, 120 V



## Main

|                                        |                                                                                                                                                                                          |
|----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Range of product                       | Telemecanique Safety switches XCS                                                                                                                                                        |
| Product or component type              | Safety switch                                                                                                                                                                            |
| Component name                         | XCSLF                                                                                                                                                                                    |
| Design                                 | Slim                                                                                                                                                                                     |
| Material                               | Metal                                                                                                                                                                                    |
| Head type                              | Key operated turret head                                                                                                                                                                 |
| Contacts type and composition          | 2 NC + 1 NO                                                                                                                                                                              |
| Contact operation                      | Slow-break, break before make                                                                                                                                                            |
| Solenoid contacts type and composition | 2 NC + 1 NO (slow-break, break before make)                                                                                                                                              |
| Cable entry                            | 3 entries tapped for M20 x 1.5                                                                                                                                                           |
| Electromagnet interlocking             | Locking on de-energisation and unlocking on energisation of solenoid                                                                                                                     |
| [Us] solenoid rated supply voltage     | 24 V AC/DC                                                                                                                                                                               |
| Cable outer diameter                   | 7...13 mm                                                                                                                                                                                |
| Electrical connection                  | Spring terminal, clamping capacity: 1 x 1.5 mm <sup>2</sup> flexible or solid cable<br>Spring terminal, clamping capacity: 2 x 0.5 mm <sup>2</sup> flexible cables with 13 mm bared ends |
| Number of poles                        | 3                                                                                                                                                                                        |
| Locking options description            | With interlocking, locking by solenoid                                                                                                                                                   |
| Local signalling                       | 1 LED (orange) for actuator withdrawn<br>1 LED (green) for actuator inserted and locked                                                                                                  |
| Signalling circuit voltage             | 120 V                                                                                                                                                                                    |

## Complementary

|                                              |                                                                                                                              |
|----------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|
| Positive opening                             | With NC contact                                                                                                              |
| Supply voltage type                          | AC/DC                                                                                                                        |
| Supply frequency                             | 50/60 Hz                                                                                                                     |
| Load factor                                  | 1                                                                                                                            |
| Signalling circuit type                      | AC                                                                                                                           |
| Mechanical durability                        | 1000000 cycles                                                                                                               |
| Minimum actuation speed                      | 0.01 m/s                                                                                                                     |
| Maximum actuation speed                      | 0.5 m/s                                                                                                                      |
| [Ie] rated operational current               | 0.55 A at 24 V, DC-13, R300 conforming to EN/IEC 60947-5-1<br>0.75 A at 240 V, AC-15, C300 conforming to EN/IEC 60947-5-1    |
| [Ithe] conventional enclosed thermal current | 4 A                                                                                                                          |
| Maximum load current                         | <= 15 A                                                                                                                      |
| [Ui] rated insulation voltage                | 300 V conforming to UL 508<br>300 V conforming to CSA C22.2 No 14<br>250 V (pollution degree 3) conforming to EN/IEC 60947-1 |
| [Uimp] rated impulse withstand voltage       | 4 kV conforming to EN/IEC 60947-5-1                                                                                          |
| Minimum switching current                    | 10 mA at 20 °C                                                                                                               |
| Minimum switching voltage                    | 17 V                                                                                                                         |
| Short-circuit protection                     | 4 A cartridge fuse type gG (gl)<br>6 A type fast blow                                                                        |

|                                          |                                                                                                                                                                                                                                                                        |
|------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Maximum actuator forcible withdrawal rtc | 3000 N                                                                                                                                                                                                                                                                 |
| Minimum actuator force for extraction    | 20 N                                                                                                                                                                                                                                                                   |
| Resistance to mechanical impact          | 9.6 J against the partition<br>6.4 J without partition                                                                                                                                                                                                                 |
| Maximum operating rate                   | 10 cyc/mn for maximum durability                                                                                                                                                                                                                                       |
| Safety level                             | Can reach category 4 with the appropriate monitoring system and correctly wired conforming to EN/ISO 13849-1<br>Can reach PL = e with the appropriate monitoring system and correctly wired conforming to EN/ISO 13849-1<br>Can reach SIL 3 conforming to EN/IEC 61508 |
| Safety reliability data                  | B10d = 5500000 value given for a life time of 20 years limited by mechanical or contact wear                                                                                                                                                                           |
| Body material                            | Zamak                                                                                                                                                                                                                                                                  |
| Head material                            | Zamak                                                                                                                                                                                                                                                                  |
| Depth                                    | 51 mm                                                                                                                                                                                                                                                                  |
| Height                                   | 205 mm                                                                                                                                                                                                                                                                 |
| Width                                    | 44 mm                                                                                                                                                                                                                                                                  |
| Net weight                               | 1.1 kg                                                                                                                                                                                                                                                                 |

## Environment

|                                       |                                                                                                                        |
|---------------------------------------|------------------------------------------------------------------------------------------------------------------------|
| Standards                             | EN/IEC 60204-1<br>UL 508<br>EN 1088/ISO 14119<br>EN/ISO 13849-1<br>EN/IEC 62061<br>EN/IEC 60947-5-1<br>CSA C22.2 No 14 |
| Product certifications                | UL[RETURN]CSA[RETURN]TÜV                                                                                               |
| Protective treatment                  | TC                                                                                                                     |
| Ambient air temperature for operation | -25...60 °C                                                                                                            |
| Ambient air temperature for storage   | -40...70 °C                                                                                                            |
| Vibration resistance                  | 5 gn (f= 10...500 Hz) conforming to IEC 60068-2-6                                                                      |
| Shock resistance                      | 10 gn for 11 ms conforming to IEC 60068-2-27                                                                           |
| Electrical shock protection class     | Class I conforming to EN/IEC 61140                                                                                     |
| IP degree of protection               | IP66 conforming to EN/IEC 60529 and EN/IEC 60947-5-1<br>IP67                                                           |

## Packing Units

|                              |            |
|------------------------------|------------|
| Unit Type of Package 1       | PCE        |
| Number of Units in Package 1 | 1          |
| Package 1 Height             | 5.6 cm     |
| Package 1 Width              | 7.5 cm     |
| Package 1 Length             | 22.9 cm    |
| Package 1 Weight             | 1.266 kg   |
| Unit Type of Package 2       | PAL        |
| Number of Units in Package 2 | 128        |
| Package 2 Height             | 60.0 cm    |
| Package 2 Width              | 80.0 cm    |
| Package 2 Length             | 128.0 cm   |
| Package 2 Weight             | 162.816 kg |
| Unit Type of Package 3       | S02        |
| Number of Units in Package 3 | 8          |
| Package 3 Height             | 15.0 cm    |
| Package 3 Width              | 30.0 cm    |
| Package 3 Length             | 40.0 cm    |
| Package 3 Weight             | 11.121 kg  |

### Offer Sustainability

|                                            |                                                                                                                                                                                                                                                                                                                                                                                   |
|--------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Sustainable offer status                   | Green Premium product                                                                                                                                                                                                                                                                                                                                                             |
| California proposition 65                  | WARNING: This product can expose you to chemicals including: Diisononyl phthalate (DINP), which is known to the State of California to cause cancer, and Di-isodecyl phthalate (DIDP), which is known to the State of California to cause birth defects or other reproductive harm. For more information go to <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a> |
| For all Reach Rohs enquiries contact us at | <a href="mailto:sustainability@tesensors.com">sustainability@tesensors.com</a>                                                                                                                                                                                                                                                                                                    |

### Contractual warranty

|          |           |
|----------|-----------|
| Warranty | 18 months |
|----------|-----------|