

Safety switch, Telemecanique Safety switches  
XCS, metal XCSE, 2NC + 1 NO, slow break,  
2 entries tapped M20, 24 V



## Main

|                                                          |                                                                                          |
|----------------------------------------------------------|------------------------------------------------------------------------------------------|
| Range of product                                         | Telemecanique Safety switches XCS                                                        |
| Product or component type                                | Safety switch                                                                            |
| Component name                                           | XCSE                                                                                     |
| Design                                                   | Rectangular                                                                              |
| 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                   | 1 NC + 1 NO (slow-break, simultaneous)                                                   |
| Cable entry                                              | 2 entries tapped for M20 x 1.5                                                           |
| Electromagnet interlocking                               | Locking on energisation and unlocking on de-energisation of solenoid                     |
| [Us]&nbsp;solenoid&nbsp;rate&nbsp;of&nbsp;supply voltage | 24/48 V                                                                                  |
| Cable outer diameter                                     | 7...13 mm                                                                                |
| Electrical connection                                    | Terminal, clamping capacity: 1 x 0.5...2 x 1.5 mm <sup>2</sup> with or without cable end |
| Number of poles                                          | 3                                                                                        |
| Locking options description                              | With interlocking, locking by solenoid                                                   |
| Local signalling                                         | 2 LEDs (green or orange) for guard open/guard closed and locked                          |
| Signalling circuit voltage                               | 24/48 V (voltage limits: 20...52 V)                                                      |

## Complementary

|                                              |                                                                                                                                                                                                                                          |
|----------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Positive opening                             | With NC contact                                                                                                                                                                                                                          |
| Supply voltage type                          | AC/DC                                                                                                                                                                                                                                    |
| Supply frequency                             | 50/60 Hz                                                                                                                                                                                                                                 |
| Load factor                                  | 1                                                                                                                                                                                                                                        |
| Power consumption in VA                      | 10 VA inrush<br>10 VA sealed                                                                                                                                                                                                             |
| Signalling circuit type                      | AC/DC                                                                                                                                                                                                                                    |
| Signalling circuit consumption               | 7 mA                                                                                                                                                                                                                                     |
| 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 125 V, DC-13, Q300 conforming to IEC 60947-5-1<br>0.27 A at 250 V, DC-13, Q300 conforming to IEC 60947-5-1<br>3 A at 120 V, AC-15, B300 conforming to IEC 60947-5-1<br>1.5 A at 240 V, AC-15, B300 conforming to IEC 60947-5-1 |
| [Ithe] conventional enclosed thermal current | 6 A                                                                                                                                                                                                                                      |
| [Ui] rated insulation voltage                | 50 V conforming to IEC 60947-1 for signalling circuit                                                                                                                                                                                    |
| [Uimp] rated impulse withstand voltage       | 6 kV conforming to IEC 60947-5-1                                                                                                                                                                                                         |
| Protection type                              | Overvoltage protection for signalling circuit                                                                                                                                                                                            |
| Short-circuit protection                     | 10 A cartridge fuse type gG (gl)                                                                                                                                                                                                         |
| Actuator forcible withdrawal rtc             | 2000 N                                                                                                                                                                                                                                   |

|                                       |                                                                                                                                                                                                                                                                                                                          |
|---------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Minimum actuator force for extraction | 20 N                                                                                                                                                                                                                                                                                                                     |
| 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 ISO 13849-1<br>Can reach PL = e with the appropriate monitoring system and correctly wired conforming to ISO 13849-1<br>Can reach SIL 3 with the appropriate monitoring system and correctly wired conforming to IEC 61508 |
| Safety reliability data               | B10d = 5000000 value given for a life time of 20 years limited by mechanical or contact wear                                                                                                                                                                                                                             |
| Body material                         | Zamak                                                                                                                                                                                                                                                                                                                    |
| Head material                         | Zamak                                                                                                                                                                                                                                                                                                                    |
| Depth                                 | 44 mm                                                                                                                                                                                                                                                                                                                    |
| Height                                | 146 mm                                                                                                                                                                                                                                                                                                                   |
| Width                                 | 98 mm                                                                                                                                                                                                                                                                                                                    |
| Net weight                            | 1.14 kg                                                                                                                                                                                                                                                                                                                  |

## Environment

|                                       |                                                                                             |
|---------------------------------------|---------------------------------------------------------------------------------------------|
| Standards                             | EN 1088/ISO 14119<br>UL 508<br>ISO 12100<br>CSA C22.2 No 14<br>IEC 60947-5-1<br>IEC 60204-1 |
| Product certifications                | UL[RETURN]CSA                                                                               |
| Protective treatment                  | TC                                                                                          |
| Ambient air temperature for operation | -25...40 °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 IEC 61140                                                             |
| IP degree of protection               | IP67 conforming to EN/IEC 60529 and EN/IEC 60947-5-1                                        |

## Packing Units

|                              |           |
|------------------------------|-----------|
| Unit Type of Package 1       | PCE       |
| Number of Units in Package 1 | 1         |
| Package 1 Height             | 5.500 cm  |
| Package 1 Width              | 11.200 cm |
| Package 1 Length             | 15.300 cm |
| Package 1 Weight             | 1.314 kg  |
| Unit Type of Package 2       | S01       |
| Number of Units in Package 2 | 4         |
| Package 2 Height             | 15.000 cm |
| Package 2 Width              | 15.000 cm |
| Package 2 Length             | 40.000 cm |
| Package 2 Weight             | 5.420 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 |
|----------|-----------|