



## Main

|                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|-------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Range of product              | Preventa Safety automation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Product or component type     | Preventa safety module                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Safety module name            | XPSAV                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Safety module application     | For emergency stop and switch monitoring                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Function of module            | Emergency stop button with 2 NC contacts, monitored start<br>Emergency stop monitoring 1-channel wiring<br>Monitoring of a movable guard associated with 2 switches automatic start<br>Emergency stop button with 1 NC contact, automatic start or unmonitored start<br>Emergency stop monitoring 2-channel wiring                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Safety level                  | Can reach PL e/category 4 conforming to EN/ISO 13849-1<br>Can reach SILCL 3 conforming to EN/IEC 62061                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Safety reliability data       | DC > 99 % conforming to EN/ISO 13849-1<br>MTTFd = 75.8 years conforming to EN/ISO 13849-1<br>PFHd = 7.95E-9 1/h conforming to EN/IEC 62061                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Type of start                 | Configurable                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Connections - terminals       | Captive screw clamp terminals, clamping capacity: 2 x 0.5...2 x 1.5 mm <sup>2</sup> flexible cable with cable end, with double bezel<br>Captive screw clamp terminals, clamping capacity: 1 x 0.14...1 x 2.5 mm <sup>2</sup> flexible cable with cable end, with double bezel<br>Captive screw clamp terminals, clamping capacity: 1 x 0.14...1 x 2.5 mm <sup>2</sup> solid cable with cable end, with double bezel<br>Captive screw clamp terminals, clamping capacity: 1 x 0.25...1 x 1.5 mm <sup>2</sup> flexible cable with cable end, with double bezel<br>Captive screw clamp terminals, clamping capacity: 1 x 0.25...1 x 2.5 mm <sup>2</sup> flexible cable with cable end, with double bezel<br>Captive screw clamp terminals, clamping capacity: 2 x 0.14...2 x 0.75 mm <sup>2</sup> flexible cable with cable end, with double bezel<br>Captive screw clamp terminals, clamping capacity: 2 x 0.14...2 x 0.75 mm <sup>2</sup> solid cable with cable end, with double bezel<br>Captive screw clamp terminals, clamping capacity: 2 x 0.25...2 x 1 mm <sup>2</sup> flexible cable with cable end, with double bezel |
| Output type                   | Relay instantaneous opening 3 NO, volt-free<br>Relay time delay opening 3 NO, volt-free                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Number of additional circuits | 3 solid state outputs                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| [Us] rated supply voltage     | 24 V DC (- 20...20 %)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |

## Complementary

|                                     |                              |
|-------------------------------------|------------------------------|
| Synchronisation time between inputs | Unlimited for emergency stop |
|-------------------------------------|------------------------------|

|                                             |                                                                                                                                                                                                                                                            |
|---------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                             | 1.5 s for guard                                                                                                                                                                                                                                            |
| Power consumption in W                      | <= 5 W DC                                                                                                                                                                                                                                                  |
| Input protection type                       | Internal, electronic                                                                                                                                                                                                                                       |
| Time delay range                            | 0.1...2 s                                                                                                                                                                                                                                                  |
| [Uc] control circuit voltage                | 24 V DC                                                                                                                                                                                                                                                    |
| Line resistance                             | 100 Ohm 2000 m                                                                                                                                                                                                                                             |
| Breaking capacity                           | C300 : 180 VA, AC-15 (holding) for relay output<br>C300 : 1800 VA, AC-15 (inrush) for relay output                                                                                                                                                         |
| Breaking capacity                           | 20 mA at 24 V<br>1.25 A at 24 V (DC-13) time constant: 50 ms for relay output                                                                                                                                                                              |
| Output thermal current                      | 2 A for 1 output and 4 A for the other 2 outputs for instantaneous and time delay outputs<br>3.3 A for all 3 outputs for instantaneous and time delay outputs<br>6 A for 1 output and 2 A for the other 2 outputs for instantaneous and time delay outputs |
| [Ith] conventional free air thermal current | 20 A                                                                                                                                                                                                                                                       |
| Associated fuse rating                      | 4 A fuse type gG or gL for instantaneous and time delay outputs conforming to EN/IEC 60947-5-1, DIN VDE 0660 part 200<br>6 A fuse type fast blow conforming to EN/IEC 60947-5-1, DIN VDE 0660 part 200                                                     |
| Minimum output current                      | 10 mA for relay output                                                                                                                                                                                                                                     |
| Minimum output voltage                      | 17 V for relay output                                                                                                                                                                                                                                      |
| Response time on input open                 | <= 30 ms                                                                                                                                                                                                                                                   |
| [Ui] rated insulation voltage               | 300 V (degree of pollution: 2) conforming to DIN VDE 0110 part 1<br>300 V (degree of pollution: 2) conforming to IEC 60947-5-1                                                                                                                             |
| [Uimp] rated impulse withstand voltage      | 4 kV overvoltage category III conforming to IEC 60947-5-1<br>4 kV overvoltage category III conforming to DIN VDE 0110 part 1                                                                                                                               |
| Local signalling                            | 11 LEDs                                                                                                                                                                                                                                                    |
| Mounting support                            | 35 mm symmetrical DIN rail                                                                                                                                                                                                                                 |
| Product weight                              | 0.32 kg                                                                                                                                                                                                                                                    |

## Environment

|                                       |                                                                                            |
|---------------------------------------|--------------------------------------------------------------------------------------------|
| Standards                             | EN/ISO 13850<br>EN 1088/ISO 14119<br>EN/IEC 60947-5-1<br>EN/IEC 60204-1                    |
| Product certifications                | UL<br>TÜV<br>CSA                                                                           |
| IP degree of protection               | IP20 (terminals) conforming to EN/IEC 60529<br>IP40 (enclosure) conforming to EN/IEC 60529 |
| Ambient air temperature for operation | -10...55 °C                                                                                |
| Ambient air temperature for storage   | -25...85 °C                                                                                |

## Dimensions

