



Main

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|---------------------------|--|
| Range of Product | Preventa Safety automation |
| Product or Component Type | Safe mixed I/O expansion module |
| Device short name | XPSMCM |
| Electrical Connection | Screw terminal |
| [Us] rated supply voltage | 24 V - 20...20 % DC |
| Number of inputs | 8.0 digital 4.0 digital external device monitoring |
| Number of outputs | 4.0 test line control 4.0 safety outputs OSSD contactor/drive connection 4.0 configurable diagnostic connection |
| Discrete input type | Isolated |
| Discrete output type | PNP |
| Function of module | Monitoring safety detection discrete input Monitoring safety dialogue discrete input Monitoring safety actuators discrete output |

Complementary

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|----------------------------|--|
| Power Consumption in W | 3 W |
| Power dissipation in W | 3 W |
| Integrated connection type | Backplane expansion bus |
| Number of terminal blocks | 6 |
| Connections - terminals | 2 captive screw clamp terminals, removable terminal block 1 captive screw clamp terminals, removable terminal block |
| Load type | Resistive load |
| Safety level | Can reach category 4 ISO 13849-1 Can reach PL = e ISO 13849-1 Can reach SIL 3 IEC 61508 SILCL 3 IEC 62061 |
| Quality labels | CE |
| Discrete input voltage | 24 V DC |
| Discrete output voltage | 24 V DC |
| Discrete output current | 400 mA 100 mA |
| Output load | 60 Ohm |
| Local signalling | 1 LED green PWR power ON 1 LED green RUN RUN (status) 1 LED red E IN internal error 1 LED red E EX external error 2 LEDs orange ADDR node address 8 LEDs yellow IN input status 4 LEDs green/red OUT output status 4 LEDs yellow STATUS output status |

| | |
|---------------------|--|
| Cable cross section | 0.00...0.00 In ² (0.2...1.5 mm ²) - AWG 24...AWG 16 flexible without cable end 0.00...0.00 In ² (0.2...2.5 mm ²) - AWG 24...AWG 14 flexible without cable end 0.00...0.00 In ² (0.25...1 mm ²) - AWG 23...AWG 18 flexible with cable end, without bezel 0.00...0.00 In ² (0.25...2.5 mm ²) - AWG 23...AWG 14 flexible with cable end, with bezel 0.00...0.00 In ² (0.25...2.5 mm ²) - AWG 23...AWG 14 flexible with cable end, without bezel 0.00...0.00 In ² (0.5...1.5 mm ²) - AWG 20...AWG 16 flexible with cable end, with double bezel 0.00...0.00 In ² (0.2...1 mm ²) - AWG 24...AWG 18 solid without cable end 0.00...0.00 in ² (0.2...2.5 mm ²) - AWG 24...AWG 14 solid without cable end |
| Mounting support | Omega 35 mm DIN rail EN 50022 |
| Depth | 0.89 in (22.5 mm) |
| Height | 3.90 in (99 mm) |
| Width | 4.51 in (114.5 mm) |
| Net Weight | 0.55 lb(US) (0.25 kg) |

Environment

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|--|---|
| Standards | IEC 61800-5-1 IEC 61508 ISO 13849-1 IEC 62061 |
| Product Certifications | cULus[RETURN]TÜV[RETURN]RCM |
| IP degree of protection | IP20 enclosure) |
| Ambient air temperature for operation | 14...131 °F (-10...55 °C) |
| Ambient air temperature for storage | -4...185 °F (-20...85 °C) |
| Relative Humidity | 10...95 % |
| Pollution degree | 2 |
| [Uimp] rated impulse withstand voltage | 4 kV IEC 61800-5-1 |
| Safety reliability data | DC > 99 % MTTFd = 166 years high PFHd = 1.32E-8 1/h |
| Insulation | 250 V AC between power supply and housing IEC 61800-5-1 |
| Overvoltage category | II |
| Electromagnetic compatibility | Electrostatic discharge immunity test - test level: 6 kV (on contact) conforming to IEC 61000-4-2 Electrostatic discharge immunity test - test level: 20 kV (on air) conforming to IEC 61000-4-2 Susceptibility to electromagnetic fields - test level: 10 V/m (80...1000 MHz) conforming to IEC 61000-4-3 Susceptibility to electromagnetic fields - test level: 30 V/m (1.4 GHz...2 GHz) conforming to IEC 61000-4-3 |
| Vibration resistance | +/-0.35 mm 10...55 Hz)IEC 61496-1 |
| Shock resistance | 10 gn 16 ms) 1000 shocks on each axis IEC 61496-1 |
| Service Life | 20 year(s) |

Ordering and shipping details

| | |
|-------------------|---------------------------------|
| Category | 22477-SAFETY MODULES (PREVENTA) |
| Discount Schedule | SAF2 |
| GTIN | 3606481987167 |
| Returnability | No |
| Country of origin | IT |

Packing Units

| | |
|------------------------------|-------------------|
| Unit Type of Package 1 | PCE |
| Number of Units in Package 1 | 1 |
| Package 1 Height | 6.30 in (16.0 cm) |
| Package 1 Width | 4.92 in (12.5 cm) |
| Package 1 Length | 1.69 in (4.3 cm) |
| Package 1 Weight | 8.82 oz (250.0 g) |
| Unit Type of Package 2 | S01 |

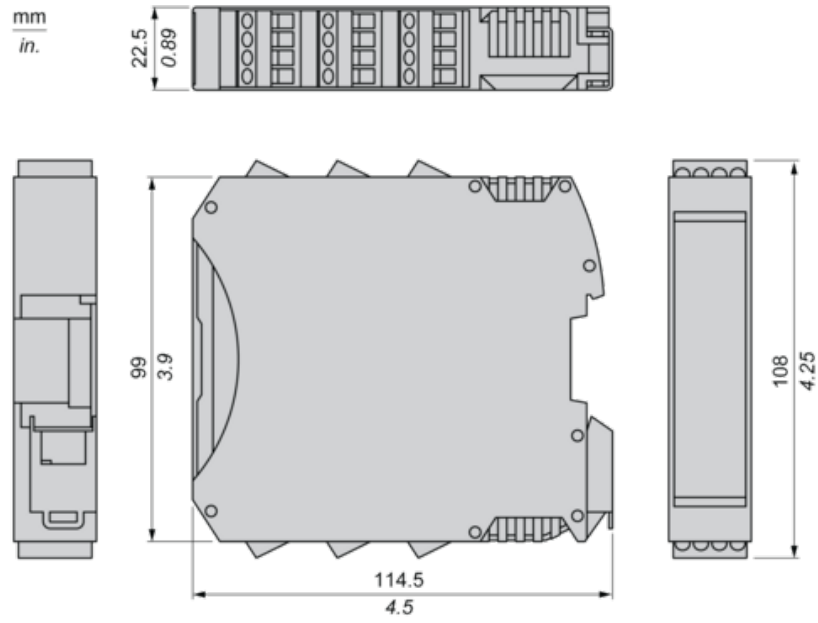
| | |
|------------------------------|------------------------|
| Number of Units in Package 2 | 6 |
| Package 2 Height | 5.91 in (15.0 cm) |
| Package 2 Width | 5.91 in (15.0 cm) |
| Package 2 Length | 15.75 in (40.0 cm) |
| Package 2 Weight | 3.89 lb(US) (1.766 kg) |

Offer Sustainability

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|----------------------------|---|
| Sustainable offer status | Green Premium product |
| California proposition 65 | WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov |
| REACH Regulation | REACH Declaration |
| REACH free of SVHC | Yes |
| EU RoHS Directive | Pro-active compliance (Product out of EU RoHS legal scope) |
| Mercury free | Yes |
| China RoHS Regulation | China RoHS Declaration |
| RoHS exemption information | Yes |
| Environmental Disclosure | Product Environmental Profile |
| Circularity Profile | End Of Life Information |
| WEEE | The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins. |

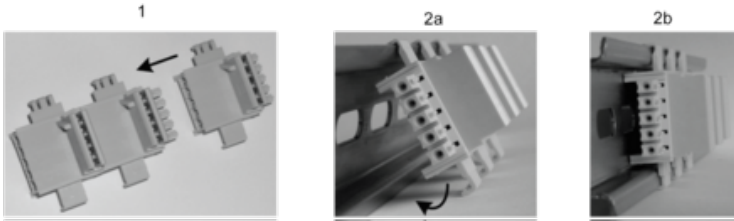
Dimensions

Screw Terminal



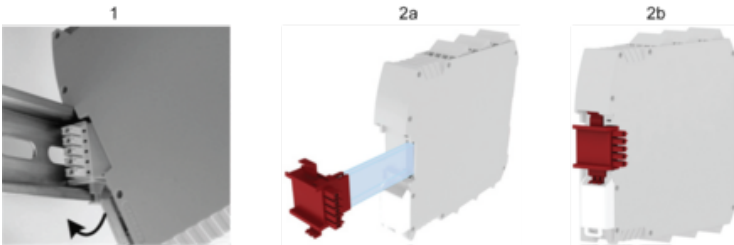
Mounting Safety Controller CPU with Module(s)

Mount BackPlane Connector on Rail



- 1 : Connect as much Backplane Connector as module to be install.
- 2 : Fix the connectors to the rail (Top first).

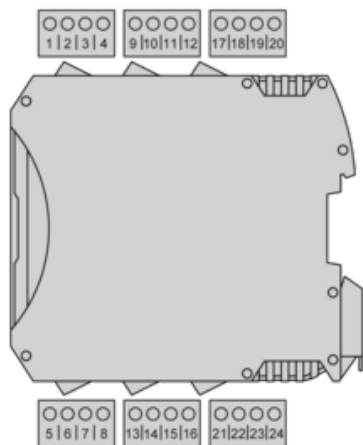
Mount Safety Controller CPU with Other Module(s)



- 1 : Mount controller CPU and modules on rail.
- 2 : Make sure that the controller CPU or the module(s) are plugged on the BackPlane connector.

Wiring

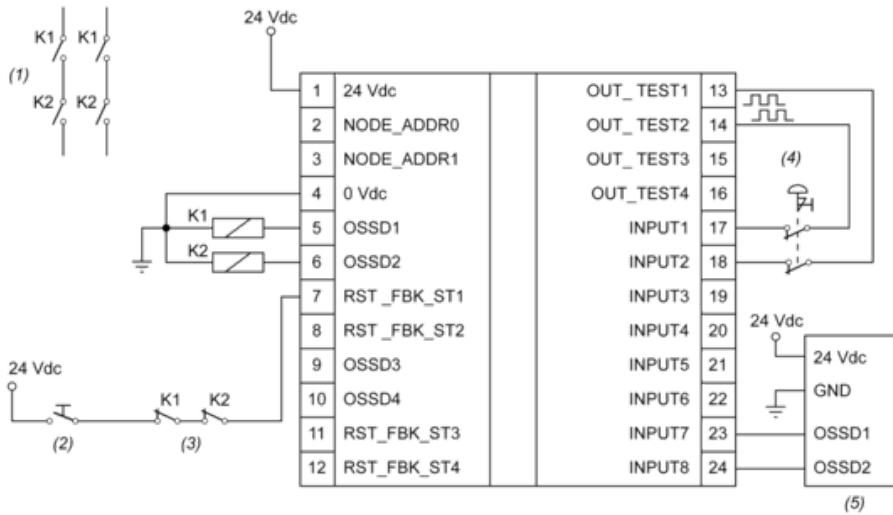
Terminal Designation



| Terminal | Signal | Description |
|---------------------------------|------------------------|--|
| 1 | 24 VDC | 24 Vdc power supply |
| 2 | NODE_ADDR0 | Node selection |
| 3 | NODE_ADDR1 | |
| 4 | 0 VDC | 0 Vdc power supply |
| 5 | OSSD1 | Safety-related output 1 |
| 6 | OSSD2 | Safety-related output 2 |
| 7 | RESTART_FBK1/ STATUS1 | Feedback/Restart 1 for OSSD1 |
| Configurable output 1 for OSSD1 | | |
| 8 | RESTART_FBK2 / STATUS2 | Feedback/Restart 2 for OSSD2 |
| Configurable output 2 for OSSD2 | | |
| 9 | OSSD3 | Safety-related output 3 |
| 10 | OSSD4 | Safety-related output 4 |
| 11 | RESTART_FBK3/ STATUS3 | Feedback/Restart 3 for OSSD3 |
| Configurable output 3 for OSSD3 | | |
| 12 | RESTART_FBK4/ STATUS4 | Feedback/Restart 4 for OSSD4 |
| Configurable output 4 for OSSD4 | | |
| 13 | OUT_TEST1 | Test output for detection of short circuits/cross circuits in input circuits |
| 14 | OUT_TEST2 | |
| 15 | OUT_TEST3 | |
| 16 | OUT_TEST4 | |
| 17 | INPUT1 | Safety-related input 1 |
| 18 | INPUT2 | Safety-related input 2 |
| 19 | INPUT3 | Safety-related input 3 |
| 20 | INPUT4 | Safety-related input 4 |

| Terminal | Signal | Description |
|----------|--------|------------------------|
| 21 | INPUT5 | Safety-related input 5 |
| 22 | INPUT6 | Safety-related input 6 |
| 23 | INPUT7 | Safety-related input 7 |
| 24 | INPUT8 | Safety-related input 8 |

Wiring Example



- (1) : Contactors
- (2) : Restart
- (3) : Feedback
- (4) : Emergency stop
- (5) : Light curtain