



### Main

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

### Complementary

Maximum 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	1 spring clamp terminals, removable terminal block 2 spring clamp terminals, removable terminal block
Load type	Resistive load
Safety level	Can reach category 4 conforming to ISO 13849-1 Can reach PL = e conforming to ISO 13849-1 Can reach SIL 3 conforming to IEC 61508 SILCL 3 conforming to 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 with PWR marking for power ON 1 LED green with RUN marking for RUN (status) 1 LED red with E IN marking for internal error 1 LED red with E EX marking for external error 2 LEDs orange with ADDR marking for node address 8 LEDs yellow with IN marking for input status 4 LEDs green/red with OUT marking for output status 4 LEDs yellow with STATUS marking for output status
Cable cross section	0.2...2.5 Mm <sup>2</sup> - AWG 24...AWG 14 flexible cablewithout cable end 0.25...2.5 Mm <sup>2</sup> - AWG 23...AWG 14 flexible cablewith cable end, with bezel 0.25...2.5 Mm <sup>2</sup> - AWG 23...AWG 14 flexible cablewith cable end, without bezel 0.2...2.5 Mm <sup>2</sup> - AWG 24...AWG 14 solid cablewithout cable end 0.5...1 mm <sup>2</sup> - AWG 20...AWG 18 flexible cablewith cable end, with double bezel
Mounting support	Omega 35 mm DIN rail conforming to EN 50022
Depth	22.5 mm
Height	99 mm
Width	114.5 mm
Net weight	0.25 kg

## Environment

Standards	IEC 62061 IEC 61508 ISO 13849-1 IEC 61800-5-1
Product certifications	RCM[RETURN]cULus[RETURN]TÜV
IP degree of protection	IP20 (enclosure)
Ambient air temperature for operation	-10...55 °C
Ambient air temperature for storage	-20...85 °C
Relative humidity	10...95 %
Pollution degree	2
[Uimp] rated impulse withstand voltage	4 kV conforming to 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 conforming to 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 (f= 10...55 Hz) conforming to IEC 61496-1
Shock resistance	10 gn (duration = 16 ms) for 1000 shocks on each axis conforming to IEC 61496-1
Service life	20 year(s)

## Packing Units

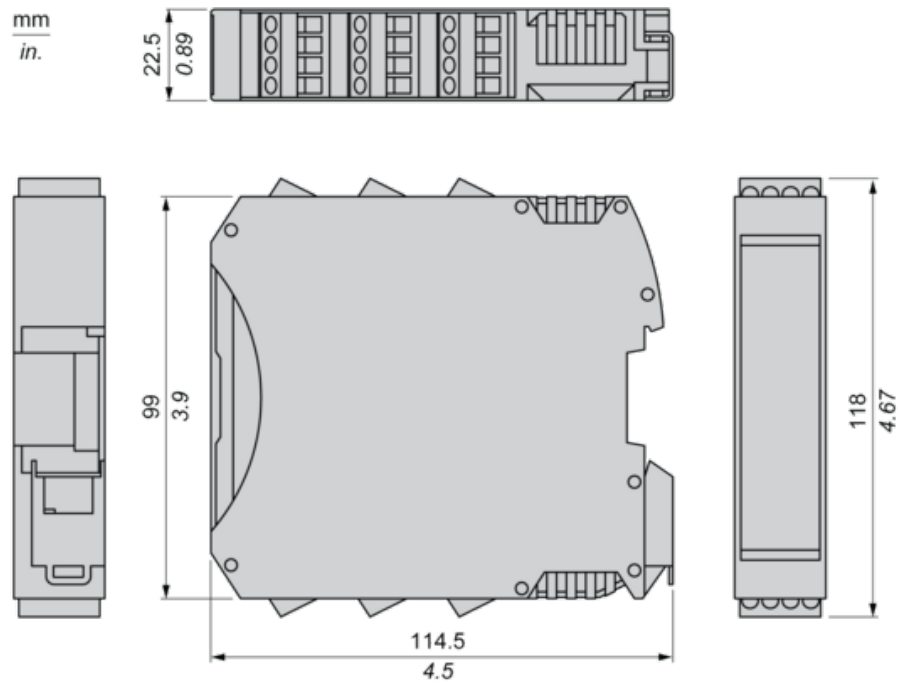
Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	16.0 cm
Package 1 Width	12.5 cm
Package 1 Length	4.3 cm
Package 1 Weight	250.0 g
Unit Type of Package 2	S01
Number of Units in Package 2	6
Package 2 Height	15.0 cm
Package 2 Width	15.0 cm
Package 2 Length	40.0 cm
Package 2 Weight	1.765 kg

## Offer Sustainability

REACH Regulation	 <a href="#">REACH Declaration</a>
REACH free of SVHC	Yes
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)
Mercury free	Yes
China RoHS Regulation	 <a href="#">China RoHS Declaration</a>
RoHS exemption information	 <a href="#">Yes</a>
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

Dimensions

Spring Terminal

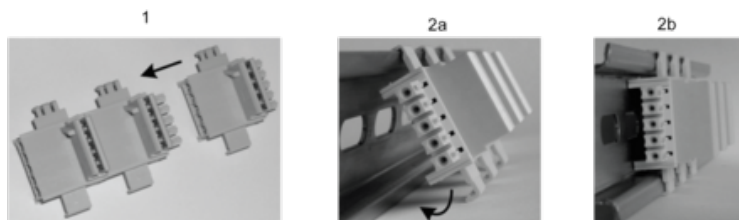


---

Mounting Safety Controller CPU with Module(s)

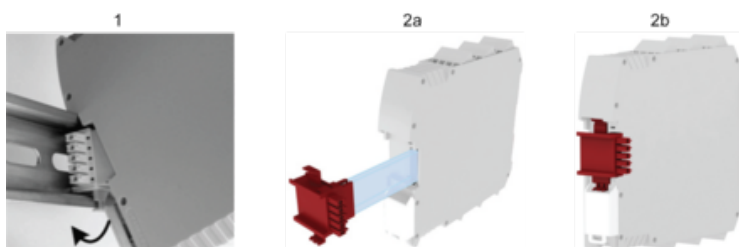
---

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).

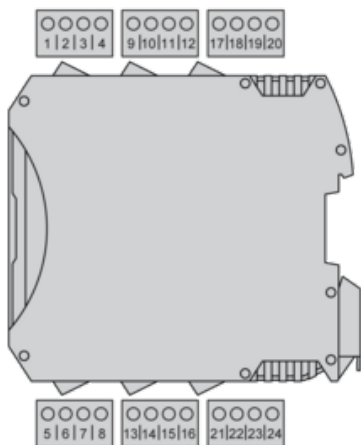
Mount Safety Controller CPU with Other Module(s)



- 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

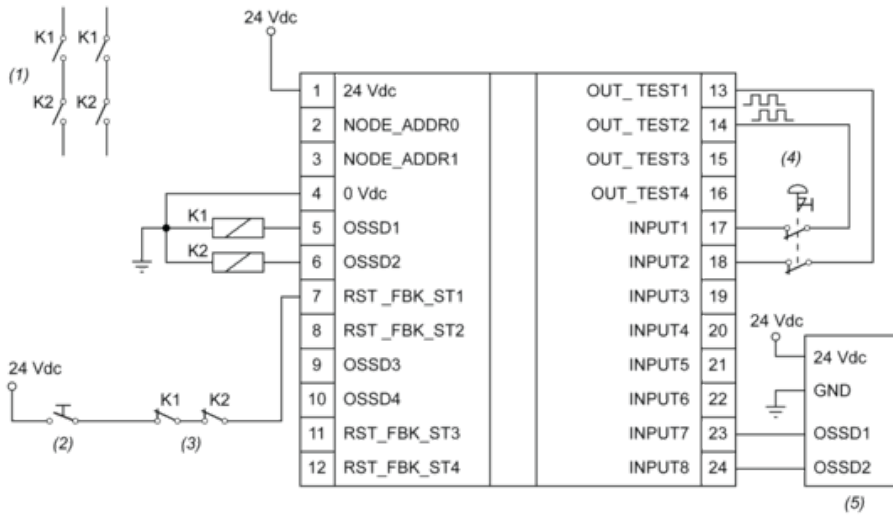
Terminal Designation



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