



### Main

Range of product	Preventa Safety automation
Product or component type	Safe input expansion module
Device short name	XPSMCM
Electrical connection	Spring terminal
[Us] rated supply voltage	24 V - 20...20 % DC
Number of inputs	12 digital
Number of outputs	8 test for line control
Discrete input type	PNP
Discrete output type	PNP
Function of module	Safety mat monitoring for discrete input

### 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
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
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 12 LEDs yellow with IN marking for input 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	ISO 13849-1 IEC 62061 IEC 61800-5-1 IEC 61508
Product certifications	RCM[RETURN]TÜV[RETURN]cULus
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 < 100 years high PFHd = 3.24E-9 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

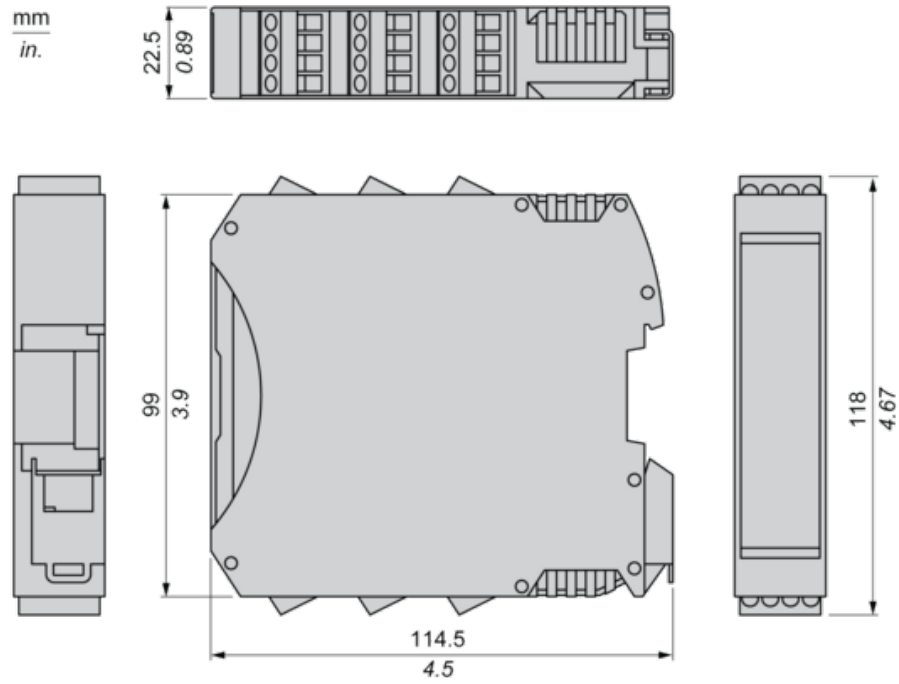
Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	4.5 cm
Package 1 Width	12.8 cm
Package 1 Length	16.2 cm
Package 1 Weight	242.0 g
Unit Type of Package 2	S01
Number of Units in Package 2	6
Package 2 Height	15.0 cm
Package 2 Width	15.0 cm
Package 2 Length	40.0 cm
Package 2 Weight	1.692 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	 Yes
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins
PVC free	Yes

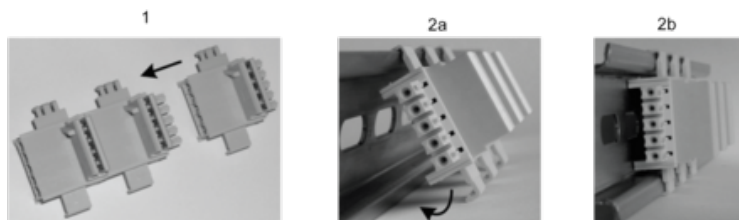
## Dimensions

### Spring Terminal



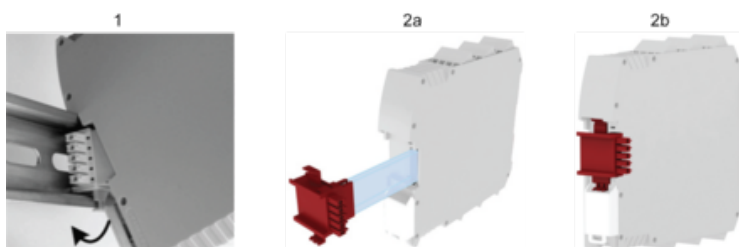
## Mounting Safety Controller CPU with Module(s)

### 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).

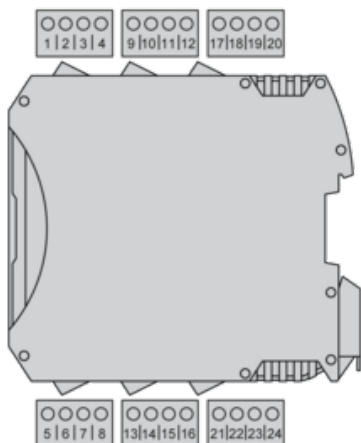
### Mount Safety Controller CPU with Other Module(s)



- 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.

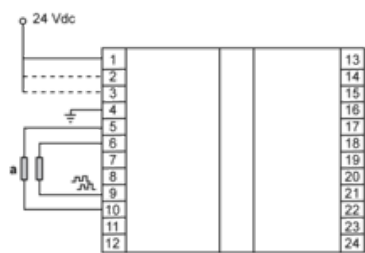
## Wiring

### 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	INPUT1	Digital input 1
6	INPUT2	Digital input 2
7	INPUT3	Digital input 3
8	INPUT4	Digital input 4
9	OUT_TEST1	Short circuit detected output
10	OUT_TEST2	
11	OUT_TEST3	
12	OUT_TEST4	
13	INPUT5	Digital input 5
14	INPUT6	Digital input 6
15	INPUT7	Digital input 7
16	INPUT8	Digital input 8
17	OUT_TEST5	Short circuit detected output
18	OUT_TEST6	
19	OUT_TEST7	
20	OUT_TEST8	
21	INPUT9	Digital input 9
22	INPUT10	Digital input 10
23	INPUT11	Digital input 11
24	INPUT12	Digital input 12

## Wiring Example



(1) Safety mat