



### 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	4.0 analog
Function of module	Analogue input current analog input Analogue input voltage analog input current

### Complementary

Power Consumption in W	3 W
Power dissipation in W	3 W
Integrated connection type	Backplane expansion bus
Number of terminal blocks	4
Connections - terminals	2 captive spring terminals, removable terminal block 1 captive spring terminals, removable terminal block
Voltage state 0 guaranteed	0...10 V analog input 0...10 V analog input voltage 0...10 V analogue input 0...10 V analogue input circuit 0...10 V analogue input signals 0...10 V temperature sensor
Current state 0 guaranteed	0...20 mA analog input) 0...20 mA analog input current) 0...20 mA analogue input) 0...20 mA analogue input circuit) 0...20 mA analogue input signals) 0...20 mA temperature sensor)
Safety level	Can reach category 4 EN/ISO 13849-1 Can reach PL = e EN/ISO 13849-1 Can reach SIL 3 EN/IEC 61508 SILCL 3 IEC 62061
Quality labels	CE
Discrete input voltage	24 V DC
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 4 LEDs green/red IN input status
Cable cross section	0.00...0.00 In <sup>2</sup> (0.2...1.5 mm <sup>2</sup> ) - AWG 24...AWG 16 flexible without cable end 0.00...0.00 In <sup>2</sup> (0.2...2.5 mm <sup>2</sup> ) - AWG 24...AWG 14 flexible without cable end 0.00...0.00 In <sup>2</sup> (0.25...1 mm <sup>2</sup> ) - AWG 23...AWG 18 flexible with cable end, without bezel 0.00...0.00 In <sup>2</sup> (0.25...2.5 mm <sup>2</sup> ) - AWG 23...AWG 14 flexible with cable end, with bezel 0.00...0.00 In <sup>2</sup> (0.25...2.5 mm <sup>2</sup> ) - AWG 23...AWG 14 flexible with cable end, without bezel 0.00...0.00 In <sup>2</sup> (0.5...1.5 mm <sup>2</sup> ) - AWG 20...AWG 16 flexible with cable end, with double bezel 0.00...0.00 In <sup>2</sup> (0.2...1 mm <sup>2</sup> ) - AWG 24...AWG 18 solid without cable end 0.00...0.00 in <sup>2</sup> (0.2...2.5 mm <sup>2</sup> ) - AWG 24...AWG 14 solid without cable end
Mounting support	Omega 35 mm DIN rail EN 50022
Depth	4.51 in (114.5 mm)

Height	3.90 in (99 mm)
Width	0.89 in (22.5 mm)
Net Weight	0.36 lb(US) (0.164 kg)

## Environment

Standards	IEC 62061 EN/IEC 61508 EN/ISO 13849-1 EN/IEC 61800-5-1
Product Certifications	RCM CULus TÜV
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 EN/IEC 61800-5-1
Safety reliability data	PFHd = 1.53E-8 1/h DC > 99 % MTTFd = 106 years high
Insulation	250 V AC between power supply and housing EN/IEC 61800-5-1
Overvoltage category	II
Electromagnetic compatibility	Electrostatic discharge immunity test 6 kV on contact) EN/IEC 61000-4-2 Electrostatic discharge immunity test 20 kV on air) EN/IEC 61000-4-2 Susceptibility to electromagnetic fields 10 V/m 80...1000 MHz) EN/IEC 61000-4-3 Susceptibility to electromagnetic fields 30 V/m 1.4 GHz...2 GHz) EN/IEC 61000-4-3
Vibration resistance	+/-0.35 mm 10...55 Hz)EN/IEC 61496-1
Shock resistance	10 gn 16 ms) 1000 shocks on each axis EN/IEC 61496-1
Service Life	20 year(s)

## Ordering and shipping details

Category	22477 - SAFETY MODULES (PREVENTA)
Discount Schedule	SAF2
GTIN	3606481987051
Nbr. of units in pkg.	1
Package weight(Lbs)	9.17 oz (260 g)
Returnability	No
Country of origin	IT

## Packing Units

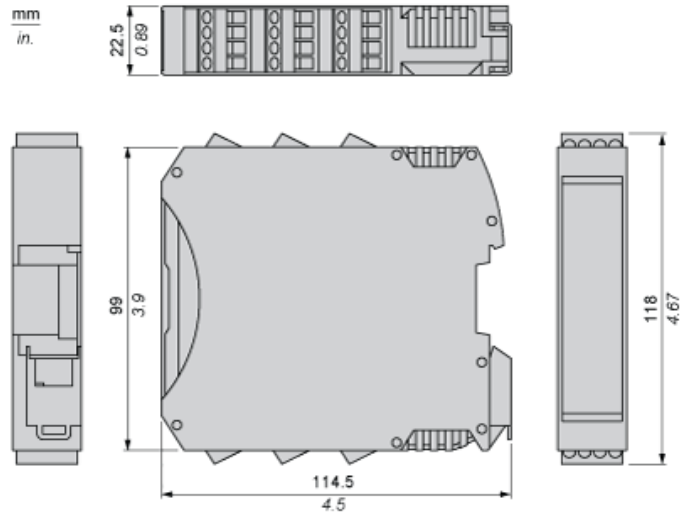
Unit Type of Package 1	PCE
Package 1 Height	6.30 in (16 cm)
Package 1 width	4.92 in (12.5 cm)
Package 1 Length	1.69 in (4.3 cm)
Unit Type of Package 2	S01
Number of Units in Package 2	6
Package 2 Weight	4.03 lb(US) (1.826 kg)
Package 2 Height	5.91 in (15 cm)
Package 2 width	5.91 in (15 cm)
Package 2 Length	15.75 in (40 cm)

## Offer Sustainability

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 <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a>
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) <a href="#">EU RoHS Declaration</a>
Mercury free	Yes
RoHS exemption information	<a href="#">Yes</a>
China RoHS Regulation	<a href="#">China RoHS Declaration</a>
Environmental Disclosure	<a href="#">Product Environmental Profile</a>
Circularity Profile	<a href="#">End Of Life Information</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).

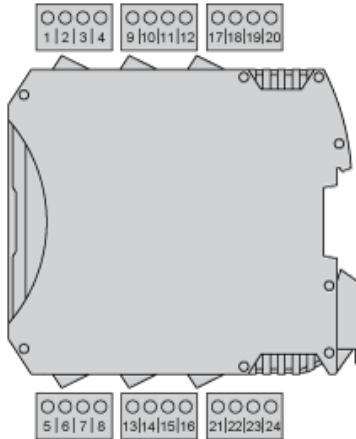
Mount Safety Controller CPU with Other Module(s)



- 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

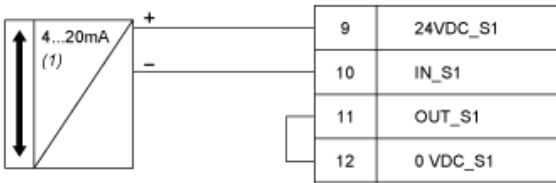


Terminal	Signal	Description
1	24 VDC	24 Vdc power supply
2	NODE_ADDR0	Node selection
3	NODE_ADDR0	
4	0 VDC	0 Vdc power supply
9	24VDC_S1	Sensor 1 connections
10	IN_S1	
NEG_S1		
11	OUT_S1	
POS_S1		
12	0 VDC_S1	
13	24VDC_S3	Sensor 3 connections
14	IN_S3	
NEG_S3		
15	OUT_S3	
POS_S3		
16	0 VDC_S3	
17	24VDC_S2	Sensor 2 connections
18	IN_S2	
NEG_S2		
19	OUT_S2	
POS_S2		
20	0 VDC_S2	
21	24VDC_S4	Sensor 4 connections
22	IN_S4	
NEG_S4		
23	OUT_S4	
POS_S4		

Terminal	Signal	Description
24	0 VDC_S4	

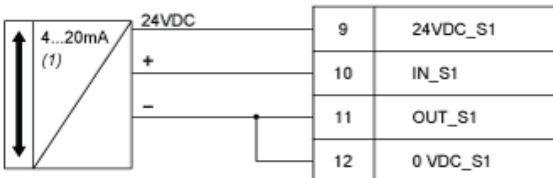
## Wiring Example

### 2 Wires Current Sensor



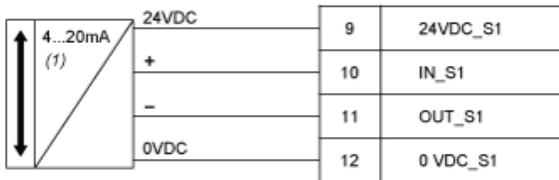
(1): Sensor

### 3 Wires Current Sensor



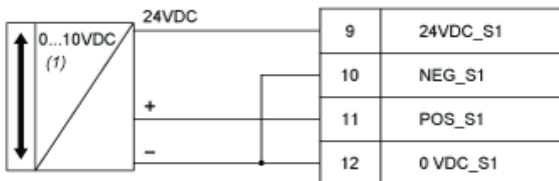
(1): Sensor

### 4 Wires Current Sensor



(1): Sensor

### 3 Wires Voltage Sensor



(1): Sensor