

Product data sheet

Specifications



4 analog Input expansion spring term

XPSMCMAI0400G

Product availability: Non-Stock - Not normally stocked in distribution facility

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
Input type	4 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 spring clamp terminals, removable terminal block 1 spring clamp 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 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
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

Price is "List Price" and may be subject to a trade discount – check with your local distributor or retailer for actual price.

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

Cable cross section	0.0003...0.002 in² (0.2...1.5 mm²) - AWG 24...AWG 16 flexible without cable end 0.0003...0.004 in² (0.2...2.5 mm²) - AWG 24...AWG 14 flexible without cable end 0.0004...0.002 in² (0.25...1 mm²) - AWG 23...AWG 18 flexible with cable end, without bezel 0.0004...0.004 in² (0.25...2.5 mm²) - AWG 23...AWG 14 flexible with cable end, with bezel 0.0004...0.004 in² (0.25...2.5 mm²) - AWG 23...AWG 14 flexible with cable end, without bezel 0.0008...0.002 in² (0.5...1.5 mm²) - AWG 20...AWG 16 flexible with cable end, with double bezel 0.0003...0.002 in² (0.2...1 mm²) - AWG 24...AWG 18 solid without cable end 0.0003...0.004 in² (0.2...2.5 mm²) - AWG 24...AWG 14 solid without cable end
Mounting support	Omega 35 mm DIN rail EN 50022
Depth	4.5 in (114.5 mm)
Height	3.9 in (99 mm)
Width	0.9 in (22.5 mm)
Net Weight	0.362 lb(US) (0.164 kg)

Environment

Standards	IEC 62061 IEC 61508 ISO 13849-1 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 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 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 16 ms) 1000 shocks on each axis IEC 61496-1
Service Life	20 year(s)

Ordering and shipping details

Category	US1SAF222477
Discount Schedule	SAF2
GTIN	3606481987051

Returnability	No
Country of origin	IT

Packing Units


Unit Type of Package 1	PCE
Nbr. of units in pkg.	1
Package 1 Height	6.30 in (16.000 cm)
Package 1 Width	4.92 in (12.500 cm)
Package 1 Length	1.69 in (4.300 cm)
Package weight(Lbs)	9.171 oz (260.000 g)
Unit Type of Package 2	S01
Number of Units in Package 2	6
Package 2 Height	5.91 in (15.000 cm)
Package 2 Width	5.91 in (15.000 cm)
Package 2 Length	15.75 in (40.000 cm)
Package 2 Weight	4.123 lb(US) (1.870 kg)

Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.



[Environmental Data explained >](#)

[How we assess product sustainability >](#)

Use Better

 Materials and Substances	
Packaging made with recycled cardboard	No
Packaging without single use plastic	Yes
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)
REACH Regulation	REACH Declaration
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

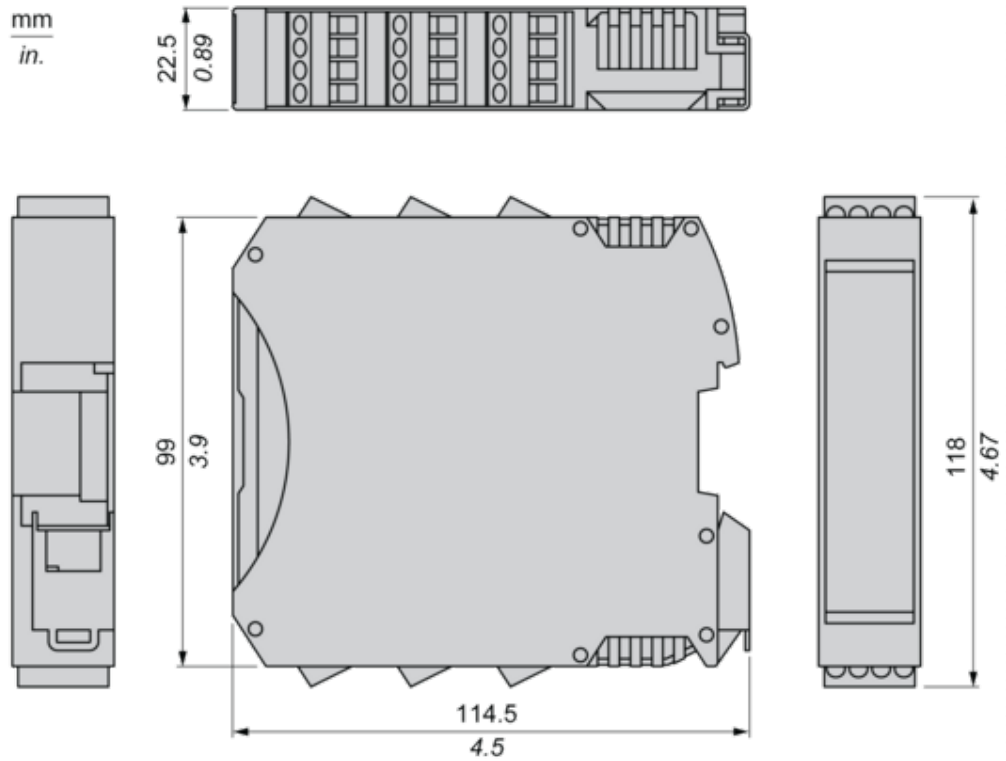
Use Again

 Repack and remanufacture	
Take-back	No
WEEE Label	 The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.

Dimensions Drawings

Dimensions

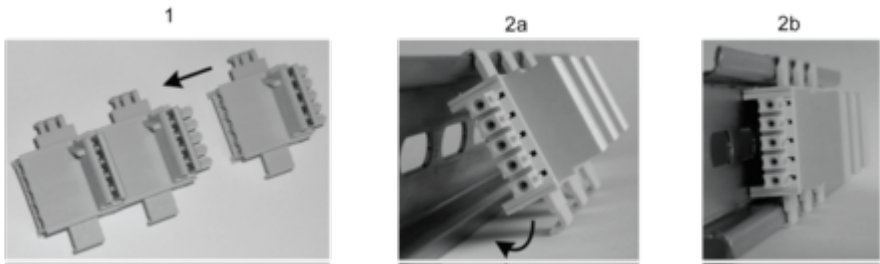
Spring Terminal



Mounting and Clearance

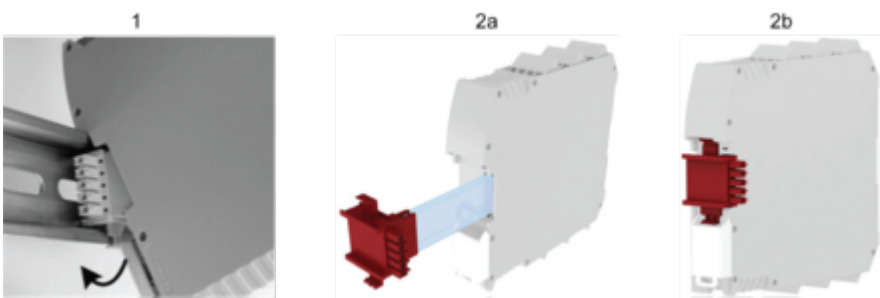
Mounting Safety Controller CPU with Module(s)

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)

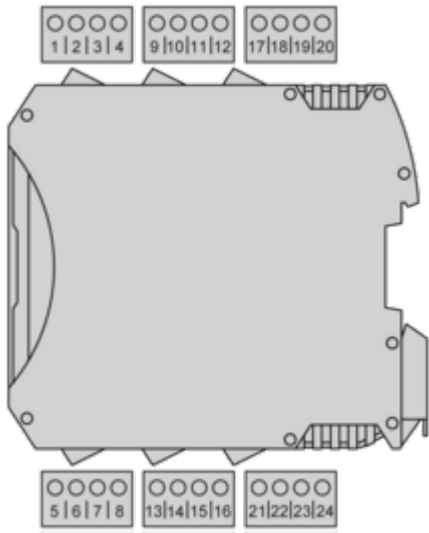


- 1 : Mount controller CPU and modules on rail.
- 2 : Make sure that the controller CPU or the module(s) are plugged on the BackPlane connector.

Connections and Schema

Wiring

Terminal Designation

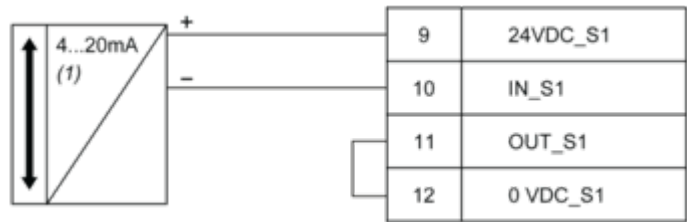


Terminal	Signal	Description
1	24 VDC	24 Vdc power supply
2	NODE_ADDR0	Node selection
3	NODE_ADDR0	
4	0 VDC	0 Vdc power supply
9	24VDC_S1	Sensor 1 connections
10	IN_S1	
	NEG_S1	
11	OUT_S1	
	POS_S1	
12	0 VDC_S1	
13	24VDC_S3	Sensor 3 connections
14	IN_S3	
	NEG_S3	
15	OUT_S3	
	POS_S3	
16	0 VDC_S3	

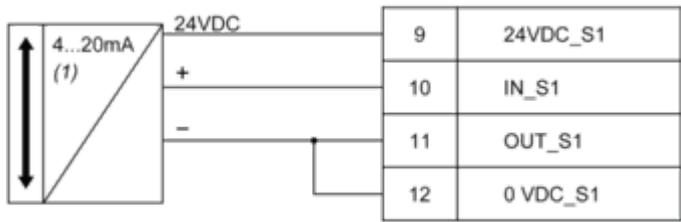
Terminal	Signal	Description
17	24VDC_S2	Sensor 2 connections
18	IN_S2	
	NEG_S2	
19	OUT_S2	
	POS_S2	
20	0 VDC_S2	
21	24VDC_S4	Sensor 4 connections
22	IN_S4	
	NEG_S4	
23	OUT_S4	
	POS_S4	
24	0 VDC_S4	

Wiring Example

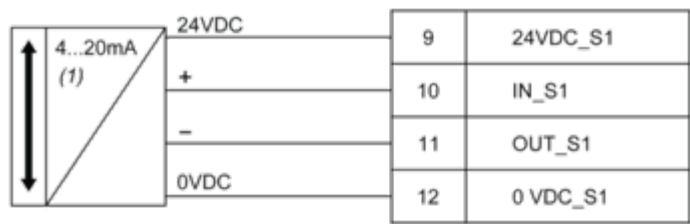
2 Wires Current Sensor



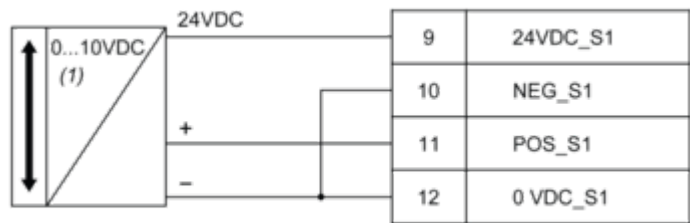
(1) : Sensor
3 Wires Current Sensor



(1) : Sensor
4 Wires Current Sensor



(1) : Sensor
3 Wires Voltage Sensor



(1) : Sensor