Product data sheet
Characteristics

XPSMC16ZCPACK
safety controller XPS-MC - 24 V DC - 16 input - 32 LEDs signalling



Main

Range of product	Preventa Safety automation
Product or Component Type	Kit configurable safety controller
Safety module name	XPSMC
Safety use category	Category 4 maximum EN 954-1/EN/ISO 13849-1 PLE maximum EN/ISO 13849-1 SIL 3 maximum IEC 61508
Type of start	Configurable
Standards	IEC 61508 EN 954-1/EN/ISO 13849-1 EN/IEC 61496-1 EN/IEC 60204-1 EN 1760-1/ISO 13856-1 EN 574/ISO 13851 EN/IEC 60947-5-1
Product Certifications	CSA UL TÜV
[Us] Rated Supply Voltage	24 V DC - 20...20 %
Number of inputs	16
Communication port protocol	CANopen 1 SUB-D 9-pin male, serial link 20 kbps, 50 kbps, 125 kbps, 250 kbps, 500 kbps, 800 kbps or 1 Mbps Modbus 1 RJ45, serial link 1200 bps, 2400 bps, 4800 bps, 9600 bps or 19200 bps
Safety level	Can reach PL e/category 4 EN 954-1/EN/ISO 13849-1 Can reach SIL 3 IEC 61508

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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.
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Complementary

Kit composition	Set of cage clamp terminals Configuration software CANopen SUB-D female connector 180 Packaging small model for software configuration Safety controller Ethernet cable 2m CANopen SUB-D female connector 90 USB/RS485 converter VDE slot screwdriver 2.5 x 75 mm Set of screw terminals Connection cable Printed packaging label 80 x 50 mm
Function of module	Dynamic monitoring of hydraulic valves on linear presses Eccentric press Emergency stop monitoring, with or without time delay, 1 or 2-channel wiring Enabling switch monitoring, 2 or 3 contacts Foot switch monitoring Guard monitoring for injection presses and blowing machines Guard monitoring with 1 or 2 limit switches Hydraulic press Magnetic switch monitoring Monitoring safety stop at top dead centre on eccentric press Muting function of light curtains Position selector Safety mat monitoring Safety time delays Shaft/Chain breaking monitor Zero speed detection Light curtain monitoring category 4 EN/IEC 61496 Two-hand control category 3 EN 574/ISO 13851
Synchronisation time between inputs	Depending on configuration selected
Power consumption in W	12 W
Input protection type	External fuse 16 A
[Uc] control circuit voltage	28.8 V
Maximum line resistance	100 Ohm <6561.68 ft (2000 m)
Output type	2 relays, 2 NO contacts (4 NO total) Solid state, 6, volt-free
Breaking capacity	180 VA holding AC-15 C300 relay output 1800 VA inrush AC-15 C300 relay output
Breaking capacity	2 A 24 V static output circuit 1.5 A 24 V DC-13)50 ms relay output
Output thermal current	4 A for both outputs simultaneously 6 A for 1 output and 2 A for the other relay output
[Ith] conventional free air thermal current	16 A relay output 6.5 A static output circuit
Associated fuse rating	16 A gL power supply 4 A gL relay output 6 A fast blow relay output
Minimum output current	10 mA relay output
Minimum output voltage	17 V relay output
Response Time	Configurable : 20 ms or 30 ms with software XPSMCWIN
[Ui] rated insulation voltage	300 V 2)IEC 60647-5-1, DIN VDE 0110 part 1
[Uimp] rated impulse withstand voltage	4 kV III IEC 60647-5-1, DIN VDE 0110 part 1
Method of access	Slave
Exchange size	14 words
Number of addresses	1…127 CANopen 1…247 Modbus
Parity	Even Modbus No Modbus Odd Modbus
Data format	1 start bit/8 data bits 1 stop bit even or odd 2 stop bits without parity RTU (Remote Terminal Unit) mode
Supported modbus function	01 8-bit output data/32-bit input data 02 32-bit input data/8-bit output data 03 information and errors

Local signalling	32 LEDs
Mounting Support	Mounting plate
Depth	6.02 in (153 mm)
Height	5.96 in (151.5 mm)
Width	2.91 in (74 mm)
Product Weight	1.81 lb(US) (0.82 kg)

Environment

IP degree of protection	IP20 conforming to EN/IEC 60529
Ambient Air Temperature for Operation	14…131 °F (-10…55 °C)
Ambient Air Temperature for Storage	-13…185 °F (-25…85 °C)

Ordering and shipping details

Category	22477 - SAFETY MODULES (PREVENTA)
Discount Schedule	SAF2
GTIN	3389119018258
Nbr. of units in pkg.	1
Package weight(Lbs)	5.47 lb(US) (2.481 kg)
Returnability	No
Country of origin	FR

Packing Units

Unit Type of Package 1	PCE
Package 1 Height	9.65 in (24.5 cm)
Package 1 width	9.65 in (24.5 cm)
Package 1 Length	10.83 in (27.5 cm)

Offer Sustainability

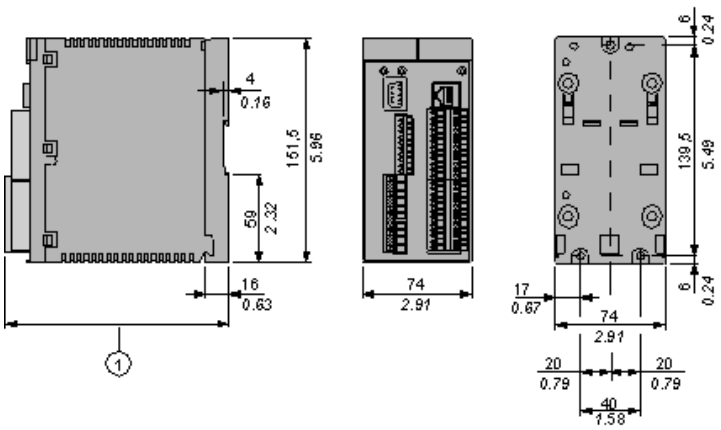
California proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov
REACh Regulation	REACh Declaration
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration
Mercury free	Yes
RoHS exemption information	Yes
China RoHS Regulation	China RoHS Declaration
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.
PVC free	Yes

Contractual warranty

Warranty	18 months

XPSMC16ZCPACK

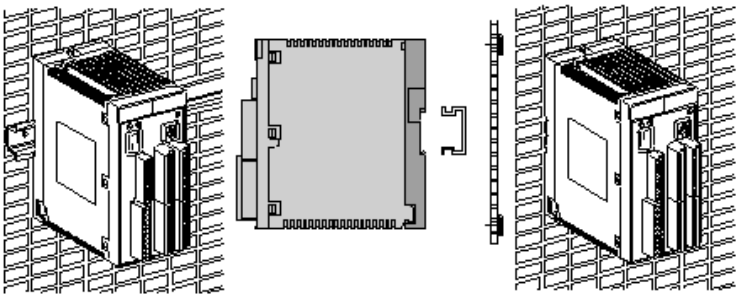
Dimensions



1 When using XPSMCTS• connectors this dimension is 153 mm (6.02 in)
When using XPSMCTC• connectors this dimension is 151,5 mm (5.96 in)

XPSMC16ZCPACK

Installation

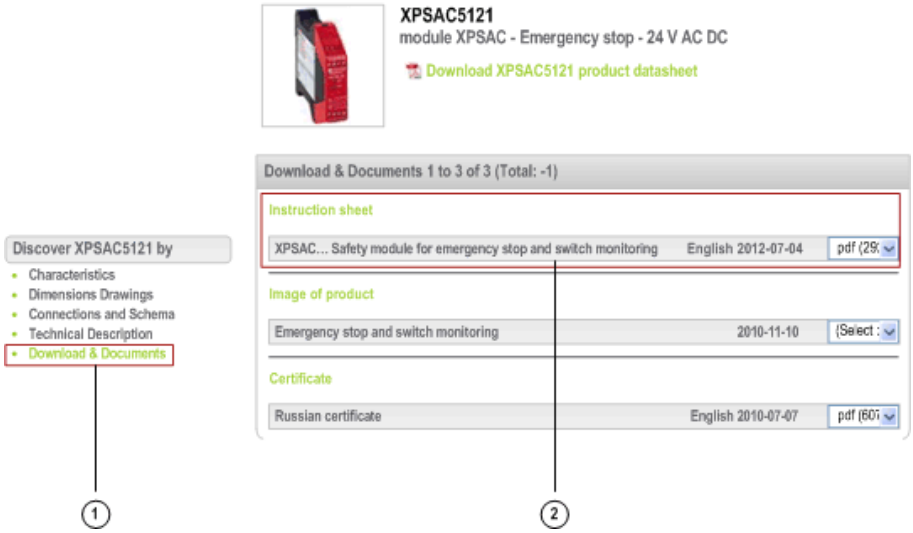


Metal adaptor for fixing on metal: DIN rail 35 mm/1.38 in.

Wiring Diagrams

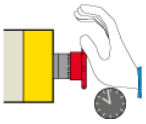
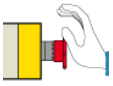
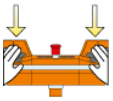
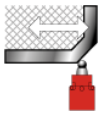
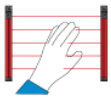
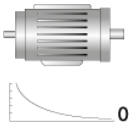
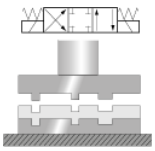
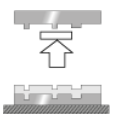
Refer to the Instruction Sheet

To download the instruction sheet, follow below procedure:



1 Click on Download & Documents.
2 Click on Instruction sheet.

Safety Functions

	• Emergency stop monitoring with time delay: ○ 1 channel wiring, with automatic start. ○ 2 channel wiring, with start button.
	• Emergency stop monitoring without time delay: ○ 1 channel wiring, with automatic start. ○ 2 channel wiring, with start button.
	• Two-hand control.
	• Guard monitoring: ○ with 1 limit switch. ○ with 2 limit switches. ○ with 2 limit switches, with guard locking. • Guard monitoring for injection presses and blowing machines.
	• Magnetic switch monitoring.
	• Sensing mat monitoring.
	• Light curtains monitoring: ○ Relay output type. ○ Solid-state output type. • “Muting” function for light curtains.
	• Zero speed detection.
	• Dynamic monitoring of hydraulic valves on linear presses.
	• Safety time delays.
	• Monitoring safety stop at top dead centre on eccentric press. • Hydraulic press. • Eccentric press.

	• Enabling switching monitoring:
	  ○ 2 contact type.
	  ○ 3 contact type.

Other functions:

- Foot switch monitoring
- Chain shaft breakage monitoring
- Position selector