

# Product data sheet

Specifications



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

XPSMC16ZC

### Main

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

### Complementary

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 category 4 conforming to EN/IEC 61496 Monitoring safety stop at top dead centre on eccentric press category 3 conforming to EN 574/ISO 13851 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 conforming to IEC 61496 Two-hand control category 3 conforming to EN 574/ISO 13851
Synchronisation time between inputs	Depending on configuration selected

<b>Power consumption in W</b>	12 W
<b>Input protection type</b>	External fuse 16 A
<b>[Uc] control circuit voltage</b>	28.8 V
<b>Maximum line resistance</b>	100 Ohm <2000 m
<b>Output type</b>	2 relays, 2 NO contacts (4 NO total) circuit(s) Solid state, 6 circuit(s), volt-free
<b>Breaking capacity</b>	180 VA holding AC-15 C300 relay output 1800 VA inrush AC-15 C300 relay output
<b>Breaking capacity</b>	2 A at 24 V for static output circuit 1.5 A at 24 V (DC-13) time constant: 50 ms for relay output
<b>Output thermal current</b>	4 A for both outputs simultaneously 6 A for 1 output and 2 A for the other for relay output
<b>[Ith] conventional free air thermal current</b>	16 A for relay output 6.5 A for static output circuit
<b>Associated fuse rating</b>	16 A gL for power supply 4 A gL for relay output 6 A fast blow for relay output
<b>Minimum output current</b>	10 mA for relay output
<b>Minimum output voltage</b>	17 V for relay output
<b>Response time</b>	Configurable : 20 ms or 30 ms with software XPSMCWIN
<b>[Ui] rated insulation voltage</b>	300 V (pollution degree 2) conforming to IEC 60647-5-1, DIN VDE 0110 part 1
<b>[Uiimp] rated impulse withstand voltage</b>	4 kV overvoltage category III conforming to IEC 60647-5-1, DIN VDE 0110 part 1
<b>Method of access</b>	Slave
<b>Exchange size</b>	14 words
<b>Number of addresses</b>	1...127 for CANopen 1...247 for Modbus
<b>Parity</b>	Even for Modbus No for Modbus Odd for Modbus
<b>Data format</b>	1 start bit/8 data bits 1 stop bit even or odd 2 stop bits without parity RTU (Remote Terminal Unit) mode
<b>Supported modbus function</b>	01: 8-bit output data/32-bit input data 02: 32-bit input data/8-bit output data 03: information and errors
<b>Local signalling</b>	32 LEDs
<b>Mounting support</b>	Mounting plate
<b>Depth</b>	153 mm
<b>Height</b>	151.5 mm
<b>Width</b>	74 mm
<b>Product weight</b>	0.82 kg

## Environment

<b>IP degree of protection</b>	IP20 conforming to IEC 60529
<b>Ambient air temperature for operation</b>	-10...55 °C
<b>Ambient air temperature for storage</b>	-25...85 °C

## Packing Units

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Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	9.500 cm
Package 1 Width	18.000 cm
Package 1 Length	26.000 cm
Package 1 Weight	1.265 kg
Unit Type of Package 2	S04
Number of Units in Package 2	6
Package 2 Height	30.000 cm
Package 2 Width	40.000 cm
Package 2 Length	60.000 cm
Package 2 Weight	8.459 kg

## Contractual warranty

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Warranty	18 months
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## Environmental Data

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 >](#)

### Environmental footprint

Total lifecycle Carbon footprint	540
Environmental Disclosure	<a href="#">Product Environmental Profile</a>

## Use Better

### Materials and Substances

Packaging made with recycled cardboard	No
Packaging without single use plastic	No
<a href="#">EU RoHS Directive</a>	Pro-active compliance (Product out of EU RoHS legal scope)
REACH Regulation	<a href="#">REACH Declaration</a>
California proposition 65	<b>WARNING:</b> 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="#">www.P65Warnings.ca.gov</a>
PVC free	Yes

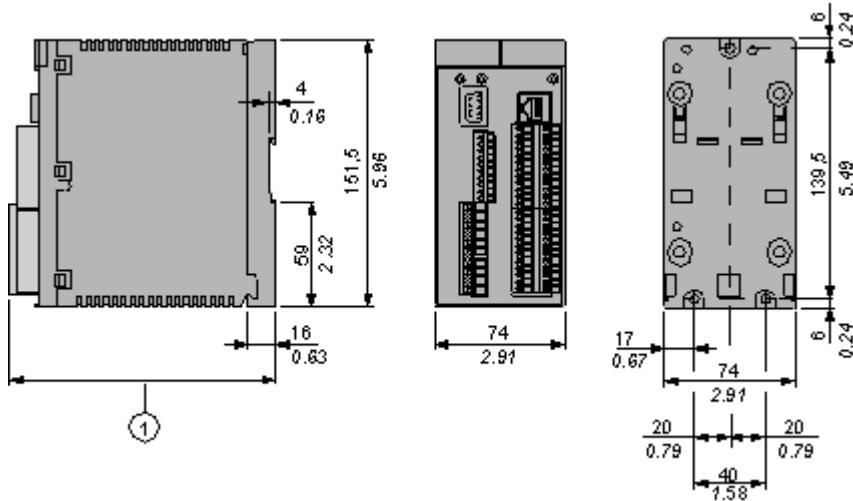
## Use Again

### Repack and remanufacture

End of life manual availability	<a href="#">End of Life Information</a>
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

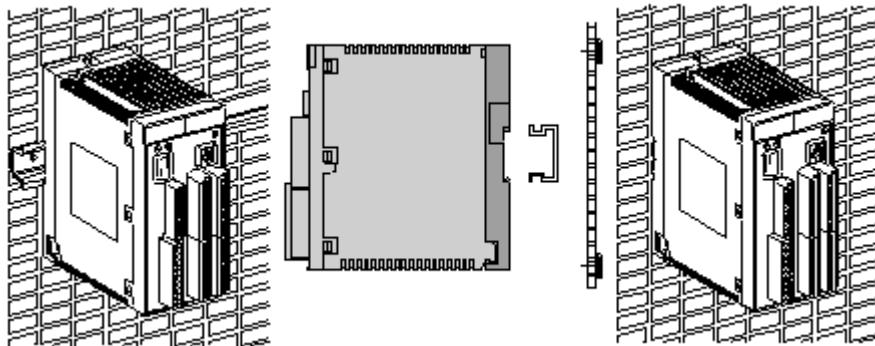


1 When using XPSMCTS• connectors this dimension is 153 mm (6.02 in)

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

**Mounting and Clearance****Installation**

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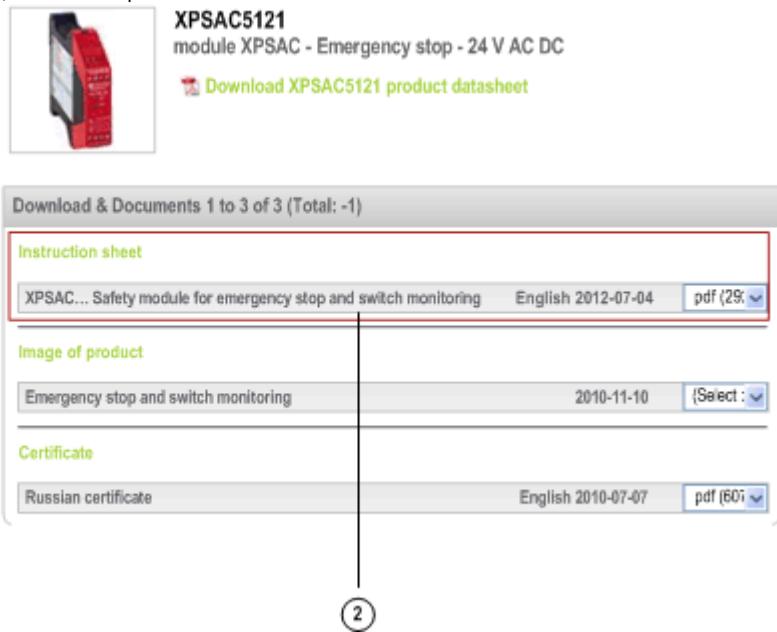
Metal adaptor for fixing on metal: DIN rail 35 mm/1.38 in.

## Connections and Schema

Wiring Diagrams

## Refer to the Instruction Sheet

To download the instruction sheet, follow below procedure:



The screenshot shows the product page for the XPSAC5121. At the top, there is a product image and a brief description: "XPSAC5121 module XPSAC - Emergency stop - 24 V AC DC". Below this is a green link: "Download XPSAC5121 product datasheet".

On the left, a sidebar titled "Discover XPSAC5121 by" lists several options: Characteristics, Dimensions Drawings, Connections and Schema, Technical Description, and a highlighted "Download & Documents".

The main content area is titled "Download & Documents 1 to 3 of 3 (Total: -1)". It contains three items:

- Instruction sheet**: XPSAC... Safety module for emergency stop and switch monitoring, English 2012-07-04, pdf (29).
- Image of product**: Emergency stop and switch monitoring, 2010-11-10, Select: (dropdown).
- Certificate**: Russian certificate, English 2010-07-07, pdf (60).

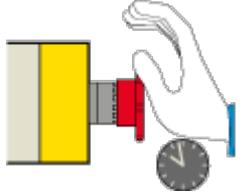
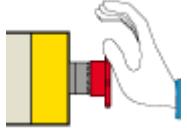
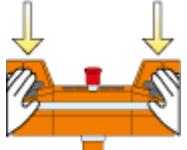
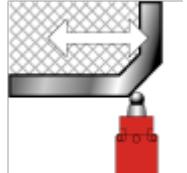
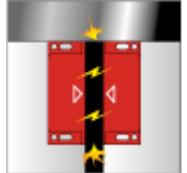
Two numbered circles indicate the steps: (1) points to the "Download & Documents" button in the sidebar, and (2) points to the "Instruction sheet" link in the list.

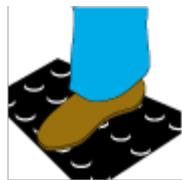
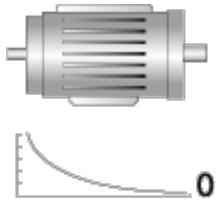
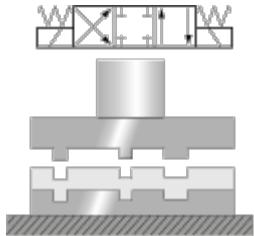
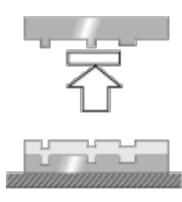
1 Click on **Download & Documents**.

2 Click on **Instruction sheet**.

## Technical Description

## Safety Functions

	<ul style="list-style-type: none"><li>Emergency stop monitoring with time delay:<ul style="list-style-type: none"><li>1 channel wiring, with automatic start.</li><li>2 channel wiring, with start button.</li></ul></li></ul>
	<ul style="list-style-type: none"><li>Emergency stop monitoring without time delay:<ul style="list-style-type: none"><li>1 channel wiring, with automatic start.</li><li>2 channel wiring, with start button.</li></ul></li></ul>
	<ul style="list-style-type: none"><li>Two-hand control.</li></ul>
	<ul style="list-style-type: none"><li>Guard monitoring:<ul style="list-style-type: none"><li>with 1 limit switch.</li><li>with 2 limit switches.</li><li>with 2 limit switches, with guard locking.</li></ul></li><li>Guard monitoring for injection presses and blowing machines.</li></ul>
	<ul style="list-style-type: none"><li>Magnetic switch monitoring.</li></ul>

	<ul style="list-style-type: none"><li>• Sensing mat monitoring.</li></ul>
	<ul style="list-style-type: none"><li>• Light curtains monitoring:<ul style="list-style-type: none"><li>◦ Relay output type.</li><li>◦ Solid-state output type.</li></ul></li><li>• "Muting" function for light curtains.</li></ul>
	<ul style="list-style-type: none"><li>• Zero speed detection.</li></ul>
	<ul style="list-style-type: none"><li>• Dynamic monitoring of hydraulic valves on linear presses.</li></ul>
	<ul style="list-style-type: none"><li>• Safety time delays.</li></ul>
	<ul style="list-style-type: none"><li>• Monitoring safety stop at top dead centre on eccentric press.</li><li>• Hydraulic press.</li><li>• Eccentric press.</li></ul>

	<ul style="list-style-type: none"><li>Enabling switching monitoring:<ul style="list-style-type: none"><li>2 contact type.</li><li>3 contact type.</li></ul></li></ul>
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Other functions:

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