

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 |

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

| | |
|---------------------------------------------|--------------------------------------------------------------------------------------------------------------------|
| 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 <2000 m |
| Output Type | 2 relays, 2 NO contacts (4 NO total) circuit(s) Solid state, 6 circuit(s), volt-free |
| Breaking Capacity | 180 VA holding AC-15 C300 relay output 1800 VA inrush AC-15 C300 relay output |
| Breaking Capacity | 2 A at 24 V for static output circuit 1.5 A at 24 V (DC-13) time constant: 50 ms for relay output |
| Output Thermal Current | 4 A for both outputs simultaneously 6 A for 1 output and 2 A for the other for relay output |
| [Ith] Conventional Free Air Thermal Current | 16 A for relay output 6.5 A for static output circuit |
| Associated Fuse Rating | 16 A gL for power supply 4 A gL for relay output 6 A fast blow for relay output |
| Minimum Output Current | 10 mA for relay output |
| Minimum Output Voltage | 17 V for relay output |
| Response Time | Configurable : 20 ms or 30 ms with software XPSMCWIN |
| [Ui] Rated Insulation Voltage | 300 V (pollution degree 2) conforming to IEC 60647-5-1, DIN VDE 0110 part 1 |
| [Uimp] Rated Impulse Withstand Voltage | 4 kV overvoltage category III conforming to IEC 60647-5-1, DIN VDE 0110 part 1 |
| Method Of Access | Slave |
| Exchange Size | 14 words |
| Number Of Addresses | 1...127 for CANopen 1...247 for Modbus |
| Parity | Even for Modbus No for Modbus Odd for 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 | 153 mm |
| Height | 151.5 mm |
| Width | 74 mm |
| Net Weight | 0.82 kg |

Environment

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|---------------------------------------|------------------------------|
| Ip Degree Of Protection | IP20 conforming to IEC 60529 |
| Ambient Air Temperature For Operation | -10...55 °C |
| Ambient Air Temperature For Storage | -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 |
|----------|-----------|

Sustainability

Green Premium™ label is Schneider Electric's commitment to delivering products with best-in-class environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO₂ products.

Guide to assessing product sustainability is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

[Learn more about Green Premium >](#)

[Guide to assess a product's sustainability >](#)



Transparency RoHS/REACH

Well-being performance

✓ Mercury Free

✓ Rohs Exemption Information [Yes](#)

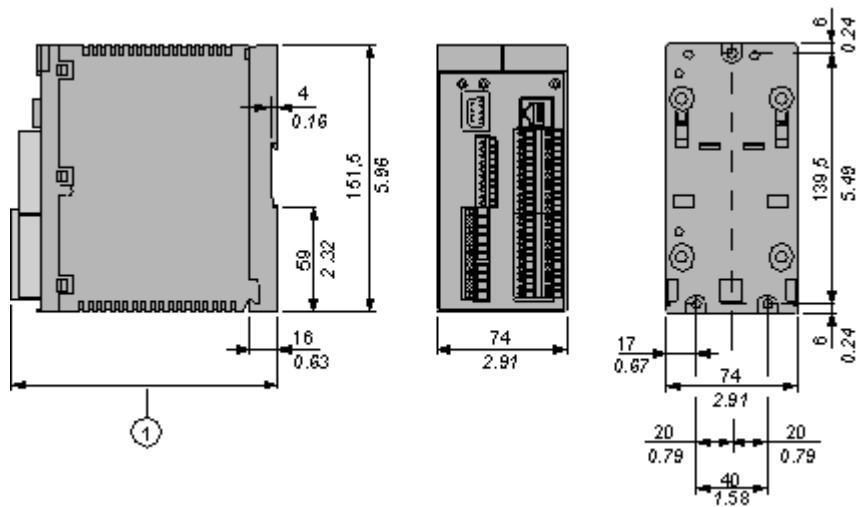
✓ Pvc Free

Certifications & Standards

| | |
|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Reach Regulation | REACH Declaration |
| Eu Rohs Directive | Pro-active compliance (Product out of EU RoHS legal scope) |
| China Rohs Regulation | China RoHS declaration |
| Environmental Disclosure | Product Environmental Profile |
| Weee | The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins |
| Circularity Profile | End of Life Information |
| 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 |

Dimensions Drawings

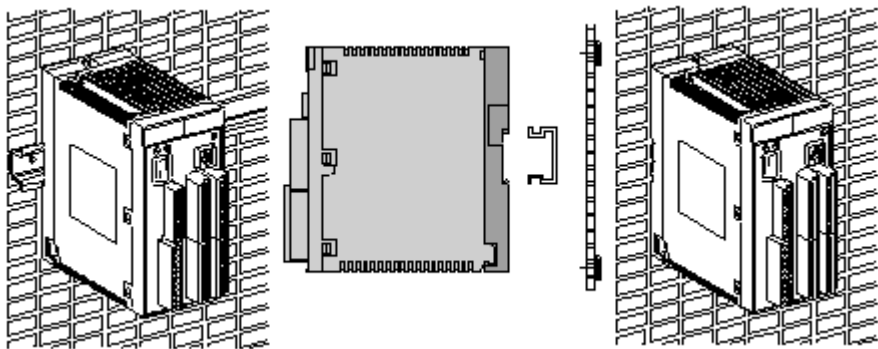
Dimensions



- 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



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:



XPSAC5121
module XPSAC - Emergency stop - 24 V AC DC
 [Download XPSAC5121 product datasheet](#)

Discover XPSAC5121 by

- Characteristics
- Dimensions Drawings
- Connections and Schema
- Technical Description
- **Download & Documents**

Download & Documents 1 to 3 of 3 (Total: -1)

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

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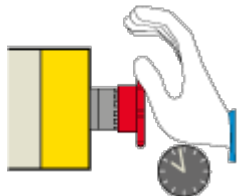
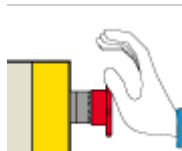
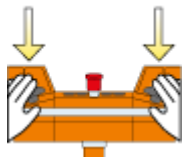
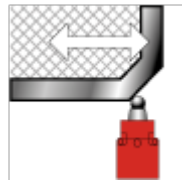

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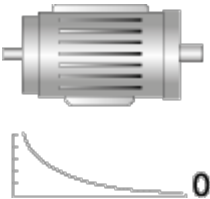
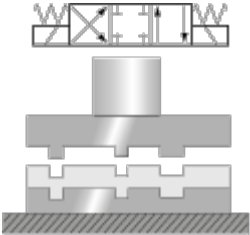
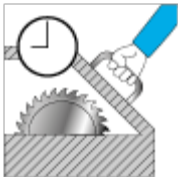
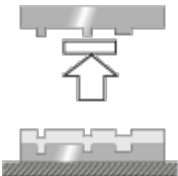
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Technical Description

Safety Functions

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

| | |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | <ul style="list-style-type: none">• Sensing mat monitoring. |
|  | <ul style="list-style-type: none">• Light curtains monitoring:<ul style="list-style-type: none">◦ Relay output type.◦ Solid-state output type.• “Muting” function for light curtains. |
|  | <ul style="list-style-type: none">• Zero speed detection. |
|  | <ul style="list-style-type: none">• Dynamic monitoring of hydraulic valves on linear presses. |
|  | <ul style="list-style-type: none">• Safety time delays. |
|  | <ul style="list-style-type: none">• 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