

# Product data sheet

Specifications



## Speed monitoring 2 TTL encoder expansion module with screw term

XPSMCMEN0200TT

### Main

|                           |                              |
|---------------------------|------------------------------|
| Range of product          | Preventa Safety automation   |
| Product or component type | Safe speed monitoring module |
| Device short name         | XPSMCM                       |
| Electrical connection     | Screw terminal               |
| [Us] rated supply voltage | 24 V - 20...20 % DC          |
| Discrete input voltage    | 24 V DC                      |
| Function of module        | Speed monitoring             |

### Complementary

|                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Power consumption in W     | 3 W                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Power dissipation in W     | 3 W                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Integrated connection type | Backplane expansion bus                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Safety level               | Can reach category 4 conforming to ISO 13849-1<br>Can reach PL = e conforming to ISO 13849-1<br>Type 4 conforming to IEC 61496-1<br>SILCL 3 conforming to IEC 62061                                                                                                                                                                                                                                                                                        |
| Quality labels             | CE                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Number of terminal blocks  | 4                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Local signalling           | 1 LED green with PWR marking for power ON<br>1 LED green with RUN marking for RUN (status)<br>1 LED red with E IN marking for internal error<br>1 LED red with E EX marking for external error<br>2 LEDs orange with ADDR marking for node address<br>2 LEDs yellow with PROX marking for proximity sensors connection status<br>2 LEDs yellow with SH marking for speed monitoring status<br>2 LEDs yellow with ENC marking for encoder connection status |
| Connections - terminals    | 2 captive screw clamp terminals, removable terminal block<br>1 captive screw clamp terminals, removable terminal block                                                                                                                                                                                                                                                                                                                                     |
| Maximum input frequency    | 5 kHz for sensor<br>500 kHz for encoder TTL                                                                                                                                                                                                                                                                                                                                                                                                                |
| Sensor type                | Inductive proximity sensor                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Electrical connection      | 2 connectors RJ45 conforming to EIA/TIA-568-A                                                                                                                                                                                                                                                                                                                                                                                                              |
| Cable cross section        | 0.2...2.5 mm² flexible cablewithout cable end<br>0.2...2.5 mm² solid cablewithout cable end<br>0.25...2.5 mm² flexible cablewith cable end, with bezel<br>0.25...2.5 mm² flexible cablewith cable end, without bezel<br>0.2...1.5 mm² flexible cablewithout cable end<br>0.25...1 mm² flexible cablewith cable end, without bezel<br>0.5...1.5 mm² flexible cablewith cable end, with double bezel<br>0.2...1 mm² solid cablewithout cable end             |
| Mounting support           | Omega 35 mm DIN rail conforming to EN 50022                                                                                                                                                                                                                                                                                                                                                                                                                |

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

|                |          |
|----------------|----------|
| Depth          | 22.5 mm  |
| Height         | 99 mm    |
| Width          | 114.5 mm |
| Product weight | 0.3 kg   |

## Environment

|                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|----------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Standards                              | IEC 61508<br>IEC 61800-5-1<br>ISO 13849-1<br>IEC 62061<br>IEC 61496-1                                                                                                                                                                                                                                                                                                                                                           |
| Product certifications                 | TÜV<br>cULus<br>RCM                                                                                                                                                                                                                                                                                                                                                                                                             |
| IP degree of protection                | IP20 (enclosure)                                                                                                                                                                                                                                                                                                                                                                                                                |
| Ambient air temperature for operation  | -10...55 °C                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Ambient air temperature for storage    | -20...85 °C                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Relative humidity                      | 10...95 %                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Pollution degree                       | 2                                                                                                                                                                                                                                                                                                                                                                                                                               |
| [Uimp] rated impulse withstand voltage | 4 kV conforming to IEC 61800-5                                                                                                                                                                                                                                                                                                                                                                                                  |
| Insulation                             | 250 V AC between power supply and housing conforming to 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<br>Electrostatic discharge immunity test - test level: 20 kV (on air) conforming to IEC 61000-4-2<br>Susceptibility to electromagnetic fields - test level: 10 V/m (80...1000 MHz) conforming to IEC 61000-4-3<br>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 (duration = 16 ms) for 1000 shocks on each axis conforming to IEC 61496-1                                                                                                                                                                                                                                                                                                                                                 |
| service life                           | 20 year(s)                                                                                                                                                                                                                                                                                                                                                                                                                      |

## Packing Units

|                              |          |
|------------------------------|----------|
| Unit Type of Package 1       | PCE      |
| Number of Units in Package 1 | 1        |
| Package 1 Height             | 4.4 cm   |
| Package 1 Width              | 12.8 cm  |
| Package 1 Length             | 16.2 cm  |
| Package 1 Weight             | 248.0 g  |
| Unit Type of Package 2       | S01      |
| Number of Units in Package 2 | 6        |
| Package 2 Height             | 15.0 cm  |
| Package 2 Width              | 15.0 cm  |
| Package 2 Length             | 40.0 cm  |
| Package 2 Weight             | 1.729 kg |

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 >](#)

Use Better

|  Materials and Substances |                                                                                                                                                                                                                                                                                             |
|------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Packaging made with recycled cardboard                                                                     | No                                                                                                                                                                                                                                                                                          |
| Packaging without single use plastic                                                                       | Yes                                                                                                                                                                                                                                                                                         |
| <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                                                                                  | 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> |
| PVC free                                                                                                   | Yes                                                                                                                                                                                                                                                                                         |

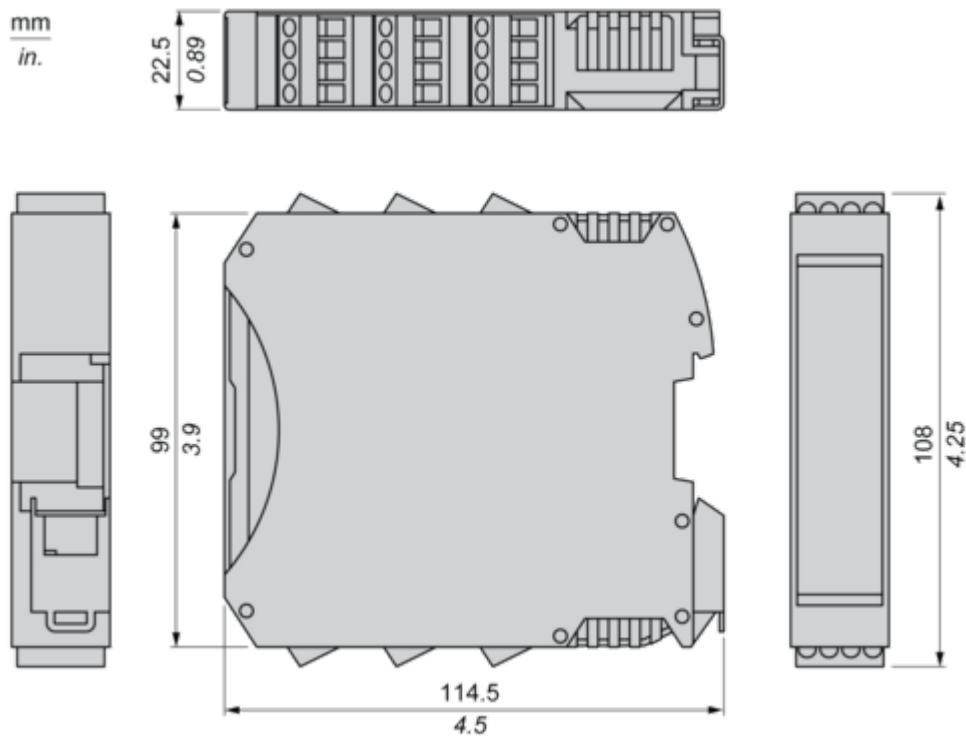
Use Again

|  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

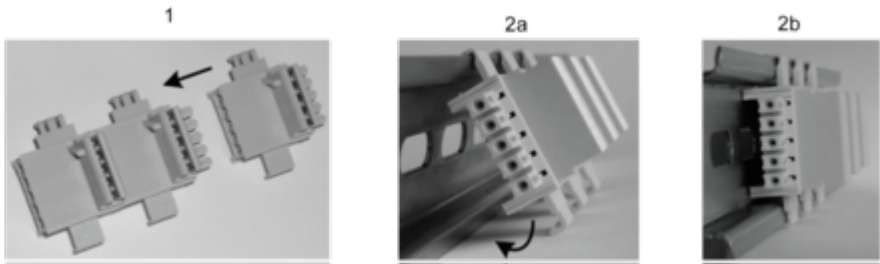
Screw Terminal



Mounting and Clearance

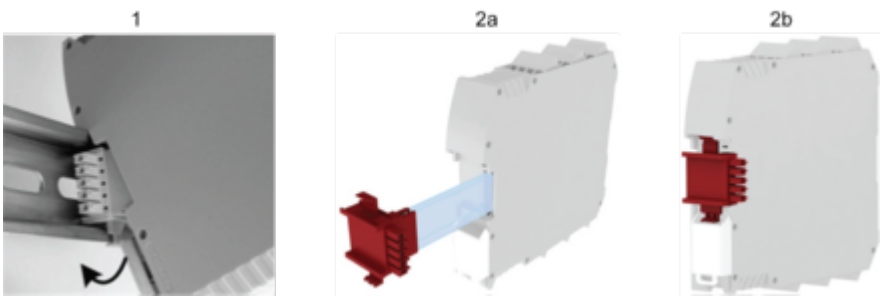
Mounting Safety Controller CPU with Module(s)

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)

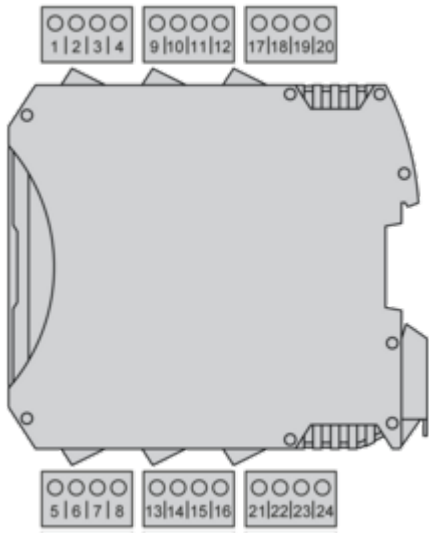


- 1 : Mount controller CPU and modules on rail.
- 2 : Make sure that the controller CPU or the module(s) are plugged on the BackPlane connector.

Connections and Schema

Wiring

Terminal Designation



| Terminal | Signal        | Description             |
|----------|---------------|-------------------------|
| 1        | 24 VDC        | 24 VDC power supply     |
| 2        | NODE_ADDR0    | Node selection          |
| 3        | NODE_ADDR1    |                         |
| 4        | 0 VDC         | 0 Vdc power supply      |
| 5        | PROXY1_24V    | PROXIMITY 1 connections |
| 6        | PROXY1_REF    |                         |
| 7        | PROXY1_NO     |                         |
| 8        | PROXY1_NC     |                         |
| 9        | PROXY2_24V    | PROXIMITY 2 connections |
| 10       | PROXY2_REF    |                         |
| 11       | PROXY2_NO     |                         |
| 12       | PROXY2_NC     |                         |
| 13       | not connected | not connected           |
| 14       |               |                         |
| 15       |               |                         |
| 16       |               |                         |



Image of product / Alternate images

Alternative

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