

Product datasheet

Specifications



Prevent a Safety automation - digital output and counting input cards

XPSMFCIO2401

⚠ Discontinued on: 31 Dec 2019

⚠ To be end-of-service on: 31 Dec 2027

⚠ Discontinued

EAN Code: 3389119010801

Main

Range Of Product	Preventa Safety automation
Product Or Component Type	Digital output and counting input cards
Safety Module Name	XPS MF60
Safety Use Category	Category 4 maximum conforming to EN 954-1 Performance level e conforming to EN/ISO 13849-1 SIL 3 conforming to EN/IEC 61508
Function Of Module	Monitoring incremental encoders for counting inputs Monitoring safety actuators for discrete output Monitoring safety dialogue for discrete output Monitoring sensors 2/3-wire PNP/NPN for counting inputs
Standards	DIN V 0801 DIN V 19250 EN 50156 pending IEC 61131
[Us] Rated Supply Voltage	24 V DC - 15...20 %
Group Of Channels	2 groups of 4 counting inputs 1 group of 4 discrete inputs
Counting Input Number	2
Discrete Output Number	4

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

Connections - Terminals	Counting inputs: removable screw terminal block, 2 x 0.5 mm² (AWG 20) flexible with cable end Discrete output: removable screw terminal block, 2 x 0.5 mm² (AWG 20) flexible with cable end Counting inputs: removable screw terminal block, 1 x 0.14...1 x 1.5 mm² (AWG 28...AWG 16) flexible without cable end Discrete output: removable screw terminal block, 1 x 0.14...1 x 1.5 mm² (AWG 28...AWG 16) flexible without cable end Counting inputs: removable screw terminal block, 1 x 0.14...1 x 1.5 mm² (AWG 28...AWG 16) solid without cable end Discrete output: removable screw terminal block, 1 x 0.14...1 x 1.5 mm² (AWG 28...AWG 16) solid without cable end Counting inputs: removable screw terminal block, 1 x 0.25...1 x 0.5 mm² (AWG 22...AWG 20) flexible with cable end Discrete output: removable screw terminal block, 1 x 0.25...1 x 0.5 mm² (AWG 22...AWG 20) flexible with cable end Counting inputs: removable screw terminal block, 1 x 0.25...1 x 1.5 mm² (AWG 22...AWG 16) flexible without cable end Discrete output: removable screw terminal block, 1 x 0.25...1 x 1.5 mm² (AWG 22...AWG 16) flexible without cable end Counting inputs: removable screw terminal block, 2 x 0.14...2 x 0.5 mm² (AWG 28...AWG 20) solid without cable end Discrete output: removable screw terminal block, 2 x 0.14...2 x 0.5 mm² (AWG 28...AWG 20) solid without cable end Counting inputs: removable screw terminal block, 2 x 0.14...2 x 0.75 mm² (AWG 28...AWG 18) flexible without cable end Discrete output: removable screw terminal block, 2 x 0.14...2 x 0.75 mm² (AWG 28...AWG 18) flexible without cable end Counting inputs: removable screw terminal block, 2 x 0.25...2 x 0.34 mm² (AWG 22) flexible without cable end Discrete output: removable screw terminal block, 2 x 0.25...2 x 0.34 mm² (AWG 22) flexible without cable end
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Complementary

Marking	CE
Internal Resistance	3.7 kOhm for counting circuit
Counting Input Voltage	24 V DC 5 V DC
Counting Input Current	<= 3 mA
Maximum Counting Frequency	1 MHz
Counter Inputs Resolution	24 bits
Time Base Accuracy	0,002
Maximum Cable Distance Between Devices	500 mm counting inputs
Discrete Output Voltage	18.4...26.8 V DC
Discrete Output Current	<= 2 mA (per channel) 2 A (per card) 0.5 A (per channel)
Maximum Voltage Drop	<3 V at 0.5 A for discrete output
Minimum Load	2 mA per discrete output
Maximum Leakage Current	1 mA, at 2 V at state 0
Number Of Terminal Blocks	1 for discrete output 2 for counting inputs
Current Consumption	0.1 A at 3.3 V DC rack 0.1 A at 5 V DC rack 0.8 A at 24 V DC power supply
Net Weight	0.26 kg

Environment

Product Certifications	TÜV C-Tick UL CSA
Ip Degree Of Protection	IP20 (with covering plate on unused in rack I/O card slots)
Ambient Air Temperature For Operation	0...60 °C conforming to EN/IEC 61131-2
Ambient Air Temperature For Storage	-40...85 °C conforming to EN/IEC 61131-2
Relative Humidity	95 % supply not connected
Operating Altitude	< 2000 m
Pollution Degree	2
Electrical Shock Protection Class	Class II conforming to IEC 61131-2
Electromagnetic Compatibility	EN/IEC 61131-2
Vibration Resistance	1 gn (f = 10...150 Hz) - 10 cycles per axis - conforming to EN 61131-2
Shock Resistance	15 gn for 11 ms (2 cycles per axis) conforming to EN 61131-2
Resistance To Electrostatic Discharge	4 kV contact conforming to EN/IEC 61000-4-2 8 kV on air conforming to EN/IEC 61000-4-2
Resistance To Electromagnetic Fields	10 V/m (26...1000 MHz), amplitude modulation 80 % conforming to EN/IEC 61000-4-3

Contractual warranty

Warranty	18 months
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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 >](#)

Well-being performance

 Mercury Free

 Rohs Exemption Information Yes

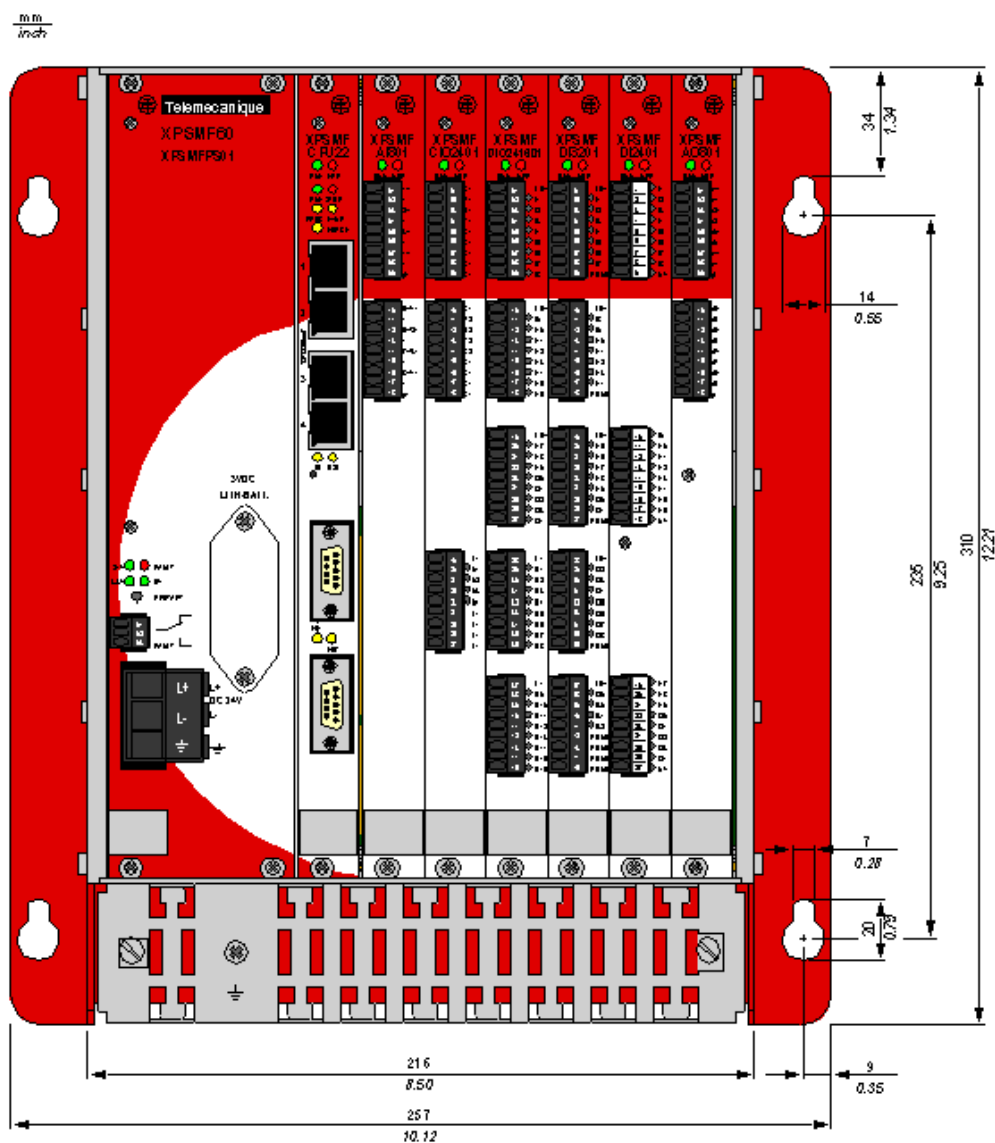
Eu Rohs Directive

Pro-active compliance (Product out of EU RoHS legal scope)

EU RoHS Declaration

Dimensions

Front View

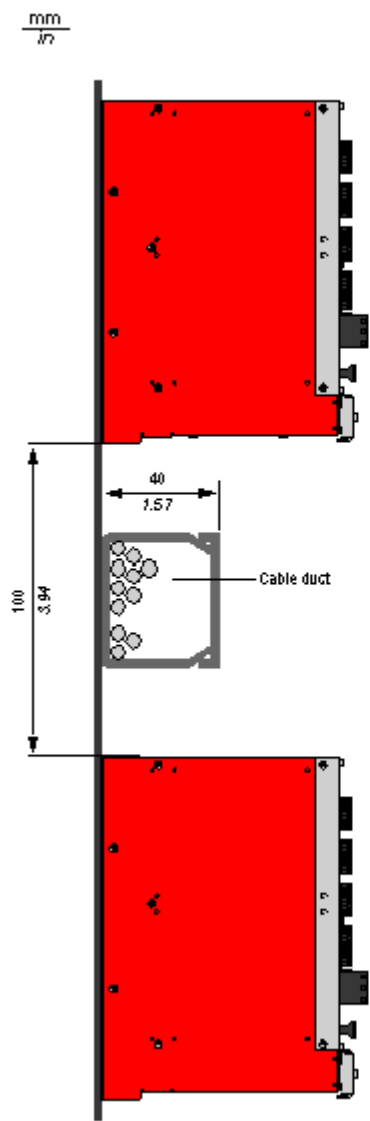


Max. module depth including screw terminals for the power supply: 239 mm/ 9.21 in.

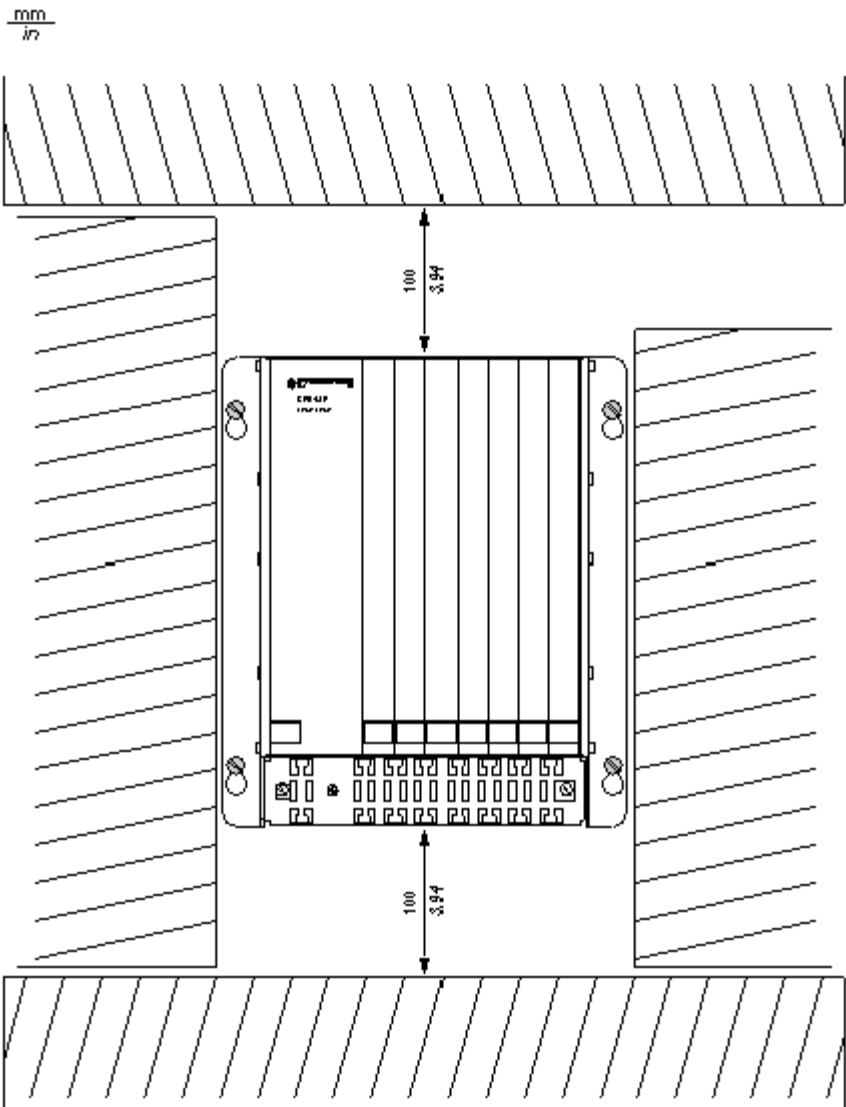
Mounting and Clearance

Mounting

Air Circulation

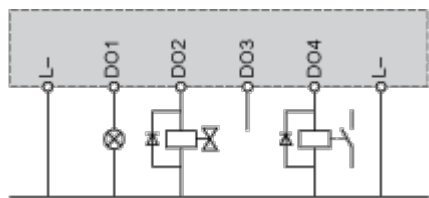


Minimum clearances



Connections and Schema

Actuator Connections to the Outputs



Emergency Stop Connections (Line Control)

