### Product data sheet Characteristics

### XPSCM1144

## module XPS-CM - single-beam photo-electric sensors - 24 V DC



Product or component type  Safety module name  XPSCM  Safety module application  Function of module  Built-in muting  Can reach PL = c conforming to EN/ISO 13849-1 with the appropriate control system and correctly wired  Can reach SILCL 1 conforming to EN/IEC 62061 with the appropriate control system and correctly wired  Can reach category 2 conforming to EN/ISO 13849-1 with the appropriate control system and correctly wired  Can reach category 2 conforming to EN/ISO 13849-1 with the appropriate control system and correctly wired  Safety reliability data  PFHd = 3.12E-7 1/h conforming to EN/IEC 62061  PFH = 3.12E-7 1/h conforming to EN/IEC 64061  PFH = 3.12E-7 1/h conforming to EN/ISO 13849-1  MTTFd = 16.6 years conforming to EN/ISO 13849-1  MTTFd = 16.6 years conforming to EN/ISO 13849-1  Mumber of inputs  4 (terminal(s) Z1, Z2, Z3, Z4) for sensor 2 (terminal(s) MA, MB) for muting function  4 V DC for sensor  Input voltage  24 V DC (terminal(s) U+, U-) for muting function  XU 2S18PP340 (on muting function  XU 2S18PP340 (on muting function  XU 2M18PP340 for muting function  XU Imit switch for muting function  XC limit switch for muting function  XC limit switch for muting function  Connections - terminals  Captive screw clamp terminals, clamping capacity: 2 x 0.52 x 1.5 mm² flexible cable with cable end, with out bezel  Captive screw clamp terminals, clamping capacity: 2 x 0.142 x 0.75 mm² solid or flexible cable without cable end, without bezel  Captive screw clamp terminals, clamping capacity: 1 x 0.251 x 1.5 mm² flexible cable with cable end, without bezel  Captive screw clamp terminals, clamping capacity: 1 x 0.251 x 1.5 mm² flexible cable with cable end, with bezel  Captive screw clamp terminals, clamping capacity: 1 x 0.251 x 1.5 mm² flexible cable with cable end, with bezel  Captive screw clamp terminals, clamping capacity: 1 x 0.251 x 1.5 mm² flexible cable with cable end, with bezel  Captive screw clamp terminals, clamping capacity: 1 x 0.251 x 1.5 mm² flexible cable witho	Commercial Status	Commercialised
Safety module name XPSCM  Safety module application  Function of module Built-in muting  Safety level Can reach PL = c conforming to EN/ISO 13849-1 with the appropriate control system and correctly wired  Can reach SILCL 1 conforming to EN/IEC 62061 with the appropriate control system and correctly wired  Can reach such a category 2 conforming to EN/ISO 13849-1 with the appropriate control system and correctly wired  Can reach category 2 conforming to EN/ISO 13849-1 with the appropriate control system and correctly wired  Safety reliability data  PFHd = 3.12E-7 1/h conforming to EN/IEC 62061 PFH = 3.12E-7 1/h conforming to EN/ISO 13849-1 MTTFd = 16.6 years conforming to EN/ISO 13849-1 MTTFd = 16.6 years conforming to EN/ISO 13849-1 MTTFd = 16.6 years conforming to EN/ISO 13849-1 With the propriate control system and correctly wired  Safety reliability 4 (terminal(s) Z1, Z2, Z3, Z4) for sensor 2 (terminal(s) MA, MB) for muting function  Input voltage 24 V DC (terminal(s) U+, U-) for muting function 24 V DC for sensor  Input compatibility XU9M18PP340 for muting function XU2S18PP340 (infrared) for sensor XU2M18PP340 (infrared) for sensor XU2M18PP340 for muting function  Connections - terminals  Captive screw clamp terminals, clamping capacity: 2 x 0.5 2 x 1.5 mm² flexible cable with cable end, with double bezel Captive screw clamp terminals, clamping capacity: 2 x 0.14 2 x 0.75 mm² solid or flexible cable without able end  Captive screw clamp terminals, clamping capacity: 1 x 0.25 1 x 2.5 mm² flexible cable with cable end, with out bezel Captive screw clamp terminals, clamping capacity: 1 x 0.25 1 x 1.5 mm² flexible cable with cable end, with out bezel Captive screw clamp terminals, clamping capacity: 1 x 0.25 1 x 1.5 mm² flexible cable with cable end, with bezel Captive screw clamp terminals, clamping capacity: 1 x 0.25 1 x 1.5 mm² flexible cable with cable end, with bezel Captive screw clamp terminals, clamping capacity: 1 x 0.25 1 x 1.5 mm² flexible cable with cable end, with be	Range of product	Preventa Safety detection
Safety module application  Function of module  Built-in muting  Can reach PL = c conforming to EN/ISO 13849-1 with the appropriate control system and correctly wired Can reach SILCL 1 conforming to EN/IEC 62061 with the appropriate control system and correctly wired Can reach category 2 conforming to EN/ISO 13849-1 with the appropriate control system and correctly wired Can reach category 2 conforming to EN/ISO 13849-1 with the appropriate control system and correctly wired Can reach category 2 conforming to EN/ISO 13849-1 with the appropriate control system and correctly wired  Safety reliability data  PFHd = 3.12E-7 1/h conforming to EN/IEC 62061 PFH = 3.12E-7 1/h conforming to EN/ISO 13849-1 MTTFd = 16.6 years conforming to EN/ISO 13849-1 Veterminal(s) MA, MB) for muting function  Valuation State	Product or component type	Safety module
Function of module  Built-in muting  Can reach PL = c conforming to EN/ISO 13849-1 with the appropriate control system and correctly wired  Can reach SILCL 1 conforming to EN/IEC 62061 with the appropriate control system and correctly wired  Can reach category 2 conforming to EN/IEC 62061 with the appropriate control system and correctly wired  Safety reliability data  PFHd = 3.12E-7 1/h conforming to EN/IEC 62061 PFH = 3.12E-7 1/h conforming to EN/IEC 61508 DC = 95.5 % conforming to EN/IEC 61508 DC = 95.5 % conforming to EN/ISO 13849-1 MTTFd = 16.6 years conforming to EN/ISO 13849-1  Number of inputs  4 (terminal(s) Z1, Z2, Z3, Z4) for sensor 2 (terminal(s) MA, MB) for muting function  Input voltage  24 V DC (terminal(s) U+, U-) for muting function XU2S18PP340 (infrared) for sensor XU2M18PP340 for muting function XC limit switch for muting function  Connections - terminals  Captive screw clamp terminals, clamping capacity: 2 x 0.52 x 1 mm² flexible cable with cable end, with out bezel Captive screw clamp terminals, clamping capacity: 1 x 0.251 x 2.5 mm² flexible cable with cable end, without bezel Captive screw clamp terminals, clamping capacity: 1 x 0.251 x 2.5 mm² flexible cable with cable end, without bezel Captive screw clamp terminals, clamping capacity: 1 x 0.251 x 1.5 mm² flexible cable with cable end, with out bezel Captive screw clamp terminals, clamping capacity: 1 x 0.251 x 1.5 mm² flexible cable with cable end, with out bezel Captive screw clamp terminals, clamping capacity: 1 x 0.251 x 1.5 mm² flexible cable with cable end, with bezel Captive screw clamp terminals, clamping capacity: 1 x 0.251 x 1.5 mm² flexible cable with cable end, with bezel Captive screw clamp terminals, clamping capacity: 1 x 0.251 x 1.5 mm² flexible cable with cable end, with bezel Captive screw clamp terminals, clamping capacity: 1 x 0.141 x 2.5 mm² solid or flexible cable without cable end	Safety module name	XPSCM
Safety level  Can reach PL = c conforming to EN/ISO 13849-1 with the appropriate control system and correctly wired  Can reach SILCL 1 conforming to EN/IEC 62061 with the appropriate control system and correctly wired  Can reach category 2 conforming to EN/ISO 13849-1 with the appropriate control system and correctly wired  Safety reliability data  PFHd = 3.12E-7 1/h conforming to EN/IEC 62061 PFH = 3.12E-7 1/h conforming to EN/IEC 61508 DC = 95.5 % conforming to EN/ISO 13849-1 MTTFd = 16.6 years conforming to EN/ISO 13849-1 MTTFd = 16.6 years conforming to EN/ISO 13849-1 WITH = 10.6 years conforming to EN/ISO 13849-1 WITH EN/ISO 13849-1 WIT	Safety module application	For monitoring of single beam photo-electric sensor
with the appropriate control system and correctly wired Can reach SILCL 1 conforming to EN/IEC 62061 with the appropriate control system and correctly wired Can reach category 2 conforming to EN/ISO 13849-1 with the appropriate control system and correctly wired  Safety reliability data  PFHd = 3.12E-7 1/h conforming to EN/IEC 62061 PFH = 3.12E-7 1/h conforming to EN/IEC 61508 DC = 95.5 % conforming to EN/ISO 13849-1 MTTFd = 16.6 years conforming to EN/ISO 13849-1 MTTFd = 16.6 years conforming to EN/ISO 13849-1 V DC (terminal(s) Z1, Z2, Z3, Z4) for sensor 2 (terminal(s) MA, MB) for muting function  1	Function of module	Built-in muting
PFHd = 3.12E-7 1/h conforming to EN/IEC 62061 PFH = 3.12E-7 1/h conforming to EN/IEC 61508 DC = 95.5 % conforming to EN/ISO 13849-1 MTTFd = 16.6 years conforming to EN/ISO 13849-1 Number of inputs  4 (terminal(s) Z1, Z2, Z3, Z4) for sensor 2 (terminal(s) MA, MB) for muting function  Input voltage  24 V DC (terminal(s) U+, U-) for muting function 24 V DC for sensor  Input compatibility  XU9M18PP340 (infrared) for sensor XU2M18PP340 (infrared) for sensor XU2M18PP340 for muting function XC limit switch for muting function XC limit switch for muting function Connections - terminals  Captive screw clamp terminals, clamping capacity: 2 x 0.52 x 1.5 mm² flexible cable with cable end, with double bezel Captive screw clamp terminals, clamping capacity: 2 x 0.252 x 1 mm² flexible cable with cable end, with out bezel Captive screw clamp terminals, clamping capacity: 2 x 0.142 x 0.75 mm² solid or flexible cable with cable end, without bezel Captive screw clamp terminals, clamping capacity: 1 x 0.251 x 2.5 mm² flexible cable with cable end, without bezel Captive screw clamp terminals, clamping capacity: 1 x 0.251 x 1.5 mm² flexible cable with cable end, with bezel Captive screw clamp terminals, clamping capacity: 1 x 0.251 x 1.5 mm² flexible cable with cable end, with bezel Captive screw clamp terminals, clamping capacity: 1 x 0.251 x 1.5 mm² flexible cable with cable end, with bezel Captive screw clamp terminals, clamping capacity: 1 x 0.251 x 1.5 mm² flexible cable with cable end, with bezel Captive screw clamp terminals, clamping capacity: 1 x 0.141 x 2.5 mm² solid or flexible cable without cable end	Safety level	with the appropriate control system and correctly wired Can reach SILCL 1 conforming to EN/IEC 62061 with the appropriate control system and correctly wired Can reach category 2 conforming to EN/ISO 13849-1 with the appropriate control system and cor
Input voltage  24 V DC (terminal(s) U+, U-) for muting function 24 V DC for sensor  Input compatibility  XU9M18PP340 for muting function XU2S18PP340 (infrared) for sensor XU2M18PP340 for muting function XC limit switch for muting function XC limit switch for muting function  Connections - terminals  Captive screw clamp terminals, clamping capacity: 2 x 0.52 x 1.5 mm² flexible cable with cable end, with double bezel Captive screw clamp terminals, clamping capacity: 2 x 0.252 x 1 mm² flexible cable with cable end, with out bezel Captive screw clamp terminals, clamping capacity: 2 x 0.142 x 0.75 mm² solid or flexible cable without cable end Captive screw clamp terminals, clamping capacity: 1 x 0.251 x 2.5 mm² flexible cable with cable end, without bezel Captive screw clamp terminals, clamping capacity: 1 x 0.251 x 1.5 mm² flexible cable with cable end, with bezel Captive screw clamp terminals, clamping capacity: 1 x 0.251 x 1.5 mm² flexible cable with cable end, with bezel Captive screw clamp terminals, clamping capacity: 1 x 0.141 x 2.5 mm² solid or flexible cable without cable end	Safety reliability data	PFHd = 3.12E-7 1/h conforming to EN/IEC 62061 PFH = 3.12E-7 1/h conforming to EN/IEC 61508 DC = 95.5 % conforming to EN/ISO 13849-1
Input compatibility  XU9M18PP340 (infrared) for sensor XU2M18PP340 (infrared) for sensor XU2M18PP340 for muting function XC limit switch for muting function  Connections - terminals  Captive screw clamp terminals, clamping capacity: 2 x 0.52 x 1.5 mm² flexible cable with cable end, with double bezel  Captive screw clamp terminals, clamping capacity: 2 x 0.252 x 1 mm² flexible cable with cable end, with out bezel  Captive screw clamp terminals, clamping capacity: 2 x 0.142 x 0.75 mm² solid or flexible cable withou cable end  Captive screw clamp terminals, clamping capacity: 1 x 0.251 x 2.5 mm² flexible cable with cable end, without bezel  Captive screw clamp terminals, clamping capacity: 1 x 0.251 x 1.5 mm² flexible cable with cable end, with bezel  Captive screw clamp terminals, clamping capacity: 1 x 0.141 x 2.5 mm² solid or flexible cable without cable end	Number of inputs	, , , ,
XU2S18PP340 (infrared) for sensor XU2M18PP340 for muting function XC limit switch for muting function  Connections - terminals  Captive screw clamp terminals, clamping capacity: 2 x 0.52 x 1.5 mm² flexible cable with cable end, with double bezel  Captive screw clamp terminals, clamping capacity: 2 x 0.252 x 1 mm² flexible cable with cable end, with out bezel  Captive screw clamp terminals, clamping capacity: 2 x 0.142 x 0.75 mm² solid or flexible cable withou cable end  Captive screw clamp terminals, clamping capacity: 1 x 0.251 x 2.5 mm² flexible cable with cable end, without bezel  Captive screw clamp terminals, clamping capacity: 1 x 0.251 x 1.5 mm² flexible cable with cable end, with bezel  Captive screw clamp terminals, clamping capacity: 1 x 0.141 x 2.5 mm² solid or flexible cable without cable end	Input voltage	( , , , ,
x 0.52 x 1.5 mm² flexible cable with cable end, with double bezel  Captive screw clamp terminals, clamping capacity: 2 x 0.252 x 1 mm² flexible cable with cable end, with out bezel  Captive screw clamp terminals, clamping capacity: 2 x 0.142 x 0.75 mm² solid or flexible cable without cable end  Captive screw clamp terminals, clamping capacity: 1 x 0.251 x 2.5 mm² flexible cable with cable end, without bezel  Captive screw clamp terminals, clamping capacity: 1 x 0.251 x 1.5 mm² flexible cable with cable end, with bezel  Captive screw clamp terminals, clamping capacity: 1 x 0.141 x 2.5 mm² solid or flexible cable without cable end	Input compatibility	XU2S18PP340 (infrared) for sensor XU2M18PP340 for muting function
	Connections - terminals	Captive screw clamp terminals, clamping capacity: 2 x 0.252 x 1 mm² flexible cable with cable end, with out bezel Captive screw clamp terminals, clamping capacity: 2 x 0.142 x 0.75 mm² solid or flexible cable without cable end Captive screw clamp terminals, clamping capacity: 1 x 0.251 x 2.5 mm² flexible cable with cable end, without bezel Captive screw clamp terminals, clamping capacity: 1 x 0.251 x 1.5 mm² flexible cable with cable end, with bezel Captive screw clamp terminals, clamping capacity: 1 x 0.141 x 2.5 mm² solid or flexible cable without
	Output type	Relay 2 NO (13-14, 23-24), volt-free

24 V DC (- 20...20 %)

The information provided in this documentation contains general descriptions and/or technical characteristics of the performance of the products contained herein. This documentation is not inherent for and is not to be used for determining suitability or reliability of these products for specific user applications. It is the dourn and restring of the products with respect to the relevant specific application or use thereof. Neither Schneider Electric Industries SAS nor any of its affiliates or subsidiaries shall be responsible or liable for misuse of the information contained herein.

Number of additional

[Us] rated supply volt-

circuits

age

### Complementary

Sensor power supply	24 V DC (terminal(s) U+, U-)
Supply current for sensors	< 200 mA
Input current	< 200 mA for muting function
Synchronisation time between inputs	3 s (+/- 20 %) for the activation of the MA/MB muting signal
Muting maximum duration	60 s (- 1030 %)
Line resistance	<= 10 Ohm for sensor power supply
Breaking capacity	C300 : inrush 1800 VA AC-15 for relay output C300 : holding 180 VA AC-15 for relay output
Breaking capacity	1.5 A / 24 V - L/R = 50 ms, DC-13 for relay output 20 mA / 24 V for solid state output
Associated fuse rating	6 A fast blow for relay output conforming to EN/IEC 60947-5-1 6 A fast blow for relay output conforming to DIN VDE 0660 part 200 4 A gG for relay output conforming to EN/IEC 60947-5-1 4 A gG for relay output conforming to DIN VDE 0660 part 200
Minimum output current	10 mA for relay output
Minimum output voltage	17 V for relay output
Response time on input open	<= 25 ms
Local signalling	1 incandescent lamp, function muting power consumption: 46.5 W 1 LED, function safety outputs open 1 LED, function safety outputs closed 1 LED, function restarting 1 LED, function electronic internal fuse status
Output thermal current	11 A maximum 5.6 A per relay
Power consumption	<= 15 W
Protection type	Electronic internal fuse
[Ui] rated insulation voltage	300 V, degree of pollution 2 conforming to EN/IEC 60947-5-1 300 V, degree of pollution 2 conforming to DIN VDE 0110 parts 1 and 2
[Uimp] rated impulse withstand voltage	4 kV overvoltage category III, conforming to EN/IEC 60947-5-1 4 kV overvoltage category III, conforming to DIN VDE 0110 parts 1 and 2

### Environment

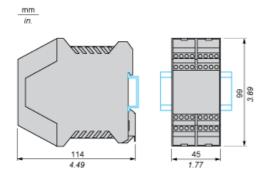
Ambient air temperature for operation	-1055 °C
Ambient air temperature for storage	-2585 °C
IP degree of protection	IP40(Enclosure) conforming to IEC 60529 IP20(Terminals) conforming to IEC 60529



# Product data sheet Dimensions Drawings

## XPSCM1144

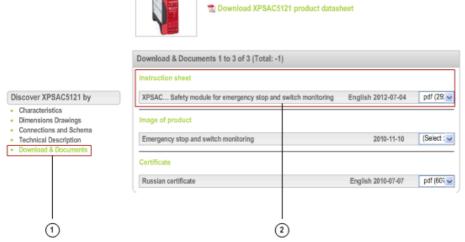
### **Dimensions**



### Wiring Diagrams

#### Refer to the Instruction Sheet

To download the instruction sheet, follow below procedure:



module XPSAC - Emergency stop - 24 V AC DC

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