Preventa safety modules

XPSCM

For monitoring single-beam photoelectric sensors with a test input associated with a built-in "muting" function

Catalogue

june 2014







Operating principle, references

Preventa safety modules

Type XPSCM

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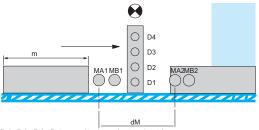
Principe de fonctionnement

XPSCM safety modules used in conjunction with XU2S single-beam photo-electric sensors (periodically tested), establish a category 2 light curtain conforming to IEC/EN 61496 parts 1 and 2.

The connection of 1 to 4 pairs of XU2S photo-electric sensors makes it possible to create a protected zone up to 1200 mm high conforming to EN 999/ISO 13855 and 8 m long.

The built-in "muting" function allows the automatic passage of parts to be machined, or loaded pallets, without interrupting the transportation movement.

When the system is switched on by the start command (in series with the main circuit feedback loop) and the light protection is not interrupted, the main circuit is closed by the two safety relays of the XPSCM module.



D1, D2, D3, D4: monitoring photo-electric sensors.

MA1, MB1, MA2, MB2: "muting" photo-electric sensors.

m = trolley length (including material) dM = distance between MA1, MB1 and MA2, MB2. To trigger the "muting" function, the inhibition devices must be activated within the 3 second time interval. This synchronisation time for the two inhibition inputs can be deactivated by connecting two configuration terminals. The "muting" cycle has a maximum duration of 60 seconds. During this period, materials can be transported through the protection field without deactivating the safety outputs. The 60 second limit value of the "muting" cycle may be made infinite by connecting two configuration terminals.

During the "muting" process, a light indicating the "muting" status is controlled by the XPSCM module. An fault at indicator light level (short-circuit, open circuit) will be immediately recognised and deactivate the "muting" function. The indicator light comes on when a "muting" signal is generated and indicates the inhibition of the protection function.

Maximum achievable safety level

- PL c/Category 2 conforming to EN/ISO 13849-1
- SILCL1 conforming to EN/IEC 61508 and EN/IEC 62061

Product certifications

- UL
- CSA
- IFA

References						
Description	Type of terminal block connection	Number of safety circuits	Additional outputs	Supply	Reference	Weight kg/ lb
Safety modules for monitoring single-beam photo-electric sensors, with a built-in "muting" function	Integrated in module	2	4	24 V	XPSCM1144	0.350/ 0.772
	Removable from module	2	4	24 V	XPSCM1144P	0.350/ 0.772



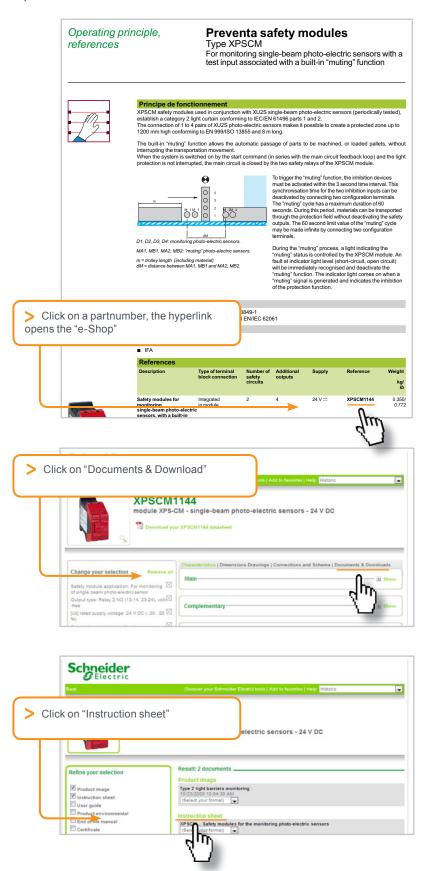
XPSCM1144

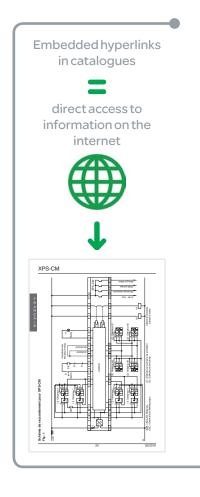
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>> Wiring diagram and Functional Diagram are available on the "e-Shop" via the partnumber.







More information on http://www.schneider-electric.com/machinesafety

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