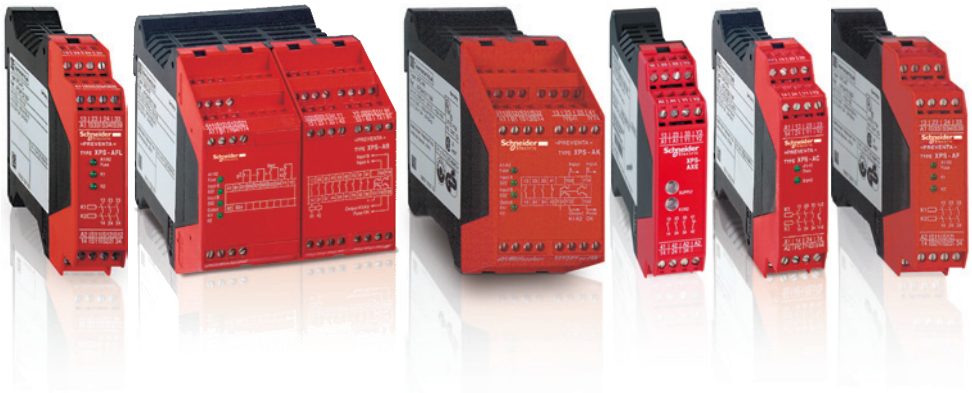
Preventa safety modules

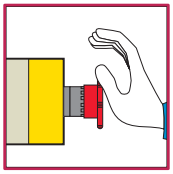
For Emergency stop and switch monitoring - Category 0

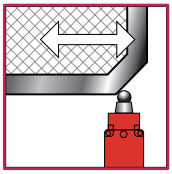
XPSAFL, XPSAR, XPSAK, XPSAXE, XPSAC, XPSAF

Catalog

October 2015







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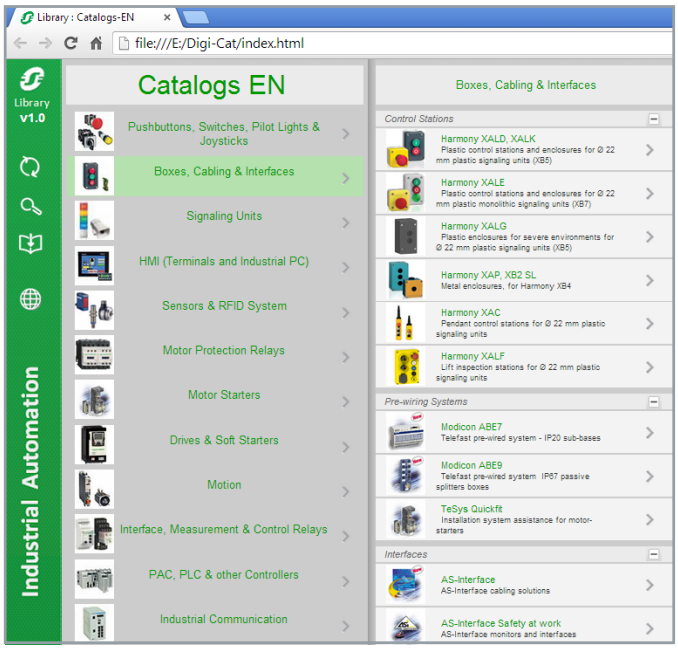

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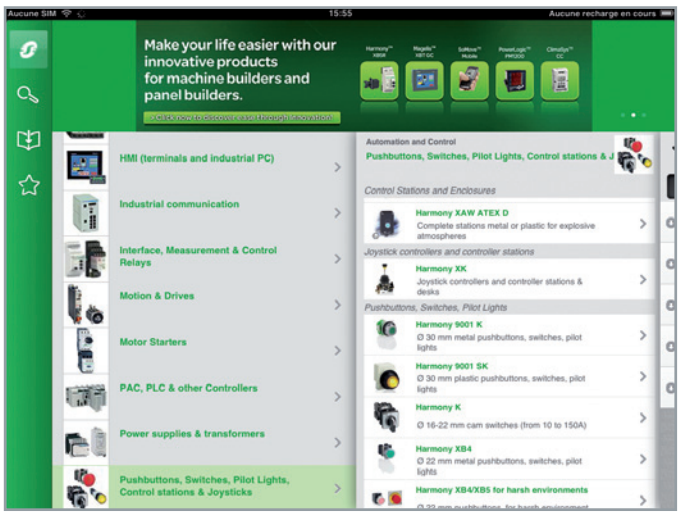

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Preventa safety modules

For Emergency stop and switch monitoring - Category 0

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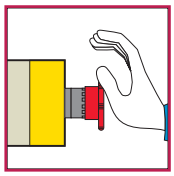
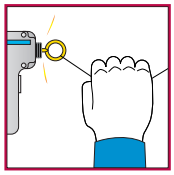
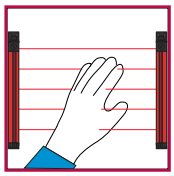
Preventa safety modules
Type XPSAFL
For Emergency stop, switch and safety light curtain monitoring







Operating principle

Safety modules **XPSAFL** meet the requirements of Performance Level PL e/Category 4 conforming to standard EN/ISO 13849-1.

They are used for:
- Monitoring Emergency stop circuits conforming to standards EN/ISO 13850 and EN/IEC 60204-1.
- Electrical monitoring of switches activated by protection devices conforming to standard EN/ISO 14119.
- They can also be used for monitoring type 4 light curtains conforming to EN 61496-1 that have solid-state safety outputs. This system conforms to Performance Level PL e/Category 4 in accordance with EN/ISO 13849-1.
- Housed in a compact enclosure, the modules have 3 safety outputs.
- Preventa safety modules **XPSAFL●●●●P** incorporate removable terminal blocks, thus optimising machine maintenance.
- To aid diagnostics, the modules have 3 LEDs on the front face which provide information on the monitoring circuit status.
- The Start button monitoring function is configurable depending on the wiring.

Maximum achievable safety level
- PL e/Category 4 conforming to EN/ISO 13849-1
- SILCL3 conforming to EN/IEC 61508 and EN/IEC 62061

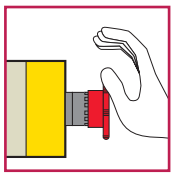
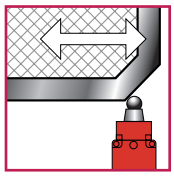
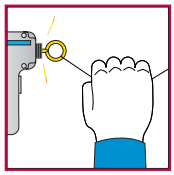
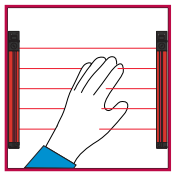
Product certifications
- UL
- CSA
- TÜV

References

Description	Connection	Number of safety circuits	Supply	Reference	Weight kg/ *lb*
Safety modules for Emergency stop, switch and safety light curtain monitoring	Captive screw clamp terminals Terminal block integrated in module	3	∿ and ⎓ 24 V	**XPSAFL5130**	0.250/ *0.551*
	Captive screw clamp terminals Terminal block removable from module	3	∿ and ⎓ 24 V	**XPSAFL5130P**	0.250/ *0.551*

XPSAFL5130

Preventa safety modules
Type XPSAR
For Emergency stop, switch or safety light curtain monitoring

Operating principle

Safety modules **XPSAR** meet the requirements of Performance Level PL e/Category 4 conforming to standard EN/ISO 13849-1 and are designed for the following safety applications:
- Monitoring Emergency stop circuits conforming to EN/ISO 13850 and EN/IEC 60204-1.
- Electrical monitoring of switches activated by protection devices conforming to standard EN/ISO 14119.
- Monitoring type 4 light curtains conforming to EN/IEC 61496-1 that have solid-state safety outputs with test function (light curtains XUS L).
- In addition to 7 safety outputs, modules **XPSAR** incorporate 2 relay signalling outputs and 4 solid-state signalling outputs for signalling to the process PLC.
- Safety modules **XPSAR●●●●●●P** incorporate removable terminal blocks, thus optimising machine maintenance.
- To aid diagnostics, the modules have 4 LEDs on the front face which provide information on the monitoring circuit status.
- The Start button monitoring function is configurable depending on the wiring.

Maximum achievable safety level
- PL e/Category 4 conforming to EN/ISO 13849-1
- SILCL3 conforming to EN/IEC 61508 and EN/IEC 62061

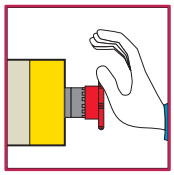
Product certifications
- UL
- CSA
- TÜV

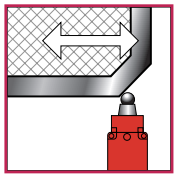
XPSAR3●1144

References

Description	Connection	Number of safety circuits	Additional outputs/ solid-state outputs to PLC	Supply	Reference	Weight kg/ *lb*
Safety modules for Emergency stop, switch or safety light curtain monitoring	Captive screw clamp terminals, Terminal block integrated in module	7	2 / 4	∿ and ⎓ 24 V	**XPSAR311144**	0.300/ *0.661*
				∿ 115 V ⎓ 24 V	**XPSAR351144**	0.400/ *0.882*
				∿ 230 V ⎓ 24 V	**XPSAR371144**	0.400/ *0.882*
	Captive screw clamp terminals, Terminal block removable from module	7	2 / 4	∿ and ⎓ 24 V	**XPSAR311144P**	0.300/ *0.661*
				∿ 115 V ⎓ 24 V	**XPSAR351144P**	0.400/ *0.882*
				∿ 230 V ⎓ 24 V	**XPSAR371144P**	0.400/ *0.882*

Preventa safety modules
Type XPSAK
For Emergency stop, switch, sensing mat/edges or safety light curtain monitoring





Operating principle

Safety modules **XPSAK** meet the requirements of Performance Level PL e/Category 4 conforming to standard EN/ISO 13849-1.
They are used for:
- Monitoring Emergency stop circuits conforming to standards EN/ISO 13850 and EN/IEC 60204-1.
- Electrical monitoring of switches activated by protection devices, with optional selection of synchronisation time between signals.
- Monitoring 4-wire sensing mats or edges.
- Monitoring type 4 light curtains conforming to EN/IEC 61496-1 which have solid-state safety outputs with test function (light curtains XUSL).
- Housed in a compact enclosure, the modules have 3 safety outputs, a relay signalling output and 4 solid-state signalling outputs for signalling to the process PLC.
- Preventa safety modules **XPSAK●●●●P** incorporate removable terminal blocks, thus optimising machine maintenance.
- To aid diagnostics, the modules have 4 LEDs on the front face which provide information on the monitoring circuit status.
- The Start button monitoring function is configurable depending on the wiring.

Maximum achievable safety level

- PLe/Category 4 conforming to EN/ISO 13849-1,
- SILCL3 conforming to EN/IEC 61508 and EN/IEC 62061

Product certifications

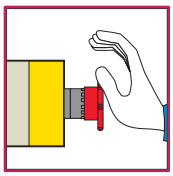
- UL
- CSA
- TÜV

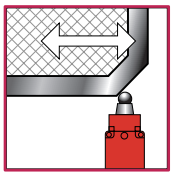
References

XPSAK3●1144

Description	Connection	Number of safety circuits	Additional outputs / Solid-state outputs for PLC	Supply	Reference	Weight kg/ *lb*
Safety modules for Emergency stop, switch, sensing mat/edges or safety light curtain monitoring	Captive screw clamp terminals Terminal block integrated in module	3	1 / 4	∿ and ⎓ 24 V	**XPSAK311144**	0.300/ *0.661*
				∿ 110 V ⎓ 24 V	**XPSAK361144**	0.400/ *0.882*
				∿ 120 V ⎓ 24 V	**XPSAK351144**	0.400/ *0.882*
				∿ 230 V ⎓ 24 V	**XPSAK371144**	0.400/ *0.882*
	Captive screw clamp terminals Terminal block removable from module	3	1 / 4	∿ and ⎓ 24 V	**XPSAK311144P**	0.300/ *0.661*
				∿ 48 V	**XPSAK331144P**	0.300/ *0.661*
				∿ 110 V ⎓ 24 V	**XPSAK361144P**	0.400/ *0.882*
				∿ 120 V ⎓ 24 V	**XPSAK351144P**	0.400/ *0.882*
				∿ 230 V ⎓ 24 V	**XPSAK371144P**	0.400/ *0.882*

Preventa safety modules
Type XPSAXE
For Emergency stop and switch monitoring





Operating principle

Safety modules **XPSAXE** are used for monitoring Emergency stop circuits conforming to standards EN/ISO 13850 and EN/IEC 60204-1 and also meet the safety requirements for the electrical monitoring of switches in protective devices conforming to standard EN/ISO 14119.

- They provide protection for both the machine operator and the machine by immediately stopping the dangerous movement on receipt of a stop instruction from the operator, or on detection of a fault in the safety circuit itself.
- To aid diagnostics, the modules have LEDs which provide information on the monitoring circuit status.
- The **XPSAXE** module has 3 safety outputs and a relay output for signalling to the PLC

Maximum achievable safety level

- PL e/Category 4 conforming to EN/ISO 13849-1
- SILCL3 conforming to EN/IEC 61508 and EN/IEC 62061

Product certifications

- UL
- CSA
- BG

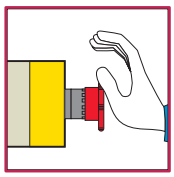
References

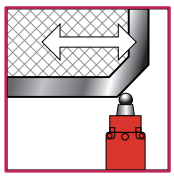
Description	Connection	Number of instantaneous opening safety circuits	Additional outputs	Supply	Reference	Weight kg/ *lb*
Safety modules for Emergency stop and switch monitoring	Captive screw clamp terminals Terminal block removable from module	3	1 relay	∼ and ⎓ 24 V	**XPSAXE5120P**	0,229/ *0,505*
	Spring terminals Terminal block removable from module	3	1 relay	∼ and ⎓ 24 V	**XPSAXE5120C**	0,229/ *0,505*

XPSAXE5120P

XPSAXE5120C

Preventa safety modules
Type XPSAC
For Emergency stop and switch monitoring





Operating principle

Safety modules **XPSAC** are used for monitoring Emergency stop circuits conforming to standards EN/ISO 13850 and EN/IEC 60204-1 and also meet the safety requirements for the electrical monitoring of switches in protective devices conforming to standard EN/ISO 14119.

- They provide protection for both the machine operator and the machine by immediately stopping the dangerous movement on receipt of a stop instruction from the operator, or on detection of a fault in the safety circuit itself.
- To aid diagnostics, the modules have LEDs which provide information on the monitoring circuit status.
- The **XPSAC** module has 3 safety outputs and a solid-state output for signalling to the PLC.

Maximum achievable safety level

- PL e/Category 4 conforming to EN/ISO 13849-1
- SILCL3 conforming to EN/IEC 61508 and EN/IEC 62061

Product certifications

- UL
- CSA
- TÜV

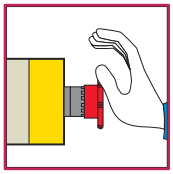
References

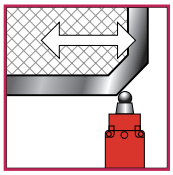
Description	Connection	Number of instantaneous opening safety circuits	Additional outputs	Supply	Reference	Weight kg/ *lb*
Safety modules for Emergency stop and switch monitoring	Captive screw clamp terminals Terminal block integrated in module	3	1 solid-state	∿ and ⎓ 24 V	**XPSAC5121**	0.160/ *0.353*
				∿ 48 V	**XPSAC1321**	0.210/ *0.463*
				∿ 115 V	**XPSAC3421**	0.210/ *0.463*
				∿ 230 V	**XPSAC3721**	0.210/ *0.463*
	Captive screw clamp terminals Terminal block removable from module	3	1 solid-state	∿ and ⎓ 24 V	**XPSAC5121P**	0.160/ *0.353*
				∿ 48 V	**XPSAC1321P**	0.210/ *0.463*
				∿ 115 V	**XPSAC3421P**	0.210/ *0.463*
				∿ 230 V	**XPSAC3721P**	0.210/ *0.463*

XPSAC●●●●

XPSAC●●●●P

Preventa safety modules
Type XPSAF
For Emergency stop and switch monitoring





Operating principle

Safety modules **XPSAF** meet the requirements of Performance Level PL e/Category 4 conforming to standard EN/ISO 13849-1.

They are used for:

- Monitoring Emergency stop circuits conforming to standards EN/ISO 13850 and EN/IEC 60204-1.
- Electrical monitoring of switches activated by protection devices conforming to standard EN/ISO 14119.
- Housed in a compact enclosure, the modules have 3 safety outputs.
- Preventa safety modules **XPSAF●●●●P** incorporate removable terminal blocks, thus optimising machine maintenance.
- To aid diagnostics, the modules have 3 LEDs on the front face which provide information on the monitoring circuit status.
- The Start button monitoring function is configurable depending on the wiring.

Maximum achievable safety level

- PL e/Category 4 conforming to EN/ISO 13849-1
- SILCL3 conforming to EN/IEC 61508and EN/IEC 62061

Product certifications

- UL
- CSA
- TÜV

References

Description	Connection	Number of safety circuits	Supply	Reference	Weight kg/ *lb*
Safety modules for Emergency stop and switch monitoring	Captive screw clamp terminals Terminal block integrated in module	3	∼ and ⎓ 24 V	**XPSAF5130**	0.250/ *0.551*
	Captive screw clamp terminals Terminal block removable from module	3	∼ and ⎓ 24 V	**XPSAF5130P**	0.250/ *0.551*

XPSAF5130

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Head Office
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