SAFETY PRODUCTS

Safe door monitoring with interlock for low risk

Sentry, MKey5 and contactor

- **Simple solution**
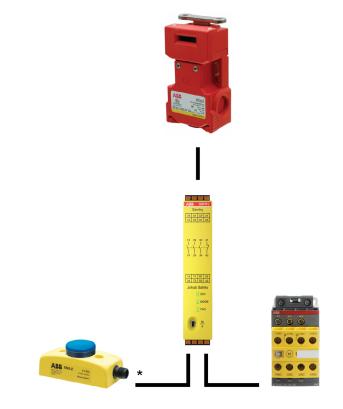- **Easy to install**
- **Cost effective**

Application

For low risk machines (where the risk assessment shows that the possible injuries are minor or reversible), simpler solutions are often enough. For instance an interlock (monitoring) function supervising a single door or hatch using a safety key switch and safety relay.

MKey5 is a simple and cost-effective solution if a safety level up to PL c/SIL 1 is required, see below. The safety relay can be configured for manual or automatic reset. (For manual reset a reset button is required, see illustration.)

Using a single contactor to cut power to the machine is sufficient for reaching PL c/SIL 1.

Functional safety level

This is a one-channel solution that fulfills up to Category 1, PL c according to EN ISO 13849-1 and up to SIL 1 according to EN 62061. MKey5 meets the low-level coding requirements according to EN ISO 14119 regarding manipulation protection. Measures to prevent tampering must be considered.

* The reset button is only required if the safety relay is set to manual reset.

Sentry SSR10P

MKey5

Smile 11 RA

M12-C61

AFS09

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Sentry safety relay
Choose between standard screw terminals or push-in terminals

Description	Type	Order code
Single function safety relay with screw terminals	Sentry SSR10	2TLA010050R0000
Single function safety relay with push-in terminals	Sentry SSR10P	2TLA010050R0001

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MKey safety switch

Description	Type	Order code
Safety interlock switch, plastic body and head. 2NO+1NC guard open. 3xM20 conduit entries. Delivered with standard key.	MKey5	2TLA050003R0100

Note that alternative models are available both for the switch and the key (see Safety Products catalog).

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Reset button

Description	Type	Order code
Reset button in Smile enclosure, 1xNO button, 1x Blue LED, 1x M12-5 male connector	Smile 11 RA	2TLA030053R0000

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Cables for reset button
Choose suitable cable length

Description	Type	Order code
M12-5 cable length 3 meter	M12-C31	2TLA020056R0500
M12-5 cable length 6 meter	M12-C61	2TLA020056R0000

Note that alternative cable lengths are available (see Safety Products catalog).

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Safety contactors
The AFS contactors are dedicated for safety applications. See product sheet for range and selection.

Links

Product sheets	[Sentry flyer](#)
	[AF contactors for safety applications](#)
Web pages	[Sentry SSR10](#)
	[MKey5](#)
	[Smile 11 RA](#)
	[Contactors for safety applications - Motor protection and control](#)
Connection diagrams	[Sentry connection diagrams with most safety devices](#)
	See SSR10 General E)
Manuals	[Sentry SSR10](#)
	[MKey5](#)

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