

SIRIUS Safety Bundle Advanced 3SK1912-3SB40

Safety door monitoring and Emergency-Stop up to SIL 3 / PL e with safety relay and failsafe motor starter

In addition to the SIRIUS safety bundle basic, there is also a safety bundle advanced for more sophisticated safety solutions with the necessary SIRIUS devices you need for detecting, evaluating and reacting. This enables you to implement a safety application with SIRIUS 3SK safety relays in perfect interaction with the 3RM1 safety motor starter.

See for yourself and get to know modern SIRIUS safety solutions at a special price!

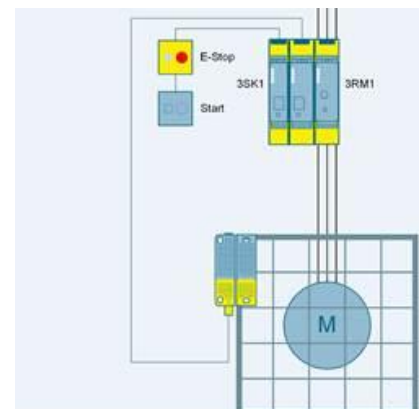
Special bundle with customer benefits

- All required products for safety door monitoring can be ordered in one package with just one article number: 3SK1912-3SB40.
- Functional safety up to SIL 3 / PL e (according to IEC 62061 / ISO 13849) can be achieved with the products in this bundle.
- SIRIUS ACT components are water and dust proof up to IP69k.
- The 3SK1 safety relays have reliable semiconductor outputs.
- Parameterization of the SIRIUS 3SK1 safety relays can directly be done via the DIP switches on the front of the devices.
- Seamless integration into the main circuit by means of failsafe 3RM1 motor starters via innovative device connectors.
- The extremely compact SIRIUS 3SK1 safety relays (multifunctionality with narrow width) in perfect interaction with the compact 3RM1 motor starters.

How do the products of the Safety Bundle Advanced work together?

The safety relay monitors the safety door and the emergency stop. When the safety door is opened or the Emergency Stop is activated, the safety relay opens the release circuits and switches off safely via the safety motor starter. When the safety door is closed again or the Emergency Stop is unlocked again and the start button is pressed, the safety relay switches the safety motor starter on again.

For more information about machine safety, please see [here](#).



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Content of the SIRIUS Safety Bundle Advanced

Product name	Article number	Quantity
• Push button blue with holder, 1NO, spring-type terminal	3SU1100-0AB50-3BA0	1
• Enclosure gray for command and signalling devices + metric connection	3SU1801-0AA00-0AB1 3SU1900-0HG10-0AA0	1 1
• Emergency Stop in enclosure, with protective collar, rotate-to-unlatch, 2 NC, screw terminal + metric connection	3SU1801-0NB00-2AC2 3SU1900-0HG10-0AA0	1 1
• Safety relay, electronic signaling circuits, Us = 24 V DC, spring-type terminal (push-in)	3SK1122-2AB40	1
• Input expansion for safety relays, Us = 24 V DC, spring-type terminal (push-in)	3SK1220-2AB40	1
• Failsafe direct starter, 3RM1, 500 V, 0.55...3 kW, 1.6...7 A, DC 24 V, spring-type terminal (push-in)	3RM1107-2AA04	1
• Device connector for 3SK1, 17.5 mm	3ZY1212-1BA00	1
• Device connector for 3SK1, 22.5 mm	3ZY1212-2BA00	1
• Device termination connector for motor starter	3ZY1212-2FA00	1
• RFID non-contact safety switch	3SE6315-0BB01	1
• Standard actuator for all safety switches RFID	3SE6310-0BC01	1
• Connecting cable 8-pole, bare cable end, 3 m long for safety switch M12	3SX5601-2GA03	1

Application details

- Detecting:** The emergency stop needs to be monitored with two normally close contact modules and cross circuit detection in order to reach SIL 3 / PL e.

Expert tip: According to ISO 13850 a start button is obligatory for starting after emergency stop.
- Evaluating:** The SIRIUS safety relay 3SK1 monitors the sensors, opens the enabling circuits and switches the 3RM1 safely off. All relevant parameters can be set using the DIP switches on the front of the 3SK1 devices.

Expert tip: Wiring diagrams can be found in the [3SK1 manual](#)
- Reacting:** When a sensor is actuated, the 3SK1 safety relay sends a safe switching signal to the connected motor starter.

Expert tip: The wiring of the 3SK1 devices and the motor starter is easy, fast and wiring mistakes can be avoided when using the device connectors.

Further information, trainings and services

- Detailed information on [SIRIUS Safety Bundle Advanced](#)
- Further information on [safety integrated](#), [SIRIUS safety relays 3SK](#) and [SIRIUS motor starter 3RM1](#)

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