

SIRIUS Safety Bundle Basic 3SK1911-3SB40

Emergency stop shutdown up to SIL 3 / PL e with a safety relay and two contactors

SIRIUS is the industrial control technology from Siemens. It provides everything you need for a consistent and cost-effective safety chain in basic safety applications: from detecting to evaluating and reacting.

For example, the SIRIUS 3SK safety relays can be used to implement both local and integrated safety functions very easily, since they work perfectly together with both sensor technology and actuators. See for yourself and get to know the SIRIUS safety technology at a special price.

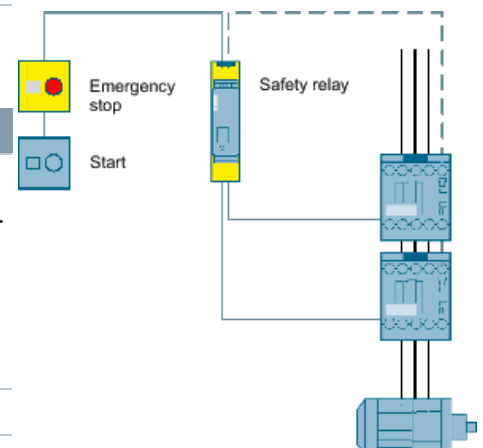
Special bundle with customer benefits

- All required products for emergency stop monitoring can be ordered as a bundle with one article number: 3SK1911-3SB40
- Functional safety up to SIL 3 / PL e (acc. to IEC 62061 / ISO 13849) can be reached with the products in this bundle
- SIRIUS ACT components are water and dust proof up to IP69k
- Reliable semiconductor outputs of the 3SK1 safety relay
- Parameterization of the 3SK1 safety relay can directly be done via DIP switches on the front of the device
- Safety main power connector for series connection of two contactors reduces wiring time and wiring failures
- SIRIUS 3SK1 relays are extremely compact: multifunctionality with a small footprint

How do the products of the bundle work together?

The safety relay monitors the emergency stop command device on two channels. When the emergency stop command device is actuated, the safety relay opens the enabling circuits and switches the power contactors off in a safety-related way. If the emergency stop command device is unlatched and the feedback circuit is closed, the start button can be used to switch on again.

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





Contents of the SIRIUS Safety Bundle Basic

Product name	Article number	Quantity
• Blue start button with holder 1NO, spring-type	3SU1100-0AB50-3BA0	1
• Grey enclosure for command devices + metric connection	3SU1801-0AA00-0AB1 3SU1900-0HG10-0AA0	1 1
• Emergency stop in enclosure, with protective collar, rotate-to-unlatch, 2 NC, screw-type + metric connection	3SU1801-0NB00-2AC2 3SU1900-0HG10-0AA0	1 1
• Safety relay, electronic enabling circuits Us = 24 V DC, spring-type terminal (push-in)	3SK1112-2BB40	1
• Power contactor, AC-3 7 A, 3 kW / 400 V 1 NC, 24 V DC 3-pole, size S00, screw-type terminal	3RT2015-1BB42	2
• Safety main power connector for series connection 3RT201, size S00, screw-type terminal	3RA2916-1A	1
• Surge suppressor, RC element, 24 ... 48 V AC, 24 ... 70 V DC, for contactors size S00	3RT2916-1CB00	2

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.
- Evaluating:** The 3SK1 safety relay monitors the sensor, opens the enabling circuits and switches the power contactors in a safety-related way. All relevant parameters can be set with the DIP switches on front of the 3SK1 device: Cross circuit detection and monitored start needs to be activated.

Expert tip: Position of DIP switches on 3SK1:
1st switch → right: monitored start
2nd switch → right: cross circuit detection
3rd switch → right: two channel sensor
4th switch → right: start up test off
Wiring diagrams can be found in the [3SK1 manual](#)
- Reacting:** If the emergency stop command device is actuated the 3SK1 safety relay gives a safe switching signal to the connected contactors. In order to reach SIL 3 / PL e two contactors are required.

Expert tip:
The contactors can also be wired directly, but the safety main power connector (3RA2916-1A) helps you to reduce wiring time and wiring failures.

Further information, trainings and services

- [Detailed information about the bundle](#)
- More information about [Safety Integrated](#)
- More Information about [SIRIUS 3SK safety relays](#)