Simply switch **safely**

SIRIUS contactors with failsafe control input –
innovative and powerful

SIEMENS

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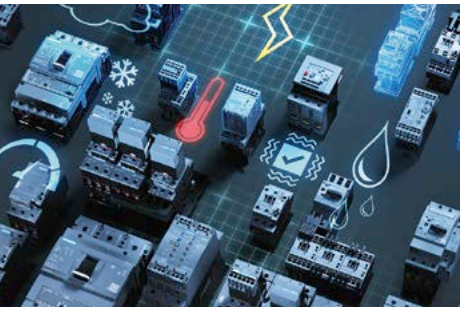


The SIRIUS modular system plays an important role when it comes to implementing safety-related applications. Our portfolio encompasses many other SIRIUS safety components, with which you can quickly and easily implement innovative safety solutions.

- SIRIUS 3SK safety relays
- Accessories to configure compact contactor combinations, such as the safety main current connector
- SIRIUS 3RM1 and ET 200SP motor starters with integrated safety-related shutdown
- SIRIUS ACT commanding and signaling devices, can be controlled via Profinet and Emergency Stop
- SIRIUS 3RW55 Failsafe soft starters
- Safety mechanical or contactless position switches

SIRIUS contactors can be directly controlled from failsafe controllers. In the higher power ranges, generally a coupling level was required due to the higher power consumption of the contactors. These new contactors with failsafe control input mean that this coupling level can be eliminated.

The F-PLC contactors represent a consequential continuation and development of the SIRIUS modular system in the domain of safety-related switching. Their failsafe inputs make it possible to achieve SIL 2 or PL c in accordance with IEC 62061 or ISO 13849-1 with just one contactor. SIL 3 or PL e can be achieved by connecting two contactors in series.

The huge advantage of this solution is that additional positively driven coupling relays can be eliminated and the safety assessment process is made significantly simpler.

The free-of-charge Safety Evaluation Tool (SET) for Standards IEC 62061 and ISO 13849-1 allows you to quickly and simply assess the safety functions of your machine. The result is a report in compliance with the standard, which can be integrated into the documentation as proof of safety.

Advantages at a glance

Digital input directly on board

- Contactors with certified, digital F-PLC input for control from failsafe controllers, standard controllers or safety relays

Time, cost and space saving

- No additional coupling level
- Lower engineering and wiring costs as a result of the safety main current connector
- Portfolio covers a wide range up to 250 kW

Simplified safety calculation

- Contactors seamlessly certified in all sizes

Tamper protected

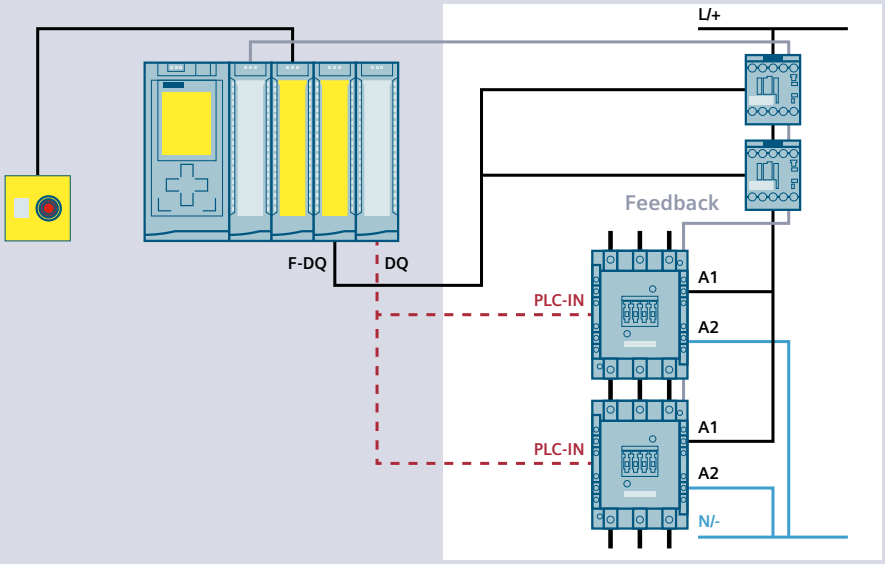
- Cover for the seal (accessory)
- Contactor variant with permanently mounted auxiliary switches

You can simply download
the Safety Evaluation Tool (SET):
www.siemens.com/safety-evaluation

3RT203□-□S□30

3RT105□-□Sv36
3RT145□-□S□36

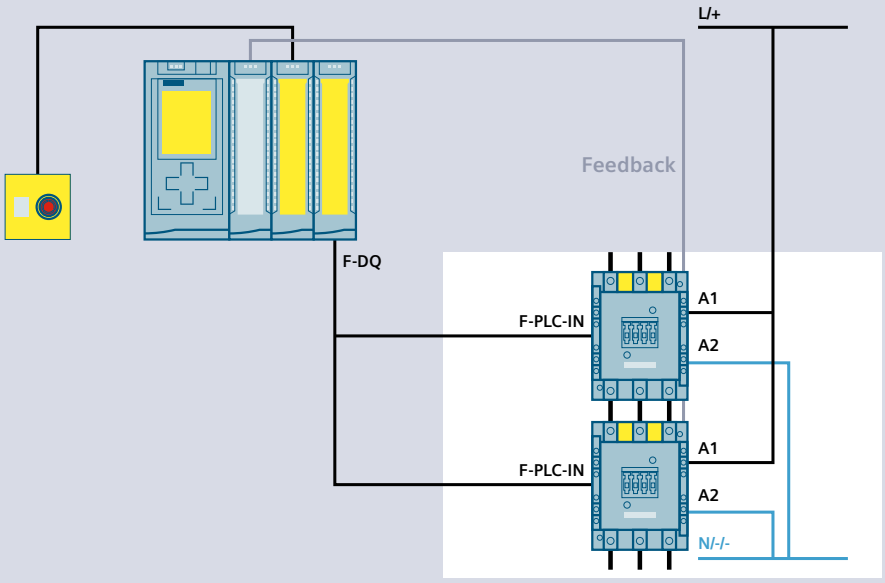
Example for SIL 2 and SIL 3 / PL e application without F-PLC-IN



3RT1 in size S6 with standard or solid-state operating mechanism with PLC-IN

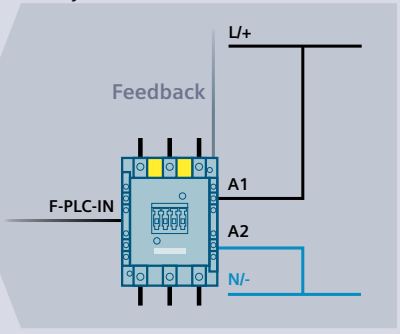
- Safety-related tripping only possible via coupling links and F-DQ
- Standard operating mechanism: operational switching via coupling links and F-DQ
- Solid-state operating mechanism: operational switching with PLC-IN and DQ

Example for SIL 3 / PL e (left) and **SIL 2 / PL c (right)** application



3RT1 in size S6 with standard or solid-state operating mechanism with fail-safe control input F-PLC-IN (e. g. 3RT1055-6SP36)

- Safety-related tripping and operational switching via F-PLC-IN and F-DQ
- SIL 2 / PL c possible with only one contactor



3RT1066-□S□36
3RT146□-□S□36

3RT1075-□S□36
3RT147□-□S□36

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