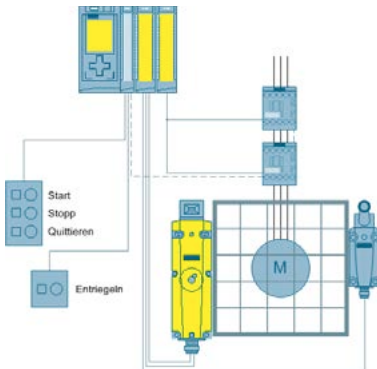


Protective door with spring-loaded interlocking with an S7-1500

To prevent access to the hazard zone of a machine during operation, a protective door is installed and the position of the protective door is monitored. Since overrunning machine components may cause hazards, the protective door is interlocked and can only be opened after the machine is in standstill.

Monitoring the position of the protective door is performed via two SIRIUS 3SE5 position switches to reach the demanded safety level. If one position switch fails, an opened protective door is still detected by the second position switch. A failed position switch is detected by the discrepancy monitoring in the controller, and switching it back on is prevented until the failure has been removed.



One position switch is equipped with interlocking. Apart from monitoring the position of the protective door, the door can be kept closed during operation and hence entry into the hazard zone be prevented.

To be able to switch on the machine, the protective door must be closed and locked. Unlocking the protective door is only possible at the end of a configured period of time, after the machine has been switched off, so the operator is protected against hazardous machine overrun motion.