SCB - Applications of the Safety Timer

Information about applications

Example 1

Bypass for short-term debouncing of pressure switches in the electric torque of a machine.

Short-term pressure shocks in the electric torque of a machine can trigger used pressure switches, leading to undesirable machine downtime.

Solution:

This can be prevented by the SCB with a safety-oriented bypass of the pressure switch in the electric torque.

To this, the safe contacts of the SCB are wired in parallel to the pressure switch. The SCB is wired in a way that it bypasses the contacts of the pressure switch in the electric torque and activates the time delay by opening the safety circuit. After the expiration of the parameterized delay time (e.g. 3 seconds), the SCB contacts open up and the bypass of the pressure switch is dissolved.

The SCB ensures that the pressure switch is not bypassed longer than the parameterized time of the SCB, also in case of failure.



Example 2

Filtering short-term fluctuations in pressures, volume flows, temperature etc.

Short-term exceedance of adjusted limits cannot be fully excluded depending on application and must also not inevitably lead to an immediate shutdown. This may lead to unnecessary shutdowns with high personnel costs regarding the accrual.

Solution:

A triggering of sensors due to short-term exceedance of limits is filtered with a SCB temporally and safely.

This means, if a limit is exceeded and the according sensor is triggered, the downstream SCB will be triggered. The parameterized switch-off delay proceeds now.

If the limit is undershot within the parameterized delay time, the SCB resets and no switch-off takes place.

If there is still an exceedance of the limit after the expiration of delay time, the SCB switches off safely.



Example 3

Monitoring flushing duration of boilers

Flushing duration before the release of burners have to be monitored safely. This means that for a defined period it is necessary to ensure that a burner cannot be started.

Solution:

When beginning the flushing of boilers, the SCB will be activated. Then the adjusted delay time on the SCB starts. After the expiry of the delay time, the contacts of the SCB release the burner.

The use of the SCB ensures that a release of a burner does not take place earlier than adjusted on the SCB.





For further information, please consult the enclosed operating instructions. This document serves only for the first commissioning to test the devices and **does not** replace the operating instructions.

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English translation Errors and technical changes reserved