

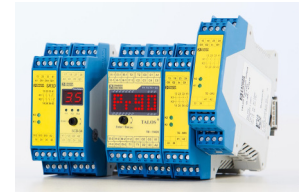
We are going through fire for your safety!

ZANDER Aachen is your expert for safety-related solutions in the process industry. The prerequisite for this is a precise knowledge of the normative framework conditions:

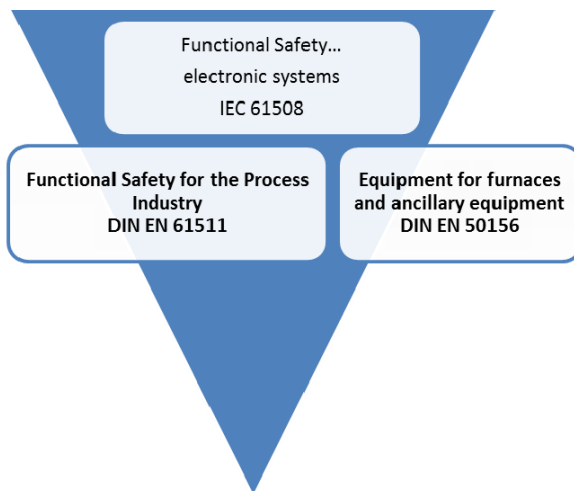
Normative framework conditions

Normatively, a differentiation is made by the definition whether it is a plant of the process industry or a machine. Depending on this, the respective requirements are described in the following standards:

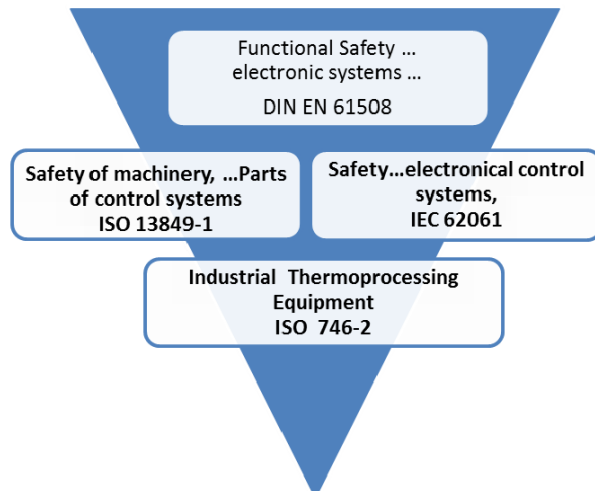
For machine manufacturers or switch cabinet builders in the plant construction, there is often the uncertainty as to whether the safety consideration must be carried for a machine or a process engineering plant.



Requirements of the Process Industry



Requirements for machines



The great advantage of ZANDER safety technology is that it is type approved by the TÜV Rheinland for both areas. That means each of the following products reaches the highest safety requirements SILCL 3/ PL e according to ISO 13849 and IEC 62061 as well as the requirements for combustion plants in continuous operations according to IEC 50156.

ZANDER offers here the entire product range from the safe contact extension to small control with the possibility of hierarchical illustration of all safety requirements:

Safety coupling relay SK3D / Safety relay SR3D

The safe coupling relay SK3D is very suitable for contact reinforcement, contact reproduction and galvanic isolation. In addition, it enables the debouncing of safe semiconductor outputs with superior safety control systems. This is possible with minimal wiring effort (savings of up to 60 % in comparison to the standard safety relays) and an optional screw-free connection with spring-cage terminals.

The safety relay SR3D fulfils the requirements of a classic safety relay with the special feature, that it is authorized especially for the use in combustion plants.

The great advantage of the products is, that they can be used instead of the normative prescribed, diverse safety combination according to DIN EN 510156-1. This means great space and cost efficiency.

Both products are available with 24V and 230V input voltage.



Mini-time control device SCB

The safety time control device SCB makes the safe, delayed on and off switching within process- and firing chains possible. The compact safety controller offers the highest level of diagnostic incl. error messages, which minimizes complex commissioning and maintenance works. There are variants available with semi conductor- and/or relay outputs.

The unique feature is the large bandwidth and the exact setting of the delay times. Time ranges from 0.1 to 99 sec, min up to 99 h are available. All of this with an exact setting accuracy of 0.1 over a push-rotary in combination with the LED display.



Safe, individual configured compact controller TALOS

If the entire process chain should be monitored at the highest level of diagnostics, the compact safety controller TALOS will be the best choice.

14 safe inputs, 3 safe semi conductor outputs as well as 6 signal outputs enable reliable monitoring of the process chain.

TALOS fulfills like every presented ZANDER product the normative requirements for combustion plants in continuous operations according to DIN EN 50156-1 and fulfills the highest safety requirements at the same time PL e, Kat.4 according to DIN EN 13849-1 as well as SILCL 3 according to IEC 62061.

ZANDER already configures the controlling customer specific. The following applications can be realized through this.

- Application with multiple, different delay times, e.g. signalling of an imminent shutdown
- Acknowledgement operations with visualization of the status (warning light, signal lamp) and non-acknowledgement after a specified time leads to a safe shutdown
- TALOS as a safe restarting device in case of power failure (Process will be brought back into work position through re-triggering)
- Safe burner start-monitoring
- The many signal contacts allow a visualization of the entire safety chain.



And that with a maximum of diagnosis.

Additionally, the relays extension module is available for the TALOS base unit.



Further information on these products can be found on our website:

www.zander.aachen.de