Safe Temperature Monitoring in Industrial Furnaces

Bihl+Wiedemann developed the Safety Thermocouple Module (BWU3271) to meet the special requirements of industrial furnaces. It enables the implementation of applications up to SIL3/PLe. Despite the large measuring range, the process value is resolved very accurately and transmitted directly to the PLC.

Easy Parameter Assignment via ASIMON360

Different J, K, N, R and S-type thermocouples can be easily selected via the ASIMON360 configuration software. It also allows up to 8 switching thresholds or temperature ranges to be defined. ASIMON360 facilitates the application of exact signal corrections – for example, it is possible to store scaling functions or calibration results.

The Perfect System for Industrial Furnaces

Control and monitor safe sensors and actuators in industrial furnaces. Bihl+Wiedemann's AS-Interface solutions collect all safe signals such as pressure or temperature in the furnace and control, for example, the safe valve control system via one simple flat cable.

The Safety Thermocouple Module in Detail:

- Monitors J, K, N, R, S-type thermocouples
- Measuring range from -270 °C to 1,750 °C
- 8 configurable safe switching thresholds
- For use in thermoprocessing plants approved according to EN 746-2, para. 5.7.2.b
- Safety temperature limiter/monitor with thermal overload shutdown of industrial furnaces according to SIL3/PLe (Machinery Directive, DIN EN ISO 13849-1 PLe)
- High-precision transmission of calibrated process values to the process control system via gateways
- Chip card for easy device replacement without reassignment of parameters
- Safe transfer of switching thresholds up to SIL3 to the control system (e.g., via PROFIsafe Gateway)
- 22.5 mm overall width
- IP20 protection class

Questions about our products and solutions?

We would be happy to assist you.