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ETC6000 Series Burner Control System

ETC6048 Temperature Sensor

The ETC6048 is a high-accuracy boiler temperature sensor designed for seamless integration with the ETC6000 series burner controllers. It offers dependable temperature measurement from -80 to 410°C, enabling precise control, efficiency, and safety in industrial combustion systems.

Features:

- **-80 - 410°C Operating Range:** Ideal for any temperature boiler system.
- **High Accuracy:** $\pm 0.4\%$ typical system accuracy ensures precise monitoring.
- **Compact Sensor Design:** 6 mm dia. probe fits standard wells and pockets.
- **Integrity Monitoring:** Dual pt100 sensors provide system self diagnostics and contamination checks.
- **Easy Installation:** Case and insert approved for boiler installation.

Benefits:

- **Continuous Operation:** Approved for Continuous operation as a main boiler Sensor (as per EN298, EN 230, EN60730-2-5 UL 60730-2-5).
- **Improved Safety:** Suitable for SIL3 safety functions.
- **CANBus Communication:** Highly resilient to interference with simpler wiring. Also frees up 4-20mA inputs on controller.
- **Integrated Design:** Fully compatible with ETC6000 Controllers.
- **Reliable Performance:** Maintains accuracy in fluctuating thermal environments.

The ETC6048 boiler temperature sensor is a durable, high-precision device designed for accurate thermal monitoring in industrial burner systems. Optimised for seamless use with the ETC6000 series burner controllers, it delivers real-time data critical for efficient and safe boiler operation.

With a temperature range of -80 to 410°C, the ETC6048 is ideal for low- and mid-temperature systems such as steam boilers, thermal oil heaters, and closed water circuits. Its compact stainless steel probe and IP65-rated housing ensure reliable performance in demanding industrial environments. The sensor is typically installed in a thermal well or pocket, allowing for quick replacement without draining the system—ideal for minimising downtime during maintenance.

The ETC6048 connects directly to the ETC6000 via an analogue input channel, enabling the controller to adjust firing rates, enforce temperature limits, and trigger alarms or shutdowns as needed. Its fast, stable response supports precise burner modulation, helping reduce fuel use, limit thermal stress, and maintain consistent process temperatures.

Electrical connection available: a 12mm plug/socket for quick-disconnect setups.

Accurate temperature feedback is essential for safety. If overheating occurs, the ETC6000—fed by the ETC6048 — can shut down the burner or activate protective logic immediately. This proactive approach safeguards both equipment and personnel, meeting stringent industrial compliance standards.

The ETC6048 also reduces maintenance effort. Its pocketmounted design allows for easy sensor replacement, and its stable performance over time requires little adjustment. Annual checks—verifying mounting, connections, and sensor readings—are typically sufficient to ensure continued accuracy.

In summary, the ETC6048 offers dependable, accurate boiler temperature monitoring as part of a fully integrated ETC6000 control system. It supports better efficiency, safety, and serviceability—key advantages in any industrial heating application.

For further information on the ETC6048 Temperature Sensor for the 6000 Series contact ETC today for bespoke solutions tailored to your needs.

Energy Technology & Control Ltd.

Caburn House • Brooks Road • Lewes • East Sussex • BN7 2BY • UK

+44 (0)1273 480667 • sales@energytechnologycontrol.com

energytechnologycontrol.com

