ETC

Energy • Technology • Control

ETC6000 Series Burner Control System

ETC1040 Temperature Sensor

The ETC1040 is a high-accuracy boiler temperature sensor designed for seamless integration with the ETC6000 series burner controllers. It offers dependable temperature measurement from 0 to 150°C, enabling precise control, efficiency, and safety in industrial combustion systems.

Features:

- **0–150°C Operating Range:** Ideal for low- to mid-temperature boiler systems.
- **24–30 VDC Supply:** Compatible with standard control panel voltages.
- **Compact Sensor Design:** 6 mm dia. probe fits standard wells and pockets.
- **Easy Installation:** Supports conduit or plug/socket connection options.
- **IP65 Protection:** Resistant to dust and water ingress for industrial environments.
- **High Accuracy:** ±0.1% typical system accuracy ensures precise monitoring.

Benefits:

- **Efficient Boiler Control:** Enables responsive burner modulation and shutdown.
- **Minimised Downtime:** Easy-to-replace design avoids draining the system during servicing.
- **Improved Safety:** Helps maintain safe temperature limits for boiler protection.
- **Versatile Application:** Suitable for steam, thermal oil, and water boilers.
- **Reliable Performance:** Maintains accuracy in fluctuating thermal environments.
- **Integrated Design:** Fully compatible with ETC6000 analogue input configurations.

Leaders in Combustion Control

The ETC1040 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 0 to 150°C, the ETC1040 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 ETC1040 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.

Two electrical connection options are available: an M16 conduit entry for permanent wiring, and a 12 mm plug/socket for quick-disconnect setups. Both are designed to simplify installation and servicing while ensuring signal integrity.

Accurate temperature feedback is essential for safety. If overheating occurs, the ETC6000—fed by the ETC1040—can shut down the burner or activate protective logic immediately. This proactive approach safeguards both equipment and personnel, meeting stringent industrial compliance standards.

The ETC1040 also reduces maintenance effort. Its pocket-mounted 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 ETC1040 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 ETC1040 Temperature Sensor for the 6000 Series contact ETC today for bespoke solutions tailored to your needs.

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