

ETC

Energy • Technology • Control



ETC6000 Series Burner Control System

ETC6000 Burner Management System

Our ETC6000 Burner Management System is designed to manage modulating, dual fuel (gas and oil) burners as single fuel profiles or mixed profiles. There are options of fan and/or pump speed control via variable frequency drive (VFD), and oxygen trim, which further improve burner efficiency.

Features:

- Suitable for single and dual fuel burners.
- All burner start up sequence functions and timings fully integrated.
- Ignition control.
- IR, UV, photocell and ionisation flame detection supported.
- Control of two variable speed drives for combustion air and fuel pump control.
- Up to 10 rotary actuators can be assigned.
- Fuel safety valve control and leak testing.
- Up to 4 fuel:air ratio profiles can be programmed.
- Choice of communications protocols including RS-485, Profibus and Modbus RTU.
- Versatile programming options allowing most applications to be addressed.
- Oxygen trim option using dedicated ETC oxygen probe and interface.
- Plant Master can connect up to 10 ETC6000 series controllers to the user interface.

Benefits:

- Rotary actuators with a positioning accuracy of $\pm 0.1^\circ$ replace conventional characterising cams and linkages and eliminates backlash and hysteresis.
- Improved combustion and improved turndown saves up to 5% on fuel costs and significantly reduces harmful CO₂ and other flue gas emissions.
- Using a second setpoint during periods of low demand can save up to 10% in fuel usage.
- Passcode protection to prevent untrained/unauthorised changes to combustion set-up.
- Software allows advanced interfacing functions and collection/trend logging of data.
- Oxygen trim saves up to 3.5%.

The ETC6000 Series Burner Management System offers complete and flexible solutions to industrial burner users.

Applications include steam and hot water boilers, oil heaters and process driers. The ETC6000 controllers are suitable for use with single and dual fuel burners as well as with twin fired boilers.

Fuel prices and pressure to reduce CO₂ emissions are prompting industrial boiler operators to look at ways of improving efficiency. If your boiler uses a conventional mechanical linkage control system then you are almost certainly wasting fuel.

By installing an electronic Burner Management System savings of over 10% can be made in fuel usage, running costs and CO₂ emissions.

Further efficiency improvements and cost savings can be made by adding Oxygen Trim and VSD control options.

The ETC6000 replaces mechanical linkages and characterising cams with accurate and repeatable servo motors to position fuel and air drives. Up to four fuel:air profiles can be set for each burner in the safe knowledge that each time a profile is selected the servo motor positioning will be repeatable throughout the firing range. In the event of a burner system failure the burner will shutdown allowing the fault to be investigated and rectified.

A comprehensive range of ancillary devices allows complete Burner Management Systems to be configured. The ETC6000 is suitable for both single and multiple boiler applications. Where more than one boiler is used in a plant, the ETC6000 controllers can be networked using Ethernet communications. The ETC Plant Master boiler sequencing system enables the boilers to be sequenced for optimum efficiency of the boiler plant.

For further information on the ETC6000 Burner Management System 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

