

BoilerTEK

By KDS Controls

Advanced Burner Management & Combustion Control

Complete burner management and combustion control in an easy to operate system.

Improved Boiler Efficiency

- Tighter control reduces energy costs.

PLC Based Control System

- Secure burner management logic control with independent control loop processing for combustion control in accordance with NFPA guidelines.

Color Touch screen Interface

- Setup, Tuning, and Fuel/Air Ratio adjustments available through password protected screens.
- Easy and fast operator adjustments with a complete view of all system information.
- Full color display of critical startup data including flame scanner status, purge, pilot, and fuel status.
- Historical trending replaces paper recorders.

First Out Annunciator

- Allows easy determination of boiler trips.

Expansion and Networking

- Easily expandable to Plant Master, Boiler Master, Fuel, Forced Draft, O2 Trim, Drum Level and Furnace Draft.
- Jackshaft, Parallel, and Cross Limited Fully Metered Systems Available.
- Optional Ethernet module for LAN and Internet access.





Get a text message on your cell phone or a page whenever there is a problem in your plant you need to know about.

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CATALOG ITEM DESCRIPTION:

BURNER MANAGEMENT SYSTEM FUEL:

- NG-Select for natural gas fired boiler
- 2F-Select for number two(2) oil fired boiler
- 4F-Select for number four(4) oil fired boiler
- 6F-Select for number six(6) oil fired boiler

BURNERS:

- 1B, 2B, etc.-Select for number of burners per boiler

SCANNERS:

- 1S or 2S-Select the number of scanners required

OPTIONS:

- DS-Select if digital scanner with 4-20ma output is desired (Displays on analog meter)
- SS-Select if a monitored surge suppressor is desired (Failure displays on screen)

COMBUSTION CONTROL SYSTEM

- PM-Select if you require a controller to provide a demand signal to one or more boilers based on plant header pressure
- BM-Select if a signal is already being provided by an existing plant master
- JS-Select if air and fuel are operated through common linkage from a single actuator
- PL-Select if fuel and F.D. actuators operate independently from a common signal
- CL-Select if fuel flow and air flow are metered
- TM-Select if Oxygen Trim is desired
- VM-Select if Oxygen Trim will be implemented through a variable speed drive to the fan motor
- L1-Select if one element is desired (requires drum level measurement)
- L2-Select if two element is desired (requires drum level and steam flow measurement)
- L3-Select if three element drum level is required (requires above metering plus feed flow)
- ID-Select if boiler is negative draft type (requires draft transmitter)

OPTIONAL CONTROL SYSTEMS

- LL-Select if automatic boiler sequencing based on load requirements is desired
- AI-Select if additional analog inputs are desired
- IF-Select if an interface to an existing HVAC or other system is required
- RM-Select if remote pager or cell phone text messaging for alarms is required
- DA-Select if a Data Acquisition System is required

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The BoilerTEK system is the first to combine burner management and combustion control using a single PLC with a separate CPU for independent combustion control in accordance with NFPA guidelines. BoilerTEK eliminates expensive and time consuming installation and engineering by providing a packaged, pre-engineered system to meet your boiler control needs. Cost effective design allows practical application for small boilers at a less expensive price than comparable systems. This allows for quicker return on investment through reduced fuel consumption along with extending the life of your connected boiler. This combination ensures the highest reliability and safety available in a complete boiler control solution.

Standard Features:

- 10" touch screen interface.
- Dual fuel multiple burner control capable.
- Uninterruptible fuel transfer.
- First out annunciator.
- Boiler trip history.
- Alarm management and scrolling display.
- Proof of closure indication.
- Complete startup sequence logic display.

Optional Features

- 6" or 12" touch screen interface.
- Multiple scanner support.
- Flame intensity display.
- Available simplified Burner-Management-Only system.
- PC-Based SCADA/HMI with local and remote data storage.
- Ethernet LAN and Internet remote access.
- Connectivity to OPC compatible data acquisition system.
- Energy monitoring with automatic spreadsheet populating.
- Cellular text message and page alarm notification.



Specifications:

Type	Description
System Input Voltage	100-130VAC, 50-60Hz
Approximate Power Consumption	20A main breaker provided
Operating Temperature	32 to 131 deg F (0 to 55 deg C, inside enclosure)
Relative Humidity (non condensing)	10 to 90%
Cycle Time	100K steps ladder per millisecond Ladder CPU 50 milliseconds per PID loop
PLC Memory	56K steps ladder program, 112K data register storage
Operator Interface	6", 10", and 12" full color touch screen
Surge Suppression	25 kA, Line-to-Neutral or Line-to-Ground with alarm contact
Enclosure	NEMA 4
Terminal Blocks	600V, 1492CA1 terminals for field wiring
Agency approvals*	UL 508 *Factory Mutual (with approved programmer)

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Represented by: