CONCERT™ BOILER CONTROL

THERMAL SOLUTIONS
Innovative Equipment for Hot Water Systems

THERMAL SOLUTIONS
2/12/2014 – 11:30 am

HOME   INFO   MENU   STATUS   ADJUST   HELP

HEADER
140
120   160
100   180
80   200
60   220
actual   °F   setpoint
179   180
Priority: Central Heat
50%
Boiler 2:   Running

MODULATION
4000
3250   4750
2500   5500
1750   6250
1000   7000
actual   RPM   setpoint
4750   4750
58%
Running

BOILER 1
Supply   180 F
Return   150 F
Stack   200 F
Flame   4.5 uA
Priority: Sequence Control
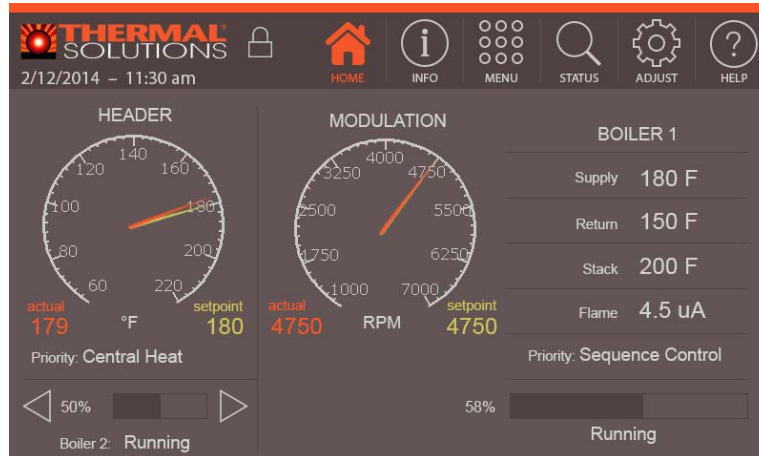
Advanced Commercial Boiler Control …. Putting Your System in Tune

The Concert™ Boiler Control includes features and functions designed to save energy, optimize long-term efficiency, and integrate seamlessly with all Energy Management Systems (EMS). Built on a proven control platform, these features are _Unique_, _Specifiable_, and unavailable from other suppliers.

Unique Specifiable Features

- Complete EMS Interface - Read and write firing rate demand & setpoint; if loss of EMS, defaults to local control
- A.I.D. (Advanced Input Determination) - Firing rate and water temperature based algorithms for multiple boilers
- USB Data Sharing Port - Input, update, download settings and historical data
- Factory Default Settings - Restore control parameters back to factory settings
- Real Time BTU/Hr Display
- Time/Date Stamp - Store hard & soft lockouts and faults (sensor, EMS signal, sequencer and limit string)
- Four (4) Month History - Collect and store supply & return temperature, flame intensity and firing rate
- Two (2) Boiler Start/Stop Trigger – Support large domestic hot water demands

USB Data Sharing Port

- Simplifies Commissioning – Upload/download settings from one boiler to the next
- Aids Troubleshooting - Allows settings and fault history to be shared with factory for consultation
- Enhances Performance Analysis - Historical operation trends can be saved in .CRV formatted files

USB

Intuitive Icon Navigation

- <u>Single Menu</u> - Quick setup menu makes programming a breeze
- <u>Troubleshooting Guide</u> - Pinpointing & fixing faults has never been easier
- <u>Advanced data archives</u> - Powerful historical data & graph analysis
- <u>Comprehensive Operations</u> – Review, adjust & manage for best efficiency
- <u>Always EMS Capability</u> - Interface via Modbus , 4-20mA or 0-10v
- <u>Menu Icons Made Easy</u> – Get to where you going seamlessly

| HOME | INFO | MAIN MENU | STATUS | ADJUST | HELP | LOCKED SCREEN | UNLOCKED SCREEN | PREVIOUS SCREEN |

Self-Guiding Diagnostics

- <u>Industry-Leading Fault Identification and Correction</u>
- <u>Accessible</u> - HELP Icon always visible, always available
- <u>Factory Reset</u> - Default to "as shipped" settings for fresh start
- <u>Vast Historical Info</u> - Archived alarms & working history helps in resolution

Unmatched Archives Data

- <u>Lockout History</u> – 15 alarms; even after power cycle
- <u>Ultimate Resource</u> – Aids commissioning, optimization & troubleshooting
- <u>Extensive Operational Trending</u> - 4 months of historical operational data
- <u>Graphical Displays Boosts Evaluation</u> - Makes it easier to analyze & adjust

Optional System Enhancements

- <u>Eco Propel Cognitive Pump Technology</u> - Provides 0-10vdc variable speed pump output for total energy savings (up to 89% electrical and up to 3% fuel – the REAL story!). Payback as little as 1 year!
- <u>EMS Signal Converter Kit</u> - Converts 0-10vdc signal from EMS to 4-20mAdc for our control
- <u>Wireless Outdoor Sensor</u> - Saves installation time
- <u>BACnet, LonWorks & ModBus</u> – Communication gateway translates effectively to various EMS protocols