HYD-3200

# **Submittal Data Information**

Combination Temperature Limit, Low Water Cut-Off and Boiler Reset Residential Hot Water Boilers



Supercedes: New Effective: September 1, 2010

JOB\_\_\_\_ENGINEER\_\_\_CONTRACTOR\_\_\_

Item Number	Model Number	Notes

## **Features**

- Dial Type Settings-Allows for quick and easy set-up.
- Diagnostic Lights-Continually indicate which features are active and if the control is holding off the burner for any reason. No complicated menus to scroll through.
- Dynamic Display-Continually displays boiler temperature.
   Changes to indicate control settings when Test/Settings button is pressed. Displays Pur when control is in Thermal Pre-Purge mode.
- Test/Settings Button-Tests the low water cut-off operation when installed with a Hydrolevel Electro-Well.
   Displays all settings when sequencially depressed.
- Indirect Water Heater Compatible-Bypasses Thermal Targeting function on calls from the indirect water heater, allowing the boiler to fire to the high limit setting, ensuring quick response to hot water needs.
- Circulator Hold-Off-Delays circulator on a call for heat until the boiler temperature reaches 120°F to reduce potential for condensing.

## **Specifications**

- Input Voltage:.....120VAC/60HZ
- Operating Range Low Limit:.....Off or 110°F to 200°F
- Operating Range High Limit:.....100°F to 220°F
- Circulator Contacts: 5.8 FLA, 34.8 LRA@120VAC
- Burner Contacts (3250): 7.4 FLA, 44.4 LRA
  @120VAC
- Burner Contacts (3200): 30VA@ 24VAC
- Power Consumption.....2.6 VA
- Agency Listing.....U.L. 353
- NEMA Classification.....NEMA 1

# **Standard Application**

Hydrolevel's Fuel Smart HydroStats are installed primarily on residential oil or gas fired water boilers. Fuel Smart HydroStat combines the functions of temperature limit control, low water cut-off and energy saving boiler reset into a single control.

## **Operation**

#### Low Water Cut-Off Function

When installed with Hydrolevel's ElectroWell, Fuel Smart HydroStat will provide automatic reset Low Water Cut-Off functionality to any boiler installation. When the Fuel Smart HydroStat is installed on an electrowell a green LWCO "active" light will automatically illuminate on the control.

## How Thermal Targeting Works

Thermal Targeting Technology analyzes thermostat activity and continually evaluates how much heat the house requires. When it is very cold outside, the heat demand is high and the Fuel Smart HydroStat will raise the boiler's Target temperature to provide needed heat to the home. When the outside temperature is milder, the heat demand is lower. During these periods, the Fuel Smart HydroStat will lower the boiler's Target temperature - saving fuel - while continuing to provide comfort to the house.

## How Thermal Pre-Purge Works

To further enhance fuel efficiency, Fuel Smart HydroStat is also equipped with a Thermal Pre-Purge feature. When activated, the control will purge standing heat in the boiler at the start of any thermostat call, supplying the "free" latent energy to the heating zone that is calling. If this latent heat is not sufficient to satisfy the thermostat, the control will then energize the burner. This feature works with single and multi-zone heating systems utilizing circulators or zone valves and requires no change in wiring.







