

Model 3200-*Plus* Model 3250-*Plus*

Three Function Control

Temperature Limit

Designed for cold start and tankless coil boilers

Low Water Cut-Off

Provides protection against potentially dangerous low water conditions when installed with the Hydrolevel Electro-Well™

Boiler Reset

- Thermal Targeting
 On-board microprocessor saves
 fuel by adjusting boiler temperature
 based on heating demand
- Outdoor Reset Ready
 Provides outdoor reset and warm weather shutdown with addition of Outdoor Sensor Kit



MODEL 3200-Plus for gas-fired boilers

MODEL 3250-Plus for oil-fired boilers



Innovators in Boiler Protection Since 1965

Upgrade Existing Cold Start and Triple-Action Aquastats*

- Install HydroStat on existing immersion well for full Aquastat and Boiler Reset functionality, or
- Install HydroStat on Electro-Well[™] to add Low Water Cut-Off protection

■ Easy Dial-Type Set-up

Simply dial in the Temperature Limit and Economy settings.



■ Dynamic Display

Continually displays boiler temperature. Intermittently displays



outside temperature when in outdoor reset mode. Instantly

changes to display control settings when any dial is adjusted.

■ Test/Settings Button

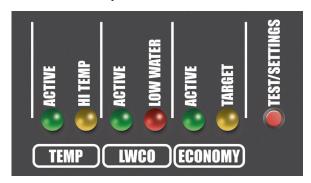
- Press and hold to test the Low Water Cut-Off operation (operational when control is installed on an Electro-WellTM)
- Press momentarily to scroll through control settings (High Limit, Low Limit, Economy Setting, and the current Boiler Reset Target Temperature).

■ Easy to Install

Uses industry standard wiring designations.

■ LED Status Lights

Continually indicates which functions are active and if the control is holding the burner off for any reason.



- **TEMP ACTIVE** Indicates the control is powered and the temperature function is active.
- **TEMP HI TEMP –** Illuminates any time the burner is off as a result of the boiler reaching the high limit setting.
- LWCO ACTIVE Illuminates when the control is providing low water cut-off protection. This function is activated by installing a Hydrolevel Electro-Well™. This LED will not illuminate when the control is installed on a standard immersion well.
- LWCO LOW WATER Indicates a low water condition in the boiler.
- ECONOMY ACTIVE Indicates that the Economy dial is turned on and that Thermal Targeting or Outdoor Reset function is active.
- **ECONOMY TARGET –** Illuminates any time the burner is off as a result of the boiler reaching the Target temperature determined by Thermal Targeting or Outdoor Reset.

■ Smart DHW Priority

Closely monitors boiler temperature when calls for domestic hot water coincide with space heating calls. The control will prioritize the domestic hot water call only when needed.

■ Call for Heat Indicator

Illuminates on any call for heat.



Optional Features

Easily activated in HydroStat's program mode

Thermal Pre-Purge - Further enhances boiler efficiency by supplying latent heat, that may remain in the boiler from a previous run cycle, to the heating zone requiring heat. The control activates the burner only when it determines that the latent heat will not be adequate to satisfy the heating demand. During the Pre-Purge cycle, the display will indicate $P_{\cup r}$.

Degrees Celsius - Changes the control's settings and display to Celsius.

Manual Reset LWCO - Changes the low water cut-off function to manual reset, which is required for many commercial installations.

Circulator Activation - Can be set to activate the primary circulator on calls from T/T, ZC/ZR, or both.

Enhanced Condensing Protection - To reduce the potential for condensing, on a call for heat, this feature allows the boiler to heat to 125°F prior to energizing the circulator. Once activated, the control continues to monitor boiler temperature and interrupts the circulator if it drops below 115°F.

Fuel Savings through Boiler Reset

Boiler Reset is the decades-old principle of governing boiler temperature in accordance with the heating demand. A boiler is sized to heat a home during the coldest days of the year. During all other times, the heating system is larger than it needs to be. Boiler Reset saves fuel by reducing the boiler temperature during periods of non-peak demand. The FuelSmart HydroStat offers two cost effective ways to provide this fuel saving technology:

Thermal Targeting™ - Microprocessor based algorithm monitors thermostat activity and continually evaluates how much heat the house requires. When demand for heat is high the FuelSmart HydroStat raises the boiler's Target Temperature to provide needed heat to the house. When demand for heat is lower the FuelSmart HydroStat lowers the boiler's Target Temperature - saving fuel - while continuing to provide comfort to the house.

Outdoor Reset & Warm Weather Shutdown - For those who prefer the more traditional outdoor reset approach, Hydrolevel offers two Outdoor Sensor Kits (see below). When sensor is plugged into the control, the boiler reset methodology changes instantly from Thermal Targeting to Outdoor Reset, where the boiler temperature is governed by the temperature outside. Use of sensor also allows the control's Warm Weather Shutdown feature to be activated. This feature prevents the boiler from supplying space heating when the outside temperature exceeds a selected level.

Outdoor Sensor Kits (sold separately)

Hydrolevel's optional Outdoor Sensor Kits automatically activate outdoor reset functionality and warm

weather shutdown capability when used with the HydroStat-Plus control. These easy-to-install kits are available at Hydrolevel distributors.

Part No. **Description**

48-140 Model OS-100 Outdoor Sensor Kit 48-145 Model OS-200 Wireless Outdoor Sensor Kit



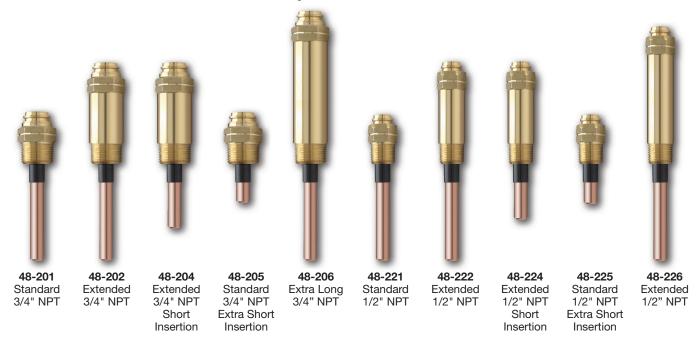




MODEL OS-200

The three-function Fuel Smart HydroStat is factory equipped on many premier boiler lines. It is also available at leading plumbing & heating wholesalers for upgrading existing gas and oil fired boilers with fuel-saving Boiler Reset Functionality.

Electro-Well™ Models Enables HydroStat's low water cut-off function.



Remote Mounting Options For all HydroStat Models except 3000 Series





Wall/Jacket Mounting Kit Kit includes: 2 mounting brackets, remote sensor, plastic grommet, rubber well cap, 4 #8x1/2" self-tapping screws.

48-101 HydroStat Wall/Jacket Mounting Kit with 2' sensor
48-102 HydroStat Wall/Jacket Mounting Kit with 4' sensor
48-103 HydroStat Wall/Jacket Mounting Kit with 10' sensor
48-104 HydroStat Wall/Jacket Mounting Kit with 20' sensor





Pipe Mounting Kit Kit includes: mounting bracket for 1" to 2" pipe, remote sensor, plastic grommet, rubber well cap.

48-121 HydroStat Pipe Mounting Kit with 4' sensor

Specifications

Burner Contacts
Circulator Contacts
Operating Range – Low Limit
Operating Range – High Limit
Operating Range – Differential

Model 3200-Plus

30 VA@24 VAC
5.8 FLA, 34.8 LRA@120 VAC
Off or 110°F - 200°F
100°F - 220°F
Automatic – will vary between
10° and 20° subtractive based on control

settings and boiler temperature

Model 3250-Plus

7.4 FLA, 44.4 LRA@120 VAC
5.8 FLA, 34.8 LRA@120 VAC
Off or 110°F - 200°F
100°F - 220°F
Automatic – will vary between
10° and 20° subtractive based on control settings and boiler temperature



PATENT NO. 7,891,572 Others Pending

