



MODEL 3250-EKT

Temp Limit/LWCO Control with Thermal Targeting™ for Energy Kinetics Ascent Combi

120 VAC Operating Voltage

PATENT NO. 8,931,708; 8,844,834;
7,891,572; others pending

INSTALLATION INSTRUCTIONS and OPERATING MANUAL

- **Saves Fuel** – Features Plate Warming, On Demand and Smart Learning hot water modes as well as Thermal Targeting™ technology and Thermal Pre-Purge capability for heating
- **Outdoor Reset Ready** – Provides Outdoor Reset and Warm Weather Shut-Down capability with the addition of Hydrolevel OS-100 Outdoor Sensor Kit (sold separately)
- **Operating Indicators** – LEDs, Dynamic Display and Test Button provide continual and on-demand status checks
- **Prioritizes Domestic Hot Water** – Gives priority to calls from the hot water flow switch
- **Reduces Condensation** – Condensation protection for reliable cold-start operation for both heating and hot water calls

Three Function Design

Temperature Limit Control

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™ (see page 2 for details).

Boiler Reset Control

- **Thermal Targeting** – On-board microprocessor adjusts boiler temperature based on heating demand.
- **Outdoor Reset Ready** – Compatible with Hydrolevel OS-100 Outdoor Sensor Kit (sold separately) for outdoor reset and warm weather shut-down functionality.



WARNING

Electrical shock hazard. To prevent electrical shock, death or equipment damage, disconnect power supply before installing or servicing control. Only qualified personnel may install or service this control in accordance with local codes and ordinances. Read instructions completely before proceeding.



CAUTION

To prevent serious burns, boiler should be thoroughly cooled before installing or servicing control.



WARNING

Frozen pipes/water damage. Central heating systems are prone to shut down as a result of power or fuel outages, safety related fault conditions or equipment failure. Installation of freeze protection monitoring or other precautions is recommended for unattended dwellings in climates subject to sustain below-freezing temperatures.



WARNING

If the circuit board gets wet, the control can malfunction allowing the boiler to overheat and cause a fire or explosion. Protect the control from water exposure during and after installation. Do not install where water can flood or drip on the control or where condensation can form on the circuit board. Replace the control if the circuit board was exposed to water.

**HYDROLEVEL
COMPANY**

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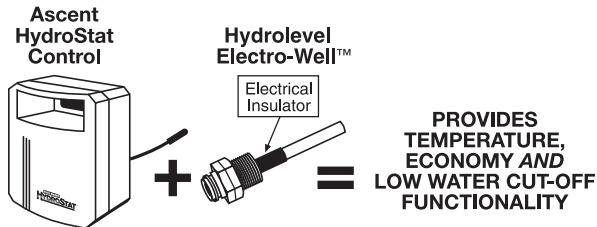
IMMERSION WELLS

Ascent HydroStat can be installed on an existing immersion well already in the boiler or on a Hydrolevel Electro-Well™ (sold separately). The low water cut-off function is automatically activated when installed on an Electro-Well™.

IMPORTANT: The control will not provide low water cut-off protection when installed on a standard immersion well.

NOTE: Do not use heat-conducting grease.

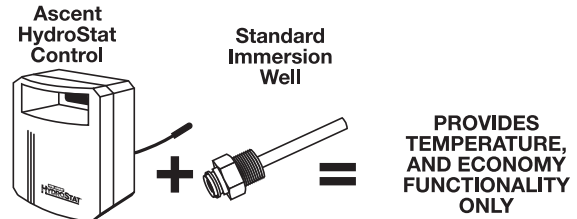
Ascent HydroStat installed with Hydrolevel Electro-Well™



IMPORTANT: For proper operation of the low water cut-off function, there must be a minimum of ½" clearance between the copper well tube and any surface within the boiler.

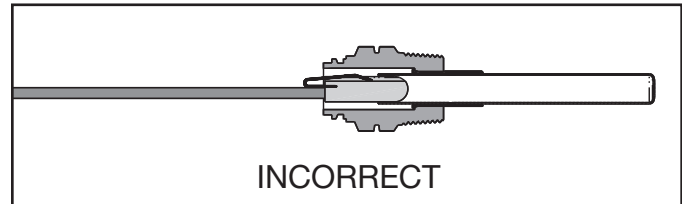
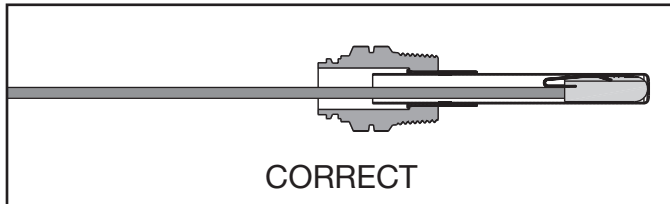
See Electro-Well models on page 15.

Ascent HydroStat installed with standard immersion well



NOTE: When installed on a standard immersion well, the "LWCO Active" LED will not illuminate.

IMPORTANT Sensor must be inserted all the way into the well for proper operation.



WIRING

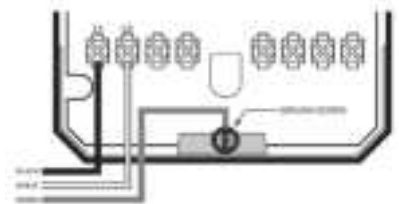
IMPORTANT Make sure that the immersion well or Electro-Well™ is installed in the boiler manufacturer's designated temperature limit control tapping.

NOTE: If installing an Electro-Well, pipe sealing compound should be used. Teflon tape is not recommended.

NOTE: In the case of space restrictions, the Ascent HydroStat control may be mounted in a horizontal orientation without any loss of function. Hydrolevel recommends vertical mounting, when possible, for proper orientation of LED display.

GROUNDING A poorly grounded control is more likely to have ignition noise interference or nuisance low water lockouts. In order to ensure proper operation, it is important to install the ground wire from the system electrical panel to the HydroStat's ground plate screw. If an electrical ground wire is not available, then any earth ground directly tied to the system piping will suffice.

NOTE: The HydroStat 3250-EKT is mounted remotely and not installed on the ElectroWell (immersion well), it may be necessary to add a wire from the HydroStat ground plate screw to the ElectroWell and secure it with a clamp.

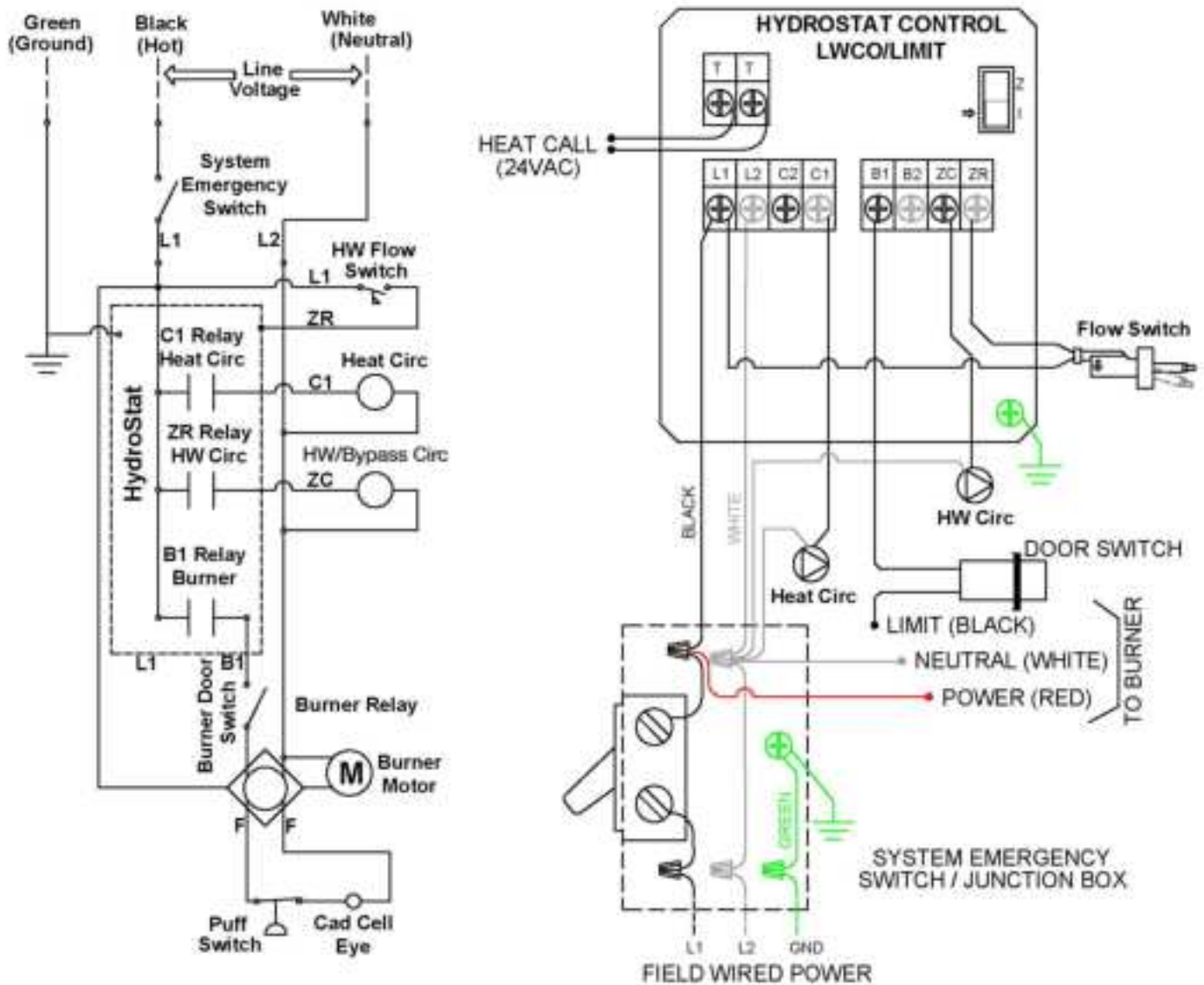


WIRING



WARNING

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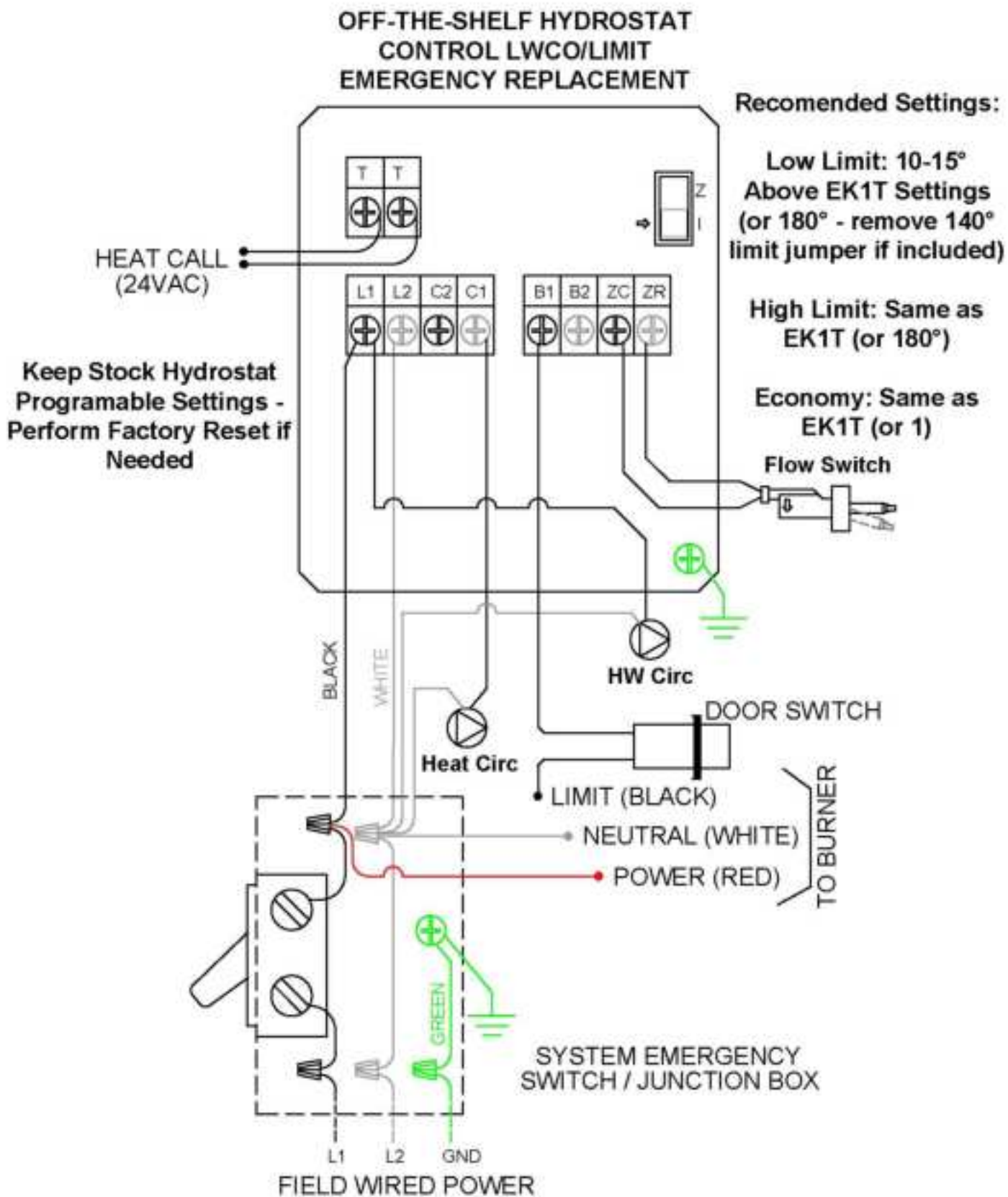


WIRING



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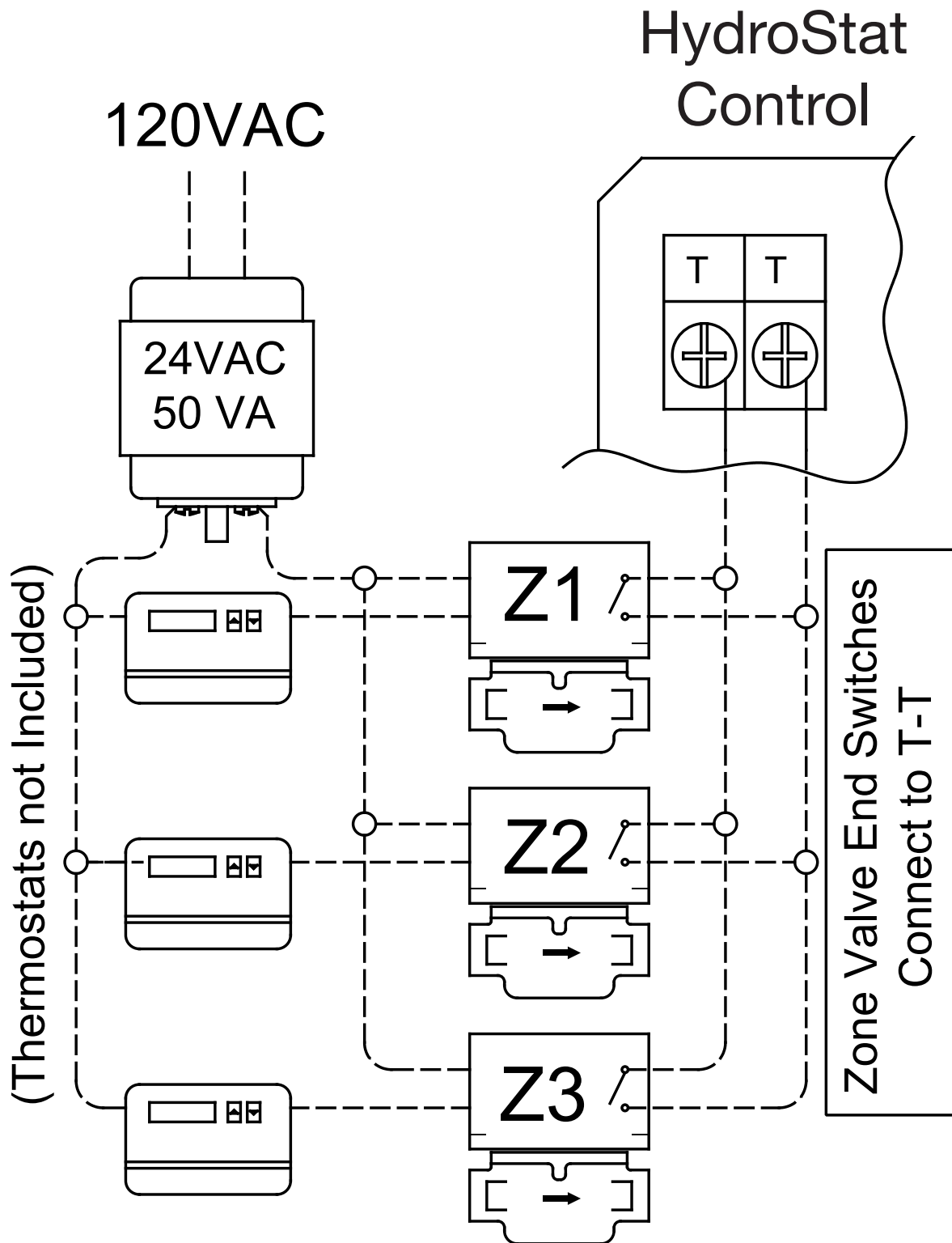


WIRING



WARNING

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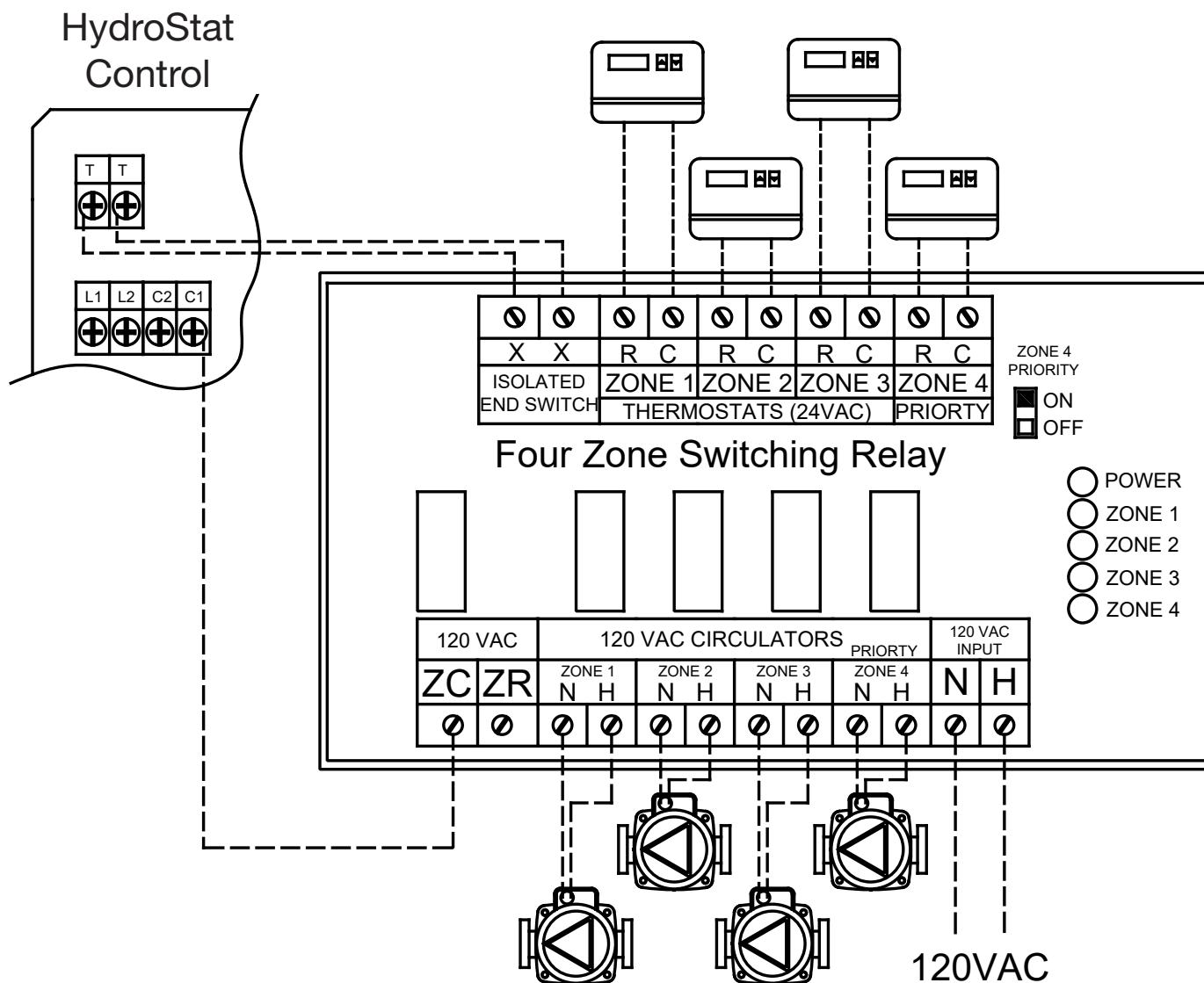


WIRING

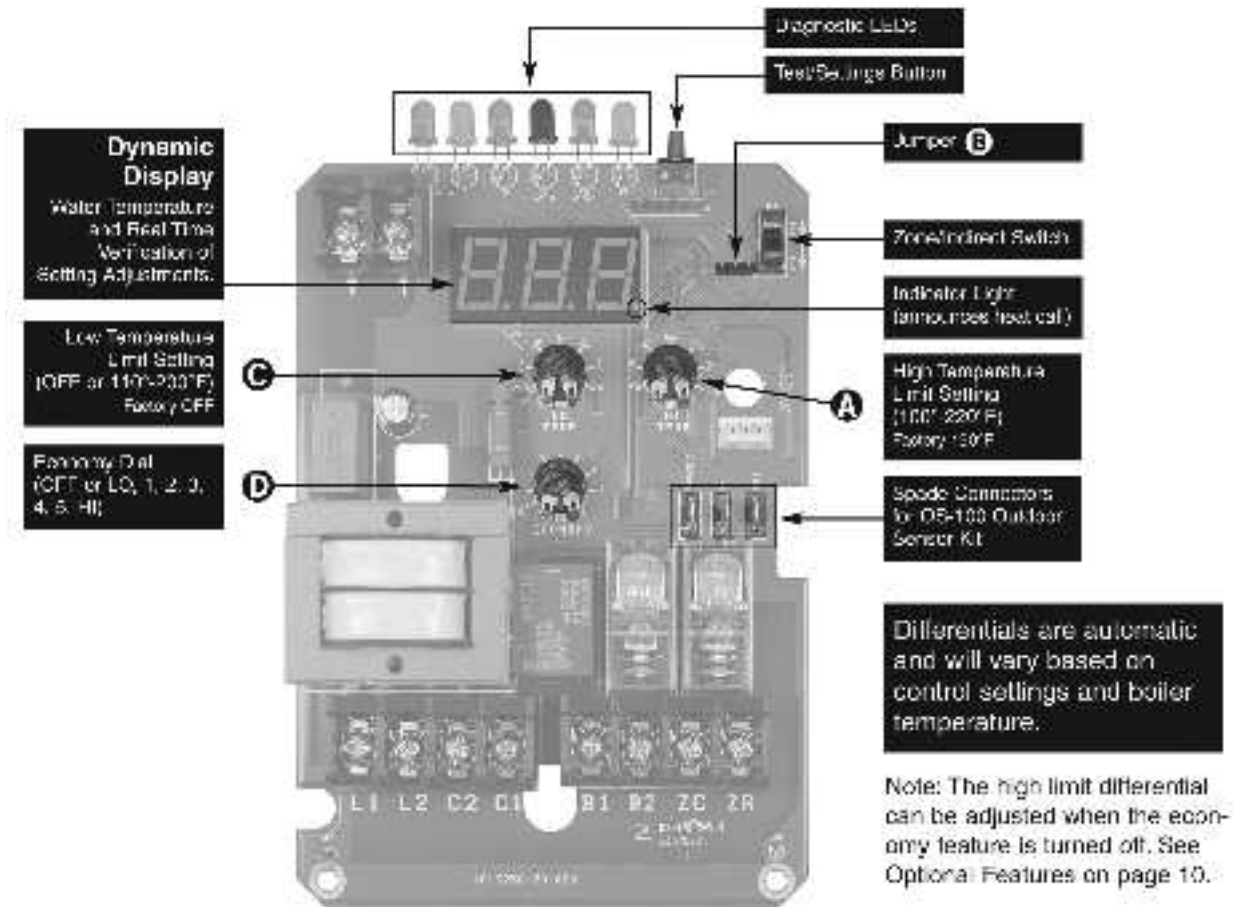


WARNING

Electrical shock hazard. To prevent electrical shock, death or equipment damage, disconnect power supply before installing or servicing control.



SETTING THE CONTROL



NOTE: Settings can be checked using the TEST/SETTINGS Button. See page 11 for details.

Setting the High Limit

The high limit is factory set at 190°F. To adjust, turn the HI TEMP Dial **A** until the desired setting is displayed. (Setting range: 100°-220°F)

Setting the Low Limit

The low limit is designed to maintain temperature in boilers equipped with plate heat exchange used for domestic hot water. The low limit is factory set to 170°. Prior to adjusting, remove the jumper (not equipped on all units) **B**. Then turn the LO TEMP Dial **C** clockwise until the desired temperature is displayed. For proper operation, the low temperature limit setting should be at least 10° below the high limit setting. LL settings below 170°F should only be used in heat-only boilers. For combi systems, cold start is set by adjusting the boiler to the OP2 mode. Setting the LL under 170°F will result in reduced or NO hot water. **IMPORTANT:** If low limit temperature cannot be set above 140°F, remove jumper **B**. (Setting range: OFF or 110°-200°F).

Setting the Economy Feature

The Economy Feature is factory set for a 1 zone heating system. To adjust, turn the ECONOMY Dial **D** until the number displayed equals the number of heating zones. **Do not**

include indirect water heaters in the number of heating zones. The Economy Feature conserves fuel by reducing boiler temperature (see “How Thermal Targeting Works” on page 8). If the heating system is unable to supply needed heat to the house, the ECONOMY Dial should be turned to a lower setting (example: In a three zone house, turn the dial to 2 or 1). Conversely, if the boiler provides adequate heat, added fuel savings can be achieved by selecting a higher setting (example: 4 or 5).

Setting the Zone/Indirect Switch

The Zone/Indirect switch must be set to the “I” position.

SETTING	
OFF	Disables economy function. Will allow boiler to fire until hi-limit temp is reached and re-fire with a 10° subtractive differential.
LO	Provides lowest level of fuel savings. Use this setting only if the house does not stay warm at higher settings.
1	Recommended setting for single zone systems
2	Recommended setting for Two zone systems
3	Recommended setting for Three zone systems
4	Recommended setting for Four zone systems
5	Recommended setting for Five zone systems
HI	Provides highest level of fuel savings

SYSTEM STARTUP

At initial start up, the Economy Feature will be set to OFF by default. The control establishes a target temperature equal to the low limit setting (170°F by default). In OP2, or cold start mode, the control will not fire the burner until there is an active heat or hot water call. To test the high limit shut-off function, the Economy Dial must be turned to OFF. Once tested, restore the Economy Dial setting.

NOTE:

- *Smart DHW Priority:* During a call from the hot water flow switch, the control will de-energize the circulator contacts (C1/C2) providing priority ensuring an adequate supply of domestic hot water. The control will re-energize the heat circulator when the flow switch is no longer calling.

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 Ascent 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 Ascent HydroStat will lower the boiler's Target temperature – saving fuel – while continuing to provide comfort to the house.

ADVANCED FEATURES

To improve efficiency, the EK1T Ascent Combi boiler has been equipped with advanced features designed to reduce idle loss (the energy required to keep the boiler in standby mode).

- Option 1 (OP1) – Always Ready or Plate Warming – Good Efficiency, Best Hot Water Convenience
- Option 2 (OP2) – Cold-start On Demand Hot Water – Best Efficiency, Good Convenience
- Option 3 (OP3) – Advanced Learning – Better Efficiency, Better Convenience
- Option 4 (OP4) – Advanced Learning – Better Efficiency, Even Better Convenience

Option 1 (OP1): The EK1T Ascent Combi ships in the most convenient, but less efficient mode, Option 1, or OP1. In this mode, the boiler will maintain through the plate heat exchanger a minimum temperature (factory set to 145°F with a LL setting of 170°F) to ensure hot water can be instantly produced at all times. This is similar the way traditional tankless coil boilers operate although they typically maintain significantly higher temperatures than are required by the EK1T Ascent Combi. Even in this setting, significant savings over traditional tankless coil boilers will be realized.

Option 2 (OP2): This mode is much more efficient and the boiler operates as a cold start system for heat and hot water. The boiler will not maintain temperature (although it may be hot for a large portion of the heating season) and may not always be able to instantly produce hot water. A hot water draw of at least 30 seconds will enable the boiler to fire. The boiler will take roughly 2-3 minutes to reach full operating temperature, during which the boiler will send out progressively warmer pulses of water as part of its preheat and condensation protection operation. To speed preheating and reduce water use, the boiler can be activated instantly with a 'double pump': Turn the hot water on and off twice in quick succession at any fixture in the house. The boiler will recognize this as a requirement to preheat and quickly get ready to make hot water. With a 'double pump,' the hot water fixture can be left off and the boiler will preheat. The Ascent Combi is well insulated and will remain hot for over 2 hours after preheating, so after activated, the water will be ready for an extended period of time.

Option 3 (OP3): This option is a compromise between maximum efficiency and convenience. In this mode, the boiler will learn your schedule over the course of two weeks. The boiler will automatically preheat anytime your usage pattern indicates a hot water draw may be imminent. This mode will use more fuel than OP2, however it will provide significant savings over OP1 as long as your schedule is reasonably consistent. If the boiler does not correctly anticipate your schedule, the same draw patterns as OP2 will activate the boiler (30 second draw or cycling the hot water faucet twice in succession).

Option 4 (OP4): This option is a compromise between maximum efficiency and convenience. Like Option 3, in this mode, the boiler will learn your schedule over the course of two weeks in particular by identifying periods with no hot water demand like night time hours. The boiler will automatically preheat anytime your usage pattern indicates a hot water draw may be imminent based on any usage in the past two weeks. This mode will use more fuel than OP2 and OP3, however it will provide savings over OP1 and is ideal if your schedule is less consistent. If the boiler does not correctly anticipate your schedule, the same draw patterns as OP2 will activate the boiler (30 second draw or cycling the hot water faucet twice in succession).

SELECTING ADVANCED SETTINGS

The advanced settings can be activated using the red 'Test/Reset' button on the Ascent Hydrostat control. Pressing the button will cycle through system parameters and eventually the advance settings options, displayed as options 1, 2, 3 or 4 ('OP1', 'OP2', 'OP3' and 'OP4'). Pressing and holding the red button will cause the display to flash so the Option Mode may be selected. Once the control is flashing, press the red button to cycle through OP1, OP2, OP3 and OP4 until you reach the desired setting. Releasing the button for 2 seconds will select the last option displayed. The control will then return to the main temperature display.

OPTIONAL FEATURES

NOTE: The Program Mode – **Pro** – is accessed by turning the LO TEMP dial to a position just above OFF.

Thermal Pre-Purge

Thermal Pre-Purge is designed to maximize boiler efficiency. When activated, the control will supply latent heat that may remain in the boiler from a previous run cycle to the heating zone that is now calling. The control monitors how quickly the boiler temperature is declining and activates the burner only when it determines that the latent heat is insufficient to satisfy the call. During the purge cycle, the display will indicate **Pur**. This feature works with single-zone and multi-zone heating systems utilizing circulators or zone valves. No change in wiring is needed.

To activate Thermal Pre-Purge

1. Turn the LO TEMP dial to access the Program Mode – indicated in the display as **Pro**
2. Turn the HI TEMP dial to select feature **1**
3. Push the Test/Settings Button to turn Thermal Pre-Purge **On** or **Off**
4. Reset LO TEMP and HI TEMP settings to desired temperatures (see page 7)

Degrees Fahrenheit or Celsius

The control has the ability to operate in degrees Fahrenheit or Celsius. When operating in Celsius, a **C** will appear in the display next to the temperature whenever the temperature is below 100 degrees.

To change between degrees Fahrenheit and degrees Celsius

1. Turn the LO TEMP dial to access the Program Mode – indicated in the display as **Pro**
2. Turn the HI TEMP dial to select feature **2**
3. Push the Test/Settings Button to **C** for Celsius or **F** for Fahrenheit
4. Reset LO TEMP and HI TEMP settings to desired temperatures (see page 7)

Manual Reset Low Water Cut-Off

The low water cut-off operation on the HydroStat can be set to operate in automatic (default) or manual reset mode. When in manual reset mode, the control will shut-down the burner immediately when a low water condition is detected. If the low water condition is sustained for 30 seconds, the low water light will blink, indicating that the control has locked out the burner. The control can only be reset by pushing the Test Settings button on the top of the control. The manual reset feature meets CSD-1 code requirements.

IMPORTANT: The system must be checked by a qualified heating professional prior to resuming operation.

WARNING: DO NOT ADD WATER UNTIL THE BOILER HAS FULLY COOLED.

To activate Manual Reset LWCO mode

1. Turn the LO TEMP dial to access the Program Mode – indicated in the display as **Pro**
2. Turn the HI TEMP dial to select feature **3**
3. Push the Test/Settings Button to **A** for Automatic Reset Mode or **b** for Manual Reset Mode
4. Reset LO TEMP and HI TEMP settings to desired temperatures (see page 7)

To Test the Manual Reset Feature: Press and hold the Test/Settings button located on the top of the control for 30 seconds to simulate a low water condition. After 30 seconds, the Low Water light will blink indicating that the control is locked out. To reset the lock-out condition, press the Test/Settings button momentarily.

MORE OPTIONAL FEATURES ON NEXT PAGE

OPTIONAL FEATURES *continued*

High Limit Differential

When the Economy feature is on, the control's Thermal Targeting feature actively sets varying differentials based on system conditions. This option allows for selecting a 10, 20 or 30 degree fixed differential when the Economy feature is turned OFF. These optional differential settings are subtractive from the HIGH LIMIT setting. Note: If the Economy feature is on, this setting will be overridden by the control's Thermal Targeting function.

To change the high limit differential

1. Turn the LO TEMP dial to access the Program Mode – indicated in the display as **Pro**
2. Turn the HI TEMP dial to select feature **9**
3. Push the Test/Settings Button to select a high limit differential of **10**, **20**, or **30**
4. Reset LO TEMP and HI TEMP settings to desired temperatures (see page 7)

Restore Factory Default Settings

To restore all features to the factory default settings (see following chart for default settings)

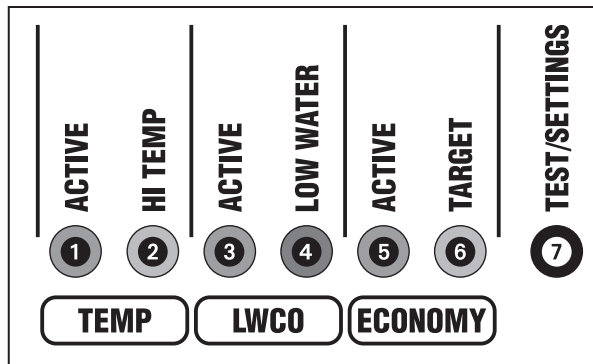
1. Turn the LO TEMP dial to access the Program Mode – indicated in the display as **Pro**
2. Turn the HI TEMP dial to select feature **DEF**
3. Push the Test/Settings Button to **Y** to reset all features to the default settings.
4. Reset LO TEMP and HI TEMP settings to desired temperatures (see page 7)

Dial Setting	Feature	Options	Description	Default Setting
1	Thermal Pre-Purge	OFF on	Purge Inactive Purge Active	OFF
2	Fahrenheit or Celsius	F C	Degrees Fahrenheit Degrees Celsius	F
3	LWCO Manual or Automatic Reset	A b	Automatic Reset Manual Reset	A
4	<i>Not available on this control</i>			
5	<i>Not available on this control</i>			
6	<i>Not available on this control</i>			
7	<i>Not available on this control</i>			
8	<i>Not available on this control</i>			
9	High Limit Differential	10 20 30	10° Differential 20° Differential 30° Differential	10
DEF	Restore Factory Defaults	Y n	Restore Defaults Do Not Restore Defaults	n

NOTE: If the HydroStat is factory-equipped on a boiler, some options may be set differently from the default settings.

SEE PAGE 7 FOR ADDITIONAL SETTINGS

LED LEGEND and TEST/SETTINGS BUTTON



1 TEMP ACTIVE Indicates that the Ascent HydroStat control is powered and that the temperature function is active.

2 TEMP HI TEMP Illuminates when the boiler water temperature reaches the high limit setting. It will remain lit until the water temperature falls 10°. The Ascent HydroStat prevents burner operation while this LED is on. See Differential explanation on page 7.

3 LWCO ACTIVE Indicates that the low water cut-off (LWCO) function of the Ascent HydroStat is active. When the control is installed with a Hydrolevel Electro-Well™, this LED will be on at all times when the control is powered.

4 LWCO LOW WATER Indicates that the boiler is in a low water condition. The HydroStat control will prevent burner operation during this condition. If the LOW WATER light is blinking, the control has been programmed to provide lock-out protection in the event a low water condition is detected (see Manual Reset Low Water Cut-Off on page 9). Pressing the TEST/SETTINGS button will reset the control.

IMPORTANT: The system must be checked by a qualified heating professional prior to resuming operation.

WARNING: ALLOW THE BOILER TO FULLY COOL BEFORE ADDING WATER.

5 ECONOMY ACTIVE Indicates that the Thermal Targeting function is active and the Ascent HydroStat will reduce boiler temperature to conserve fuel. The Economy feature is activated using the ECONOMY dial. (See “How Thermal Targeting Works” on page 8 for more information).

6 ECONOMY TARGET When the Economy feature is active, the Ascent HydroStat continually sets target temperatures below the high limit setting to maximize fuel efficiency. When the boiler water reaches the target temperature, the LED illuminates and the burner will shut down. The boiler water will continue to circulate and heat the house as long as the thermostat call continues. The LED will stay lit until the boiler temperature drops below the differential set point at which point the boiler will be allowed to fire again. See Differential explanation on page 7.

NOTE: This LED illuminates regularly during normal boiler operation.

7 TEST/SETTINGS Button

To Test Low Water Cut-Off: Press and hold the Test/Settings button for 5 seconds. The display will read LCO.

LWCO TEST LCO

The red Low Water light should illuminate and the burner circuit (B1 and B2) should de-energize. **NOTE:** The control must be installed with a Hydrolevel Electro-Well™ for low water cut-off functionality (see page 2 for more details).

To View Current Settings: Press and release the Test/Settings Button in short intervals to sequentially display the following settings:

HIGH LIMIT SETTING HL

LOW LIMIT SETTING LL

ECONOMY SETTING ECO

OPERATING MODE OPI


CURRENT TARGET TEMPERATURE 000

The display will return to boiler temperature (default) if Test/Settings Button is not pressed for 5 seconds.

SELECTING ADVANCED SETTINGS

The advanced settings can be activated using the red ‘Test/Reset’ button on the Ascent Hydrostat control. Pressing the button will cycle through system parameters and eventually the advance settings options, displayed as options 1, 2, 3 or 4 (‘OP1’, ‘OP2’, ‘OP3’ and ‘OP4’). Pressing and holding the red button will cause the display to flash so the Option Mode may be selected. Once the control is flashing, press the red button to cycle through OP1, OP2, OP3 and OP4 until you reach the desired setting. Releasing the button for 2 seconds will select the last option displayed. The control will then return to the main temperature display.

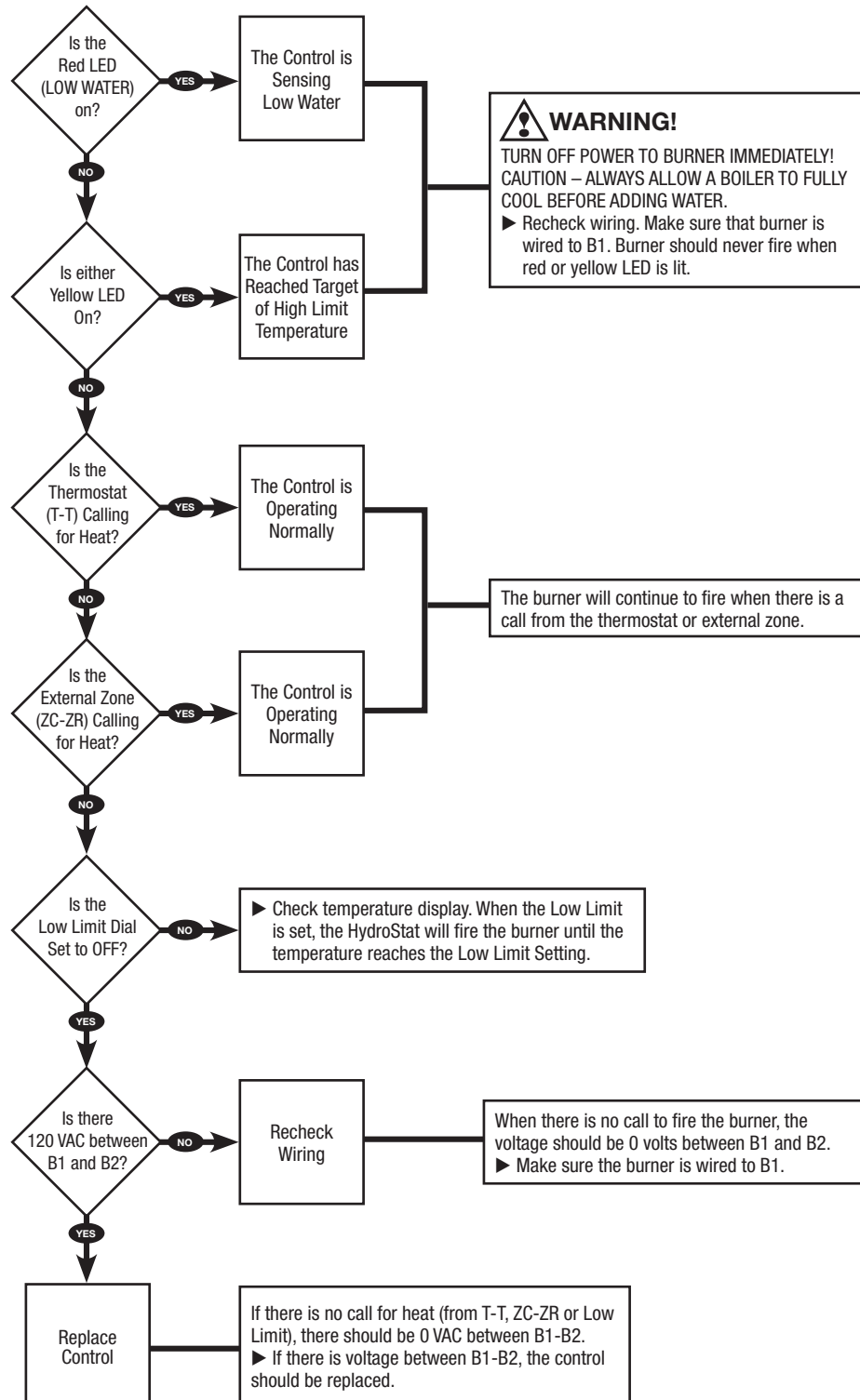
TROUBLESHOOTING

Burner Will Not Shut Down	See Flow Chart 1, page 13
Burner Will Not Fire	See Flow Chart 2, page 14
Temperature Display Exceeds High Limit Setting	Under normal operation, boiler temperature will continue to rise after the control shuts off the burner. This condition, known as “thermal stacking”, results from hot boiler surfaces continuing to release heat into the boiler water.
No or Insufficient Domestic Hot Water	For boilers equipped with a plate heat exchanger, make sure the low limit setting on the HydroStat is set properly. NOTE: If the low limit setting is dialed fully counter clockwise, it will shut off the low temperature maintenance feature and will function as a cold start control.
Pulsing Hot Water	Pulsing warm water means the Ascent Combi is pre-heating. This takes about two minutes from cold start before hot water starts flowing continuously through hot water piping. Pulsing could also indicate the domestic water flow rate is too high and the boiler is in condensation protection mode. Reduce domestic flow rate to allow the boiler to reach operating temperature, or increase the firing rate if desired.
Low Water Light (Red LED) is On or Blinking	<p> WARNING: A low water condition is a serious and potentially dangerous condition. Do not attempt to add water to a hot boiler. Allow the boiler to fully cool before adding water.</p> <p>When Installed on an Electro-Well™</p> <p>When the LOW WATER light is on, this indicates that the control is not detecting water in the boiler. When the LOW WATER light is blinking, this indicates that the control has been programmed to provide low water lock-out protection and is currently locked out (see Manual Reset Low Water Cut-Off on page 9). Pressing the TEST/SETTINGS button after the low water condition is resolved will reset the lock-out condition.</p> <ol style="list-style-type: none"> 1. If the light is on and the heating system is filled with water, pull the sensor out of the well and inspect it. Make sure that the metal clip is protruding enough to come in contact with the inside of the well tube. Check that the well does not have excessive build-up of heat transfer grease that may interfere with the clip contacting the well. 2. Remove well and examine for excessive residue build-up. Clean and re-install. <p>When Installed on a Standard Immersion Well</p> <p>If either LWCO LED lights are illuminated and the control is installed on a standard immersion well, this is a false reading caused by a loss of continuity between the sensor and the inside of the well tube. Follow steps 1 and 2 (above) to ensure that the metal sensor head is making good contact with the inside surface of the copper well.</p>
Boiler Will Not Maintain Low Limit Temperature	Check for overlapping high temperature setting. If the high limit setting is set below the low limit setting, the control will default to the high limit setting and the corresponding high limit differential setting.
House Will Not Get or Stay Warm	<ol style="list-style-type: none"> 1. Check for air-bound radiators. 2. Check thermostat settings including heat anticipator settings (common on non-digital thermostats). 3. Check the Economy setting. The Economy feature, much like outdoor reset controls, lowers average boiler temperature and can slow or, in some cases, prevent the house from coming up to temperature. Move to a lower setting (see “Setting the Economy Feature” on page 7).
All LED Lights and Temp Display are Blinking	If the LED lights and the temp display are blinking alternately, this indicates the control has sensed a boiler temperature of 250°F. When this occurs, the control pulses the burner relay and then shuts down and locks-out the burner. The system should be analyzed to determine the cause of the overheating condition. Check that the sensor is inserted all the way into the well so it can accurately sense the temperature of the boiler water. Check the load on the burner contacts: If the load exceeds the 7.4 Amp rating, the contacts may have welded. Correct the overloading condition and replace the control before reenergizing the system. If the load on the contacts is below the rating, check system wiring and operation as well as the control's high limit setting. If the cause of the overheating is found and the system is deemed safe, the control can be reset by removing power from the control and then re-powering while simultaneously pressing the Test/Settings button on the top of the control. If the cause of the overheating condition is not determined, the control should be replaced.
5nF in display	Check sensor connection or replace sensor.
Temperature Display Flickering	Confirm proper grounding of control (see page 3)
Control Continually Resets	Confirm proper grounding of control (see page 3)

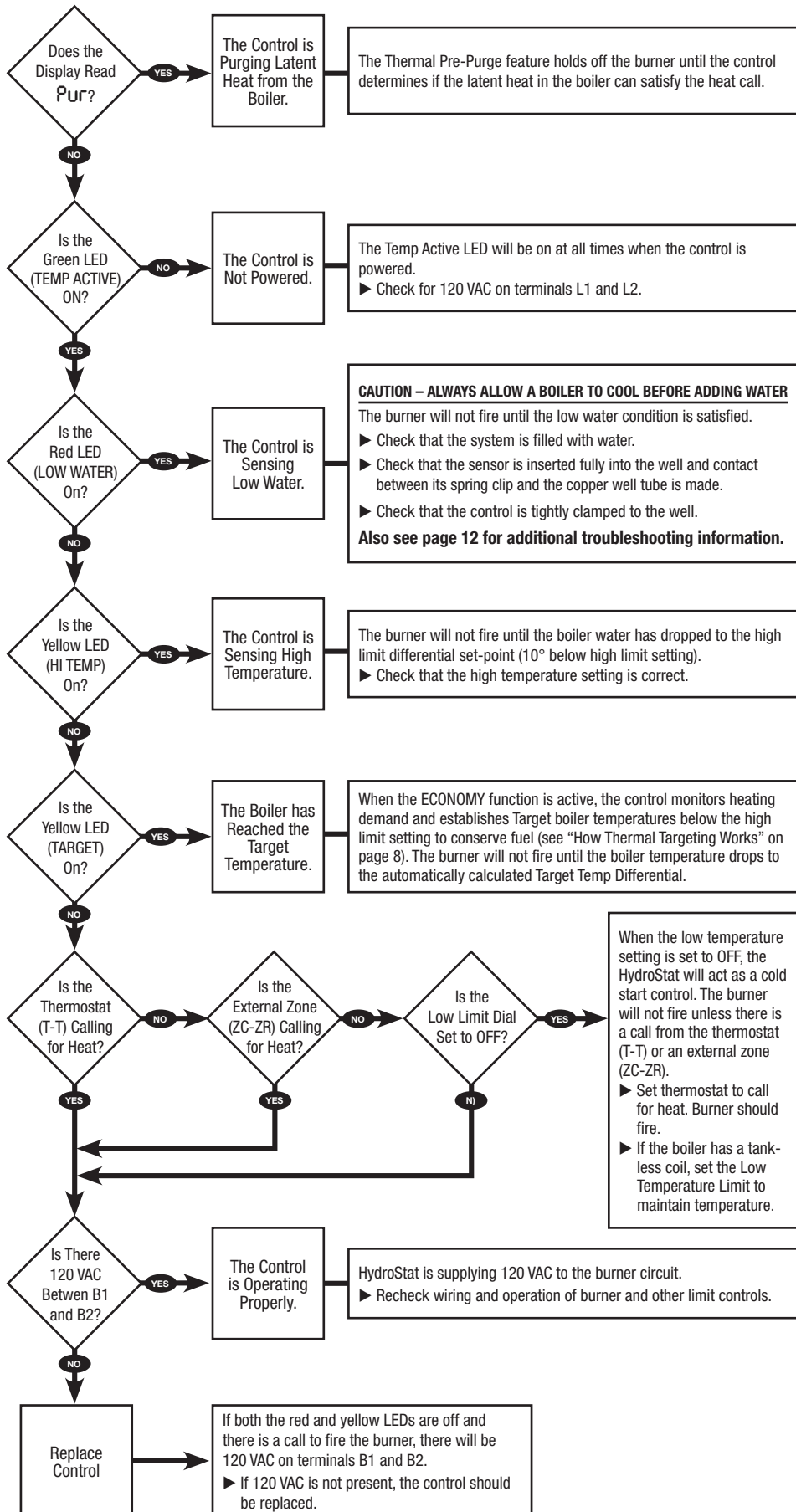
TROUBLESHOOTING (continued)

All Lights Are Off	If all LEDs and the LCD display don't light up, ensure there is 120VAC at L1 & L2. If there is, replace the control
8 or 888 in Display	Indicates microprocessor is not functioning. Replace control
Low Water Active Light is Off	Check to ensure the immersion well is a Hydrolevel Electro-Well (See page 2). If it is, check for clearance inside the boiler. The well should have a 1/4" clearance from any metal surface for proper operation.

Troubleshooting Flow Chart 1 – Burner Will Not Shut Down



Troubleshooting Flow Chart 2 – Burner Will Not Fire



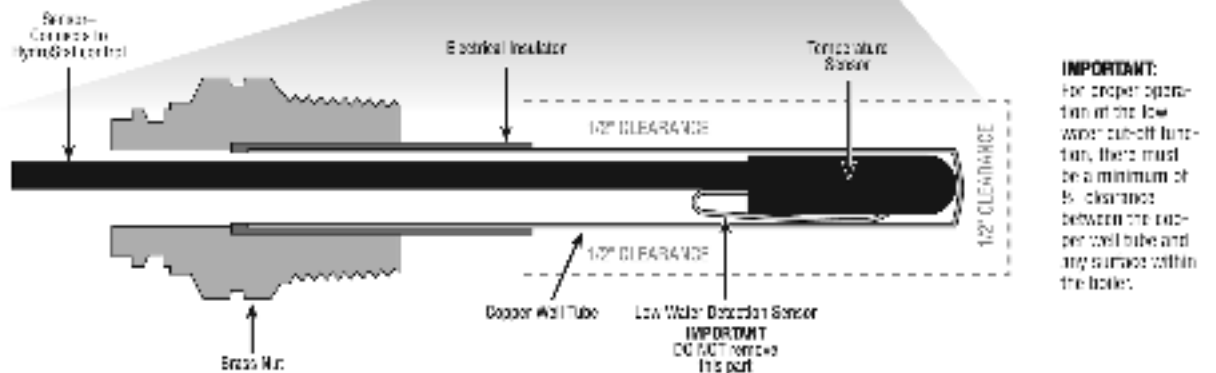
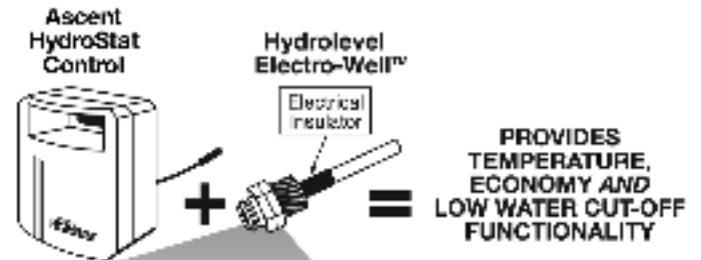
MAINTENANCE

Remove the Electro-Well™ from the heating system every five years and clean any scale or sediment deposits from all parts that are exposed to the boiler water. After cleaning, reinstall the well using pipe sealing compound. Teflon tape is not recommended.

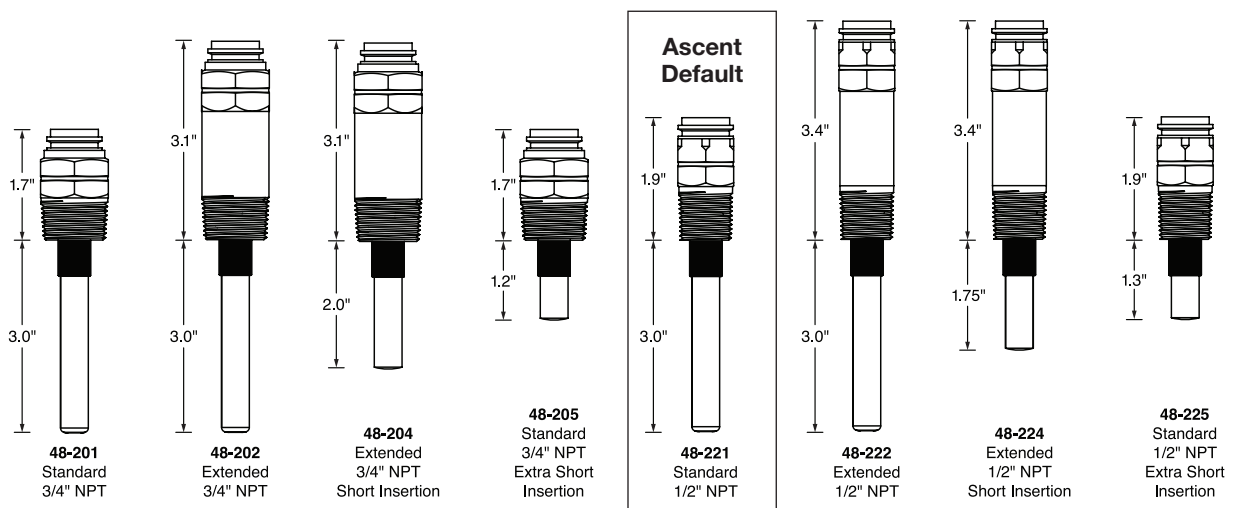
ELECTRO-WELLS™

Ascent HydroStat installed with Electro-Well™

When installed with the Hydrolevel Electro-Well™, Ascent HydroStat will provide both temperature and low water cut-off functionality. If the control was supplied by the boiler manufacturer, it was installed with an Electro-Well™. The Electro-Well™ is available separately for field installations.



Electro-Well™ Models



OUTDOOR SENSOR KITS

Hydrolevel's optional Outdoor Sensor Kits automatically activate outdoor reset functionality and warm weather shutdown capability when plugged into the Ascent HydroStat control. These kits are available separately at Hydrolevel distributors.

Part No.	Description
48-140	Model OS-100 Outdoor Sensor Kit
48-145	Model OS-200 Wireless Outdoor Sensor Kit
48-3250-58	48" Replacement Temp and Low Water Sensor

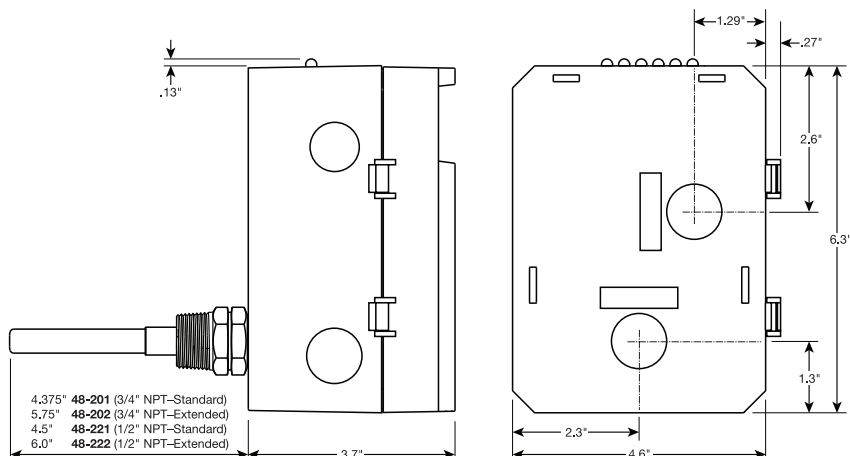


Model OS-100



Model OS-200

DIMENSIONS



SPECIFICATIONS ASCENT HYDROSTAT MODEL 3250-EKT

Input voltage	120 VAC, 60 HZ
Burner contacts	7.4 FLA, 44.4 LRA@120 VAC
Circulator contacts	5.8 FLA, 34.8 LRA@120 VAC
Operating range – low limit	Off or 110°F (43°C) - 200°F (93°C)
Operating range – high limit	100°F (38°C) - 220°F (104°C)
Operating range – differentials	Automatic
Thermostat heat anticipator setting	0.2A



LIMITED MANUFACTURER'S WARRANTY

We warrant products manufactured by Hydrolevel Company to be free from defects in material and workmanship for a period of two years from the date of manufacture or one year from the date of installation, whichever occurs first. In the event of any claim under this warranty or otherwise with respect to our products which is made within such period, we will, at our option, repair or replace such products or refund the purchase price paid to us by you for such products. In no event shall Hydrolevel

Company be liable for any other loss or damage, whether direct, indirect, incidental or consequential. This warranty is your EXCLUSIVE remedy and shall be IN PLACE OF any other warranty or guarantee, express or implied, including, without limitation, any warranty of MERCHANTABILITY or fitness for a particular purpose. This warranty may not be assigned or transferred and any unauthorized transfer or assignment thereof shall be void and of no force or effect.