TempTrac Equipped Water Heater FAQs

When the water heater goes off on LWCO (and during the test), why doesn’t this condition activate an alarm? It didn’t, should an alarm have been activated?

The Alarm on Any Failure feature is active only during a Call-For-Heat cycle. If any safety device or proving interlock prevents the burner from firing during a call-for-heat cycle within an allotted time period (3 minutes), the Temptrac will initiate an alarm notification. The LWCO test of the alarm feature must occur while the unit is operating, and remains de-energized for three minutes.

What is the fault code AL2?

Many PVI commercial water heaters are equipped with an Alarm On Any Failure (AL2) functionality. An “AL2” fault on the Temptrac Controller indicates that an ignition did not occur in the time required for the ignition trial. An alarm is sounded and the Temptrac Controller must be reset to resume operation. An AL2 fault should occur if any of the following conditions exists:
- A temperature limit condition is exceeded
- The air flow proving switch fails to close during the time required for ignition
- Flame is not successfully established during the time required for ignition
- A high or low gas pressure condition has occurred
- A field interlock remained open during the time required for ignition
- A low water control or low water condition exists
- A DPDT relay in the alarm circuit is faulty

How should the AL2 alarm be reset?

To reset the TempTrac once the alarm is activated, attempt to determine the safety device which caused the condition and correct the condition. Once the condition is corrected the TempTrac can be reset by pressing any button. If the lockout is caused by the ignition control, power must be re-cycled in order to reset the ignition module.

I still have a AL2 alarm and none of the fault conditions exist. What do I do?

If none of the fault conditions has occurred during an AL2 alarm, it is reasonable to conclude that one or more of the DPDT relays in the alarm circuit are faulty. This is a nuisance shut-down problem and is not a dangerous or hazardous issue. If the DPDT alarm relay is defective and no other problem is detected, switching the power switch OFF and then ON following and alarm should restart the water heater until the relay can be replaced.

Is there anything I can do to keep the heater running until I can replace the alarm relay?

If you have confirmed that that the alarm is not resulting from any other fault condition, cycling power should restart the water heater until the relay can be replaced. If the frequency to recycle the water heater becomes a nuisance or if a replacement relay is not immediately available, the alarm timing function can be extended temporarily to eliminate shut downs until the relay is replaced. To temporarily extend the TempTrac alarm timing function:

1. First Enter the password protected programming menu by pressing the SET then DOWN buttons together for more than 3 seconds. The name of the parameter is on the upper display and its value is on the lower display.
2. Press the UP button to select parameter “PR2” in the upper display. Its value “PAS” is shown in the lower display.
3. Now press the SET button. The value “_ _” is displayed and flashes.
4. Use the UP or DOWN buttons to input the passkey 3-2-1 in the flashing value. Push the SET button after each entry.
5. Now use the UP or DOWN buttons to scroll to the “i2d” parameter.
6. Press the SET button and the value in the lower display will start blinking.

7. Use the UP button to change the i2d parameter value from 3 minutes to 250 minutes.

8. Press SET to store the new value. Note that the next parameter and value is now displayed.

9. To exit press the SET then UP buttons together, or wait 30 seconds without pressing a button to return to the home screen.

Important: Remember to return the “i2d” value to 3 minutes when the defective relay is replaced.