Quick start manual for the Watlow temperature controller

6/18/11

It is strongly recommended that the user read and understand the features and potential risks with using the thermal platform. Please read the short manual that describes the platform. Likewise, in depth familiarity with the functionality of the Watlow controller will allow safer and more efficient use of the controller's functionality.

The TotalTemp Technologies thermal platform is capable of extreme temperatures. "Hands off" should be the general rule. Always be aware of the many potential dangers of extreme temperatures and compressed coolants.   Read safety warnings in platform manual before using.

Powering Up:

The switch on the front powers up the controller which in turn enables the heating and controlling circuits. The circuit breaker at the rear protects the heating and cooling circuits. Be certain that this circuit breaker switch on the rear is ON when you intend to use the system. The controller will power up but no heating or cooling can occur with the circuit breaker/switch at the back in the off position.

The two connectors on the umbilical must be connected to the platform before operation is initiated.

The larger connector carries the POWER for heat, cool and bimetal failsafe circuit, the smaller connector contains the connections for the temperature sensor(s), including the redundant failsafe if specified. If the smaller controller becomes disconnected, the "open sensor" alarm will occur on the controller and the system will cease to apply heat or coolant. If the system includes redundant failsafe system, (Watlow EZ zone limit controller) th open sensor condition must be cleared on the failsafe unit per below.

Redundant failsafe:

If the system is equipped with a high-low failsafe system, the failsafe must manually reset as well in the event of an open sensor condition. The LL.S display on the failsafe controller indicates the low limit setpoint, the LS.S display indicates high limit set point. The up and down arrows can be used to adjust these limits to values appropriate for your use.   Once the

temperature within the limits has been established, pressing the 'RESET' button on the failsafe limit will restore operation and within a couple seconds the display will indicate 'SAFE'.

Please refer to the Watlow EZ zone PM limit control instructions for further information detail.

Manual Control:

Controlling to a setpoint is very straight forward, It will start controlling upon power up so ALWAYS verify an acceptable temperature setpoint on the lower (Green) display of the Watlow controller immediately after powering up. The temperature setpoint can be raised or lowered by pressing the up /down arrows. The Green EZ button on the front of the controller can be easily configured to set the controller to an idle mode among other possible uses for this button.

Please refer to the Watlow EZ zone PID manual for detailed information regarding setup, functions, programming and additional features of this versatile controller. The controller support serial communications however TotalTemp Technologies does not offer further support on the serial communication functions of this controller beyond the information offered in the Watlow manuals.

Controller Handle/tilt stand:

The tilt stand and handle supplied with bench top units is generally light duty and should be treated with care. Avoid allowing the handle skip over stops to of handle positions. Gently pull side arms of controller outward to change handle positions.

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