Power controller
5C7-361: 5C7-362

Rev A

These temperature controllers can be configured to respond to an input signal and provide a proportional power output to the TE Module both for heating and cooling. When operated in this mode the unit becomes an open loop power controller.

Refer to the controller GUI: This is the screen used to configure the controller from your PC.

Establish communication and click on “INITIALIZE” This reads data over the link so the GUI and controller now have the same information.

Refer to “CONFIGURE” on the GUI.

“PWM OUTPUT TIMEBASE” You may select 675 Hz or 2700 Hz. Remember you are dealing with a pulse width modulated output, and this selection is the frequency of this signal. The power level is determined by the width of each pulse. Changing the width of the output pulse varies the output power.

“SET TEMP TYPE INPUT 2” This selection defines the input signal on input two. JP1 Pins 1 & 2. Select “0 to 5vdc SET” (*) By making this selection the set temp high and low are identified as counts out of 120 full scale, input as 12.0.

If you wish to be able to apply full power (100%) in both heating and cooling direction, enter 12.0 in '“SET TEMP HIGH RANGE”: Enter –12.0 in “SET TEMP LOW RANGE”

“CONTROL TYPE’ Select “COMPUTER CONTROL”

“CONTROL MODE” Use default value.

Click “Send Box Values” in the Configure section to download this information to the controller

You will apply 0 to 5 vdc to input 2 JP1: 1 & 2. This will provide the following response of output power.

0 vdc	-100% power
2.5vdc	0 % power
5.0vdc	+ 100 % power

The output power will be proportional to the input voltage with the above scaling.

* If you select “COMPUTER SET VALUE” you can determine power level by inputting this request into the “FIXED SET TEMP” in the tuning section, Noting that the range is bounded by –12.0 to +12.0.

GUI Menu Tree

RS-232 Communications