Data Sheet

CALIBRATION PROCEDURES µATC-15 MODULE   2014

Items Required:
1. Calibration Box with 240vac Single Phase Power Supply w/ "G" series connector for module to plug into. WARNING – do not hook up a load hooked as the load will create extra heat which will result in a false reading to the compensator.
2. Calibrated Thermocouple Simulator

Procedure to Calibrate µATC-15 Module:
1. Insert module into calibration box.
2. Select simulated thermocouple temperature input less than 200° F.
3. Switch ON the module, the module will go through internal checks and display the software version in the upper display window. Note & record the software version
4. The soft start cycle will start, soft start light will start blinking. The external load light will be on.
5. As the module goes through the soft start cycle; set the set point to 400° f; check the preset values and correct to factory set values if they are not. (Refer to the following table)

Preset Software Version 1.32	Preset Software Version 1.35	Description	Options	Factory Set value
P01	C – F	Display	°F / °C	°F
P02	AL	Audible alarm	ON / OFF	ON
P03	tcb	TC Break Average Power	APO / OFF	APO
P04	Out	Control Method	FZY / PID	FZY *
P05	rSt	Soft start time	0 to 20 (min)	5 (min)
P06	utA	Low temperature alarm	5° to 30°	30°
P07	otA	High temperature alarm	5° to 30°	30°
P08	gFS	Ground fault sensitivity	60 to 180 (mA) or OFF	120 (mA)
P09	tOH	Set time delay to sense open traic or heater	1 to 255 (sec.)	180 (sec.)
–	HiA	Maximum Current	1.0 to 16.0 (Amp)	16.0
–	bST	Temperature Boost Increment	30° to 100° F, Time 0 to 4 ½ min.	30
P10	rSL	Soft start bypass lock	ON / OFF	ON
P11	PAd	Key pad security	LOC / ULC	ULC

6. After 3 minutes (P09 - 180 seconds), "tOH" alarm will be displayed and audible alarm will start beeping.
7. Switch OFF the module, set simulator input temperature to 400° F and switch the module back ON.
   - a The process temperature must read 400° F.
     - i   Yes it reads 400° F
       - a   Set the simulator input temperature to 200° F, The process temperature must read 200° F.
       - b   Set the simulator input temperature to 800° F, The process temperature must read 800° F.
     - ii No, it does not read 400° F or the process temperature is not the same as setpoint in above steps. Calibrate the module as follows:
       - a   Switch OFF the module
       - b   Press "MAN" key and switch ON the module. The module will go in "Calibration Mode".

   iii   With "CAL" in the setpoint display (lower) window, use "UP" or "DOWN" keys, such that the process temperature (upper) window displays 400° F

   iv   Press "SEL OPT" key to go to next calibration temperature.

   v   With "CL2" in the setpoint display window, use "UP" or "DOWN" keys, such that process temperature window displays 200° F.

   vi   Press "SEL OPT" key to go to next calibration temperature.

   vii   With "CL8" in the setpoint display window, use "UP" or "DOWN" keys, such that process temperature window displays 800° F.

   viii   Press "SEL OPT" key again, "Str" will appear in the upper window which means the calibrated values are stored in the chip.

b   Set the simulated temperature to 400° F.

c   The module is CALIBRATED.