



Pre-Certification Check List

I. Locate Flow Sensor Model # = _____ PIPE SIZE = _____

II. Locate Supply Temperature Sensor

III. Locate Return Temperature Sensor

IV. With Temperature Input (Option Slot#1) connector unplugged, measure the resistance between the connector points listed below. When standard Data Industrial 10,000 OHM Thermistors's are used, the results should be as follows:

T1+ to T1- = _____ (Should be about 10,000Ohms)

T1- to COM _____ (Should be about 0 Ohm – Due to Jumper)

T2+ to T2- = _____ (Should be about 10,000 Ohms)

T2- to COM _____ (Should be about 0 Ohm Due to Jumper)

Note: The actual resistance across T+ and T- increases with temperature

32°F = 32,654Ω

50°F = 19,903Ω

77°F = 10,000 Ω

140°F = 2,488Ω

T1+
T1-
COM

T2 +
T2-
SHLD

Monitoring chill water lines resistance measured between T1+ and T1- will be more than resistance measured between T2+ and T2-. Hot water lines will be the reverse.

V. Inspect Power Connections

1. Ground to GND
2. 120VAC Phase to "L"
3. 120VAC Neutral to "C"

VI. Inspect BAS Connection.

1. Two wires should be connected to "Relay #1 COM" and "Relay#1 NO"
2. There should be about 26VDC from the BAS system on these wires.
3. Shorting these wires together should result in a pulse recognized by the BAS.

V. Connect Power to the Model 2300

1. Display should light and show Values
2. Measure voltage across the Flow Sensor (Sensor "IN" to Sensor "GND") should be 7.2.0VDC to 9.6VDC. Any higher suggest a broken connection. Less than 1VDC suggests a short



Model 2300 Initial Programming

1. Apply Power
2. Press **"Menu"** -
See **"RESET SETUP DIAG"**
3. Press **"Setup"** -
See **(SETUP) "PWORD DSPY FLOW1"**
4. Press **"DSPY"** and then **"Enter/Next"**
See **(DSPY) "Line1 Line2"**
5. Press **"Line1"** and then **"↑"**
until **"LINE 1 DISPLAY: FLOW 1 RATE"**
6. Press **"Enter/Next"**
7. See **(DSPY) "Line1 Line2"**
8. Press **"Line2"**
and then **"↑"** until **"LINE 2 DISPLAY: TEMP1 and TEMP2"**
9. Press **Enter/Next** twice
See **(SETUP) "PWORD DSPY FLOW1"**
10. Press **"FLOW1"**
See **(FLOW1) "RATE TOTAL SENSOR"**
11. Press **"SENSOR"**
See **"(FLOW1 SENSOR) TYPE AVG DICAL"**
12. Press **"DICAL"**
See **"(FLOW1 DICAL) KNMU OFFSET"**
13. Press **"KNUM"**
Use **"↑"** and **"↓"** to enter the **"K"** value from Flow Sensor Manual
14. Press **"Enter/Next"**
15. Press **"OFFSET"**
Use **"↑"** and **"↓"** to enter the **"offset"** value from Flow Sensor Manual
16. Press **"Enter/Next"** and then **"Menu"**
 17. Press **"Menu"** then **"SETUP"** then **"Enter/Next"** then **"BTU"**
See **(BTU SENSR) "RATE TOTAL SENSOR"**
18. Press **"SENSOR"** See **(BTU SENSR) "TYPE CONST TMODE"**
19. Press **"TYPE"** Select **"10k THERMISTOR"** with **"Enter/Next"**
20. Press **"MENU"** to return to the normal display, probably with a **"System Error"** flashing.
21. Press **"MENU"** - See **"RESET SETUP DIAG"**
22. Press **"DIAG"** - See **"(DIAG) SER# SREV# ERROR"**
23. Press **"ERROR"** -
24. See after a list of error codes **"CLEAR ERROR? YES NO"**
25. Press **"YES"** then **"MENU"** - See Normal Display

If there is flow in the line the display should display it correctly, along with the correct supply and return temperatures.