

REFRIGERATION TECHNOLOGY, INC.

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MODBUS PROGRAM FUNCTIONS: MODEL SSDP-TH

The dual probe thermostat/humidistat works like (2) independent instruments in one enclosure. You are limited to a single stage output per probe. You can set the temperature thermostat for heating or cooling and you can set the humidistat for raising or lowering the relative humidity.

When you look at the display, it will change from temperature to humidity every 4 seconds. When you see a decimal point on the far right of the upper readout, you are looking at the humidity reading. If you see no decimal to the right of the upper readout, you are looking at the temperature reading.

There is a similar decimal point to the right of the set point display. You can lock the display in temperature or humidity for constant monitoring by pushing the O button. If you see a decimal point to the right of the set point (lower) display, you are locked on temperature (no decimal to the right of the upper readout) or humidity (decimal point on the far right of the upper readout).

To set the thermostat, wait until the display is on the temperature function and push the O button. This will lock temperature on and allow you to set the program functions for the thermostat. After setting the program functions and pressing "P" to return to normal operation, push the O button to return to the alternating display.

To set the humidistat, wait until the display is on the humidity function and push the O button. This will lock the humidity on and allow you to set the program functions for the humidistat. After setting the program functions and pressing "P" to return to normal operation, push the O button to return to the alternating display.

If you have an alarm and the beeper function is activated, the beeper will beep during both temperature and humidity system displays. The alarm light will be on only for the system in alarm. If both systems are in alarm, you must push the reset (lockout) button twice, once while in temperature and once while in humidity.

PROGRAM FUNCTIONS

TEMPERATURE

1. HI ALARM Degrees over set-point.
2. LO ALARM Degrees below set-point.
3. DLY Alarm delay in minutes: 1 to 127, 0 = Disable
4. CAL Enter a permanent off-set to recalibrate plus or minus.
5. SET POINT Y = Enable
 DISABLE N = Disable
6. ALARM BEEPER Y = Enable
 N = Disable
7. R1 DIFF Relay 1: Dead band between on and off for the solenoid.
8. RESOLUTION This allows the option of displaying temperatures in whole numbers or tenths.
9. AAR Y= Enable
 N= Disable
10. F/C "F" = Fahrenheit, "C" = Centigrade
11. RTD TYPE 2 Wire
 3 Wire
 4 Wire
12. UNIT I.D. Used for computer interface only. Enter tank no. when applicable.
13. BAUD RATE Set at 5

PROGRAM FUNCTIONS

HUMIDITY

- | | | |
|-----|----------------------|---|
| 1. | HI ALARM | Degrees over set-point. |
| 2. | LO ALARM | Degrees below set-point. |
| 3. | DLY | Alarm delay in minutes: 1 to 127, 0 = Disable |
| 4. | CAL | Enter a permanent off-set to recalibrate plus or minus. |
| 4. | SET POINT
DISABLE | Y = Enable
N = Disable |
| 6. | ALARM BEEPER | Y = Enable
N = Disable |
| 7. | R2 DIFF | Relay 2: Dead band between on and off for the system. |
| 8. | RESOLUTION | This allows the option of displaying humidity in whole numbers or tenths. |
| 9. | AAR | Y=Enable
N=Disable |
| 10. | UNIT I.D. | Used for computer interface only. |
| 11. | BAUD RATE | Set at 5. |

SUPER STAT Instructions SSDP-TH/SSDPPC-TH
MODBUS
TO PROGRAM

TEMPERATURE

ENTER PROGRAM	PUSH "P" FOR (2) SECONDS:
Step 1 HI ALARM Enter	Set to desired Enter E button
Step 2 LO ALARM Enter	Set to desired
Step 3 DLY Enter	Set to desired
Step 4 CAL Enter	Calibrate
Step 5 SETPOINT LOCKOUT Enter	Lock out to prevent change from front panel.
Step 6 BEEPER Enter	Lock out if desired.
Step 7 R1 DIFFERENTIAL Enter	Set to desired
Step 8 RESOLUTION - 10 TH Enter	Set if desired
Step 9 AAR	Set if desired
Step 10 F/C Enter	Set
Step 11 RTD TYPE	2 = 2 Wire 3 = 3 Wire 4 = 4 Wire
Step 12 UNIT I.D. Enter	Enter the tank no. if on a computer system.
Step 13 BAUD RATE	Set at 5

Press top right button to return to normal operation.

SUPER STAT Instructions SSDP-TH/SSDPPC-TH
MODBUS

TO PROGRAM

HUMIDITY

ENTER PROGRAM	PUSH "P" FOR (2) SECONDS:
Step 1 HI ALARM Enter	Set to desired Press E button
Step 2 LO ALARM Enter	Set to desired
Step 3 DLY Enter	Set to desired
Step 4 CAL Enter	Calibrate
Step 5 SETPOINT LOCKOUT Enter	Lock out to prevent change from front panel.
Step 6 BEEPER Enter	Lock out if desired.
Step 7 R2 DIFFERENTIAL Enter	Set to desired
Step 8 RESOLUTION - 10 TH Enter	Set if desired
Step 9 AAR	Set if desired
Step 10 UNIT I.D. Enter	Enter the humidity system number if on a computer.
Step 11 BAUD RATE	Set at 5

Press top right button to return to normal operation.

PROGRAMMING OPTION DETAILS

To program the SUPER STAT you enter the program by holding down the upper right button for (2) seconds. You advance through the steps of the program using the bottom right button. To change a step in the program, use the up/down arrows.

HI ALARM Set for alarm temperature above set point or set out of range if not to be used.

LO ALARM Set for alarm temperature below set point or set out of range if not to be used.

CAL Temperature

After the unit is wired and ready to go, test it against a known temperature or with ice water. Add a + or – offset to correct the reading.

Humidity

After the unit is wired and ready to go, test it against a known relative humidity sensor reading. Add a + or – offset to correct the reading.

RELAY 1 DIFFERENTIAL This is the on-off differential, i.e.

Temperature

Set point = 55
Diff = 2
Mode = Cooling
Solenoid on = 58
Solenoid off = 55

Humidity

Set point = 70
Diff = 2
Mode = Heating
System on = 67
System off = 70