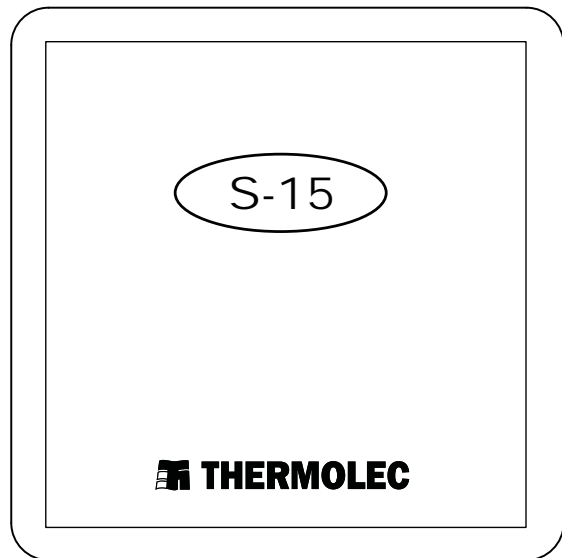
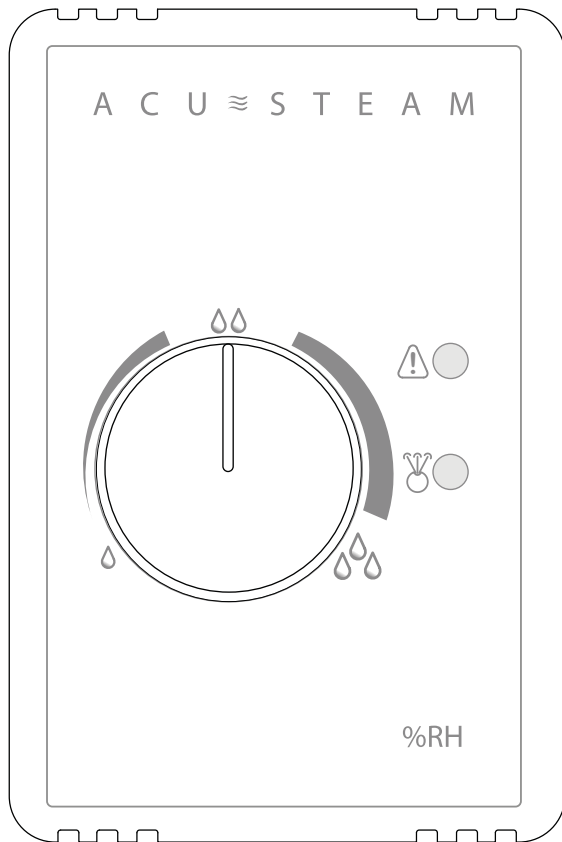


ACU \approx STEAM[®]



ELECTRONIC HUMIDISTAT AND OUTDOOR SENSOR INSTALLATION INSTRUCTIONS



ACU-STEAM HUMIDISTAT, version A

Features

- State of Art digital RH sensor
- ROOM or DUCT mounting
- Reprogrammable Microcontroller
- Potentiometer Set-point setting
- Out-door temperature sensor for Set-point Reset
- Green (ON/OFF) and Red (warning) status LEDs

Specifications

Set-point range. 20% to 50% Relative Humidity
Accuracy. $\pm 4.5\%$, without calibration
Linearity $\pm 1\%$ in the Set-point range
Differential % RH. $\pm 2\%$
Outdoor Temp. Reset Range between -9 °F (-23 °C) to 27 °F (-3 °C)

Outdoor reset Temperature vs.	Set point change
28 °F (-2 °C) and warmer	No change
27 °F (-3 °C) to 23 °F (-5 °C)	42% max,
22 °F (-6 °C) to 18 °F (-8 °C)	38% max,
17 °F (-9 °C) to 12 °F (-11 °C)	34% max,
11 °F (-12 °C) to 5 °F (-15 °C)	30% max,
4 °F (-16 °C) to -2 °F (-19 °C)	26% max,
-3 °F (-20 °C) to -9 °F (-23 °C)	22% max,
-9 °F (-23 °C) and colder	20% max.

NOTE: these ranges can vary by $\pm 2\%$.

The Outdoor Temperature sets the maximum set point of RH internally.
If the Dial position is higher, the actual set point will be limited as above.

Installing and Connecting the ACU-STEAM Humidistat and the Outdoor Sensor

1.1 The humidity sensor is located at the lower right side in the wall mount humidistat. Please see [Fig.1a](#).

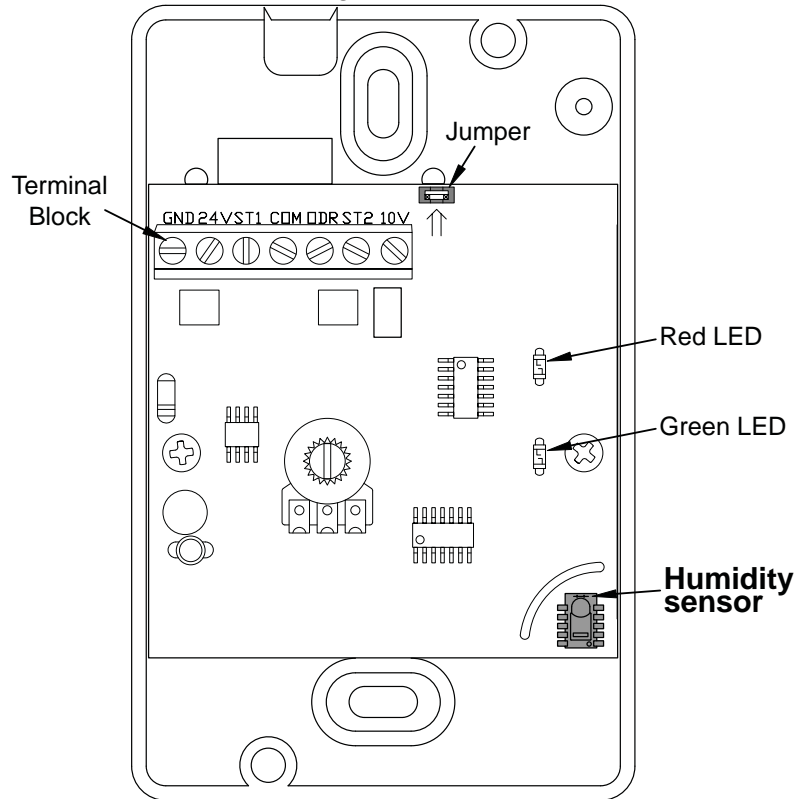


Fig. 1a Wall Mount Humidistat

1.2 A three wire control cable (not supplied) has to be connected between the wall (or duct) electronic humidistat and the humidifier electronic board at the three terminals marked "H-STAT".

Please respect the sequence and connect

GND to GND

24V to 24V

ST1 to IN

1.3 The outdoor sensor **S-15** (please see [Fig.1c](#)) is supplied with the humidistat. It could be installed on an outside wall facing North *or* a fresh air duct. This outdoor sensor automatically reduces the setting of the humidistat according to the outdoor temperature in order to avoid condensation on windows during extremely cold days. It does the opposite during the mild days without your having to manually adjust the humidistat. The outdoor sensor is a 10 kilo-ohms NTC thermistor (negative temperature coefficient). To install the **S-15** on a fresh air duct, drill a 3/8" hole in the duct, peel off the velcro backing and push the black tip of the sensor into the duct while sticking the velcro to the duct.

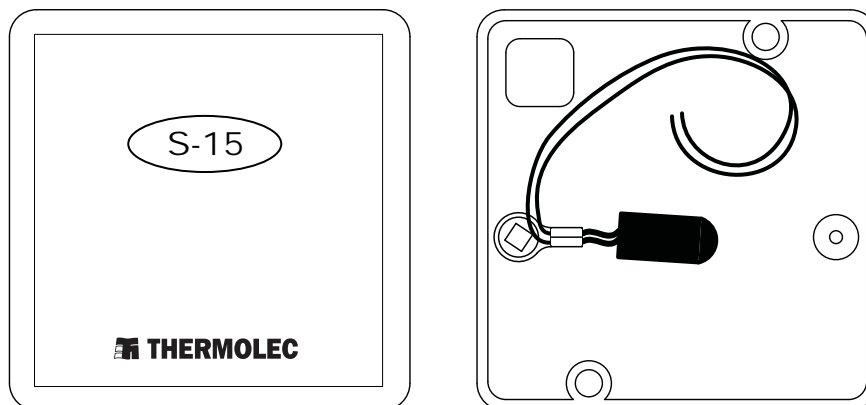
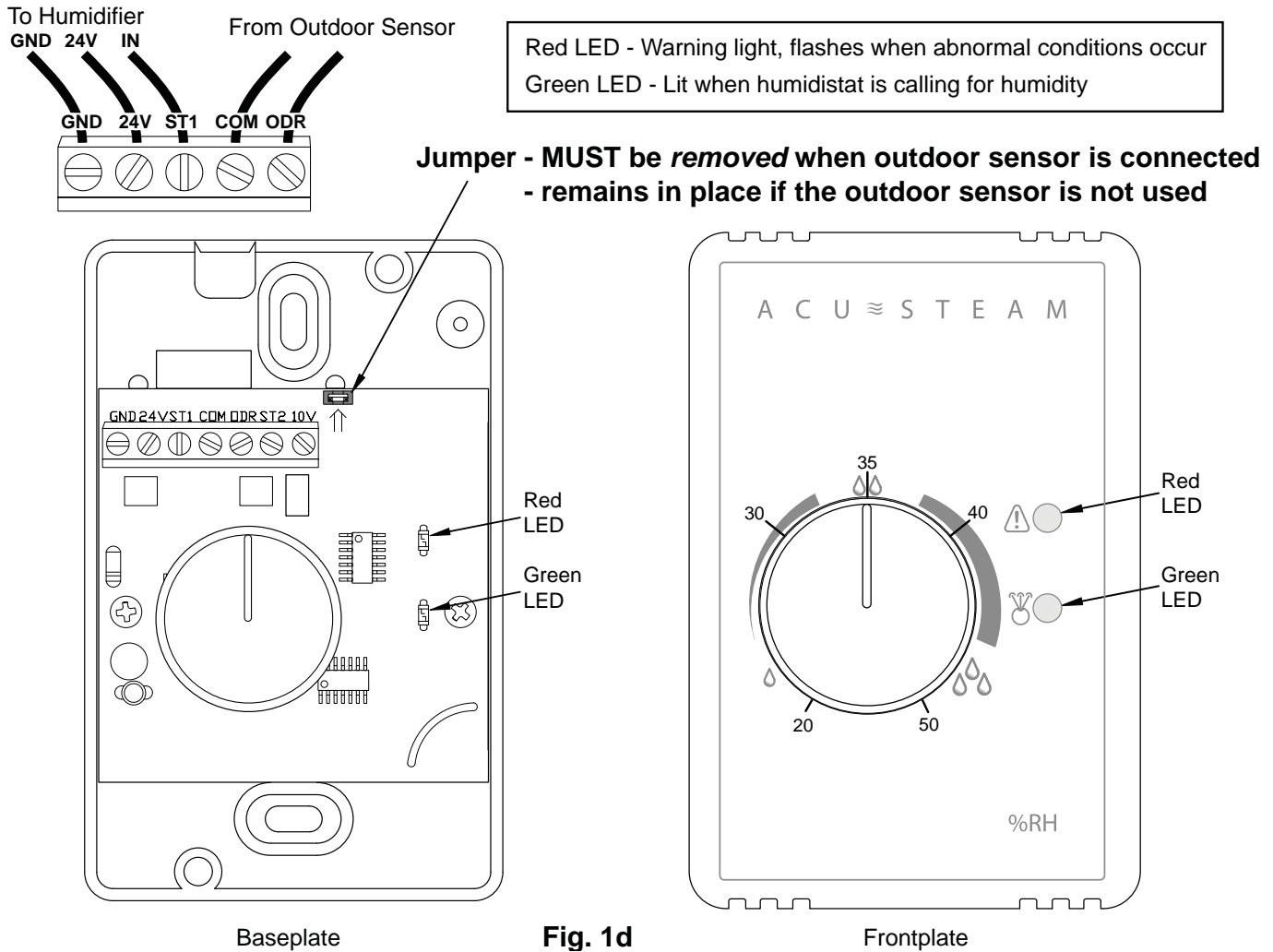


Fig. 1c

1.4 A two wire control cable is required to connect the outdoor sensor to the terminals marked **COM** & **ODR** on the electronic humidistat. Please see Fig. 1d. The outdoor sensor is not polarized so there is no wiring polarity to follow.



IMPORTANT : Whenever an outdoor sensor is connected to the electronic humidistat, **the jumper located at the top of the electronic board must be removed so that the outdoor sensor becomes operational** (i.e. the jumper short circuits the terminals dedicated to the outdoor sensor). If the outdoor sensor is not installed, **keep the jumper in place**.

1.5 To force a drain cycle when the humidifier is running and producing steam, simply turn down the humidistat. Please note that when using an ACU-STEAM electronic humidistat, if the relative humidity is extremely low the humidifier may still run with the knob at the minimum setting because of a range limiter inside the cover. If this occurs you will need to remove the humidistat cover by pulling it off and turn the knob counter-clockwise to the minimum setting. The humidifier should now stop and drain.

