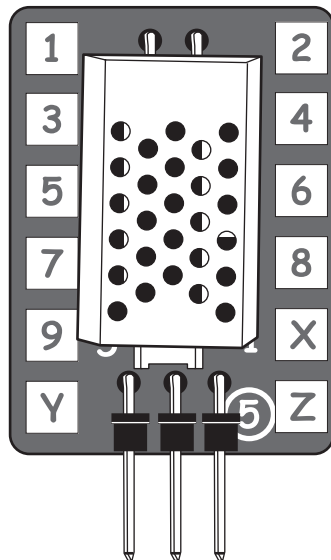




Product Specification

DEBONAIR® Humidity Control Accessory for 400, 420, and 450 Series Thermostats

Part Number 33CSHUMID-01



The humidity control accessory offers the following advantages:

- Adds humidification and dehumidification functions to the thermostat
- Allows thermostat to perform Cool to Dehumidify operation
- Allows thermostat to initiate reheat during cooling cycle
- Compatible with Debonair 33CS400-01, 33CS420-01, and 33CS450-01 thermostats (not used with Humidi-MiZer™ or 62AQ Energy\$Recycler applications)

Features/Benefits

The humidity module accessory provides control of humidification and dehumidification between the thermostat and the HVAC unit.

Humidification control

If the HVAC (heating, ventilation, and air conditioning) unit is equipped with a humidification system, the thermostat will provide power to the appropriate terminal on the backplate of the thermostat when the measured humidity falls below the user-defined set point. The value for this set point ranges from 0% to 60% relative humidity.

Dehumidification control

If the HVAC unit is equipped with a dehumidification terminal, then the thermostat will provide power to the appropriate terminal on the backplate of the thermostat when the measured humidity is above the user-defined set point. When the indoor humidity rises above the set point, the appropriate terminal will be deenergized. The value for this set point ranges from 25% to 99% relative humidity.

Features/Benefits (cont)



Cool to Dehumidify operation

If the Cool to Dehumidify function is on, then the thermostat has the ability to initiate a cooling cycle for advanced dehumidification operation. When the thermostat detects the humidity percentage is above the set point for dehumidification, and heating or cooling is not on, the thermostat will force the compressor to run with the fan, thus reducing moisture in the air.

This feature will also allow the user to adjust the cooling hysteresis of the set point, from 0° to 5° F. For example, if the cooling hysteresis is set for 3° F and the cooling set

point is set for 74 F, then as long as the room temperature reads between 71 F and 74 F this feature will energize the compressor and fan to dehumidify the air.

Reheat operation

This feature allows the thermostat to turn on electric heating (W2) during Cool to Dehumidify operation to maintain room temperature until the dehumidification set point is reached. The cooling cycle will allow for the dehumidification of the air to occur while the electric heat provides a constant room temperature.

Specifications

Operating temperature/relative humidity

32 to 122

0 to 95%, non-condensing

Storage temperature

32 to 122 F

Weight

Approximately 1 oz

Power requirement

5 VDC, 0.01 A from thermostat, no batteries required

Operating characteristics

Works with the following thermostats:

- Debonair® 400 (33CS400-01)
- Debonair 420 (33CS420-01)
- Debonair 450 (33CS450-01)

Dimensions

