

**CARNES STEAM HUMIDIFIERS** are available with a complete selection of accessories to provide accurate humidity control.

#### WALL HUMIDISTAT, PROPORTIONAL CONTROL

##### Model HXHAM



The Model HXHAM is a wall-mounted, microprocessor-controlled humidistat solution for cutting edge humidity control. The HXHAM employs a backlit LCD module, which displays both the ambient temperature and humidity of the surrounding air. The embedded software allows user navigation between temperature/humidity viewing mode, setpoint adjustment mode, and also outdoor temperature and humidity viewing mode. Setpoint range is 0 to 100%. An optional outdoor temperature compensation sensor can be added (HXHAMT).

#### WALL HUMIDISTAT, ON-OFF CONTROL

##### Model HXHAA



Mount this humidistat four or five feet above the floor in freely circulating air of the temperature and humidity about average for the entire space to be controlled. Avoid locations near hot or cold air ducts and discharge air from the humidifier. Scale range is from 10-90% RH. Differential is 5% non-adjustable. Case dimensions are 4-3/8" high, 2-7/8" wide and 1-5/8" deep including control knob.

#### WALL HUMIDISTAT, PROPORTIONAL CONTROL

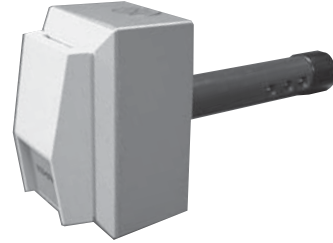
##### Model HXHCG



The wall mounted HXHCG humidistat uses a monolithic sensor and electronic circuitry to provide accurate and reliable humidity sensing. Setpoint range is 0 to 100%. The HXHCG has a concealed setpoint adjustment with a locking cover to prevent tampering. Ambient operating conditions are from 0° to 85°C. Case dimensions are 2-13/16" x 4-1/2" x 1-1/4".

#### DUCT HUMIDISTAT, PROPORTIONAL CONTROL

##### Model HXHAN



The Model HXHAN is an intelligent humidistat solution used exclusively for duct mounted installations. The humidistat is capable of providing both humidity and temperature measurements from inside the duct. The microprocessor control takes the temperature into consideration when calculating the humidity to provide an extra degree of precision. 0 to 100% setpoint range.

#### DUCT HUMIDISTAT, ON-OFF CONTROL

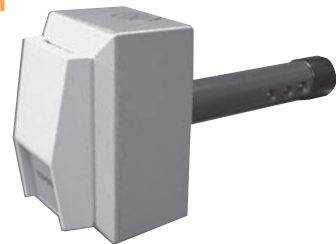
##### Model HXHAB



This duct mounted humidistat is installed in the return air duct to sense the humidity level in the area being served. Scale range is 15-50% RH. Differential is 4-6% non-adjustable. Case dimensions are 3-3/4" high and 2-3/8" wide. The humidistat projects 2-1/2" outside of the duct and extends 7-1/2" into the duct.

#### DUCT HUMIDISTAT OR HIGH LIMIT, PROPORTIONAL CONTROL

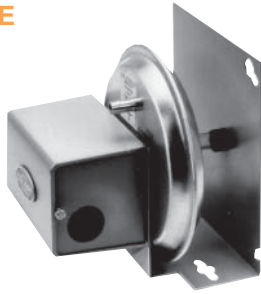
##### Model HXHCH



The Model HXHCH is designed to be mounted in a duct to provide a means of sensing relative humidity. Setpoint range is from 0 to 100% RH. Ambient operating conditions are from 0° to 85°C. The humidistat may be mounted in a return duct to provide a mean of sensing and controlling relative humidity. The humidistat may be mounted in a supply duct a minimum of 10 feet downstream from the distributor pipe when used as a high limit humidistat. Case dimensions are 2-13/16" x 4-1/2" x 2-1/4". The probe extends 5-3/4" into the duct.

**AIR FLOW SWITCH, PRESSURE DIFFERENTIAL TYPE**

**Model HXAEE**



Air flow in the duct may be sensed by using this differential pressure switch. The differential in pressure between the interior of the duct and ambient when air is moving in the duct closes a micro switch allowing the humidifier to operate. Air pressure differential as low as .07 w.g. and as high as 12.0 w.g. may be sensed with one model. The switch may be mounted with tubing connecting to the duct. Switch is UL listed.

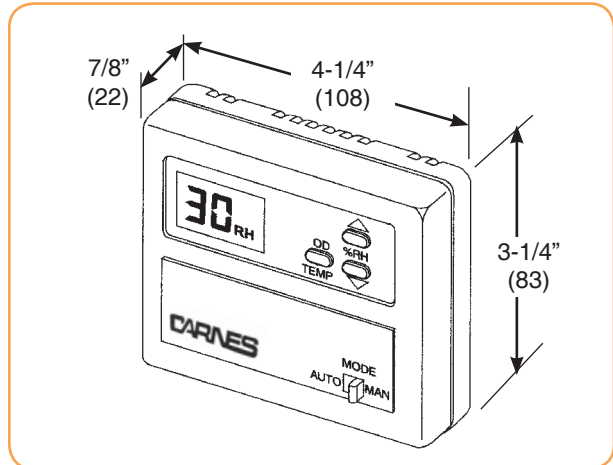
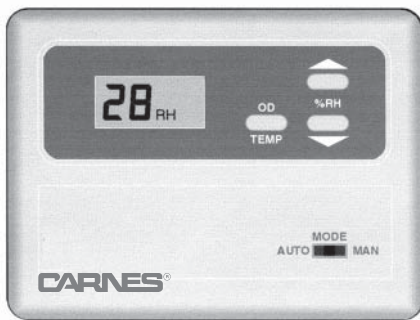
**HIGH LIMIT HUMIDISTAT**

**Model HXHAD**



The Model HXHAD humidistat is available for use as a safety precaution to prevent air in the duct from exceeding a preset level. Do not use the humidistat in air that is over 125°F or in locations where the unit could become wet. The control must be mounted a minimum of 10 feet downstream of the distributor pipe. Scale range is from 15%-95% RH. Differential is 5% non-adjustable. Mounting plate dimensions are 6-1/2" wide, 4-3/4" high. Humidistat extends 1-1/4" into duct and projects 2-1/4" outside the duct.

**OUTDOOR AIR TEMPERATURE COMPENSATED DIGITAL HUMIDISTAT, ON-OFF CONTROL**



**Model HXHAT**

The HXHAT humidistat can be either wall or duct mounted and includes a remote outdoor temperature sensor for exterior wall or intake duct mounting. The humidistat can automatically change the setpoint in response to changes in outdoor temperature or be set to maintain a setpoint regardless of temperature changes. The LCD display shows setpoint RH%, actual RH% or outdoor temperature (from -9 to 98°F). Relay contacts provide an on/off signal to the humidifier. Setpoint range is from 30-65% RH. Default setpoint is 40% RH.

The HXHAT will automatically reduce the RH setpoint as the temperature drops below 35°F. The graph below shows the RH setting of 35° RH and as the temperature drops the RH setpoint is adjusted by the computer as shown. Below -10° there is no adjustment.

