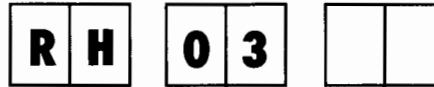


# RFHAA - DUAL RECORDING PNEUMATIC TEMPERATURE CONTROL



## BASIC RFHAA MODEL

## CHART DRIVES

Description		Code
125V/60Hz	24 H	01
125V/60Hz	7 D	02
125V/60Hz	12 H	03
125V/60Hz	48 H	04
125V/50Hz	24 H	05
125V/50Hz	7 D	06
Spring	24 H	07
Spring	7 D	08
250V/50Hz	24 H	09
250V/50Hz	7 D	10
250V/60Hz	24 H	11
250V/60Hz	7 D	12

Note: Set pointers cannot be crossed more than 50% of chart span.

## HOW TO ORDER

First select the proper ordering number for the RFHAA unit. Next consult element selection matrix (this unit requires 2 thermal sensing element), see Page 62. Select chart number, see page 70 and 71, and specify as a separate line item. The chart selected must correspond to specific range of sensing element selected. The RFHAA instrument requires a hollow (L-Type) element plunger (code 51 or 52). High ambient temperature head assembly (code 51) is used when the instrument will be located in ambient temperatures between 32°F but not greater than 150°F. Low ambient head assembly should be called out (code 52) when the instrument will be located in ambient temperatures between -30°F and 125°F. If the solution the sensing bulb is being immersed in is of a corrosive nature, see Form 3052, "Guide for use in Corrosive Applications".

**Note: Availability of charts will limit element selection.**

## Sample Order:

Description	Required Number
RFHAA Unit	RH0301
with charts	00208004 (from page 71)
with element	109510520 (from page 62 and 63)

For pricing see Form 3028, Mechanical Price Book, page 13.

# ABOUT THIS INSTRUMENT

## Description

This unit is designed to control pneumatically and record two separate temperature variables on a common chart. Relative humidity can be governed through the control of wet and dry bulb temperatures. Two independent control systems in a single case. Humidity and temperature control, output 3-15psi. Manual reset adjustment with adjustable throttling range 5-25%.

## Operation

The dual RFHAA operates air powered throttling valves regulating the flow of steam, water or gas or actuates other pneumatic devices such as pressure switches or relays. Wet and dry bulbs are recorded when it is used to control temperature and relative humidity.

Two instruments with independent pen arms comprise the control. Pen arms are set at two-hour time differential on a 24 hour chart to prevent interference when recording at or near the same control temperature.

Pen arms move up or down scale in response to the expansion or contraction in the thermal sensing element. As a pen arm enters the throttling range and approaches set point, it changes the effective orifice size in its control mechanism's bleed valve.

Pressure transmitted by the instrument is reflected by the valve position of the air-operated device which modulates the flow of heating or cooling medium.

The control produces an output pressure of 3 to 15 psi, approximately 16 psi input pressure is required to obtain this range. Throttling span is adjustable within the extremes of 5 to 15% of the scale range.

Load arm, inherent in throttling controls, is compensated by a manual reset adjustment.

## Specifications

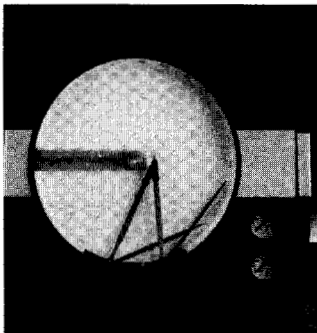
Dimensions	15 1/8" W x 13 13/16"H x 4 7/8" D
Chart Diameter	10 inch.
Chart Marking	Felt Tip Cartridge.
Chart Drive	Electric with toggle switch, or spring wound.
Chart Rotation Periods	24 and 48 hour, 7 day, other options.
Flush Mount Cutout	13 1/2" W x 12 11/16" H
Surface Mounting	Mounting brackets included.
Conduit Openings	One 7/8 inch diameter hole on each side of the case for 1/2 inch conduit fitting; drill guide hole spotted in the rear of the case showing optional rear opening location.
Air Hookup	1/4-NPT inlet and outlet openings at top and back of case.
Air Input Requirements	Approximately 16 psi to 20 psi.
Air Output Pressure	3 to 15 psi.
Air Consumption	12 cfm maximum per mechanism.
Throttling Span	Adjustable from 7 to 35% of element range.
Load Error Adjustment	Manual reset for load error compensation.
Control Action	Reverse or Direct Acting (Factory set - reverse, field changeable to direct acting).

Warranty One year, see page 80 for details.

Approx. Net Weight\* 10 lbs.

Approx Ship. Weight\* 11 lbs.

\*Weight may vary depending on element length.



Recorders