

RFA - PNEUMATIC RECORDING TEMPERATURE CONTROLLER

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BASIC RFA MODEL

CHART DRIVES (Counter Clockwise Rotation)

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

ACCESSORIES

Description	Code
None	0
Pressure Sensitive Marking Sys.	3

HOW TO ORDER

First select the proper ordering number for the RFT unit. Next consult element selection matrix, 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 RFT 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
RFA Unit	RF03010
with charts	00208004 (from page 71)
with element	109510520 (from page 62 and 63)

For pricing see Form 3028, Mechanical Price Book, page 12.

ABOUT THIS INSTRUMENT

Description

This recorder is an accurate, sensitive pneumatic controller used in conjunction with an air-operated valve for control of steam, gas or fuel for combustion equipment or to operate other pneumatic devices. Requires approximately 16 psi input, air output is 3 to 15 psi, throttling span is 5% to 25% of scale range. Flush or wall mounted (brackets supplied) with 12 optional ranges from -30°F to 1100°F.

Operation

Operates in an adjustable throttling range of 5-25% of scale range. As the indicating pointer, moving up or down scale in response to the expansion or contraction in the thermal sensing element, enters the throttling range and approaches set point, it changes the effective orifice in the instrument's bleed valve.

Depending upon its control action (reverse or direct acting) this increases or decreases the pressure delivered to the remotely-placed air operated control device.

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

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

Note: For long air line feeds, ie. 10 feet or greater, or large volume air valves or control devices, an air pressure booster relay is strongly recommended.

Specifications

Dimensions	15 1/8" W x 13 3/16"H x 4 7/8" D
Chart Diameter	10 inch.
Chart Marking	Felt Tip Cartridge/optional pressure sensitive charts
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.
Electrical Hookup	Terminal block accessible with cover open.
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.
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).
Air Gauges	Inlet and outlet - both gauges provide for English and Metric scales.
Warranty	One year, see page 80 for details.
Approx. Net Weight*	9 1/2 lbs.
Approx Ship. Weight*	10 3/4 lbs.

*Weight may vary depending on element length.

