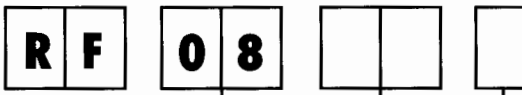


RFCP RECORDING TEMPERATURE PROGRAMMER



BASIC RFCP 135 5/16" MODEL

The potentiometer coil kits listed below are available. They must be ordered separately and installed in the field.

Description	Part #
100 Ohm 1/8"	64403504
100 Ohm 5/16"	64403505
135 Ohm 1/8"	64403501

CHART DRIVES

Description		Code
125V/60Hz	24 H	01
125V/60Hz	7 D	02
250V/50Hz	24 H	03
250V/50Hz	7 D	04
250V/60Hz	24 H	05

ACCESSORIES

Description	Code
None	0
250P Cam Follower Attachment	2

HOW TO ORDER

First select the proper ordering number for the RFCP 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 RFCP 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
RFCP Unit	RF08010
with charts	00208004 (from page 71)
with element	109510520 (from page 62 and 63)

For pricing see Form 3028, Mechanical Price Book, page 14.

ABOUT THIS INSTRUMENT

Recorders

Description

This instrument is a recorder which utilizes a potentiometer-type controlling mechanism which provides automatic temperature programming by use of a pre-cut plastic cam. It governs proportional positioning motors which operate modulating valves, damper systems, or electric multi-state systems where extremely close sensitive or straight-line control is required. The instrument automatically positions any of a wide variety of standard motor operators to provide precise temperature control without the sawtooth line characteristics of conventional on-off control. CSA listed.

Operation

Control point of the RFCP is determined by a cam-follower which rides the edge of a revolving pre-cut cam and positions the potentiometer in accordance with the program for which the cam is shaped. Cam is configured and fabricated by end user.

The pen arm, which moves up or down scale in response to the expansion and contraction in the thermal sensing element, also slides the contact finger along the potentiometer coil within the modulating range. In essence, the coil forms half of a Wheatstone bridge circuit, while the other half of the bridge is formed by a potentiometer of similarly electric characteristics built into the proportioning motor and driven by the motor shaft. A detector relay, either incorporated into the proportioning motor or operating as a separate unit, detects any imbalance in the Wheatstone bridge caused by a change in control temperature and drives the proportioning motor in the direction necessary to regain a balanced bridged circuit.

The shaft of the proportioning motor is connected through linkage to the device which controls the process fuel flow or temperature variable. When the contact finger is located at the low end of the potentiometer coil, the motor drives the device to the fully open position. When the contact finger at the high end of the coil, the motor moves the divide to the fully-closed position.

Resistance of the potentiometer coil to the Model RFCP should match that of the coil in the positioning motor. Optional resistance coils are listed on page 36. These may be selected if the motor to be controlled utilizes this resistance requirement.

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.		
Chart Drive	Electric with toggle switch.		
Chart Rotation Periods	24 hour and 7 day.		
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.		
Coil Resistance	135 ohms 5/16" width std., others available as field installed kits.		
Coil Length,	1/8"	5/16"	5/8"
Throttling Range Available	5%	12%	24%
	Optional throttling ranges must be user installed and obtained separately.		
Rated Accuracy	1% of element range.		
Agency Listing	CSA		
Warranty	One year, see page 80 for details.		
Approx. Net Weight*	9 lbs.		
Approx Ship. Weight*	14 lbs.		
	*Weight may vary depending on element length.		

