

CA-805 and CA-806 Warm Air Limit Controls

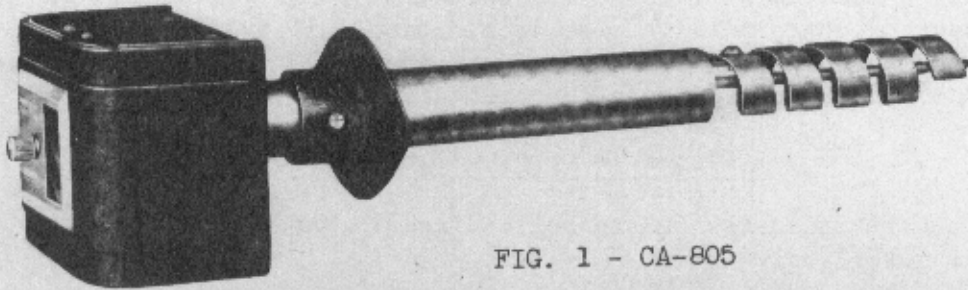


FIG. 1 - CA-805

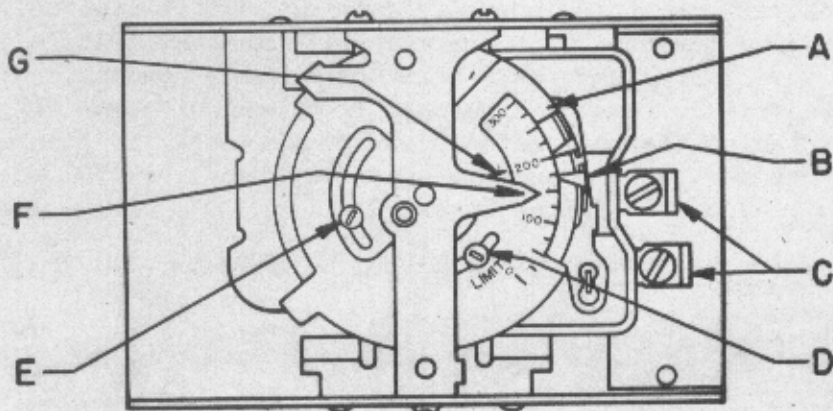
The CA-805 and CA-806 Limit Controls are of compact and sturdy construction, suitable for either line or low voltage, and are identical except for insertion length and method of mounting.

The CA-805 is provided with a flat mounting flange and the insertion length is adjustable from 4 7/16" to 10 13/16".

The CA-806 mounts directly on the plenum or duct and has an insertion length of 6 7/16".

The Limit Switch - terminals of which are shown at "C", Fig. 2 - breaks circuit on an increase in temperature and makes circuit on a decrease in temperature. It automatically stops the burner if the temperature in the plenum or duct exceeds the setting of the instrument.

On both Controls the Range and Differential are adjustable: Range, 100° to 300° Differential, 18° to 100°.



- | | |
|-----------------------------------|----------------------------------|
| A. Maximum Limit Stop | D. Scale Plate Lock Screw |
| B. Limit Indicators | E. Maximum Limit Stop Lock Screw |
| C. Limit Switch Terminals | F. Pointer |
| G. Maximum Limit Indicating Arrow | |

FIG. 2

Setting the Control

The CA-805 and CA-806 are factory set to open circuit at 190° and close circuit at 160°.

If it is necessary to change these settings, the indicators "B" may be moved with the fingers or a screw driver to the desired cut-in and cut-out settings as shown on the scale.

Part "A" is a maximum stop for limit switch setting. It is set at the factory at 250°. This setting conforms with most local codes. If a higher setting is needed, and local codes permit, the maximum stop may be changed by loosening screw "E" and moving stop "A" to the desired point as indicated by arrow "G".

Plenum Temperature Indicator

The Pointer "F" indicates on the scale directly behind it the approximate temperature of the bi-metal coil.

Location

Select a location in the plenum or duct which will assure average temperatures and free circulation of air around the bi-metal coil, and cut a 1 1/4" round hole.

To install the CA-805, attach the mounting flange, using the sheet metal screws furnished. Then place the shank of the Control through the opening, making sure the bi-metal coil does not meet any obstruction and is free to operate, and tighten the set screw in the flange to hold the instrument firmly in place at the proper position. It is not necessary that the Control be mounted exactly level or vertical.

To install the CA-806, remove the cover and after inserting the shank through the 1 1/4" hole, secure the case directly to the plenum or duct by means of sheet metal screws through the slots provided in the back of the case.

Calibration

If, because of abuse or rough handling, it is desired to check the calibration of the Control, proceed as follows:

Remove the Control from the plenum and immerse the bi-metal coil in water of approximately 150°, as measured by a thermometer. The temperature indicated by pointer "F" should be approximately the same as the thermometer reading. If necessary, calibration may be made by removing the seal from head of screw "D", loosening screws "D" and "E" and rotating the calibrated scale plate until the pointer "F" indicates the same temperature as the thermometer. Then tighten screw "D" to hold the new setting. Adjust limit stop and tighten screw "E".

Electrical Rating: 1 H.P. 115-230 Volts A.C. only

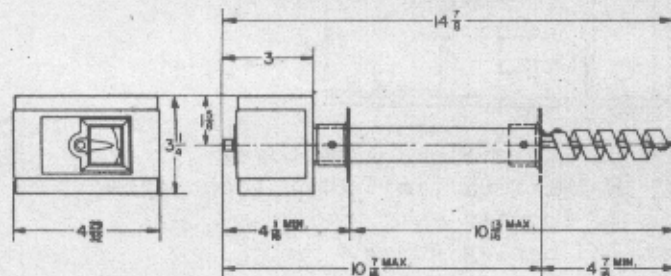


FIG. 3 - CA-805

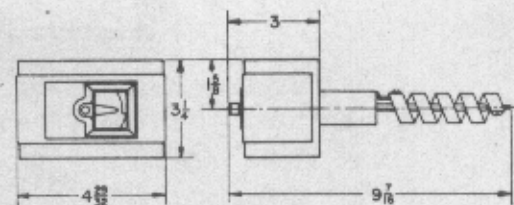


FIG. 4 - CA-806

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