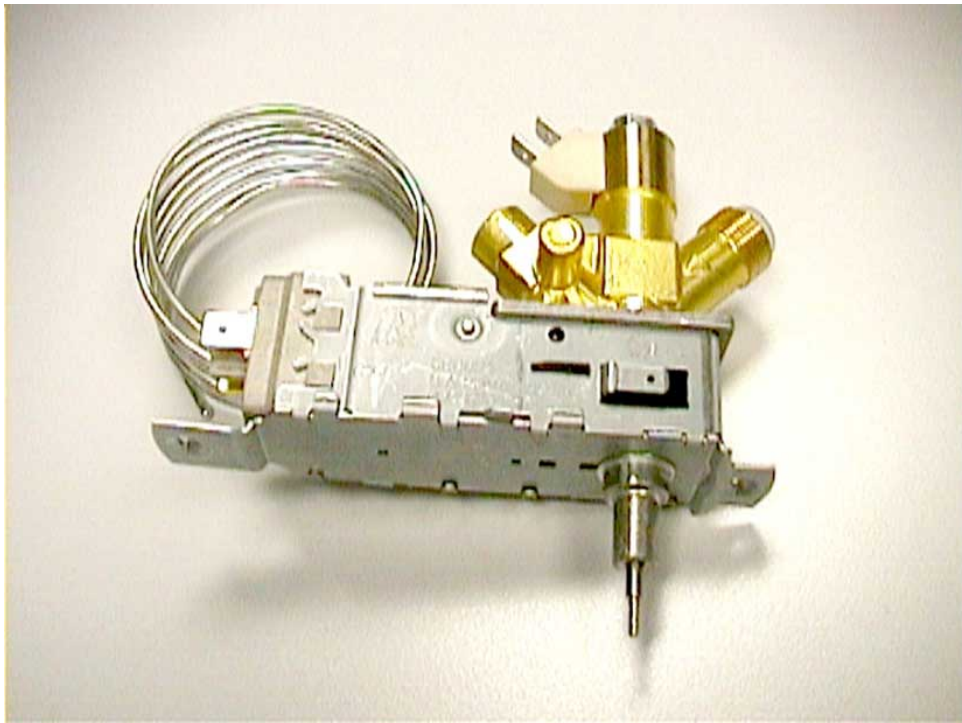
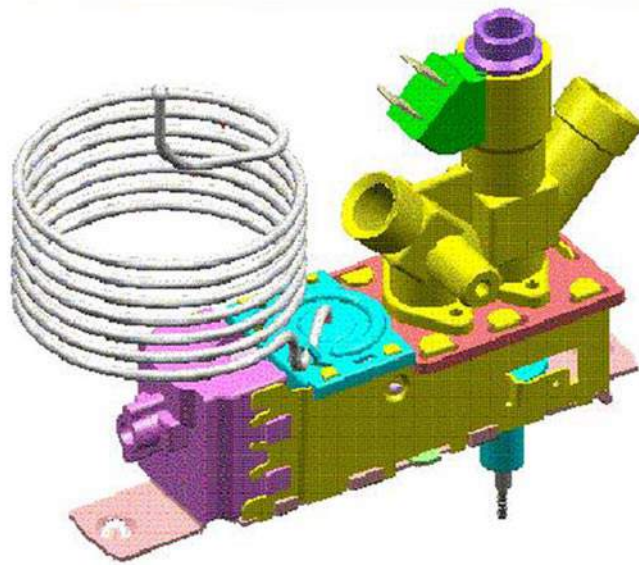


A RANCO

V85 Thermostatic Gas Valve



THERMOSTATIC GAS VALVE V85



DESCRIPTION

This compact valve is designed to be assembled in absorption refrigerator that can be supplied by gas or AC voltage or DC voltage. It is a multifunctional thermostatic gas valve, it includes a safety gas valve a thermostatic gas valve and an electromechanical thermostat. Further functions and features makes this product unique.

FEATURES

Due to its light weight reduced dimensions and one knob operating the valve can permit a more comfortable layout to the complete system. Equivalent temperature working electrical mode or gas mode. Two terminals are available on the safety valve to switch the gas off, when requested. A galvanometer can be positioned in serie to those two terminals to check the presence of the flame when working in gas function. Independently by the sensed temperature when pushing push button to engage the safety valve this device will allow minimum 50% of full flow, this function reduce the needed time to fill the gas bottle. Independently by the sensed temperature it possible to check the by pass flow, as described in mounting section, this function will allow a 100% check in production line or in the field. The rotary dial will allow a comfortable temperature adjustment. A mounting bracket will allow a sure fixation on the refrigerator.

APPLICATION

This device is designed to control thermostatically the temperature of dual supply (gas/electrical) refrigerators using manufactured, natural or liquid petroleum gas.

OPERATION

The valve intercepts the gas flow and depending from the sensed temperature operates a switch and changes from full gas flow to by pass gas flow. The valve is composed by three parts: a safety valve, a thermostatic valve and a thermostatic switch. The safety valve is supplied by a thermocouple and it is engaged the first time by pushing the push button in the knob. The valve has two terminals to allow the interruption of the positive to the safety valve and to give a signal to a galvanometer. To close completely the gas flow it is necessary to open the positive on the safety valve. The temperature sensor is of the vapour fill type with remote sensing portion and depending on the setting it opens or closes the main flow and, at the same time, it opens or closes a switch. The setting can be varied rotating the dial shaft through a knob (see figure 4). A clockwise rotation will increase the set temperature in the fridge. The switch can be used to operate the electrical heaters in case of electrical power. When the safety valve is open a minimum flow is guaranteed, it is called by-pass flow. If the temperature sensor is measuring a temperature above the limit, cut in, then the valve will open completely allowing the full flow.

CONSTRUCTION

The valve incorporates a thermal power element and a switching element. The power element consists of a single capsule bellows and a length capillary tubing the end of which acts as a temperature sensor. The valve opens and the electrical switch closes on an increase in temperature. Variation of the temperature setting is achieved by rotating of dial shaft. The same element is driving the valve mechanism and the electrical switch, this gives an equivalent temperature setting working electrically or gas.

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