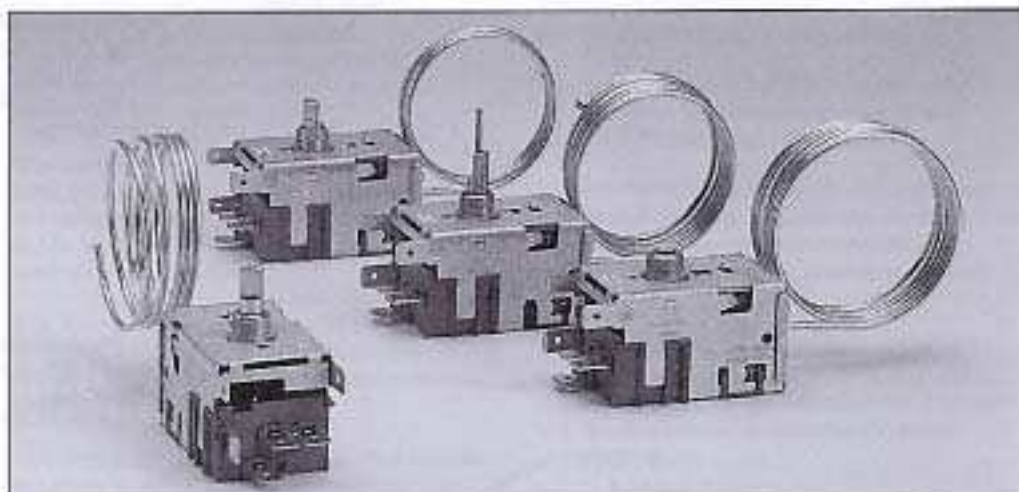


Application



Thermostat 077B is used to control the temperature in refrigerators, upright and chest freezers, liquid coolers, bottle coolers and small commercial refrigeration appliances. The thermostat can be used as an evaporator thermostat or a room thermostat.

The thermostats are available with normal function, fixed cut-in and cut-out temperature, constant or variable cut-in temperature for automatic defrost, and with a pushbutton for semi-automatic defrost.

The thermostats can be supplied with the following supplementary functions:

- Auxiliary contact
- Changeover contact
- Signal contact
- Series contact
- Reduction of temperature for super-function and indication of same

All thermostats have normal function, i.e. they cut in the compressor current circuit on rising temperature.

- Temperature control in the interval -42°C to $+11^{\circ}\text{C}$.

- Cut-out temperature interval (difference between cut-out temperature in position cold and cut-out temperature in position warm) from 5°C to 20°C .

- Differentials (difference between cut-in and cut-out temperature) between 4°C and 15°C in position warm. For thermostats with fixed setting, from 3°C .

- With automatic defrost the cut-out temperature lies between -5°C and -42°C , the cut-in temperature between $+1^{\circ}\text{C}$ and $+11^{\circ}\text{C}$.

- Other temperature settings can be supplied by arrangement.

- 6.3 mm or 4.8 mm tabs.

- Wide range with various extra functions and accessories.

- Approved by recognised authorities.

Function description

General

Danfoss 077B thermostats are designed primarily for temperature control in refrigerators and freezers.

The thermostat regulates by cutting off or cutting in current to the compressor, depending on the temperature registered by the thermostat phial.

The thermostat can be used either as an evaporator thermostat or a room thermostat. When used as an evaporator thermostat, the end 50-130 mm of the capillary tube must be used as a phial. If the thermostat is to be used as a room thermostat, the capillary tube end can be coiled. For this application, please contact Danfoss.

Mounting

To ensure the best function it is important to ensure that the phial (capillary tube end) makes good contact with the evaporator, or, in

room thermostat applications, with the air flow. The phial must always be placed colder than the rest of the capillary tube and the thermostat itself. The thermostat must not be exposed to condensate or defrost water.

Operation

On thermostats with a temperature setting spindle, lower temperatures can be obtained by turning the spindle clockwise (from warm towards cold position). Both cut-out and cut-in temperatures can be changed by turning the spindle, except on types 077B6, 077B62 and 077B63 in which only the cut-out temperature can be changed in this way.

The thermostats can be supplied with or without stop. The stop function cuts out the compressor current circuit.