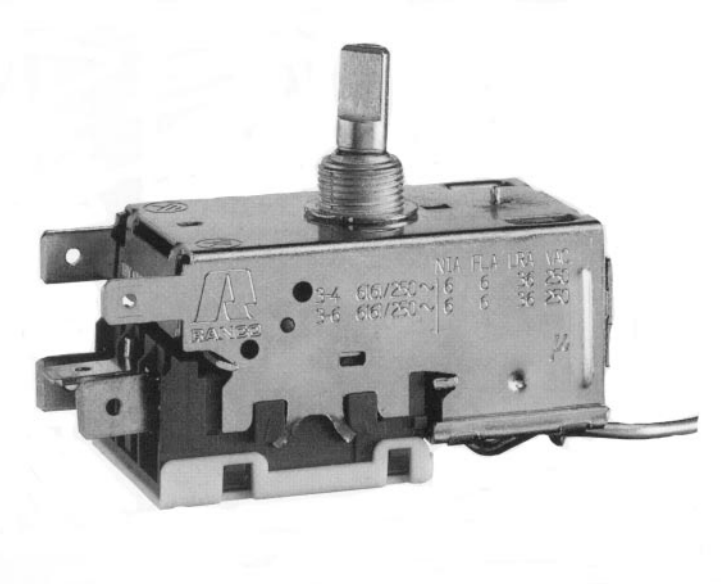


A RANCO

K59 Thermostats



Temperature control with SPST switch and auxiliary switch for OFF position. Automatic defrost function by constant cut-in value



Terminal 3-4 closes at temperature rise
Terminal 3-6 opens in OFF position (version C without auxiliary terminal 6)

Closing with rising temperature and auxiliary switch (terminal 3-6) connected in series with the main switch breaks the current circuit as soon as the temperature control is set to OFF position. The main feature of the temperature control K59 is the cut-out point adjustable via the dial shaft and the cut-in point remaining constant in all positions. As this cut-in point normally is in the positive range, automatic defrosting is initiated during each compressor stop period.

In general type K59 is classified into 3 basic versions:

Version A: as described above

Version B: as described above, but with so-called bellows heater. This is a metal film resistor (82 kΩ) connected in parallel to the main switch, which when the main switch is open (compressor stop period), heats the control housing and bellows (diaphragm) of the capillary system. By this the X-ambient effect (crossing of ambient temperature) is avoided in the compressor stop period, i.e. defrost period of the evaporator. Heating of the bellows ensures that the defrost sensing point at the evaporator is the coldest point of the capillary system. Perfect function of the temperature control is guaranteed.

Version C: without bellows heater and without auxiliary switch for cut-out.

There is a possibility to choose between the type with and that without OFF position. OFF position here means manual opening of the main switch 3-4 within a dial angle of 45° and at the same time mechanical locking.

Rating at 250 V, 50 Hz

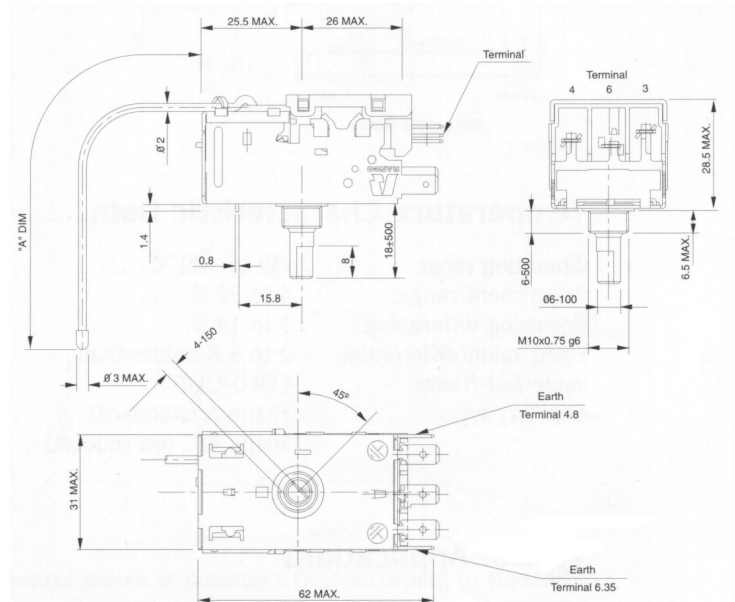
3-4: 6(6)A

3-6: 6(6)A

Dimensions/Connections

Control shown in position COLD according to standard type, other dial shaft positions on request.

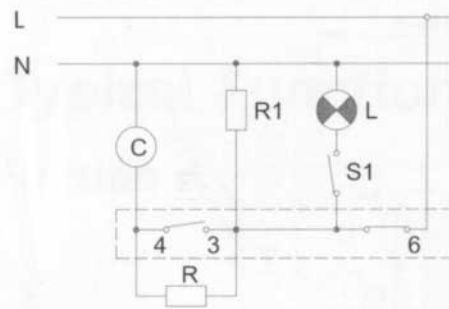
For the type equipped with terminals 6,35 mm the external terminals are turned by 90° with respect to the a.m. figure.



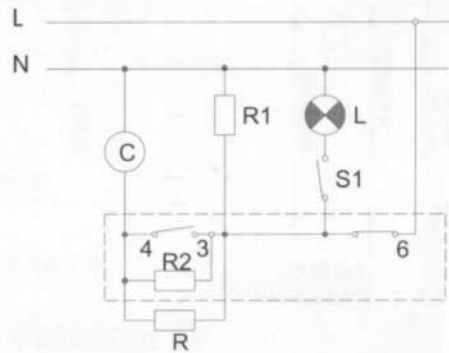
Typical Electrical Wiring Diagram

- 3-4 = main switch closes on temp rise
- 3-6 = aux switch opens in OFF position
- C = compressor
- L = lamp
- R = defrost heater
- R1 = collar heater
- R2 = heating resistor internal (82 k Ω)
- S1 = door switch

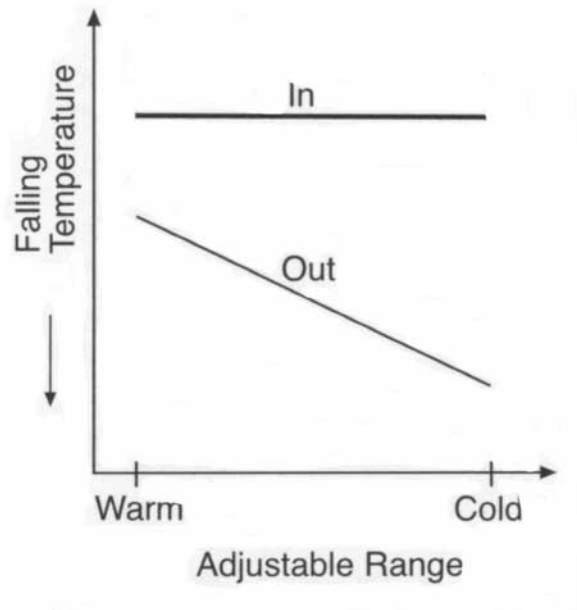
Version A



Version B



Typical Function Chart



Temperature Characteristic Data

- Operating range: -32 to 6 °C
- Adjustment range: 4 to 18 K
- Constant cut-in value: 2 to 8 K
- Capillary type: Shape A (standard)
Shape B/C (on request)

Typical Applications

Refrigerators

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