

C-RSV-47k / C-RSV-47k-A (Averaging) Indoor Temperature Sensor



Features :

- Blackbox control series compatible 47k sensors
- Slim profile wall mounted design
- Simple and secure installation
- Averaging version allowing two sensors per Blackbox controller

Applications :

- Indoor temperature measurement

Temperature Sensor

The sensor measures the temperature by use of a 47k NTC sensing element. The sensing element is either a glass packed thermistor with a negative temperature coefficient, a platinum film or a nickel thin layer based probe. Its resistance changes according to the temperature. The change follows a specified curve as shown in the resistance table.

Ordering

Item name	Description	Probe Type	Application
C-RSV-47k	Room Sensor 47k	NTC 47kΩ at 25°C	Wall mounted
C-RSV-47k-A	Room Sensor 47k Averaging	NTC 47kΩ at 25°C	Wall mounted

Installation:

Mount the unit on a flat internal wall of the room to be controlled. Avoid obstructions such as shelves, curtains and recesses. Do not place near heat sources, draft channels or external walls. Do not expose to direct sunlight. The sensor wall plate should be sealed to prevent false measurements due to draughts through the wall cavity.

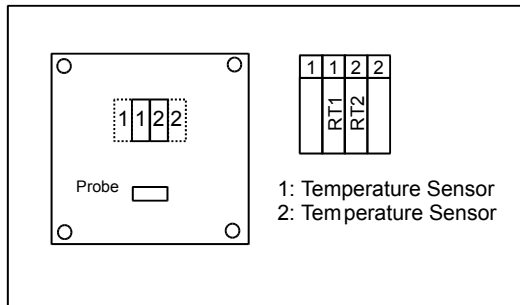
Installation procedure:

- o Disassemble base plate from unit by loosening mounting screw.
- o Install the base plate on the interior wall
- o Pull the conductors through the central opening of mounting plate
- o Connect the wires according to the wiring diagram to the measuring circuit in the cover:
- o Apply wall / plate foil tape provided to seal cable penetration hole in wall.
- o Assemble the cover with the base plate and tighten mounting screw.

Technical Specification

Sensing Probe	Thermistor:	47k @ 25deg NTC
Connection	Terminal Connectors	2 wire 0.34...2.5 mm ² (AWG 24...12)
Housing Material	Cover	Fire proof ABS plastic
	Mounting Plate	Galvanised Steel
	Dimensions (H x W x D)	21 x 88 x 88 mm (0.8 x 3.5 x 3.5 in)
	Weight (including package)	150 g (5.3 oz)

Terminal Connections



Resistance Table 19.5 – 31.05 deg c

60428.57	19.5
59477.88	19.84
58543.86	20.18
57626.09	20.52
56724.14	20.87
55837.61	21.21
54966.10	21.55
54109.24	21.9
53266.67	22.24
52438.02	22.58
51622.95	22.93
50821.14	23.27
50032.26	23.61
49256.00	23.96
48492.06	24.31
47740.16	24.65
47000.00	25
46271.32	25.35
45553.85	25.7
44847.33	26.05
44151.52	26.4
43466.17	26.75
42791.04	27.1
42125.93	27.45
41470.59	27.81
40824.82	28.16
40188.41	28.52
39561.15	28.88
38942.86	29.23
38333.33	29.59
37732.39	29.95
37139.86	30.32
36555.56	30.68
35979.31	31.05

Dimension [mm]

