

TAE-DI4 Electronic Room Thermostats with Display

The TAE DI4 -C (Fig. 1) is a room electronic thermostat suitable for a reliable and accurate temperature regulation in commercial and industrial premises as well as for home installation. The digital display gives the readout of the room temperature, thus allowing an accurate regulation of the temperature in the environment to be controlled. The manual selector (a) selects the heating or cooling mode, according to the type of the plant wired to the thermostat.

Features

- 230V~ (TAE-DI4-MC) or 24V~/= (TAE-DI4-2C) power supply
- Knob limitation feature through mechanical pins
- Room temperature display
- Heating / Cooling switch
- Fixing with distance between holes 60mm
- Compliant with directives EEC 89/336, 73/23 and 93/68 CE



Model Types	Model	Description	
	TAE-DI4-MC	Electronic Room Thermostat with Display	
	TAE-DI4-2C	Electronic Room Thermostat with Display (24Vac)	
Technical Data	Power supply	TAE-DI4-MC	230V~ -15% +10% 50Hz
		TAE-DI4-2C	24V~/= -15% +10% 50Hz
	Power absorption	7VA	
	Regulation range	6°C...30°C	
	Sensor type	PTC 2k ohm @ 25°C internal	
	Remote sensor (optional)	Cod. STL PTS A150	
	Accuracy	Thermostat	±1°C
		Display	±1°C (0°C...30°C range)
	Resolution	Knob	1°C
		Display	0.1°C
	Hysteresis	0,5°C	
	Contact rating	5 (1) A @ 250V~ SPDT	
	Protection class	IP30	
	Operating temperature	0°C...40°C	
	Storage temperature	-10°C...+50°C	
	Humidity limits	20%...80% rH (non condensing)	
	Enclosure	Material: ABS V0 self-extinguishing	
		Colour: Signal white (RAL 9003)	
	Size	85W x 85H x 31D mm	
	Weight	~150 gr.	

OPERATION

If the device is in 'Heating' mode and the measured room temperature is below the value set with the knob the thermostat turns the relay on and, at the same time, turns the flame symbol on the display.

If instead the device is in 'Cooling' mode and the measured room temperature is upper the value set with the knob the thermostat turns the relay on and, at the same time, turns the fan symbol on the display.

SET-POINT KNOB

Through the set-point knob (b) the user can set the desired temperature.

INSTALLATION

For installation of TAE DI4 -C follow these steps:

1. Remove the knob by tilting it, eventually with the help of a screwdriver placed in the slot.
2. Remove plastic cover by moving to the inner side, through the use of a tool (Fig. 4), the two plastic teeth (f) located on the left side (Fig. 3) of the thermostat.
3. Fix the thermostat base plate to the wall through the two screw holes with distance between axes of 60mm.
4. Make electrical wirings according to the diagram of Fig. 5, 7 or 8. 5. Close the thermostat by carefully positioning the cover so that the slide switch matches the relevant hole and then by slightly pressing the cover in order to make the four plastic teeth snapping.

KNOB ROTATION LIMITATION

It is possible to limit the rotation range for the set-point knob by following these steps:

1. Remove the knob by tilting it, eventually with the help of a screwdriver placed in the slot.
2. Pick up the plastic pins (c) parked at one side of the knob area and set them (d) as in the example of Fig. 2. In this example the rotation range (e) is reduced as in the shown angle.

SELECTION REMOTE SENSOR

In order to connect to TAE DI4 -C a remote sensor (g) alternative to the internal one, follow diagram in Fig. 8 and remove the jumper on the thermostat board, which is located in the bottom right side of the thermostat, underneath the set-point knob (Fig. 6).

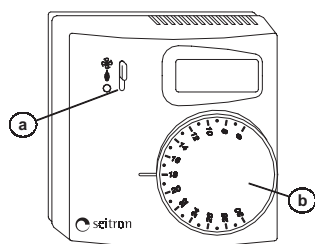


Fig. 1: TAE DI4-C External aspect

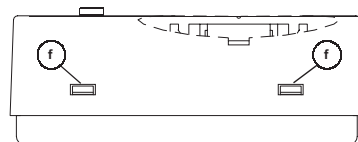


Fig. 3: Plastic teeth position

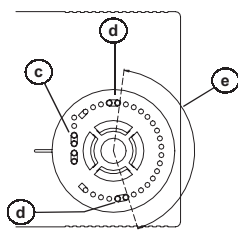


Fig. 2: Mechanical pins positioning.

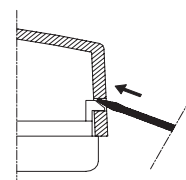


Fig. 4: Cover opening through screwdriver

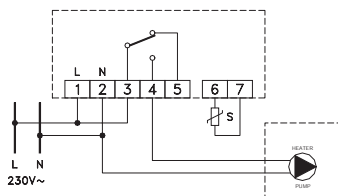


Fig. 7: TAE DI4-C electrical wiring example for cooling function with a heater

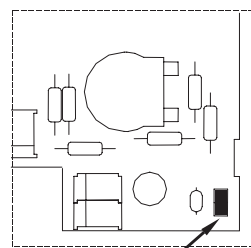


Fig. 6: Jumper position for internal/remote sensor.

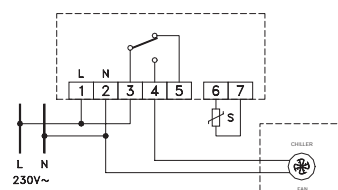


Fig. 7: TAE DI4-C electrical wiring example for cooling function with a chiller device.

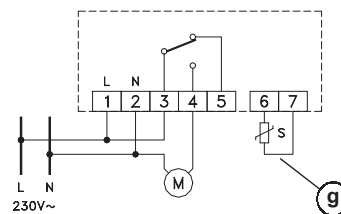


Fig. 8: TAE DI14-C Wiring Diagram

WARNING:

To adjust properly room temperature, install the thermostat far from heat sources, draughts or particularly cold walls (thermal bridges). When the remote sensor is used in conjunction with the thermostat, then this note is to be applied to the remote sensor itself.

For remote version all wirings must be made using wires with 1.5mm² minimum section and no longer than 25m. Do not use same duct for signal wires and mains.

The appliance must be wired to the electric mains through a switch capable of disconnecting all poles compliant to the current safety standards and with a contact separation of at least 3mm in all poles.

Installation and electrical wirings of this appliance must be made by qualified technicians and in compliance with the current standards.

Before wiring the appliance be sure to turn the mains power off.

Notes: In the view of a constant development of their products, the manufacturer reserves the right for changing technical data and features without prior notice. The consumer is guaranteed against any lack of conformity for 24 months from the time of delivery, according to the European Directive 1999/44/EC. The full text of guarantee is available on request from the seller.

