

TC300 Series Digital Fan Coil Thermostat



The TC300 features microprocessor-based control and a large backlit LCD screen. The LCD display modes include operation status (cooling, heating, and ventilation), fan speed, room temperature, and set-point.

Features

- Modern appearance
- Large, blue backlit, LCD screen
- Eco button for energy saving
- Button lockout function controls unauthorised operation
- Non-volatile memory (EEPROM) retains user settings during power loss
- Low temperature protection
- Standard 86 x 86 mm box for installation
- Alert function facilitates temperature sensor maintenance
- Optional Modbus communication
- Deluxe models include:
 - Sleep mode for energy savings
 - Occupancy/Card Key input
 - Real-time display
 - Optional remote temperature sensor

Product Description

The TC300 Series fan coil thermostats are optimised for office building, hotel and residential applications. The TC300 Series can be used for 2-pipe or 4-pipe applications. Their simple design makes them suitable for any contemporary building. They are both easy to operate and install.

Available Products

Part Number	Description	Application	Comm.	Real Time
TC303-3A2L	FCU Thermostat for 2-position on/off actuator (2-wire)	2-pipe	None	No
TC303-3A4L	FCU Thermostat for 2-position on/off actuator (2-wire)	4-pipe*	None	No
TC303-3A2LM	FCU Thermostat for 2-position on/off actuator (2-wire)	2-pipe	Modbus	No
TC303-3A4LM	FCU Thermostat for 2-position on/off actuator (2-wire)	4-pipe*	Modbus	No
TC303-3A2DLS	Deluxe FCU Thermostat for 2-position on/off actuator (2-wire)	2-pipe	None	Yes
TC303-3A4DLS	Deluxe FCU Thermostat for 2-position on/off actuator (2-wire)	4-pipe*	None	Yes
TC303-3A2DLMS	Deluxe FCU Thermostat for 2-position on/off actuator (2-wire)	2-pipe	Modbus	Yes
TC303-3A4DLMS	Deluxe FCU Thermostat for 2-position on/off actuator (2-wire)	4-pipe*	Modbus	Yes
IR-300	TC3xx IR Remote Control**			
RS-03	10 kΩ NTC Remote Sensor - 3 m (10 pcs)**			

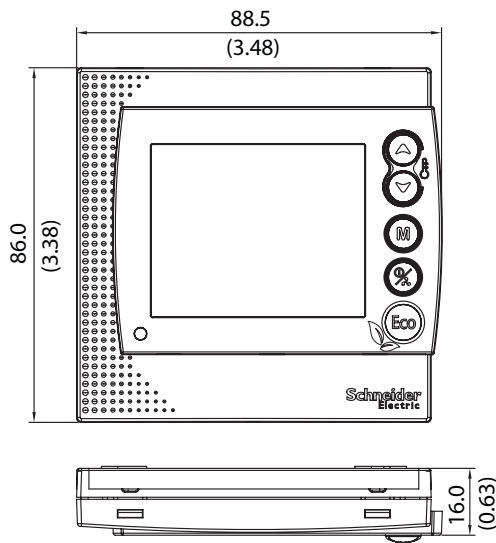
* Can be changed from 4-pipe system with 2-wire motorised valve, to 2-pipe system with 3-wire motorised valve.

** For use with deluxe models only.

Specifications

Sensing element	10 kΩ NTC (3950)
Accuracy	±1 °C
Set-point range	5 ... 35 °C
Display range	0 ... 50 °C (shown in 0.5 °C increments)
Operating temperature	0 ... 45 °C
Operating humidity	5 ... 95 %RH (non-condensing)
Power requirement	< 1 W
Power supply	85 ... 260 Vac, 50/60 Hz
Terminals	Can be connected to 2 x 1.5 mm ² or 1 x 2.5 mm ² conductors
Switch current rating	5 A resistive, 3 A inductive @ 230 Vac
Switch power rating	Max. inrush 1385 VA / 150 W
Protection class	IP30
Housing	Flame-retardant PC
Dimensions	88.5 x 86 x 16 mm (3.48" x 3.38" x 0.63")
Hole pitch	60 mm (standard)

Dimensions mm (in.)



Functions

Set-point Adjustment – The set-point buttons allows users to adjust the set-point (in 0.5 °C increments) for the space.

Fan Speed – Users can select fan speed (High, Medium, Low and Automatic) by pressing the Power/Fan button.

Mode Control – Users can switch operating modes (Heating, Cooling, or Ventilation) by pressing the Mode button.

Eco Saving Mode – Pressing the Eco button starts the energy savings mode. In cooling mode, the set-point is automatically adjusted to 26 °C and the fan speed is set to Low. In heating mode, the set-point is automatically adjusted to 18 °C and the fan speed is set to Low. The user can exit the energy saving by pressing the Eco button.

Button Lockout Function – Allows the buttons to be deactivated to prevent thermostat operation by others.

Low Temperature Protection – If the room temperature drops below 5 °C, the thermostat will start automatically and the fan speed will be set to High. Once the temperature reaches 7 °C, the thermostat will switch off the output.

Alert – In the event of an operating exception, the thermostat will attempt to command the valve to close and place the device in an inoperative state. The display will indicate the current status with one of four diagnostic messages.

Accessories

Remote Control

The IR-300 remote controller is suitable for TC300 series thermostats (deluxe models only). Control operations include: Temperature Set-point Adjustment, Fan Speed Selection, Mode of Operation, ON/OFF, etc. Requires two AAA batteries (not supplied).



Remote Sensor

The RS-03 remote sensor can be used in place of the existing built-in temperature sensor of the TC300 series thermostats (deluxe models only). It has the same 10 kΩ NTC (3950) element encapsulated in a plastic bulb housing that measures approximately Ø6 x 25 mm and is supplied with 3 m cable (2-wire), finished in all white. The RS-03 sensors are only available in multi-packs of 10 pieces.

