



Carrier

TS2 Series Thermostats

For use with fan coil units (FCU) in international markets



Carrier's TS2 Series communicating and non-communicating thermostats provide the flexibility to manage indoor climates in office buildings, hotels, and dorm rooms. The TS2 thermostats feature an intuitive touch key interface, designed to measure space temperature and precisely manage fan speed and operation modes. Available in configurations that support diverse application needs, equipment requirements, and ventilation strategies, they deliver reliable performance in both single-zone and multi-zone buildings.

Features/Benefits

- Reduced Energy Costs with 7-day Scheduling:** Optimizes energy consumption with 4-period, 7-day scheduling, and an economy (ECO) mode, leveraging the keycard S1/S2 input to automatically adjust setpoints for energy efficiency based on room occupancy.
- Versatile Installation for Broad Application:** Supports 2-pipe or 4-pipe fan coil units that can operate as standalone solutions or integrate with building automation systems, including the i-Vu® BAS via the Modbus protocol.
- Maximize Design Flexibility and System Integrity:** Enables customized solutions using the S1/S2 input terminals, to support an analog input (for remote temperature sensing) or a dry contact input (for a 3rd party keycard or interlocks).
- Enhanced Comfort and Intelligent Control:** Provides an intuitive touch key interface with built in temperature sensor for effortless command of temperature, fan speed, and heating/cooling/ventilation modes, with versatile 0-10V modulating valve and fan control.
- Enhanced Reliability and Reduced Service Calls:** Settings are battery backed and retained after power outages. Built-in diagnostics provide clear alarm/fault codes in case of sensor malfunction.
- Improved Security and Policy Compliance:** Prevents unauthorized access and tampering with button and menu lockout options.



TS2 Series Thermostats



Part Numbers and Features

Part Number	FCU Type	Fan Type	Valve Type	Protocol	Color
33TS2-2-P-XW	2 pipe	Permanent Split Capacitor (PSC) fan	0-10V	Standalone	White
33TS2-4-P-XW	4 pipe	PSC fan	0-10V	Standalone	White
33TS2-2-P-MW	2 pipe	PSC fan	0-10V	Modbus	White
33TS2-4-P-MW	4 pipe	PSC fan	0-10V	Modbus	White
33TS2-2-E-MW	2 pipe	Electronically Commutated (EC) fan	ON/OFF	Modbus	White
33TS2-4-E-MW	4 pipe	EC fan	ON/OFF	Modbus	White
33TS2-2-P-XB	2 pipe	PSC fan	0-10V	Standalone	Black
33TS2-4-P-XB	4 pipe	PSC fan	0-10V	Standalone	Black
33TS2-2-P-MB	2 pipe	PSC fan	0-10V	Modbus	Black
33TS2-4-P-MB	4 pipe	PSC fan	0-10V	Modbus	Black
33TS2-2-E-MB	2 pipe	EC fan	ON/OFF	Modbus	Black
33TS2-4-E-MB	4 pipe	EC fan	ON/OFF	Modbus	Black

Specifications

Product Type	FCU Thermostat
Application Options	2-pipe FCU or 4-pipe FCU, PSC, or ECM fan motor, 0-10V or ON/OFF valve control
Communication	Stand-alone and Modbus RTU (EIA-485 A, B wiring terminals), with baud rates up to 38,400 kbps Recommended Max. of 25 devices
Power Requirements	Supply: AC 90–240VAC (L,N), 50/60Hz Max. Load Current: < 2 A (Resistive), < 1 A (Inductive) Consumption: < 2W
Wiring Termination	One 2.5 mm ² or two 1.5 mm ² wires
Display	Backlit LCD with Metric Units (°C)
Input	S1-S2: AI - Remote Temperature Sensor (low voltage) DI – Keycard Accessory (Dry Contact Input)
Outputs	L, M, H, AO, G (2-Pipe, PSC/AC Fan) L, M, H, AO1, AO2, G (4-Pipe, PSC/AC Fan) AO, G, VO, VC (2-Pipe, ECM Fan) AO, G, VO1, VC1, VO2, VC2 (4-Pipe, ECM Fan) Minimum Load = 0.5 ohms Maximum Load = <2A (resistive), <1A (inductive) Supports line voltage (90-240VAC) for fan speed and valve control.
Environmental Operating Range	0°C to 45°C, Humidity: 5–95% RH (non-condensing)
Compliance	CE
Enclosure	PC+ABS anti-flaming, IP30 rated, 86(H) x 86(W) x 11.5(D) mm
Scheduling	7-day/5+2, 4 periods per day
Temperature Sensor	Accuracy: ±1°C Range: 0°C to 55°C
Display Resolution	±0.5°C
Setpoint Range	2°C–90°C
Mounting	Standard 60 mm wall box mounting

Dimensions in mm (in)

