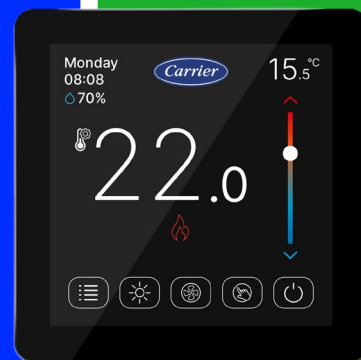




TS3 Series Thermostats

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



Carrier's TS3 Series thermostats provide flexible temperature control for office buildings, hotels, and dorm rooms. They feature an intuitive color touchscreen interface for controlling space temperature, fan speed, and operating mode. With support for BACnet MS/TP and Modbus RTU protocols, they integrate easily into building automation systems (BAS), including the i-Vu® system. Available in multiple configurations to support specific fan coil equipment requirements and ventilation strategies, they can be used in both single-zone and multi-zone buildings.



Features/Benefits

- **Energy Management with 7-day Scheduling:** Supports multi-period, 7-day scheduling, leveraging the keycard AI/DI input to automatically adjust setpoints for energy efficiency based on room occupancy.
- **Versatile Installation for Broad Application:** Supports 2-pipe and 4-pipe fan coil units, 3-speed Permanent Split Capacitor (PSC) or 0-10V Electronically Commutated Motor (ECM) fan control, and 0-10V or ON/OFF valve control. Can operate stand-alone or as part of a BAS using the BACnet MS/TP or Modbus RTU protocol.
- **Security and Policy Compliance:** Designed to prevent unauthorized access and tampering via password protection.
- **Comfort Management & Intelligent Control:** Features integrated temperature sensor and an intuitive push button interface for controlling space temperature, fan speed, and heating/cooling/ventilation modes.
- **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 remote sensor malfunction.
- **Design Flexibility and System Integrity:** Enables customized solutions using the AI/DI input terminals to support an analog input (for remote temperature sensing) or a dry contact input (for a third party keycard or interlocks).

TS3 Series Thermostats



Part Numbers and Features

Part Number	FCU Type	Fan Type	Valve Type	Protocol	Color
TS3-2-P-XW	2-pipe	Permanent Split Capacitor (PSC) Fan	ON/OFF or 0-10V	Standalone	White
TS3-4-P-XW	4-pipe	PSC fan	ON/OFF or 0-10V	Standalone	White
TS3-2-E-XW	2-pipe	Electronically Commutated (EC) Fan	ON/OFF or 0-10V	Standalone	White
TS3-4-E-XW	4-pipe	EC fan	ON/OFF or 0-10V	Standalone	White
TS3-2-P-MW	2-pipe	PSC fan	ON/OFF or 0-10V	Modbus	White
TS3-4-P-MW	4-pipe	PSC fan	ON/OFF or 0-10V	Modbus	White
TS3-2-E-MW	2-pipe	EC fan	ON/OFF or 0-10V	Modbus	White
TS3-4-E-MW	4-pipe	EC fan	ON/OFF or 0-10V	Modbus	White
TS3-2-P-BW	2-pipe	PSC fan	ON/OFF or 0-10V	BACnet	White
TS3-4-P-BW	4-pipe	PSC fan	ON/OFF or 0-10V	BACnet	White
TS3-2-E-BW	2-pipe	EC fan	ON/OFF or 0-10V	BACnet	White
TS3-4-E-BW	4-pipe	EC fan	ON/OFF or 0-10V	BACnet	White
TS3-2-P-XB	2-pipe	PSC fan	ON/OFF or 0-10V	Standalone	Black
TS3-4-P-XB	4-pipe	PSC fan	ON/OFF or 0-10V	Standalone	Black
TS3-2-E-XB	2-pipe	EC fan	ON/OFF or 0-10V	Standalone	Black
TS3-4-E-XB	4-pipe	EC fan	ON/OFF or 0-10V	Standalone	Black
TS3-2-P-MB	2-pipe	PSC fan	ON/OFF or 0-10V	Modbus	Black
TS3-4-P-MB	4-pipe	PSC fan	ON/OFF or 0-10V	Modbus	Black
TS3-2-E-MB	2-pipe	EC fan	ON/OFF or 0-10V	Modbus	Black
TS3-4-E-MB	4-pipe	EC fan	ON/OFF or 0-10V	Modbus	Black
TS3-2-P-BB	2-pipe	PSC fan	ON/OFF or 0-10V	BACnet	Black
TS3-4-P-BB	4-pipe	PSC fan	ON/OFF or 0-10V	BACnet	Black
TS3-2-E-BB	2-pipe	EC fan	ON/OFF or 0-10V	BACnet	Black
TS3-4-E-BB	4-pipe	EC fan	ON/OFF or 0-10V	BACnet	Black

TS3 Series Thermostats



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	Standalone, Modbus RTU, or BACnet MS/TP (EIA-485 A, B wiring terminals), with baud rates up to 115,200 bps Recommended Max. of 32 devices
Power Requirements	Supply: AC 90–240VAC (L,N), 50/60Hz Max. Load Current: < 5 A (Resistive) , < 2 A (Inductive) Consumption: < 1W
Wiring Termination	One 2.5 mm ² or two 1.5 mm ² wires
Display	TFT Color Touchscreen with Metric Units (°C)
Input	AI- Remote Temperature Sensor (low voltage) DI- Keycard Accessory (Dry Contact Input)
Outputs	L, M, H, Valve, 0-10V (2-Pipe, PSC/AC Fan) L, M, H, C-Valve, H-Valve, 0-10V, 0-10V (4-Pipe, PSC/AC Fan) 0-10V (EC Fan), Valve, 0-10V (2-Pipe, ECM Fan) 0-10V (EC Fan), C-Valve, H-Valve, 0-10V, 0-10V (4-Pipe, ECM Fan) Minimum Load = 0.5 ohms Maximum Load = <5A (resistive), <2A (inductive) Supports line voltage (90-240VAC) for fan speed and valve control.
Environmental Operating Range	0°C to 50°C, Humidity: 5–85% RH (non-condensing)
Compliance	CE mark, LVD 2014/35/EU, EMC 2014/30/EU, RoHS 2011/65/EU, REACH #1907/2006
Enclosure	PC+ABS UL94-5 Fire Retardant, IP30 rated, 88(H) × 88(W) × 15.8(D) mm
Scheduling	7-day/multiple periods per day
Temperature Sensor	Accuracy: ±1°C Range: 5°C to 35°C
Humidity Sensor	Accuracy: ±5% Range: 0 - 100%
Display Resolution	±0.5°C
Setpoint Range	5°C–35°C
Mounting	Standard 60 mm wall box mounting

Dimensions - mm (in)

