T8000

Touch Screen Thermostat

Product Bulletin

T8000 Touch Screen Thermostats are designed to control heating and cooling through air conditioning unit in Commercial, Industrial and Residential Installation.

Typical applications include the control of fan coil units, packaged terminal air conditioners and combination of heating and cooling equipment. As part of the system, T8000 controls a two-way or three-way valve and a multi-speed line voltage fan.

T8000 features with large LCD screen display and displays the status of work mode (cooling, heating, air venting), fan speed, indoor temperature and set temperature etc.

Capacitance touch screen enhances the fluency on operation. Keypad includes: Power on/off 1 Mode selection M, Fan Speed Selection 8, Clock/Timer 2 and two Adjustment buttons 2 & 3



Touch screen

Capacitance touch screen enhances the fluency on operation

■ Backlit Liquid Crystal Display (LCD)

 Offer Easy-to-Read Real-time control status of the environment, graphical messages with constant backlight that brightens during user interaction

6 Function Keys

- All-in-One location function keys, simplified user to change the setpoint and parameter
- Molded Industrial Standard Graphical Symbol

Appearance

- Attractively-Style Twin-Ring Streamline ABS Plastic Cover and Base
- All-in-One Enclosure Design without Protrusion of Power Circuit

■ Energy Saving

- Features with Unoccupied Function
- Requires no batteries; EEPROM retains the last events and parameter settings after a loss of power

■ Installation, Service and Maintenance

Quick Replacement to reduce to Downtime of Service Maintenance



Function

Item	Description	T8200- TBE0-9JR0	T8200- TBE0-9JS0	T8200- TFE0-9JR0	T8200- TFE0-9JS0
Application	2-pipe heating or cooling	•	•		
	4-pipe heating and cooling				•
User-interface	Touch Screen				
	Backlight	•	•	•	•
	EN/Icon				
	°C / °F Changeable	•	•	•	•
Energy Saving	Venitlation Mode				
	Setpoint Limit				•
	Occupied contact with NO/NC options				
	Unoccupied setpoints				•
	Low fan in unoccupancy				
	Auto Changeover				•
Other Functions	Timer On/Off				
	Display setpoint only				•
	Anti-freezing				
	Key Lock				•
	Display temperature calibration				
	Remote temperature sensor				
	Restart after power failure				
	Timer Function	•	•	•	•
Certificate	CE	•	•	•	•



Product Overview

T8000 touch screen thermostat with 4-basic models cover all types of FCU standalone applications. There are models for 2-pipe cooling or heating, 4-pipe cooling and heating designed to work with ON/OFF Value actuators. On-board high accuracy NTC sensor allows precision comfort control over occupied space area.

The T8000 thermostats come with 12-hours timer that allows user to schedule On-Time or Off-Time for the fan coil depending on user needs.

88 x 88mm size suitable for 75 x 75 x 35mm wall box installation.

Model T8200-TBE0-9JS0

The Model T8200-TBE0-9JS0 is line voltage, LCD display (with Backlit) fan coil unit thermostat that design for cooling or heating in a 2-pipe fan coil unit with ON/OFF valve actuator. Integrated with System On/Off button allows user to shutdown the T8000 and cutoff the output power for fan (cutoff the Output power for Valve Actuator). Simply pressing the fan speed button, allows user selection of Auto-High-Med-Low fan speed. All fan output by relay that can withstand max. of 5Amp (Res). operating current.

Additional Dry-contact for Occupancy mode that allows better comfort control and to achieve energy cost saving.

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With remote temperature sensor. While remote sensor is connected, the built-in sensor will be disable automatically.

Model T8200-TFE0-9JS0

The Model T8200-TFE0-9JS0 is line voltage, LCD display (with Backlit) fan coil unit thermostat that design for cooling or heating in a 4-pipe fan coil unit with ON/OFF valve actuator. Integrated with System On/Off button allows user to shutdown the T8000 and cutoff the output power for fan (cutoff the Output power for Valve Actuator). Simply pressing the fan speed button, allows user selection of Auto-High-Med-Low fan speed. All fan output by relay that can withstand max. of 5Amp (Res). operating current.

Additional Dry-contact for Occupancy mode that allows better comfort control and to achieve energy cost saving.

Model T8200-TFE0-9JR0

The Model T8200-TFE0-9JR0 is line voltage, LCD display (with Backlit) fan coil unit thermostat that design for cooling or heating in a 4-pipe fan coil unit with ON/OFF valve actuator. Integrated with System On/Off button allows user to shutdown the T8000 and cutoff the output power for fan (cutoff the Output power for Valve Actuator). Simply pressing the fan speed button, allows user selection of Auto-High-Med-Low fan speed. All fan output by relay that can withstand max. of 5Amp (Res). operating current.

With remote temperature sensor. While remote sensor is connected, the built-in sensor will be disable automatically.



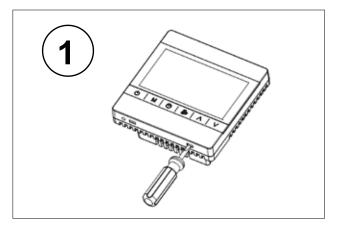
Repair and Replacement

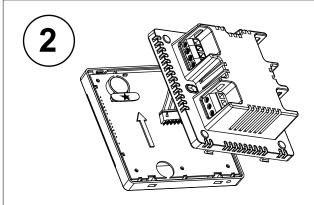
If the thermostat fails to operate within its specifications, replace the unit. To order the replacement, refer to the Order Information section.

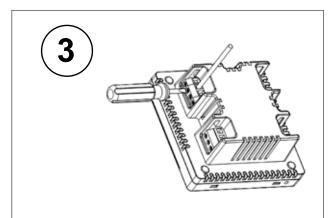
To order the replacement T8000 Series thermostat, contact the nearest Johnson Controls® representative. Specify the desired product code number from "Ordering Codes" Table.

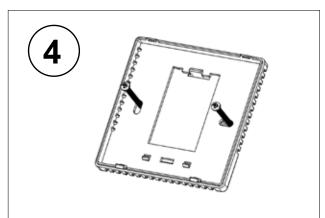
Installation

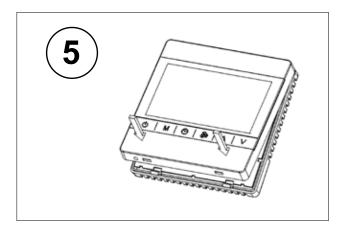
T8000 thermostats are suitable for 75 x 75 x 35 mm wall box installation.





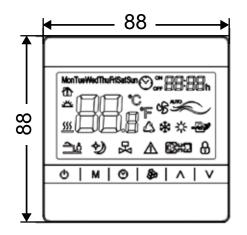


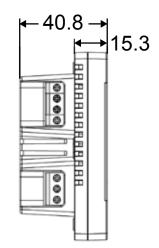


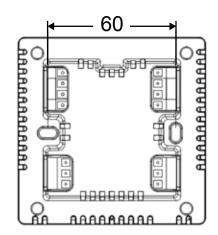




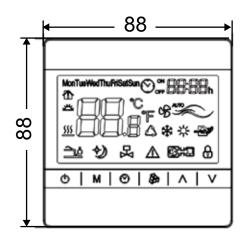
Dimensions

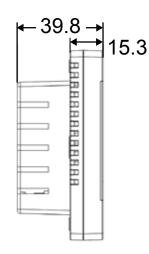


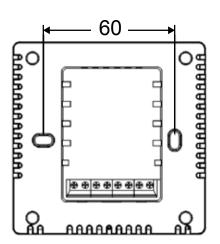




T8200-TFE0-9JR0 / T8200-TFE0-9JS0



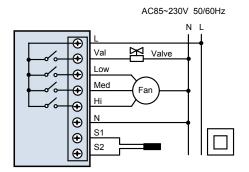




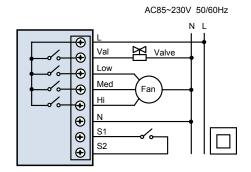
T8200-TBE0-9JR0 / T8200-TBE0-9JS0



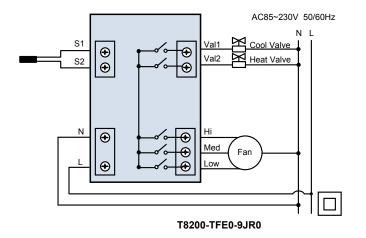
Wirings

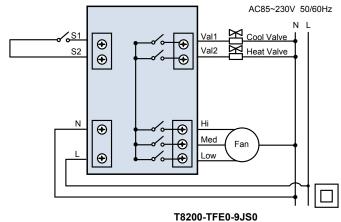


T8200-TBE0-9JR0



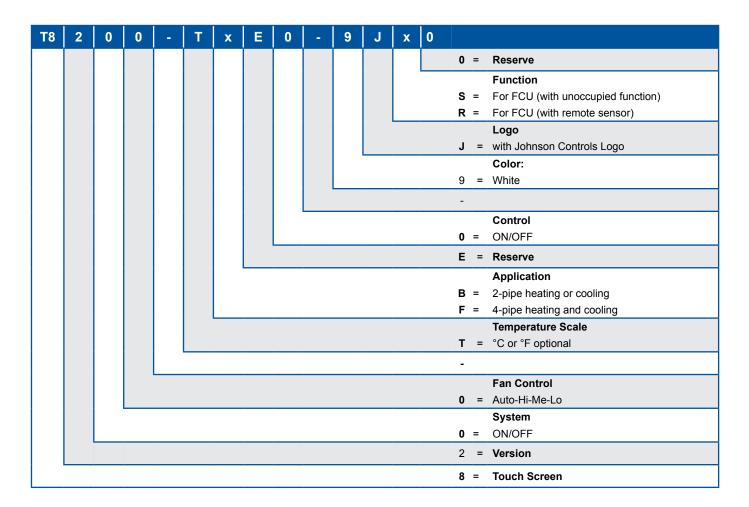
T8200-TBE0-9JS0







Ordering Codes







IMPORTANT:

The power supply to the thermostat must include overload protection. Failure to include overload protection may result in damage to the thermostat.

Technical Specifications

Actuator Models	T8200-TBE0-9JR0 2-pipe Cooling / Heating FCU Thermostat with Remote Sensor	T8200-TBE0-9JS0 2-pipe Cooling / Heating FCU Thermostat and Occupancy contact	T8200-TFE0-9JR0 4-pipe Cooling and Heating FCU Thermostat with Remote Sensor	T8200-TFE0-9JS0 4-pipe Cooling and Heating FCU Thermostat and Occupancy contact		
Power Requirements	AC85-230V, 50/60 Hz					
Accuracy	±1 °C					
Display Range	0 to 55 °C					
Setpoint Range	5 to 35 °C					
Unoccupied Mode		External Voltage-Free Contact Input Signal		External Voltage-Free Contact Input Signal		
Remote Sensor	NTC 10K, 1.5 m, Max. 20m (0.7 -1.0 mm²)		NTC 10K, 1.5 m, Max. 20m (0.7 -1.0 mm²)			
Termination	Screw terminals					
Valve Control	1 x Single-Pole, Single Throw (SPST), 5A (Max.); Relay Output	1 x Single-Pole, Single Throw (SPST), 5A (Max.); Relay Output	2 x Single-Pole, Single Thow (SPST), 5A (Max.); Relay Output	2 x Single-Pole, Single Throw (SPST), 5A (Max.); Relay Output		
Fan Control	3 x Single-Pole, Single Throw (SPST), 5A (Res.) at 250 VAC (Max.); Relay Output for Hi-Med-Low Fan					
Ambient Operating Conditions	0 to 45 °C 90% Non-condensing RH					
Ambient Storage Conditions	-10 to 60 °C 90% Non-condensing RH					
Housing Material	PC: UL 94-V0					
Protection Class	IP20					
Dimensions in mm	88 x 88 mm					
Shipping Weight	approximately: 214 g					
Compliance	Johnson Controls, Inc., declares that this product is in compliance with the essential requirements and other relevant provisions of the EMC Directive 2004/108/EC and Low Voltage Directive 2006/95/EC.					

^{*} When connected, the On/Off switch does not disconnect power to the unit; it only turns off or on the LCD and functions.

