

T5000

# T5000 LCD Digital Fan Coil Thermostat--More Models



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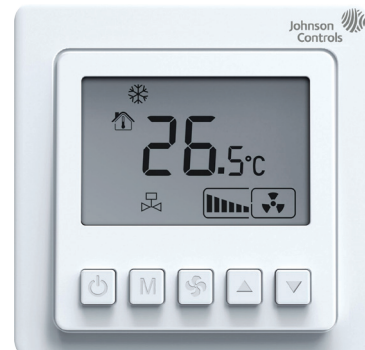
We care about your business and understand that each business has its unique requirements. Our all-encompassing maintenance package is tailor-made to fit your every financial and technical need. It covers from planned routine equipment inspections and predictive maintenance routines to system performance checks and annual shutdowns.



# T5000 LCD Digital Fan Coil Thermostat

T5000 LCD Digital Fan Coil Thermostats are designed to control heating, cooling, or year round air conditioning unit in Commercial, Industrial and Residential Installation. Typical Application includes the control of fan coil units, packaged terminal air conditioners and combination heating and cooling equipment. As part of the system that consists of a two-way or three-way valve and a multi-speed line voltage fan.

These aesthetic design thermostat features with Backlit Liquid Crystal Display (LCD); an attractive white color in a compact size complements any decor. The thermostat does not require any battery backup as setpoint and other parameters are stored in non-volatile memory. The intuitive operation makes the thermostat very user-friendly.



T5000 LCD Digital Fan Coil Thermostat

## Features and Benefits

Backlit Liquid Crystal Display (LCD)	<ul style="list-style-type: none"> <li>Industrial Standard Graphical Symbol to eliminate native language interface</li> <li>Offer Easy-to-Read Real-time control status of the environment, Graphical messages with constant backlight that brightens during user interaction</li> </ul>
5 Function Key	<ul style="list-style-type: none"> <li>Easy-to-Use Interface Keys allow for easy commissioning and adjustment</li> <li>All-in-One location function keys, Simplified user to change the setpoint and parameter</li> <li>Molded Industrial Standard Graphical Symbol</li> </ul>
Appearance	<ul style="list-style-type: none"> <li>Attractively-Style Twin-Ring Streamline ABS Plastic Cover and Base</li> <li>All-in-One Enclosure Design without Protrusion of Power Circuit</li> </ul>
Energy Saving	<ul style="list-style-type: none"> <li>Features with Unoccupied Function</li> <li>Requires no batteries; EEPROM retains the last events and parameter settings after a loss of power</li> </ul>
Installation, Service and Maintenance	<ul style="list-style-type: none"> <li>Universal Mounting with Standard Wall Box</li> <li>Quick Replacement to reduce to Downtime of Service Maintenance</li> </ul>

## Function

Item	Description	T5200-TC-9JS0	T5200-TB-9JS0	T5200-TB-9JR0	T5200-TF-9JS0	T5200-TF-9JR0
User-interface	Backlight (Blue)	■	■	■	■	■
	EN/Icon	■	■	■	■	■
	°C & °F Changeable	■	■	■	■	■
Energy Saving	Ventilation Mode	■	■	■	■	■
	Setpoint Limit	■	■	■	■	■
	Occupied contact with NO/NC options		■			
	Unoccupied setpoints		■			
	Low fan in unoccupancy		■			
Other Functions	Timer on/off	■	■	■	■	■
	Display setpoint only	■	■	■	■	■
	Anti-freezing	■	■	■	■	■
	Key Lock	■	■	■	■	■
	Display temperature calibration	■	■	■	■	■
	Remote temperature sensor			■		■
	Restart function after power failure	■	■	■	■	■

# Product Overview

T5000 are line voltage LCD display fan coil thermostat with 3-basic models that cover all type of FCU standalone applications. There are model for cooling only, heating only and heating-cooling fan coil system integrate with 2-Wire or 3-Wire Valve Control. On-board high accuracy NTC sensor allows precision comfort control over occupied space area.

88 x 88mm size allows for 75 x 75 x 35mm standard wall box installation.

## Model T5200-TC-9JSO

The Model T5200-TC-9JSO is line voltage LCD display (with Backlit) fan coil unit thermostat that design for cooling only fan coil unit with 2-wire or 3-wire valve actuator application. Integral with System On/Off button that allows user to shutdown the T5000 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.

The T5000 thermostats come with 12-hours timer that allows user to schedule On-Time or Off-Time for the fan coil depending user needs.

## Model T5200-TB-9JSO

The Model T5200-TB-9JSO is line voltage LCD display (with Backlit) fan coil unit thermostat that design for cooling or heating fan coil unit with 2-wire valve actuator application. Integral with System On/Off button that allows user to shutdown the T5000 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.

The T5000 thermostats come with 12-hours timer that allows user to schedule On-Time or Off-Time for the fan coil depending user needs.

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

## Model T5200-TB-9JRO

The Model T5200-TB-9JRO is line voltage LCD display (with Backlit) fan coil unit thermostat that design for cooling or heating fan coil unit with 2-wire valve actuator application. Integral with System On/Off button that allows user to shutdown the T5000 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.

The T5000 thermostats come with 12 -hours timer that allows user to schedule On-Time or Off-Time for the fan coil depending user needs.

## Model T5200-TF-9JSO

The Model T5200-TF-9JSO is line voltage LCD display (with Backlit) fan coil unit thermostat that design for cooling and heating fan coil unit (4-Pipe system) with 2-wire valve actuator application. Integral with System On/Off button that allows user to shutdown the T5000 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.

The T5000 thermostats come with 12-hours timer that allows user to schedule On-Time or Off-Time for the fan coil depending user needs.

## Model T5200-TF-9JRO

The Model T5000-TF-9JRO is line voltage LCD display (with Backlit) fan coil unit thermostat that design for cooling and heating fan coil unit (4-Pipe system) with 2-wire valve actuator application. Integral with System On/Off button that allows user to shutdown the T5000 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.

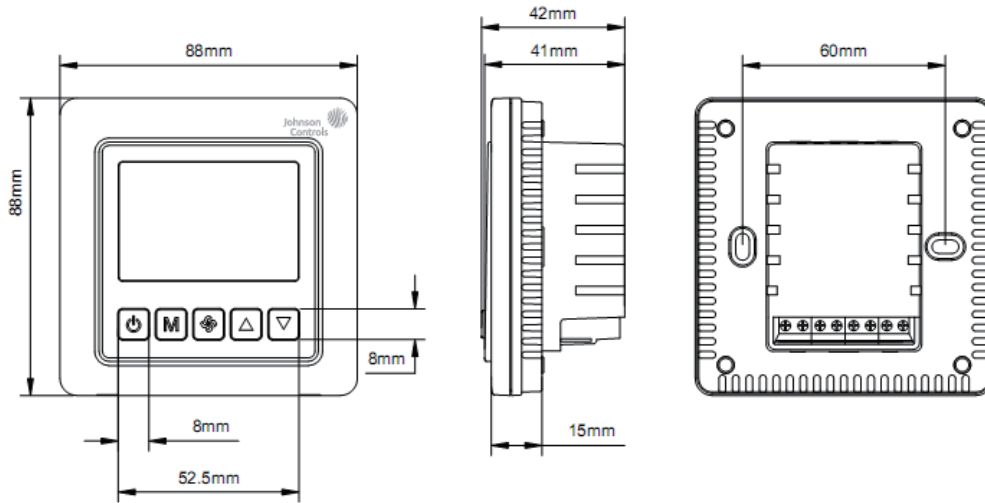
With remote temperature sensor. While remote sensor is connected, the built-in sensor will be disable automatically.

The T5000 thermostats come with 12-hours timer that allows user to schedule On-Time or Off-Time for the fan coil depending user needs.

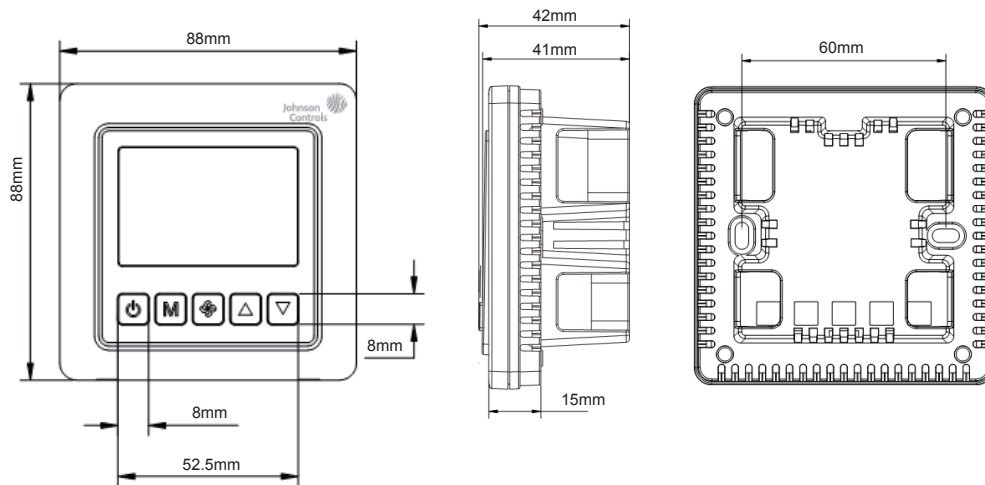
### IMPORTANT:

Use this T5000 Series Line Voltage Fan Coil Thermostat only as an operating control. Where failure or malfunction of the T5000 Series Thermostat could lead to personal injury or property damage to the controlled equipment or other property, additional precautions must be designed into the system. Incorporate and maintain other devices such as supervisory or alarm systems or safety or limit controls intended to warn of, or protect against, failure or malfunction of the T5000 Series Thermostat.

# Dimensions



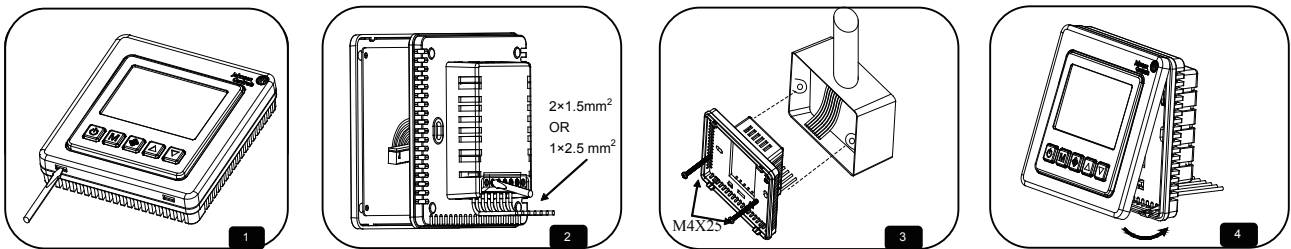
T5200-TC/TB/TF-9JS0、T5200-TB-9JR0 Series Thermostat Dimensions in (mm)



T5200-TF-9JR0 Series Thermostat Dimensions in (mm)

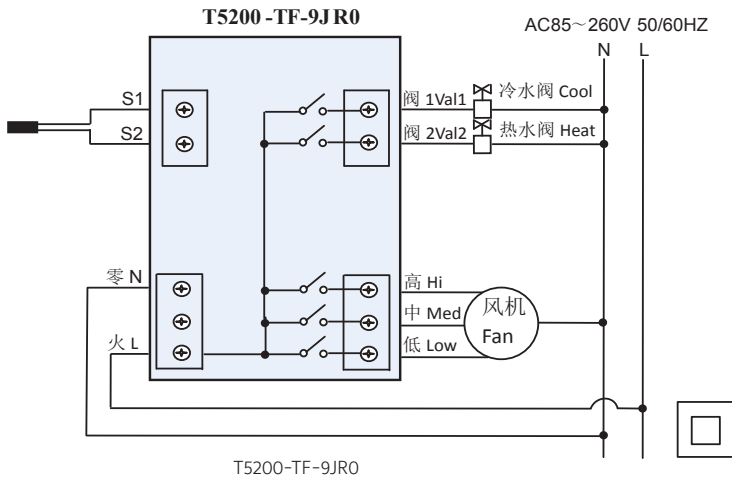
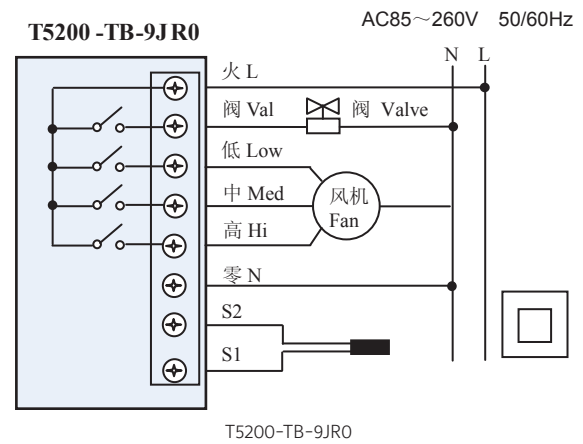
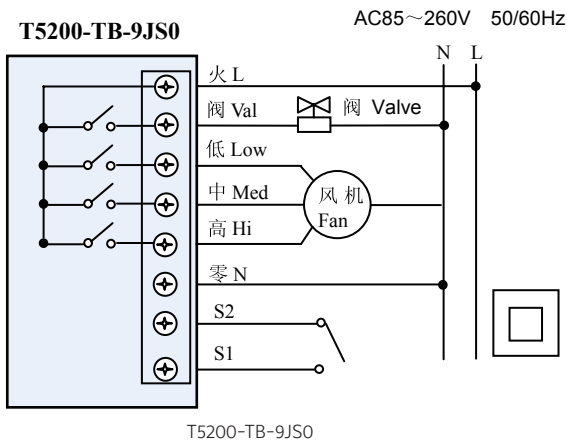
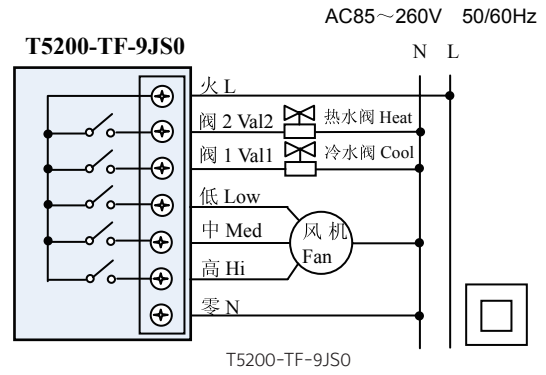
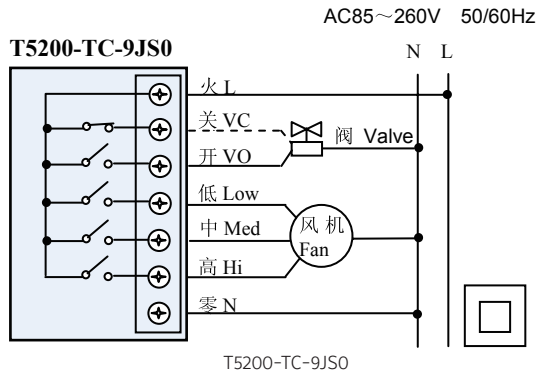
# Installation

T5000 thermostats allows for 75 x 75 x 35mm standard wall box installation.



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

# Wiring



# Ordering Information

To order the replacement T5000 Series thermostat, contact the nearest Johnson Controls® representative. Specify the desired product code number from the Table 1 and Table 2.

### IMPORTANT:

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



# Table 1: Model Selection Guide

	T	5	2	0	0	-	T	C	-	9	J	S	0
<b>Power</b>	2	=	AC85-260V										
<b>System</b>	0	=	On-Off	2									
<b>Fan Control</b>	0	=	Auto-Hi-Med-Lo		0								
<b>Temperature Scale</b>	T	=	°C or °F changeable				T						
<b>Application</b>	C	=	Cooling only										
	B	=	2-pipe Heating or cooling					C					
	F	=	4-pipe Heating and cooling										
<b>Color</b>	9	=	White						9				
<b>Logo</b>	J	=	With Johnson Controls Logo								J		
<b>Compliance</b>	S	=	Standard									S	
	R	=	With remote sensor										
<b>Version</b>	0	=	Version										0

# Table 2: Model Available

Models	Applications	Occupancy Mode	Remote Sensor
T5200-TC-9JS0	Cooling only	None	None
T5200-TB-9JS0	2-pipe Heating or cooling	Yes	None
T5200-TB-9JR0	2-pipe Heating or cooling	None	Yes
T5200-TF-9JS0	4-pipe Heating and cooling	None	None
T5200-TF-9JR0	4-pipe Heating and cooling	None	Yes

# Table 3: Specifications

	<b>T5000 LCD Digital Fan Coil Unit Thermostat</b>	
<b>Product</b>	T5200-TC-9JS0	Backlit LCD Cooling only FCU Thermostat
	T5200-TB-9JS0	Backlit LCD 2-pipe Cooling / Heating FCU Thermostat with Occupancy Contact
	T5200-TB-9JR0	Backlit LCD 2-pipe Cooling / Heating FCU Thermostat with Remote Temperature Sensor
	T5200-TF-9JS0	Backlit LCD 4-Pipe Cooling and Heating FCU Thermostat
	T5200-TF-9JR0	Backlit LCD 4-pipe Cooling and Heating FCU Thermostat with Remote Temperature Sensor
<b>Power Requirements</b>	AC85-260V, 50/60 Hz	
<b>Accuracy</b>	±1°C	
<b>Display Range</b>	0 to 55°C	
<b>Setpoint Range</b>	5-35°C	
<b>Unoccupied Mode</b>	T5200-TB-9JS0 External Voltage-Free Contact Input Signal	
<b>Restart after Power Failure</b>	Three options available, off, on and keep last status	
<b>Remote sensor</b>	T5200-TB-9JR0/T5200-TF-9JR0 with remote temperature sensor, NTC 10K, 1.5m, Max.20m (0.75~1.0mm <sup>2</sup> )	
<b>Termination</b>	Screw terminals	
<b>Valve Control</b>	T5200-TC-9JS0 (Cooling only)	2 x Single-Pole, Single Throw (SPST), 5A at 250 VAC (Maximum); Relay Output
	T5200-TB-9JS0 (2-pipe Cooling or Heating)	1 x Single-Pole, Single Throw (SPST), 5A at 250 VAC (Maximum); Relay Output
	T5200-TB-9JR0 (2-pipe Cooling or Heating)	1 x Single-Pole, Single Throw (SPST), 5A at 250 VAC (Maximum); Relay Output
	T5200-TF-9JS0 (4-pipe Cooling and Heating)	2 x Single-Pole, Single Throw (SPST), 5A at 250 VAC (Maximum); Relay Output
	T5200-TF-9JR0 (4-pipe Cooling and Heating)	2 x Single-Pole, Single Throw (SPST), 5A at 250 VAC (Maximum); Relay Output
<b>Fan Control</b>	3 x Single-Pole, Single Throw (SPST), 5A(Res.) at 250 VAC (Maximum); Relay Output for High-Med-Low Fan	
<b>Ambient Operating Conditions</b>	0 to 45°C 90% Non-condensing RH	
<b>Ambient Storage Conditions</b>	-10 to 60°C 90% Non-condensing RH	
<b>Housing Material</b>	PC: UL 94-V0	
<b>Protection Class</b>	IP20	
<b>Certification</b>	CE	
<b>Dimensions</b>	88 x 88 x 42mm	
<b>Shipping Weight</b>	Appr. 206g	

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

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