

T6000 Series

# T6000 LCD Digital Fan Coil Thermostat



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T6000 LCD Digital Fan Coil Thermostats are designed to control heating, cooling, or year round 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 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.



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## 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 blue 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> <li>• Molded Logo &amp; Symbol to unsure Original Pattern</li> </ul>
Energy Saving	<ul style="list-style-type: none"> <li>• Features with Unoccupied Function</li> <li>• Dual-Setpoint, enable user define comfort Setting</li> <li>• Low Speed Fan Startup, eliminating High Inrush Current</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>• Un-pluggable Wire Termination, allows quick connect for final hand-over to end-user</li> <li>• Quick Replacement to reduce to Downtime of Service Maintenance</li> <li>• Power Failure Restart, allows user selection of Auto-restart of Equipment after power resume</li> </ul>

## Model Available

Models	Applications	Control	Backlit LCD	Occupancy Mode	With Remote Sensor	Power supply
T6634-TA10-9JS0	Cooling only	On/Off	Yes	No	No	AC95V ~ AC240V
T6634-TE20-9JS0	2-pipe Heating or cooling	On/Off	Yes	Yes	No	AC95V ~ AC240V
T6634-TF20-9JS0	4-pipe Heating and cooling	On/Off	Yes	Yes	No	AC95V ~ AC240V
T6634-TE21-9JS0	2-pipe Heating or cooling	DC 0-10V modulating	Yes	Yes	No	AC24V
T6634-TE21-9JR0	2-pipe Heating or cooling	DC 0-10V modulating	Yes	No	Yes	AC24V
T6634-TE22-9JS0	2-pipe Heating or cooling	Floating	Yes	Yes	No	AC95V ~ AC240V

# Product Overview

T6000 are LCD display (with Backlit) fan coil unit thermostat that design for cooling or heating fan coil unit with valve actuator control application. Integral with System On/Off button that allows user to shutdown the T6000 and cutoff the output power for fan (except Valve Actuator Output power). 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. operating current.

The T6000 thermostats come with 24-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.

Standard 86 x 86mm size allows for 75 x 75 x 35mm standard wall box installation.

- The Models T6634-TA10/TE20/TF20-9JS0 are used for the application with On/Off valve actuator. (eg. VA7010 with VG4000)
- The Model T6634-TE21-9JS0/9JR0 are used for the application with modulating valve actuator. (eg. VA7482 with VG4000)
- The Model T6634-TE22-9JS0 is used for the application with floating valve actuator.(eg. VA7480 with VG4000)

**IMPORTANT:**

Use this T6000 Series Fan Coil Thermostat only as an operating control. Where failure of malfunction of the T6000 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 T6000 Series Thermostat.

# 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.

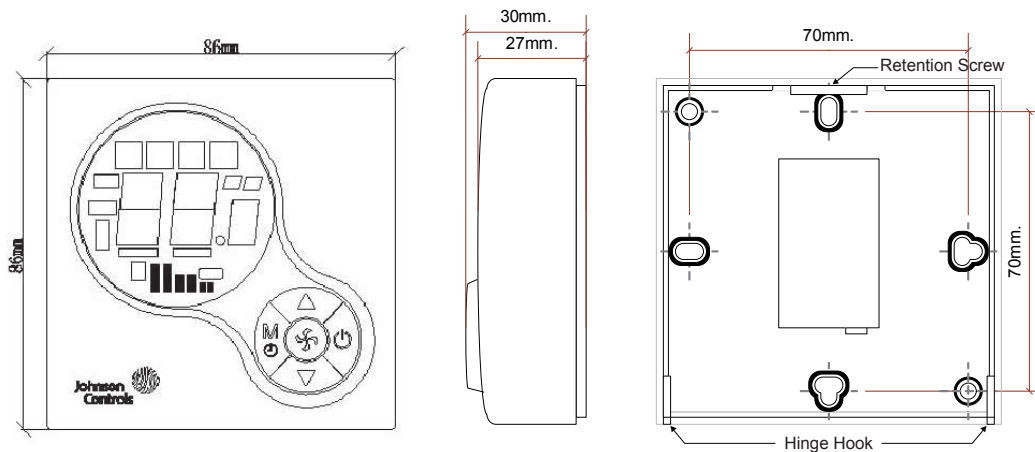
# Ordering Information

To order the replacement T6000 Series thermostat, contact the nearest Johnson Controls® representative. Specify the desired product code number.

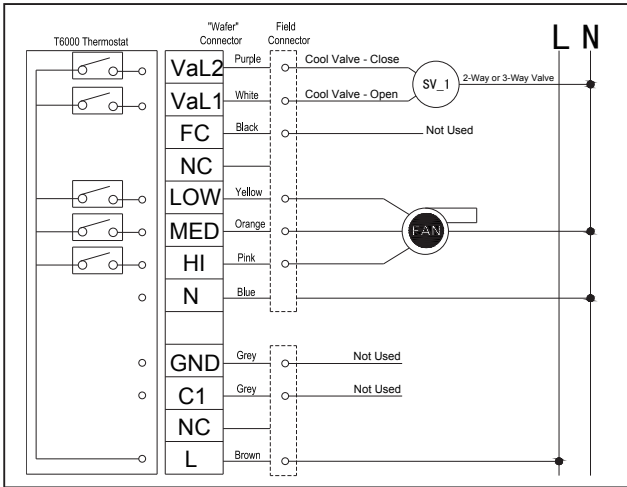
**IMPORTANT:**

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

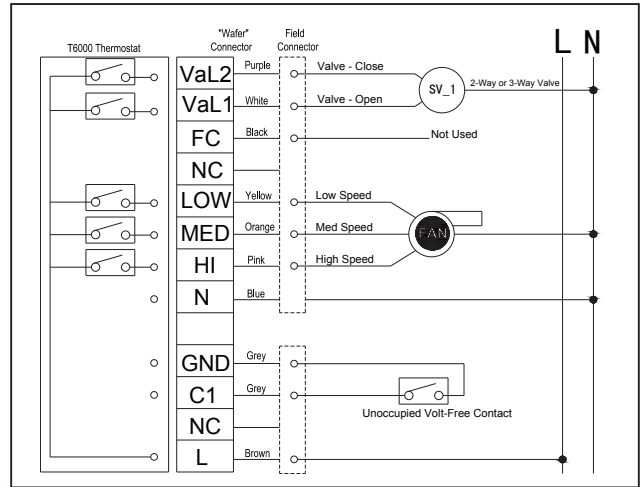
# Dimensions



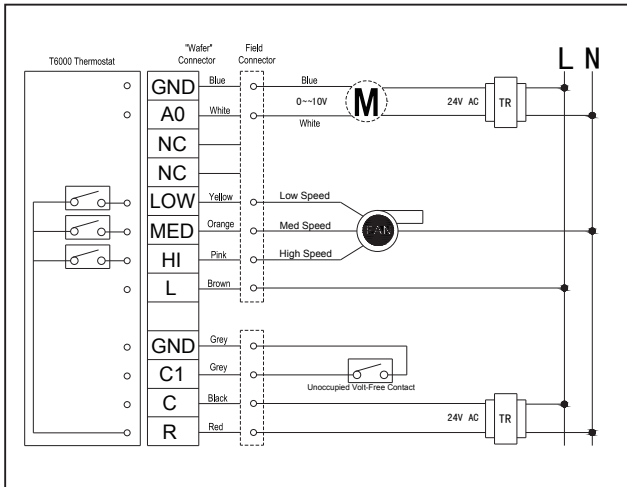
# Wiring



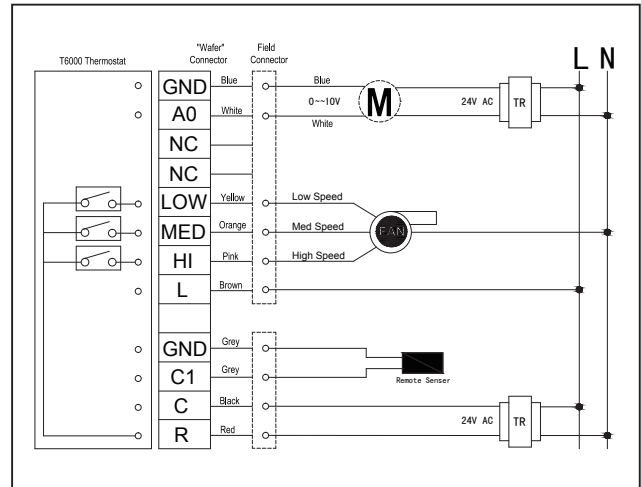
T6634-TA10-9JS0



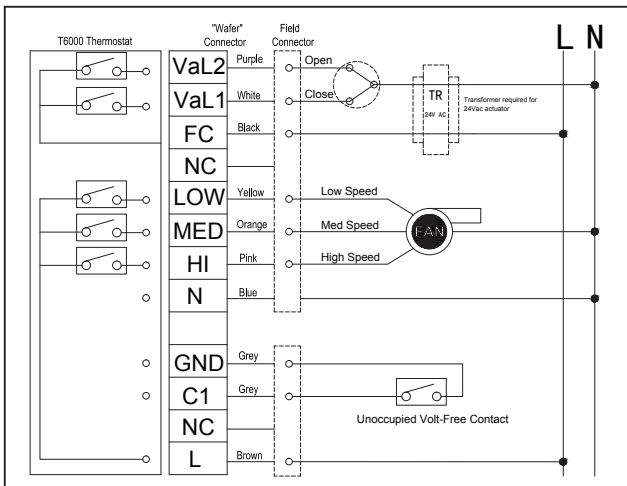
T6634-TE20-9JS0



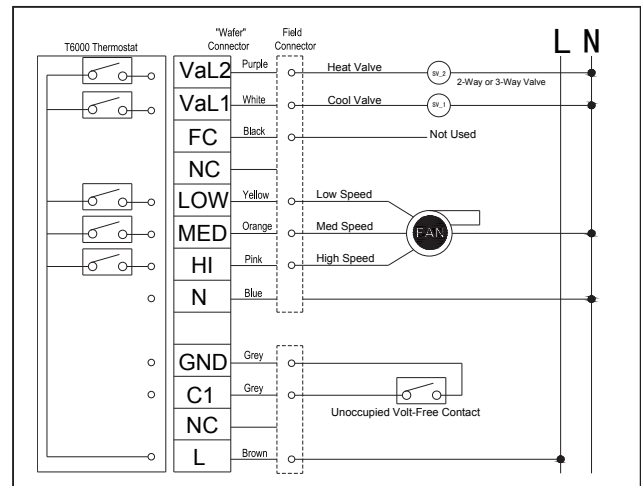
T6634-TE21-9JS0



T6634-TE21-9JRO



T6634-TE22-9JS0



T6634-TF20-9JS0

# Model Selection Guide

	T6	6	3	4	-	T	E	2	0	-	9	J	S	0
New generation	6	=	New generation											
System Off-On	3	=	System Off-On											
Fan Control	4	=	Auto-Hi-Med-Lo											
Temperature Scale	T	=	°C & °F			T								
Applications	A1	=	Cooling only											
	E2	=	Cooling or Heating				E							
	F2	=	Cooling and Heating w / Occupied Contact											
Valve Control	0	=	On/Off											
	1	=	Modulating						1					
	2	=	Floating											
Color	9	=	White							9				
Finishing	J	=	With JCI Logo									J		
Compliance	S	=	Standard										S	
	R	=	With Remote Sensor											
Future Use	0	=	None											0

# Specifications

Product	T6000 LCD Digital Fan Coil Unit Thermostat	
	T6634-TA10-9JS0	Backlit LCD Cooling only, On/Off control for 2-wire/3-wire valve (actuator)
	T6634-TE20-9JS0	Backlit LCD Cooling or Heating, On/Off control for 2-wire/3-wire valve (actuator), w/occupancy contact
	T6634-TF20-9JS0	Backlit LCD Cooling and Heating, On/Off control for 2-wire valve (actuator) , w/occupancy contact
	T6634-TE21-9JS0	Backlit LCD Cooling or Heating, Modulating control, w/occupancy contact
	T6634-TE21-9JR0	Backlit LCD Cooling or Heating, Modulating control, with remote sensor
	T6634-TE22-9JS0	Backlit LCD Cooling or Heating, Floating control, w/occupancy contact
Power Requirements	T6634-TA10/TE20/TE22/TF20-9JS0: AC95V ~ AC240V ±10%, 50/60 Hz	
	T6634-TE21-9JS0/9JR0: AC24V ±10%, 50/60 Hz	
Accuracy	±1°C	
Display Range	0 to 55°C (32 to 99°F ) maximum	
Setpoint Range	5 to 30°C (41 to 86°F ) maximum	
Unoccupied Mode	External Voltage-Free Contact Input Signal (Not available for T6634-TA10-9JS0 and T6634-TE21-9JR0)	
Remote Sensor	T6634-TE21-9JR0 with remote sensor, NTC 10K, 1.5m, max.20m (0.75~1.0mm <sup>2</sup> )	
Termination	Un-pluggable "Wafer" Connector with 12 cm Color-coded 20AWG PVC cable	
Valve Control	T6634-TA10-9JS0 (Cooling only)	On/Off control, 2X SPST relay output, AC230V, Maximum 5A(Res.)
	T6634-TE20-9JS0 (Cooling or Heating)	On/Off control, 2X SPST relay output, AC230V, Maximum 5A(Res.)
	T6634-TF20-9JS0 (Cooling and Heating)	On/Off control, 2X SPST relay output, AC230V, Maximum 5A(Res.)
	T6634-TE21-9JS0	DC 0-10V Modulating
	T6634-TE21-9JR0	DC 0-10V Modulating
	T6634-TE22-9JS0	Floating control, AC24V/AC230V, Maximum 0.6A
Fan Control	3 x Single-Pole, Single Throw (SPST) , Relay Output for High-Med-Low Fan, 5A (Res.) at 230 VAC (Maximum)	
Ambient Operating Conditions	0 to 50°C (32 to 122°F) 90% Non-condensing RH	
Ambient Storage Conditions	-10 to 60°C (14 to 140°F) 90% Non-condensing RH	
Housing Material	PC: UL94-V0	
Protection Class	IP20	
Dimensions	86 x 86 x 30 mm	
Weight	T6634-TA10/TE20/TE22/TF20-9JS0: Appr. 205g; T6634-TE21-9JS0: Appr. 187g; T6634-TE21-9JR0: Appr. 198g	

\* 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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