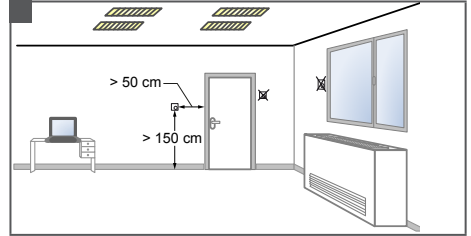
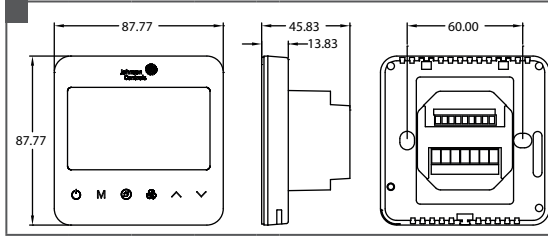




## LCD Digital Thermostat

### Installation Guide

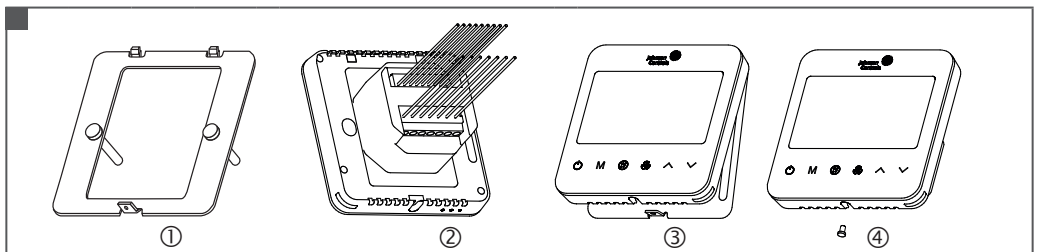
P/N 24-11448-00009 Rev. — Issue Date: 06 2020



• Ambient  
 • 工作环境

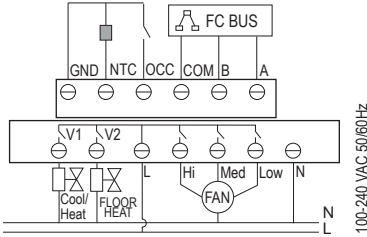
MAX	MIN	MAX	MIN
40 °C	0 °C	60 °C	-10 °C
104 °F	-32 °F	140 °F	-14 °F

MAX 90% RH  
 MIN 10% RH

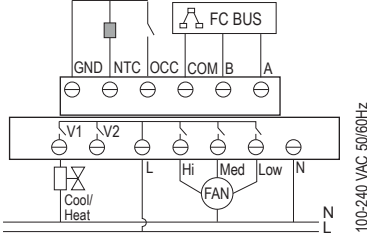


T9800-TF20-1JS0

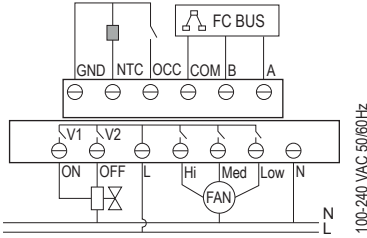
2-pipe FCU (relay)  
with floor heating  
2管制开关阀+地暖



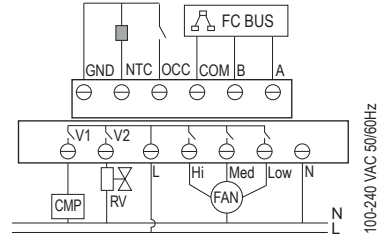
2-pipe FCU (relay)  
2管制开关阀



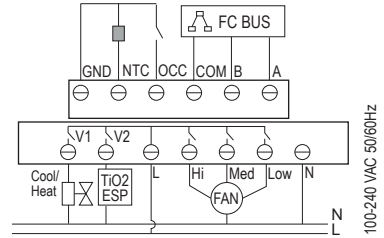
2-pipe, 3 wire (relay)  
2管制3线开关阀



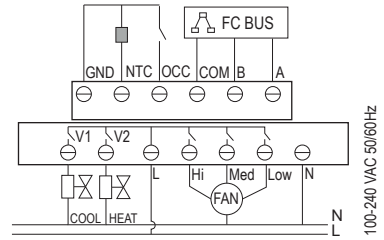
Water source heat pump  
水源热泵  
RV = REVERSING VALVE  
CMP = COMPRESSOR



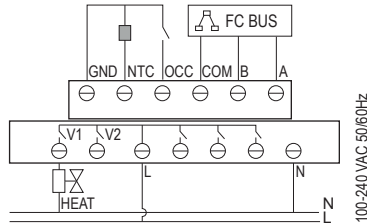
2-pipe FCU (relay)  
with TiO2/ESP  
2管制开关阀+TiO2/ESP



4-pipe FCU (relay)  
4管制开关阀

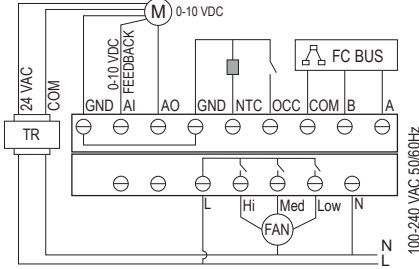


Floor heating/Boiler  
地暖/锅炉



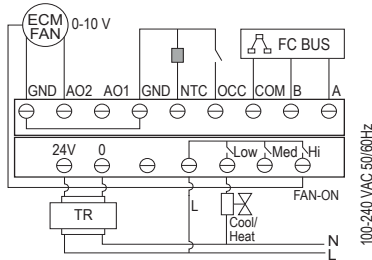
**T9800-TB21-1JA0**

2-pipe FCU, 3 speed fan  
2管制, 3速风机, 比例阀

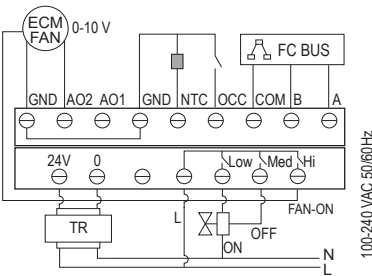


**T9800-TF21-1J50**

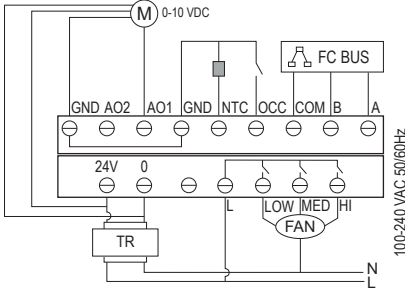
2-pipe FCU (relay) with ECM Fan  
2管制开关阀, ECM风机



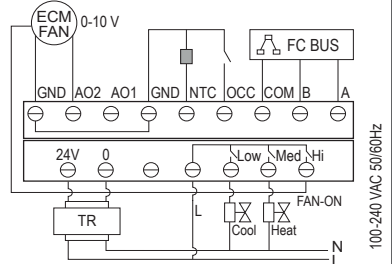
2-pipe 3 wire (relay) with ECM fan  
2管制三线阀, ECM风机



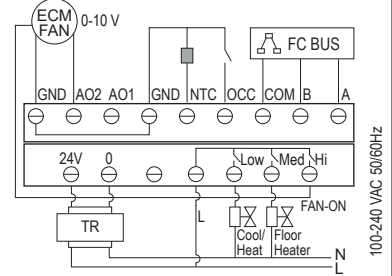
2-pipe FCU (prop) 3 speed fan  
2管制比例阀, 三速风机

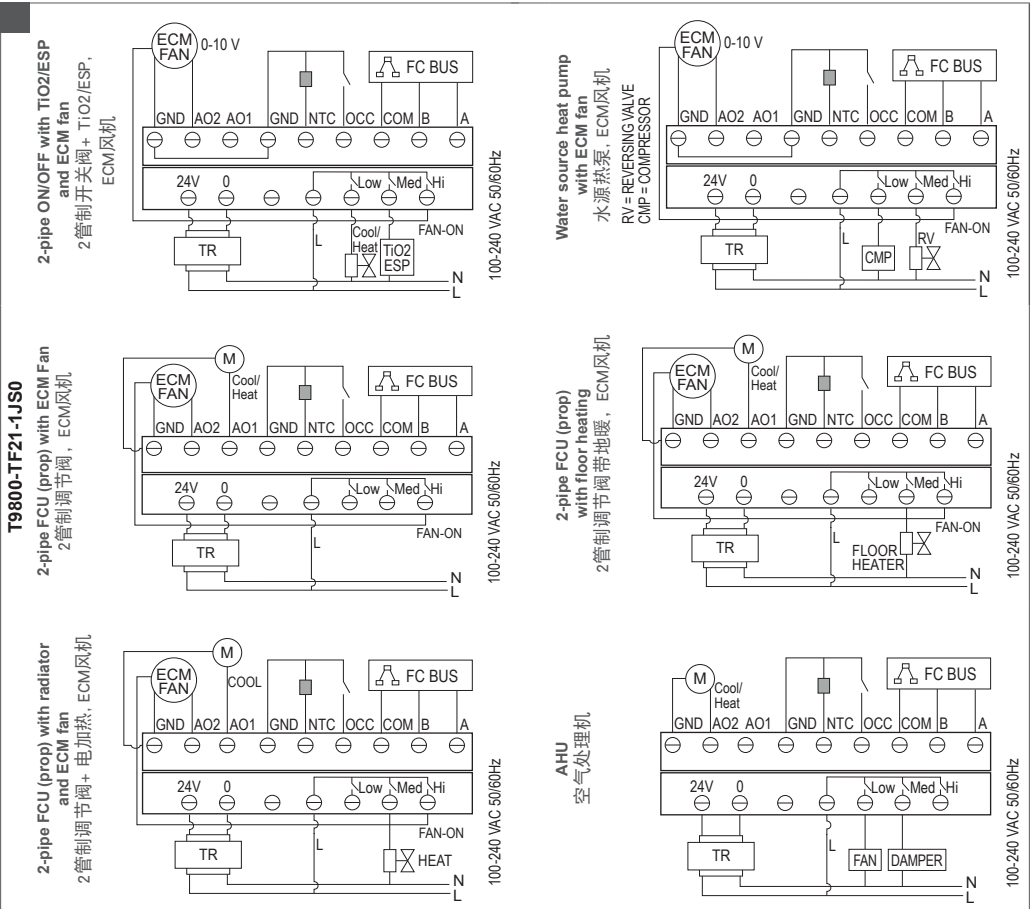


4-pipe FCU (relay) with ECM Fan  
4管制开关阀, ECM风机



2-pipe FCU with floor heating  
and ECM fan  
2管制开关阀带地暖, ECM风机





图例:			
FC BUS:	FC BUS A线	F-ON:	风机开关
A:	FC BUS B线	GND:	地
B:	FC BUS 公共端	L:	火线
COM:	FC BUS 公共端	N:	零线
NTC:	温度传感器	V1:	阀1
OCC:	门卡开关	V2:	阀2
ECM FAN:	ECM风机	TR:	24VAC变压器
FAN:	风机	24 V:	接24VAC变压器
AO1:	模拟输出1	o:	接24VAC变压器
AO2:	模拟输出2	TiO2:	TiO2 二氧化钛
AI:	模拟输入/阀反馈	ESP:	Electro-static Precipitator 静电除尘设备
		CMP:	Compressor 压缩机
		RV:	Reversing Valve 换向阀
		HEAT:	热水阀
		COOL:	冷水阀
		FLOOR HEAT:	地暖阀
		LOW:	风机低速档位
		MED:	风机中速档位
		HI:	风机高速档位



**INSTALLATION INSTRUCTIONS FOR THE TECHNICIAN / FITTER**

**READ THIS INSTRUCTION SHEET AND THE SAFETY WARNINGS CAREFULLY BEFORE INSTALLING AND SAVE IT FOR FUTURE USE**

**REPAIR AND REPLACEMENT**

Do not attempt to repair the T9 Series thermostat. In case of an improperly functioning control, contact the nearest Johnson Controls® representative, and specify the desired product code number. When contacting the supplier for a replacement, state the type/model number of the control located on the data plate or cover label.

**IMPORTANT**

- Use this T9 Series thermostat only as an operating control. Where failure or malfunction of the T9 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 T9 Series thermostat.
- Do not install this thermostat in condensing, wet, or damp environments. Moisture may cause damage to the thermostat.
- Do not remove PCB from the enclosure cover. Removing the PCB from the enclosure cover voids the product warranty.
- Make all wiring connections in accordance with local, national, and regional regulations. Do not exceed the T9 Series thermostat's electrical ratings.

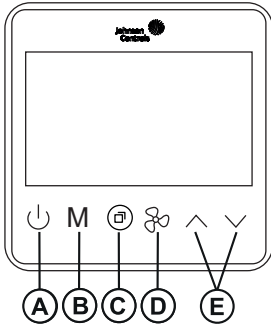
**WARNING**

Disconnect power supply before making electrical connections. Contact with components carrying hazardous voltages can cause electrical shock and may result in severe personal injury or death.

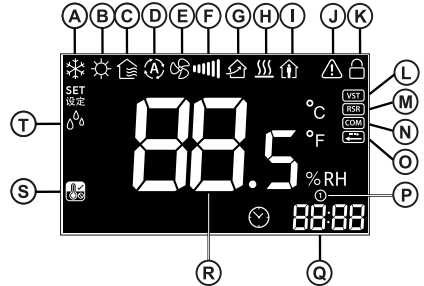
• **Risk of Electrical Shock:** Ground the thermostat according to local, national, and regional regulations. Failure to ground the thermostat may result in electrical shock and severe personal injury and death.

• **Risk of Electrical Shock and Property Damage:** Insulate and secure each unused wire lead before applying power to the thermostat. Failure to insulate and secure each unused wire lead may result property damage, electrical shock, and severe personal injury or death.

**T9800 interface**







Callout	Feature
A	Power button
B	Working mode button
C	General button
D	Fan speed adjustment button
E	Up and down buttons










Callout	Feature
A	Cooling
B	Heating
C	Ventilation
D	Auto mode
E	Fan auto
F	Fan speed Hi/Med/Low
G	Tio2/ESP
H	Floor heating
I	Occupancy
J	Alarm
K	Lock
L	Valve status
M	Remote sensor
N	Communication
O	Compressor protection
P	BACnet address 100
Q	Timer on/off
R	Temperature and humidity value
S	Low temperature protection
T	Dehumidify

**INSTRUCTIONS**




On/Off Setting: Press  to turn on, press again to turn off, close the fan and valve.

Mode Selection: Press **M** to change the working mode, ❄ for cooling, ☀ for heating,  for venting,  for auto cooling or heating mode.  is available only for 4-pipe application or 2-pipe application when BI-FUNCTION is Change Over Sensor input.





Temperature Setting: Press either  or  button to increase or decrease the temperature by 0.5°C/1°F.


Fan Speed Adjustment: Press  to switch the fan mode, auto  flash, high , medium , low  fan.


Note: Fan stops at Floor Heating Mode, until FH-FAN parameter set to enable, for single stage floor heating application only.


Delay On/Off setup: Press and hold  button 5 seconds, then "ON" appears, press  button to switch On or Off delay, then press  or  to adjust the minute by 30 minutes.

Note: Time-On/Off setting performs only once.






Delay On/Off Cancel: Press and hold  button 5 seconds, then "ON" appears, press  button to switch to check On or Off delay time, then press  or  adjust the time to "00:00".

Lock setup: If  Lock function is enabled, the thermostat locks automatically after 30 seconds unused.

Unlock function: Press and hold the  button 5 seconds to unlock.

Tio2/ESP Manual: When Tio2/ESP function is set to Manual, press  button once, to switch Tio2/ESP On or Off.

**USER SETTING**


Press  and  button for 5 seconds at power off mode to get in parameter list. Press **M** to scroll forward and  to scroll backward in the list and use  and  button to change parameter value.

**PARAMETER SETTING (PART 1/2)**






Code	T9800-TF20-1JS0	T9800-TB21-1JA0	T9800-TF21-1JS0	Parameter name	Default	Function
01	■	■	■	MAC (MS/TP)	128	Mac address for BACnet MS/TP: 6-128
02	■	■	■	MAC (Modbus)	01	Mac address for Modbus 1-96
04	■	■	■	MUTE	00	Enable/disable the beep when push touch button: 00: Disable 01: Enable
05	■	■	■	OFFSET	0°C/ 0°F	Offset to be compensate the room temperature: Step: 0.5°C (1°F) Range: 5°C~-5°C (9°F- -9°F)
06	■	■	■	UNOCC-CLG-SP	26°C/ 79°F	Cooling setpoint unoccupied mode. Not available for Boiler application Step: 0.5°C (1°F) Range: 22°C~32°C (72°F-90°F)
07	■	■	■	UNOCC-HTG-SP	18°C/ 64°F	Heating setpoint unoccupied mode. Step: 0.5°C (1°F) Range: 10°C~21°C (50°F-70°F)
08		■	■	SMPL-TM	10 s	Sample time, PID parameter, only for PID Range: 1~99 s
09		■	■	PB	5	Proportion band, PID parameter, only for PID Range: 1~10
10		■	■	KI	10	Integration parameter, PID parameter, only for PID Range: 0~99
11	■	■	■	BL-TIMER	30	Backlight timer. Range: 5~99 s
12	■	■	■	PWR-F-RSTT	02	Restart after power failure: 00: OFF 01: ON 02: Recovery

...Continued...

## PARAMETER SETTING (PART 2/2)

Code	T9800- TF20- 1JS0	T9800- TB21- 1JA0	T9800- TF21- 1JS0	Parameter Name	Default	Function
13	■		■	TIO2ESP-CTL	00	TIO2ESP control: 00: Automatic 01: Manual For TIO2ESP application
14	■	■	■	BAUD_MSTP	00	Baud rate for BACnet MS/TP: 00:AUTO 01:9600 02:19200 03:38400 04:76800
15	■	■	■	BAUD_MODBUS	00	Baud rate for Modbus: 00: 9600 01: 4800
16	■	■	■	KEY-LOCK 	00	Key lock function: 00: No Lockout 01: Level 1 ->Lock all keys 02: Level 2 ->Lock the keys except Fan Speed and Temp Adjustment keys 03: Level 3 ->Lock the ON/OFF and General keys 04: Level 4 ->Lock the keys except ON/OFF key
17	■	■	■	TEMP-DISP	00	UI display room temperature or set point: 00: Room Temperature 01: Setpoint 02: Humidity
18	■	■	■	UNIT	01	Unit selection: 00: °F 01: °C
19			■	DAMP-OPEN-TIME	0	Damper opening time, for AHU application range 0-99 (0=75 s, 99=174 s)
20	■	■	■	SF-VERSION		Software version, read only

## SERVICE SETTING (Setting through professional)

In the Setting page press  button for 3 seconds to get in Service page, the occupancy icon  shows. Press **M** to scroll forward and  to scroll backward in the list and use  and  button to change parameter value.

## PARAMETER SETTING (PART 1/3)

Code	T9800- TF20- 1JS0	T9800- TB21- 1JA0	T9800- TF21- 1JS0	Parameter name	Default	Function
01	■	■	■	PROTOCOL	00	00:BACnet MS/TP 01:Modbus
02	■	■	■	FRST-PRT	00	Frost protection: 00: No 01: Yes
03	■		■	FH-FAN	00	Enable/disable fan output when floor heater: 00: Disable 01: Enable

...Continued...

## PARAMETER SETTING (PART 2/3)

Code	T9800- TF20- 1JS0	T9800- TB21- 1JA0	T9800- TF21- 1JS0	Parameter Name	Default	Function
04	■	■	■	APPLICATION	00	T9800-TF20-1JS0 00: 2-pipe FCU 01: 4-pipe FCU 02: 2-pipe 3-wire valve FCU 03: 2-pipe FCU with floor heater 04: 2-pipe FCU with TiO2/ESP 05: water source heat pump 06: Floor heating/Boiler  T9800-TB21-1JA0 00: 2-pipe FCU, three speed fan  T9800-TF21-1JS0 00: 2-pipe FCU, three speed fan 01: 4-pipe FCU, three speed fan 02: 2-pipe FCU (relay), ECM fan 03: 4-pipe FCU (relay), ECM fan 04: 2-pipe 3 wire (relay), ECM fan 05: 2-pipe FCU with floor heater, ECM fan 06: 2-pipe FCU with TiO2/ESP, ECM fan 07: water source heat pump, ECM fan 08: 2-pipe FCU (0-10VDC), ECM fan 09: 2-pipe FCU (0-10VDC) with floor heater, ECM fan 10: 2-pipe FCU (0-10VDC) with radiator, ECM fan 11. AHU
05	■	■	■	DOWN-SET-LIMIT	5°C/ 41°F	lower setpoint limit Range: 0°C~36°C (32°F~97°F)
06	■	■	■	UP-SET-LIMIT	35°C/ 95°F	Upper setpoint limit Range: 2°C~37°C (36°F~99°F)
07	■	■	■	FP-SP	5°C/ 41°F	Frost protection setpoint. Step: 0.5°C (1°F) Range: 0°C~20°C (32°F~68°F)
08			■	ECM-MIN-V	3 V	ECM Min voltage. Min voltage below which the fan output is 0%. Step: 0.5 V Range: 0 V~10 V
09			■	ECM-MAX-V	10 V	ECM Max voltage. Max voltage below which the fan output is 100%. Step: 0.5 V Range: 0 V~10 V
10	■		■	STG-DFFR	3°C/5°F	floor heater Stage temperature difference Step: 0.5°C (1°F) Range: 0°C~10°C (0°F~18°F)
11	■		■	HTRSS	1°C/2°F	Hysteresis for ON/OFF control Range: 1°C~5°C (2°F~9°F)
12	■ <sup>1</sup>	■	■	BI-FUNCTION	02	00: Occupancy Input 01: Dew Point Risk Input 02: Filter Alarm Input 03: Change Over Sensor Input 04: Warning.
13	■	■	■	MODE-RST	00	00: No Restriction 01: Cooling only 02: Heating only
14	■	■	■	FAN-RST	03	00: No Fan 01: One Speed Fan 02: Two Speed Fan 03: Three Speed Fan
15	■	■	■	FAN-DB	01	Fan operation in deadband: 00: OFF 01: Low
16	■	■	■	UNOCC-FAN	00	Fan mode in unoccupied: 00: OFF 01: Low

...Continued...

## PARAMETER SETTING (PART 3/3)

Code	T9800- TF20- 1JS0	T9800- TB21- 1JA0	T9800- TF21- 1JS0	Parameter Name	Default	Function
17	■		■	HTG-STG	02	00: One Heating Stage - Fan Coil 01: One Heating Stage - Floor Heating 02: Two heating stage
18	■	■	■	BI-PLRT	01	BI polarity: 00: Normally Close 01: Normally Open
19	■	■	■	OCC-OVRD	00	Override the OCC-S value: 00: No Override 01: Occupied 02: Unoccupied
20	■	■	■	SNS-TYPE	00	00: JCI type 10K NTC 01: China type 10K NTC
21	■	■	■	FAN-DELAY	00	Fan off delay after valve closed, in seconds(0-99 s)
22			■	ECM-RLY	00	00: Disable 01: Enable
23	■	■	■	DEV-OBJ-ID-HI	00	Hight part for BACnet Instance Id 0~99
24	■	■	■	DEV-OBJ-ID-LO	01	Low part for BACnet Instance Id 0~99

**Note**

- Terminal blocks changes depending on the application selected, check the table beside first
- The relay output are line voltage, they are connected with Terminal "L" internally
- The digital input "OCC" can assume different meaning depending on parameter 12 setting
- BACnet Instance ID is automatically set to 10000+ MAC address by default. If you need to manually set BACnet Instance ID, you can configure parameters 23 and 24. Parameter 23 and 24 determine the BACnet Device ID. For example if parameter 23 is set to 03 and parameter 24 is set to 04 then the BACnet Device ID is 304.

1. If the application is Boiler, then only 00 and 04 are available.

① shows when the Mac address is larger than 99. ① disappears when the Mac address less than 100.

**ALARM CODE DESCRIPTION**

Item	Code	Description
1	E1/E2	Internal sensor warning.
2	HI	High temperature warning. Room temperature >55°C (>131°F)
3	LO	Low temperature warning. Room temperature <0°C (<32°F) or internal sensor opened.
4	E5	Dew point risk warning. FCU valve is shut and Fan keeps working when error is active.
5	E6	Filter alarm
6	E7	BI warning

**COM** flashes when there is a communication error.



## 安装指导

请在安装前仔细阅读该安装指导和安全警告

### 维修和替换：

不要试图现场维修T9000系列温控器。如果T9000不能正常工作，请与附近江森自控办事处联系。当联系办事处更换产品的时候，请说明外部标签或参数表上印有的类型/型号。

### 重要：

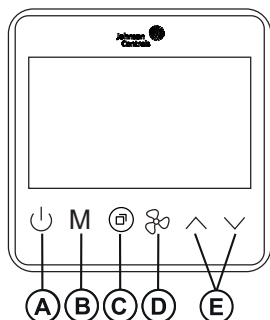
- T9000系列温控器仅用作设备控制。当T9000系列温控器调节装置失灵或故障时可能会导致人员伤害，财产损失及其他设备损坏。请在系统中增加预防措施，如使用监控及报警系统、保护开关等，来加强此温度调节装置的机能失效和故障时的保护。
- 不要把T9000装在结露、潮湿或有湿气处。湿气会损坏温控器。
- 不要拆卸外壳中的PCB，拆卸PCB板将不再享有质保服务。
- 使所有接线符合国家、地区和当地的规定。不要超过T9000系列温控器电气参数。
- 使用前请移除LCD塑料保护壳。

### 警告：

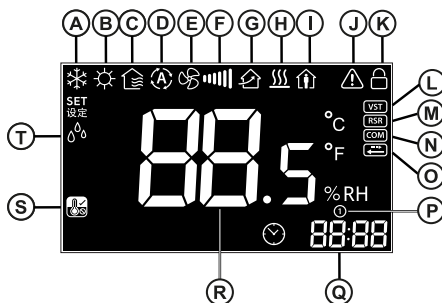
在进行电器接线时确保电源断开。在带电时连接各部件可能引起电击，从而导致人员受伤甚至死亡。

- 电击危险：按照国家、地区和当地的规定给温控器接地。接地失效可能导致电击和人员受伤甚至死亡。
- 电击危险和财产损失：在温控器通电前把未使用的线头保护好，使之绝缘。任何一个未使用的线头未被绝缘和保护可能导致财产损失，电击和人员受伤甚至死亡。

## T9800 界面








编号	功能
A	开关键
B	模式键
C	功能键
D	风速键
E	上下调节键





编号	功能
A	制冷
B	制热
C	通风
D	自动模式
E	自动风速
F	风速高中低
G	TiO2/ESP
H	地暖
I	占用模式
J	警告
K	键盘锁
L	阀状态
M	外置传感器
N	通讯
O	压缩机保护中
P	BACnet 地址 100
Q	时间启停
R	温度/湿度读数
S	低温保护
T	除湿

## 使用说明





开关机设置：按  键一次开机；再按一次关机，同时关闭风机盘管、电动阀。

模式调节：开机状态下，按 M 键进行工作模式切换。液晶显示  表示制冷，显示  表示制热，显示  表示通风， 表示自动转换制冷制热模式（仅4管制FCU，或2管制FCU，BI输入功能设置为制冷制热模式转换）。





温度设置：在开机状态下，按  或  可进行设置温度的调节，每按一次，温度变化0.5°C/1°F。


风速调节：温控器有4种风机速度，自动  闪烁、高 、中 、低  风速。按  按钮，将循环切换。


注意：地暖模式下，地暖模式-风机设置成启用，风机才可以打开，仅地暖模式下。


定时开关机设置：开机状态下，按  键，直至出现“on”符号，再次按  键以切换设置“On”延时开或者“Off”延时关时间，按  或  键调整，每按一次变化30分钟。

注意：设定一次定时开关机时间只能执行一次，即只在一天内有效。

取消定时开关机设置：开机状态下，按  键，直至出现“on”符号，再次按  键以切换查看“On”延时开或者“Off”延时关时间，按  或  键调整，每按一次变化30分钟，将时间调整为“00:00”，即为取消定时功能。

按键锁功能：如果温控器开启了  锁按键功能，在没有人使用的情况下30秒后会自动把按键锁上，禁止其他人员对温控器进行操作。

按键解锁：按风速按键  5秒即可解锁（在没有人使用的情况下30秒后会自动把按键锁上）。

TiO2/ESP功能：仅在TiO2/ESP应用，且TiO2/ESP操作设定为手动操作，按  键马上释放以切换TiO2/ESP启用/停止。

## 用户设置（第1/2部分）

关机状态下同时按  和  键5秒进入用户设置页面，参数设定列表按 M 或  切换参数，按键  和  键调整参数。

编号	T9800- TF20- 1JS0	T9800- TB21- 1JA0	T9800- TF21- 1JS0	参数名	默认值	功能含义
01	■	■	■	BACnet Mac 地址	128	6~128
02	■	■	■	Modbus地址	01	1-96
04	■	■	■	静音	00	00: 禁用 01: 启用
05	■	■	■	温度偏移	0°C/ 0°F	阶跃: 0.5°C (1°F) 设定范围: -5°C~5°C (-9°F~9°F)
06	■	■	■	无人状态制冷设定值	26°C/ 79°F	设置每步: 0.5°C (1°F) 设定范围: 22°C~32°C (72°F~90°F)
07	■	■	■	无人状态制热设定值	18°C/ 64°F	阶跃: 0.5°C (1°F) 设定范围: 10°C~21°C (50°F~70°F)
08		■	■	采样时间	10 s	设定范围: 1~99 s
09		■	■	PB	5	设定范围: 1~10
10		■	■	KI	10	设定范围: 0~99
11	■	■	■	背光时间	30	设定范围: 5~99 s
12	■	■	■	断电重启	02	00: 关闭 01: 启动 02: 恢复
13	■		■	TiO2/ESP操作	00	00: 与风机联动 01: 单独操作 (通用键)
14	■	■	■	MSTP波特率	00	00: AUTO 01: 9600 02: 19200 03: 38400 04: 76800
15	■	■	■	Modbus波特率	00	00: 9600 01: 4800

...继续...

## 用户设置 (第2/2部分)

关机状态下同时按 和 键5秒进入用户设置页面, 参数设定列表按 M 或 切换参数, 按键 ^ 和 v 键调整参数。

编号	T9800- TF20- 1JS0	T9800- TB21- 1JA0	T9800- TF21- 1JS0	参数名	默认值	功能含义
16	■	■	■	按解锁	00	00: 禁用 01: 锁定所有按键 02: 除风速及温度调节按键, 锁定其他按键 03: 锁定开关及通用按键 04: 除开关键, 锁定其他按键
17	■	■	■	默认显示	00	00: 室内温度 01: 温度设定值 02: 湿度
18	■	■	■	温度单位	01	00: 华氏度(°F) 01: 摄氏度(°C)
19			■	阀门开启时间	0	仅AHU应用 0-99 (0=75 s 99=174 s)
20	■	■	■	软件版本		只读, 不可设置, 显示当前软件版本号

## 高级设置 (专业人员设置) (第1/2部分)

在用户设置页面下按 键 3 秒进入高级设置页面, 此时有人模式图标 显示。参数设定列表按 M/ 键切换参数, 按键 ^ 和 v 键调整参数。

编号	T9800- TF20- 1JS0	T9800- TB21- 1JA0	T9800- TF21- 1JS0	参数名	默认值	功能含义
01	■	■	■	通讯协议	00	00: BACnet MS/TP 01: Modbus
02	■	■	■	低温保护	00	00: 关闭 01: 启用
03	■		■	地暖风速	00	2管制+地暖应用, 制热设置为低级地暖, 风机是否可以手动操作: 00: 禁止 01: 启用
04	■	■	■	应用	00	T9800-TF20-1JS0 00: 2管制开关阀 01: 4管制开关阀 02: 2管制3线开关阀 03: 2管制开关阀+地暖 04: 2管制开关阀+TiO2/ESP 05: 水源热泵 06: 地暖/锅炉  T9800-TB21-1JA0 00: 2管制调节阀, 3速风机  T9800-TF21-1JS0 00: 2管制调节阀, 3速风机 01: 4管制调节阀, 3速风机 02: 2管制开关阀, ECM风机 03: 4管制开关阀, ECM风机 04: 2管制三线阀, ECM风机 05: 2管制开关阀带地暖, ECM风机 06: 2管制开关阀+ TiO2/ESP, ECM风机 07: 水源热泵, ECM风机 08: 2管制调节阀, ECM风机 09: 2管制调节阀带地暖, ECM风机 10: 2管制调节阀+ 电加热, ECM风机 11: 空气处理机
05	■	■	■	设定值下限	5°C/ 41°F	设定范围 0°C~36°C (32°F-97°F)
06	■	■	■	设定值上限	35°C/ 95°F	设定范围 2°C~37°C (36°F-99°F)
07	■	■	■	低温保护设定值	5°C/ 41°F	设定范围 0°C~20°C (32°F-68°F)
08			■	ECM风机电压输入下限	3 V	0%对应电压值, 设定范围 0 V-10 V. (0.5 V阶跃)

...继续...

## 高级设置 (专业人员设置) (第2/2部分)

编号	T9800- TF20- 1JS0	T9800- TB21- 1JA0	T9800- TF21- 1JS0	参数名	默认值	功能含义
09			■	ECM风机电压输入上限	10 V	100%对应电压值, 设定范围0 V-10 V. (0.5 V阶跃)
10	■		■	制热阶段切换阈值	3°C/ 5°F	设定范围0°C~10°C (0°F-18°F)
11	■		■	温度回差	1°C/ 2°F	设定范围: 1°C~5°C (2°F-9°F)
12	■ <sup>1</sup>	■	■	BI输入	02	00: 无人模式 01: 露点报警 02: 滤网报警 03: 制冷制热模式转换 04: 报警
13	■	■	■	模式限制	00	00: 制冷/制热/通风 01: 单冷 02: 单热
14	■	■	■	风速限制	03	00: 风扇禁用 01: 单风速 (接LOW) 02: 两风速 (接MED, LOW) 03: 三风速
15	■	■	■	死区风机状态	01	00: 关闭 01: 低风速
16	■	■	■	无人模式风机状态	00	00: 关闭 01: 低风速
17	■		■	制热阶段	02	00: 单级制热 - 风机盘管 01: 单级制热 - 地暖 02: 两级制热
18	■	■	■	BI输入正反属性	01	00: 常闭 01: 常开
19	■	■	■	强制占用模式	00	00: 无强制 01: 强制占用 02: 强制非占用
20	■	■	■	传感器类型	00	00: JCI版 10KNTC 01: 中国版 10KNTC
21	■	■	■	风机延时	00	阀关闭后, 风机延时关时间(0-99 s)
22			■	ECM启停	00	00: 禁用 01: 启用
23	■	■	■	BACnet Instance ID 高位	00	BACnet Instance ID 高位 0~99
24	■	■	■	BACnet Instance ID 低位	1	BACnet Instance ID 低位 0~99

## 注意:


- 接线前请查看接线图中的应用表以确定端子接线方式
- 温控器继电器输出为线电压, 内部继电器与火线相连
- 参数12可配置BI输入“occ”为不同应用
- BACnet Instance ID 默认自动设置为10000+MAC 地址, 如果需要手动设置BACnet Instance ID, 可以配置参数23和24。举例, 参数23设置成03, 参数24设置成04, 这时, BACnet Instance ID 是304。

1. 地暖/锅炉应用只有 00和04

① 当Mac地址大于99时 ① 会出现, 代表Mac地址百分位。当Mac地址小于100时 ① 会消失

## 报警代码描述

编号	代码	描述
1	E1/E2	内置温度传感器故障
2	HI	高温报警, 室内温度 > 55°C.
3	LO	1) 低温报警, 室内温度 < 0°C. 2) 传感器开路
4	E5	露点传感器报警
5	E6	滤网报警
6	E7	BI报警

 图标闪烁表示通讯故障报警

## 产品中有害物质的名称及含量

部件名称	有害物质					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr (VI))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
塑胶部件	o	o	o	o	o	o
电路板及组件	x	o	o	o	o	o
金属部件	o	o	o	o	o	o

本表格依据SJ/T11364的规定编制

○：表示该有害物质在该部件所有均质材料中的含量均在GB/T26572规定的限量要求以下

×：表示该有害物质在该部件所有均质材料中的含量超出GB/T26572规定的限量要求

(产品中使用的物料超出SJ/T11364标准，但在欧盟RoHS中，此项为豁免，因目前技术无法有符合SJ/T11364的替代材料)



Compliance

Johnson Controls declares that these products are in compliance with the essential requirements and other relevant provisions of the EMC Directive and Low Voltage Directive.



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