

Honeywell

温控器

WL9 系列温控器

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两管制接线 - 两线阀

四管制接线 - 两线阀

四管制接线 - 两线阀

自动风速运行逻辑

自动风速运行逻辑

安装设置

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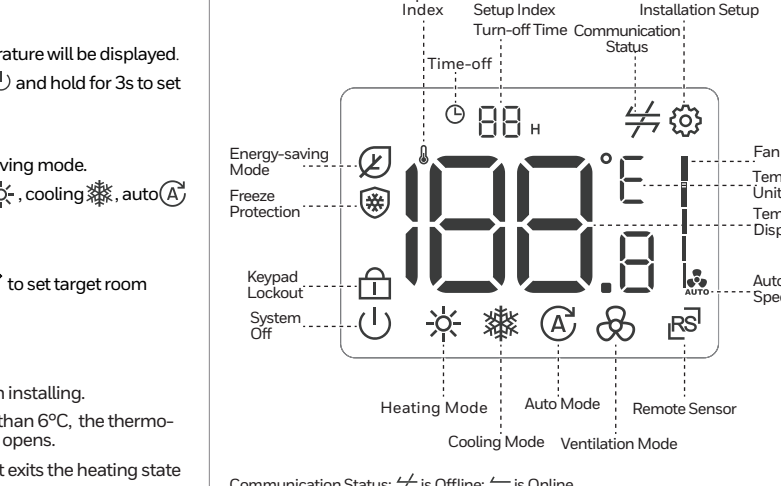
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Thermostat Appearance



Operating Your Thermostat

Power On/Off Time-off

In Off status, the icon and indoor temperature will be displayed.

When the thermostat is working, press the icon and hold for 3s to set the automatic turn off time.

Energy-saving / Mode

Press and hold for 3s to enter Energy-saving mode.

Short press to switch between heating, cooling, auto and ventilation modes.

Fan Speed

In heating, cooling or auto mode, press the icon or the icon to set target room temperature.

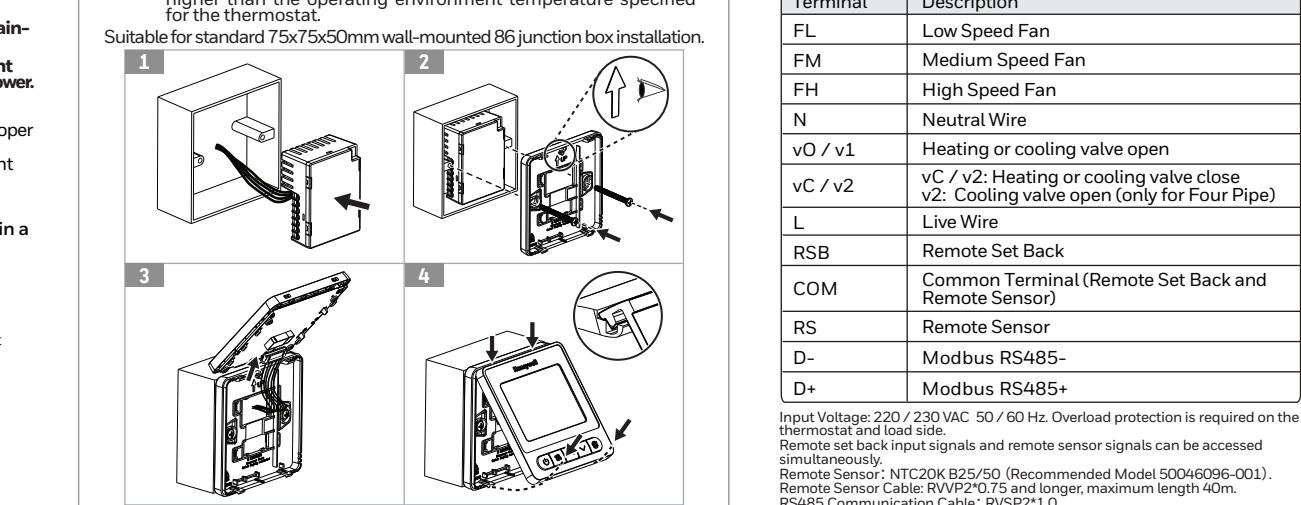
Freeze Protection

Users can turn on the overcooling protection when installing.

In Off state, when the indoor temperature is lower than 6°C, the thermostat enters the heating state and the heating valve opens.

When the indoor temperature is higher than 8°C, it exits the heating state and the heating valve closes.

LCD Display



Communication Status: Off: Offline; On: Online.

Trouble Shooting Tips

If...	Then....
Doesn't work	Set the mode to heating mode by pressing the icon. Check if the setpoint temperature is set below the room temperature. Check if the icon is displayed. Wait 5 minutes for the system to respond.
Doesn't work	Set the mode to cooling mode by pressing the icon. Check if the setpoint temperature is set above the room temperature. Check if the icon is displayed. Wait 5 minutes for the system to respond.
Doesn't work	Check if the icon is locked. Check if the thermostat is Off.
Doesn't work	Check if the icon is locked. Check if the system is in mode. Check if the thermostat is Off.
The system turns off automatically	Check if auto time-off value is set.
Time-off doesn't work	Check if the icon is locked. Check if the turn off time is 0. Check if the thermostat is in Installation Setup. Check if the thermostat is Off.
Display Unconnected Icon	Check communication address and baudrate. Check the wiring.

Installation Guide

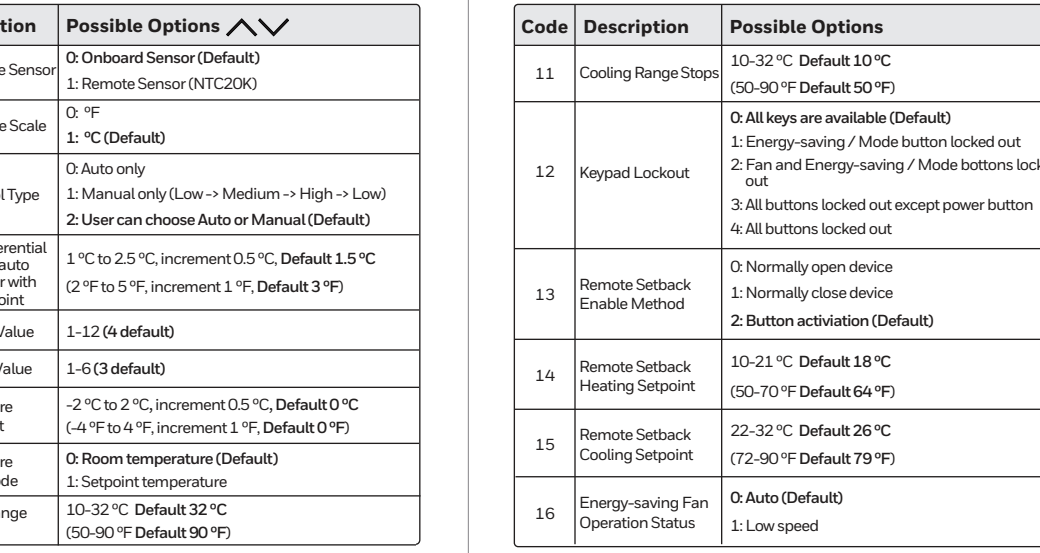
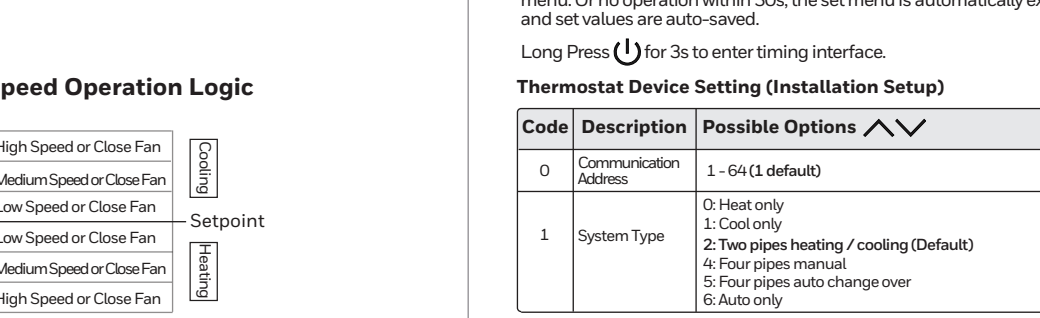
Warning:
• Installation and maintenance must be performed by trained and qualified service technician.
• To avoid personal injury (electrical shock) and to prevent equipment damage, before wiring you must disconnect power.

Instructions:
• Please read this manual carefully before installation, improper installation can cause damage to the thermostat.
• Make sure the thermostat is suitable for your equipment before installation.
• After installation, please test for normal use.

Install the thermostat approximately 1.5 meters above the floor in a well-ventilated location.

Do not install the thermostat in locations below:

- Unventilated areas such as corners and behind doors
- Areas near heating or cooling ducts
- Areas near sunlight or heat sources
- Other locations with low/high indoor temperatures, e.g., walls in direct contact with the outside world



Input Voltage: 220 / 230 VAC 50 / 60 Hz. Overload protection is required on the thermostat and load side.
Remote set back input signals and remote sensor signals can be accessed simultaneously.
Remote Sensor: NTC20K B25/50 (Recommended Model 50046096-001). Remote Sensor Cable: RVVP2*0.75 and longer, maximum length 40m.
RS485 Communication Cable: RVSP2*1.0.
Weak power and communication cables cannot be co-ducted or co-slotted with strong power.

Modbus Specifications

Modbus RTU Specifications

Physical Layer	EIA485
Protocol Type	Master - Slave
Baud Rate	9600 (default)/4800/19200/38400
Parity Check	None
Data Bits	8
Stop Bits	1

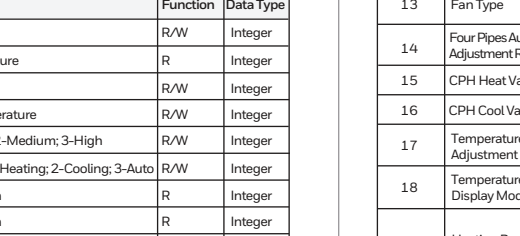
Function Code Information

Code	Function
0x03	Read Holding Register
0x06	Write Single Register
0x10	Write Multiple Registers

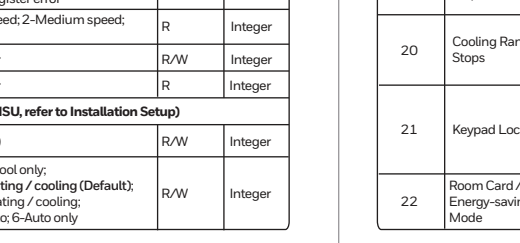
Caution:

- Ensure the physical security of the device. Only authorized personnel can access to the device and bus.
- Ensure the security of device installation, operation and maintenance management.
- Ensure that the device is on an isolated internal network.

Two Pipe Application - Two-wire Valve

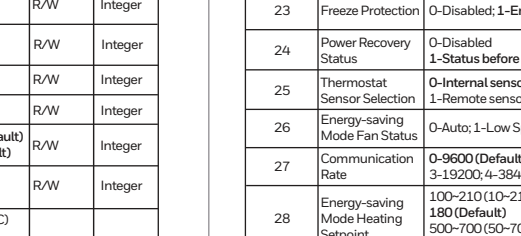


Two Pipe Application - Three-wire Valve

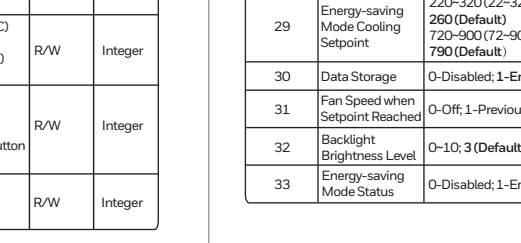


When plugging or unplugging terminals, make sure that all wires are stressed at the same time. Partial force on the wires can cause damage to the wires.

Four Pipe Application - Two-wire Valve

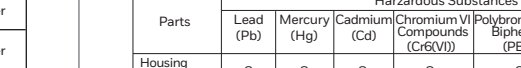


Auto Wind Speed Operation Logic



When plugging or unplugging terminals, make sure that all wires are stressed at the same time. Partial force on the wires can cause damage to the wires.

Installation Setup



Long press the icon and the icon for 3s to start installation setup.

Short press the icon to switch the menu 1-22. After confirming the menu, set the values by pressing the buttons.

When setting is complete, long press the icon and the icon for 3s to exit the setting menu. Or no operation within 30s, the set menu is automatically exited and set values are auto-saved.

Long Press the icon for 3s to enter timing interface.

Thermostat Device Setting (Installation Setup)

Code	Description	Possible Options
0	Communication Address	1 - 64 (1 default)
1	System Type	0: Heat only 1: Cool only 2: Two pipes heating / cooling (Default) 3: Four pipes manual 4: Four pipes heating / cooling 5: Four pipes auto change over 6: Auto only

When plugging or unplugging terminals, make sure that all wires are stressed at the same time. Partial force on the wires can cause damage to the wires.

Code Description Possible Options

2	Temperature Sensor	0: Onboard Sensor (Default) 1: Remote Sensor (NTC20K)
3	Temperature Scale	0: °F 1: °C (Default)
4	Fan Control Type	0: Auto only 1: Manual only (Low -> Medium -> High -> Low) 2: User can choose Auto or Manual (Default)
5	Switch differential for 4 pipes auto changeover with single setpoint	1 °C to 2.5 °C, increment 0.5 °C, Default 1.5 °C (2 °C to 5 °F, increment 1 °F, Default 3 °F)
6	CPH Heat Value	1-12 (4 default)
7	CPH Cool Value	1-6 (3 default)
8	Temperature Adjustment	-2 °C to 2 °C, increment 0.5 °C, Default 0 °C (-4 °F to 4 °F, increment 1 °F, Default 0 °F)
9	Temperature Display Mode	0: Room temperature (Default) 1: Setpoint temperature
10	Heating Range Stops	10-32 °C Default 32 °C (50-90 °F Default 90 °F)

When plugging or unplugging terminals, make sure that all wires are stressed at the same time. Partial force on the wires can cause damage to the wires.

Code Description Possible Options

11	Cooling Range Stops	10-32 °C Default 10 °C (50-90 °F Default 50 °F)
12	Keypad Lockout	0: All keys are available (Default) 1: Energy-saving / Mode button locked out 2: Fan and Energy-saving / Mode buttons locked out 3: All buttons locked out except power button 4: All buttons locked out
13	Remote Setback Enable Method	0: Normally open device 1: Normally close device 2: Button activation (Default)
14	Remote Setback Heating Setpoint	10-21 °C Default 18 °C (50-70 °F Default 64 °F)
15	Remote Setback Cooling Setpoint	22-32 °C Default 26 °C (72-90 °F Default 79 °F)
16	Energy-saving Fan Operation Status	0: Auto (Default) 1: Low speed

When plugging or unplugging terminals, make sure that all wires are stressed at the same time. Partial force on the wires can cause damage to the wires.

Code Description Possible Options

17	Freeze Protection	0: Disabled 1: Enabled when room temperature is below 6°C (43°F) (Default)
18	Power Recovery Status	0: Off 1: Previous Status (Default)
19	Data Storage	0: Disabled 1: Enabled (Default)
20	Fan Speed when Setpoint Reached	0: Off (Default) 1: Previous Status
21	Communication Baudrate	0: 9600 (Default) 1: 4800 2: 19200 3: 38400
22	Backlight Brightness Level	Level 0-10 (3 Default) Note: Backlight disabled when level 0 is set.

When plugging or unplugging terminals, make sure that all wires are stressed at the same time. Partial force on the wires can cause damage to the wires.

Communication Variable Setting

Resistor Address	Description	Setting Value	Function	Data Type
1	Thermostat Status	0-Off; 1-On	R/W	Integer
2	Room Temperature	Room Temperature	R	Integer
3	Temperature Unit	0-°F; 1-°C	R/W	Integer
4	Setpoint	Set target temperature	R/W	Integer
5	Fan Speed	0-Auto; 1-Low; 2-Medium; 3-High	R/W	Integer
6	System Status	0-Ventilation; 1-Heating; 2-Cooling; 3-Auto	R/W	Integer
7	VO/V1 Valve	0-Close; 1-Open	R	Integer
8	VC/V2 Valve	0-Close; 1-Open	R	Integer
9	Error Code	0-No error; 1-Sensor error; 2-Register error	R	Integer
10	Fan Status	0-Off; 1-Low speed; 2-Medium speed; 3-High speed	R	Integer
34	Off Time	0-12; Unit: Hour	R/W	Integer
35	Remain Time to Off	0-12; Unit: Hour	R	Integer

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Resistor Address Description Setting Value Function Data Type

13	Fan Type	0-Auto; 1-Manual; 2-Auto+manual (Default)	R/W	Integer
14	Four Pipes Auto Adjustment Range	2-1°C (2°F); 3-1.5°C (3°F) (Default) 4-2°C (4°F); 5-3°C (5°F)	R/W	Integer
15	CPH Heat Value	1-12; 4 (Default)	R/W	Integer
16	CPH Cool Value	1-6; 3 (Default)	R/W	Integer
17	Temperature Adjustment	0-8 (-2-2°C) increment 1 (0.5°C) 4 (Default) 0-8 (-4-4°F) increment 1 (1°F) 4 (Default)	R/W	Integer
18	Temperature Display Mode	0-Room Temperature (Default); 1-Setpoint Temperature	R/W	Integer
19	Heating Range Stops	100-320 (10-32°C) increment 5 (0.5°C) 180 (Default) 500-700 (50-70°F) increment 10 (1°F) 640 (Default)	R/W	Integer
20	Cooling Range Stops	100-320 (10-32°C) increment 5 (0.5°C) 100 (Default) 500-700 (50-70°F) increment 10 (1°F) 790 (Default)	R/W	Integer
21	Keypad Lockout	0-All keys available (Default) 1-Mode button locked out 2-Fan and mode button locked out 3-All buttons locked out except power button 4-All buttons locked out	R/W	Integer
22	Room Card / Energy-saving Mode	0-Room card normally open 1-Room card normally close 2-Energy-saving / Mode button	R/W	Integer

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Resistor Address Description Setting Value Function Data Type

23	Freeze Protection	0-Disabled; 1-Enabled (Default)	R/W	Integer
24	Power Recovery Status	0-Disabled 1-Status before power cut (Default)	R/W	Integer
25	Thermostat Sensor Selection	0-Internal sensor (Default) 1-Remote sensor	R/W	Integer
26	Wire-saving Mode Fan Status	0-Auto; 1-Low Speed	R/W	Integer
27	Communication Rate	0-9600 (Default); 1-4800; 3-19200; 4-38400	R/W	Integer
28	Energy-saving Mode Heating Setpoint	100-210 (10-21°C) increment 5 (0.5°C) 180 (Default) 500-700 (50-70°F) increment 10 (1°F) 640 (Default)	R/W	Integer
29	Energy-saving Mode Cooling Setpoint	220-320 (22-32°C) increment 5 (0.5°C) 260 (Default) 720-900 (72-90°F) increment 10 (1°F) 790 (Default)	R/W	Integer
30	Data Storage	0-Disabled; 1-Enabled (Default)	R/W	Integer
31	Fan Speed when Setpoint Reached	0-Off; 1-Previous status	R/W	Integer
32	Backlight Brightness Level	0-10; 3 (Default)	R/W	Integer
33	Energy-saving Mode Status	0-Disabled; 1-Enabled	R/W	Integer

When plugging or unplugging terminals, make sure that all wires are stressed at the same time. Partial force on the wires can cause damage to the wires.

Name and Content of Hazardous Substances

Parts	Lead (Pb)	Mercury (Hg)	Cadmium (Cd)	Chromium VI Compounds (Cr(VI))	Biphenyls (BPPB)	Polybrominated Diphenyl Ethers (PBDE)
Housing Components	0	0	0	0	0	0
PWBA	X	0	0	0	0	0
Wire Harness Components	0	0	0	0	0	0
Fasteners	0	0	0	0	0	0

This table is prepared in accordance with the provisions of GB/T 11364.
0: Indicates that the hazardous substance contained in all of the homogeneous materials for this part is below the limit requirement of GB/T26572.
X: Indicates that the hazardous substance contained in at least one of the homogeneous materials for this part is above the limit requirement of GB/T 26572.
All other components, not listed in the table, do not contain restricted substances above the threshold level.