Honeywell Home T6590A Fan-Coil Controller Installation Guide

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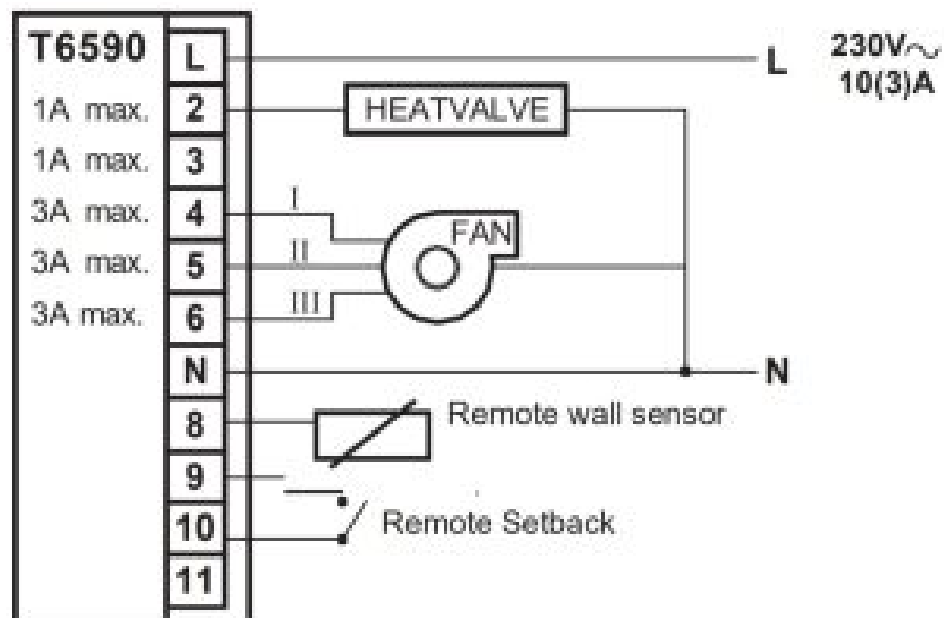
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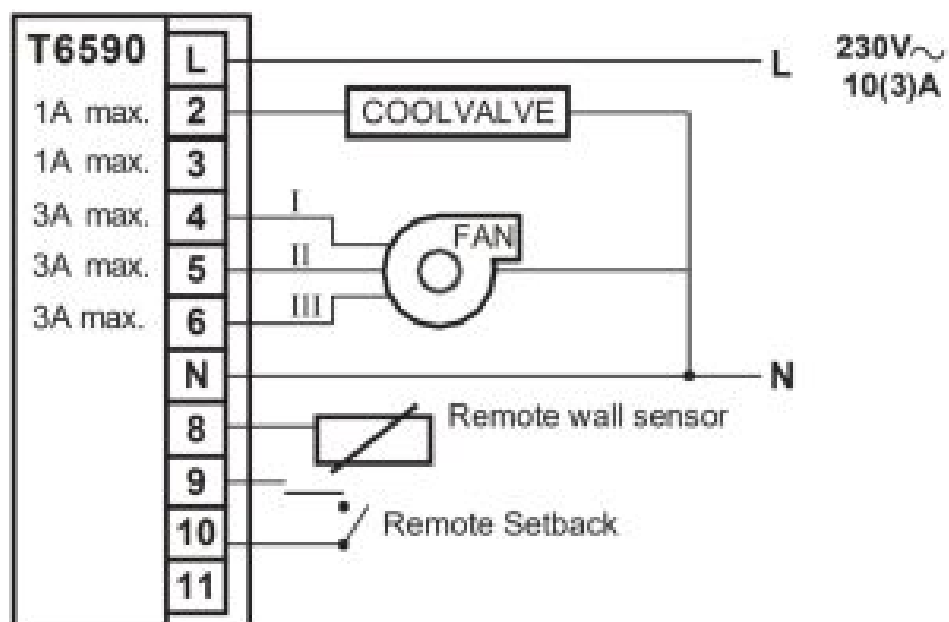
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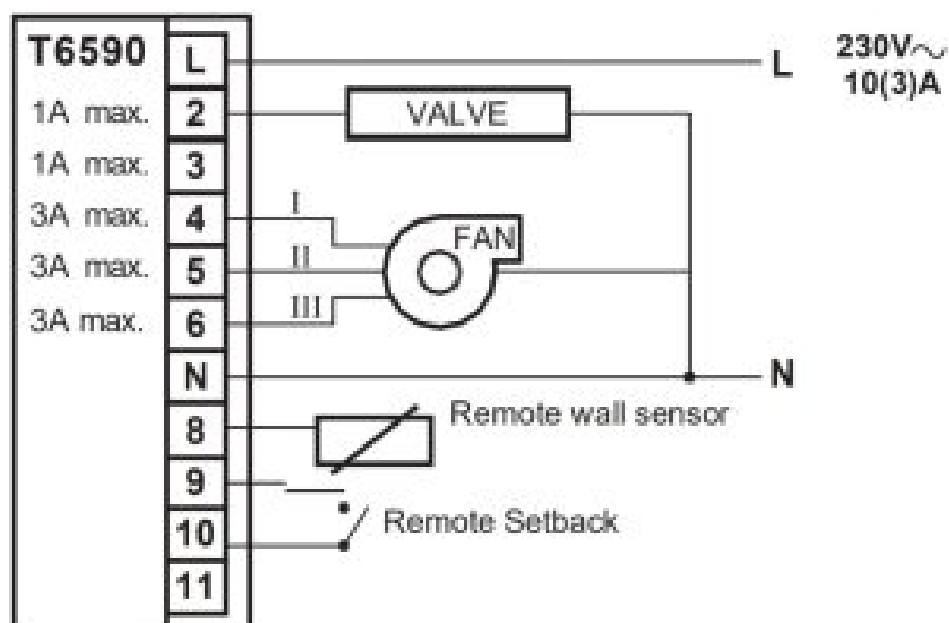
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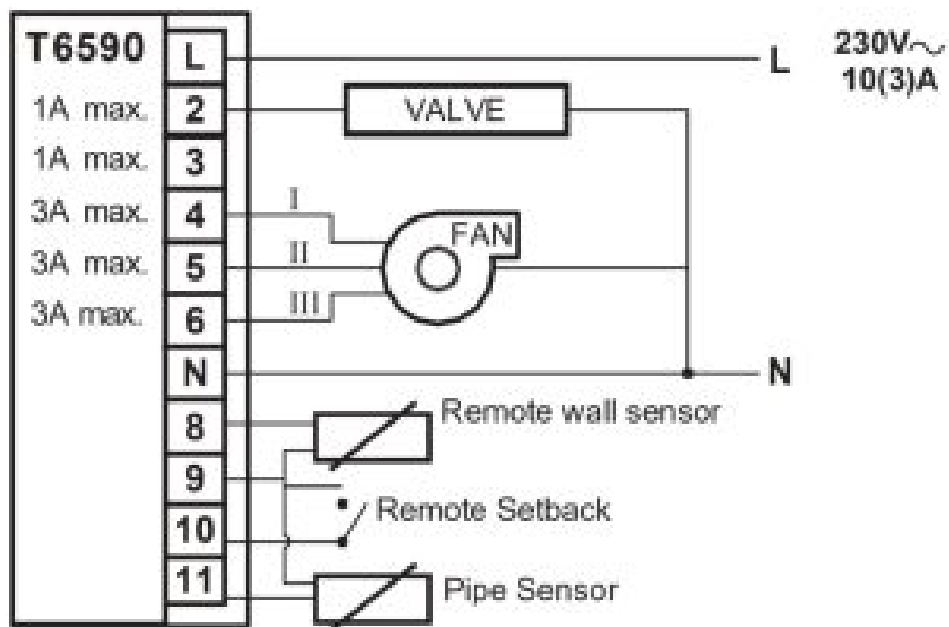
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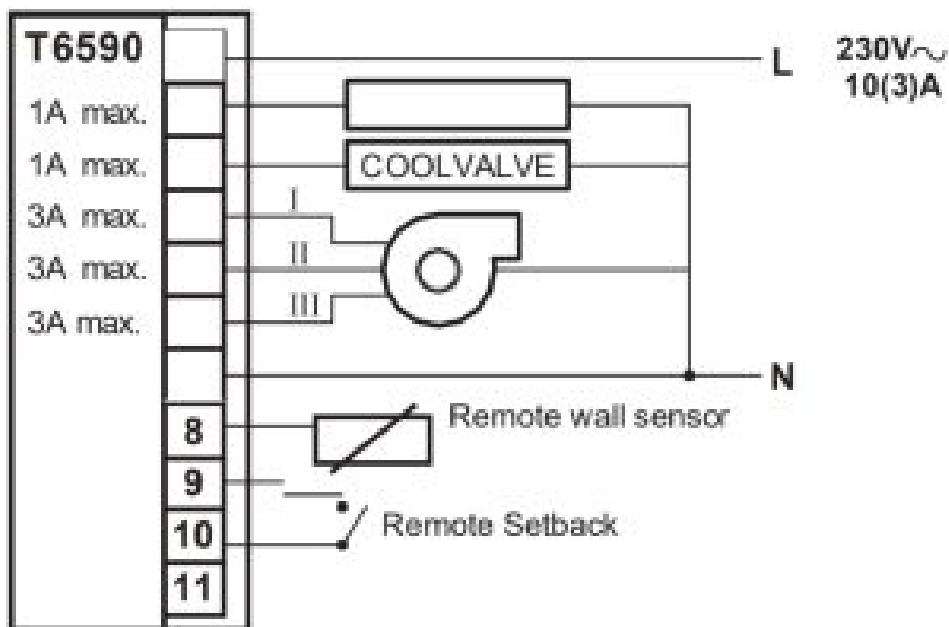
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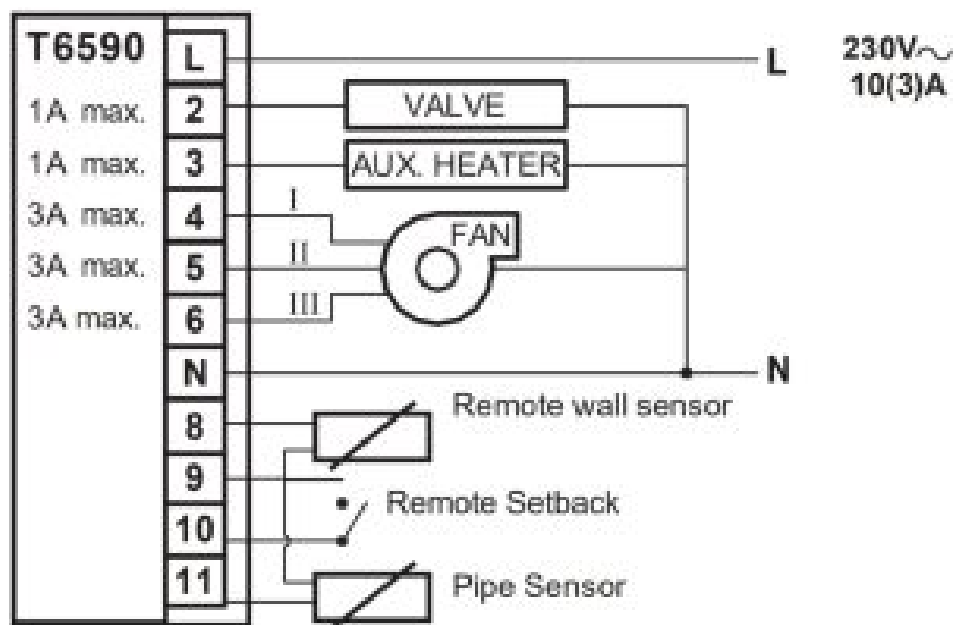
Applications

T6590A (2 Pipe Model)

Application	Description	Changeover	Fan speed	Remote sensor	Pipe sensor	Remote setback	Auxiliary Heater	Output type
0	2 pipe system, heating only	–	ON/OFF, 1/2/3, AUTO	•	–	•	–	ON, OFF
1	2 pipe system, cooling only	–	ON/OFF, 1/2/3, AUTO	•	–	•	–	ON, OFF
2	2 pipe system, 1 stage heat or 1 stage cool	Manual	ON/OFF, 1/2/3, AUTO	•	–	•	–	ON, OFF
3	2 pipe system, 1 stage heat or 1 stage cool, auto changeover	Seasonal Changeover	ON/OFF, 1/2/3, AUTO	•	•	•	–	ON, OFF

T6590B (4 Pipe Mode)

Application	Description	Changeover	Fan speed	Remote sensor	Pipe sensor	Remote set back	Auxiliary Heater	Output type
0	2 pipe system, heating only	–	ON/OFF, 1/2/3, AUTO	•	–	•	–	ON, OFF
1	2 pipe system, cooling only	–	ON/OFF, 1/2/3, AUTO	•	–	•	–	ON, OFF
2	2 pipe system, 1 stage heat or 1 stagecool	Manual	ON/OFF, 1/2/3, AUTO	•	–	•	–	ON, OFF
3	2 pipe system, 1 stage heat or 1 stage cool, auto changeover	Seasonal Changeover	ON/OFF, 1/2/3, AUTO	•	•	•	–	ON, OFF
4	4 pipe system 1 stage heat and 1 stage cool	Manual	ON/OFF, 1/2/3, AUTO	•	–	•	–	ON, OFF
5	4 pipe system 1 stage heat and 1 stage cool auto changeover	Auto changeover	ON/OFF, 1/2/3, AUTO	•	–	•	–	ON, OFF

6	2 pipe system, 1 stage heat or 1 stage cool with auxiliary electric heater	Manual with seasonal changeover	ON/OFF, 1/2/3, AUTO	•	•	•	•	ON, OFF
7	4 pipe system, mixed manual and auto	Manual / Auto changeover	ON/OFF, 1/2/3, AUTO	•	–	•	–	ON, OFF

Installer Setup Mode

The T6590 is delivered with a set of pre-configured operational values that will allow the device to function immediately. However, in order to make the device compatible with a specific system, some of the internal settings may need to be changed. For information on the default values and the configurable options, please refer to the **"Installer Parameter Table".**

1. To enter the Installer Setup Mode, press the (⏻ / 🔥 / ❄) and △ buttons together for 3 seconds.
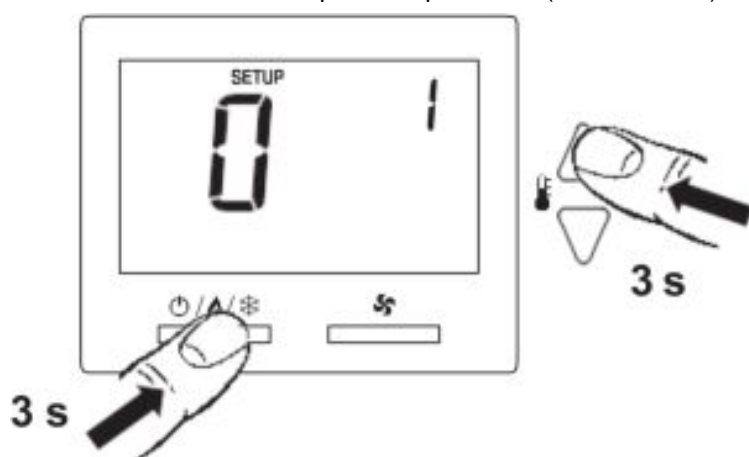
2. To index between the individual Parameters, use the (⏻ / 🔥 / ❄) button. It is only possible to move upwards through the parameters.
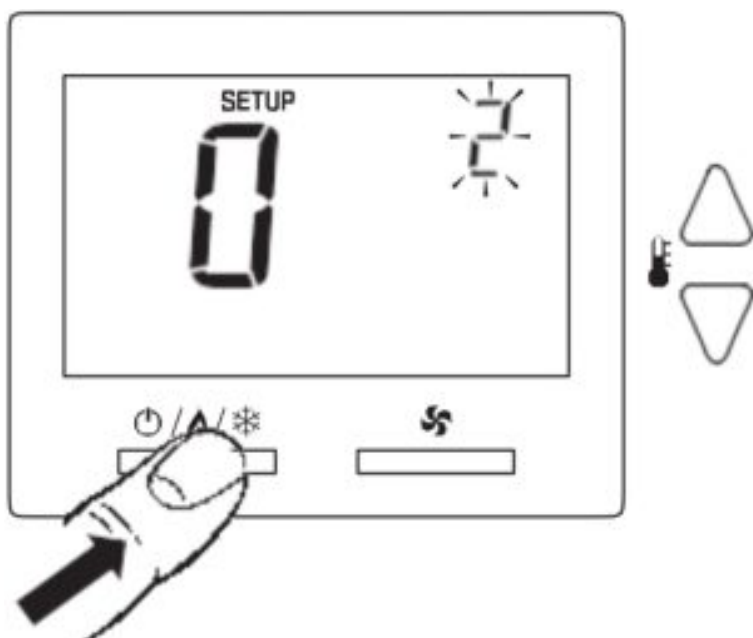
3. To change a selected parameter, use the △ or ▽ button.
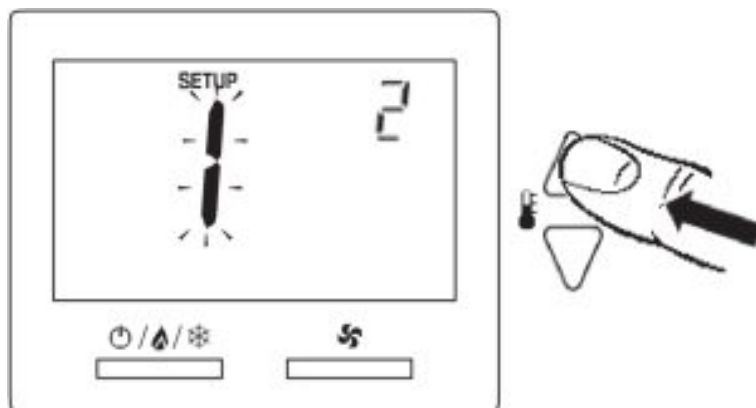
4. To save the altered settings, exit the Installer Setup Mode by Pressing the (⏻ / ♦ / ❄) and △ buttons together for 3 seconds. **NB:** If the Installer Setup Mode is exited by time-out (approximately 120 seconds), then the newly changed values will not be saved.
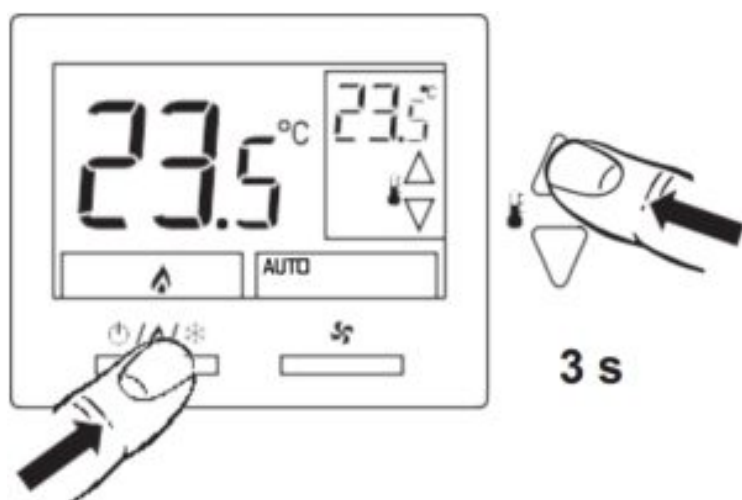
Installer Parameters Table

Parameter No	Parameter	Setting
		0 = 2 Pipe system Heat Only

1	System Type	1 = 2 Pipe system Cool Only
		2 = 2 Pipe system 1H1C manual changeove
		3 = 2 Pipe system 1H1C auto changeover (default on T6590A)
		4 = 4 pipe system with manual changeover (not available on T6590A)
		5 = 4 Pipe system auto changeover (default on T6590B
		6 = 2 pipe system 1H1C with Auxiliary Heater. Manual changeover
		7 = 4 pipe system, mixed manual and automatic changeover (not available on T6590A)
2	Valve output type	0 = NO* ON/OFF (Default)
		1 = NC** ON/OFF
3	Sensor Type	0 = Onboard Sensor (Default)
		1 = Remote Sensor
4	Pipe sensor (Note: This item will be automatically populated based on Parameter No.2)	0 = NO* input (Default = Heat
		1 = NO* input (Default = Cool)
		2 = NC** input (Default = Heat)
		3 = NC** input (Default = Cool)
		4 = Analogue input (Default) (NTC20K, T7414C1012)
5	Threshold for pipe sensor cooling	10 – 18°C (Default)
6	Threshold for pipe sensor heating	24 – 32°C (Default)
7	Fan control type Fan stops in deadband	0 = Cycle or Constant (Default) (3 speed: Low->Med->High->Auto-> Low)
		1 = Constant only (3 speed: Low->Med->High-> Low)
8	Dead band for four pipes	1 – 5°C (Default = 2°C) (not available on T6590A)
9	Cycles Per Hour (CPH) value for heating	1 – 12 CPH (Default)
10	Cycles Per Hour (CPH) value for cooling	1 – 6 CPH (Default)
11	Cycles Per Hour(CPH) value for Auxiliary Heater	1 – 12 CPH (Default)
12	Display Temperature adjustment	-2 to +2°C (Default)

13	Temperature Display mode	0 = Room Temperature only
		1 = Setpoint only
		2 = Room Temperature and Setpoint (Default)
14	Heating setpoint Range Stops	10 – 32°C (Default)
15	Cooling setpoint Range Stops	10 – 32°C (Default)
16	Keypad Lockout	0 = All keys available (Default)
		1 = System button Locked out
		2 = Fan and System button Locked out
		3 = All buttons locked out
17	Remote setback	1 = Hotel card NO*, with 1 second software delay going from Unoccupied to Occupied; 2 minute delay going from Occupied to Unoccupied
		2 = Hotel card NC**, with 1 second software delay going from Unoccupied to Occupied; 2 minute delay going from Occupied to Unoccupied
		3 = Hotel Card enabled, NO*, with 1 second software delay going from Unoccupied to Occupied; 30 minute delay going from Occupied to Unoccupied
		4 = Hotel Card enabled, NC**, with 1 second software delay going from Unoccupied to Occupied; 30 minute delay going from Occupied to Unoccupied
18	Remote setback heating setpoint	10 – 21°C (Default)
19	Remote setback cooling setpoint	22 – 32°C (Default)
20	Activity Sensing (If no key is pressed after a certain period which is configured in this item, the system will enter Unoccupied mode)	0 = Disabled (Default)
		1 = 4 Hour Sensing
		2 = 12 Hour Sensing
		3 = 24 Hour Sensing. NB: Anytime the thermostat is not touched (no single key pressed), the thermostat will automatically fall back into Unoccupied setpoints. When any key is pressed, thermostat controls to occupied mode
21		0 = Disabled (Default)
21	Freeze Protection	1 = Enabled – Thermostat Cycles On Heat when room temperature reaches 4°C and disables Heat when room temperature reaches below 8°C. This feature can not activate if the application is cool only

22	Auto Fan Reset	1 = Reset back to Auto after 2 hours (Not allowed when constant fan is selected in Parameter No.7). The start time is calculated after the initial call for heat
		2 = Reset back to Auto after 4 hours (Not allowed when constant fan is selected in Parameter No.7). The start time is calculated after the initial call for heat/cool
23	Fan run-on time after auxiliary heater is switched off	0 – 600 Sec. (Default)

Support

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Documents / Resources

| | **Honeywell Home T6590A Fan-Coil Controller** [pdf] Installation Guide
T6590A, T6590B, Fan-Coil Controller |

References

- **HoneywellHome comfort Europe from Resideo**
- **Smart Home Products and Systems | Resideo**