

HTW-61 Series Digital/Analogue Application

Product Reference No.:HTW-61-D/A

Instruction Data Sheet

This series thermostat application is designed for room climate control at hotels, offices and homes with water and fan coil installations.

- 3D1D includes 3 load digital ON/OFF fan speed outputs and 1 load digital ON/OFF valve output;
- 1A1D includes 1 load analogue EC fan motor output and 1 load digital ON/OFF valve output;
- 1A1A includes 1 load analogue EC fan motor output and 1 load analogue valve output;

The device includes a built in temperature sensor on its front panel for room temperature measurement, and features an advanced control algorithm for fan coil speed and valve position control.

The device includes a simple configuration menu that allows configuring up to 28 parameters. The unit can thus be adapted to the requirements of each installation

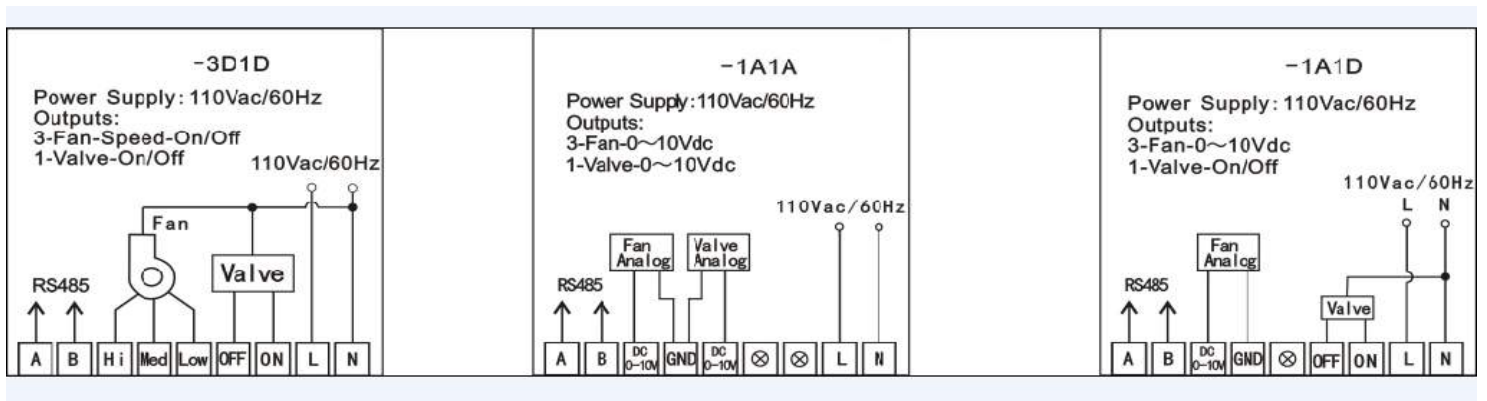


Front View



Back View

Wiring diagram



Pushbutton operation



On/Off

Switches the device and its operation on and off. In keycard switch contact operating mode, when the room is not occupied it will not allow operation until occupancy is detected.



Fan-Coil Speed

Selects sequentially the 3 fan coil speeds and the AUTO mode every time the pushbutton is pressed. Two modes are selected: AUTO or MAN. AUTO: the screen will display "AUTO", in addition to the corresponding bar graph to indicate current speed. Fan coil speed will be automatically determined by the controller, based on thermal demand. MAN: the user forces the desired fan coil speed. The "AUTO" label is not displayed in this mode.



Temperature setpoint

Temperature setpoint value may be increased or decreased within the maximum and minimum limits as configured in the device.



Heat/Cool

Switches the device operating mode between HEAT and COOL.

Configuration Parameters

Special Note:

1). During power-off status, push and hold "Fan" and "+" buttons together for 6s to entry the configuration parameter setting;

2). P19-P26 are invalid for model -3D1D; P19,P20,P23 are invalid for model -1A1D; P3,P4,P7,P17 are invalid for -1A1A.

Parameter	Description	Possible values	Default values	Setting display
1	Displaying temperature in °C or °F	°C or °F	°C	C/F
2	Fan-coil speed(1 speed,3speeds)	1/3	3	1/3
3	1 fan-coilspeed active when there's no demand in cooling mode	NO/YES	YES	NO/YES
4	1 fan-coilspeed active when there's no demand in heating mode	NO/YES	NO	NO/YES
5	Change mode COOLING/HEATING as per set-point/temperature difference	NO/YES	NO	NO/YES
6	Displaying value(set-point/room temperature/set-point&temp.) -Note 1	SET/TEP/SET&TEP	SET	SET/TEP/ALL
7	Dead-band temperature between cool/heat	+1°C~+6.0°C	3°C	+1°C~+6.0°C
8	Offset temperature	-3.0°C~+3.0°C	0.0°C	-3.0°C~+3.0°C
9	Configurable set-point maximum temperature	+22.0°C~+32.0°C	32.0°C	+22.0°C~+32.0°C
10	Configurable set-point minimum temperature	+15.0°C~+21.0°C	15.0°C	+15.0°C~+21.0°C
11	Set-point temperature in cool and occupied mode	+15.0°C~+32.0°C	23.0°C	+15.0°C~+32.0°C
12	Set-point temperature in heat and occupied mode	+15.0°C~+32.0°C	21.0°C	+15.0°C~+32.0°C
13	Equipment start-up after reset(OFF/ON)	OFF/ON	ON	OFF/ON
14	Equipment start-up internal mode(COOL/HEAT)	CO/HE	CO	CO/HE
15	Default value for all parameters	NO/YES	NO	NO/YES
16	Modbus address setting (ID)	1~255	1	1~255
17	Time delay for Auto-Speed switch: 1). 1---1 min delay; 2). 3---3 min delay; 3). 5---5 min delay	1/3/5	1	1/3/5
18	Changeover Configurable on M button 1-Heating and Cooling 2-Cooling Only 3-Heating Only	1/2/3	1	1/2/3
19	Modulating 0-10v value P in PI	4\6\8\10°C	10°C	4\6\8\10
20	Modulating 0-10v value I in PI	1-60 Second	40S	1-60
21	EC Fan Motor Starting Voltage (S1)	0~S2	1.0V	0~S2 V
22	EC Fan Motor Maximum Voltage(S2)	S1~10	8.0V	S1~10 V
23	Starting point of EC motor in regulation (% valve regulation). Enables the EC motor to be started only if the minimum opening percentage set in P23 has been reached by the valve (see ventilation function)	0~100%	10%	0~100%
24	Speed 1 of EC motor (% of range P22 - P21) 0%=P21 setting 100%=P22 setting	0~15%	10%	0~15%
25	Speed 1 of EC motor (% of range P22 - P21) 0%=P21 setting 100%=P22 setting	30~75%	65%	30~75%
26	Speed 1 of EC motor (% of range P22 - P21) 0%=P21 setting 100%=P22 setting	80~100%	100%	80~100%

Notes

1) If P9 is configured as ALL, defaulting display SET, and display TEP by pushing and holding "+"&"-" buttons together, 6s later return to SET display.