

HL2003 Series Thermostats

General

The HL2003 series thermostats are stand-alone microprocessor based thermostats with LCD display. The thermostats are designed to on/off control the fans, valves, dampers or electric heaters in fan coil units and heating applications.

Models are available for heating/cooling/ventilating control of 2-pipe or 4-pipe fan coil units.

The fan speed can be manually controlled by the fan speed control pushbutton. It is wired to run high/medium/low speed continuously or to automatically change the fan speed.



Features

- Attractive modern styling makes this thermostat ideal for locating in the occupied space
- Digital LCD display room temperature and set point
- Adjustable heating/cooling/ventilating mode control
- Adjustable manual 3-speed or automatic fan speed control and on/off control output for valve
- Infrared remote control available(optional)
- Backlight function available(optional)
- Thermostat mounted directly onto a wall or standard junction box
- Model available for 24,110, 220Vac power input also
- Reliable DC power supply by transformer
- Reliable output by relays

Main Functions

- Mode: Cool, Heat and Vent.
- Room Temperature Setting
- Detect and Display Room Temperature
- Low Temperature Protection
- Backlight function available(optional)
- Manual/Auto Fan Speed Changeover
- Remote Control (Optional)

Model Definitions

Model	Control Mode			Fan 3-speed		Application					Control Capability		Sub-feature	
	Heat	Cool	Vent.	Manual	Auto	Damper	2-Pipe fan coil	4-Pipe fan coil	2-wire Motorized Valve	3-wire Motorized Valve	Cycling Fan	Auto Changeover	-L Backlit	-R IR
HL2003Y	✓	✓				✓							Optional functions	
HL2003DA	✓	✓	✓	✓	✓		✓		✓					
HL2003DA2	✓	✓	✓	✓	✓		✓			✓				
HL2003DB	✓	✓	✓	✓	✓		✓		✓		✓			
HL2003DB2	✓	✓	✓	✓	✓		✓			✓	✓			
HL2003FCV2	✓	✓	✓	✓	✓			✓	✓					
HL2003AFCV2	✓	✓	✓	✓	✓			✓	✓			✓		

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Specifications

Power Supply:

220Vac(or any other volt.) $\pm 10\%$, 50/60Hz

Setpoint Range:

5 ~ 35°C

Setting Unit:

1°C/step

Accuracy:

$\pm 1^\circ\text{C}$

Display:

53 × 36mm LCD display

System Adjust:

5 push-button for Power, Mode, Fan speed, Up and Down

Mode Setting:

Heating, Cooling and Ventilating

Fan Speed Adjust:

High, Medium, Low and Automatic fan speed control

Cycling Fan Control:

Fan cycled running with thermostat

Control Performance:

ON/OFF control

Differential:

1°C

Thermostat Output:

SPST relay for 2-pipe configuration
2 SPST relay for 4-pipe configuration

Electrical Rating:

0.8A run, 5A inrush

Temperature Sensor:

NTC Thermistor 100K

Enclosure:

Fire retardant PC ABS

Minimum Operational Life:

Thermostat contacts: 100,000 cycles

Remote Controller(optional):

Infrared Remote Control

Backlight Function(optional) :

Blue light

Dimensions:

86 × 86 × 13mm (W × H × D)

Hole Pitch:

60 mm

Environmental requirements:

Operating temperature range 0 ~ 40°C,
Humidity range 5 ~ 95 %RH (non-condensing)

Wiring:

Screw-in terminals, each terminal capable of accepting
16 AWG, 18 AWG, 1.25mm² or 0.75mm² wires

Embedded Mounting:
