

HL109 Series Thermostats

General

HL109 series thermostats are designed to control the room temperature in industrial, commercial and residential environment via controlling the fan coil units (With or without motorized valve), dampers, diffuser etc. which uses NTC to detect the room temperature and compare it with the set-point so as to automatically keep the room temperature stable.



Features

- Elegant shape with high reliability
- To control fan coil, valve and damper etc.
- Manual switch to select work state and use knob to set the temperature.
- Thermostats can be directly mounted on the wall or standard wiring box.

Main Functions

- Turning On/Off
- Fan Speed Adjustable
- Cool/Heat Exchange Control
- Room Temperature Setting

Model Definitions

Model	Control Mode		Fan 3-speed	Application					Control Capability
	Heat	Cool	Manual	Damper	2-Pipe fan coil	4-Pipe fan coil	2-wire Motorized Valve	3-wire Motorized Valve	Cycling Fan
HL109Y			✓	✓					
HL109DA	✓	✓	✓		✓		✓		
HL109DA2	✓	✓	✓		✓			✓	
HL109DB	✓	✓	✓		✓		✓		✓
HL109DB2	✓	✓	✓		✓			✓	✓
HL109FCV2	✓	✓	✓			✓	✓		



Specifications

Supply Voltage:

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

Setpoint Range:

10~30°C

Setting Unit:

1°C/step

Accuracy:

$\pm 1.5^\circ\text{C}$

Indication:

LED indicate operation state:
In RED shows the power is on;
In ORANGE shows under heating or cooling.

System Adjust:

6 switch for OFF,HEAT, COOL, HIGH, MED and LOW

Mode Setting:

Heating, Cooling

Fan Speed Adjust:

High, Medium, Low fan speed control

Cycling Fan Control:

Fan cycled running with thermostat

Control Performance:

ON/OFF control

Thermostat Output:

SPST relay for 2-pipe and 4-pipe models

Electrical Rating:

3A run, 3A inrush

Temperature Sensor:

NTC Thermistor 10K

Enclosure:

Fire retardant PC ABS

Minimum Operational Life:

Thermostat contacts: 100,000 cycles

Dimensions:

86x86x24mm (WxHxD)

Hole Pitch:

60 mm

Environmental requirements:

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

Mounting:

Mounts directly onto wall or wall-box(Mounting screws supplied)

Wiring:

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