

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

- Surface mounting
- 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

- HEAT/COOL/OFF select by switch
- Adjust setpoint by knob
- Speed select by switch
- LED indicates working state

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	✓	✓	✓			✓	✓		



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Specifications

Power Voltage:

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

Electrical Rating:

0.8A run,5A inrush

Setpoint Range:

10~30°C

Temperature Sensor:

NTC Thermistor 10K

Setting Unit:

1°C/step

Enclosure:

Fire retardant PC ABS

Accuracy:

± 1°C

Minimum Operational Life:

Thermostat contacts: 100,000 cycles

Indication:

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

Dimensions:

86 × 86 × 24mm (W × H × D)

Hole Pitch:

60 mm

System Adjust:

3-position slide switch for system of HEAT,OFF, COOL
3-position slide switch for fan speed of HIGH, MED and LOW

Environmental requirements:

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

Mode Setting:

HEAT,COOL

Mounting:

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

Fan Speed Select:

High, Medium, Low fan speed control

Wiring:

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

Cycling Fan Control:

Fan cycled running with thermostat

Control Performance:

ON/OFF control

Thermostat Output:

SPST relay for 2-pipe and 4-pipe configuration