

# **HL109 Electronic 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), damper, diffuser etc. which uses NTC to detect the room temperature and compare it with the setpoint 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 knob to set the temperature
- Thermostats can be directly mounted on the wall or standard wiring box

## **Functions**

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

## Part No.

	Control Mode		Fan 3-speed	Application					Control Capability
Model	Heat	Cool	Manual	Damper	2–Pipe fan coil	4–Pipe fan coil	2-wire MatarizedValve	3-wire MotorizedValve	Cydling Fan
HL109Y	V	V		V					
HL109DA	V	V	V		V		V		
HL109DA2	$\sqrt{}$		$\sqrt{}$		$\sqrt{}$				
HL109DB	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$		$\sqrt{}$		$\sqrt{}$		
HL109DB2	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$						$\sqrt{}$
HL109FCV2	V	V	V			V	V		



Ver Manual HL109DA / HL109FCV2



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**Specifications** 

Power Voltage:

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

Setpoint Range:

10~30℃

Setting Unit:

1°C/step

Accuracy:

± 1℃

Indication:

LED indicate the working state:

RED shows the power is on;

ORANGE shows under heating or cooling.

System Adjust:

3-position slide switch for system of HEAT, OFF, COOL

3-position slide switch for fan speed of HIGH, MED and LOW

Mode Setting:

HEAT, COOL

Fan Speed Selection:

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 configuration

Electrical Rating:

0.8A run,5A inrush

Temperature Sensor:

NTC Thermistor 10K

Enclosure:

Fire retardant PC ABS

Minimum Operational Life:

Thermostat contacts: 100,000 cycles

Dimensions:

 $86 \times 86 \times 24$ mm (W  $\times$  H  $\times$  D)

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 mm<sup>2</sup> or 0.75 mm<sup>2</sup> wires

