

## HL 2016 Digital Thermostats

### General

HL 2016 series FCU 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).

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



### Features

- Luxury appearance with larger digital LCD display
- Backlight function available(optional)
- Clock,7 days 4 periods Programmable(optional)
- ECONOMY mode selectable
- Adjustable manual 3-speed or automatic fan speed
- Control and on/off control fan control
- Low temperature protection

### Functions

- Clock, Timer on/off function(optional)
- 7 days 4 periods Programmable(optional)
- Infrared Remote Control (optional)
- Blue Backlight (optional)
- Power failure memory
- Key Locking Function

### Specifications

- Power Supply: 24Vac,110Vac,230Vac , 50/60Hz
- Setpoint Range: 5~35°C
- Setting Unit: 1°C/step
- Display Accuracy: ± 0.5°C
- Control Accuracy: ± 1°C
- Operating Temperature: 0~45°C
- Storage Temperature: 0~55°C
- Operation Humidity: 5~90%
- Temperature Sensor: NTC
- Electrical Rating: 1A run, 2A inrush
- Enclosure: Fire retardant PC ABS
- Dimensions: 86 × 100 × 15.3mm(W × H × D )
- Hole pitch: 60mm
- Protection Class: IP30
- Wiring: Screw-in terminals, each terminal capable of accepting 16AWG,18AWG,1.25mm<sup>2</sup> or 0.75mm<sup>2</sup>

### Part No.

| 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 | -T Prog.    | -L Backlit | -R IR              |
| HL2016Y     | ✓            | ✓    |       |             |      | ✓           |                 |                 |                        |                        |                    |                 |             |            |                    |
| HL2016DA    | ✓            | ✓    | ✓     | ✓           | ✓    |             | ✓               |                 | ✓                      |                        |                    |                 |             |            | Optional functions |
| HL2016DA2   | ✓            | ✓    | ✓     | ✓           | ✓    |             | ✓               |                 |                        | ✓                      |                    |                 |             |            |                    |
| HL2016DB    | ✓            | ✓    | ✓     | ✓           | ✓    |             | ✓               |                 | ✓                      |                        | ✓                  |                 |             |            |                    |
| HL2016DB2   | ✓            | ✓    | ✓     | ✓           | ✓    |             | ✓               |                 |                        | ✓                      | ✓                  |                 |             |            |                    |
| HL2016FCV2  | ✓            | ✓    | ✓     | ✓           | ✓    |             |                 | ✓               | ✓                      |                        |                    |                 |             |            |                    |
| HL2016AFCV2 | ✓            | ✓    | ✓     | ✓           | ✓    |             |                 | ✓               | ✓                      |                        |                    | ✓               |             |            |                    |

**Specification:**

**Power supply:**  
220 Vac or 12 Vdc (10%)

**Power Consumption:**  
4 VA or 300 mA at 12 Vdc

**Power Supply Output:**  
12 Vdc, Maximum 100 mA

**Communications:**  
Interface: RS-485  
Protocol: MODBUS  
Baud Rate: 9600 bps  
Maximum Length: 1200 meters  
Maximum Size: Up to 32 devices per bus

**Setpoint Range:**  
5 to 35 °C

**Setting Unit:**  
0.5 °C / step

**Accuracy:**  
0.5°C

**Mode Setting:**  
Heating, Cooling and Ventilating

**Fan Speed Setting:**  
High, Medium, Low and Automatic fan speed control

**Control Performance:**  
ON/OFF control, 1°C differential

**Dimensions:**

**Temperature Sensor:**  
NTC Thermistor 10K

**Control Output:**  
2 SPST relay for 2-pipe and 4-pipe model

**Electrical Rating:**  
2A run, 250 Vac

**Enclosure:**  
Steel housing

**Interlock Control Output:**  
SPST normally open (N.O.) dry contact output

**Wireless Remote Control (optional):**  
Infrared rays

**Dimensions:**  
125 × 150 × 36 mm (W × H × D)

**Operating Rating:**  
0 ~ 40°C, 5 ~ 95 %RH (non-condensing)

**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

**Accessories (optional):**  
RC6001A Wireless Remote Unit

