Features

SB-DN-HVAC module designed to control centralized HVAC, By use HDL control panel preset temperature and work mode , with built-in algorithm, it can smartly control the mode and fan speed. When using the master/slave mode, one panel can control several HVAC modules.

- Fan speed supported: high, medium , low.
- Mode supported: cooling, heating, dehumidification.
- Built-in control algorithm runs the air conditioner smartly.
- Can connect up to 4 PCS DS18B20(digital temperature sensor, supplied by HDL).
- One master module can have up to 8 slave module.
- Extra fan speed control method: DC0~10V
- Communication interface: HDL-BUS
- Upgrade firmware from Bus

Important Notes

- **Bus cable -** CAT5E or HDL Bus /KNX cable
- **Bus Connection -** Recommend connection of Bus wire hand by hand
- **Type of Valve -** check the valve on working voltage , make sure the input voltage matched with valve
- **Type of FAN -** check the FAN of type, make sure the type is AC or 0-10V , connect to correct terminal
- **Check Connections** – Re-tighten all connections after installation.
- **Output Circuit** – The load on each relay circuits must not exceed the specified capacity of 2A.
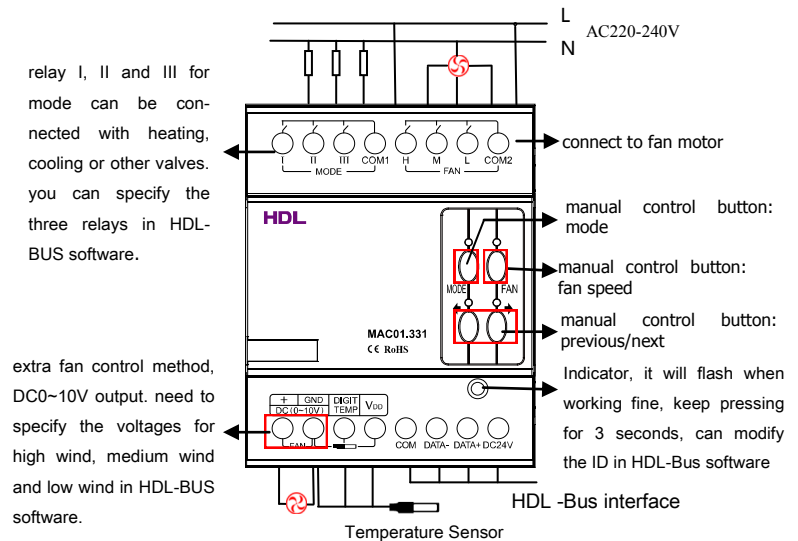
Installation Steps

- Labeling for AC power wires, load wires and HDL Bus wire
- Mount the device on a DIN rail of DB
- Make sure the current of each relay channel less than 2A.
- Connect wires for valve and FAN and AC power, Make sure there is no circuit short or open.
- Make sure the Bus cable type is correct and has no circuit short
- Connect bus cables. Make sure the color of wire same as definition
- Tidy the all Wire and separate Bus wire from AC power wire

Product Specifications

- Bus Power Supply：DC24V
- Bus Power Consumption：90mA/DC24V
- Maximum Current Per CH：2A
- Relay life time：60000
- Installation: Standard 35mm DIN-Rail
- Mounting position: DB
- Dimension：72mm×90mm×66mm
- CE approved
- Working Temperature: 0℃～+45℃
- Working Relative Humidity: 20% - 90%
- Storage Temperature: -40℃- +55℃
- Storage Relative Humidity: 10% - 93%
- IP Protection：IP20

Types

SB-DN - HVAC

relay I, II and III for mode can be connected with heating, cooling or other valves. you can specify the three relays in HDL-BUS software.

extra fan control method, DC0~10V output. need to specify the voltages for high wind, medium wind and low wind in HDL-BUS software.

- connect to fan motor
- manual control button: mode
- manual control button: fan speed
- manual control button: previous/next
- Indicator, it will flash when working fine, keep pressing for 3 seconds, can modify the ID in HDL-Bus software
- HDL -Bus interface

Temperature Sensor

HDL-Bus Definition for cable

CAT5/CAT5E	Bus	HDL Bus/KNX Cable
Brown White/ Orange White	COM	Black
Blue White /Green White	DATA-	White
Blue/Green	DATA+	Yellow
Brown/ Orange	DC24V	Red

⚠ **WARNING**   **Safety Attention**

- For safety, we recommend a proper fuse or MCB to be connected to input of power.
- The tightening torque do not exceed 0.4Nm,
- Power cable require(Switch)：0.75mm^2 to 2.5mm^2 wire.
- Mounting position: DB
- Do not make wrong connection on Bus interface, it will damage the Bus interface
- void the rain or water into module, it will damage this devices
- Do not get AC220V voltage into Bus wire , it will damage all of devices in system