

## Parameters

### Electric Parameters:

Power supply	DC15~30V
Dynamic BUS power consumption	150mA/DC24V
Static BUS power consumption	30mA/DC24V
Output channels	6
DC 0-10V output current	10mA
Relay output current	1A
Relay unit life time	5,000,000 times

### Environmental Conditions:

Working temperature	0°C~45°C
Working relative humidity	Up to 90%
Storage temperature	-20°C~+60°C
Storage relative humidity	Up to 93%

### Approved

CE

RoHS

### Production Information:

Dimensions	144×90×66 (mm)
Weight	
Housing material	Nylon, PC
Installation	35mm DIN rail installation
Protection degree	IP20

## Important Notes

- Bus cable — HDL Bus/KNX cable, 0.8mm single-core copper cable
- Bus Connection — Series connection (hand-in-hand)
- External connected DS18B20 needs 3 cables, make sure the 3 cables are well insulated. Maximum 13 temperature sensors can be connected in the module
- Temperature sensors can be parallel — series connect to the module
- Pay attention to the working voltage and type (Normal close, normal open ) of the electrical heat valve

## HDL-Bus Definition for Cable

HDL-BUS	HDL-Bus/KNX
DC24V	Red
COM	Black
DATA-	White
DATA+	Yellow

## Overview



HDL-MFH06.432 is a 6-channel floor heating controller. Each channel has the output options of Relay and 0-10V. It has built in PI Controller and supported 13 digital temperature sensors. It can be used to control the floor heating and indoor temperature, and it has the function of over heat protection for the floor.

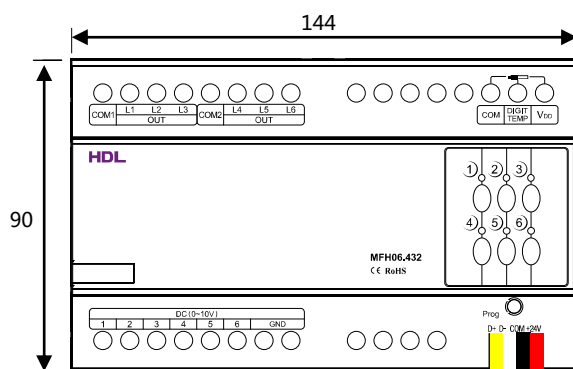
## Functions

- Use digital temperature sensor DS18B20 to detect the temperature, maximum length of the sensor cable is 100 meters.
- 6 channels of separate PI Control, has floor heat, floor cool function.
- Supports electrical AC heat valve and 0-10V electrical heat valve.
- The range of temperature control is 5~40°C, the accuracy is 0.5°C.
- Supports flush function, manually flush or timer controlled.
- Supports master and slave mode.
- Optional multiple mode: Timer, away, home, normal, etc
- Maximum and minimum heating value can be set.
- Expand control: command can be sent to external high power relay, to control the high power heater.
- Supports floor over heat protection, supports temperature sensor failure protection.
- Online upgrading from BUS is available.

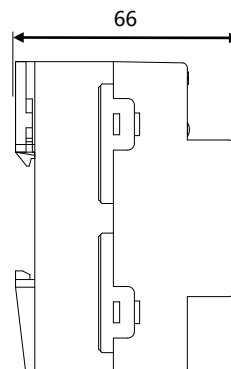
## Installation Step

- 35mm DIN rail installation, inside DB Box
- Mark up the AC Power input and the electrical heat valve
- Connect HDL-BUS, temperature sensor and electrical heat valve

## Dimensions and Wiring

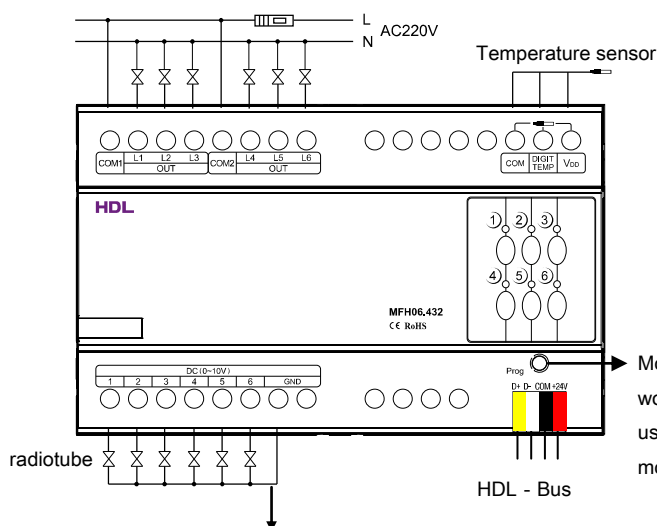


Front View



Side view

Relay Output channel, connect to floor cooling or heating system



Module Indicator, it flickers when the module is working properly. Keep pressing for 3 seconds, user can read and modify the address of the module in the HDL-Bus software.

DC 0 - 10V output connect to floor cooling or heating system

## Safety attention



- The screw down strength should not exceed 0.4Nm
- Connect breakers or fuses for the electrical heat valve
- Maximum current for each channel is 1A
- Installation: inside DB Box
- Do not make wrong connection on Bus interface, it will damage the Bus interface of this module
- Do not get AC power into HDL - Bus interface, temperature sensor, 0-10V output terminals, otherwise it will damage all devices in the system
- Ensure good ventilation
- Avoid contact with liquids and aggressive gases

