

# Datasheet HDL-MFH06.432

Floor Heating Controller

### **Parameters**

Electrical Parameters:		
Power supply	DC15~30V	
Dynamic buspro power consumption	150mA/DC24V	
Static buspro 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	-5°C~45°C	
Working relative humidity	Up to 90%	
Storage temperature	-20°C~+60°C	
Storage relative humidity	Up to 93%	
Approved		
CE		
RoHS		
Product Information:		
Dimensions	144×90×66 (mm)	
Weight	284.7g	
Housing material	Nylon, PC	
Installation	35mm DIN rail installation	
Protection degree	IP20	

## **Important Notes**

- Buspro cable — HDL Buspro/KNX cable, 0.8mm single-core copper cable
- Buspro 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
- Installation inside DB Box

## HDL Buspro Definition for Cable

CAT5/CAT5E	HDL Buspro	HDL Buspro/KNX
Brown/ Orange	DC24V	Red
Brown white/ Orange white	СОМ	Black
Blue white/ Green white	DATA-	White
Blue/ Green	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 Buspro is available.

## **Installation Step**

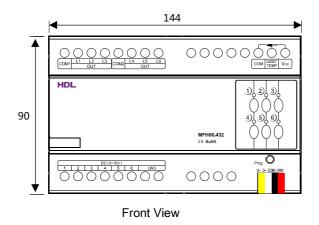
- 35mm DIN rail installation, inside DB Box
- Mark up the AC Power input and the electrical heat valve
- Connect HDL Buspro, temperature sensor and electrical heat valve

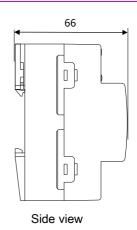




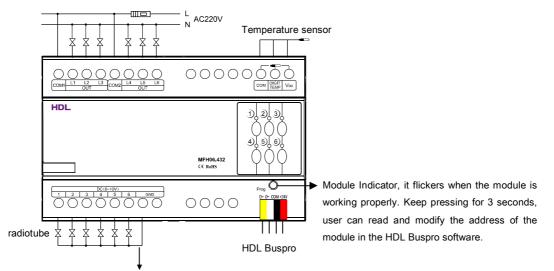
# Datasheet HDL-MFH06.432

# **Dimensions and Wiring**





Relay Output channel, connect to floor cooling or heating system



DC0 - 10V output connect to floor cooling or heating system

# Safety precaution

- The screw down strength should not exceed 0.4Nm
- Connect breakers or fuses for the electrical heat valve

1

- Maximum current for each channel is 1A
- Do not make wrong connection on Buspro interface, it will damage the Buspro interface of this module
- Do not get AC power into HDL Buspro 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

#### Packing List

Datasheet\*1 / HDL-MFH06.432 \*1 

