Parameters

Electrical parameters	
Bus Voltage	21~30VDC
Communication	KNX/EIB
Bus current	< 20mA
Temperature sensor	two wires digital temperature sensor TS/C 1.0 (18B20)
KNX Bus terminals	(Red /Grey)0.6 – 0.8mm Diameter Single Core
Outputs	8A (AC) 5A (DC)

Environmental Conditions	
Working temperature	-5℃~45℃
Working relative Humidity	Up to 90%
Storage temperature	-20℃~+60℃
Storage relative humidity	Up to 93%

Approved	
CE, RoHS	
KNX	

Product information	
Dimensions	H90mm x W72mm x D66mm
Weight	168g
Housing Material	Flame-retarded nylon
Installation	35mm Din rail installation
Protection rating	IP20

Important Notes

- **Special Programming** – This device is designed for professional KNX installation. It can only be programmed by ETS software.
- Mounting position – DB Box.
- Make sure the KNX cable type is correct and has no circuit short.
- **Check Connections** – Re-tighten all connections after installation.
- When the object is compressor need to be connect to AC contactor then connect to compressor.
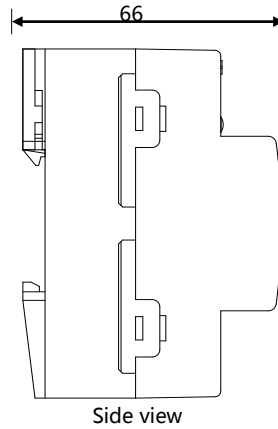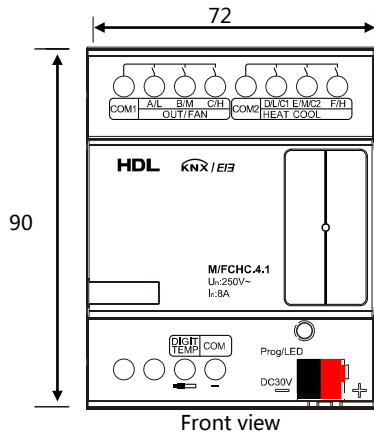
Overview

The HDL-M/FCHC.4.1 is FCHC Actuator, it is used for control air condition, fan, compressor, and floor heating, It can be work in conjunction with different panel. The channels function is set via ETS software. It supports up to 7 digital temperature sensors.
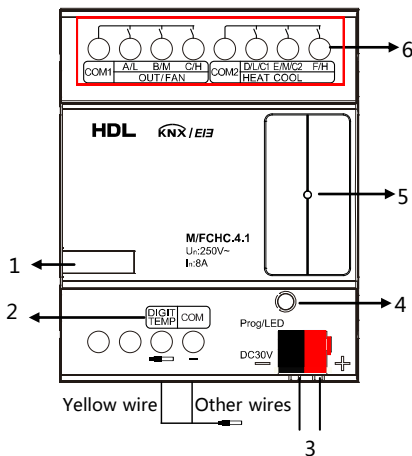
Functions

- Control modes: HVAC, Fan, Compressor, Floor Heating.
- Supports different objects: HVAC, Fan, Compressor, Floor Heating.
- Temperature alarm: when local temperature is up to the setting value, it will send alarm signal to bus.
- Active control and passive control:
  When in active control mode, this module can work with panel without PI algorithm such as HDL-M/DLP04.1.
  When in passive control mode, this module can work with panel with algorithm such as Siemens 5WG1.

Layout and Wirings

72

90

M/FCHC.4.1
UN:250V~
IN:8A

Front view

66

Side view

TS/C 1.0

1

2

M/FCHC.4.1
UN:250V~
IN:8A

5

4

3

6

Yellow wire | Other wires

1- Label area

2- Local temperature, can connect up to 7 digital temperature sensors

3- KNX/EIB interface

4- Programming button & Red programming LED & Green Local temperature LED

5- Green working LED

6- Output channels

The function of output is decided by the working mode.

HVAC mode:

Channel A, B, C are fan speed.

Channel D is heating output and channel E is cooling output.

Channel F is disable.

Fan mode:

Channel A, B, C, control one fan and D, E, F control another one.

Channel A and D are low speed, channel B and E are middle speed, channel C and F are high speed.

Compressor mode:

Channel A, B, C are fan speeds.

Channel D, E are connect to compressors.

Channel F is disable.

Floor heating mode:

Channel A, B, C, D, E, F are all floor heating

Safety Precautions ⚠ WARNING

- Screw down torque is not exceed 0.4Nm
- Relay channel need protect by proper MCB or fuse
- Installation Position: Distribution Box (DB)
- Do not make wrong connection on Bus interface, it will damage the Bus interface this module
- Do not get AC240V voltage into KNX/EIB Bus wire , it will damage all of devices in system
- Do not let the module come into contact with liquids or corrosive gases.

Package Contents

- HDL-M/FCHC.4.1*1/ Datasheet*1/TS/C 1.0 *1

Contact Us

Need help or advice? Please visit *www.hdlautomation.com*, or contact us via: *support@hdlchina.com.cn*.