

Technical Sheet
For EIB/KNX Fan coil Actuator

AFVF-01/220.1

The worldwide STANDARD for home and building control

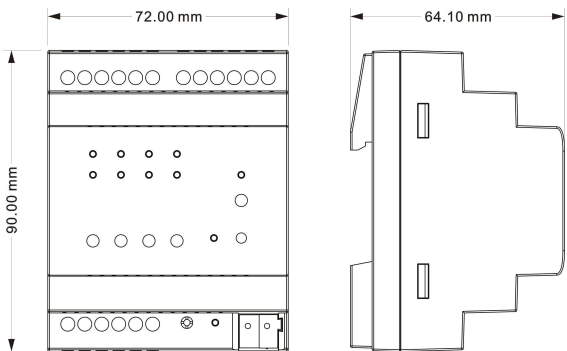
CHARACTERISTICS

- The fan can be controlled by automatically or manually with high, medium and low three speeds.
- The 2-pipe system or 4-pipe system can be controlled by raise lower valve or thermal valve
- Room temperature control mode can be set to standby mode, comfort mode, night mode and protect mode.
- It can control the fan and valve automatically with PI algorithm.
- It can report the local fan speed and valve position.
- Measure the temperature, monitor the actual temperature and the frost temperature.
- Room temperature control mode, fan speed and heating or cooling can be controlled by scenes
- It can monitor the window contacts or binary input.
- The fan coil can be controlled by extern controller.

PARAMETERS

Power supply	voltage	230 V AC +/10% (50/60Hz)
	consumption	Max 1.4W
Bus supply	Bus voltage	21-30DC, Via EIB
	Bus current	<12mA
	Bus consumption	<360mW
2 fold valve	Rated voltage	75V~265V AC
	Rated current	2A
1 fold Fan	Rated voltage	230 V AC 50/60Hz
	Rated current	6A(Note :if 3 floating contacts use together, the Maximum current is 13A for all)
Signalling inputs	Rated voltage	9V~265V AC/DC
Temperature input	range	- 45° C ... + 80° C
Temperature	Operation	- 5 °C ... + 45 °C
	Storage	-25 °C ... + 55 °C
	Transport	- 25 °C ... + 70 °C
Installation		on 35 mm mounting rail

DIMENSIONS



Model	Dimension	Weight
AFVF-01/220.1	72 x 90 x 64.1 mm	0.3kg

Connection Diagram

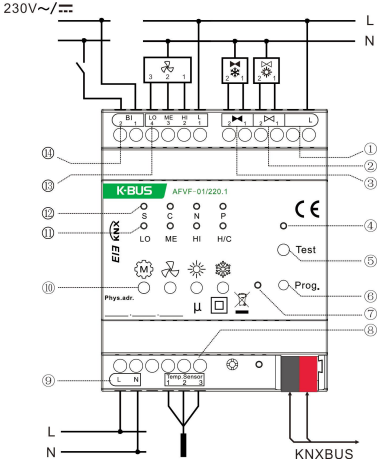


Fig.1. AFVF-01/220.1

Illustrate

- ① Power input for valve
- ② Heating valve (Raise/lower valve: 1: Close, 2:Open; Thermal valve: Connect 2 only)
- ③ Cooling valve (Raise/lower valve: 1: Close, 2:Open; Thermal valve: Connect 2 only)
- ④ Controller mode display
- ⑤ Test operate key
- ⑥ Programming key
- ⑦ Programming LED
- ⑧ 3 lines PT1000 temperature sensor
- ⑨ Power input for controller
- ⑩ Operate keys. From left to right: Room mode, Speed, Heating, Cooling.
- ⑪ LED display (Fan, Heating and cooling). "LO", "ME" and "HI" denote fan's Low Medium and High speed, "H/C" denotes heating or cooling display.
- ⑫ Room mode display. "S", standby mode; "C", Comfort mode; "N", night mode; "P", protect mode
- ⑬ Fan output
- ⑭ Binary input

INSTALLATION FIGURE

In order to install to the distribution box easily, the fan coil controller is designed to be modular device which can be installed on a 35 mm mounting rail, The devices adopt screw terminal to achieve electrical connection. The connection to the EIB/KNX bus is established via a bus connecting terminal. The input need connect 230V AC operating voltage for the Shutter actuator. Must ensure that the device operation, testing, detecting, maintenance correctly.

When install, The temperature can be collected from three-wires PT1000 temperature sensor by Extend the line to the place where in needed or via KNX temperature sensor.

In PC need to ETS3 or ETS4 software, such the PC software can be operated in PC.

IMPORTANT INFORMATION

Installation and commissioning of the device may only be carried out by trained electricians. The relevant standards, directives, regulations and instructions must be observed when planning and implementing the electrical installation.

- Protect the device against moisture, dirt and damage during transport, storage and operation!
- Do not operate the device outside the specified technical data (e.g. temperature range)!

Should the device become soiled, it may be cleaned with a dry cloth. If this does not suffice, a cloth lightly moistened with soap solution may be used. On no account should caustic agents or solvents be used.

KNX / EIB 风机盘管执行器技术规格书

适用型号：
AFVF-01/220.1

国际标准的家庭和楼宇控制系统

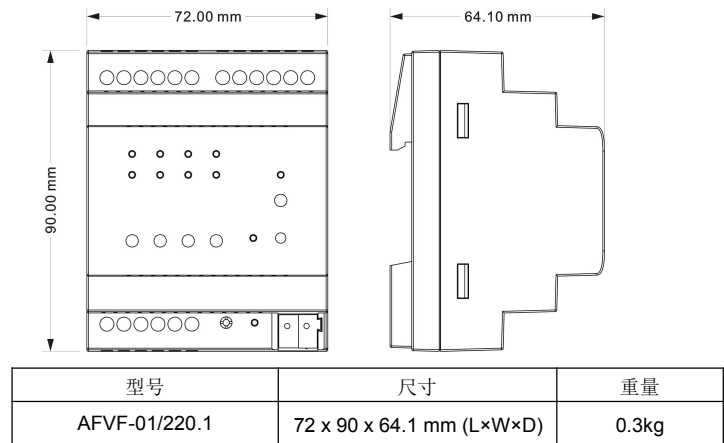
产品功能

- 通过自动或手动可以对风机高、中、低三档进行控制
- 可选择连续升降阀或普通开关阀门对双管或四管盘管进行控制
- 房间模式可设定待机、舒适、夜晚和保护模式
- 根据 PI 算法实现对风机和阀门的自动控制功能
- 可对本地的风速档位和阀门的开关状态进行报告功能
- 具有温度采集功能，可对实际温度和霜冻温度进行监控功能
- 具有场景调用功能，可对房间模式、风速或加热制冷进行调用
- 可对窗户开关或二进制输入进行监控功能
- 可实现外部控制器对风机和阀门进行控制的功能

技术参数

供电电源	工作电压	230 V AC +/10% (50/60Hz)
	总功耗	最大 1.4W
总线电源	总线电压	21-30 DC 通过 EIB 总线获得
	总线电流	<12mA
	总线功耗	<360mW
2 路阀门	额定电压	75V~265V AC
	额定电流	2A
1 路 3 档风机	额定电压	230 V AC 50/60Hz
	额定电流	6A(注：风机若作为三路独立开关使用，每路最大为 6A，三路总输入电流不能大于 13A)
1 路二进制	额定电压	9V~265V AC/DC
1 路温度采集 温度范围	温度范围	- 45° C ... + 80° C
	运行	- 5° C ... + 45° C
	存储	-25° C ... + 55° C
	运输	- 25° C ... + 70° C
安装方式		35mm 丁导轨安装

尺寸规格



接线图

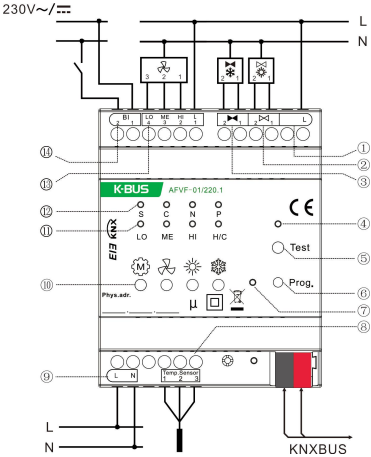


图 1. AFVF-01/220.1

说明

- ① 阀门所需电源输入
- ② 加热阀门(连续阀门：1 表示关，2 表示开；普通开关阀，只接 2 端)
- ③ 制冷阀门(连续阀门：1 表示关，2 表示开；普通开关阀，只接 2 端)
- ④ 控制模式指示灯
- ⑤ 测试模式按键
- ⑥ 编程按键
- ⑦ 编程指示灯
- ⑧ 三线 PT1000 温度传感器
- ⑨ 控制器供电电源输入
- ⑩ 操作按键组，从左往右为：房间模式操作，风速操作，加热和制冷开关操作
- ⑪ 风速和冷热指示灯，LO，ME 和 HI 分别表示风机的低中高三档，H/C 冷热指示
- ⑫ 房间操作模式指示灯，S 准备模式，C 舒适模式，N 夜间模式，P 保护模式
- ⑬ 风机输出，LO，ME 和 HI 分别是风机的低中高三档
- ⑭ 二进制输入

安装说明

为了方便安装到配电箱中，把风机盘管控制器设计成模块化安装设备，能安装在 35 毫米丁导轨上。设备采用螺丝接线柱实现电气连接，总线连接直接通过 EIB 接线端子连接，输入需要连接 230V AC 的电源电压。安装时必须确保设备操作、测试、检测、维护、维修正确无误。

安装时，可根据需要把三线 PT1000 温度传感器外延至需要采集温度的地方，进行采集温度；也可以通过 KNX 温度传感器设备对温度进行采集。

PC 上需安装 ETS3 或 ETS4 软件，这样才能设置修改数据库参数。

重要提示

安装和调试设备只能由合格的熟练电工来操作。在计划与实施电气安装的过程中相关的标准、指令、规则和指示都要严格执行。

- 需要避免器件在运输、储存、使用的过程中受潮、脏污以及受损。
- 不要使器件运行在指定的技术指标之外（例如温度范围）。

当设备脏污时，只可以使用干燥的布来清洁。如果这样不足以清洁干净,可以使用湿布蘸少许肥皂溶液轻轻擦拭。绝不能使用碱剂或者腐蚀性溶剂。