

## Technical Sheet For Heating Actuator with Triac,6-Fold

AFHT-06/05.1

The worldwide STANDARD for home and building control

### CHARACTERISTICS

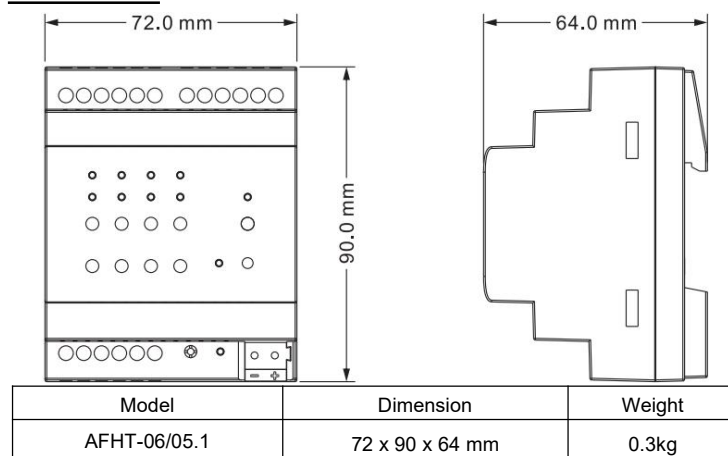
- Thermal driving can support to 24V AC or 230V AC
- Valve output function, with local or external controller, up to 6 channels
- Room temperature controller, support to heating/cooling mode, integrating 2-point and PI control algorithm, with 5 scenes functions, up to 6 channels
- Manual operation
- Summer / Winter mode
- Valve purge function
- Valve disable function
- Forced operation function
- Operating voltage failure report
- Short-circuit / overload report
- Support KNX secure

### PARAMETERS

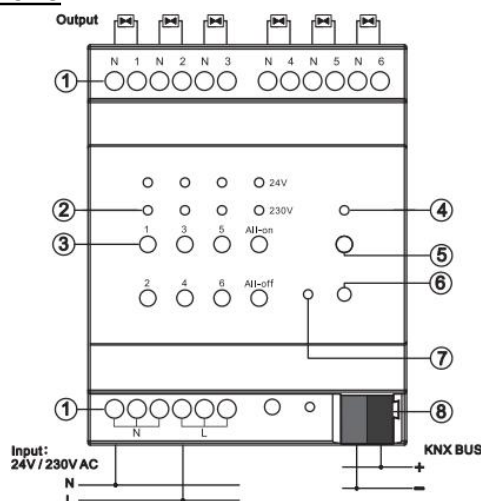
<b>Power supply</b>	Bus voltage	21-30V DC, via the KNX bus
	Bus current	<6.5mA 24V, <5.5mA 30V
	Bus consumption	<165mW
<b>Input</b>	Voltage	24V / 230V AC
<b>Output</b>	Valve channel	6 channels
	Switching current	≤300mA, per channel (Ambient temperature 35°C)
<b>Connection</b>	Voltage	24V / 230V AC
	Protection	Short-circuit / overload protection
	KNX	Bus connection terminals (Red/Black)
	Inputs / Outputs	Screw terminals, Wire Range Multi-core 0.2-1.5mm <sup>2</sup> , Single core 0.2-2.5mm <sup>2</sup> , Torque 0.4N-m

<b>Operation and display</b>	Programming button and Red LED	Assign the physical address
	Green LED flashing	Application layer running normally
	Manual button	Switch output
	Output LED	Indicate the valve status
<b>Temperature</b>	Man./Auto. button	Switch the Man. and Auto. mode
	Man./Auto. LED	Indicate the Man./Auto. mode status
	Operation	- 5 °C ... + 45 °C
	Storage	-25 °C ... + 55 °C
<b>Environment</b>	Transport	- 25 °C ... + 70 °C
	Humidity	<93%, except dewing
<b>Mounting</b>	On 35mm mounting rail	

### DIMENSIONS



### DESCRIPTIONS



- ① 24V / 230V AC drive voltage input terminals, output terminals. The output terminals do not require connect to N additionally and the N are internally connected.
- ②③ Manual operation buttons and status indicating LED for outputs: Button 1~6 for controlling the channel valves open/close individually; All-on: the all valves open, All-off: the all valves close; LED to indicate valve status: always on when valve open; always off when valve close. For indicating circuit is abnormal (short circuit/overload/under voltage), LED flashing, 1 second on and 1 second off.
- Short circuit/Overload execution concept: when a short circuit is detected firstly, the output will be off, then the output will be active again according to the current control value after delay for 1 minute. If it remains short circuit, then the output will be off permanently and cannot be used until the device is restarted.**
- ④⑤ Man./Auto. operation switch button and status indicating LED: Long press 1 second the button to switch Man. and Auto. mode, LED on is Man. mode and off is Auto. mode.
- ⑥⑦ Programming button and LED: Red LED is for assigning the physical address, green flashing LED is for displaying application layer running normally.
- Reset the device to the factory configuration: press the programming button and hold for 4 seconds then release, repeat the operation for 4 times, and the interval between each operation is less than 3 seconds**
- ⑧ KNX bus connection terminal

### INSTALLATION FIGURE

The devices are suitable for installation on the distribution boards with 35mm mounting rail which complies with DIN EN 60715 or a small box in order to facilitate quick installation of the device. Must ensure that the device operation, testing, detecting, maintenance correctly.

### IMPOFORMATION

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.

## 6 路加热执行器技术规格书

适用型号:

AFHT-06/05.1

国际标准的家庭和楼宇控制系统

### 产品功能

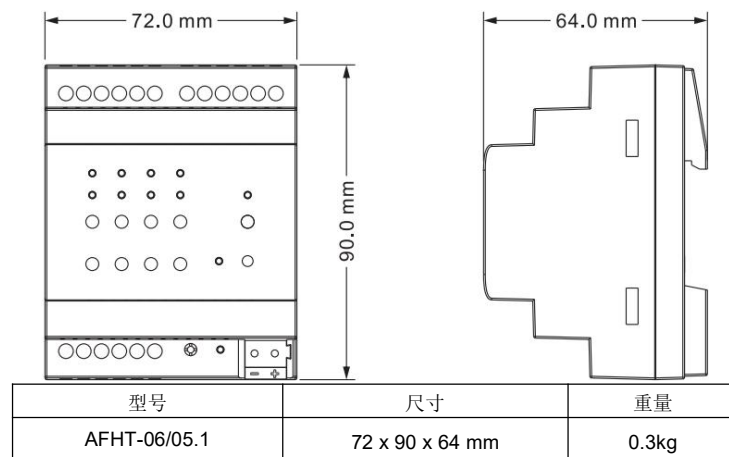
- 阀门供电可支持 24V AC 或者 230V AC
- 阀门输出功能, 可选择本地或外部控制器, 最多支持 6 个通道
- 温控器功能, 支持加热/制冷控制模式, 集成了 2 点式和 PI 控制算法, 带有 5 个场景功能, 最多支持 6 个通道
- 手动操作
- 夏天/冬天模式
- 阀门清洗功能
- 阀门禁用功能
- 强制操作
- 阀门工作电压异常状态报告
- 过载/短路状态报告
- 支持 KNX 安全

### 技术参数

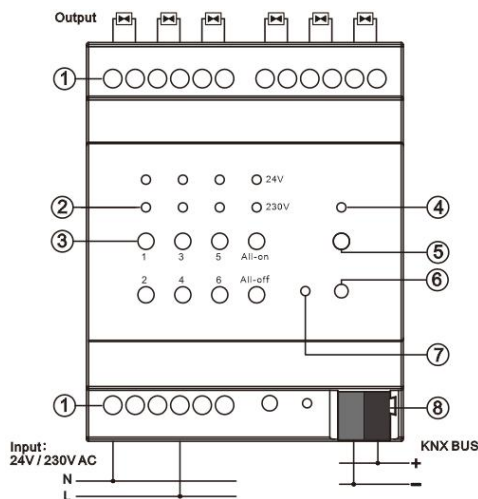
电 源	总线电压	21-30V DC, 由 KNX 总线提供
	总线电流	<6.5mA 24V, <5.5mA 30V
	总线功耗	<165mW
输 入	电压	24V / 230V AC
	输出	阀门输出通道
连 接	带载能力	≤300mA, 每通道 (环境温度 35℃ 下)
	输出电压	24V / 230V AC
	保护措施	短路/过载保护
	连接	KNX 总线连接端子(红/黑) 螺丝接线柱连接 线径多芯 0.2-1.5mm <sup>2</sup> , 单芯 0.2-2.5mm <sup>2</sup> , 扭力矩 0.4N-m
操作和指示	编程按键和红色 LED	分配物理地址
	绿色灯闪烁	指示应用层运行正常

温度范围	手动操作按键	开关输出
	输出 LED	指示阀门状态
	手动/自动按键	切换手动/自动操作模式
	手动/自动 LED	指示手动/自动模式状态
环 境	运行	-5 °C ... +45 °C
	存储	-25 °C ... +55 °C
	运输	-25 °C ... +70 °C
安 装	湿度	<93%, 结露除外
	模块化设备	35mm 导轨安装

### 尺寸规格



### 接线图



- ① 24V / 230V 驱动电压输入端、输出端。所有 N 都是内部连通, 输出端不需要额外再接入 N
- ②③通道输出的手动操作按钮和输出指示:  
按钮 1~6 用于单独控制通道的阀门打开/关闭; All-on: 全部阀门打开, All-off: 全部阀门关闭。LED 指示阀门状态: 常亮, 阀门打开; 常灭, 阀门关闭。  
用于指示回路 (短路/过载/欠压) 异常, LED 闪烁, 1 秒亮 1 秒灭。  
**短路/过载异常处理: 上电后第一次检测到短路现象, 则断开输出并延时 1 分钟后**再按照当前控制值处理输出, 如果还是有短路现象, 则永久断开输出, 除非设备重启才能使用。
- ④⑤手动/自动 (Man.) 切换按钮和指示:  
长按 1 秒此按钮切换手动/自动操作, 指示灯亮为手动操作模式, 灭为自动操作模式
- ⑥⑦编程按键及 LED 指示灯:  
红灯指示编程物理地址, 绿灯指示设备应用层运行正常  
**重置设备到出厂配置: 长按编程按键约 4 秒, 长按 4 次, 且每次松开间隔小于 3 秒**
- ⑧ KNX 总线连接端子

### 安装说明

此设备为了方便快速安装到配电箱或小盒子里面, 根据 EN 60715 系列设计成模块化安装设备, 能安装在 35 毫米丁导轨上。安装时必须确保设备操作、测试、检测、维护、维修正确无误。

### 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。