

Technical Sheet For Multifunctional Actuator, 24-Fold

AMMA-24/10.1



The worldwide **STANDARD** for home and building control

CHARACTERISTICS

The device can set max. 24 ch switch outputs, 12 ch AC curtain outputs. 6 ch DC curtain outputs, 6 ch fan control outputs or 6 ch valve control outputs. The output requirements are configured via parameter.

- Switch output: connect some electrical loads, such as lighting, sockets. All channels have the function of general switch, staircase lighting, light flashing and switch delay, scene,operation hours counter, logic and force operation;
- Curtain output(AC/DC): connect with motor blinds, awnings, roller blinds, vertical blind, etc. With operating shutter and slat adjustment, automatic sun protection , scene and safety operating etc.;
- Fan control: support up to three level fan speed, with general operation, forced operation, Auto. operation and status response etc.;
- Valve control: connect with 2pipes or 4pipes system, support three valve control types: 3point,open and close, continuous,PWM and 2state-ON/OFF, and support disable/enable HEAT and COOL, valve status response, valve purge etc..

PARAMETERS

Power	Bus voltage	21-30V DC, via the KNX bus
	Bus current	<12mA
	Bus consumption	<360mW
	Capacitor charge current	<20mA
Output	U _n rated voltage	230V AC(50/60Hz), 30V DC
	I _n rated current capacity	10A/105uF(max.200W,if LED load)
	Inrush current	300A/2ms
	Max. switching current	20A/250V AC
	Mechanical endurance	>10 ⁶
	Electrical endurance	>5 x10 ⁴
	Connection	KNX
Connection	Outputs	Bus connection terminals(Red/Black)
		Screw terminals, Wire Range
		Multi-core 0.2-2.5mm ²
		Single core 0.2-4.0mm ²
		Torque 0.8N-m

Operation and display	Programming button and Red LED	For assigning the physical address
	Green LED flashing	For displaying application layer running normally
	Manual button	Switch output
	Output LED	Indicate the output states
	Man./Auto. button	Switch the Man. and Auto. mode
	Man./Auto. LED	Indicate the Man./Auto. mode state

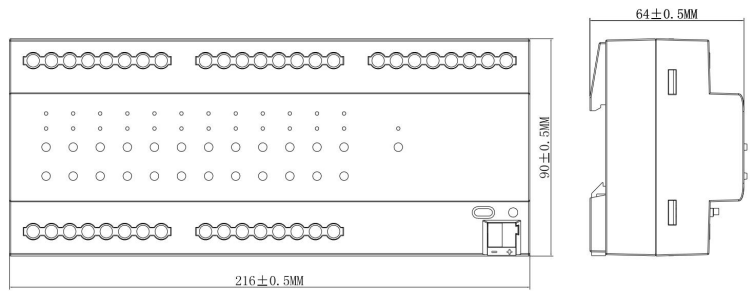
Temperature	Operation	-5 °C ... + 45 °C
	Storage	-25 °C ... + 55 °C
	Transport	- 25 °C ... + 70 °C

Environment	Humidity	<93%, except dewing
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Mounting	On 35mm mounting rail
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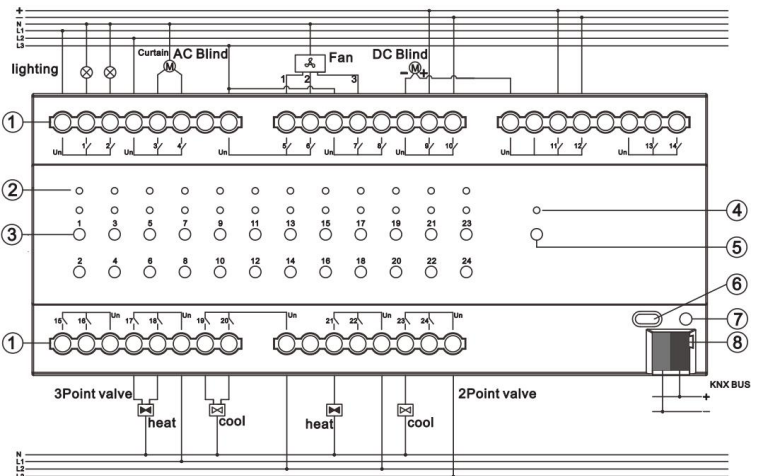
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DIMENSIONS



Model	Dimension	Weight
AMMA-24/10.1	216×90×64mm(±0.5)	0.7kg

DESCRIPTIONS



① **Output terminals:** the above icons show the wiring method for per control output.

②③ **Manual operation buttons and status indicating LED for outputs.**

The LED above the button indicates the corresponding output of state.

Take four outputs as an example:

For switch, the LED on is closed, off is open.

For curtain AC/DC, to move the curtain via a long operation, and slat adj./stop via a short operation. When curtain is running, the LED will flash; If both of blinds and slat arrive at min. or max. position, the LED will be on. (For curtain DC, the button and LED (3)&(4) are not used.)

For fan control, button&LED(1) are used to control and indicate for fan speed1; button&LED(2) are used for fan speed2; button& LED(3) are used for fan speed3. Via any button can switch off the fan in fan ON. And the button&LED(4) are not used.

For valve control, In 2pipes button&LED(1) are used to switch on/off and indicate for valve, and button&LED(2) are not used. In 4pipes button&LED(1) are used to switch on/off and indicate for heat valve and button&LED(3) is for cool valve, and button and LED(2)&(4) are not used.

④⑤ Man./Auto. operation switch button and status indicating LED

⑥⑦ Programming button and LED

⑧ KNX bus terminal

INSTALLATION FIGURE

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

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)!

•The device may only be operated in closed enclosures (e.g. distribution boards). 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.

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24 路多功能执行器技术规格书

适用型号：
AMMA-24/10.1

国际标准的家庭和楼宇控制系统



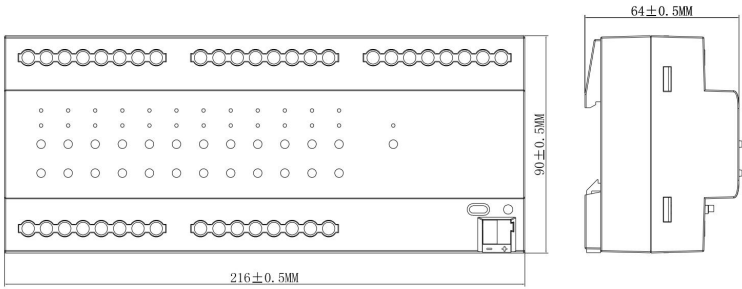
产品功能特性

- 此设备最多有 24 路开关输出、12 路驱动 AC 的窗帘输出、6 路驱动 DC 的窗帘输出、6 路风机控制输出或 6 路阀门控制输出，具体输出需求由参数配置。
- 开关输出：连接一些电气负载，如照明，插座。所有通道都有普通开关、楼梯灯、闪烁和时间功能，以及场景、逻辑、强制操作和操作时间计时功能。
 - 窗帘(AC/DC)输出：连接一些带电机的百叶窗、遮阳篷、卷帘、开闭帘、垂直窗等，支持 AC 或 DC 控制方式。每路输出支持窗帘移动，百叶角度调整，自动太阳防护、场景和安全操作功能。
 - 风机控制：支持多达 3 级风速调节，风速调节支持普通操作、强制操作、自动操作和状态反馈等。
 - 阀门控制：可连接 2 管制或 4 管制盘管系统，支持三种阀门控制类型：连续型 (3point, open and close)、PWM 开关型(continuous, PWM)和 2 点式开关型 (2 state-ON/OFF)，支持制冷/制热禁止/使能、阀门状态反馈、阀门清洗等。

参数

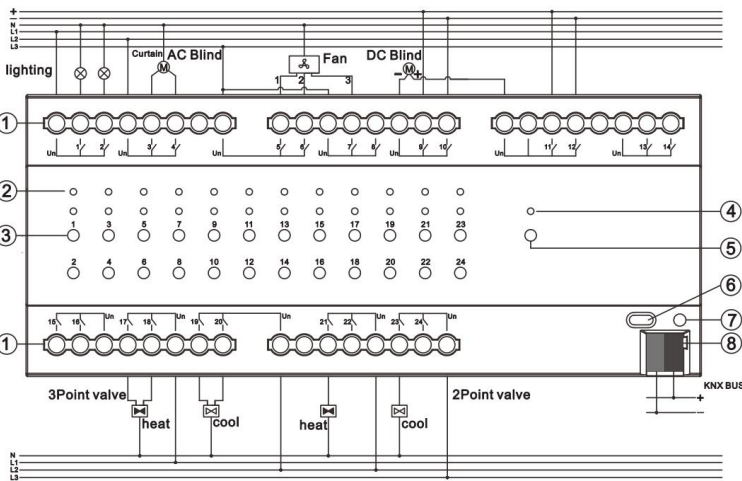
电 源	总线电压	21-30V DC,通过总线取电
	总线电流	<12mA
	总线功耗	<360mW
	充电电流	<20mA
输 出	Un 额定电压	230V AC（50/60Hz），30V DC
	In 额定电流及容性	10A/105uF（LED 负载最大 200W）
	浪涌冲击电流	300A/2ms
	最大切换电流	20A/250V AC
	机械寿命	>10 ⁶
	电气寿命	>5x10 ⁴
	连 接	KNX
连 接	输出端	总线连接端子连接(红/黑)(直径 0.8mm) 螺丝接线柱连接，线径多芯 0.2-2.5mm ² ， 单芯 0.2-4.0mm ² ，扭力矩 0.8N·m
	操作及显示	编程按键和 LED
操作及显示	编程按键和 LED	编程物理地址
	绿色灯闪烁	指示应用层运行正常
	手动操作按钮	开关输出
	输出 LED	指示输出状态
	手动/自动按钮	切换手动/自动操作模式
温 度	手动/自动 LED	指示手动/自动模式状态
	操作	-5 °C ... + 45 °C
	存储	-25 °C ... + 55 °C
环 境	运输	- 25 °C ... + 70 °C
	湿度	<93%,结露除外
安 装	模块化设备	35mm 导轨安装

尺寸图



型号	尺寸	重量
AMMA-24/10.1	216×90×64mm(±0.5)	0.7kg

说明



- ①**输出负载端子**:上图标示每种控制输出的接线方式。
- ②③**通道输出的手动操作按钮和输出指示**(四个输出为一组控制,以一组控制为例说明):
- 按钮用于控制开关输出时，每通道对应 1 个按钮和指示灯，灯亮有输出,灭时无输出。
 - 按钮用于控制窗帘/百叶窗（AC/DC）时，短按(1)上移和(2)下移，长按停止移动/调整百叶，在窗帘/百叶窗运行中，相应指示灯闪，当到达极限位置时，指示灯变常亮。(DC 输出时，指示灯和按钮(3)和(4)未使用。)
 - 按钮用于控制风机时，按钮(1)开启 1 档风速，(2)开启 2 档风速，(3)开启 3 档风速，长按任一按钮则关。按钮相应指示灯指示风速等级。
 - 按钮用于控制阀门时，2 管制下，按钮和指示灯(1)分别用于开/关阀门和指示阀门开/关状态，(2)未使用。4 管制下，按钮和指示灯(1)用于加热阀的开关和状态指示，按钮和指示灯(3)用于制冷阀的开关和状态指示，(2)和(4)未使用。
- ④⑤**手动/自动（Man.）切换按钮和指示**：
长按此按钮切换手动/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
- 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）。
 - 器件只可以运行在封闭的环境中（例如配电箱）。
- 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。