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Version

Version No.	Release Date	Description
V1.0	Sept 14th, 2023	1st Release

Notice

1. Please read this user manual carefully before using the product.
2. This product is used in indoor environment and installed in electrical control box.
3. Please install this product in a dry and ventilated place.
4. Before power on, please confirm the input voltage according to the manual; after power on please confirm the normal output voltage before connecting to the control bus.
5. Please make sure the secure shell is in good condition, if the shell is damaged, please stop using to avoid accident.
6. This product is NOT a toy, please make sure it is out of children touch.
7. Only be suitable for EIB/KNX system bus.
8. Others:The below sign indicates this product can't be dealt as ordinary family rubbish, in order to avoid the possible environment and human health harm caused by the electrical waste, this product must follow recovery processing. Please contact the local recycling department after this product is scrapped, to make sure it can go as the right waste processing procedure.

1. Technical Parameters

KNX Characteristic	KNX Bus voltage	DC 21V~31V	
	KNX Bus current	< 12mA	
	Static power	<360mW	
0~10V output	0~10V output characteristic	Current	-50-1.5mA
		Output Channel	4
		Output Voltage	0-10V
		Rated Current	-50-1.5mA
		Power Loss Per CH	<20mW
	Terminal	Wiring diameter range	0.2~1.5mm2
		Torque	0.5Nm
Switch Output	Switch characteristic	Maximum switching current	16A
		Maximum switching voltage	277VAC
		Maximum switching power	4000VA
		Mechanical durability	10^6
		Action time	10mS
		Shock resistance	20mΩ
	Terminal	Wiring diameter range	0.2-6mm2
		Torque	0.85Nm
External connection	KNX-TP1		KNX-compliant twisted pair cables
	Load terminal		A minimum torque of 0.6Nm
Shell protection level	II		EN61140
Outside safety level	IP20\Hidden heat dissipation channel		EN60529
KNX safety voltage	SELV		30V DC
Temperature range	Operating temperature		-5℃…+45℃
	Long term storage temperature		-25℃…+55℃
	Temperature during transportation		-30℃…+70℃
	Maximum air humidity		95%

Mechanical parameters	Dimension	216*90*63mm
	Weight	0.9kg
	Installation	35mm Din Rail
Appearance	Gray white, PC panel	

2. Function Overview

This manual provides you with detailed information about SATION 24 Fold Multifunction Actuator, including installation and programming details, and how to use them. This series of products complies with EN 60715 installation standards and is installed on 35mm Din rails.

SATION 24 Fold Multifunction Actuator can control lighting, curtain, blinds and FCU, Through the 0-10V analog output channel, it can adjust the brightness of lamps and control the wind speed of stepless speed fans, etc. For example: curtain opening and closing, fan function switching and wind speed can be realized through combined control.

Using the engineering debugging tool software ETS, you can easily complete the debugging of this system.

2.1 Product specific function description

* Before configured, the two channels sharing the input channel in the opening and closing channels are mutually exclusive; when configured as curtains, they are used in pairs.

* Built-in 24 channels of 16A independent switches, which can be flexibly configured as independent switches through ETS, or can be configured in pairs as curtain controllers or multi-channel groups combined as FCU controller.
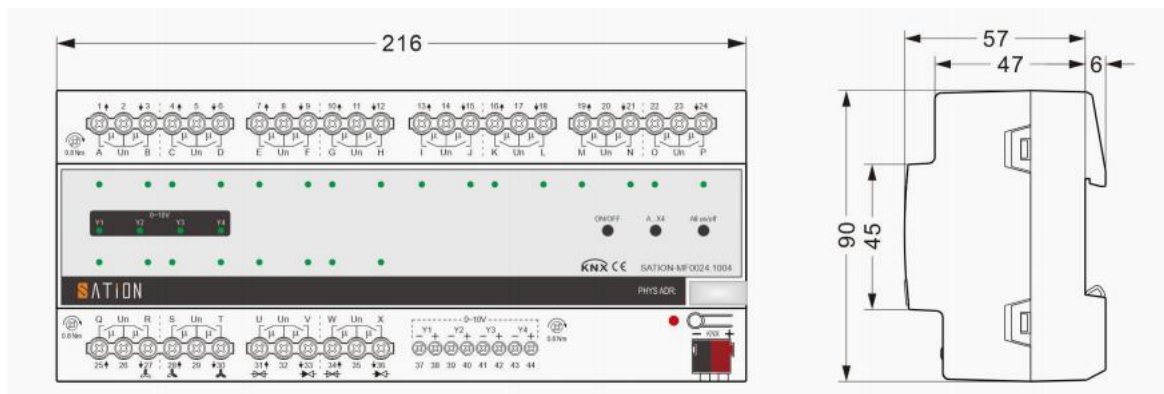
* Independent channel opening and closing, full open and full close can be realized through manual buttons, and the status is visible through the indicator light; Note: the full open and full close buttons are not configured before only half open and half closed.
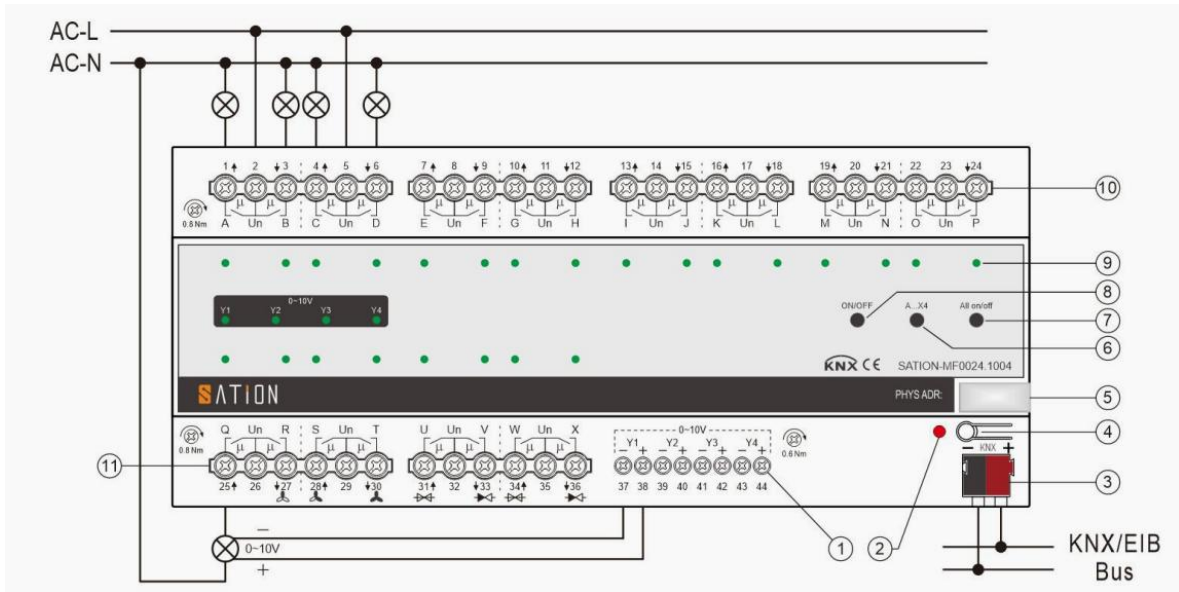
* Simulates 0~10V channel. The load capacity of each channel is 25 lamps, or 1 fan load.

2.2 Single channel Function

* Dimming function: dimming, relative dimming, absolute dimming

* Time function: open delay, close delay, open automatic close

* Dimming speed: Set the dimming time from 0% to 100%

* Startup behavior: brightness value setting at startup, opening and closing speed

* Switch function: On/off action can be set with delay

* Stairway lighting function: with early warning function

* Logical operations: AND, OR gate functions

* Curtain function

   1) The clockwise or counterclockwise running time of the motor can be set independently;

   2) Adjustment range: Set the percentage area of motor adjustment

* Fan function:

   1) Supports single-phase fans that can control up to three wind speeds, and stepless speed-adjustable fans;

   2) Supports control of heating valves and cooling valves;

   3) Supports control of 2-duct, 3-duct and 4-duct air conditioning control systems;

   4) Support manual control or automatic control of fans and valves;

   5) Support status value query reply;

* Scene function: Each channel has 8 scenes available for use

* The output actions can be set when bus is powered on/off and the device is blocked/non-blocked

3. Product Dimensions

1：0-10V output   2：PROG LED
3：KNX Bus   4：PROG Button
5：Label   6：Channel status indicator
7：ALL on/off Manual Switch 8：Manual channel switching button
9：Channel status indicator 10: AC input/output terminals

4. Product Wiring