MM1-4X-XXX-11

Prepare scenarios,
Control it remotely,
Ask for unlimited color and button combinations,
Have an energy-saving assistant,
Read room temperature,
Everthing is under control,
All are ready from a single switch.

MM1-4X-XXX-11 Series products are KNX bus switch panel, which can be used as lighting control, dimming, motor driver or other programmable equipment. It integrates a KNX bus communication module, and has made a special design for the wall flush installation method. The product is equipped with two programmable LEDs for each function button, which can be used as a status display or night light. The panel can be matched with two different shapes of buttons to assemble into 3 styles of boards.

Switch Models

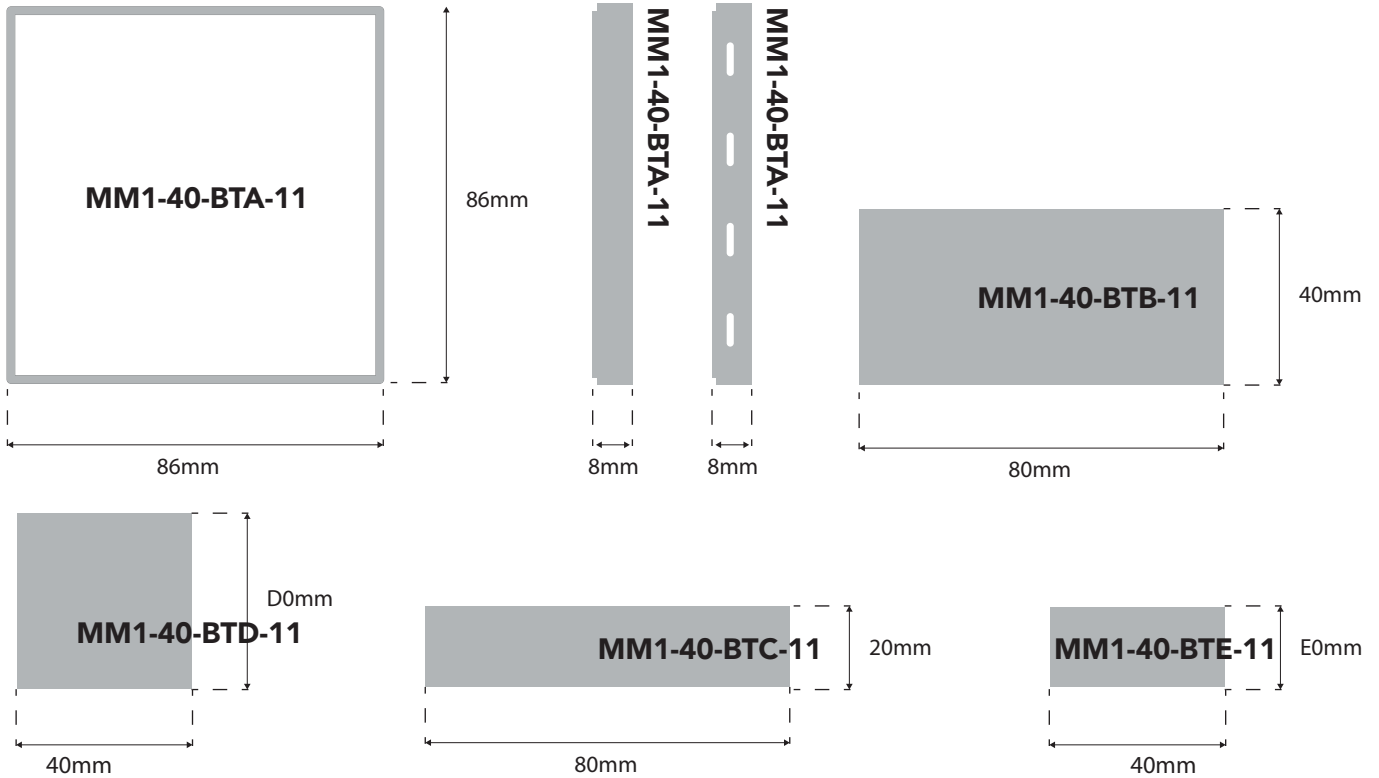|	
MM1-40-24-11	2-4 Control KNX Metal Switch, Temperature read, Thermostat logic + 2 input
MM1-40-36-11	3-6 Control KNX Metal Switch, Temperature read, Thermostat logic + 2 input
MM1-40-48-11	4-8 Control KNX Metal Switch, Temperature read, Thermostat logic + 2 input
MM1-40-58-11	5-8 Control KNX Metal Switch, Temperature read, Thermostat logic + 2 input
MM1-40-68-11	6-8 Control KNX Metal Switch, Temperature read, Thermostat logic + 2 input
MM1-40-78-11	7-8 Control KNX Metal Switch, Temperature read, Thermostat logic + 2 input
MM1-41-48-11	4-8 Control KNX Metal Switch, Temperature read, Thermostat logic + 2 input

Rocker Models

MM1-40-BTB-11	40x80 Metal Button
MM1-40-BTC-11	20x80 Metal button
MM1-40-BTD-11	40x40 Metal button
MM1-40-BTE-11	20x40 Metal button

Frame Model

MM1-40-BTA-11	86X86 Metal switch frame
MM1-40-BTF-11	86X86 Metal switch frame, with status LED

KNX

Dimension Drawing

MM1-40-BTA-11

86mm

86mm

MM1-40-BTA-11

MM1-40-BTA-11

8mm

8mm

MM1-40-BTB-11

40mm

80mm

MM1-40-BTD-11

D0mm

40mm

MM1-40-BTC-11

20mm

80mm

MM1-40-BTE-11

E0mm

40mm

Customized Buttons

1

| A | 1 | B |
| A | 2 | B |

2

| A 1 B | A 2 B |
| A 3 B | A 4 B |

3

A	1	B
A	2	B
A	3	B
A	4	B

4

A 1 B

A 2 B

A 3

B

5

A 1 B	A 2 B
A	3	B
A	4	B

6

A 1 B

A 2

A 3

A 4 B

7

1 A | A 3

2 A | A 4

A 5 B

8

1 A

2 A

3 A

4 A

A 5

B

KNX

Applications

*   On/off switching of lighting equipment and dimming equipment for single load or group load
*   Control of motor drivers (rolling doors, blinds) curtains, etc.L
*   Logic function send values (brightness).
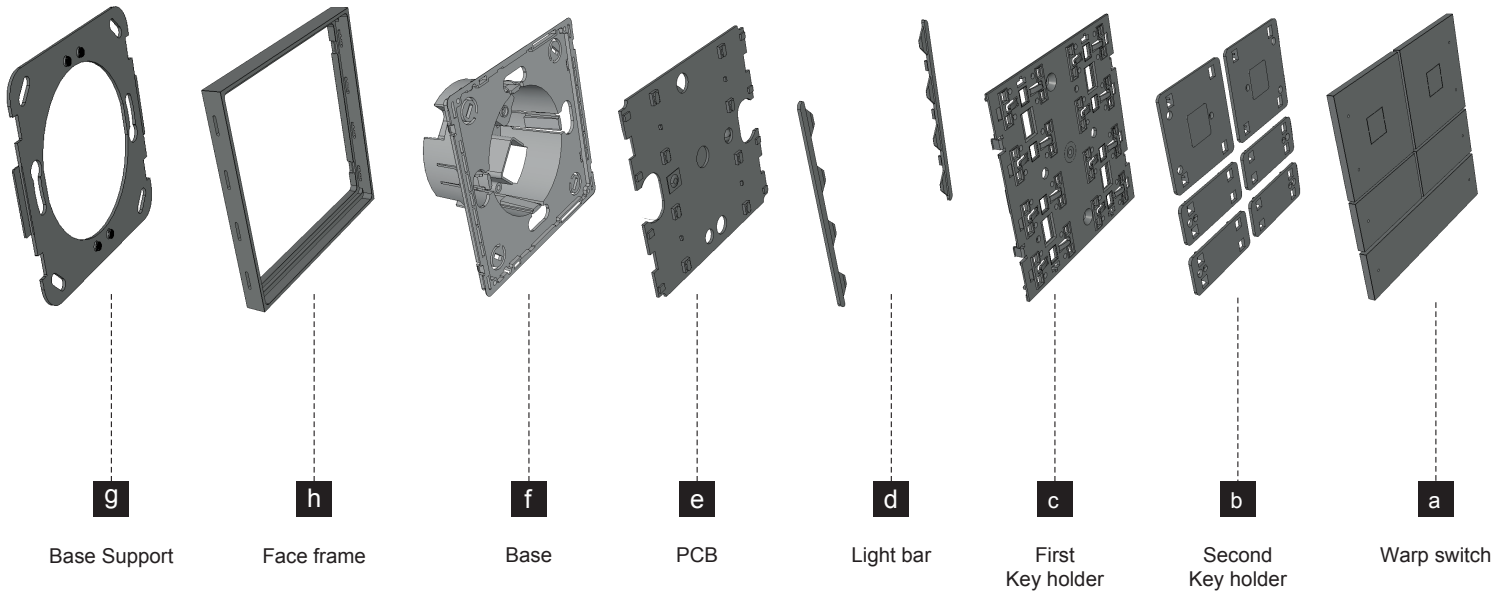*   Call scene.
*   Switch to force function (locking)

Sensor

*   Different features, programmable long press or short press.
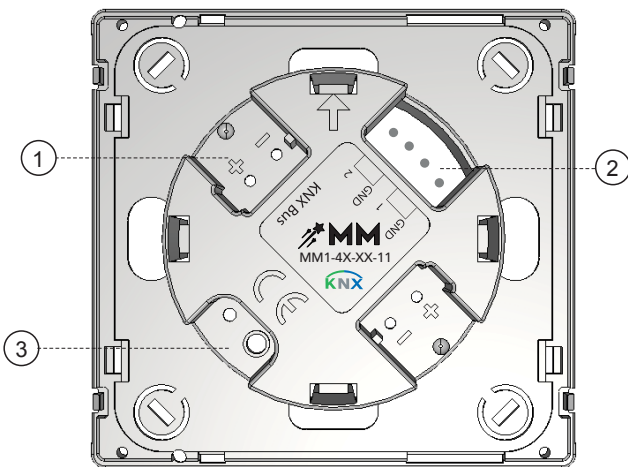*   Status feedback, configurable LED.

Other

*   Plastic material housing.
*   Box installation
*   IP20. Protection Grade
*   Climate adaptation class 3K5 mechanical class 3m2.(according to EN 50491-2)
*   Pollution rating 2(according to IEC 60664-1).
*   Weight 80g (including mounting frame)
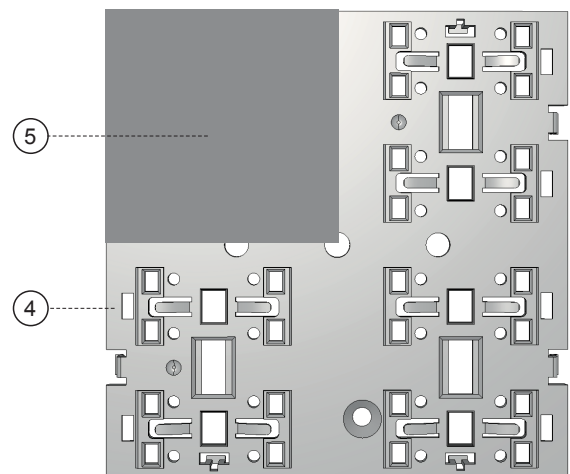*   Size 86×86×9 mm (border thickness)

Fixed Installation

*   Having a protective rating IP20, the device is suitable for use in dry rooms.
*   Perform the following:
*   Fasten the base bracket (g) to the wall bottom box with screw first;
*   Secure the key holder (c) on the base (f) while inserting the light guide strip (d) between (b) and (d) sides, and then sequentially insert the face frame (h) and the base holder (f).
*   Connect the KNX bus to the terminal first, then insert the terminal behind the product, and download the physical address of the product to the product at this time.
*   Buckle the warp switch (a) above the product.

g	h	f	e	d	c	b	a
Base Support	Face frame	Base	PCB	Light bar	First Key holder	Second Key holder	Warp switch

IQ

① KNX BUS Connection

② 2 IO inputs

③ Programming button

④ LED backlight

⑤ Warp Switch: Square Button

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Elements of switch, display and connection

* As a switching switch, the following four points are required. each channel has two LED, a programmable LED and a programmable keypad and a terminal for bus connection.

Switch

* The touch button (3) is used to switch between normal working mode and programming mode.
* A tilting switch (5) is used to switch independent loads or set group loads.

Display

* The red LED(5) indicates the current mode, and if the LED is on, the programming mode, when the lights are off, the normal mode of operation.
* Programmable backlights (4) for state feedback or small night lights.

⚠ Notice

* The programming buttons and LEDs can be observed or operated from the front or back of the product.

Suggestion

* It is best to address the product before installing the rocker. Once the address is specified, there is no need to press the programming button when downloading the subsequent program configuration.

Characteristics of KNX bus

* The wire used for the KNX terminal is preferably a single wire with a wire diameter between 0.6 and 0.8
* The exposed copper part is about 5mm long.
* Color identification: red = + (positive), black =-(negative).

⚠ Notice

* Improper installation can cause short circuit or fire. Make sure that the power is turned off before making connections.

Configuration and equipment commissioning

* ETS tool software, version V4 or higher is required to configure and debug equipment. Under the guidance of a qualified planner, configure and debug according to the smart building design plan.

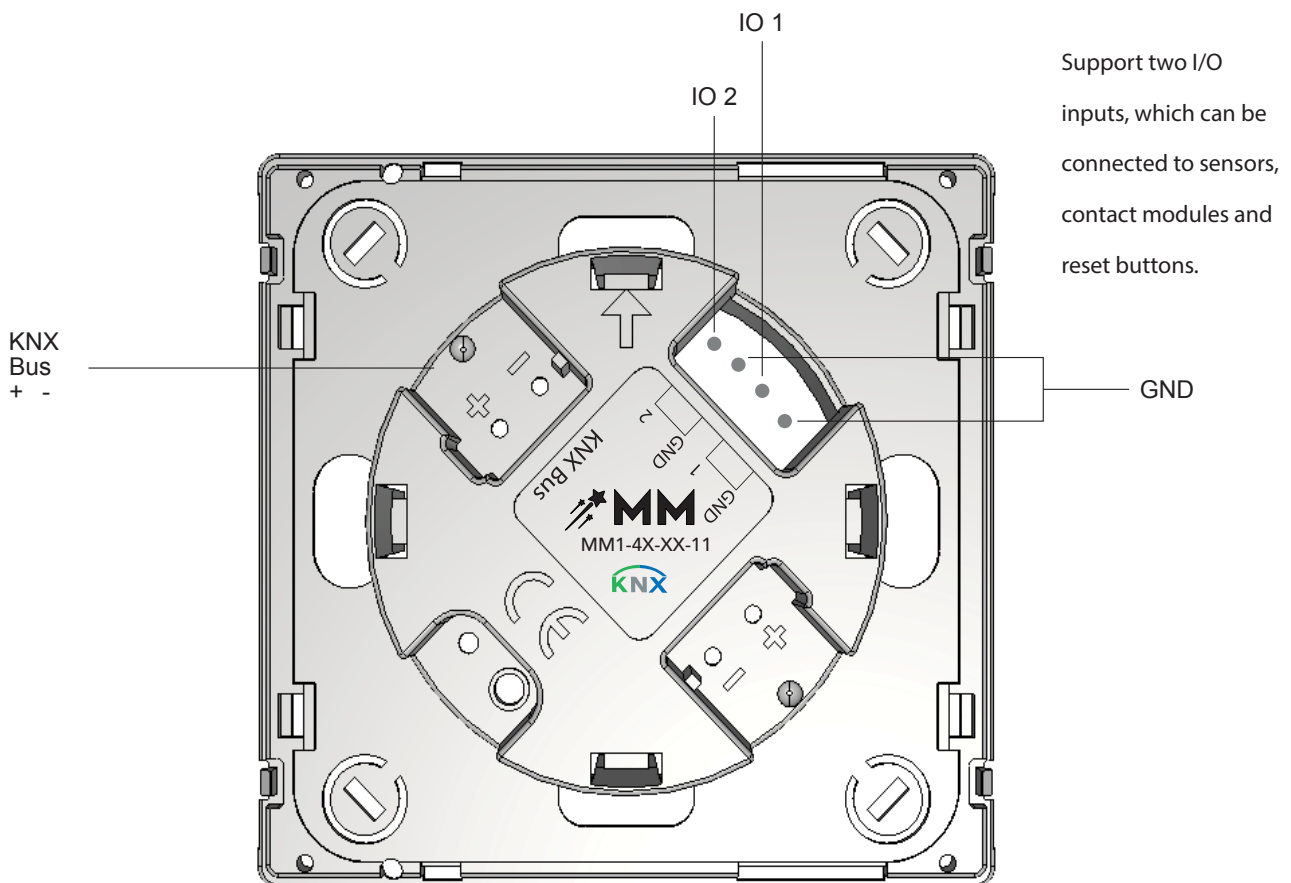| Code	Program Application (## = version)	Communication Objects (max. nr)	Group Adresses (max. nr)
MM1-40-BTB-11	8key-ctrlpanel	82	82

Device reset

* Soft reset

  * First, uninstall the data and product address through the ETS software, and then use the ETS tool to reset the physical and configuration programs before it can be used normally.

* Hard reset

  * Press the programming button to power off, and then press the programming button to power on until the programming LED lights up.

⚠ Notice

* Warning! Reset can restore the device to the state when it left the factory. The physical address and parameter value will be deleted during the setting.

Notice

IO 1

IO 2

Support two I/O inputs, which can be connected to sensors, contact modules and reset buttons.

KNX Bus + -

GND

MM1-4X-XX-11

KNX

KNX

Debugging

* In order to debug the product, follow the steps below;
* Ensure that all electrical connections are carried out in accordance with the above methods;
* Turn on the bus power, press the programming button on the back of the product to switch to programming mode, in which the programming LED is lit;
* Use ETS software to download the physical address and configuration to the product;

Set up

* In order to set the parameters of the product, the corresponding application or product database needs to be downloaded from the ETS software.

Notice

* KNX IT
* The product complies with the EC Directive: Low Voltage (35/2014 EU Directive) Electromagnetic Compatibility (2014 EU/30).
* Test according to EN 50491-4-1.

Maintenance

* KNX IT
* The product complies with the EC Directive: Low Voltage (35/2014 EU Directive) Electromagnetic Compatibility (2014 EU/30).

Dispose

* At the end of its service life, the product is classified as e-waste and cannot be disposed of with municipal unsorted solid waste.

* Improper operation or disposal of hazardous wastes may cause serious environmental damage.
* Installation and configuration can only be carried out by qualified professional and technical personnel.
* Illegal opening of the cover of the device will invalidate the warranty.

WARNING