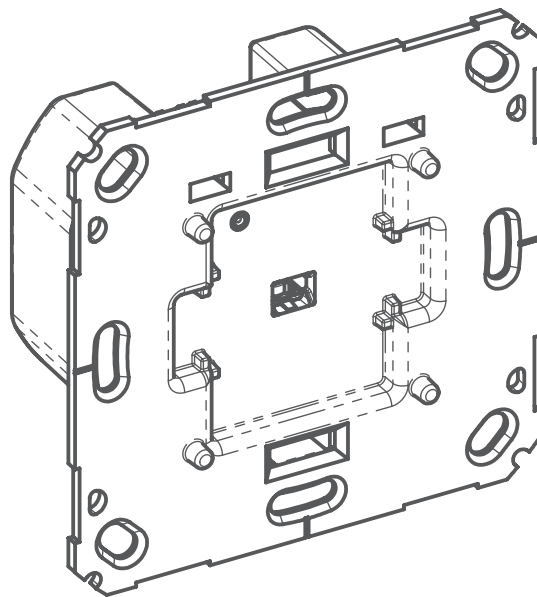


Alpha IP

BSM 24001



Instruction manual

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1 About these instructions

1.1 Validity, storage and forwarding of the instructions

These instructions apply to the Alpha IP Switch Actuator and Meter-brand switches (BSM 24001). These instructions include information necessary for commissioning and operating. These instructions must be read completely and thoroughly before commencing any work with the device. These instructions must be kept and handed over to future users.



These instructions as well as constantly up-to-date additional Alpha IP system information can be found under www.alphaip.de.



System information, functions and operating steps from the Alpha IP Access Point (HAP 2001) instructions must be followed.

1.2 Symbols

The following symbols are used in this manual:



Hazard symbol:

Indicates a hazard with possible personal damage



Note:

Identifies important or useful information



Preconditions



Result from an action



List without fixed order



List with fixed order

2 Safety

2.1 Personnel-related preconditions

The electrical installations must be performed according to the current national VDE regulations as well as according to the regulations of your local electric power utility company. These instructions require special knowledge corresponding to an officially acknowledged degree in one of the following professions:

- Systems Mechanic for sanitary, heating and air condition technology
- Electrical Equipment Installer or
- Electronics Engineer

according to the profession designations officially announced in the Federal Republic of Germany, as well as according to comparable professions within the European Community Law.

2.2 Intended use

The Alpha IP Switch Actuator and Meter – brand switches (BSM 24001) is a component of the Alpha IP System and serves

- for a fixed installation in environments of residential use,
- for switching connected electronic consumers,
- for measuring energy consumption and energy cost of connected consumers,
- for the connection of further Alpha IP components and the communication with these.

Every other use, modification and conversion is expressly forbidden. Improper use leads to dangers the manufacturer cannot be held liable for and will exempt guarantees and liabilities.

2.3 Safety notes

All safety notes in these instructions must be observed in order to avoid accidents causing personal damage or property damage. No liability is assumed for personal damage and property damage caused by improper use or non-observance of the danger notes. In such cases any warranty claim is invalid. There is no liability for consequential damages.

- Only an authorised electrician may install, connect and open the device.
- Only use the device if it is in flawless state.
- Observe the performance limits of the device and its environmental conditions.
- The device must not be used for disconnection.
- Only use the device in stationary installations.
- Do not use the device in case of visible external damage, e. g. at the casing, at operating elements or at the connection sockets.
- Only operate the device in a dry and dust-free environment.
- Do not expose the device to the influence of humidity, vibration, continuous solar radiation or other types of radiation, coldness or mechanical load.
- Ensure that children do not play with this device or its packaging. Children must be monitored if necessary.
- Do not throw packaging material carelessly away. Plastic foils, bags, styrofoam parts etc. may become a dangerous plaything in the hands of children.

3 Function

The Alpha IP Switch Actuator and Meter for brand switches is suitable for installation in a flush-type box. Once installed, it switches connected consumers (e. g. lamps) and measures their energy consumption.

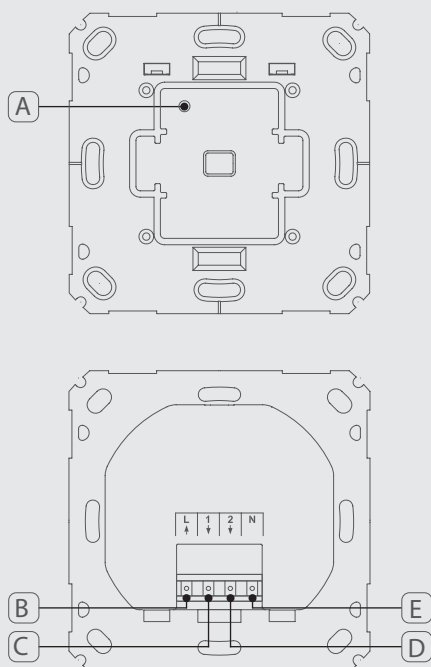
The switch actuator and meter for brand switches allows a comfortable control of connected consumers via the Alpha IP app. The energy consumption and the energy cost of connected consumers is displayed on the user interface.

The adaptors for different switch series allow a cost-saving exchange of switches made by popular manufacturers against an intelligent Alpha IP installation. Installation efforts are kept to a minimum because components of the already existing or scheduled switch series and cables can be used. The design resp. the colours and surfaces of already installed switch series remains unchanged, because existing frames and rockers can be continued to be used.

Communication with other components is performed via the Homematic (HmIP) radio protocol. Radio transmission is realised on a non-exclusive transmission path; thus, interference cannot be completely excluded. Interference can be caused e. g. by switching processes, electric motors or defective electric appliances.



The range inside buildings can be strongly different from the range in open air.



4 Device overview

- (A) System key
- (B) Connection terminal for phase (L)
- (C) Connection terminal for corresponding supply lines Normally Closed (1)
- (D) Connection terminal for lamp/corresponding supply lines Normally Open (2)
- (E) Connection terminal for neutral conductor (N)

4.1 Technical Data

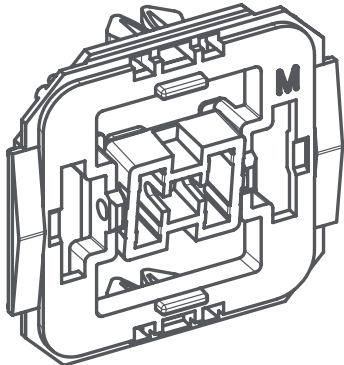
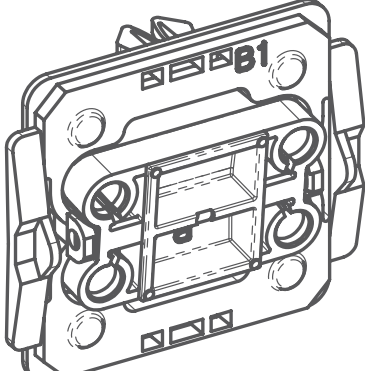
Short designation of the device	BSM 24001
Supply voltage	230 V / 50 Hz
Max. power consumption	5 A
Standby power consumption	0.2 W
Max. switching power	1150 W
Load type	resistive load
Relay	changeover contact
Line type and line section	rigid and flexible line, 0.75-1.5 mm ²
Installation	only in switchboxes according to DIN 49073-1
Protection type	IP20
Measurement category	CAT III
Ambient temperature	5 to 35 °C
Dimensions (W x H x D)	71 x 71 x 37 mm
Weight	43 g
Radio frequency	868.3 MHz/869.525 MHz
Receiver category	SRD category 2
Typical radio range	240 m (in open air)
Duty cycle	< 1 % per h / < 10 % per h
Guidelines	2014/53/EU Radio installations 2014/30/EU EMC 2011/65/EU RoHs

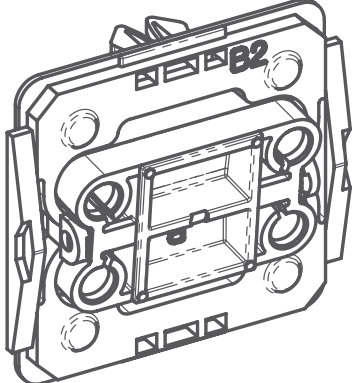
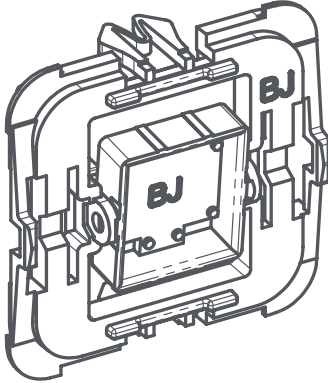
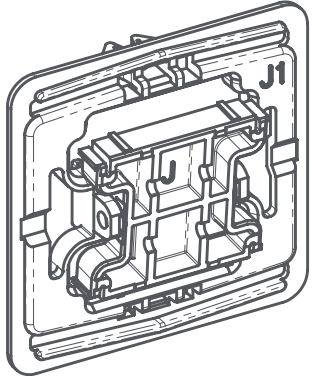
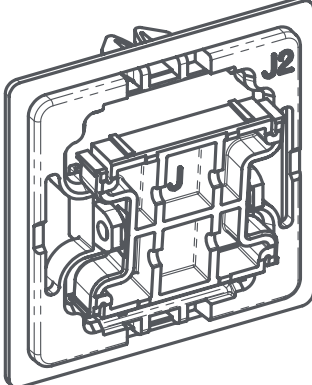
5 Adapters for brand switches

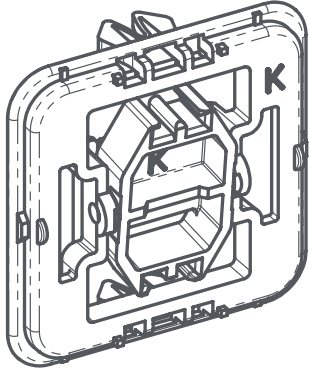
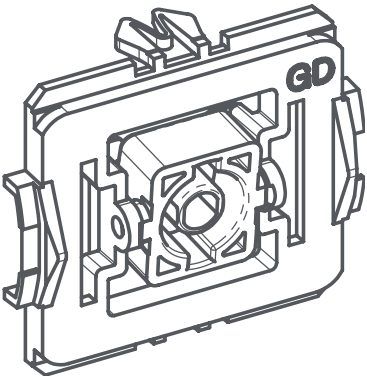
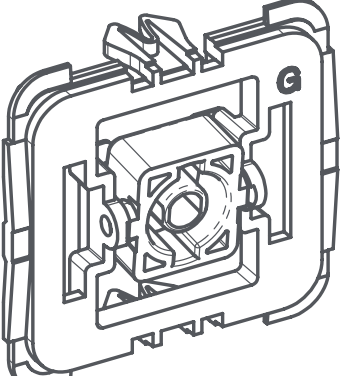
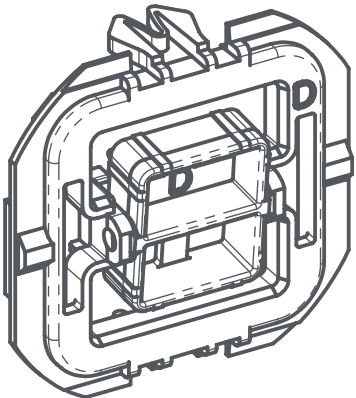
The following rocker adapters are available as possible accessories in order to achieve compatibility to as many manufacturers as possible and to facilitate integration into the most different designs. If necessary, the rocker support or the frame of the manufacturer can be adapted by sawing or filing.

*) Adaptation of rocker support necessary.

**) Adaptation of frames necessary.

	<p>Merten (M)</p> <ul style="list-style-type: none"> System M Atelier M 1-M M-Plan M-Plan Real Glass M-Smart M-ARC M-Star*) Atelier-Basis*) M1 Basis
	<p>Berker (B1)</p> <ul style="list-style-type: none"> Arsys K1

	<p>Berker (B2)</p> <p>S1 Module 2 B1 B3 B7 Q1</p>
	<p>Busch-Jaeger (BJ)</p> <p>Duro 2000® SI/SI Linear Reflex SI/SI Linear carat® future® linear solo® Busch® axcent, alpha</p>
	<p>Jung (J1)*</p> <p>LS 990 LS design LS plus CD 500 CD universal CD plus</p>
	<p>Jung (J2)*</p> <p>A 500 A creation A plus AS 500 AS universal</p>

	<p>Kopp (K)* **)</p> <p>Alaska Athenis Ambiente Europa Paris (Object HK 05) Milano Rivo</p>
	<p>Gira (GD)</p> <p>Standard</p>
	<p>Gira 55 (G)</p> <p>System 55 Standard 55 E2 Event Espirit</p>
	<p>düwi / Popp (D)**)</p> <p>Architaste Arcada Trend Standard Quadro (Plus2000) EverLuxe (Forever) ProLuxe (Quadro) PrimaLuxe</p>

6 Commissioning

6.1 Installation



WARNING

Electrical voltage! Danger to life!

- Only an authorised electrician may install and connect the device.
- Always disconnect from the mains network and secure against unintended activation before mounting and installation.
- The device must only be operated with an adapter and a corresponding and installed switch cover. Only remove the switch cover for configuration purposes.

The wiring of a room-by-room temperature control system depends on several factors and must be planned and carried through carefully by the installer.

The following cross-sections are applicable for the plug-in/clamping connections:

- rigid wire: 0.75 – 1.5 mm²
- flexible wire: 0.75 – 1.5 mm²
- 8 mm insulation stripped off the wire



Installation must only be performed in industrially available switchboxes (mounting boxes) according to DIN 49073-1.

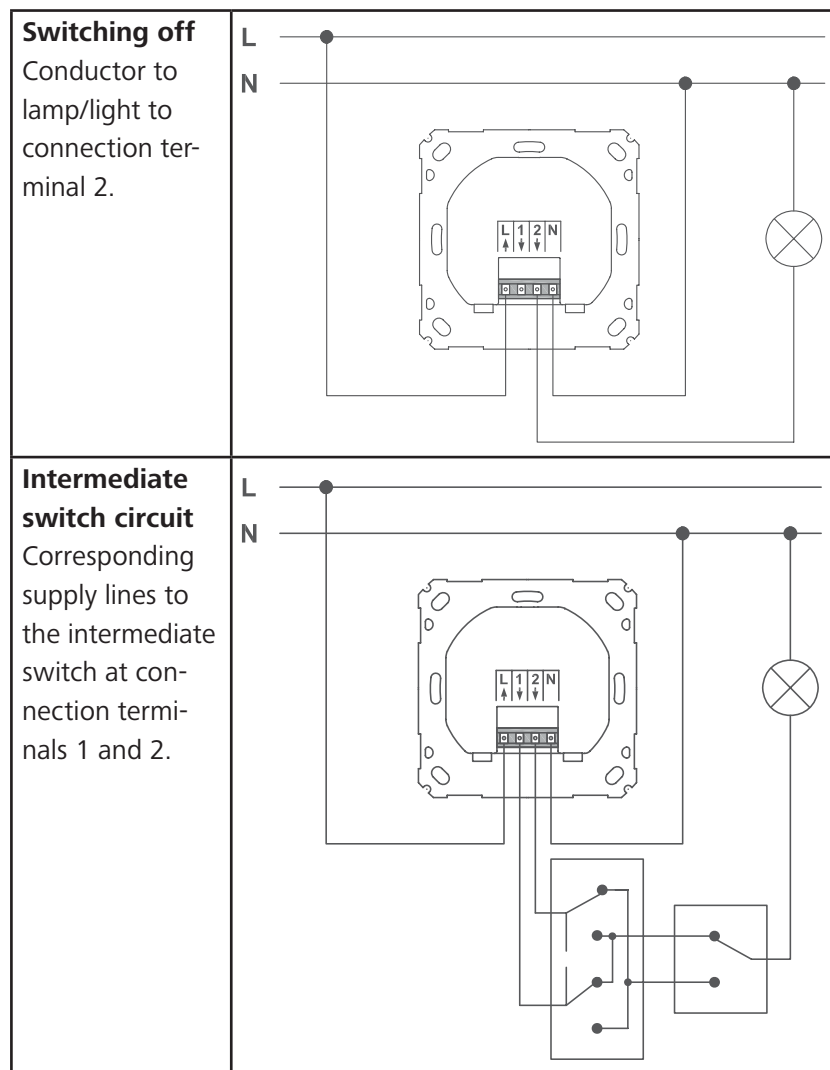


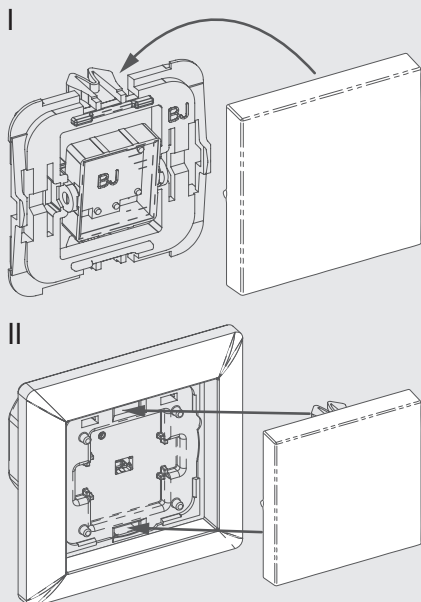
Devices with electronic power supply units (e. g. TV sets or high voltage LED lamps) do not represent ohmic loads. They can generate inrush currents of up to 100 A. The switching of such consumers leads to a premature wear of the actuator. In such cases, the use of inrush current limiters at the switching outputs is recommended.



The circuit the device and the load are connected to must be safeguarded with a circuit breaker according to EN60898-1 (triggering characteristic B or C, max. 16 A nominal current, min. 6 kA breaking capacity, energy limiting class 3). Installation guidelines according to VDE 0100 resp. HD384 or IEC 60364 must be observed. The circuit breaker must be easily accessible to the user, and must be identified as disconnect device for the unit.

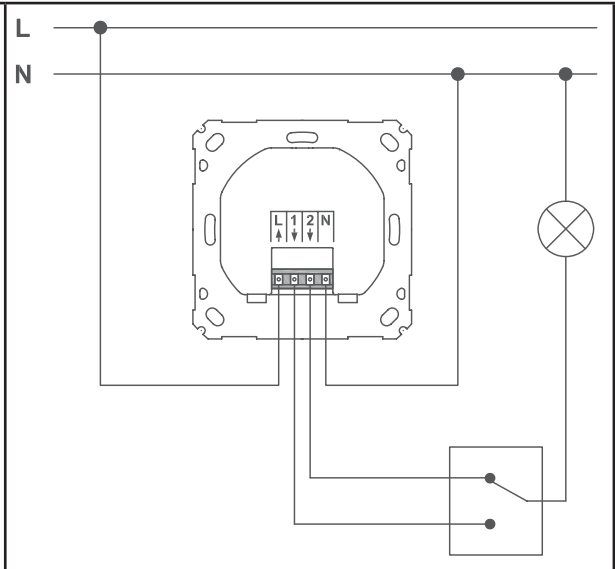
1. Disconnect from the mains network and secure against unintended activation.
2. If necessary pull off the rocker from the frame of the respective switch.
3. Pull off the frame and the clamping/support piece from the switch.
4. Loosen the cabling and remove the existing switch if necessary.
5. Connect the wiring as follows:





Multiway switching circuit

Corresponding supply lines to the toggle switch at connection terminals 1 and 2.



6. Connect the external conductor to connection terminal L.
7. Connect the neutral conductor to connection terminal N.
8. Connect the neutral conductor of the lamp to the neutral conductor of the building installation.
9. Screw the device to the flush-type box.
 - The system key must be in the left upper corner for the installation.
10. Install the adapter to the rocker (see I in figure on the left).
11. Fix the rocker together with the adapter into the frame on the actuator (see II in figure on the left). Both catches must fit to the oblong holes.
12. Connect to the mains network.

6.2 Teach-in of the device

Prior to operating the switch actuator and meter for brand switches, it must be integrated into the Alpha IP system via the Access Point (HAP 21001). For this, teach-in the respective device as follows.

- ⇒ The Alpha IP Access Point has been set up via the Alpha IP app.
 - ⇒ The actuator is assembled and installed.
1. Open the Alpha IP app on your smart phone.
 2. Select the menu item Teach-in device.



The teach-in mode is active for three minutes after installation. The teach-in mode can be activated manually by removing the rocker and short pressing of the system key.



3. The device will be displayed automatically in the app.
4. For confirmation of the teach-in process, enter the last four digits of the device number (SGTIN) in the app or scan the supplied QR code. The device number can be found on the back side of the device.

The LED will light up in green after a successful teach-in process. The process must be repeated if the LED lights up in red.

5. Follow the directions of the Alpha IP app.

7 Operation

After the teaching-in and the installation of the device, the configuration is performed via the Alpha IP app.

8 Displays

The LED of the device signals the device status by means of light and flashing patterns.

8.1 Status displays

Display	Meaning	Meaning
Long lighting in green	Process confirmed	<ul style="list-style-type: none"> Confirmation of performed setting/transmission.
1 lighting in orange and 1 lighting in green (after plugging into a power outlet)	Test indication	<ul style="list-style-type: none"> Wait until the device is ready.
Short flashing, orange	Radio transmission	<ul style="list-style-type: none"> Wait until the transmission has ended.
Short flashing, orange (once every 10 seconds)	Teach-in mode active	<ul style="list-style-type: none"> Enter the last four digits of the serial number of the device.

8.2 Error indications

Display	Meaning	Solution
Long lighting in red	Transmission error, transmission limit reached (duty cycle)	<ul style="list-style-type: none"> Re-send the command after one hour at the latest in case of exceeded duty cycle. Check the device for defects, e. g. mechanical blocking. Eliminate radio interference.
6x long flashing, red	Device defective	<ul style="list-style-type: none"> Observe the indication in the app. Have the device checked by a specialist dealer. Replace the device.

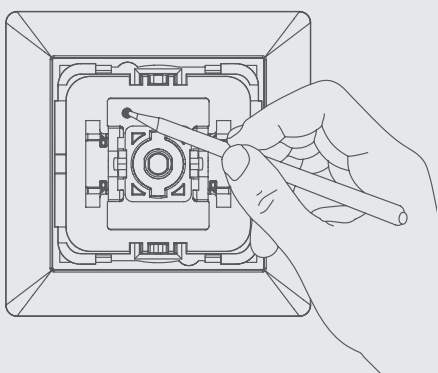
9 Cleaning

The device is maintenance-free.

10 Resetting factory settings

All settings will be lost when the factory settings are restored.

1. Delete the device from the Alpha IP app.
 2. Remove the rocker if necessary.
 3. Press the system key for 4 seconds until the LED flashes rapidly in orange (see figure on the left).
 4. Release the System key.
 5. Press the System key again for 4 seconds until the LED lights up in green.
 6. Release the System key again.
- ✓ The device restarts.
 - ✓ The factory settings are reset.



11 Decommissioning

WARNING

Electrical voltage! Danger to life!

- Only an authorised electrician may decommission the device.
- Prior to decommissioning, disconnect from the mains voltage and secure against unintended activation.

1. Delete the device from the Alpha IP app.
2. Disconnect from the mains network and secure against unintended activation.
3. Loosen all connected cables.
4. Uninstall the device and dispose of properly.

12 Disposal



Do not dispose of the device with domestic waste!

Electronic devices/products must be disposed of according to the Directive for Waste Electrical and Electronic Equipment at the local collection points for waste electronic equipment.



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