

# User Manual

Model: ECU100



**SMART**  
**eLOCK**

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## **1 Understanding Energy saving unit**

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ECU100 model is the device that manage and control the power in the residential and hotel environment. It can activate power of the room after reading or detecting a valid RFID card. In order to maintain the power, the RFID card must be inserted into the slot. The power connection must be connected according to the wiring diagram.

### **1.1 ECU100-01**

This model operates on AC100~240V and controls 1 relay. The connection follows the connection diagram ECU100-01 and receives information from a valid RFID card or mobile key to control the relay.

Room cleaning/do not disturb functions can be provided via ZIGBEE/RS485.

See Specification for the load of each relay.

### **1.2 ECU100-02**

This model operates on AC100~240V and controls 2 relays. The connection follows the connection diagram ECU100-02 and receives information from a valid RFID card or mobile key to control the relays.

Room cleaning/do not disturb functions can be provided via ZIGBEE/RS485.

See Specification for the load of each relay.

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## 2 Specification

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	ECU100-01	ECU100-02
<b>Description</b>	Standalone single relay energy saving unit	Standalone dual relay energy saving unit
<b>Credential</b>	RFID Card	RFID Card
<b>Guest/Staff Keycard</b>		It prevents hotel staff from using certain electrical equipment in the room (air conditioning, TV, phone, etc.) while cleaning the rooms.
<b>Input Power</b>	100~240 Vac. Tolerance 10%	100~240 Vac. Tolerance 10%
<b>Consumption</b>	Nominal of 20mA. Max. of 50mA.	Nominal of 20mA. Max. of 50mA.
<b>Frequency</b>	50 – 60 Hz	50 – 60 Hz
<b>Number of relay / Max load:</b>	1 relay / Nominal load:25A, Inductive load: 15A	2 relays. One according to the power supply and other potential free / Nominal load: 10A, Inductive load: 7A
<b>Dimension (mm) (inch)</b>	H 110.60 x W 85.60 x D 21	H 110.60 x W 85.60 x D 21
	H 4.35 x W 3.37 x D 0.82	H 4.35 x W 3.37 x D 0.82
<b>Case Material</b>	UL 94 V-0.	UL 94 V-0.
<b>ECU Communication (Optional)</b>	1. Lock to ECU Zigbee 2.4GHz IEEE 802.15.4 Compliant RF Transceiver	1. Lock to ECU Zigbee 2.4GHz IEEE 802.15.4 Compliant RF Transceiver
	2. Gateway to ECU Zigbee/WiFi/RS485	2. Gateway to ECU Zigbee/WiFi/RS485
<b>MUR/DND Function (Optional)</b>	Available	Available

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### **3 Installation Notes**

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Before installing and turning on the ECU100 energy saver, carefully read these instructions.

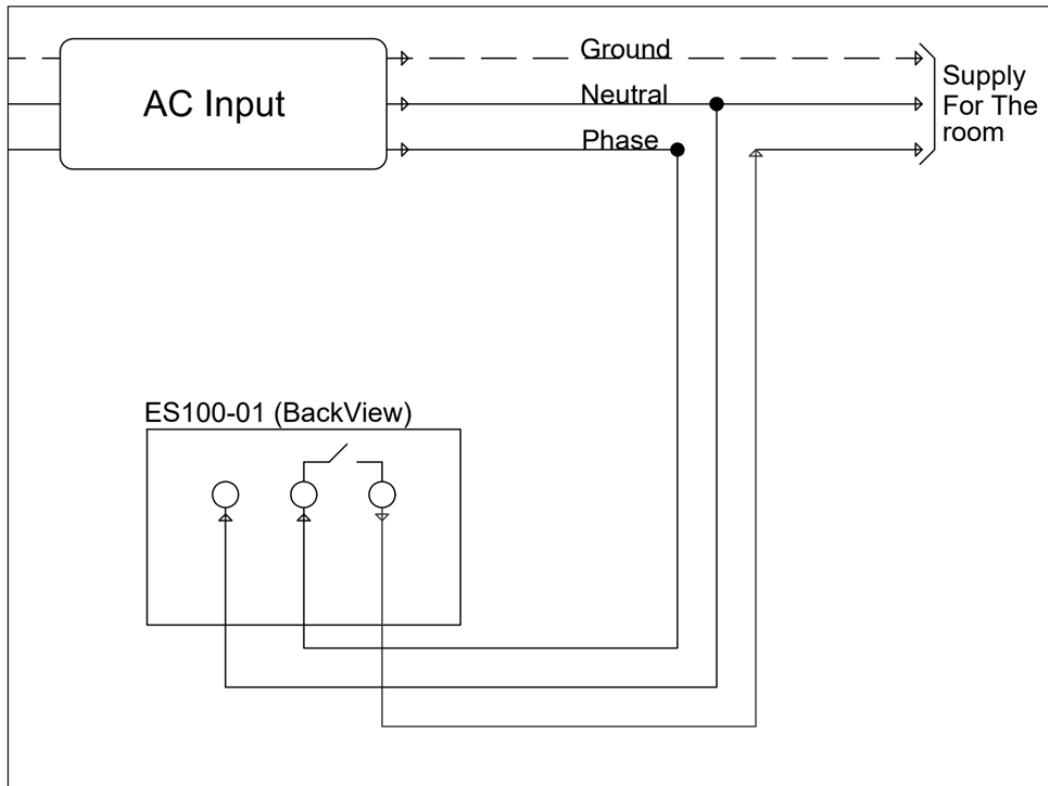
To make the connections clearer, a diagram has been added. Any improper connections will result in the installation assembler's full liability and void any prior warranties.

Please get in touch with your local distributor if you have any questions.

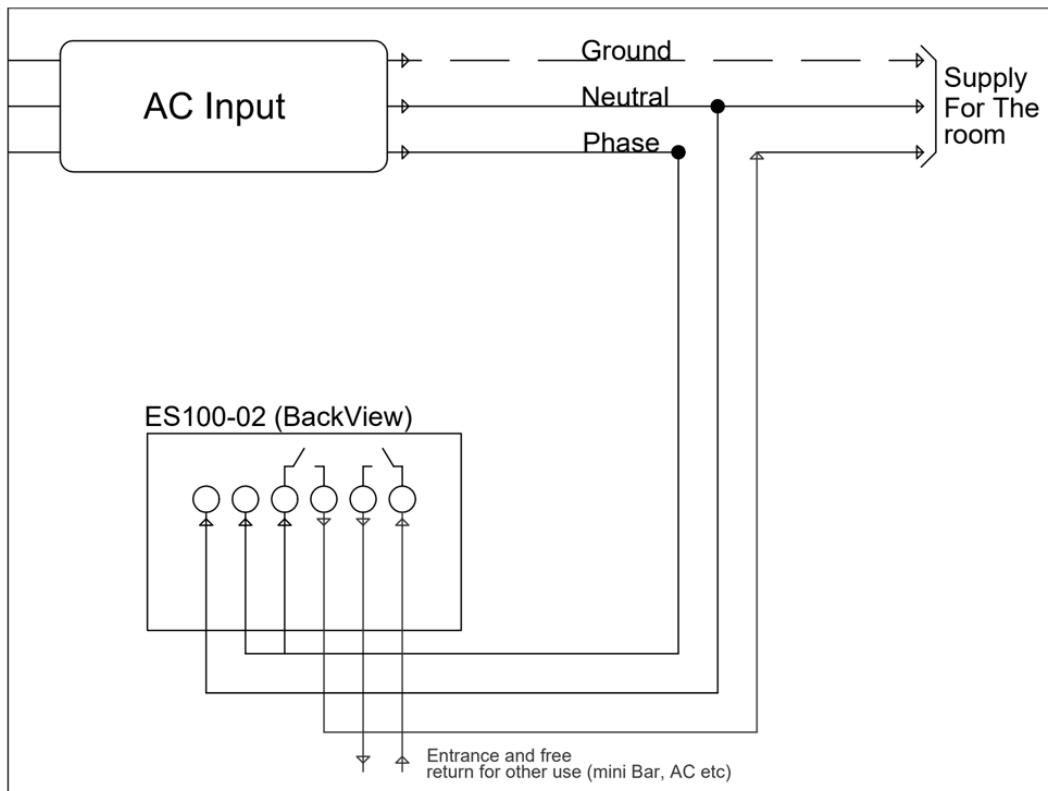
- 1. To prevent any mistakes, please read the installation instructions carefully before beginning the installation.**
- 2. Our products must be installed and handled by trained professionals. Particularly, electrical connections must only be carried out by qualified specialists.**
- 3. Use the power supply type specified on the identifying label while using your device. Consult your electricity company if you are unsure of the kind of power source your installation uses.**
- 4. Before beginning any operation for the maintenance or installation modification, disconnect the products from the power source.**
- 5. Any connection that is improperly made could result in property damage that is beyond repair, as well as injuries to individuals.**
- 6. The appliance's electrical connection must be made in accordance with current standards, directives, and applicable law.**
- 7. A device that cuts off the power supply in the event of over currents brought on by a unit malfunction must be a part of electrical installation.**
- 8. To protect the user from potential electric shocks, the unit must be closed and the cover plate installed after installation is complete.**

## 4 Wiring Diagram

### 4.1 ECU100-01

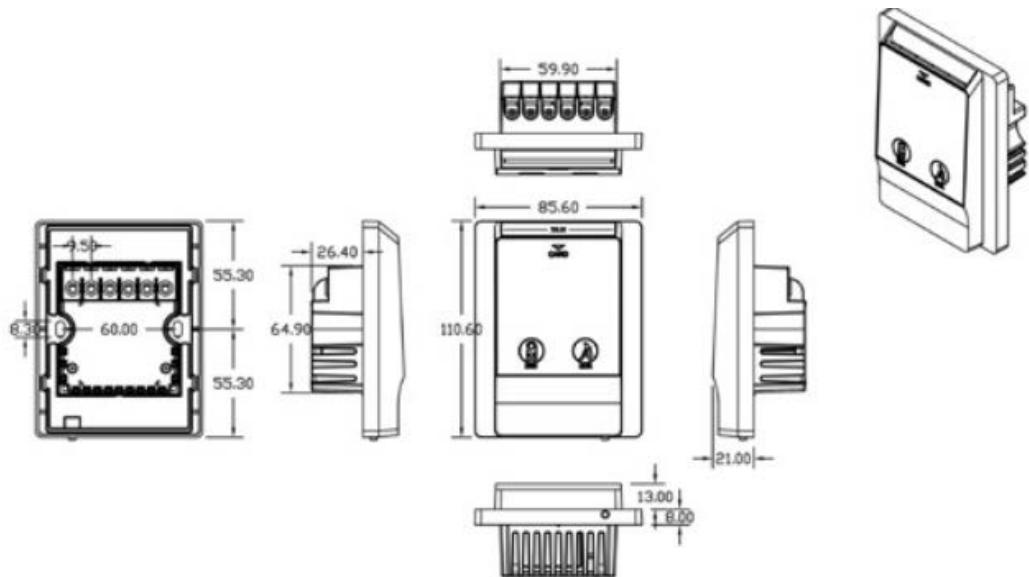


### 4.2 ECU100-02



## 5 Dimension

### 5.1 ECU100



<ES100 series>

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## **6 Test after Installation**

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### ***6.1 Test after Installation***

1. Make sure the connections are connected according to the wiring diagram.
2. Turn on the main power and check if the green LED is lit on the product.
3. Insert the user card into the slot to verify if the relay is activated to turn on the controlled power.
4. Remove the user card from the slot to verify if the connected power source turns off the controlled power.

### ***6.2 Device Setup***

1. Each site can be set up by setup cards or MIS  
(more information to follow based on scenario)

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## 7 Regulatory Statement

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The revised User Manual does not contain the FCC required warning statements.

a. Rule Part 15.19(a)(3): This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

b. Rule Part 15.21: The users manual or instruction manual for an intentional or unintentional radiator shall caution the user that changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note: This equipment has been tested and found to comply with the limits for a Class B Digital

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help

**Supplier's Declaration of Conformity**

47 CFR § 2.1077 Compliance Information

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