## Display panel ( PV-WiFi version )

| | |
|---|---|
| > U < | :Over/Under voltage warning |
| > A < | :Over/Under current warning |
| Asy | :Three-phase imbalance warning |
| > Hz < | :Over/Under frequency warning |
| Pluse | :Energy pulse indicator lamp |
| ← | :Reverse Total Active Energy |
| → | :Forward Total Active Energy |

| | |
|---|---|
| ↑ | Up |
| ↵ | Shift |
| | Menu selection |
| | On/Off/Save |

※ Over current/over voltage/over frequency Lights Flash.
※ Under current/under voltage/under frequency light flashes slowly.
Press ↵ button 8s to clear the data.Only electric energy cannot be initialized.
※ Short press ↑ button , the display shows the voltage parameter of 380V.
※ If no button is set within 60s, the device will automatically enter the low-energy consumption mode.

## Phase sequence error indication

When a phase fault occurs, L1-L3-L2 is displayed, and the protector is disconnected from the output power supply



## Matters needing attention

1. The equipment must be installed by qualified professionals.
2. Before operating the device, disconnect all power supplies and do not touch any terminal when the power supply is connected.
3. Verify that terminals are properly connected.
4. No matter whether the equipment is in normal operation, do not disassemble or repair otherwise, producers and sellersNo responsibility is accepted.
5. Do not use the equipment in places that may be corroded by gas, strong sunlight and rain.
6. Clean equipment with a dry cloth.
7. Failure to comply with these instructions will result in serious injury or serious accident.

## Product characteristics

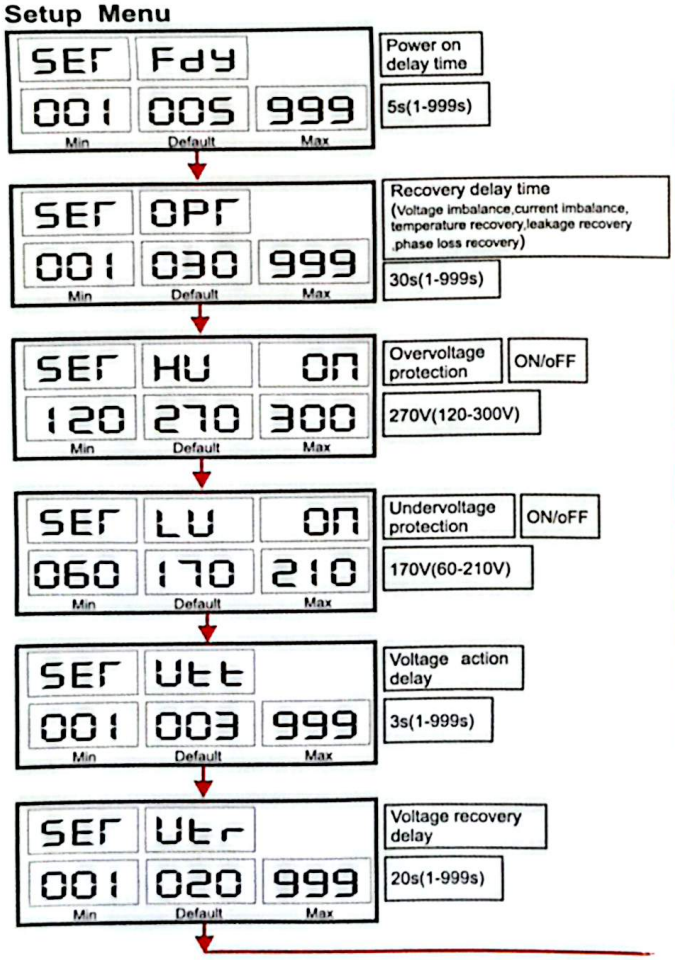
- Microcontroller-based.
- Digital display of working voltage, current, electric energy and frequency.
- Prevent the electrical set voltage is too high/too low current, three-phase asymmetry and phase sequence error.
- Measurement accuracy is 0.5 class.
- Key setting parameter.
- LED indicates overvoltage/undervoltage/over frequency/under frequency/ overcurrent/undercurrent and three-phase unbalanced protection faults.
- 20 modules, DIN rail mounting.

## Technical data

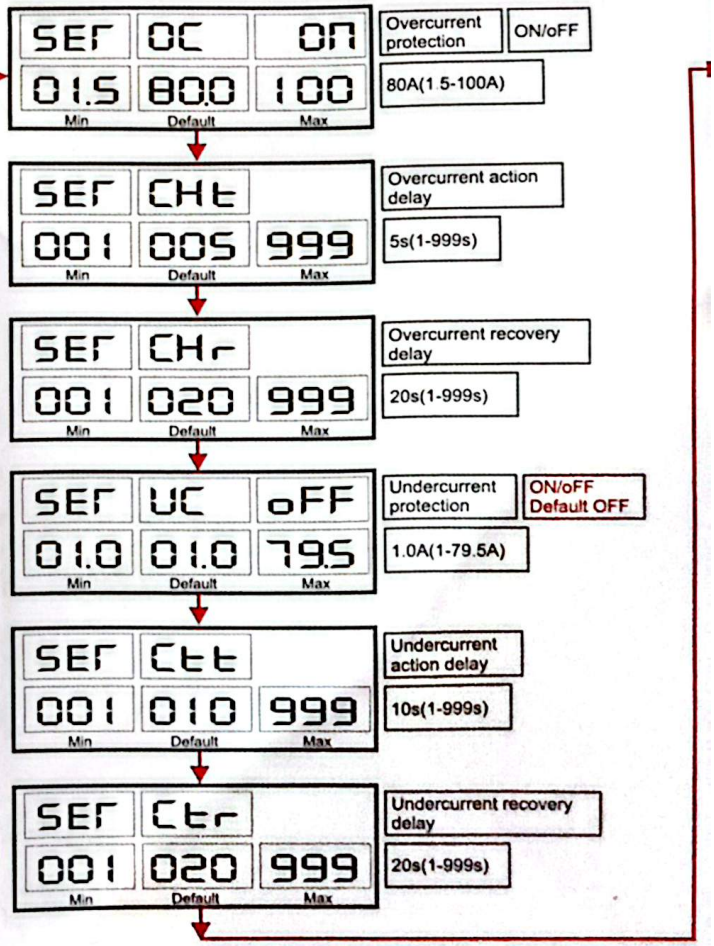
| | |
|---|---|
| Rated supply voltage | AC 230V |
| Operating voltage range | AC 60-300V |
| Rated frequency | 30-80Hz |
| lag | Overvoltage and asymmetry:5V<br>Undervoltage:5V |
| Measurement accuracy | 0.5 class |
| Rated insulation voltage | 450V |
| Output contact | 3NO |
| Electrical life | $10^5$ |
| Mechanical life | $10^5$ |
| Protection class | Ip20 |
| Pollution degree | 3 |
| Altitude | <2000m |
| Operating temperature | -20℃ ~70℃ |
| Humidity | ≤50%or40℃(Condensation free) |
| Storage temperature | -20℃ ~70℃ |
| Product size | 110*108*70mm |



## Setup Menu





## Parameter setting

| Set character | Technical parameter | Set range | Default value | Step forward | Function description |
|---|---|---|---|---|---|
| FdY | Power on delay time | 1s~999s | 5s | 1s | The time required after the external power supply is cut off is used Power on when power is restored |
| OPr | Recovery delay time | 1s~999s | 30s | 1s | Delay protection time for voltage imbalance, current imbalance, temperature recovery, leakage recovery and phase loss recovery |
| HU | Overvoltage protection | ON/OFF 120V~300V | ON/270V | 1V | When the voltage is above the set value, The protector will cut broken line |
| LU | Undervoltage protection | ON/OFF 80V~210V | ON/170V | 1V | When the voltage falls below the set value, the protector willCut the line |
| Utt | Voltage action delay | 1s~999s | 3s | 1s | The time required for voltage protection action |
| Utr | Voltage recovery delay | 1s~999s | 20s | 1s | Delay time required for voltage recovery |
| OC | Overcurrent protection | ON/OFF 1A~100A | 80A | 0.1A | Protector when the current is higher than the set value will cut the line |
| CHt | Overcurrent action delay | 1s~999s | 5s | 1s | Time required for overcurrent protection action |
| CHr | Overcurrent recovery delay | 1s~999s | 20s | 1s | Delay time required for overcurrent recovery |
| UC | Undercurrent Protection | ON/OFF 1A~79.5A | OFF | 0.1A | Undercurrent protection threshold |
| Ctt | Undercurrent action delay | 1s~999s | 10s | 1s | Time required for undercurrent protection action |
| Ctr | Undercurrent recovery delay | 1s~999s | 20s | 1s | Delay time required for undercurrent recovery |
| OH | Overfrequency protection | ON/OFF 65Hz(61Hz~80Hz) | OFF | 1Hz | When the frequency is higher than the set value, the line will be cut off |
| UH | Underfrequency protection | ON/OFF 45Hz(30Hz~49Hz) | OFF | 1Hz | When the frequency is lower than the set value, the line will be cut off |
| Htt | Frequency action delay | 1s~999s | 5s | 1s | Time required for frequency protection action |
| Ud | Three-phase voltage unbalance protection | ON/OFF (1V~100V) | ON/20V | 1V | When the unbalanced voltage error of three-phase voltage is at the set value, the power-off delay protection is implemented |
| Id | Current imbalance protection | ON/OFF (10A~100A) | ON/20A | 1V | When the unbalanced current error of three-phase current is at the set value, the power-off delay protection is implemented |
| Idt | Current imbalance protection action delay | 1s~999s | 5s | 1s | Time required for Current imbalance protection action |
| UnS | Phase sequence protection | ON/OFF | OFF | | Prevent electrical faults and equipment damage caused by phase sequence errors |
| USL | Phase failure protection | ON/OFF | OFF | | When one phase of power is lost due to line breakage, loose wiring, etc., power-off protection is activated |
| OCt | Continuous overcurrent counting | ON/OFF 5times(1~30times) | OFF | 1 times | Time required for Current imbalance protection action |
| ECh | Electric Kwh protection | ON/OFF (0~99999999Kwh) | OFF | | When the power consumption surpasses the preset threshold, the circuit breaker will activate for protection |
| FnP | Temperature protection | ON/OFF (10℃~85℃) | ON/85℃ | 1℃ | Over-temperature triggers circuit breaker protection |
| OH1 | Leakage protection | ON/OFF 10mA(30~99mA) | OFF | 1mA | Over-temperature triggers circuit breaker protection |

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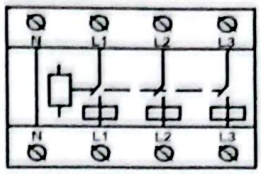
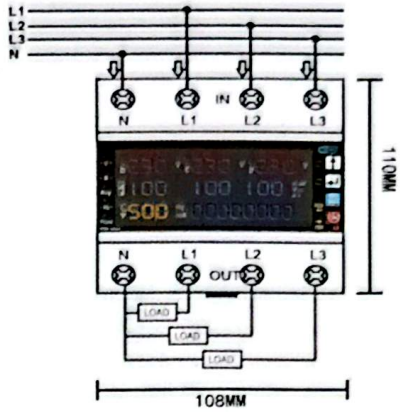
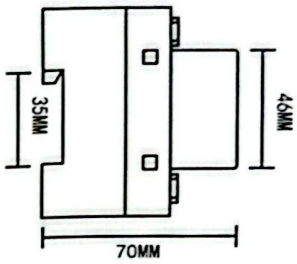
## Electrical symbol




## Wiring diagram

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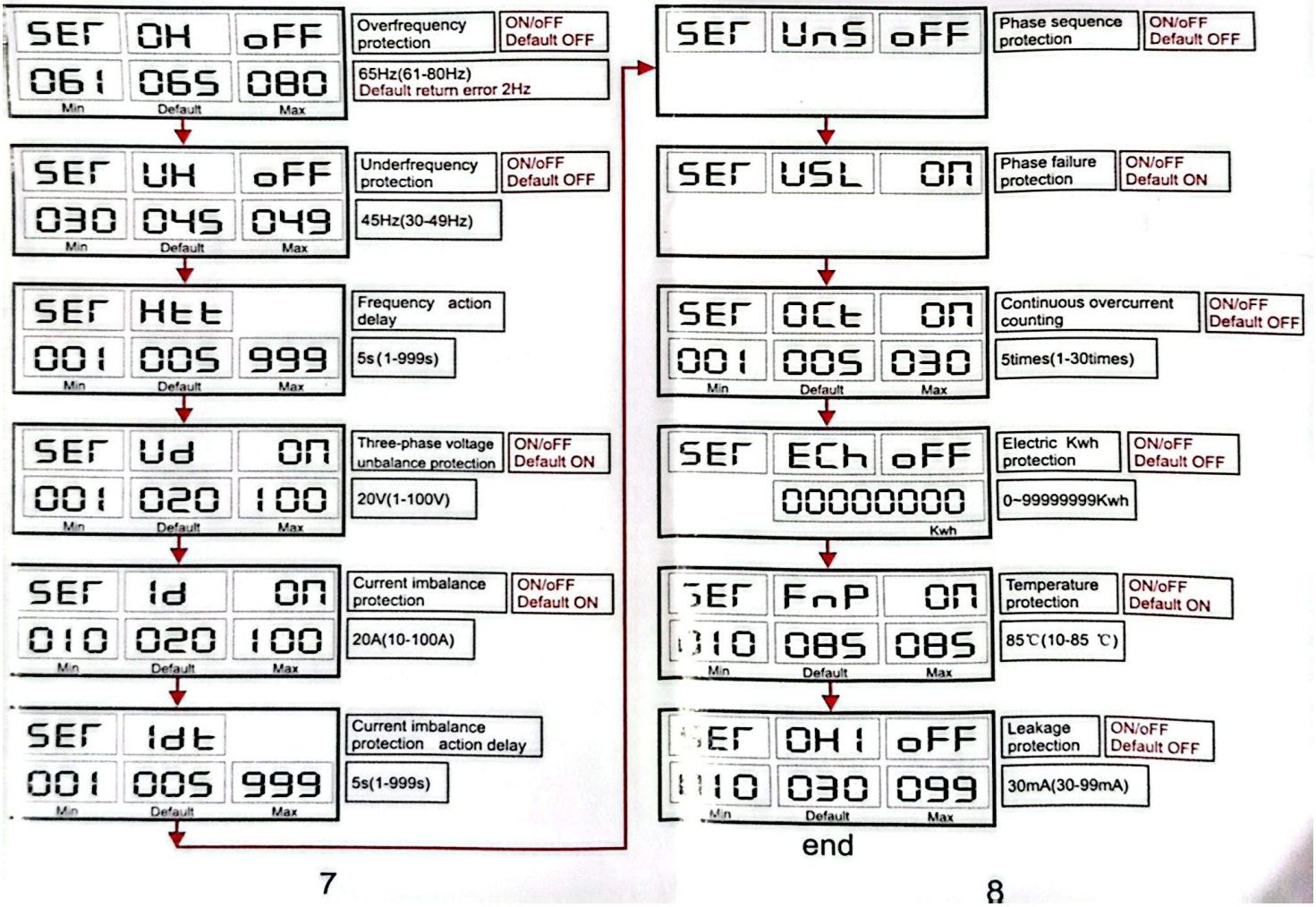


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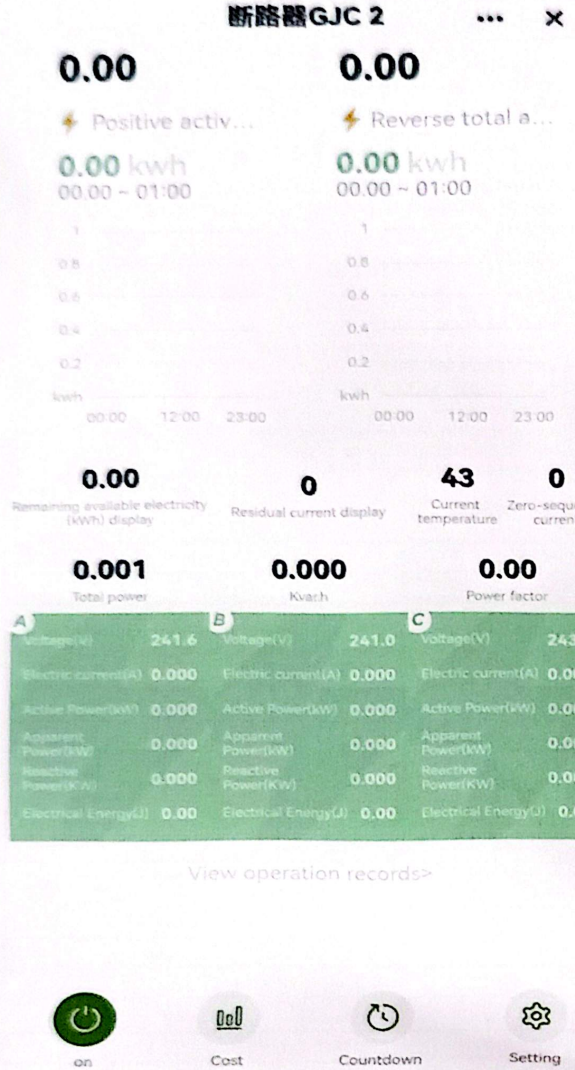


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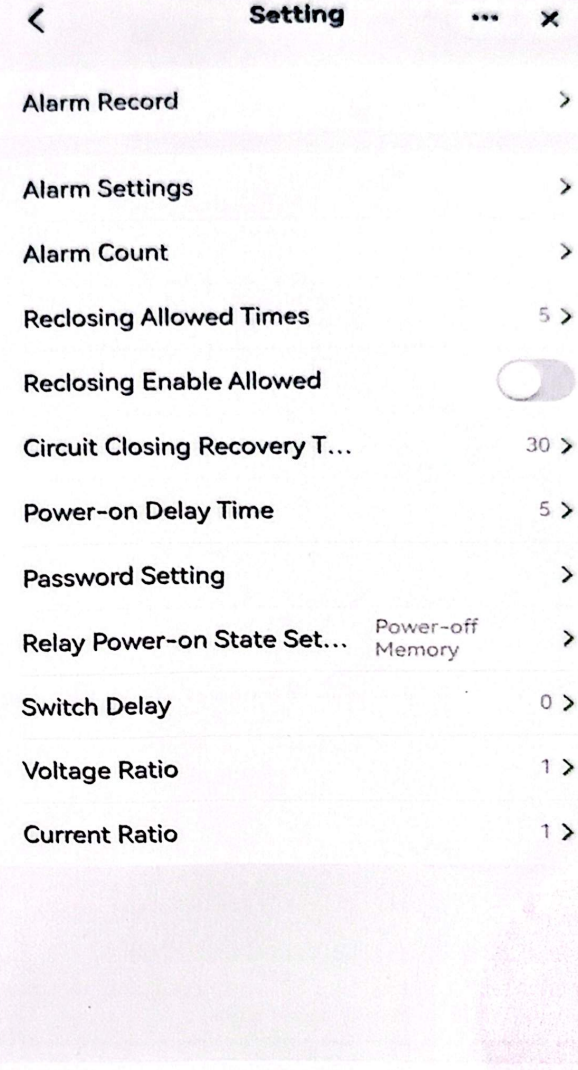


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HOW TOADD DEVCETOAPP

1. Use your smart phone to scan QR codes, or search "SmartLife" or "Tuya Smart" app in Google play or APP Store todownload and instal.
2. Create an account with your mobile number.3. Connect you mobile to your Wi-Fi router. Click "+" inthe upperright conner of homepage or click "Adddevice" then selectbreaker "Switch module ( Wi-Fi )" from "Energy", long press WiFibutton for 5 seconds, after the WiFi indicators starts to flashquickly, open app to pair.

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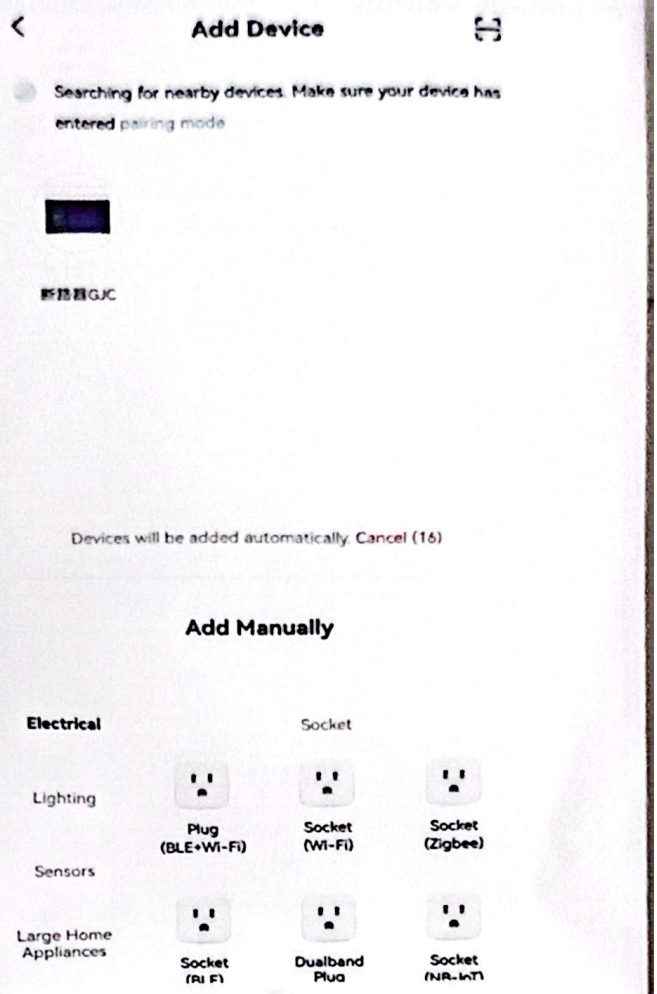


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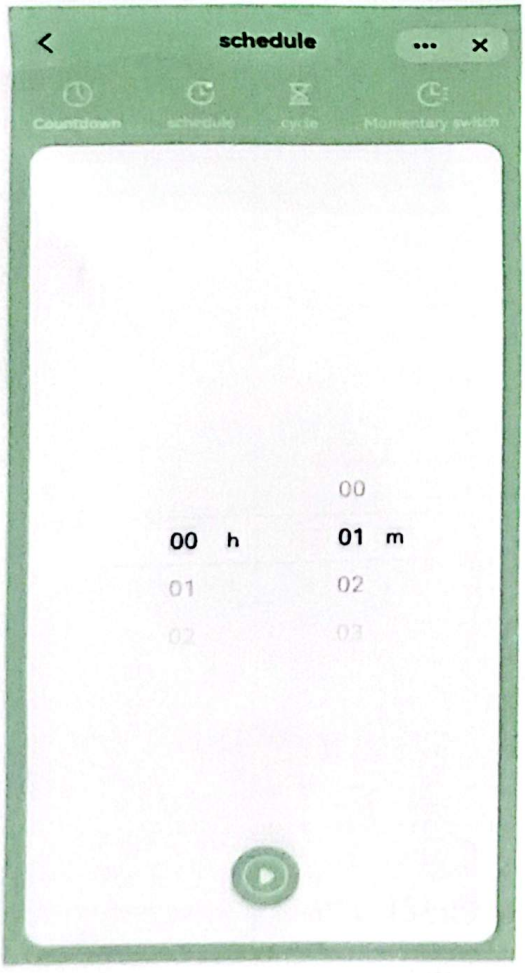


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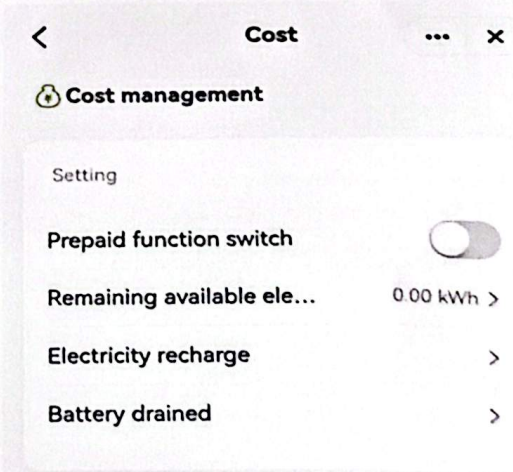


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