

LED SMART CIRCUIT BREAKER

BV-KK2P-XXA-NB



FUNCTION

The LED smart circuit breaker is suitable for AC 50Hz, rated voltage 230/400V, rated current to 100A, and has the protection function of overload and short circuit. At the same time as a smart reclosing circuit breaker, it also has a mobile phone global remote control on/off circuit, timed on, delayed on, and cycle on functions, and the function of manually operating the switch status synchronously feedback to the mobile phone. And can choose the electric energy metering function, used as a master switch meter. It can be used in advertising signs, space lighting and other fields.

NOTE: the null-earth wire (N) and live wire (L) of the smart circuit breaker cannot be connected in reverse, otherwise it will affect the power statistics.

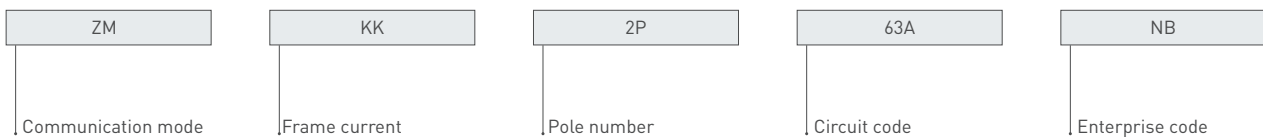
Compliance with standards: GB/T10963.1, IEC6089B-1, technical specifications for smart circuit breakers.

NOTE

This product is a remote control switch. Please use it with cautions. The company does not assume legal responsibility for the accidents caused by remote operation. When the circuit and equipment are under maintenance, you must switch to the "maintenance" in case someone using your APP.

This product adopts NB-IOT communication. In order to save the cost of data, reduce the power consumption and improve performance, please don't click the APP switch button frequently. Every two clicks need an interval of more than 10 seconds.

ORDERING CODE



TECHNICAL PARAMETERS

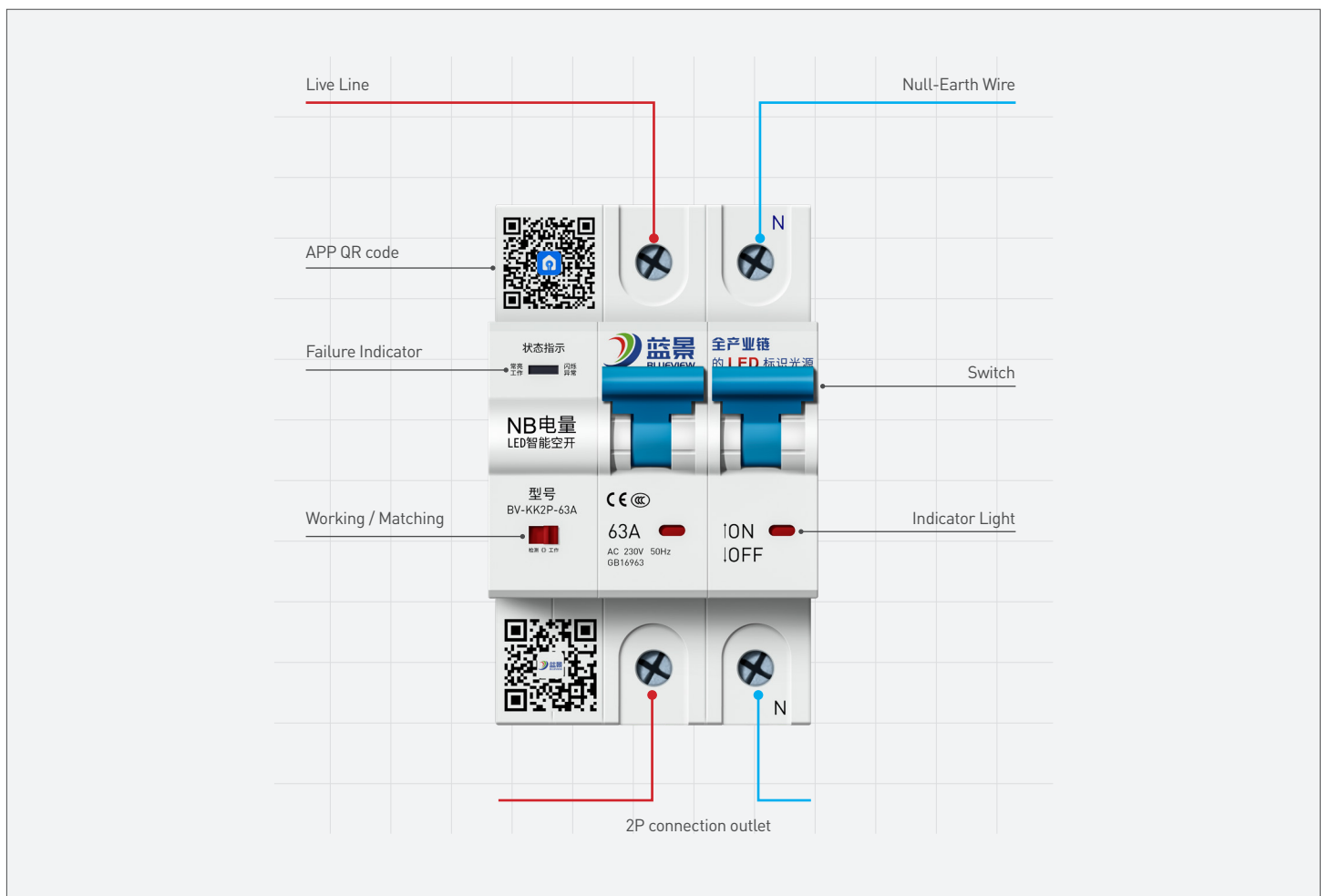
Rated Voltage	AC230V 1P 2P	Rated Current	16A/32A/50A/63A/80A/100A
Frequency	50Hz	Instantaneous Tripping Mode	C
Pollution Level	2 grade	Rated short circuit breaking current	6000A
IP Grade	IP20	Rated impulse withstand voltage	≥6KV
Installation category	II III	Mechanical Life	>10000 times
Working Temperature	-25°C~+65°C	Electrical Life	>6000 times
Frame Rated Current	125A		

ELECTRICAL MOBILITY CHARACTERISTICS

Test	Test Current	Beginning State	Trip or Non-trip Time Limit	Results	Testing Environmental Temperature	Remark
A	1.13I _n	Cold state	t ≤ 1h/2h (I _n ≤ 63A)	non-trip	30°C-35°C	/
B	1.45I _n	after A test	t < 1h (I _n ≤ 63A) / t < 2h (I _n > 63A)	trip		The current rises steadily within 5s
C	2.55I _n	Cold state	1s < t < 120s	trip		/
D	5.0I _n	Cold state	t ≤ 0.1s	non-trip		Turn on the current by closing the auxiliary switch
E	10.0I _n	Cold state	t < 0.1s	trip		

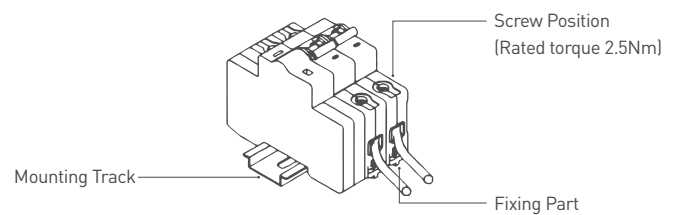
Note: "cold state" means the reference calibration temperature, without load before the test.

CONNECTION DIAGRAM

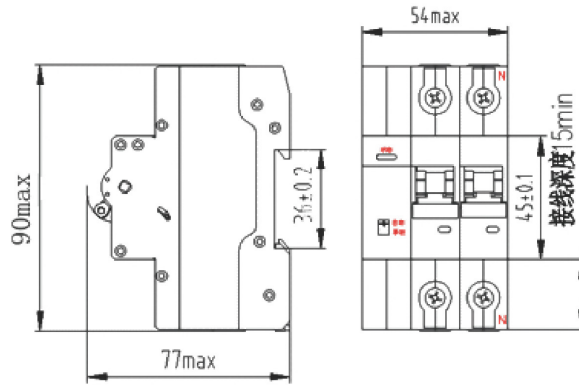


CONNECTION METHOD

Rated Current I _n (A)	Nominal Section Area Of Copper Wire
16 < I _n ≤ 32 A	6mm ²
32 < I _n ≤ 50 A	10mm ²
50 < I _n ≤ 63 A	16mm ²
63 < I _n ≤ 100 A	25mm ²



PROFILE DRAWING



1P+N / 2P profile drawing

LED INDICATOR LIGHT

Network connection:

1Hz flicker



2.5Hz Breath flicker



Succeed (light on when working, light off when not working)

Indicators status:

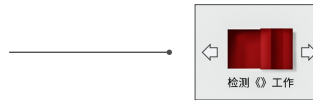
working : light on

not working: light off

error: quick flicker

BUTTON USAGE

Left is the maintenance status:
under maintain mode, it will stop working (can not change working status by manual or APP)



Right is the working status:
under working mode, can control working status by manual and App

MEASUREMENT PARAMETERS

Basic Specifications

Model No.	Precision	Reference Voltage [V]	Standard Current [A]	Instrument Parameters
Metrological type	1.0 grade	220V	5 (60)	1200

Basic Errors

Load Current	0.05Ib ≤ I < 0.1Ib	0.1Ib ≤ I ≤ Imax	0.1Ib ≤ I < 0.2Ib	0.2Ib ≤ I ≤ Imax
Power Factor	1.0	1.0	0.5L, 0.8C	0.5L, 0.8C
Error Limit Value (%)	±1.5	±1.5	±1.5	±1.5

Start

Under the conditions of reference voltage, reference frequency, and cosΦ=1.0, the energy meter will start and record continuously after the load current rises to 0.004Ib

Shunt running

When there is no current in the current circuit of the electric energy meter and 115% of the reference voltage is applied to the voltage circuit, the test output of the electric energy meter should not generate more than one pulse.

Electrical parameters

Working Voltage	Limit Working Voltage	Rated Frequency
0.9Un-1.1Un	0.7Un-1.3Un	50Hz

Temperature range

Working Temperature	Limit Working Temperature	Storage And Transportation Temperature	Working Temperature
-25°C~+65°C	-45°C~+70°C	-45°C~+70°C	≤75%

Power consumption: ≤1W, 6VA

Display function: APP screen display

	Decimal Places	Unit
Electricity	2 place	kWh
Voltage	1 place	V
Current	0 place	mA
Active Power	1 place	W

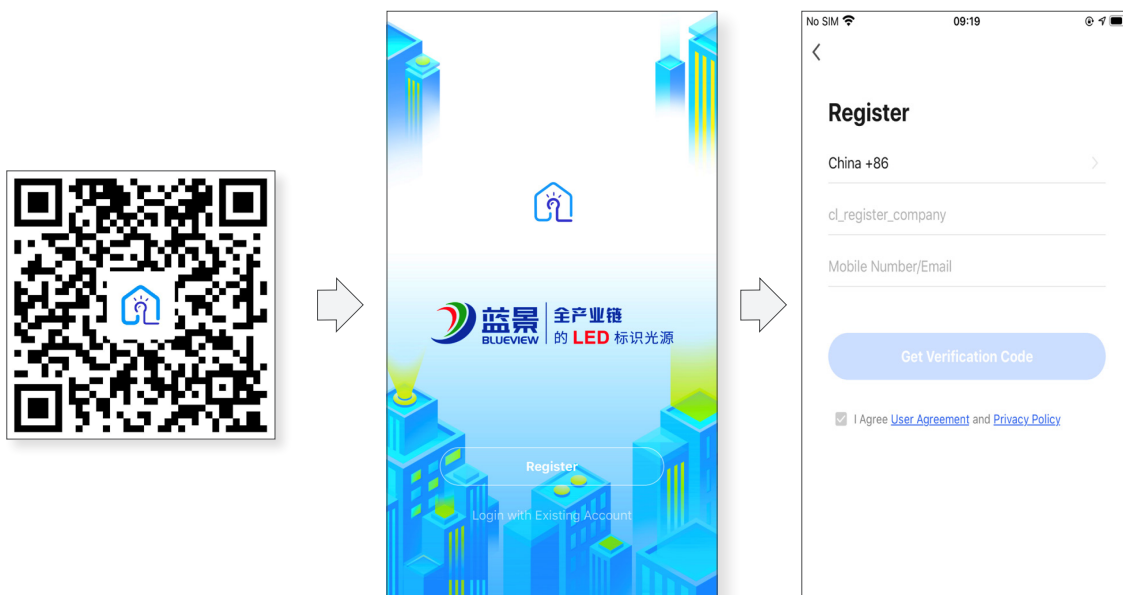
Report the switch status, voltage, current, power and electricity information once every hour or every 1kwh

FAILURE RECOVERY

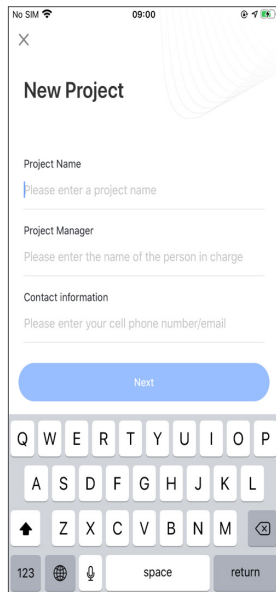
- If there is a error in the operating state, please use the slotted screw to turn the red switch to the "maintenance" position. After hearing the sound of the motor returning to its position, turn the switch to the operating state, and then use mobile App to start it.
- Check whether the 220V voltage at the inlet end is normal.
- For 1P and 3P products, please check whether the null-earth line is connected to the null-earth line of the power supply terminal.
- For 4P products, please check whether the terminals have 220V voltage.

NETWORK ACCESS SETTINGS

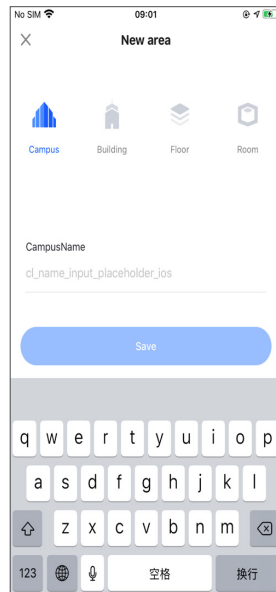
■ Scan to download APP,create new account



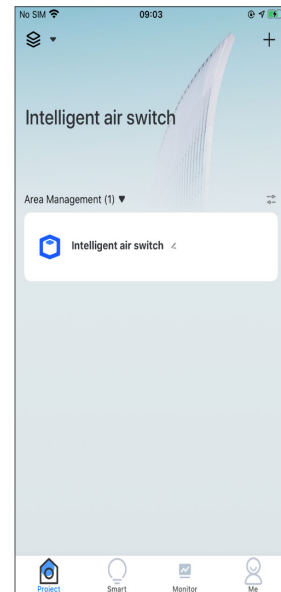
Create project



Click "add project"



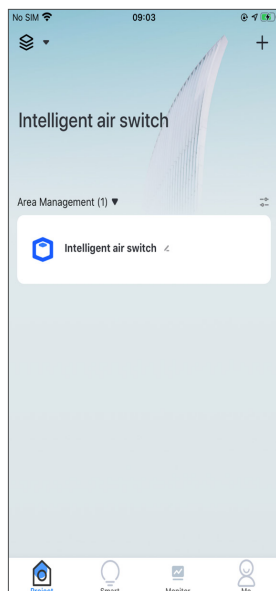
Fill in information



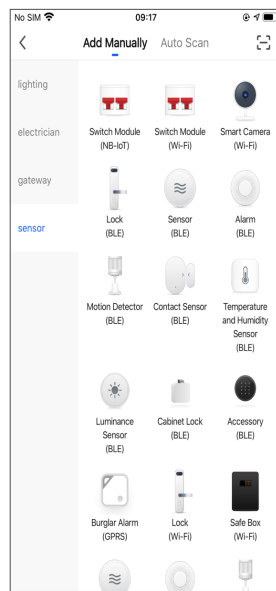
Click "save"

Note: if you want to delete a project, please remove all connected devices before deleting it. Otherwise, some devices need to be returned to the factory for reset (such as smart circuit breaker)

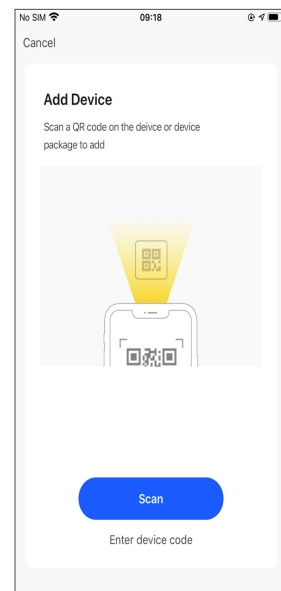
Add "smart circuit breaker"



Click "+" in the upper right corner



Click "sensor", and then "switch ... [NB-IOT], or directly click the upper right corner to scan.

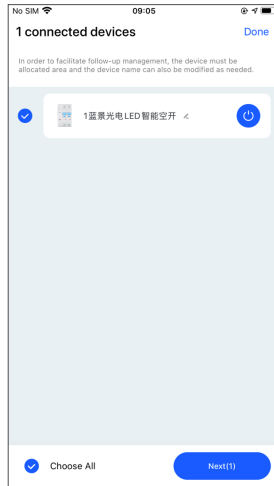


If the QR code is not clear, click "enter device code" and type IMEI next to the QR code.

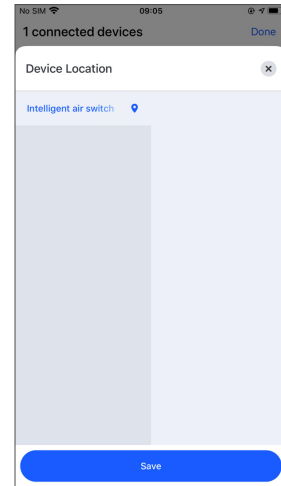
Device partition management



Click "Done"

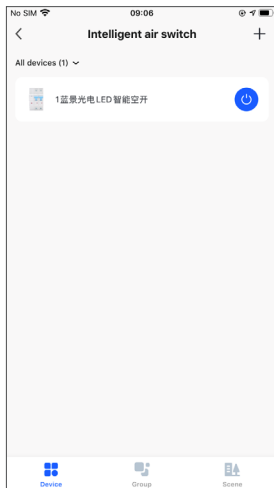


Select connected device

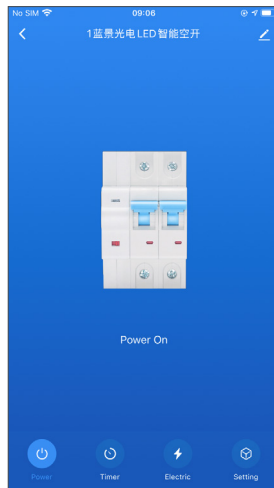


Choose Space and "Save"

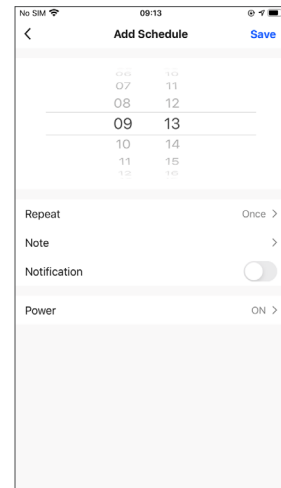
Single device timing function



Entering established space
Choose the device to be timed.

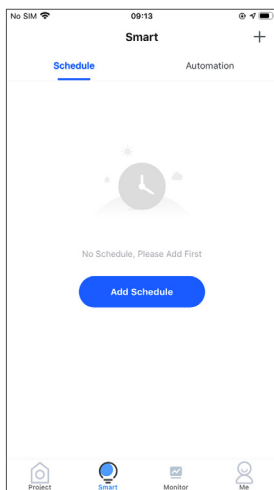


Click "Timer"

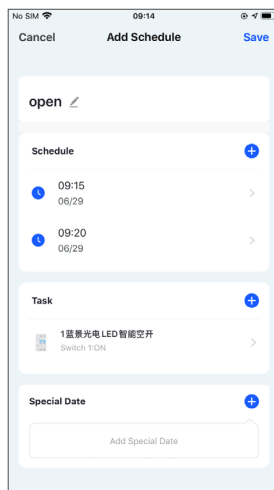


After setting the execution time and repeat time, then "save".

Multiple devices timing function



Click "smart", then "add schedule".

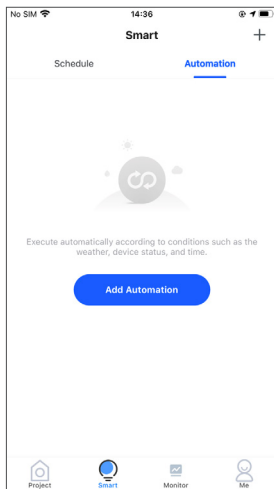


Edit name, schedule, task(need choose a device);
can add several schedules and tasks.

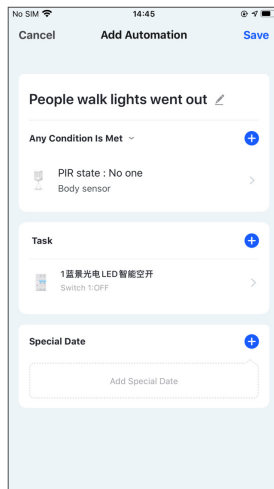


Green button means timing
function is open.

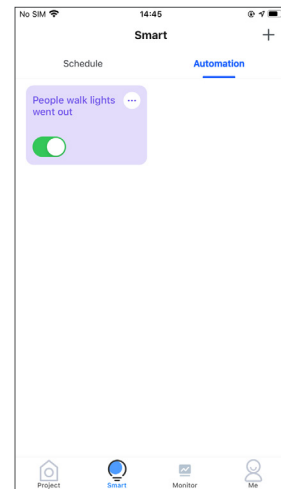
Executed with simple one-click



Click "smart", then "add automation"

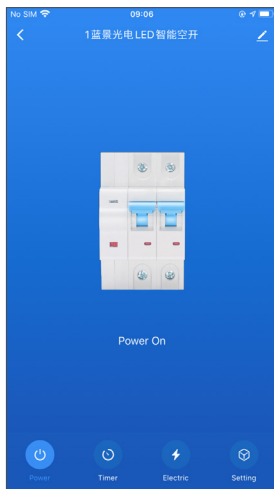


Edit name, any condition is met, task(need choose a device)

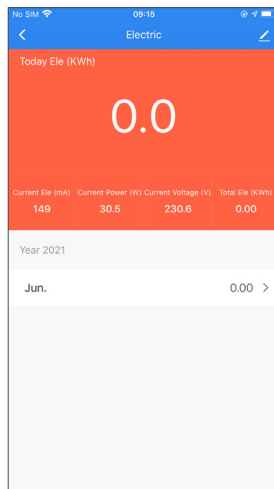


Green button means the smart linkage function is open.

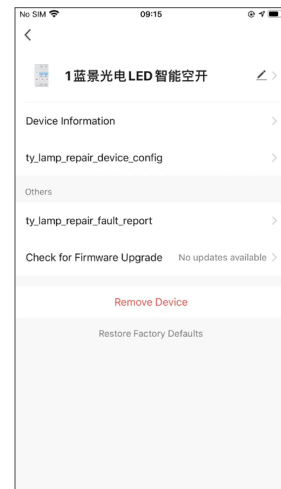
Circuit breaker's functions



Power, timer, electric, edit



Power consumption



Edit name, remove device, check device information.

Note:

1. The interval between two clicks should more than 10s.
2. Removing all the connected devices before deleting a project .

BLUEVIEW ELEC-OPTIC TECH CO.,LTD

☐ Tel: +86-28-8148 0011
☐ Fax: +86-28-8148 1258

☐ Web.: www.blueviewled.com
☐ Email: sales@blueviewled.com

☐ Add.: No. 1000, Section 2, Konggang 2nd Road, Shuangliu, Chengdu 610207, Sichuan, CHINA