

YCB9ZF-100AP series


Internet of Things Circuit Breaker

OPERATION INSTRUCTION

Standard: IEC 60898-1

CNC

Deliver
Power For Better Life

-  Before installing and using this product, please read this manual carefully and pay more attention to safety.

YCB9ZF-100AP series

Internet of Things Circuit Breaker

1 General

YCB9ZF-100AP series Internet of Things circuit breaker is a multi-functional intelligent switch that integrates the functions of electric quantity measurement, overload, short circuit, over-low voltage, leakage, over-temperature protection, remote opening and closing, timing, network communication, etc. It can be widely used in smart electricity management places such as commerce, agriculture, schools, hospitals, hotels, entertainment places, railway stations, cultural relic protection units, urban streetlamp control, etc. It can also be widely used in energy management of industrial and mining enterprises, office buildings and other places.

The product can monitor and detect the user's load power consumption in real time, and in abnormal circumstances, it can quickly cut off the power supply or remote alarm, to protect personal and property safety.

Can execute the segmented charging mode, and can transmit data and execute related instructions through the encrypted form of GPRS, RJ45, WIFI, Rs485. The network version switch operation and data can be permanently saved, and the past usage can be viewed at any time .The protection value of over

current, voltage and leakage current can be set arbitrarily, which can better protect the circuit of the equipment at the load end and realize the multi-purpose of one machine without replacing the equipment.

You can set the time of self - check at will to ensure that the product is always in normal working state. Free to set any working time of the product.

2 Basic functions and features

- OLED lattice LIQUID crystal display has long life and good low temperature characteristics;
- Can be set as a communication gateway, through the ontology 485 interface for the branch small current switch combination networking;
- It integrates multiple protection functions such as over voltage, under voltage, missing phase, wrong phase, loss of voltage, overload, short circuit, leakage, temperature, voltage/current imbalance, over power, under power, anti-power theft and so on into one, and supports early warning in accordance with the preset proportion;
- Multiple functions can be closed, alarm, trip any combination, more widely applicable;
- Support 12 months frozen electric energy and 7 days frozen electric energy query, let the remote energy management more convenient;

- Electric parameters such as active power, reactive power, apparent power and power factor are supported for collection and uploading ;
- Support positive and negative energy statistics. RS485 in non-gateway mode supports DL/T-645/Modbus protocol and automatic conversion;
- Support external dry contact control, cabinet door control;
- Support multiple groups of any time timer control closing, opening operation, so that the control more arbitrary;
- Multi-component modular design, optional collocation, more flexible use;
- Remote wireless communication technology, supporting 2G,4G,Ethernet, wifi, Bluetooth, MQTT and other communication modes;
- Operation event alarm event failure event real-time reporting, so that you can know your equipment running state anytime and anywhere; The alarm can be accompanied by a buzzer prompt, and can be muted remotely or locally, making the device alarm more intelligent;
- Support a variety of remote OTA upgrade mode, so that equipment upgrade maintenance no longer trouble;
- Hundreds of local event records (power on, power off) are stored, which can be checked at any time

for accident cause analysis;

- The clock is timed and synchronized on the cloud to ensure the accuracy of event recording time.
- The daily error is no more than 1S in the case of no network;
- Real-time statistics of the number of events can focus on frequent abnormal, support switching display in Chinese and English;
- Electric parameters such as active power, reactive power, apparent power and power factor are supported for collection and uploading;
- Support positive and negative energy statistics.

3 Main technical parameters and basic functions

Product classification	RS485 is standard configured, 4G, RJ45, or WIFI can be optional
Poles	1P+N, 3P+N
Rated voltage	Single-phase AC230V, 50/60Hz
Mechanical life	Three-phase AC440V, 50/60Hz
Electrical life	More than 20000 times
Action time	More than 10000 times
Thermo-magnetic release characteristic	Leakage action less than 100ms; Closing time is less than 1.8s and opening time is less than 1s
Rated current I_n	Ctype (Other types can be customized)
Standard	32A, 63A, 100A
Rated short-circuit capacity I_{cn}	IEC 60898-16kA

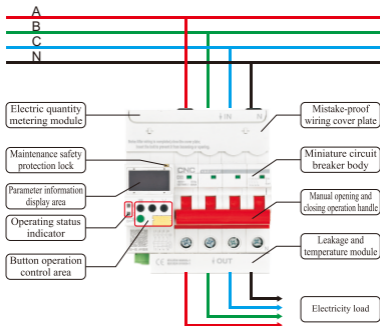
Short-circuit protection	When there is short circuit fault, it can trip within 100ms
Leakage protection	When there is leakage fault, it can trip within 100ms
Leakage protection value	30~500mA can be set freely
The leakage self-inspection	According to the actual use, can set the day, hour and minute
Over and under voltage protection	When there is over or under voltage fault, it can trip after 3s(0~99s can be set); over-voltage set value: 250~320V;under-voltage set value:100~200v
On-delay	When there is power, the switch will be automatically closed, 0~99s can be set
OFF-delay	If the power grid suddenly fails, the circuit breaker is disconnected and in the open state,0~10s can be set
Rated current setting	0.6~1In
Overload delay protection	0~99s can be set
Overtemperature protection	0~120can be set, OFF-delay time 0~99s can be set
Under power	The amount of load change can be set, OFF-delay time 0~ 99s can be set
Over power	The amount of load change can be set, OFF-delay time 0~ 99s can be set
Power limit	Reach limit power, OFF-delay time 3s,(0~99s can be set)

Timing control	5 groups of times can be set
Imbalance	Percentage can be set for both voltage and current, OFF-delay time 0~99s can be set
Record	Locally queried 680 switch event logs
Display	Chinese and English Menu
Operation times	Record various operation times of circuit breaker to determine whether the circuit breaker is with in its effective life
Maintain	Set self check, device reset, power reset, record reset, synchronize clock, restart device, restore system default, etc
Check	Local view of voltage, current, leakage current, temperature, active power, reactive power, apparent power, power factor, cumulative electricity, daily electricity (view 7-day record)
Manual automatic integrated control	Mobile phone APP or PC control, can be controlled by the button, can also be controlled through the handle
Cover plate, pull rod	It has the function of preventing electricity-stolen, maintenance and overhauls closed by mistake
Communication mode	RS485 standard; 2G/4G, WIFI, NB, RJ45 optional
Remote Software Upgrade	According to the actual situation, customized procedures to achieve remote update and upgrade

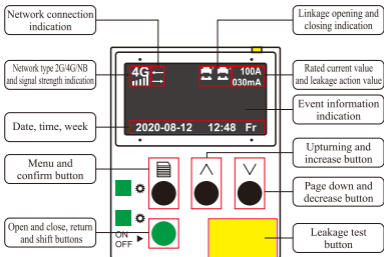
The following functions can be set to open, close, alarm or trip functions

Overvoltage protection, under voltage protection, overload protection, automatic closing, power off protection, remote control, open cover protection, under load protection, over power protection, under power protection, early warning function, timing self-check, warning allowed, gear return, high temperature protection, timing control, open phase protection, fault phase protection, voltage imbalance, current imbalance

4 Product wiring and component functions



Note: Check whether the SIM card is inserted before installation; Do not install when power on, and wiring must be reliable; When wiring and tightening the screws, check whether the front and rear modules are loose.



5 Usage and Precautions

- This product RS485 is a standard configuration communication port. It can be connected to computers and various communication devices through RS485 to USB converter to realize information exchange and control;
- The default baud rate of the system is 9600bps. You can check and set the required Baud rate in the setting communication menu.
- Network GPRS product, before use, you must insert SIM card, can through GPRS or gateway, router connection to the server to achieve Internet information exchange or remote control;

- Real-time query and analysis of all kinds of electricity consumption data and view the history, statistics and settlement of electricity consumption on a monthly basis;
- The product installation must be carried out by professional electricians;
- Products can be customized according to user needs, contact the relevant technical personnel.

Connect to network

- For YCB9ZF-100AP 4G type : Scan the QR code and down load APP"Cloud Intelligence";



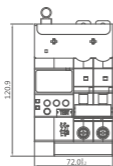
Cloud Intelligence

- For YCB9ZF-100AP WIFI type : Installation TUYA APP and open"Bluetooth" on the mobile phone, set "WIFI" communication mode on YCB9ZF-100AP, add equipment automatically.

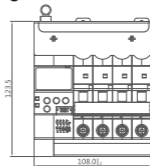


TUYA

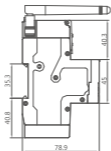
6 Outline and installing dimensions



YCB92F-100AP-2P



YCB92F-100AP-4P





CERTIFICATE

Product Model: YCB9ZF-100AP series

Standard: IEC 60898-1

Inspector : **CNC001**

Production date: Printed on the product
or package.

This product is qualified according
to the delivery inspection

A vertical red bar containing the white text 'CNC'.

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CNC ELECTRIC

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