ISO 9001 ISO 14001 OHSAS 18001

LEADING THE RECYCLING ECONOMY,
INNOVATIVE ENERGY-SAVING EMISSION REDUCTION!

Oldlang Smart Electrical

11 Series
Smart Internet of Things Circuit Breaker

Data monitoring
Fault alarm, protection
Centralized management
Analysis of energy consumption
Portable barrier remover
Handle dangerous situations anytime and anywhere

Remote control
Rights management
The regional search
Data report
Remote location + diagnosis

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Alibaba.com Verified TrustPass

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UKAS QUALITY MANAGEMENT

www.Oldlang.cn Oldlang_sale@163.com

Low Carbon Wireless Energy Saving

11 Series
Smart Internet of Things Circuit Breaker

About Oldlang Smart Electrical

The company named Oldlang Smart Electrical, which is a modern technology enterprise, committed to innovating energy conservation and emission reduction and leading the circular economy. The products focus on the original, low carbon, energy saving, collecting data, remote control and other functions are the characteristics of Oldlang's Smart electrical products. To enable users to use energy safely, reliably and efficiently is the value idea of Oldlang Smart Electrical. Therefore, the intelligent energy management is not only the inevitable development of the times, but also the direction of the development of the intelligent electrical of Oldlang's. Oldlang Smart Electrical provide wisdom into the city, the intelligent household practical products, improve people's life, improve the earth's environment, insist on sustainable development has always been the belief of Oldlang Smart Electrical.

In Oldlang smart electrical, we are always advocating:
INNOVATIVE ENERGY-SAVING EMISSION REDUCTION LEADING THE RECYCLING ECONOMY!

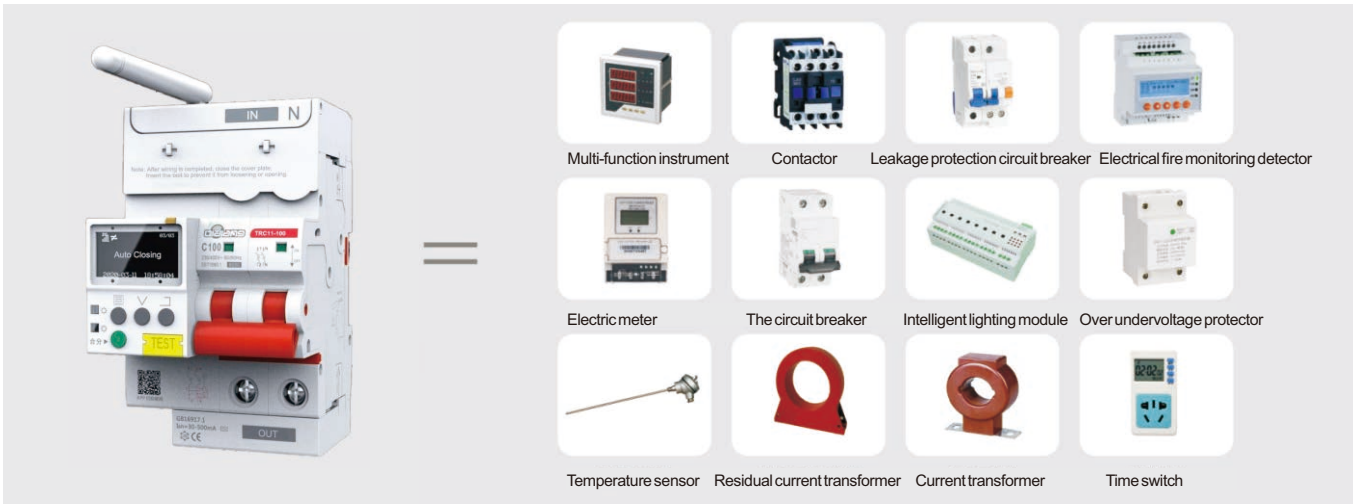
Factory Hospital Building Community School Household

11 Series
Smart Internet of Things Circuit Breaker

35 Powerful Features

Comprehensively protect the safety of human electricity

Local + remote integrated control
Local + remote leakage self-check
Operation record can be checked
Electrical fire factor monitoring
Fault early warning
Fault location/fault alarm
Tripping protection
Over undervoltage protection
Overload protection
Over temperature protection
Open phase protection
Voltage/current imbalance
Fault phase protection
Preventing electricity-stolen
Maintenance and overhauls closed by mistake
Current limit
Scene mode
Line timing
Rights management
Automatic reclosing
Generate report analysis automatically
Local + remote locking
The leakage protection current can be adjusted
Custom warning thresholds
Short circuit protection
Power contrast
Troubleshooting advice
Fault cause recording
Conditional linkage control
Centralized management
Power factor calculation
Historical data import
Electricity statistics
Chart simulation display
Status indication

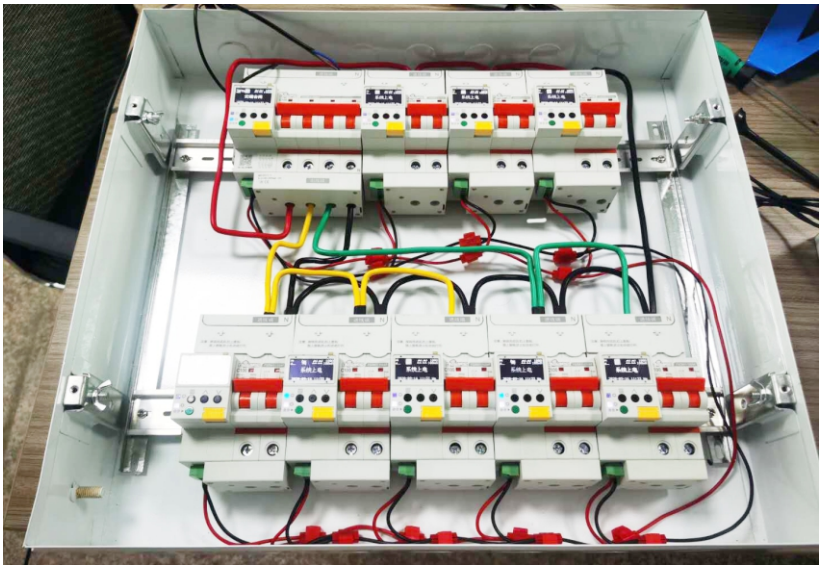


Low Carbon Wireless Energy Saving

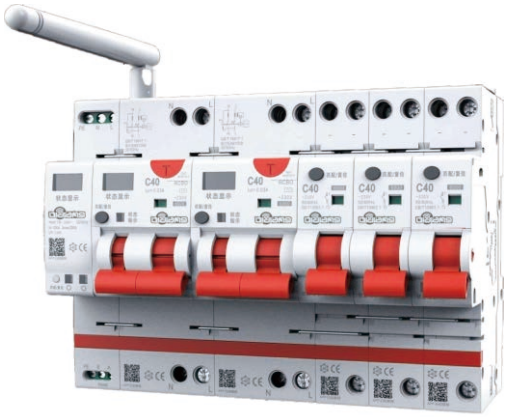
11 Series
Smart Internet of Things Circuit Breaker

Product Description:

11 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 street lamp control, etc. It can also be widely used in energy management of industrial and mining enterprises, office buildings and other places.



◇ 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.



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, jump and smell any combination, more widely applicable;

◇ RS485 in non-gateway mode supports DL/T-645/Modbus protocol and automatic conversion;
◇ Support external dry point 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 mufßed 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;

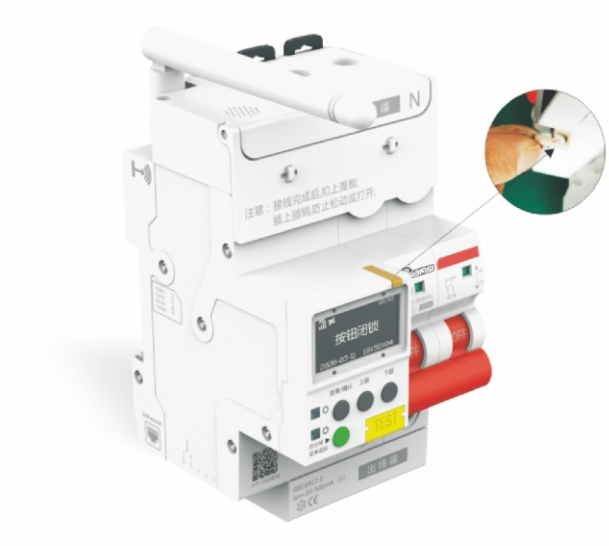
TRC11-100 Series
Smart Internet of Things Circuit Breaker

Main technical parameters

Pol.	1P, 1P+N, 2P, 3P+N, 4P.
Rated voltage	Single-phase AC230V, 50/60Hz Three-phase AC440V, 50/60Hz
Rated current	0~63A, 100A
Residual operating current	0-500mA can be set freely
Short circuit breaking capacity	Icn = Ics=6kA
Mechanical life	More than 20000 times
Electrical life	More than 6000 times
Action time	Leakage action less than 100ms; Closing time is less than 1.5s and opening time is less than 1S
Protection grade	IP20
Operating environment temperature	40 ℃~70 ℃
Principle of action process	**Under normal condition of voltage leakage:** If the device is in the state of breaking, the device will not close automatically, but can only close remotely by controlling the device end or manually by local operation. If the device is in the closing state, the device will not open automatically, but can only close remotely by controlling the device end or manually open by local operation. **Under abnormal voltage leakage:** If the equipment is in the closing state, the equipment will automatically close after the voltage is changed to normal. If the leakage self-check is not normal, the equipment will continue to open automatically once. After troubleshooting, manually operate locally or remotely control the closing. If the device is in the opening state at this time, the device will not close automatically. After the voltage returns to normal, the device needs to be manually operated locally or remotely controlled to close.
Remove lock	After manual on-site troubleshooting, remove the safety lock, push back the safety lock lever, and try to manually operate the closing and closing button once. Is the closing successful?
Safety lock	If the closing is not successful, check whether the equipment is in arrears or other circumstances to perform the opening; When the safety lock lever is not pulled out, the equipment is in operation mode: when the safety lock is pulled out, the equipment is in maintenance mode and can be repaired only after padlock is needed. The safety lock and the mechanical structure of the circuit breaker can not be closed even if manually or remotely controlled, so as to ensure the personal safety of the maintenance personnel.

TRC11-100 Series
Smart Internet of Things Circuit Breaker

15 Advantages:



1，Maintenance safety lock: greatly ensure the personal safety of maintenance personnel;
2，Protection against electric theft cover plate: it can effectively prevent electric theft, private cable, etc.
3，Independent power supply design: it can effectively prevent the whole system from being paralyzed and unable to work;
4，1.3 inch OLED display design: Provide more intuitive man-machine operation interface for maintenance personnel;
5，modular design: optional collocation, more ßexible use;
6，High accuracy: voltage and current detection accuracy level 0.5, power accuracy level 1.0;
7，The overall function of the circuit breaker saves the characteristics of the miniature circuit breaker;
8，Flexible choice of communication mode, can also do gateway use;
9，Flexible choice of function shutdown, alarm and tripping protection mode;
10，More than 10 types of remote upgrade mode, so that users upgrade maintenance no longer trouble;
11，Power off protection design: After the power off of the main circuit, the data can be saved and uploaded without loss;
12，Automatic judgment and analysis of fault causes and operation events, display log, convenient for maintenance and troubleshooting;
13，The functions of load imbalance, phase deÞciency, phase mismatch and overtemperature protection greatly ensure the aging of equipment and lines, and ensure the safety of electricity use;
14，Timing switch function: guarantee the timing switch of equipment, guarantee energy consumption and save electricity;
15，The leakage action protection is sensitive. Different leakage protection values can be set according to the use environment.

Usage and Precautions:

◇ This product RS485 is a standard conÞgured 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.

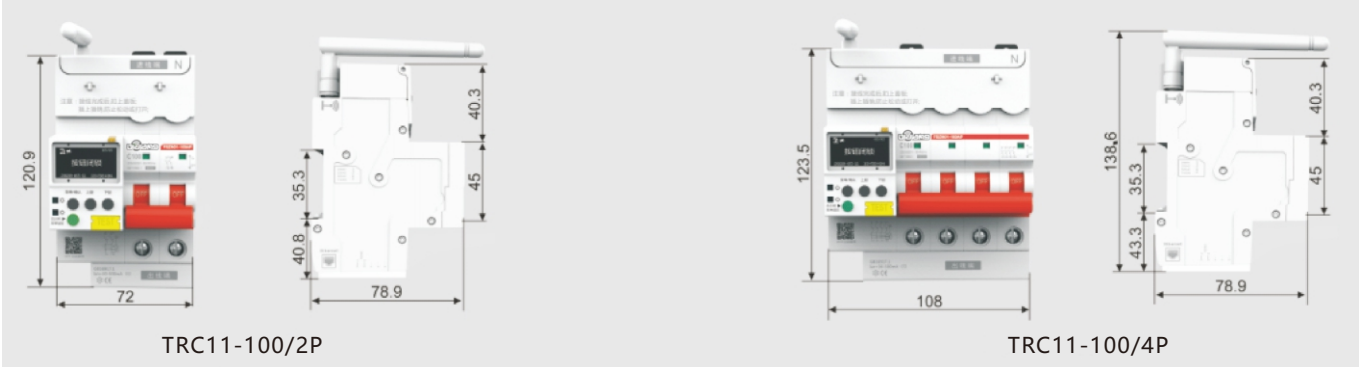
Low Carbon Wireless Energy Saving

TRC11-100 Series
Smart Internet of Things Circuit Breaker

GPRS 4G LoRaWAN

RS485

Product outline and installation dimension drawing



TRC11-100/2P TRC11-100/4P

TRJ11-40G Series
Smart Internet of Things Circuit Breaker

EN 50557
IEC 61009-1

TRJ11-40G
RCBO+ Smart Control Module

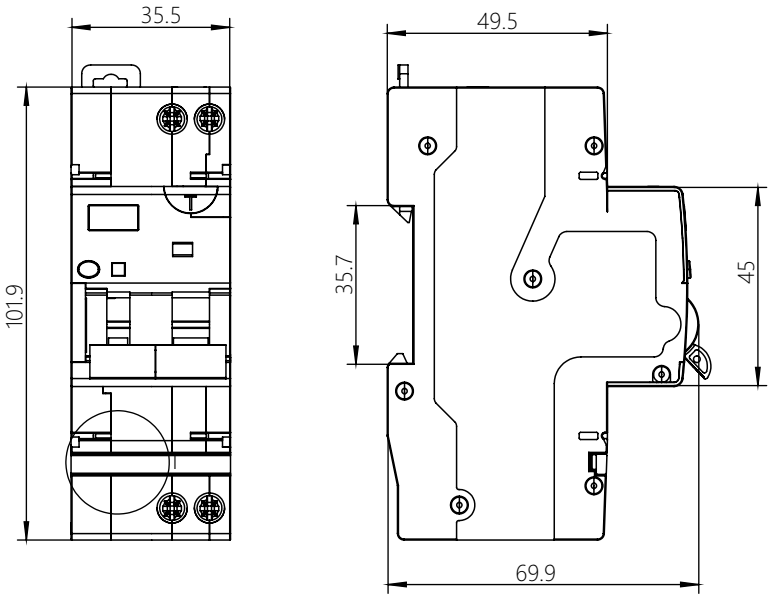
Main technical parameters of the product

- Number of poles 1P+N
- Rated Current(In) 1、2、3、4、6、10、16、20、25、32、40A
- Rated Voltage(Un) AC 230(240) V
- Residual operating current 30mA
- Tripping curve B、C、D
- Type: AC, A
- Ultimate short-circuit breaking capacity(Icn) 6000A
- Metrical data Voltage、Current、Active power、Active energy
- Metrical accuracy Voltage and current: ±0.5%FS
- Data storage 10 years
- Communication interface RS - 485
- Communication protocol DT645, MODBUS RTU/DTL
- Communication rate can be set up 1200, 2400, 4800, 9600 BPS (2400 by default)
- Operation life Protection parts: 40,000 times ; Perform control: 500,000 times
- Electrical life 20,000 times
- Stand-by power consumption 1W Max.
- Measuring precision 0.5%
- Terminal protection Ip20
- Operating temperature -25℃~+55 ℃

Leakage protection and shock protection
Electrical parameter acquisition
Short circuit & Overload protection
Overvoltage & undervoltage protection
Electric shock & Leakage protection
Timing & delay switch
Electrical energy metering & Control
Remote control & Data transfer

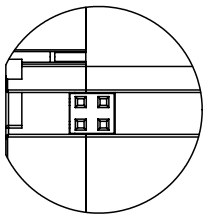
Low Carbon Wireless Energy Saving

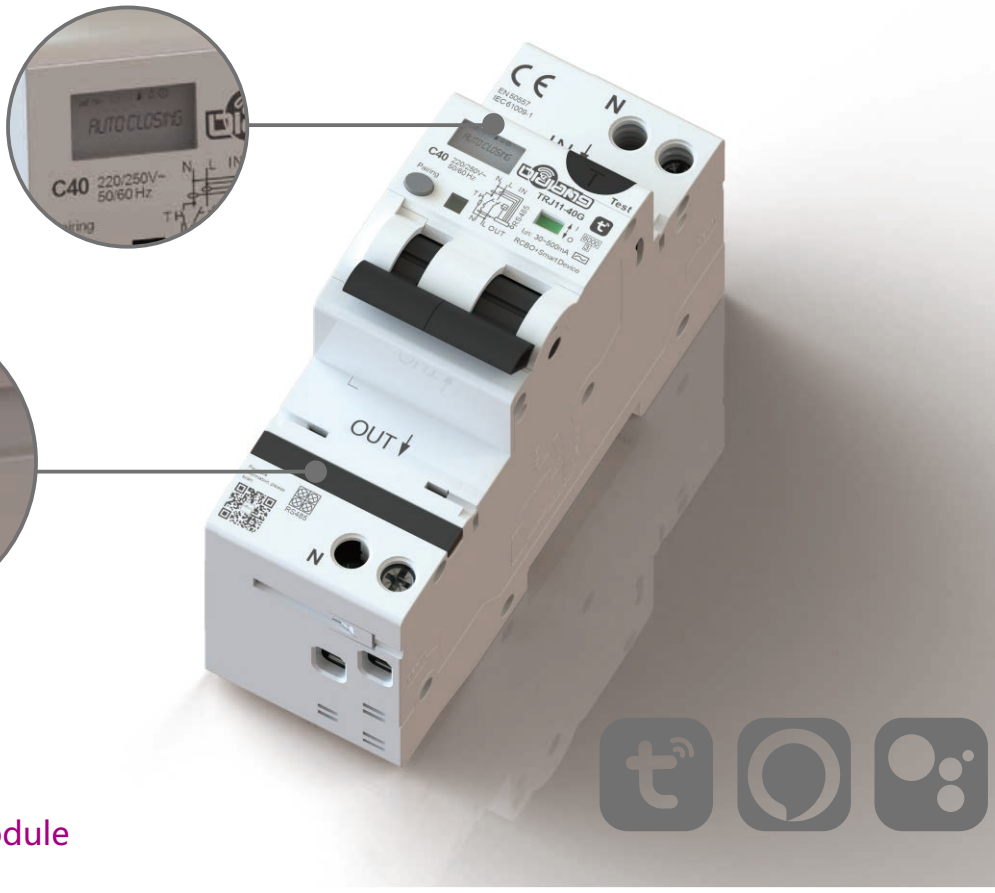
TRJ11-40G Series
Smart Internet of Things Circuit Breaker



Dimension (Unit: mm)

Installation: DIN rail, DIN35mm





TRJ11-40G
RCBO+ Smart Control Module

TRJ11-40M Series
Smart Internet of Things Circuit Breaker

EN 50557
IEC 60898-1

TRJ11-40M
MCB+ Smart Control Module

Main technical parameters of the product

- Number of poles 1P+N
- Rated Current(In) 1、2、3、4、6、10、16、20、25、32、40A
- Rated Voltage(Un) AC 230(240) V
- Tripping curve B、C、D
- Ultimate short-circuit breaking capacity(Icn) 6000A
- Metrical data Voltage、Current、Active power、Active energy
- Metrical accuracy Voltage and current: ±0.5%FS
- Data storage 10 years
- Communication interface RS - 485
- Communication protocol DT645, MODBUS RTU/DTL
- Communication rate can be set up 1200, 2400, 4800, 9600 BPS (2400 by default)
- Operation life Protection parts: 40,000 times ; Perform control: 500,000 times
- Electrical life 20,000 times
- Stand-by power consumption 1W Max.
- Measuring precision 0.5%
- Terminal protection Ip20
- Operating temperature -25℃~+55 ℃

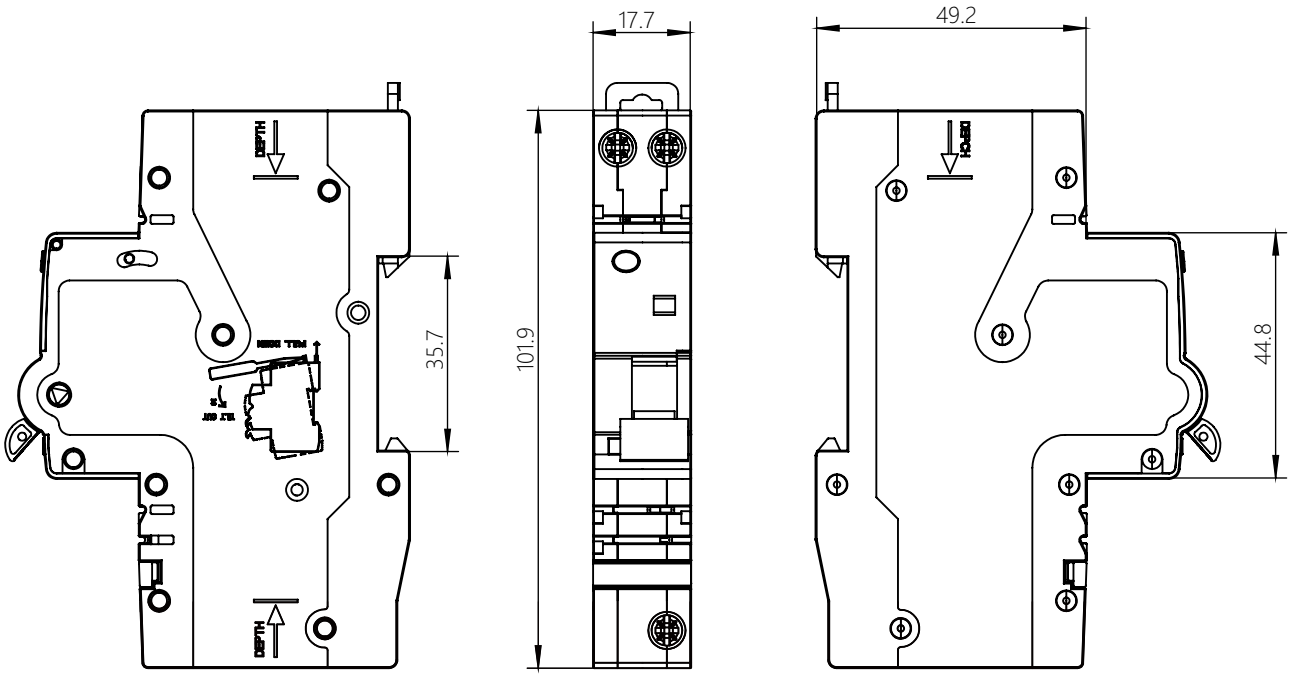
Powered by tuya Intelligence Inside

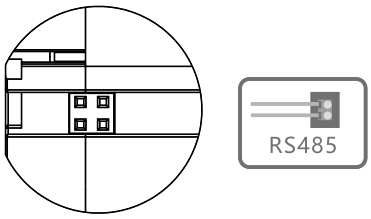
Electrical parameter acquisition
Short circuit & Overload protection
Overvoltage & undervoltage protection
Timing & delay switch
Electrical energy metering & Control
Remote control & Data transfer

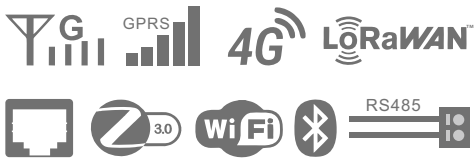
TRJ11-40M Series
Smart Internet of Things Circuit Breaker

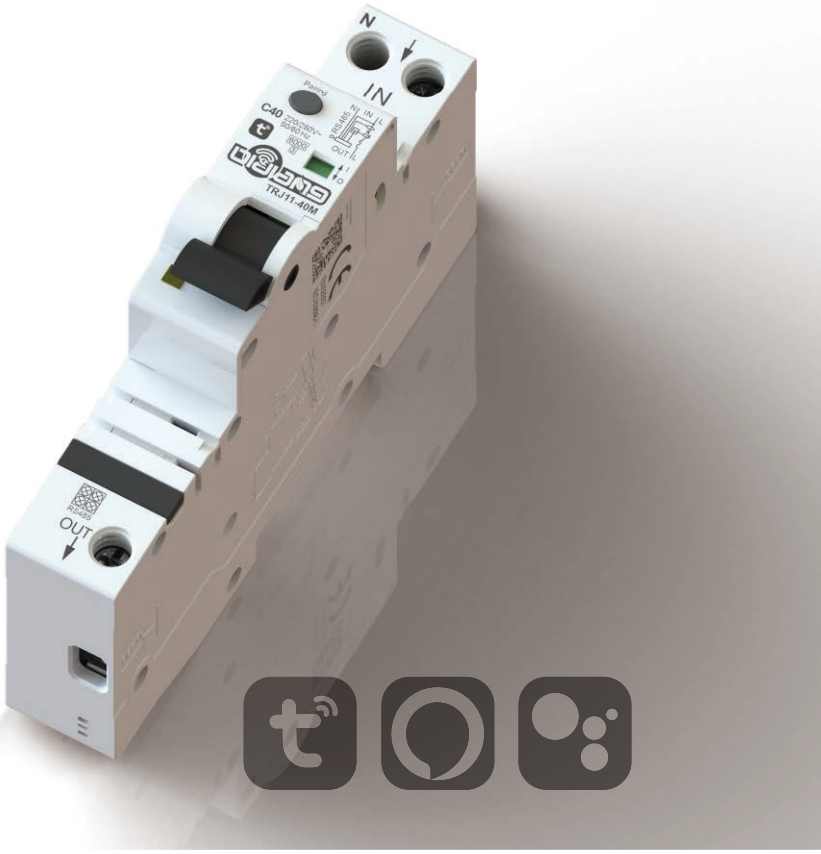
Dimension (Unit: mm)

Installation: DIN rail, DIN35mm









TRJ11-40M
MCB+ Smart Control Module

Low Carbon Wireless Energy Saving

TRR11-100 Series
Automatic Reclosing Device & Circuit Breaker

1.Product Instruction

TRR11-100 is an automatic recloser, which can inspect and reclose by itself. It may switch on/off the breaker automatically: trips and time delay can be set up and adjusted as per request. The device TRM11-100 series circuit breakers may reclose itself if no faulty, and will output signals to control station if any faulty. Therefore, it may realize remote monitor or reclose the circuit in unattended or remote place.

230VAC; 50/60Hz
ARD+MCB

CQC1121-2016
QGDW11421-2015
Q/GDW 11179.8-2015
BS EN 50557:2011

Powered by tuya Intelligence Inside

GPRS 4G LoRaWAN
RS485

TRR11-100 Series
Automatic Reclosing Device & Circuit Breaker

Technical Data

Power wiring	1P+N single phase
Rated voltage	~230V
Rated frequency	50/60Hz
Standby Power	0.5W
Mecanical life	≥8000times
Electrical life	≥5000
Trip time	Trips≤0.2s Reclose≤0.3s (time delay excluded)
Reclose times	Adjustable 0,1,2,3, 4, 5, 6, 7, 8, 9 times
Time delay	adjustable 0, 10, 20, 30, 45, 60, 90, 120, 150, 180 seconds
Protection Grade	Ip20
Operation Temperature	-25℃~+55℃
Storage Temperature	-40℃~+70℃
Relative Humidity	≤95%
The principle of trip and reclose	Under mode AUTO, and the circuit be open, the device will run "AUTO"mode to reclose the circuit immediately; The device will reclose, due to the setup delay time, if the circuit is faulty. If it still fails to reclose the circuit after setup trips, the device will run in "lock" mode, output warning signal, and will not reclose again to wait for manual operation.
Release "LOCK"	Before checking the faulty reason, the electricians need to switch mode"Auto" to "Manu". After faulty solved, press "Reset"button till the counter LCD display clear to 0. Then, switch mode "Manu"to "Auto", switch handle to close statue, the green light is on, and "lock" released.
Auto/Manu/Lock Operation Mode	**Auto:** Auto reclose function in work condition, as well as both open & close contacts work well.
	Manu: Auto reclose function doesn't work, both open & close contacts doesn't work as well.
	Lock: the device won't reclose after locked with hole diameter is 4.5mm, even manually.
Indicator	**Green:** normal work **Red:** warning **Red flash:** reclosing ...

Final test after installation

1.The mode should be on mode "Manu" and open before installation
2.After all wiring connected, switch the mode to "AUTO",manually switch on once, and green light is on;
3. Manually open, the device will reclose automatically once;
4. As for earth leakage circuit breaker, press "test monthly" to check the device;
5. The device will run normally after test Þnished;

General Questions

1	Question	No auto reclosing
	Solution	check the mode should be on "Auto". Change mode Auto-Manu-Auto to reset
2	Question	Send signal of open or close, but no action
	Solution	Make sure the switch is on "Auto"mode, and check the wring connection
3	Question	Reclosing failed
	Solution	Please check the circuit whether it has faulty of earth leakage, shor-circuit, or overload, etc.

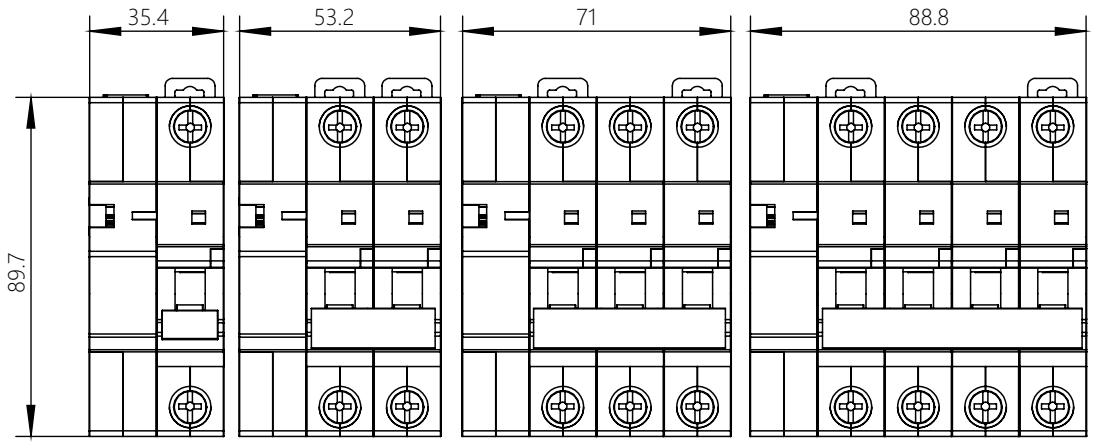
Product Guarantee

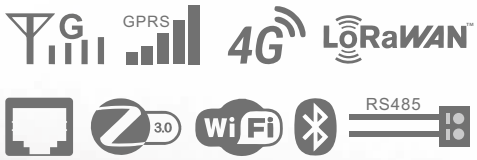
We assure our device TRR11-100 auto reclose over/under voltage protector of 12 months quality guarantee. We shall replace or repair this device while due to quality problem itself. However, this quality guarantee won't cover such problem due to improper use, such as falldown, wrong wiring, dismantled, etc.

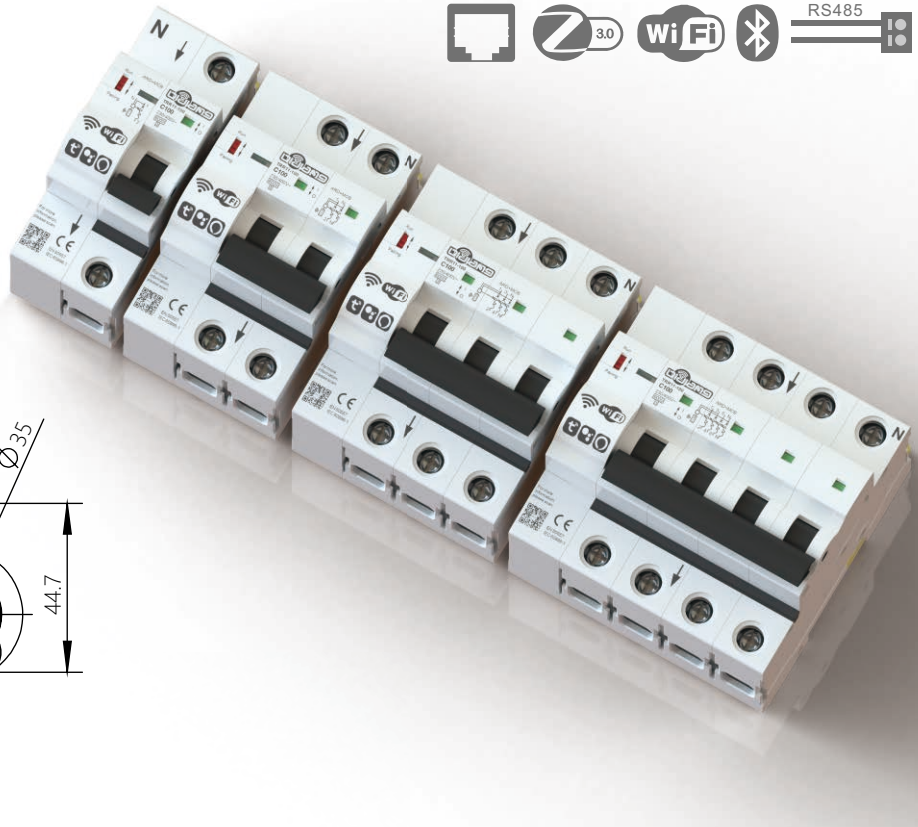
TRR11-100 Series
Automatic Reclosing Device & Circuit Breaker

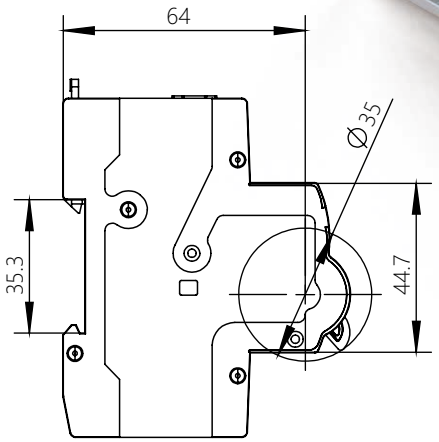
Dimension (Unit: mm)

Installation: DIN rail, DIN35mm



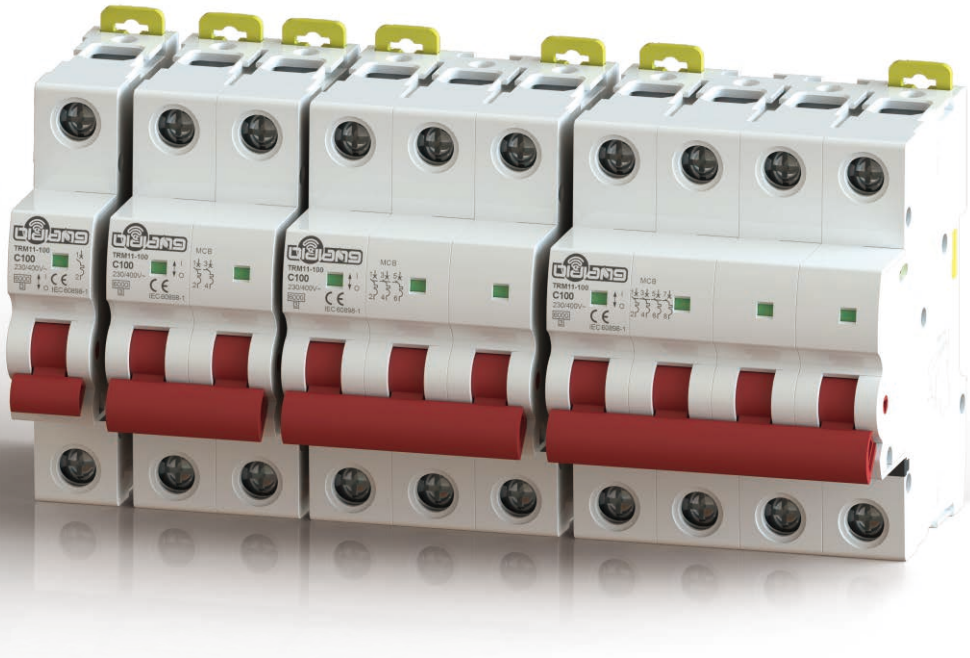






TRM11-100 Series
Large Capacity Mini Circuit Breaker

GB 10963.1
GB 14048.2
IEC/EN 60947-2
IEC/EN 60898-1

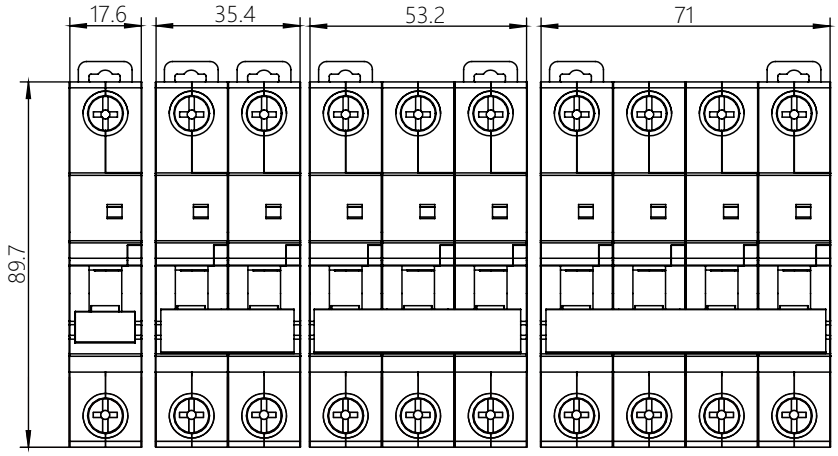


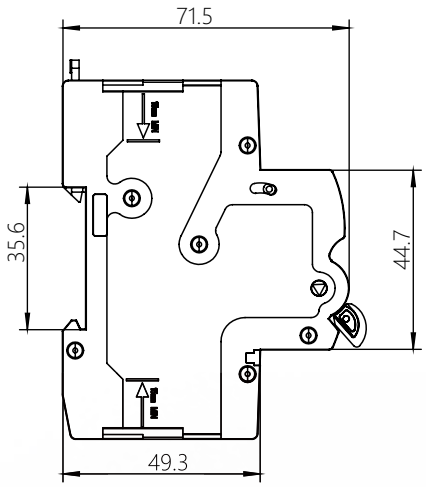
Standard		GB 10963.1, GB 14048.2, IEC/EN 60947-2, IEC/N 60898-1
CertiPcation		CCC, CE
Electrical characteristics		
Pol.		1P+N , 2P, 3P+N, 4P
Rated current (A)		1~63, 80, 100
Rated voltage	Ue	230/440
Rated insulation voltage (V)	Ui	500
Maximum working voltage (V)	Umax	440 AC
Minimum working voltage (A)	Umin	12
Rated working frequency (Hz)		50/60
Rated impact resistance voltage (kV)	Uimp	6kV
Rated short circuit capacity	Icn, 230V/400V (IEC/EN 60898)	10kA
Rated limit short circuit breaking ability (IEC/EN 60947-2)	Icu, 230V/400V	25KA
Rated running short circuit breaking capability (IEC/EN 60947-2)	Ics, 230V/400V	75%Icn
Overvoltage class		IV
Pollution levels		3
Transient tripping characteristics	B (3In~5In)	■
	C (5In~10In)	■
	D (10In~14In)	■
The leakage in attachment		■
Electrical accessories and mechanical accessories		■
Grade of shock protection		II
Mechanical properties		
Mechanical life		20000
Electrical life		10000
Protection grade	Circuit breaker body	IP20
	Installed in the distribution box	IP40
Base setting temperature		-

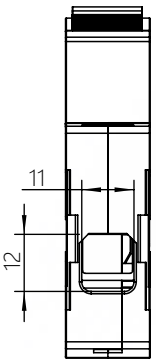
TRM11-100 Series
Large Capacity Mini Circuit Breaker

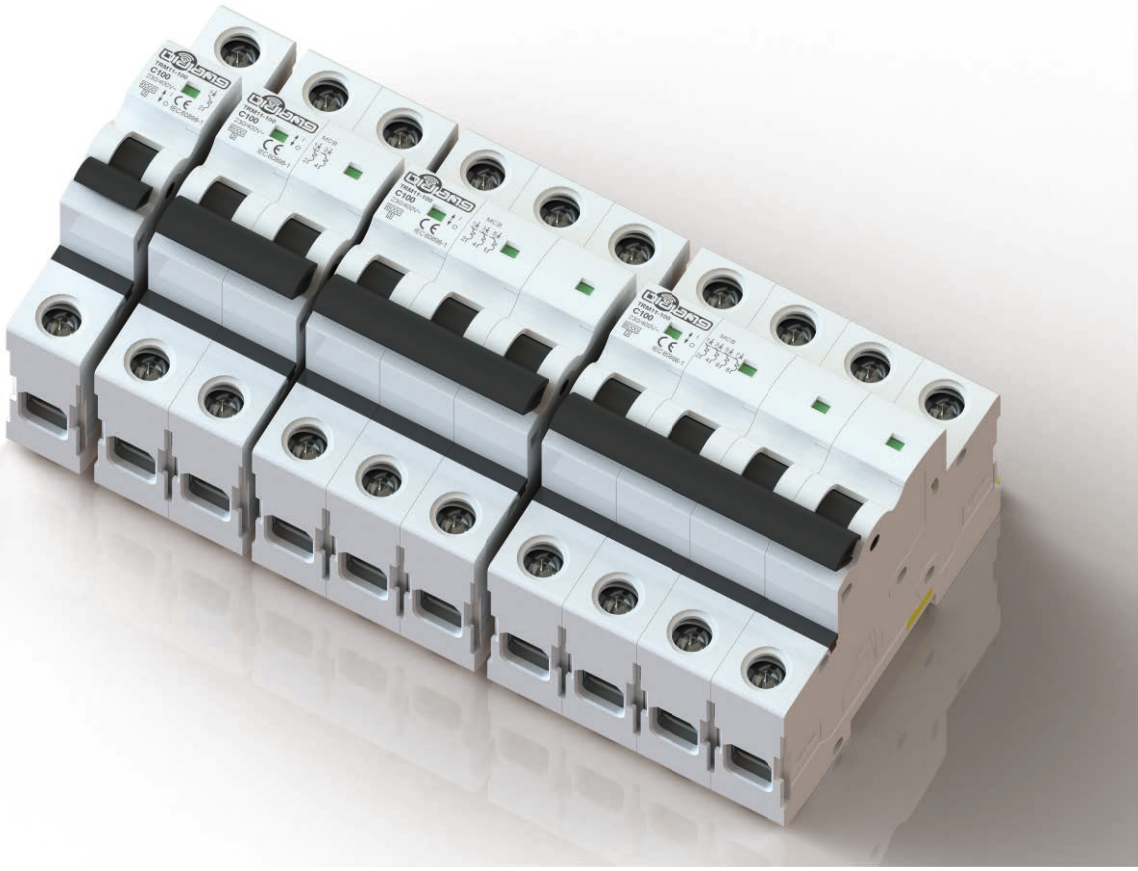
Outline Size And Connection Diagram (mm)

Arc fault detection device	
Undimensioned tolerance	Mounting hole size tolerance
< 1mm:±0.2mm 1~5mm:±0.3mm > 5mm:±0.5mm	±0.4mm









SAVE ON ENERGY, STARTS FROM ME !

LEADING THE RECYCLING ECONOMY,
INNOVATIVE ENERGY-SAVING EMISSION REDUCTION!

Oldlang Smart Electrical

Low Carbon

Wireless

Energy Saving

E-mail: Oldlang_sale@163.com http://www.Oldlang.com
Hangzhou: Future Science And Technology City / Nanjing: Gaochun Economic development zone / Wenzhou: Electric appliance city of China