



Remote Control



Tuya APP to Read the Reclosing Status



Reliable and Safe (external attachment, does not affect the main circuit)



Sustainable Power Supply

Application Scenarios

Electricity protection and sustainable power consumption



Electrified railway station power supply, transportation power distribution system, and highway electromechanical system



Intelligent mining, factory power consumption, and base station



Environmental monitoring station, remote irrigation, smart greenhouse

Technical parameter

Electrical Characteristics		
Standard:	EN 50557	
Power Distribution System	TT - TN - S	
Rated Voltage(Ue)	(V)	230 AC (1)
Min Rated Voltage(Min Ue)	(V)	85% Ue
Max Rated Voltage(Max Ue)	(V)	110% Ue
Rated Insulation Voltage(Ui)	(V)	500
Diaelectric Strength	(V)	2500 AC for 1 minute
Rated Withstand Voltage(Uimp)	(kV)	4
Over-voltage Category	III	
Rated Frequency	(Hz)	50
Leakage Making/Breaking Capability (IΔm)	(A)	The IΔm of Related Breaker
Rated Condition Residual Short Circuit Current (IΔc)	(A)	The IΔc of Related Breaker
Poles	2	4
MCB Type	1P - 2P - 3P - 4P	
RCCB Type	AC - A - A[IR] - A[S]	
RCBO Type		
Rated Current(In)	(A)	25 - 40 - 63 - 80 - 100
Rated Residual Current(IΔn)	(mA)	30 - 100 - 300 - 500
Rated Non-operating Resistance Between the Live Part and Ground(Rdo)	8 (30mA) - 2.5 (100/300/500mA)	
Rated Operating Resistance Between the Live Part and Ground(Rd)	16 (30mA) - 5 (100/300/500mA)	
Static Power	(VA)	1
Power of remote control	(VA)	20
Mechanical Characteristics		
The Width of DIN Module	1	1
Reclosing time (oper./h)	10-60-300	
Maximum Mechanical Durability (Total Number of Operations)	10000	
Maximum Number of Continuous Auto-reclosings	3	
Counter Reset Time Number Continuous Auto-reclosings	60	
Circuit Breaker Terminal Section (mm2)	Soft Cable: ≤ 1x35 - ≤ 2x16 - ≤ 1x16+2x10 hard wire:≤ 1x35 - ≤ 2x16 - ≤ 1x16+2x10	
Circuit Breaker Rated Tightening Torque (Nm)	3 (IDP) - 2 (IDP NA)	
Installation Location	any	
Protection Grade	IP20(outside the cabinet)-IP40 (inside the cabinet)	
Enviroment Characteristics		
Pollution Level	2	
Work Temperature (°C)	-25 +60	-25 +60
Storage Temperature (°C)	-40 +70	
Relative Humidity	55°C - RH 95%	



WiFi Remote Control Device MT53RW Series

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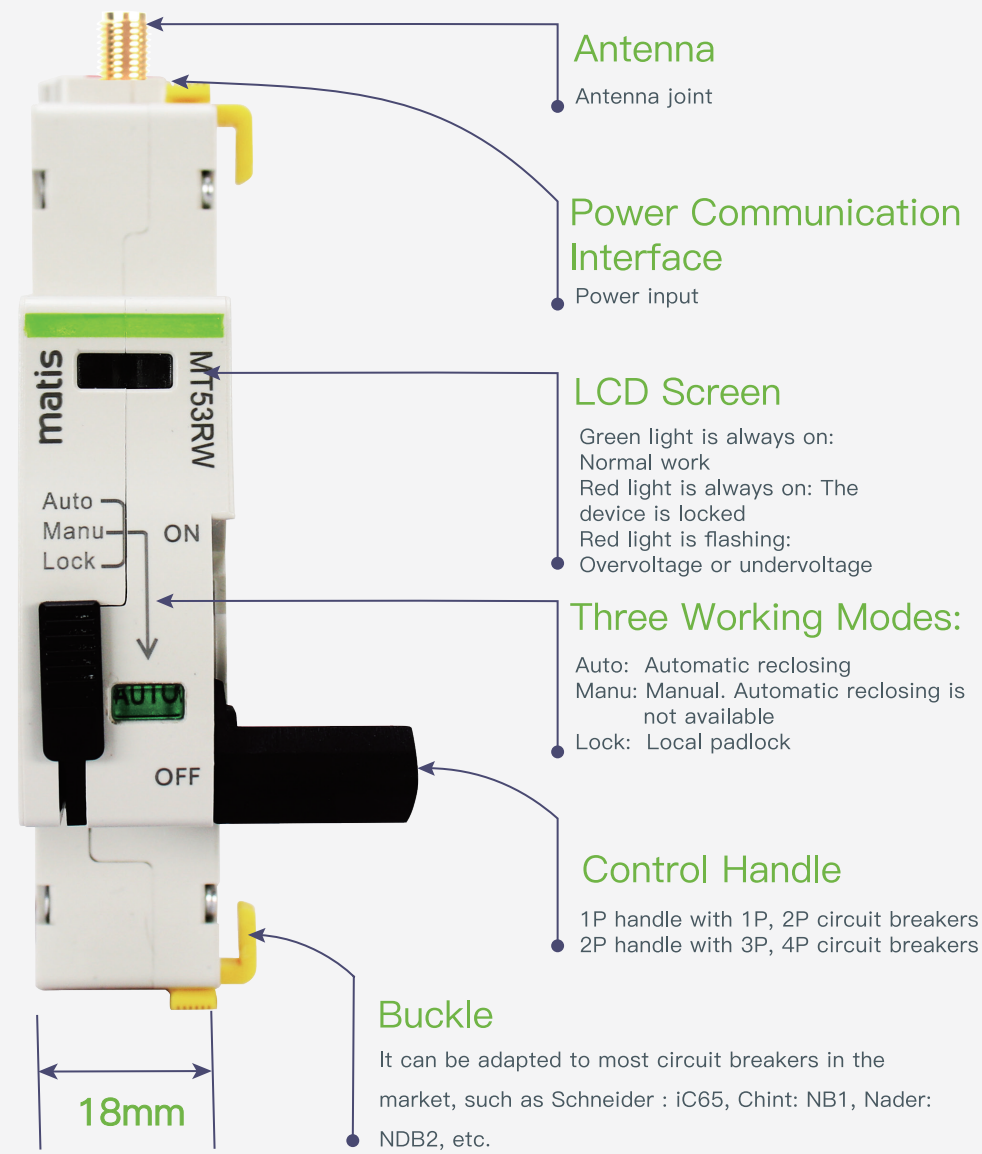
We make electricity safer and smarter!



WiFi Remote Control Device MT53RW

MT53RW remote control device can realize the following functions:

- The circuit breaker can be opened and closed remotely, and it can be equipped with residual current action protection devices or other electrical devices
- Reset tripped circuit breakers in compliance with current safety regulations
- Local control of the circuit breaker is available with the help of a handle
- Safe operation on site is ensured by padlocking the device



Two Operations for Option after the Circuit Breaker Trips:

- AUTO mode: Remote reset is permitted
- MANU mode: Remote reset is inhibited

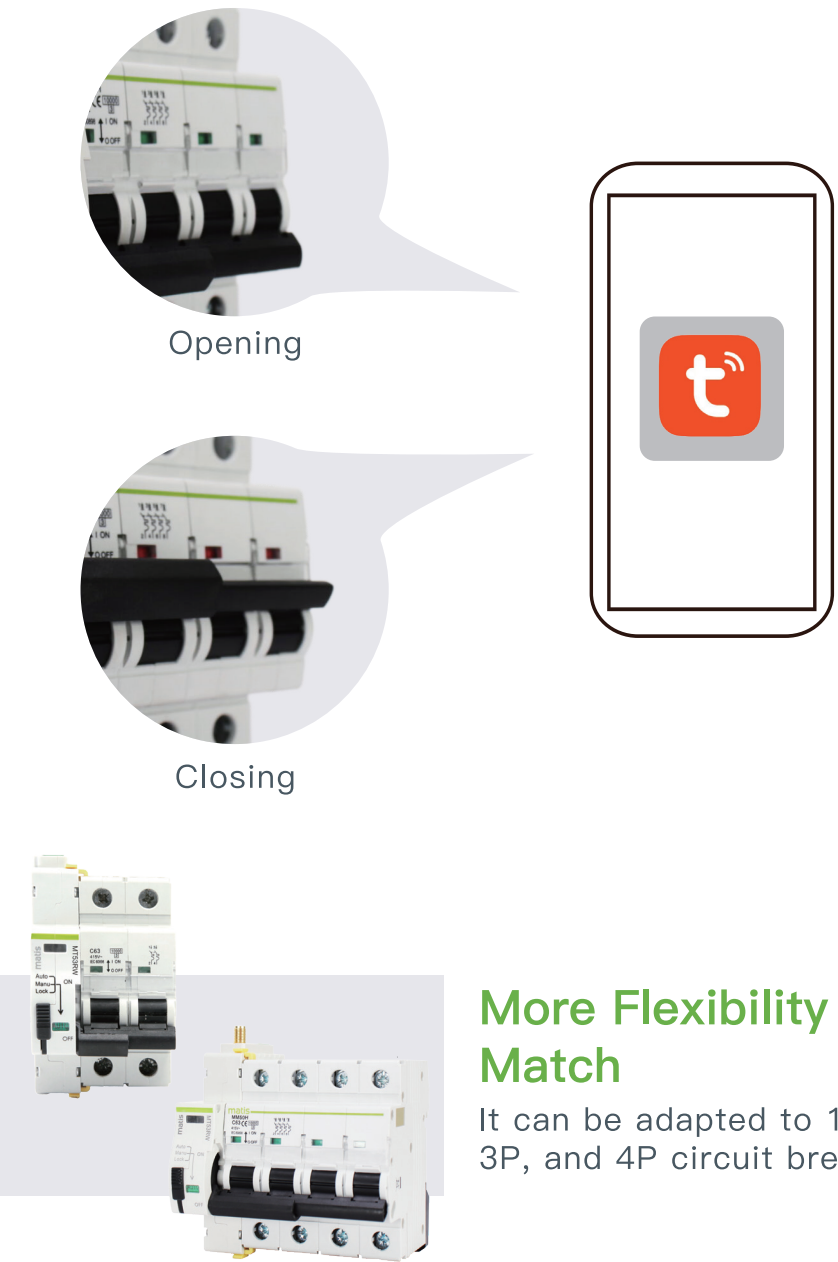
WiFi Remote Control to Ensure Continuous Power Supply

Recloser Control Mechanism

MT53RW remote control mechanism series is a compact control unit with a width of only 18mm, which can be adapted to the MCB&RCCB of many manufacturers such as Schneider, Nader, Chint and so on on the market.

WIFI Control

MT53RW is in Auto mode, and the device is connected to the power supply. You can connect the device to WIFI and use the [Tuya] APP WIFI Controlfor remote control to control the opening and closing of the device.



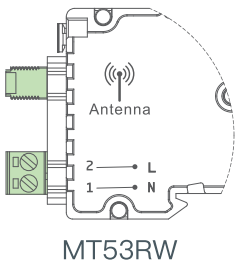
More Flexibility to Match

It can be adapted to 1P, 2P, 3P, and 4P circuit breakers.

Device Adaptation

Circuit Breaker Models	MCB			RCD		RCBO				
	1P	2P	3P/4P	2P	4P	1P	2P	3P	3P+N	4P
MT53RW-1N	✓	✓		✓		✓	✓			
MT53RW-2N			✓		✓			✓	✓	✓

Terminal Diagram



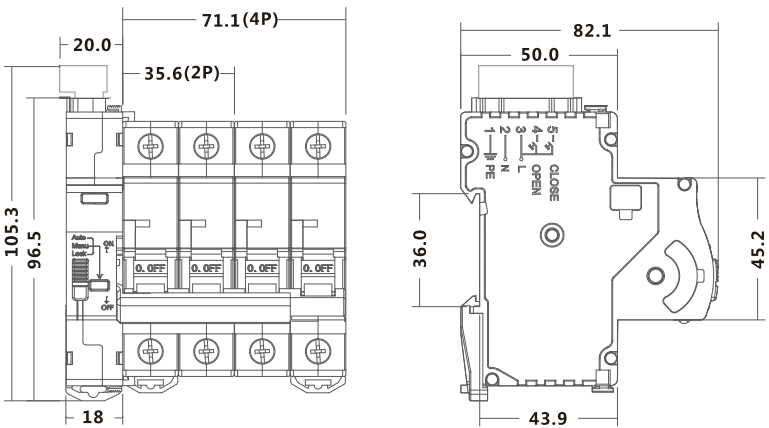
Terminal	Description
L	Live line L
N	Neutral line N
Antenna	Wifi installation point

Local Padlock

Safety locking. MT53RW series has a mechanical pad-lock mechanism. Adjust the working mode to padlock mode to realize local locking to ensure that the operator can access the maintenance work in a safe status.



Dimensional Drawing





RELIABILITY

Be installed in unmanned systems, and can guarantee service continuity and a considerable reduction in maintenance costs.



CONTINUOUS SAFETY

Guarantee total continuity under any condition: in the case of untimely tripping



PROTECTION

Restore the power supply only after checking there are no faults in the system



VERSATILITY

Available for 2P and 4P

Application scenarios

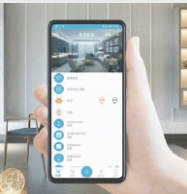


Telecommunications

- Telecom Tower stations
- Internet network distribution stations
- Telephone repeaters
- Radio links

Residentials

- Telecom Tower stations
- Internet network distribution stations
- Telephone repeaters
- Radio links



Public Service

- Public lighting
- Light signals
- Traffic light systems
- Advertising panels

Transportation

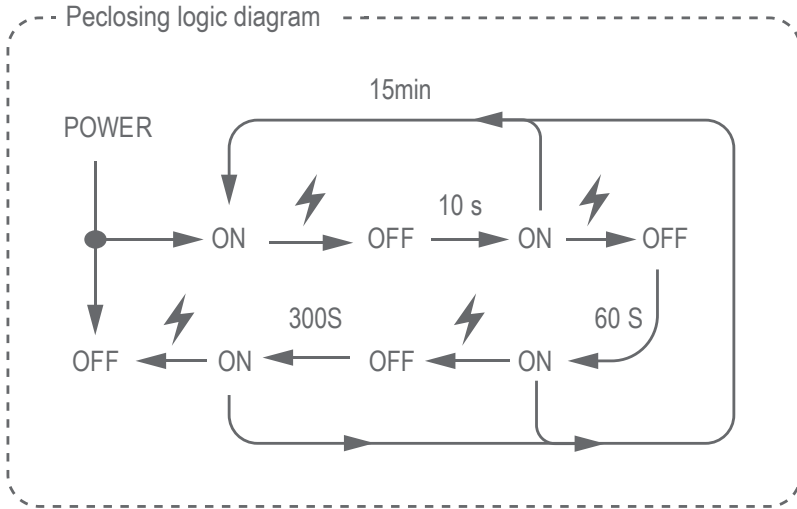
- Railway stations
- Highway
- Airports
- Bus terminals



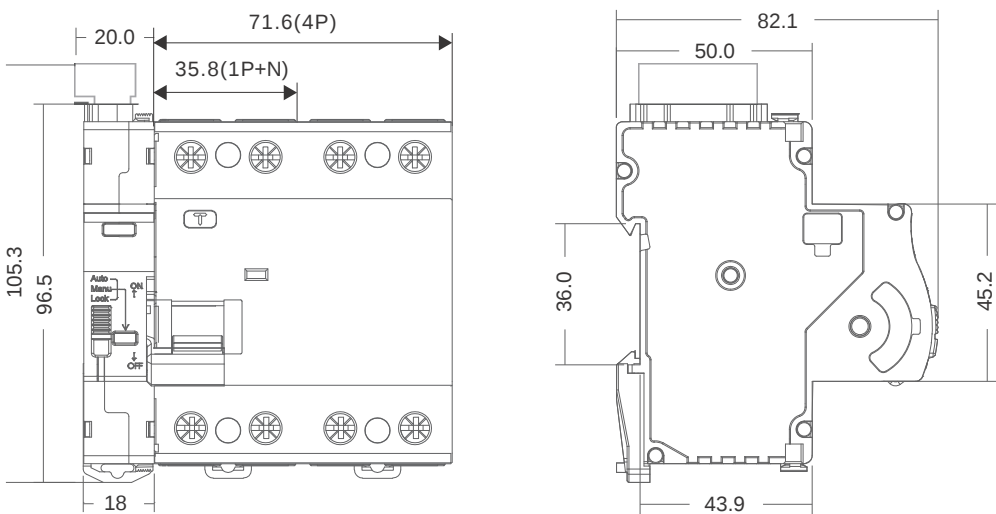
Green Energy

- Electric car charging network
- Photovoltaic systems

Reclosing Sequence Diagram



Dimensions



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Type Code Description

For example:

MT53AI+ML50H 1P+N 63A 300mA A+S

M → Company

T → Control, automatic reclosing device

53 → Serial number: 53

A → Function code:
R: Remote Control
A: Auto Recloser

I → I:IO control
S:RS485 control
W: WiFi Control

+ →

M → Company

L → RCCB

50H → Product model

1P+N → Number of poles:1P+N(2P),3P+N(4P)

63A → Rated current(In):
16A,20A,25A,32A,40A,63A,80A,100A

300mA → Rated residual current:
10mA,30mA,100mA,300mA

A+S → Type Description:
Type A, Type AC, Type A+S, Type AC+S

Technical parameters

		
	MT53+ML50H(2P)	MT53+ML50H(4P)
Electrical Parameter for Residual Current Circuit Breaker (RCCB)		
Rated current(In)	16A,20A,25A,32A,40A,63A,80A,100A	
Rate voltage(Un)	230/240VAC	400/415VAC
Number of Poles	1P+N(2P)	3P+N(4P)
Maximum Operating Voltage, Up	440Vac	
Rated Frequency	50/60Hz	
Rated residual current	10mA,30mA,100mA,300mA	
Residual Current Type	Type A - S (Time Delay) , Type A, Type AC, Type AC - S (Time Delay)	
Rated Frequency	50/60HZ	
Nuisance Tripping Rating	3kA @ 8/20s	
Electrical endurance	4000 cycles	
Mechanical endurance	10000 cycles	
Cable termination	25 mm²	
Torque of screw	2.5Nm	
IP degree	IP20	
Standards	EN/IEC 61008,EN/IEC 610008-1/IEC-61008-2	
Electrical Characterisits for ARD MT53 (Auto Recloser)		
Width	18mm(1 module)	
Power Distribution System	TN-S / TN-C-S / TT	
Rated Voltage(Ue)	230V AC (1)	
Min Rated Voltage(Min Ue)	85% Ue	
Max Rated Voltage(Max Ue)	110% Ue	
Rated Insulation Voltage(Ui)	500V	
Diaelectric Strength	2500V AC for 1 minute	
Rated Withstand Voltage(Uimp)	4kV	
Over-voltage Category	III	
Rated Frequency	50/60 Hz	
Max. Power consumption of Action	20W	
Static Power Consumption	1W	
Static Power	1VA	
Power of Remote Operation	20VA	
Standard	EN 60947-5-1	
Reclosing Function For ARD MT53(Auto Recloser)		
Reclosing Time Interval	10-60-300	
Max Operation Frequency	30	
Maximum mechanical durability (total number of operations)	10000	
Max. Auto Reclose Cycle	Reclosing times can be set	
Enviroment Characteristics		
Pollution Grade	2	
Work Temperatur	-25°C +60°C	
Storage Temperature	-40°C +70°C	
Relative Humidity	25°C / RH 95%	
Characteristics of auxilliary contacts in opening and closing state		
Opening and closing status	yes	
Contact Type	Electronic Relay	
Rated Voltage	5V-230V AC/DC	
Rated Current	0.01 A(min) - 0.4 A (max)	
Frequency	50Hz	
Use category	AC12	
Operation mode	NO/NC/COM	Signal of Handle Position
Cable Connection	≤ 2.5mm2	
Rated Tightening Torque	0.4Nm	
Communication parameters		
Baudrate	Default as 9600, Configurable	
Check Digit	No Check digit	
Data Digit	8	
Stop Digit	1	
Device Address	Factory Default Address;1	
Auto Reclose Function		
Auto Reclose When Electric Fault Trip	●	
Reclose Stops when Fault	●	
Fault Signal Indicator	●	
Function of Auto / Manual	●	
Auxiliary Contact for Remote Operation	●	

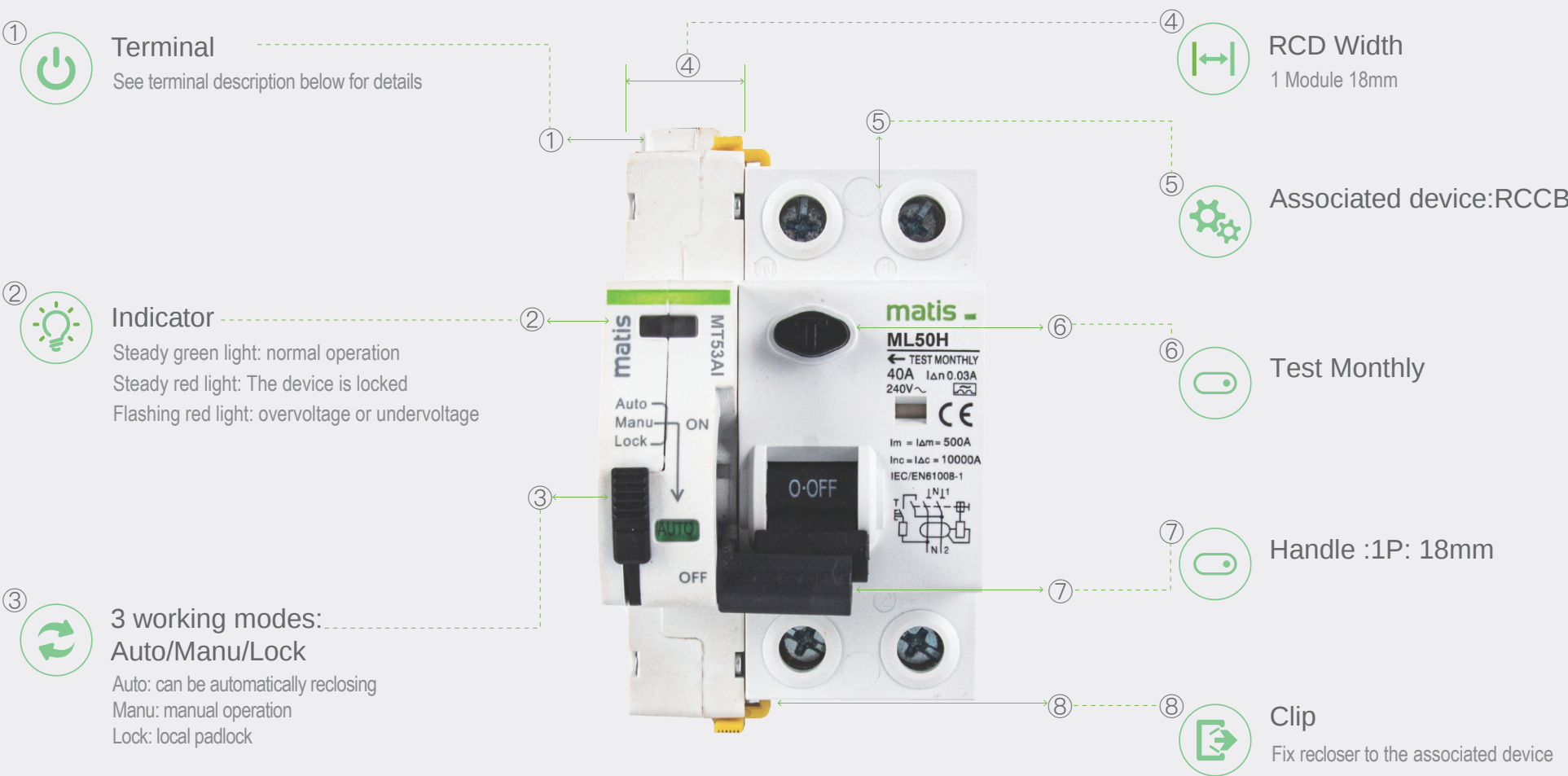


Auto Reset RCCB

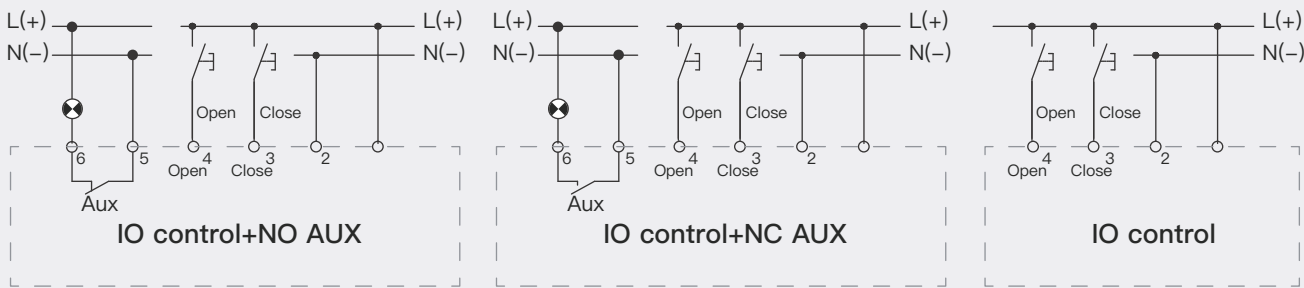
Power on with intelligence, safer and more efficient.



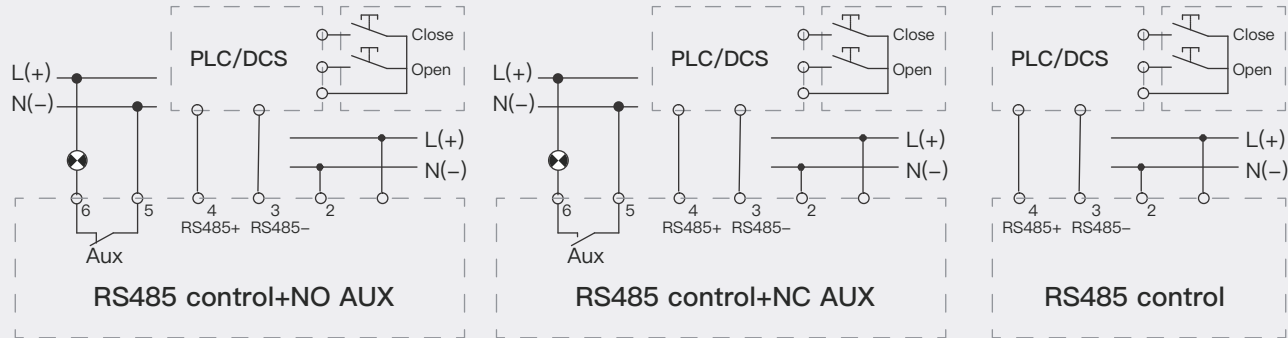
Auto Reclosing RCCB MT53+ML50H



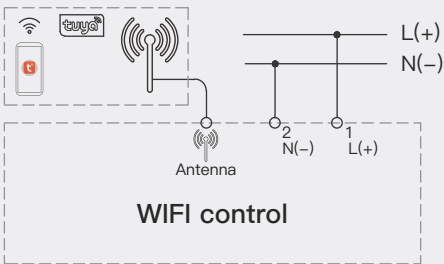
Terminal(IO Control)



Terminal(RS485 Control)

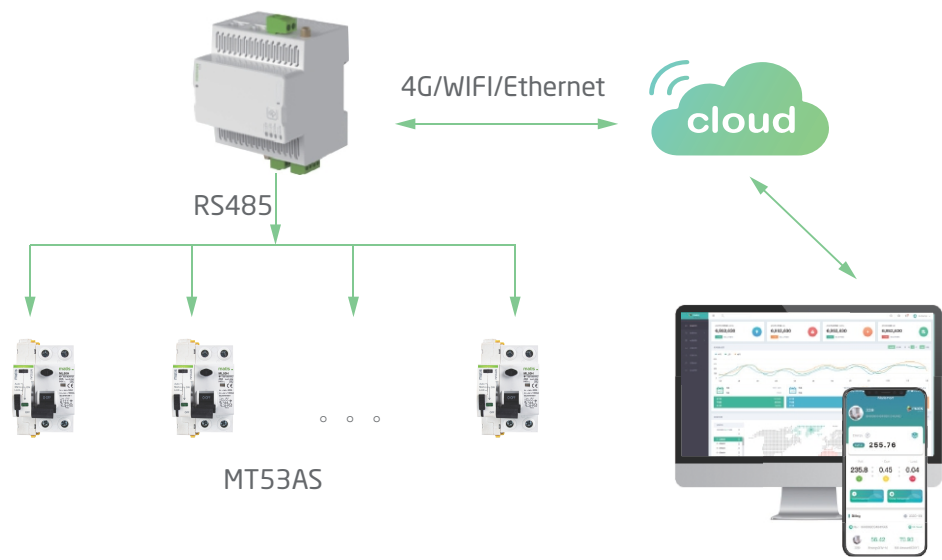


Terminal (Wifi Control)



RS485 Control

MT53AS can be connected to Gateway by RS485 and Modbus protocol ,then gateway can be connected Internet by different types communication such 4G, Wifi, Ethernet .Then the MT53AS can be controlled by Web sotware



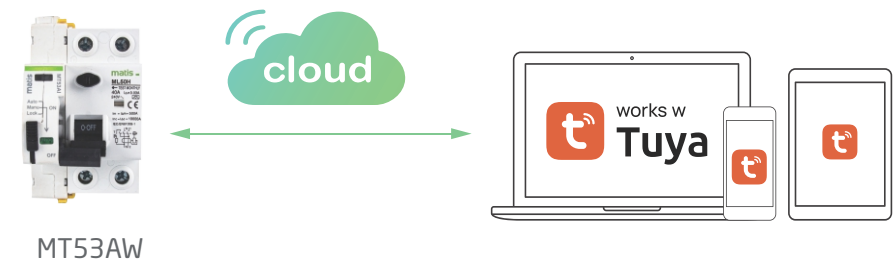
IO control (Dry Contact)

MT53AI can be controlled by IO (Dry Contact) with PLC or Pushbutton under the Auto mode

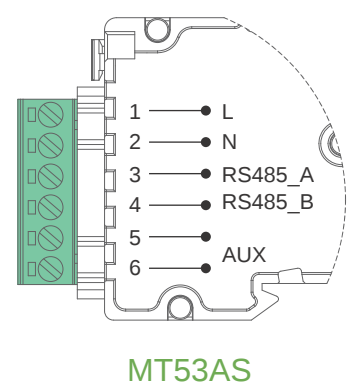


WiFi Control

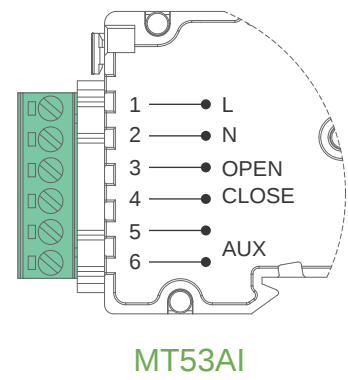
MT53AW can be connected to Tuya App directly without a gateway



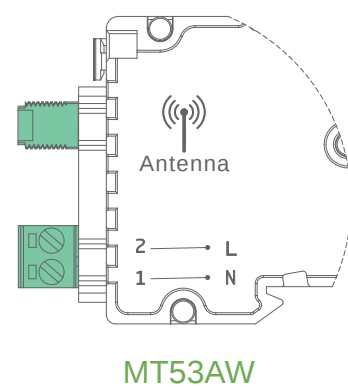
Terminals



Port	Explanation
1	Live Line
2	Neutral line
3	Modbus protocol
4	Modbus protocol
5	Opening and closing status output
6	



Port	Explanation
1	Live Line
2	Neutral line
3	Active trip input
4	Active closing input
5	Opening and closing status output
6	



Terminal	Description
L	Live line L
N	Neutral line N
Antenna	Wifi installation point

Functions

Recloser

Auto Reclosing RCCB can be used in the following scenarios to guarantees service continuity and protection:

- In the event of **nuisance tripping** of the circuit breaker.
- When there is a fault in the system.
- For any type of supervised or unsupervised residential, commercial or industrial system.

Nuisance tripping of the residualcurrent device: the causes



ATMOSPHERIC EVENTS



TECHNICAL MAINTENANCE



HARMONICS DUE TO INVERTERS



INDUSTRIAL DISTURBANCES:

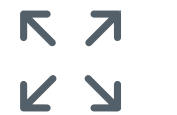


LIGHTING LOADS

Nuisance tripping of the residualcurrent device: the causes



SERVICE CONTINUITY WITH INSULATION CONTROL:



REDUCTION IN OVERALL DIMENSIONS



QUICK RECLOSING