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
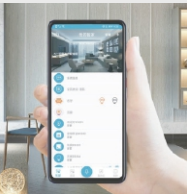Available for 2P and 4P

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
— Light signals — Advertising panels systems
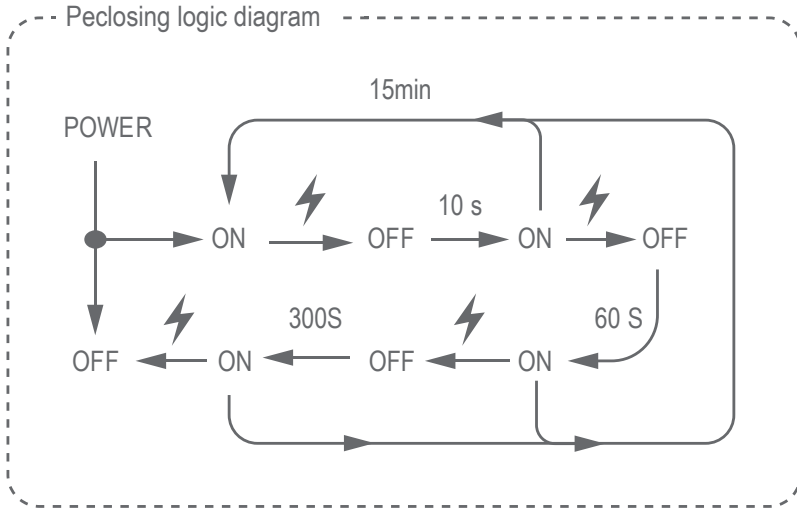
Transportation
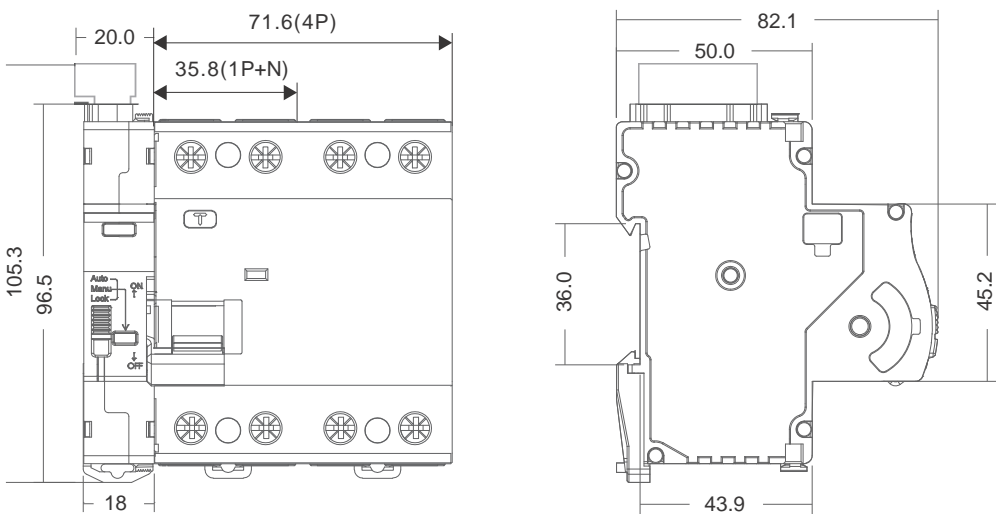— Railway stations — Highway
— Airports — Bus terminals

Green Energy
— Electric car charging network
— Photovoltaic systems

Reclosing Sequence Diagram

Peclosing logic diagram

POWER
15min
ON → OFF → 10 s → ON → OFF
OFF ← ON ← 300S ← OFF ← ON ← 60 S

Dimensions

20.0
71.6(4P)
35.8(1P+N)
105.3
96.5
18
82.1
50.0
36.0
45.2
43.9

www.matismart.com

mail:Info@matismart.com
Tel:+86 21 6050 3668,+86 18621879631
Add: Room 318-320, No.83,West Huanhu Road, Pudong, Shanghai, China 201306

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 Characteristis 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	
Dialectric 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 Characterisics		
Pollution Grade	2	
Work Temperatur	-25℃ +60℃	
Storage Temperature	-40℃ +70℃	
Relative Humidity	25℃ / RH 95%	
Characteristics of auxiliary 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	●	

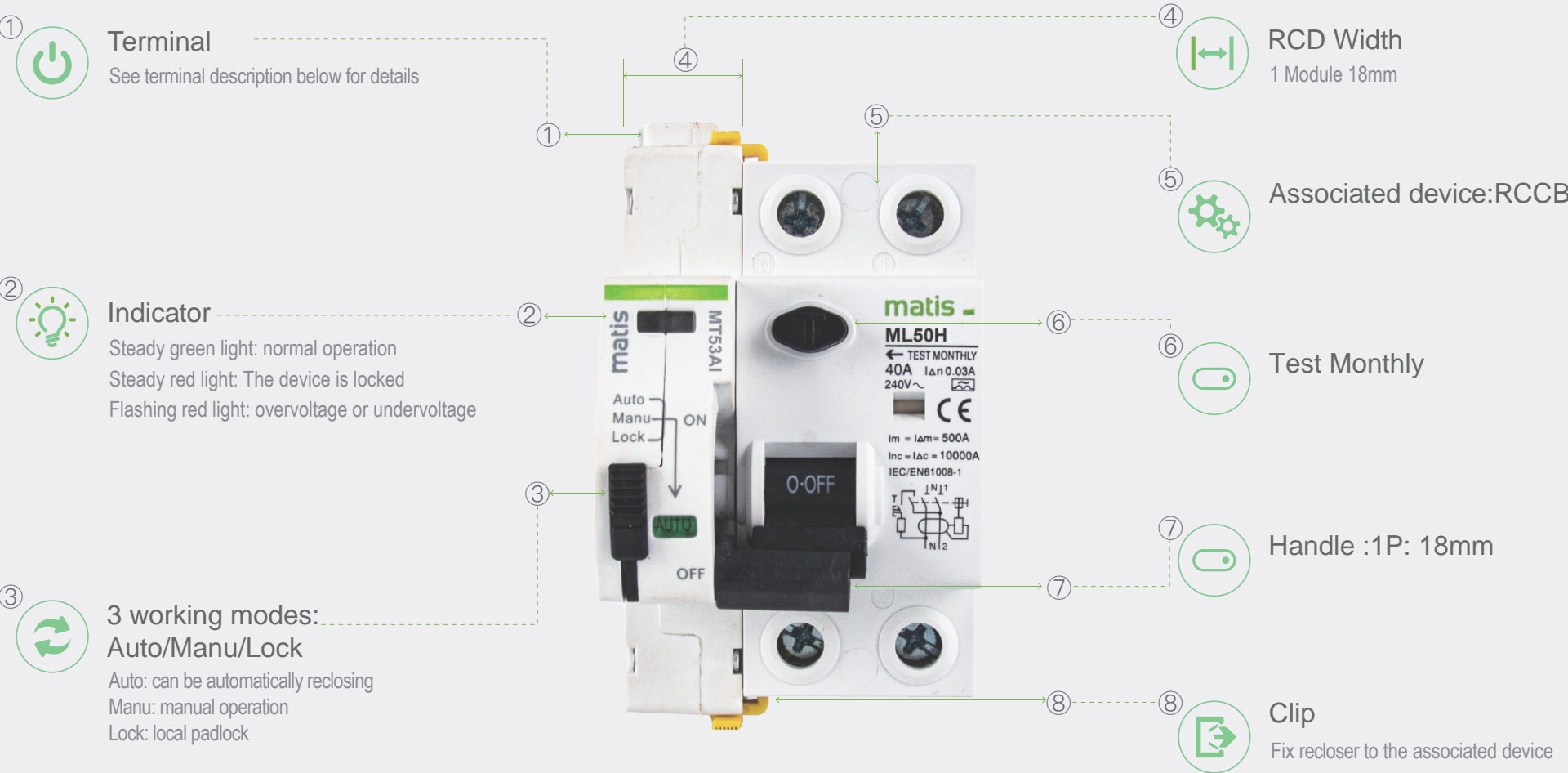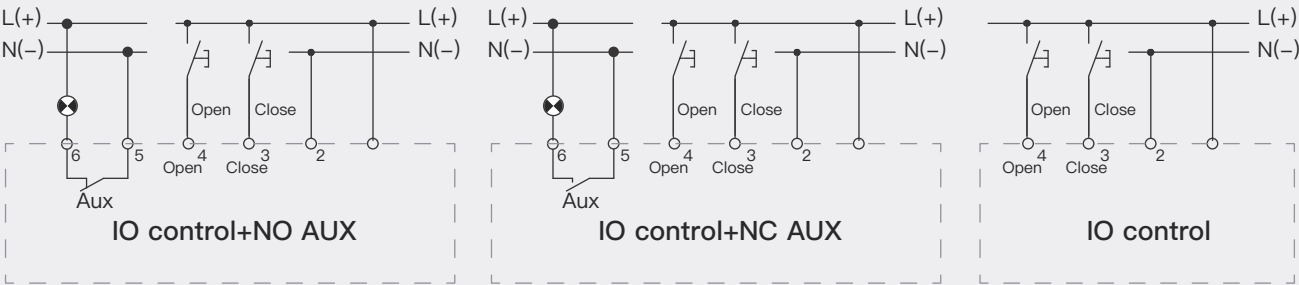# Auto Reset
RCCB

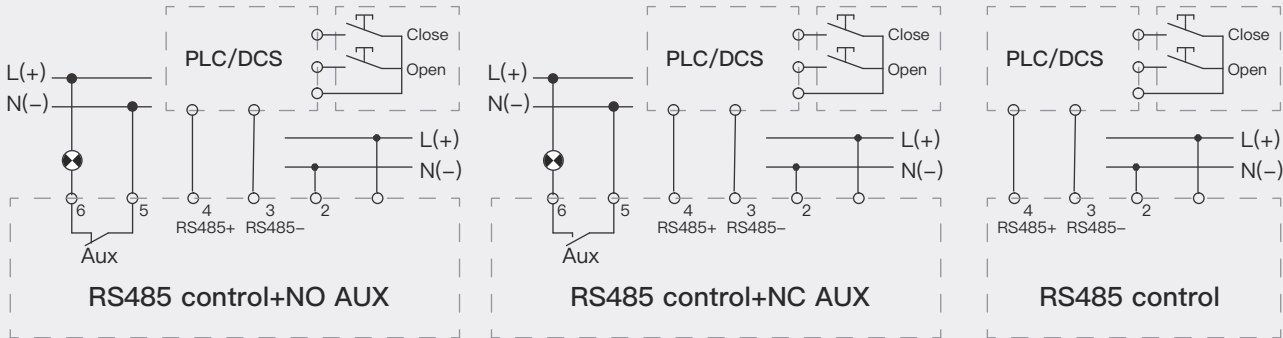Power on with intelligence, safer and more efficient.
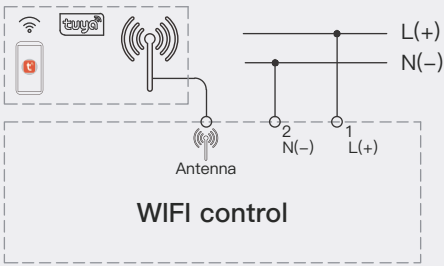
Auto Reclosing RCCB MT53+ML50H

① Terminal
See terminal description below for details

② Indicator
Steady green light: normal operation
Steady red light: The device is locked
Flashing red light: overvoltage or undervoltage

③ 3 working modes:
Auto/Manu/Lock
Auto: can be automatically reclosing
Manu: manual operation
Lock: local padlock

④ RCD Width
1 Module 18mm

⑤ Associated device:RCCB

⑥ Test Monthly

⑦ Handle :1P: 18mm

⑧ Clip
Fix recloser to the associated device

Terminal(IO Control)

| IO control+NO AUX | IO control+NC AUX | IO control |

L(+)
N(−)
Open Close
Open Close
Aux

Terminal (Wifi Control)

WIFI control
Antenna
L(+)
N(−)

Terminal(RS485 Control)

| RS485 control+NO AUX | RS485 control+NC AUX | RS485 control |

PLC/DCS
Close
Open
L(+)
N(−)
RS485+ RS485−
Aux

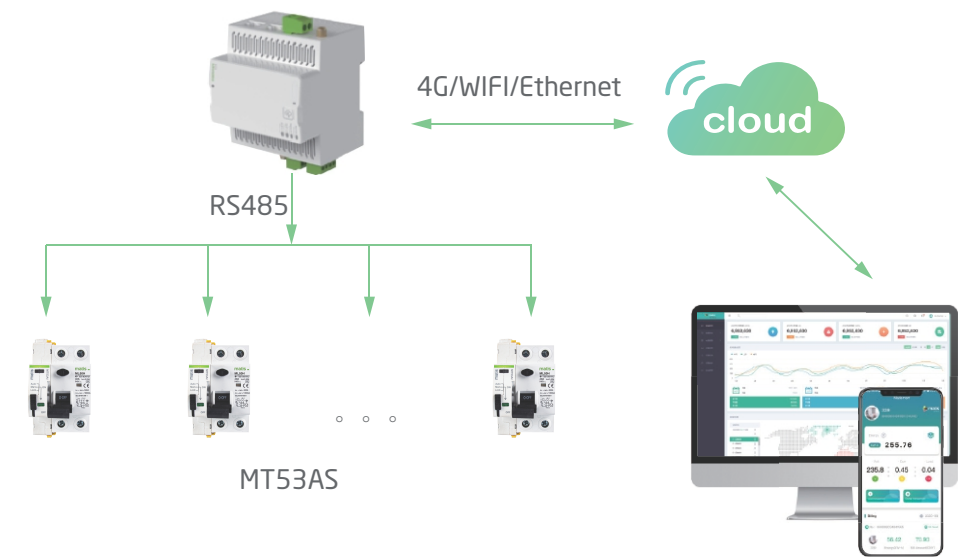## RS485 Control

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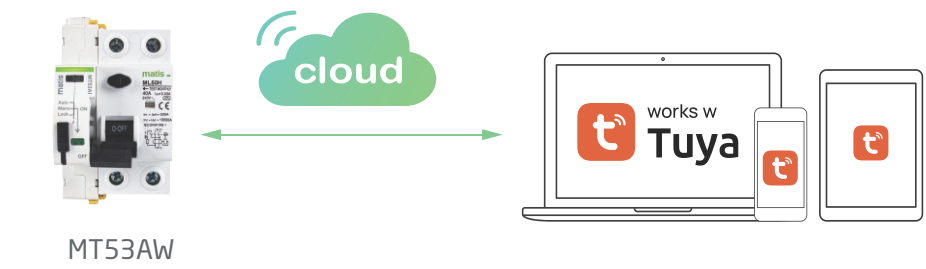
4G/WIFI/Ethernet
cloud
RS485
MT53AS

IO control (Dry Contact)

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

SCADA/DCS
PLC
I/O Control
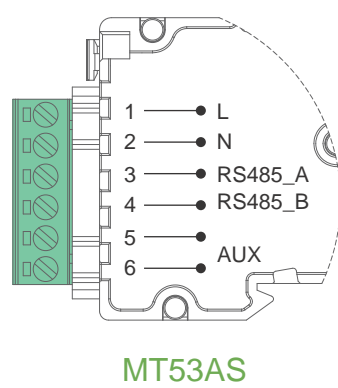I/O Control
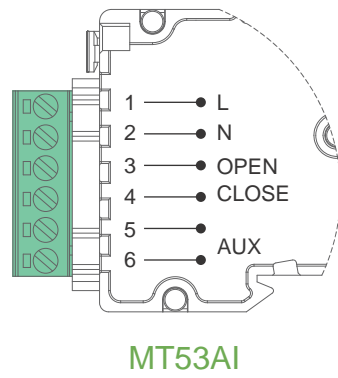MT53AI
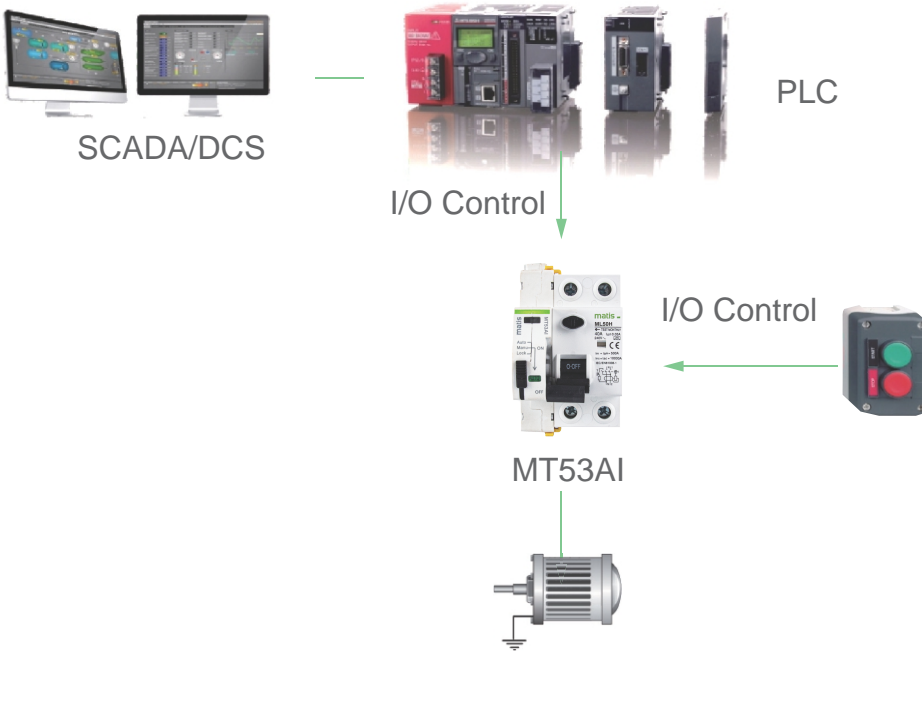
WiFi Control

MT53AW can be connected to Tuya App directly without a gateway

cloud
works w Tuya
MT53AW

Terminals

MT53AS

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

1 — L
2 — N
3 — RS485_A
4 — RS485_B
5 — AUX
6 —

MT53AI

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

1 — L
2 — N
3 — OPEN
4 — CLOSE
5 — AUX
6 —

MT53AW
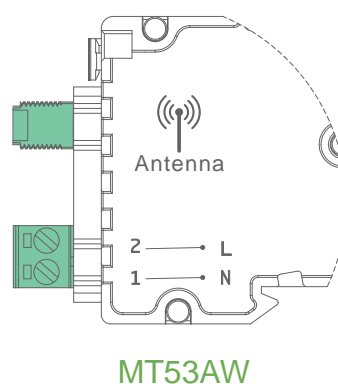
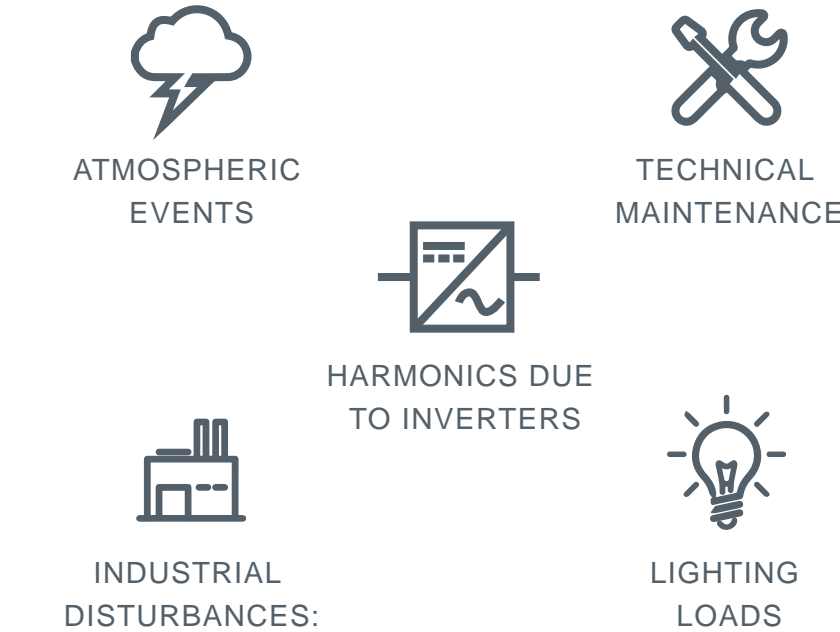| Terminal	Description
L	Live line L
N	Neutral line N
Antenna	Wifi installation point

Antenna
2 — L
1 — N

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