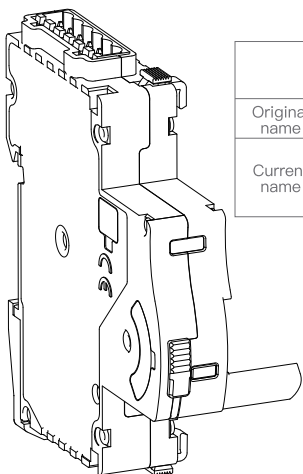


MT53 RS485

Remote Control/Auto-reclosing Series Product Manual

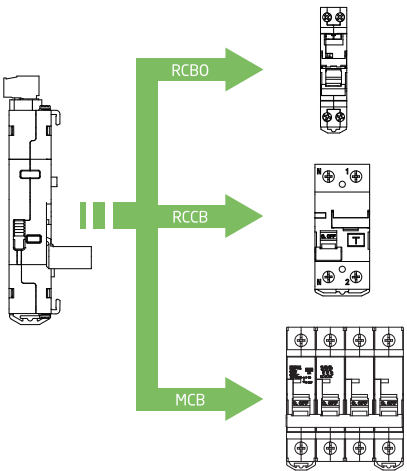


	Auto-re-closing Series	Remote Control Series
Original name	MT53AS	MT53RS
Current name	MT53RAs	MT53Rs
	MT53RAsx	MT53Rsx

Shanghai Matis Electric Co.Ltd
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Tel:+86 21 6050 3668,+86 18621879631

Add: Room 318-320, No.83,West Huanhu Road, Pudong, Shanghai, China 201306



Suitable circuit breakers for MT53 RS485 remote control/auto-reclosing devices:

CB		MCB		RCD		RCBO			
Style	Poles	1P	2p	3P/4P	2P	4P	1P	2P	3P
MT53A(R)S■10□-1△		✓	✓		✓	✓	✓	✓	
MT53A(R)S■10□-11△		✓					✓		
MT53A(R)S■10□-12△			✓					✓	
MT53A(R)S■10□-2△				✓					✓

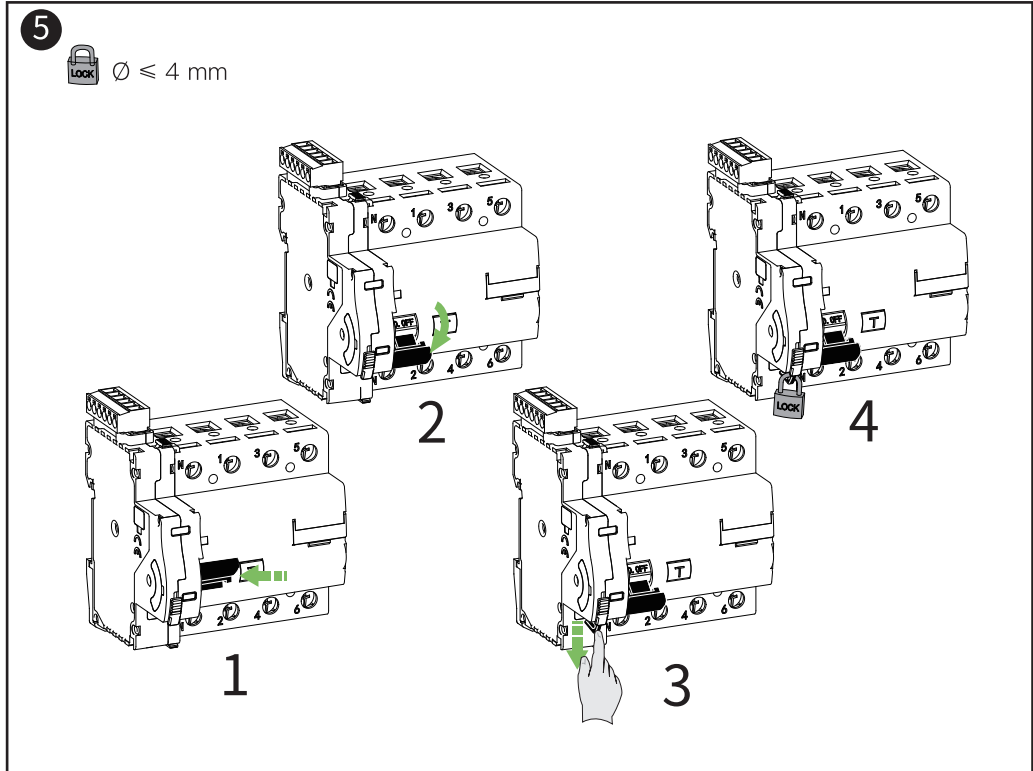
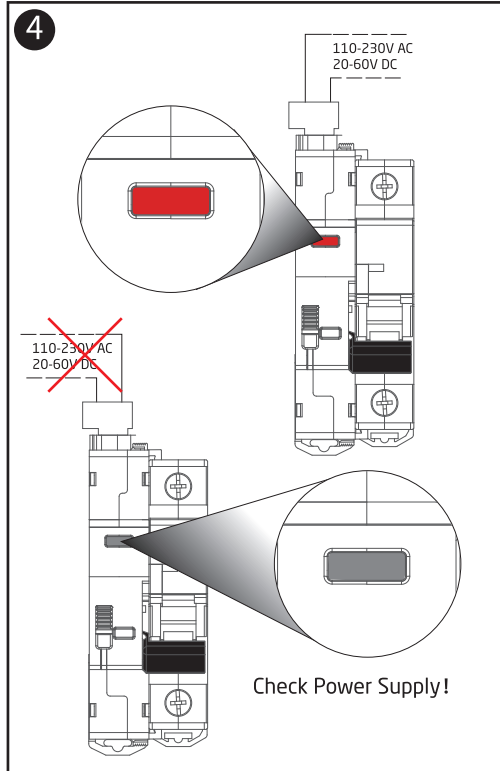
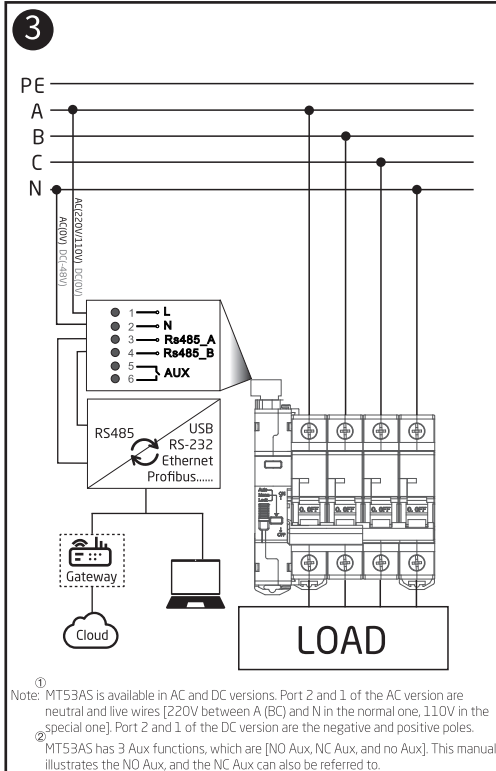
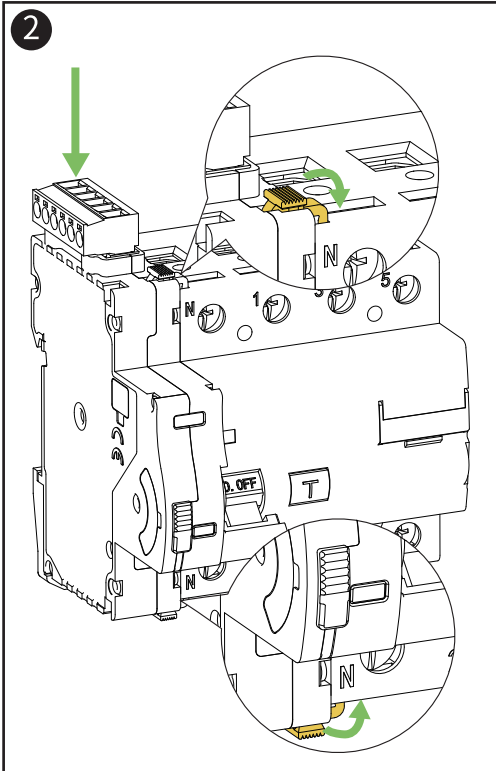
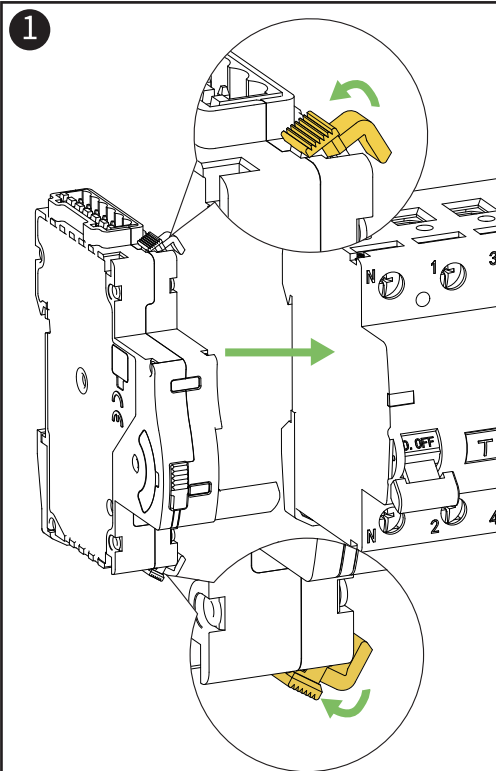
Note: ■ □ △ in the above table are all explained in the MT53 RS485 remote control/auto-reclosing model description. Please see the model description for details.

Product Model Description

For example:MT53ASw10-1N

- M: Company
- T: Control, automatic reclosing device
- 53: Design serial number
- A: A:Auto Reclose R:Remote control
- S: RS485 control
- 10: 01: NC Aux
01: NO Aux
None: No Aux
- N: W:Matis 50 series
J:Matis 60 series
H:Matis 22 series
K:Matis 90 series
N:Schneider Acti 9 series MCB/RCBO
I :Schneider Acti 9 Series RCD iID
L:Nader NDB2 MCB/RCCB
Z:Chint NB1 MCB
C:Chint NL1 RCCB
- 1: 11 :18mm handle only to 1P circuit breaker
12:18mm handle only to 2P circuit breaker
1 :18mm handle to 1P/2P circuit breaker
2 :36mm handle to 3P/4P circuit breaker
- N: N:AC220V

Electrical Characteristics		The Width of DIN Module		Contact Type		Electronic Relay			
Standard	YDT2346-2011	Reclosing Time Interval		10s - 60s - 300s		Rated Voltage		5V-230V AC/DC	
Power Distribution System	TN - S	Max Operation Frequency		30open./h		Rated Current		0.01A (min) -0.4 (max)	
Rated Voltage(Ue)	AC~220V(110V) DC~48V	Electrical Life		10000		Frequency		50/60Hz	
Min Rated Voltage(Min Ue)	85% Ue	Max. Auto Reclose Cycle		3		Use Category		AC12	
Max Rated Voltage(Max Ue)	110% Ue	Reclosed Counting Reset Time		60s		Operation Mode		NO\NC\ as a signal of ON/OFF	
Rated Insulation Voltage(Ui)	500V					Wiring Capability		≤2.5mm2	
Diaelectric Strength	2500V AC for 1 minute	Protection Grade		IP20 (Outside Panel) IP40 (Inside Panel)		Rated Tightening Torque		0.4Nm	
Rated Withstand Voltage(Uimp)	4kV					Min Rated Voltage(Min Ue)			
Over-voltage Category	III	Terminal Part of Breaker		Soft Cable: ≤ 1x16mm2 Hard Cable: ≤ 1x25mm2		Auto Reclose When Electric Fault Trip		●	
Rated Frequency	50/60Hz								
Static Power	1VA	Enviroment Characteristics				Earthleakage Test		●	
Power of Remote Operation	20VA	Pollution Grade		2		Reclose Stops when Fault		●	
Breaking Capacity of Earthleakage (IΔm)	The IΔm of Related Breaker	Work Temperature		-25℃ +60℃		Signal of Reclosing		●	
		Storage Temperature		-40℃ +70℃		Fault Signal Indicator		●	
Rated Residual Short Circuit Current (IΔc)	The IΔc of Related Breaker	Relative Humidity		55℃ - RH 95%		Function of Auto / Manual		●	
		Communication Parameter				Internal Electrical Protection		PTC	
Handle Length	1 - 2	Baudrate		Default as 9600, Configurable		 Warranty All users who purchase the product enjoy a 24-month warranty period from the date of purchase. During the warranty period, if there is a quality problem which affects normal use, you can enjoy free repair and replacement. In case of irreversible damage caused by improper use, drop, installation and wiring errors, it can be repaired or replaced at a fee within the warranty period. If you disassemble and modify it by yourself, you will not enjoy the warranty service.			
MCB Type	1P - 2P - 3P - 4P	Check Digit		No Check digit					
RCCB Type	AC - A - A[IR] - A[S]	Data Digit		8					
Rated Current(In)	The In of Related Breaker	Stop Digit		1					
Rated Residual Current(IΔn)	The IΔn of Related Breaker	Device Address		Factory Default Address: 1					
AUX Input	0.4A(max)	Auxiliary Contact Characteristics							
Mechanical Characteristics		Contact		yes					



6

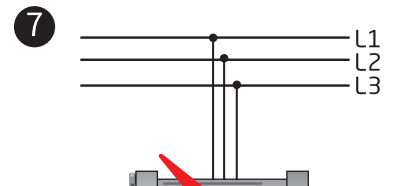
• Under “Auto” mode, and for instantaneous electrical fault, our recloser will auto reclose after 10s of breaker trips.

• It is defined as successfully reclosed if handle holds more than 15 minutes.

After successfully reclosed, previous reclose counting will be cleared and renewed.

Note: MT53AS series has automatic reclosing function, MT53RS series does not have automatic reclosing function.

7

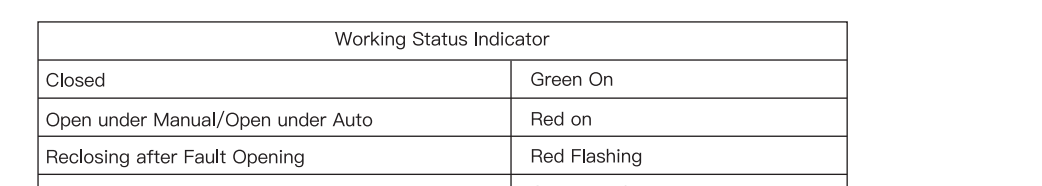


- Under “Auto” mode, and for continuous electrical fault,
- It will auto reclose after 10s time delay, and failed;
- It will auto reclose again after 60s time delay, and failed;
- It will auto reclose again after 300s time delay, and failed;
- It will switch to “Lock” status, and no more auto reclose

(Meanwhile, the terminal of remote On/Off functions)

Working Status Indicator	
Closed	Green On
Open under Manual/Open under Auto	Red on
Reclosing after Fault Opening	Red Flashing
Stabilizing after Auto Reclosing	Green Flashing
Reclosing Failed after Three Automatic Reclosing	Red/Green Flashing Alternately
Adjust to Manual Mode	Red On

Lock Status



Note: MT53A/S series has automatic reclosing function, MT53P/S series does not have automatic reclosing function.

8

The diagram illustrates the sequence of operations for a remote reset and auto reclose of a circuit breaker. The sequence is as follows:

- Initial State:** The circuit breaker is in the closed position. A fault (indicated by a red starburst) occurs, causing the breaker to trip.
- Remote Reset:** A green arrow labeled "Remote Reset" points to the breaker in the tripped position. The reset button (labeled "0. OFF") is pressed, and the breaker returns to the closed position.
- Auto Reclose:** A green arrow labeled "Auto Reclose" points to the breaker in the tripped position. The breaker automatically returns to the closed position.
- 15-minute Delay:** A black arrow labeled "15分钟" (15 minutes) points to the breaker in the closed position, indicating a delay before the next operation.

Legend:

- 1 — L
- 2 — N
- 3 — Rs485_A
- 4 — Rs485_B
- 5
- 6 — AUX

The communication module is connected to the AUX terminal (6) and a computer. The module supports RS485, USB, RS-232, Ethernet, and Profibus.

9

Auto
Manu
Lock

ON

Auto

OFF

1 L
2 N
3 Rs485_A
4 Rs485_B
5
6 AUX

RS485 USB
RS-232 Ethernet Profibus

Note: It will enter redclose status when recloser is ON position and manually switched off.

10

Auto Manu Lock ON OFF

Manu

1 2 3 4 5 6

L N Rs485_A Rs485_B AUX

RS485

USB RS-232 Ethernet Profibus.....

!

Note: The dry contact is disabled when "Manu" mode.

