Remote control opening and closing

Protocol to read remote control status

Stable performance, Reliable and safe

Sustainable power supply

Application scenarios

Electricity Protection, Sustainable Electricity



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



Smart mining, factory electricity, base station



Environmental Monitoring Station, Remote Irrigation, Smart Greenhouse

Technical parameter

TYPE		MT53NS	MT53NSx
			
Electrical Characteristics			
		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	
Breaking Capacity of Earthleakage(I△m)	(A)	The I△m of Related Breaker	
Rated Residual Short Circuit Current (I△c)	(A)	The I△c of Related Breaker	
		2	4
MCB Type		1P - 2P - 3P - 4P C - D	
MCB Type		AC - A - A[IR] - A[S]	
RCBO Type			
Rated Current(In)	(A)	25 - 40 - 63 - 80 - 100	
Rated Residual Current(I△n)	(mA)	30 - 100 - 300 - 500	
Rated non-operating resistance between electrical components and earth		8 (30mA) - 2,5 (100/300/500mA)	
Rated working resistance between live parts and earth	(kΩ)	16 (30mA) - 5 (100/300/500mA)	
Static Power	(VA)	1	1
Power of remote control	(VA)	20	20
Mechanical Characteristics			
The Width of DIN Module		1	1
Max Operation Frequency	(oper./h)	30	
Maximum mechanical durability (total number of operations)		10000	
Terminal Part of Breaker	(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 of Circuit Breaker		IP20 () - IP40 ()	
Enviroment Characterisics			
Pollution Grade		2	
Work Temperature	(°C)	-25 +60	-25 +60
Storage Temperature	(°C)	-40 +70	
Relative Humidity		55°C - RH 95%	
Auxiliary Contact Characteristics			
		yes	yes
Contact Type		-	Electronic Relay
Rated Voltage	(V)	-	5-230 AC/DC
Rated Current	(A)	-	0,6 (min) -1(max)
Frequency	(Hz)	-	50
Operation Mode		-	NO\NC\ Signal of Handle Position
Cable Connection	(mm2)	-	≤ 2.5
Rated Tightening Torque	(Nm)	-	0.4
Communication parameters			
		Default as 9600, Configurable	
Check Digit		No Check digit	
Data Digit		8	
		1	
Device Address		Factory Default Address;1	
Remote control function			
			•
Internal Electrical Protection		PTC	PTC

matismart

AIoT Electric



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

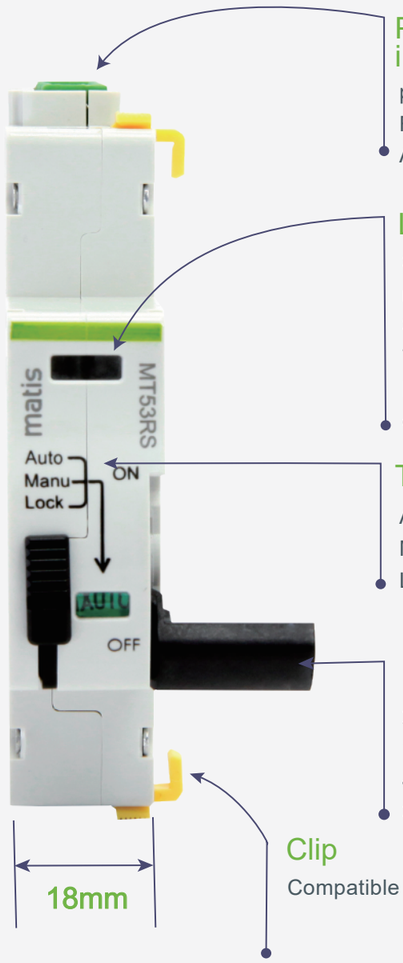
RCD Remote Control Device MT53NS Series

Power on with intelligence, safer and more efficient.

RCD Remote Control Device MT53NS

RCD_MT53Rs Remote control device can achieve the following functions:

- Remote closing/opening circuit breaker, the circuit breaker can be equipped with residual current action protection accessories or other electrical accessories
- Resetting of a tripped circuit breaker, subject to compliance with current safety regulations
- Local control of circuit breaker with handle
- Safe operation on site with padlock attachment



Power communication interface
power input
RS485 input
AUX signal output

LCD display
Steady green light:
normal operation
Steady red light:
The device is locked
Flashing red light:
overvoltage or undervoltage

Three working modes
Auto: automatic mode
Manu: Manual mode
Lock: local padlock

control handle
2P handle with:
1P, 2P circuit breaker
4P handle with:
3P, 4P circuit breaker

Clip
Compatible with Schneider: iC60 MCB

There are 2 optional actions after the circuit breaker has tripped:

- AUTO mode: allow remote reset
- MANU mode: Disable remote reset

RCD remote control device ensures sustainable power supply

Remote control device

The MT53NS automatic recloser series is a compact control unit with a width of only 18MM, can be adapted to the miniature circuit breakers of Schneider, Liangxin, Chint and many other manufacturers on the market.

RS485_Modbus control

When the MT53NS is in Auto mode, connect the device to the power supply, and the device is in the open state. It can use RS485 for remote control, control the opening and closing of the device, and can also perform operations such as status reading and address reading through the Modbus protocol.

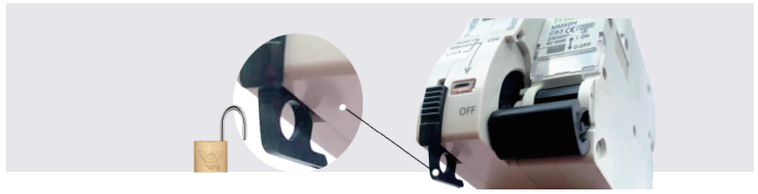


More flexible adaptation

Compatible with circuit breakers
1P, 2P, 3P, 4P

Local padlock

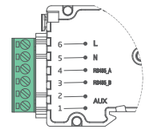
Safety locking, the MT53NS series has a mechanical pad-lock mechanism to adjust the working mode to Padlock mode, local locking. Make sure that the operator performs maintenance work in a safe state.



Product adaptation

circuit breaker	MCB		RCD		RCBO				
model \ pole(s)	1P/2P	3P/4P	2P	4P	1P	2P	3P	3P+N	4P
MT53NS-1-AC	✓		✓		✓	✓			
MT53NS-2-AC		✓		✓			✓	✓	✓
MT53NSx-1-AC	✓		✓		✓	✓			
MT53NSx-2-AC		✓		✓			✓	✓	✓
MT53NS-1-DC48	✓		✓		✓	✓			
MT53NS-2-DC48		✓		✓			✓	✓	✓
MT53NSx-1-DC48	✓		✓		✓	✓			
MT53NSx-2-DC48		✓		✓			✓	✓	✓

Terminal picture



MT53NS/MT53NSx

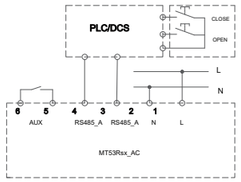
Port	Explanation
L	Live Line
N	Neutral line
RS485_A	Modbus protocol
RS485_B	Modbus protocol
AUX	Opening and closing status output MT53Rsx only

The RCD_MT53NS remote control accessory with AUX interface can realize the following functions:

- Realize fast and reliable communication connection with intelligent gateway module (host computer) through RS485 wiring
- "OF" passive dry contact realizes remote indication

Wiring diagram

Working mode: RS485control opening and closing
RS485_A:Modbus protocol
RS485_B:Modbus protocol
AUX: output of opening and closing status



MT53NSx_AC

Dimensions

