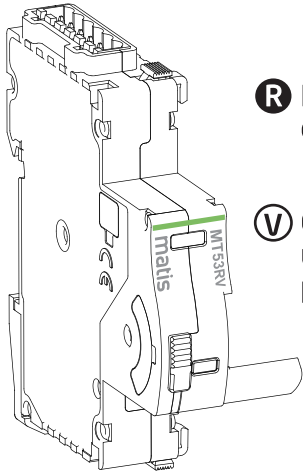


MT53RV

Product Manual



R RS485 remote control

V Overvoltage/undervoltage protector

Shanghai Matis Electric Co., Ltd.

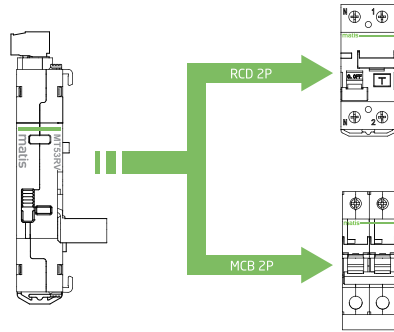
Web: www.matismart.com

Mail: info@matismart.com

Address: Room 320, No. 83, Huanhu West 3rd Road,

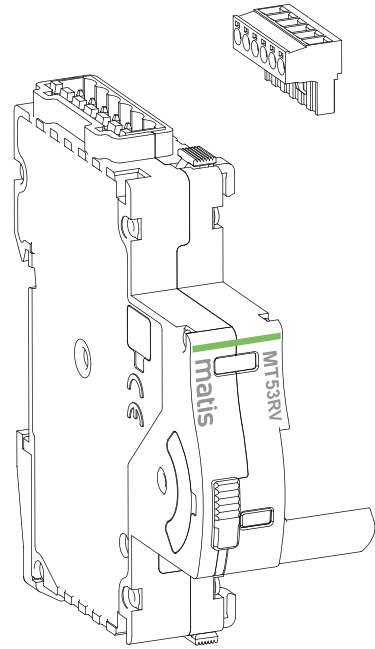
Pudong, Shanghai, China 201305

Phone: 021-6050 3668, 18291401322, 13062750401

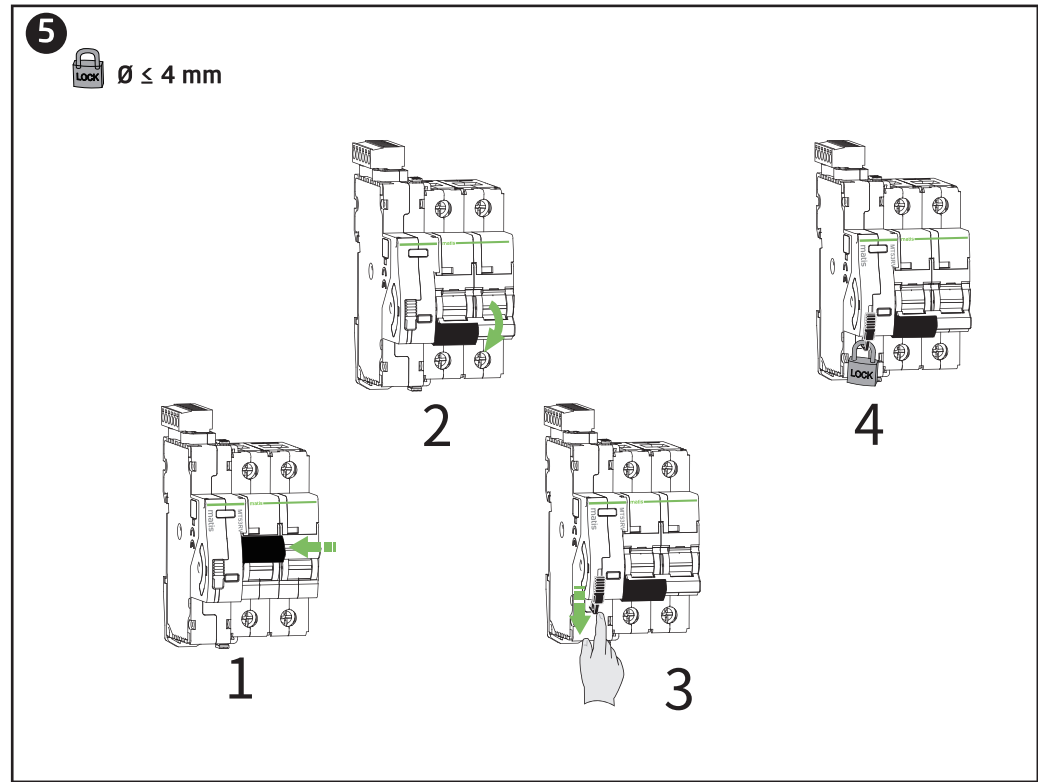
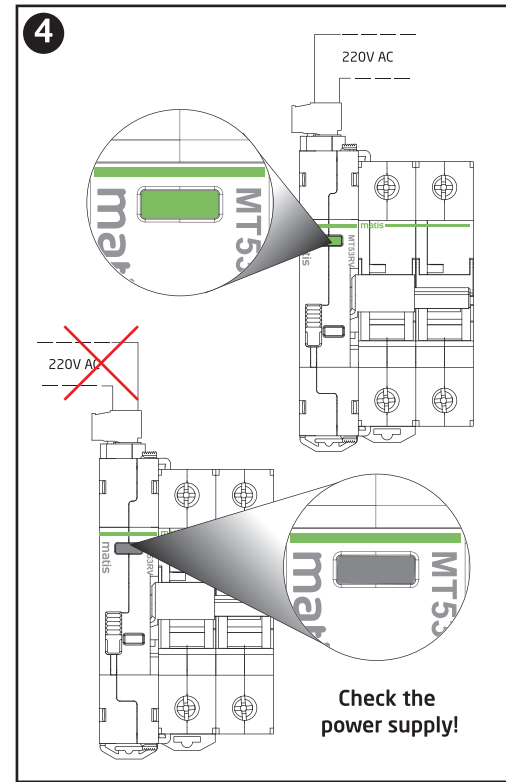
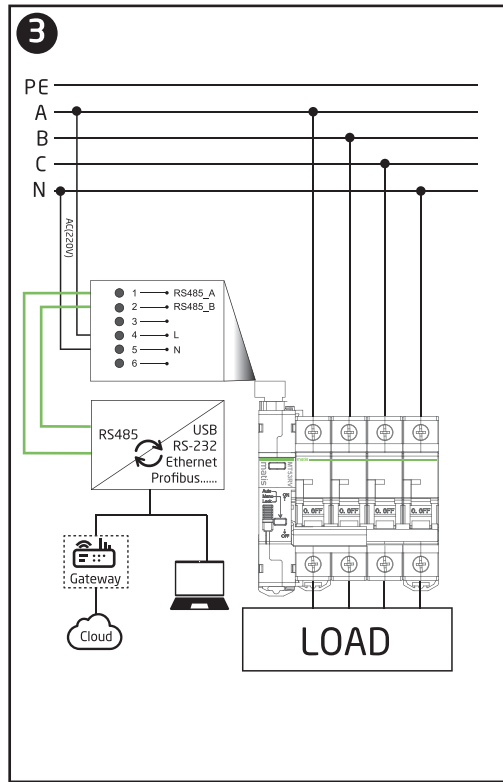
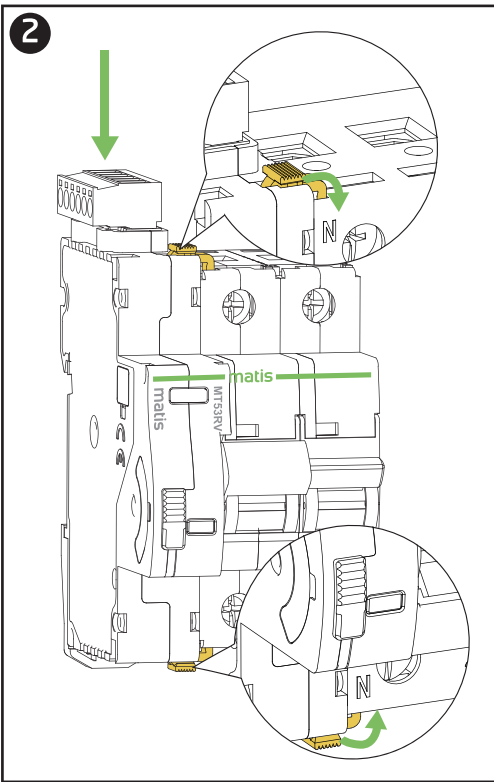
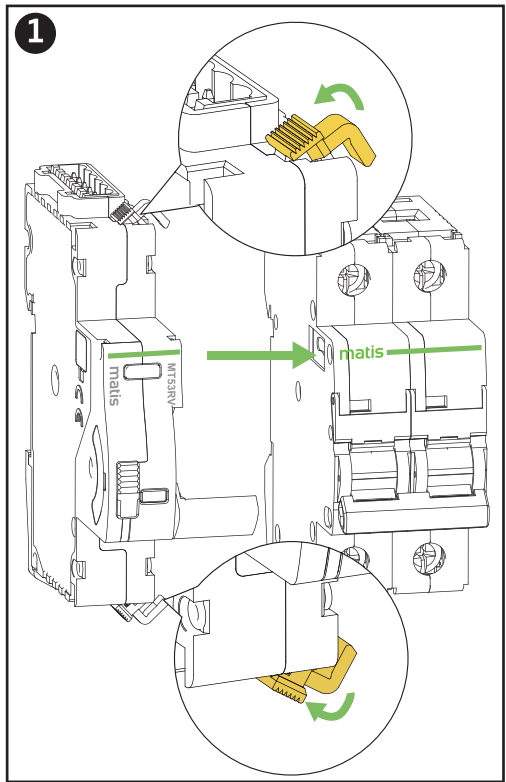


Circuit breaker for MT53RV

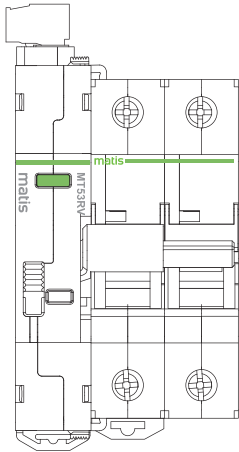
Circuit Breaker		MCB		RCD		RCBO	
Model	Poles	1P	2P	2P	1P	2P	
MT53RV-1N		✓	✓	✓	✓	✓	
MT53RV-11N		✓			✓		
MT53RV-12N			✓	✓			



Electrical Characteristics		Maximum Mechanical Durability (Total Number of Operations)		10000	Baud Rate	Default 9600, can be set
Power Distribution System	TN - S	Maximum Number of Continuous Auto-reclosings	Protection Grade	3	Check Bit	No check
Rated Voltage (Ue)	230 V ~ 50 / 60 Hz				Data Bit	8
Minimum Voltage (Minimum Ue)	45V				Stop Bit	1
Maximum Voltage (Maximum Ue)	305V	Circuit Breaker Terminal Section	IP20(outside the cabinet) IP40 (inside the cabinet)	Device Address	Factory default address: 1	
Rated Insulation Voltage (Ui)	500V			Automatic Reclosing Function		
Inter-polar Dielectric Strength Test Voltage	2500V AC for 1 minute	Environmental Characteristics	Soft wire: ≤ 1x16mm2 Hard wire: ≤ 1x25mm2	Self-recovery Over/Under Voltage	●	
Uimp	4kV			Signal that a Reclosing Operation is in Progress	●	
Overvoltage Type	III	Pollution Level	2	Over/Under Voltage Indicator	●	
Rated Frequency	50Hz	Working Temperature	-25°C +60°C	Automatic/Manual Function	●	
Static Power	1VA	Storage Temperature	-40°C +70°C	Internal Electrical Protection	PTC	
Power During Remote Control	20VA	Relative Humidity	55°C - RH 95%	 Warranty Anyone who purchases this model of device enjoys a 24-month warranty period from the date of purchase. During the warranty period, if the quality of the device itself affects the normal use, you can enjoy free repair and replacement, and the condition of paid service as follows: the improper use, drop, installation and wiring errors that cause irreversible damage. Besides, if you disassemble and modify the device yourself, you will not enjoy the warranty service.		
Leakage Making/Breaking Capability (IΔm)	IΔm of related circuit breakers	Over/Under Voltage Characteristics				
		Overvoltage Protection Value	≥295±10V			
Rated Condition Residual Short Circuit Current (IΔc)	IΔc of related circuit breakers	Overvoltage Recovery Value	≤270±10V			
		Overvoltage Reaction Time	10s			
Handle Length	1 - 2	Undervoltage Protection Value	≤170±10V			
Rated current (In)	In of related circuit breakers	Undervoltage Protection Reaction Time	4.5s			
Rated Residual Operating Current(IΔn)	IΔn of related circuit breakers	Undervoltage Recovery Reaction Time	10s			
Mechanical Characteristics		Undervoltage Recovery Value	≥195±10V			
Width in DIN module	1	Communication Parameters				
Maximum Operating Frequency	30open/h					

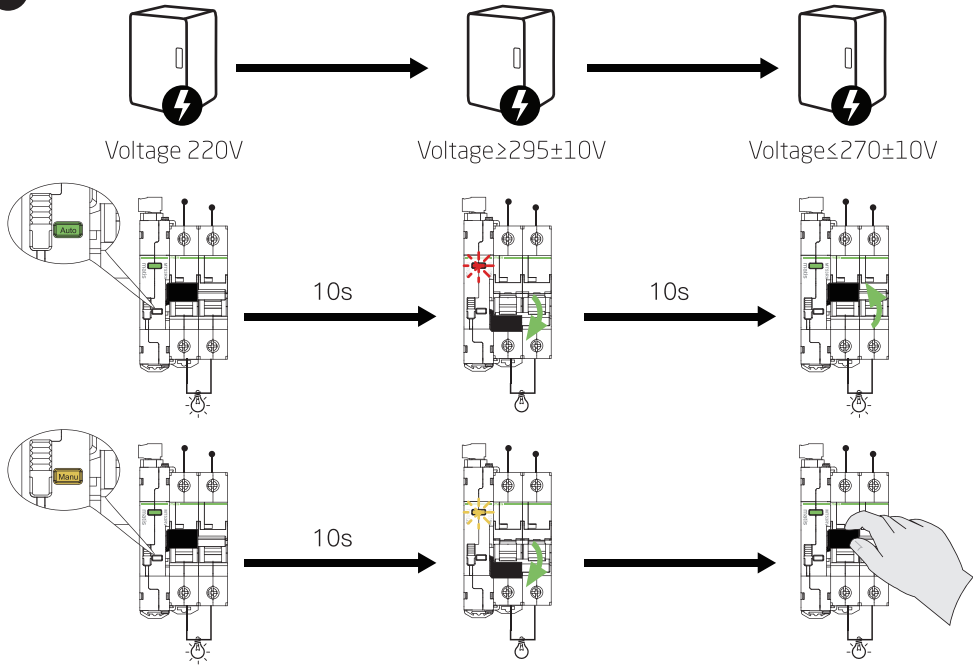


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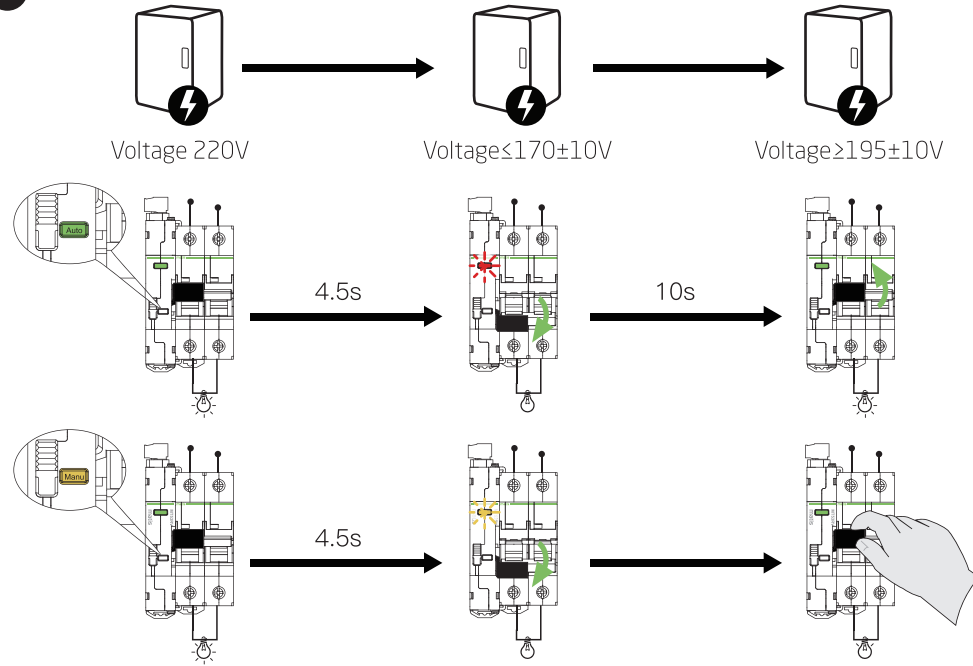
Indicator			
Mode	Status	Color	Remark
Auto	Normal OFF	Red light on	
	Normal ON	Green light on	
	Overvoltage OFF	Red light flashes(2s on, 2s off)	
	Undervoltage OFF	Red light flashes(0.5s on, 2s off)	
	Wait for auto-reclosing	Red light flashes rapidly (1s on, 1s off)	
	Stable reclosing	Green light flashes rapidly (1s on, 1s off)	
Manu	Manual mode	Yellow light on	
	Normal ON	Green light on	
	Overvoltage OFF	Yellow light flashes(2s on, 2s off)	
	Undervoltage OFF	Yellow light flashes(0.5s on, 2s off)	
Auto /Lock	Self-lock status	Red/green light flashes alternately (2s red light and 2s green light flashing alternately)	

7



Note: After overvoltage, the flashing frequency of the indicator is 2s on and 2s off.

8



Note: After undervoltage, the flashing frequency of the indicator is 0.5s on and 2s off.

9

PV Side Supply Voltage		Initial Status	Post-action Status		Continuous Hold Time
			Auto Mode	Manu Mode	
Overvoltage	$\geq 295 \pm 10V$	ON	OFF	OFF	10s
		OFF	OFF	OFF	Initial status
Overvoltage Recovery	$\leq 270 \pm 10V$	OFF	ON	OFF	10s
		ON	ON	ON	Initial status
Undervoltage	$\leq 170 \pm 10V$	ON	OFF	OFF	4.5s
		OFF	OFF	OFF	Initial status
Undervoltage Recovery	$\geq 195 \pm 10V$	OFF	ON	OFF	10s
		ON	ON	ON	Initial status

