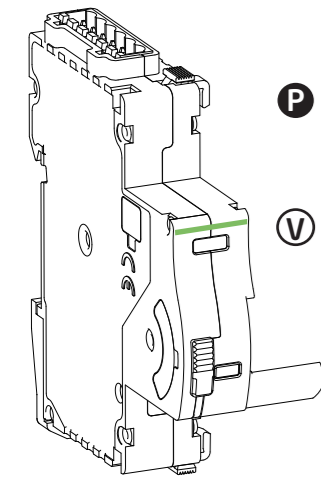


MT53PV

Product Manual



P 光伏/充电桩用
过欠压重合闸
(孤岛保护装置)

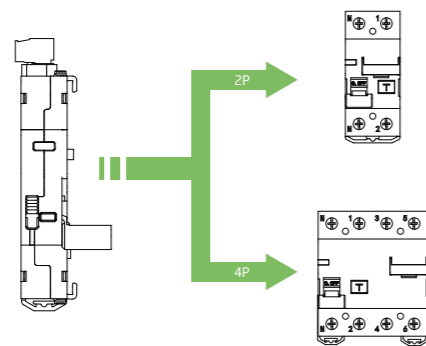
V 过电压/欠电压
保护器

上海麦豆电气有限公司

网址: www.matismart.com

地址: 上海浦东环湖西三路83号320室

电话: 021-6050 3668, 18291401322, 13062750401



MT53PV适用的断路器

断路器 产品型号	MCB			RCD		RCBO				
	1P	2P	3P/4P	2P	4P	1P	2P	3P	3P+N	4P
MT53PV-1N	✓	✓		✓		✓	✓			
MT53PV-2N		✓	✓	✓		✓	✓	✓	✓	✓
MT53PV-11N	✓					✓	✓			
MT53PV-12N		✓	✓	✓	✓		✓			✓

注: ■位置代表匹配的断路器代码, 详细情况可查看“MT53PV系列产品型号”介绍

MT53PV系列产品型号

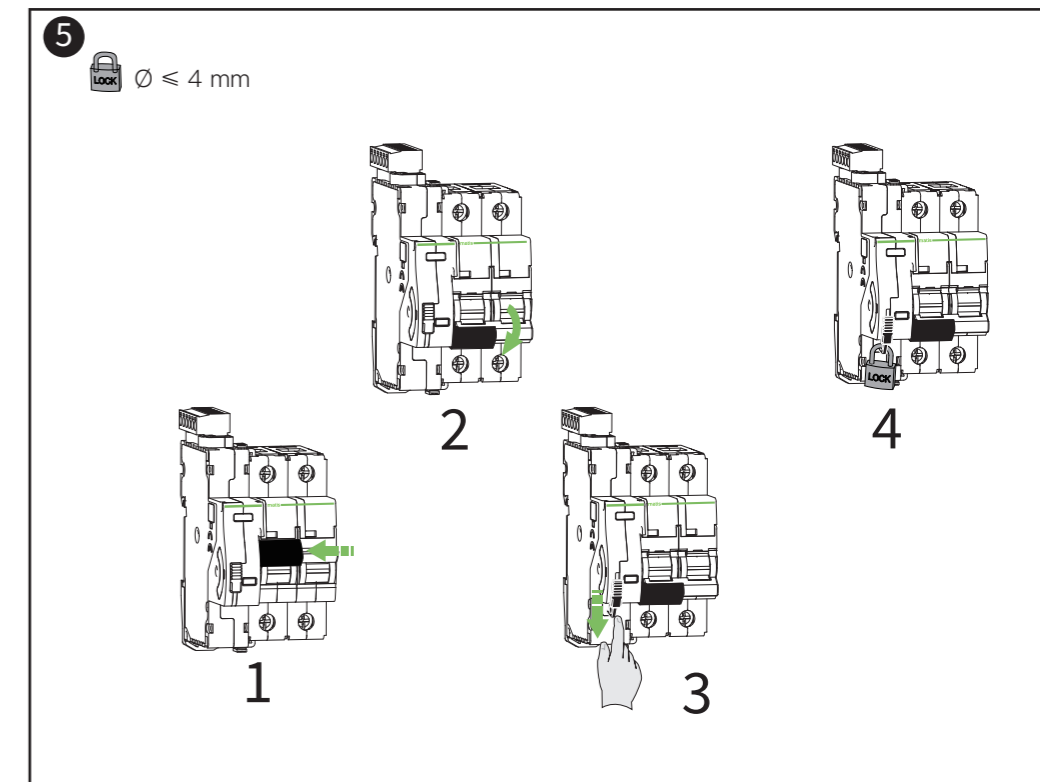
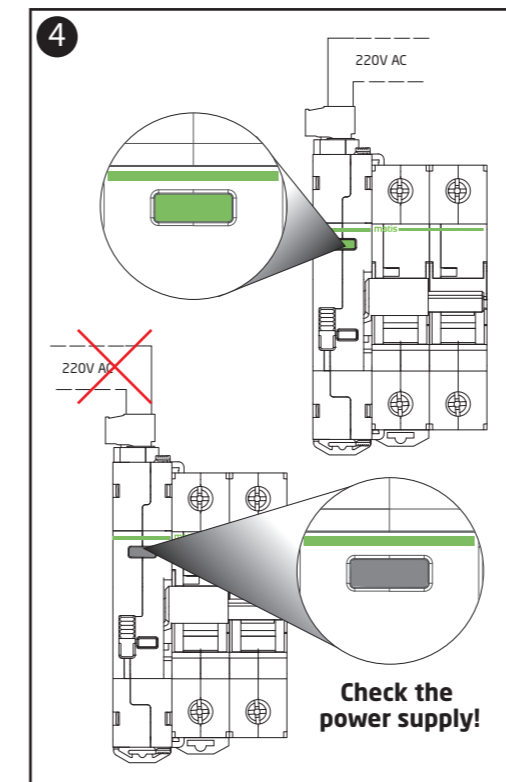
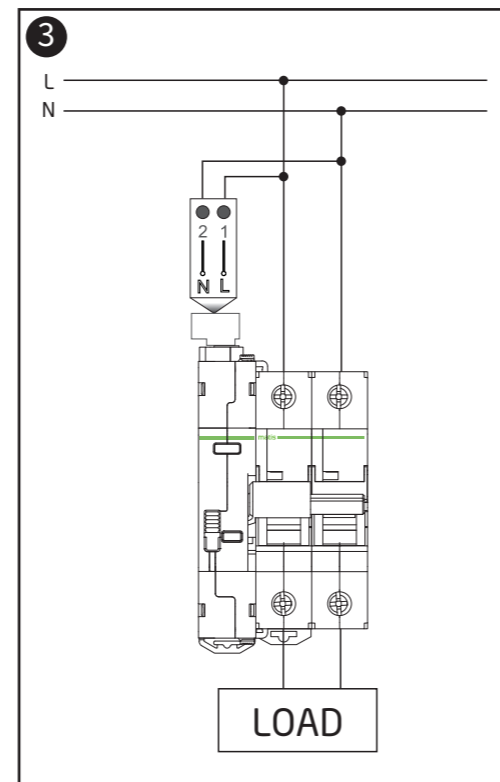
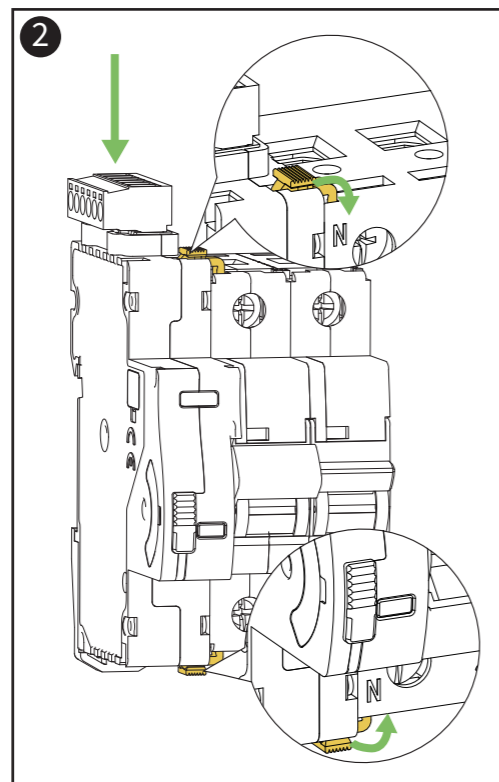
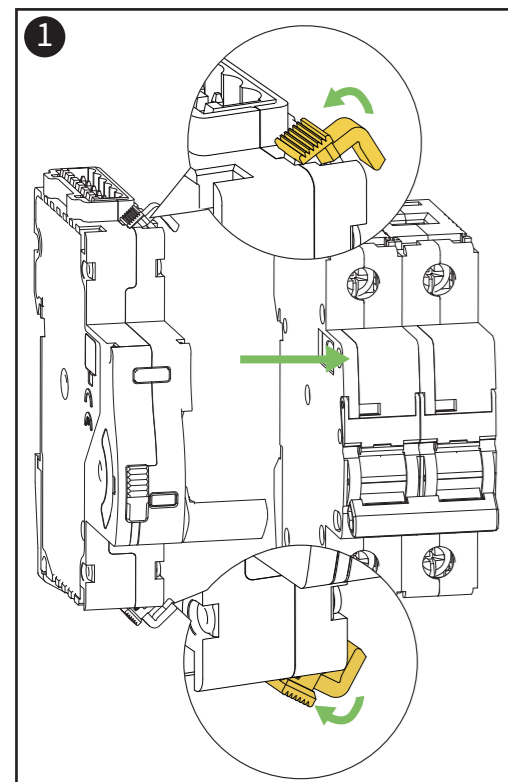
例子: MT53PVN-1N

- M** → 基础产品自动化家族_小电流
- T** → 控制类、自动重合闸类
- 53** → 设计序号
- P** → 光伏/充电桩用过欠压重合闸(孤岛保护装置)
- V** → 过电压/欠电压保护器
- N** →
 - W: Matis 50系列
 - J: Matis 60系列
 - H: Matis 22系列
 - K: Matis 90系列
 - 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手柄 仅适用1P断路器
 - 12 : 18mm手柄 仅适用2P断路器
 - 1 : 18mm手柄 适用1/2P断路器
 - 2 : 36mm手柄 适用3/4P断路器
- N** → N: AC220V

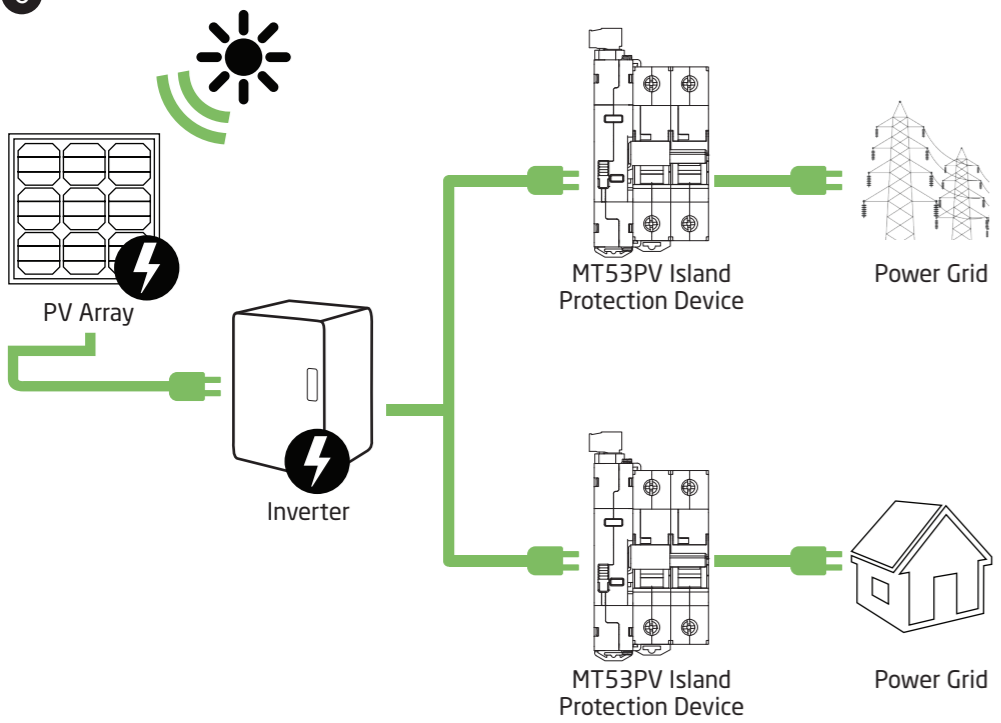
Electrical Characteristics		Mechanical Characteristics	
Standard	YDT 2346-2011	Width in the DIN Module	1
Power Distribution System	TN - S	Maximum Operating Frequency	30open/h
Rated Voltage (Ue)	230 V ~ 50 / 60 Hz	Maximum Mechanical Durability (Total Number of Operations)	10000
Minimum Voltage (Minimum Ue)	160V	Maximum Number of Continuous Auto-reclosings	3
Maximum Voltage (Maximum Ue)	305V	Protection Grade	IP20(outside the cabinet) IP40 (inside the cabinet)
Rated Insulation Voltage (Ui)	400V	Circuit Breaker Terminal Section	Soft wire: ≤ 1x16mm ² Hard wire: ≤ 1x25mm ²
Inter-polar Dielectric Strength Test Voltage	2500V AC for 1 minute	Environmental Characteristics	
Uimp	4kV	Pollution Level	2
Overvoltage Type	III	Working Temperature	-25°C +60°C
Rated Frequency	50Hz	Storage Temperature	-40°C +70°C
Static Power	1VA	Relative Humidity	55°C - RH 95%
Power During Remote Control	20VA	Over/Under Voltage Characteristics(Island Protection)	
Leakage Making/Breaking Capability (I _{Δm})	I _{Δm} of related circuit breakers	Overvoltage Protection Value	≥295±10V
Rated Condition Residual Short Circuit Current (I _{Δc})	I _{Δc} of related circuit breakers	Overvoltage Recovery Value	≤270±10V
Handle Length	1 - 2	Overvoltage Reaction Time	10s
MCB Type	1P - 2P - 3P - 4P	Overvoltage Protection Value	Overvoltage Protection Value
RCCB Type	AC - A - A[IR] - A[S]	Overvoltage Protection Reaction Time	4.5s
Rated Current (In)	In of related circuit breakers		
Rated Residual Operating Current (I _{Δn})	I _{Δn} of related circuit breakers		

Undervoltage Protection Value		Undervoltage Protection Value	
Undervoltage Protection Reaction Time		Undervoltage Protection Reaction Time	
Voltage Loss Protection Value	≤45V	Voltage Loss Protection Time	4.5s
Functional Characteristics			
Self-recovery Over/Under Voltage	•	Signal that a Reclosing Operation is in Progress	•
Over/Under Voltage Indicator	•	Automatic/Manual Function	•
Anti-islanding	•	Internal Electrical Protection	PTC

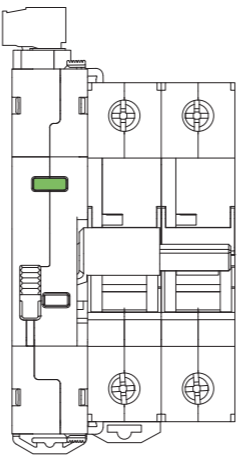
Warranty
Anyone who purchases this model of device enjoys a 24-month warranty period from the date of purchase. During the warranty period, if the quality of the device itself affects the normal use, you can enjoy free repair and replacement, and the condition of paid service as follows: the improper 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.



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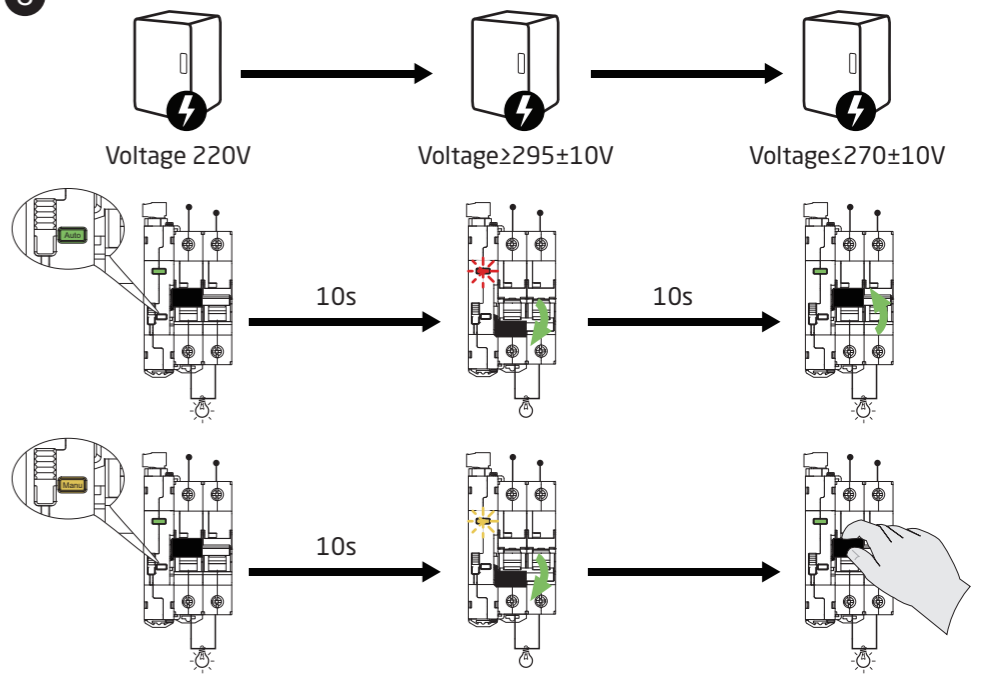


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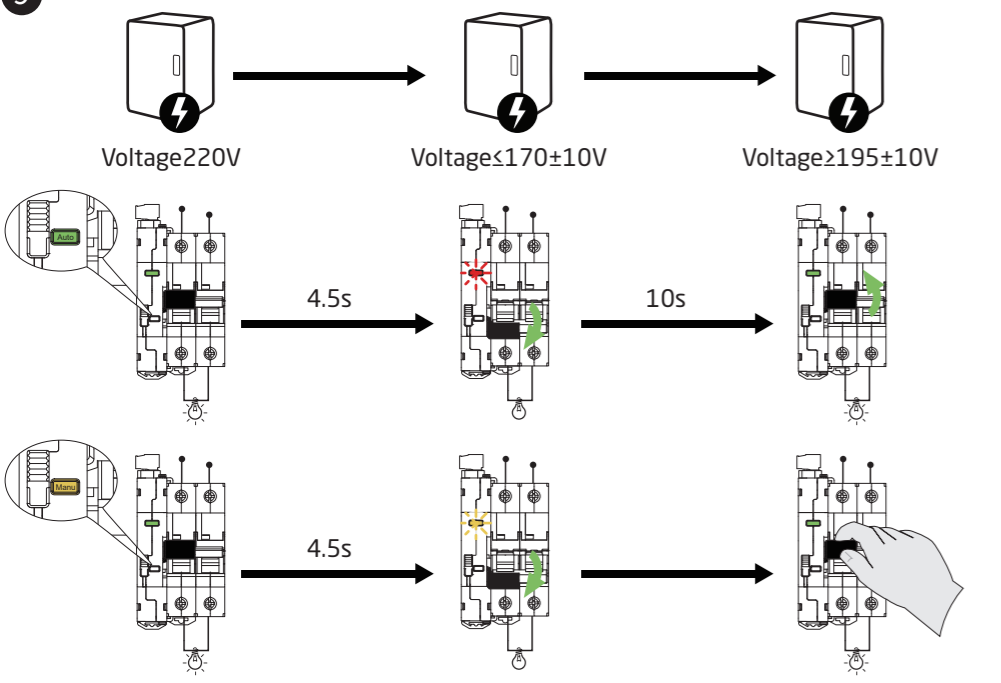
Indicator			
Mode	Status	Color	Remark
Auto	Open	Red light on	
	Overvoltage opening	Red light flashes(2s on and 2s off)	
	Undervoltage opening	Red light flashes(0.5s on and 2s off)	
	Voltage loss opening	Red light flashes(1s on and 1s off)	
Manu	Open	Yellow light on	
	Overvoltage opening	Yellow light flashes(2s on and 2s off)	
Auto/Manu	Undervoltage opening	Yellow light flashes(0.5s on and 2s off)	
	Normal power-on	Normal power-on	
Clock	Self-lock	Red/green light flashes alternately	
Device startup		Green light flashes	

8



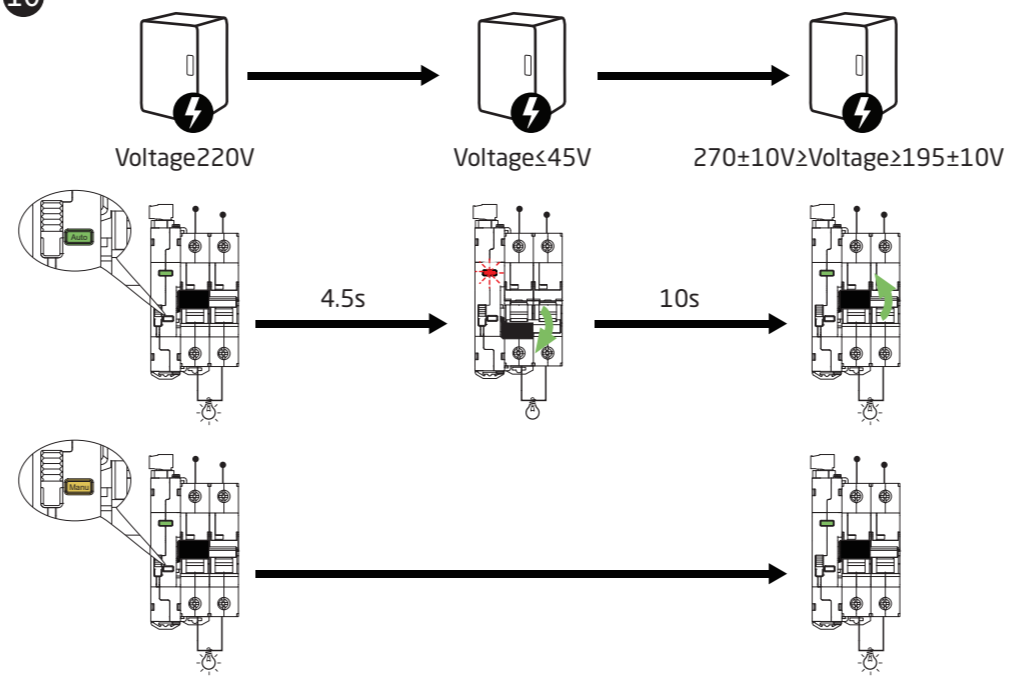
Note: When the voltage is overvoltage, the flashing frequency of the indicator is 2s on and 2s off.

9



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

10



Note: When the voltage is lost, the flashing frequency of the indicator is 1s on and 1s off.

11

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
Power off and voltage loss	$\leq 45V$	ON	OFF	ON	4.5s

