



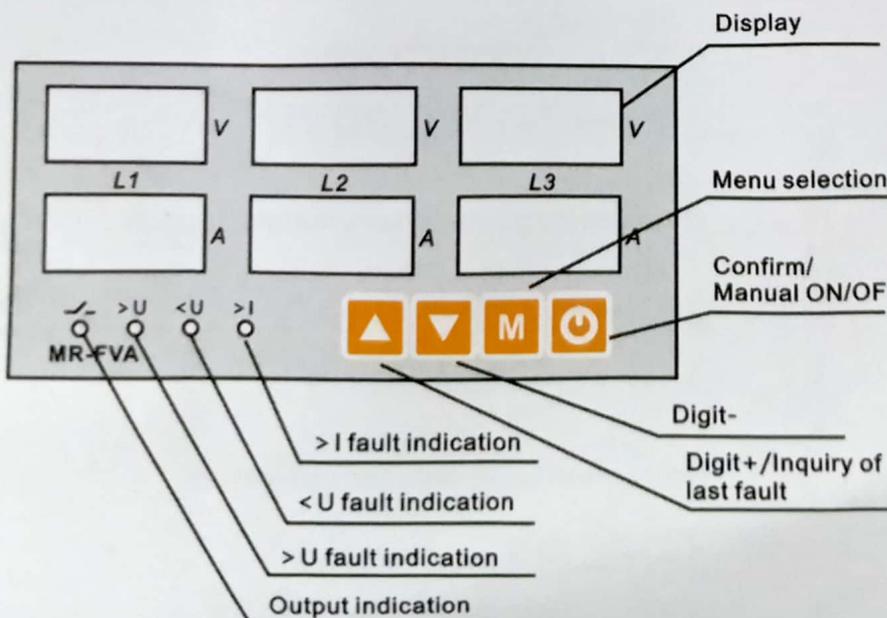
MORA[®]
Grand AES Series

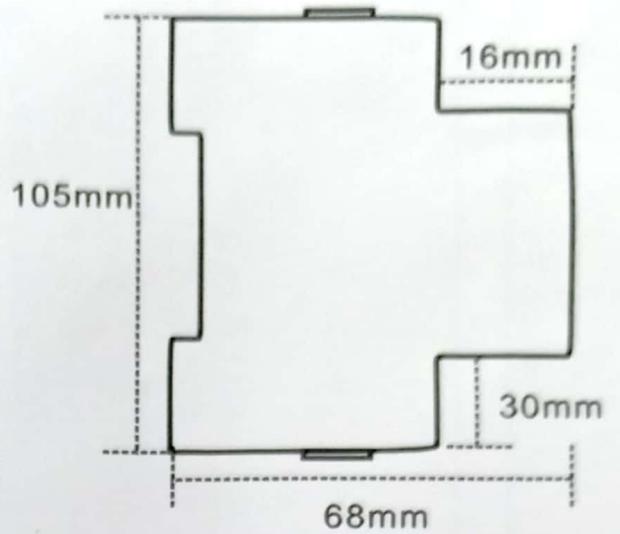
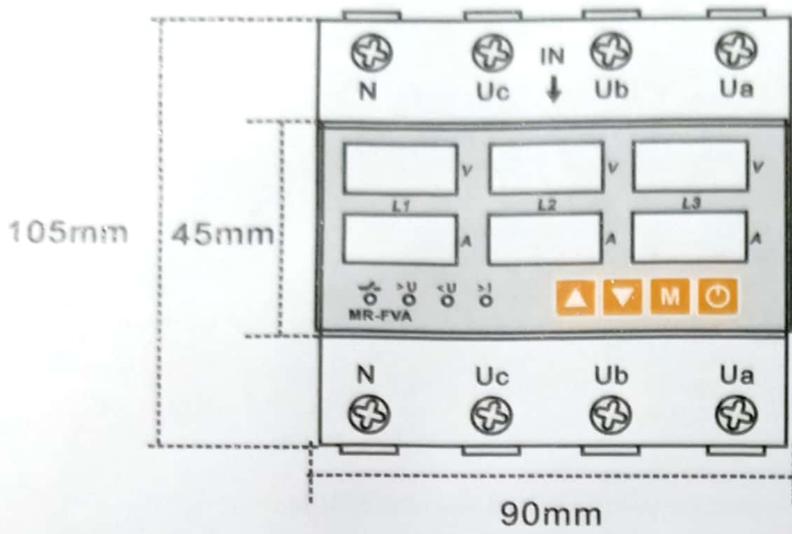
PRODUCT MANUAL

Three-phase Adjustable Voltage Protector, A new generation of home appliance protectors, suitable for houses, hotels, buildings, school dormitories, etc., to protect the electrical safety of appliances and other loads, to prevent damage to the load caused by too high or too low mains power.

● Technical data	Phase voltage mode $\gamma_{od}=1$	Line voltage mode $\gamma_{od}=0$
Rated supply voltage	AC 220V	AC 380V
Operation voltage range	AC 80~400V(three phase)	AC140~700V(three phase)
Rated frequency	50/60Hz	50/60Hz
Electric current(>A)setting range	1~40A/63A/80A/100A	1~40A/63A/80A/100A
Overvoltage ($e>U$) setting range	230~300V	390~500V
Undervoltage ($e<U$) setting range	210~140V	370~260V
Rated current	40A/63A/80A/100A	40A/63A/80A/100A
>U and <U trip delay	1~30S	1~30S
Reset/start delay	1~400S	1~400S
Voltage measurement accuracy	2%	2%
Rated insulation voltage	400V	700V
Output contact	3NO	3NO
Electrical life	10^5	10^5
Mechanical life	10^6	10^6
Protection degree	Ip20	Ip20
Pollution degree	3	3
Altitude	$\leq 2000m$	$\leq 2000m$
Operating temperature	-50°C~55°C	-50°C~55°C
Humidity	$\leq 50\%$ at 40°C (without condensation)	$\leq 50\%$ at 40°C (without condensation)
Storage temperature	-30°C~70°C	-30°C~70°C

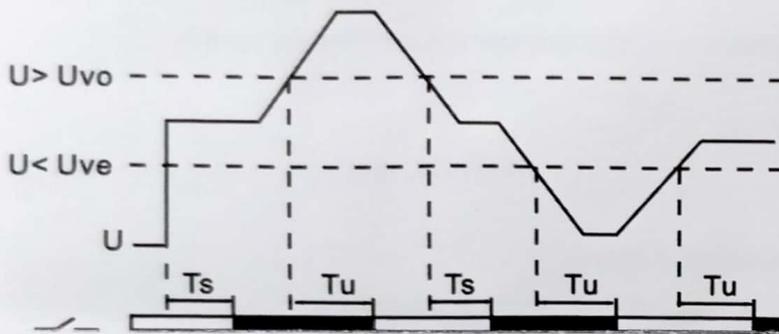
Note: Mode switching can be done under the main menu.





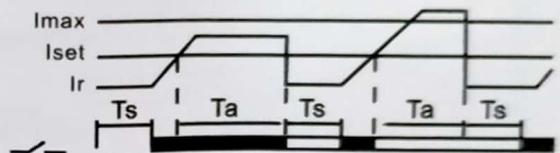
● Function diagrams

Overvoltage and undervoltage



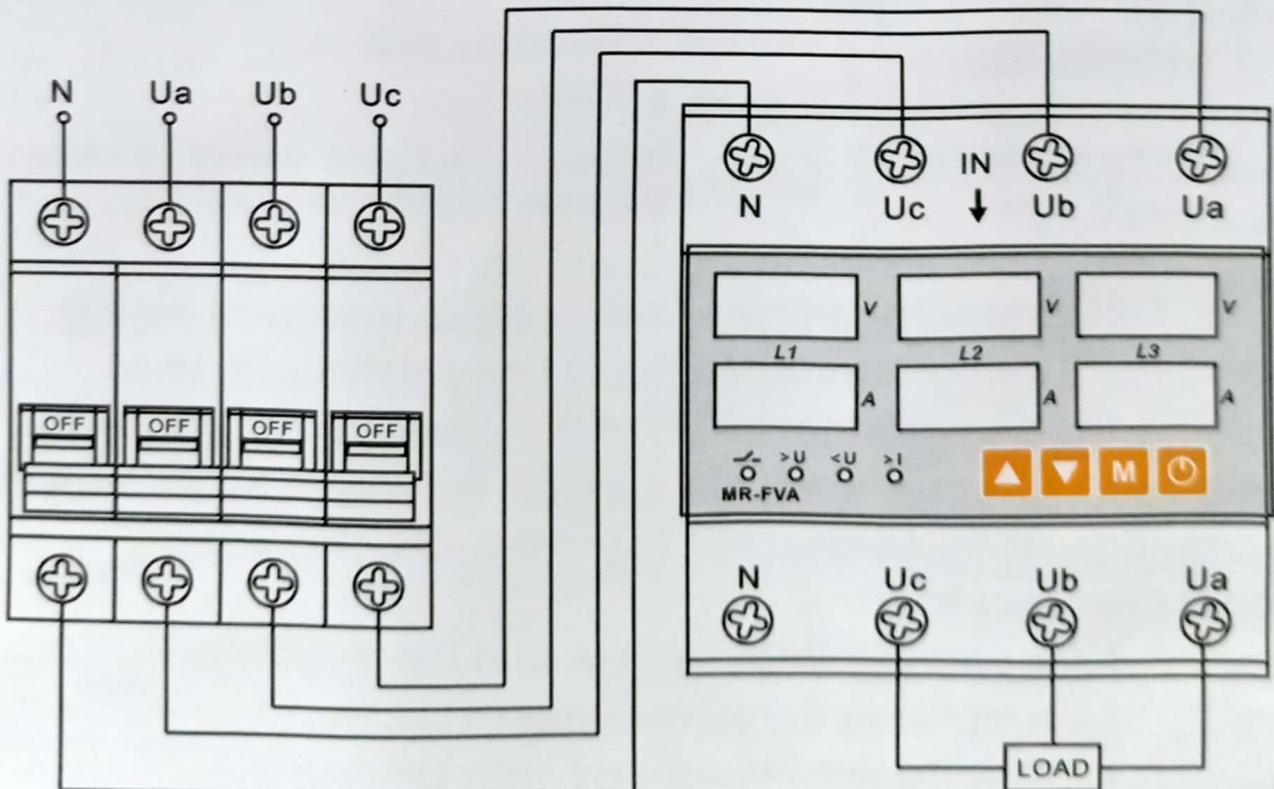
Ts: Start delay/Power on delay
Tu: Power off delay

Overcurrent



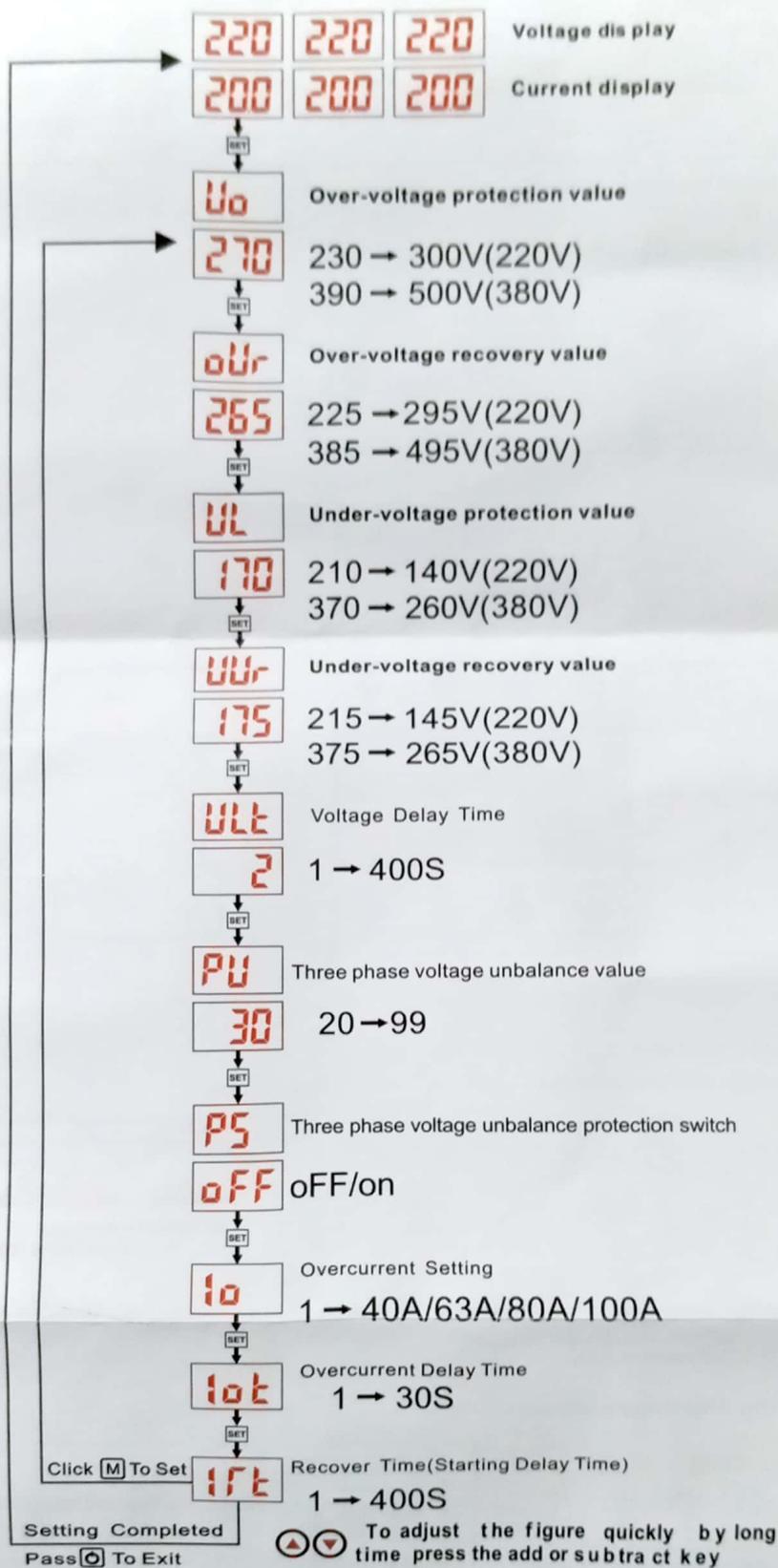
Ts: Reset/ start delay
Ta: Overcurrent faults trip delay

● Wiring and Shape dimensions



● Default setting

Technical parameter	Setting range	Step	Factory setting
Power-on delay time	1~400S	1S	10S
Over-voltage protection value	230~300V/390~500V	1V	270V/430V
Over-voltage recovery value	225~295V/385~495V	1V	265V/425V
Voltage Power Off Time	1S-400S	1S	2S
Under-voltage protection value	210~140V/370~260V	1V	170V/330V
Under-voltage recovery value	215~145V/375~265V	1V	175V/335V
Three phase voltage unbalance value	20~99V	1V	20V
Phase sequence protection switch	oFF/on		oFF
Over-current protection value	1~40A/63A/80A/100A	0.1A	30A
Over-current protection action time	0.1~30S	0.1S	1S
Recover Time (Starting Delay Time)	1S-400S	1S	2S



Note: This protector adopts three-phase four-wire wiring, which must be connected to the N line (ie the zero line), which is the common terminal of the power supply of the protector. Protector does not support three-phase three-wire wiring, it must be connected to the N line (zero line).

Panel description:

- L1 = voltage between UA and UB 380V
- L2 = Voltage between UB and UC 380V
- L3 = Voltage between UC and UA 380V