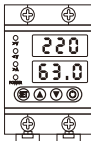
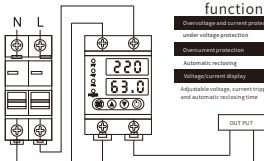


Manufacturing manual for double display overvoltage/undervoltage/overcurrent reclosure

Model AVP-100/80/63/50/40/32/25/20/16



Wiring diagram



function

Overvoltage and current protection

under voltage protection

Overcurrent protection

Automatic reclosing

Voltage/current display

Adjustable voltage, current tripping,
and automatic reclosing time

Function

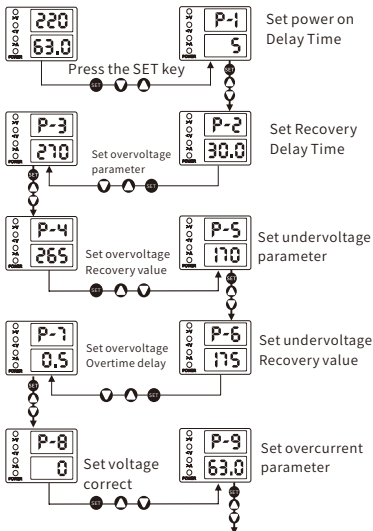
★ Overvoltage protection/shut down	
★ Undervoltage protection/shut down	
★ Overcurrent protection/shut down	
★ Continuous overcurrent counting/shut down	
★ Wide voltage	Overvoltage 130-300V, under voltage 80-210V. It is always under protection upon incorrect setting, and fault lamp is on
★ Rapid protection against power failure	Abnormal ignition of front-end power grid, power failure, and other protector actions
★ Manual/automatic recovery	After manual protection turns off the output, it must be turned on manually
★ Knife function	When the protection function is turned off, the relay remains as it is and no longer acts, but the switch button is still active
★ Multi-mode display	Voltage, current, frequency, visual power, etc. are switched according to mode
★ Setup lock	Prevent the parameters from being modified by mistake, which can not achieve the purpose of protection
★ DC mode	When DC is used, current/power is invalid
★ Energy saving mode	Reduce the brightness of digital tube to save energy when the protector is not active
★ Embedded RTOS	The system performance and stability are improved and the system has high maintainability

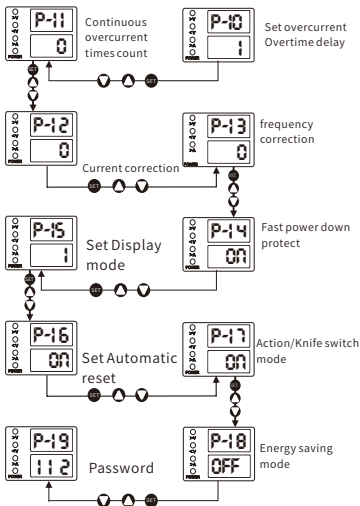
Parameter

★ Effective voltage range	AC 80~300	V	1%	Can be calibrated and have higher accuracy
★ Effective current range	AC 0.1~63.0	A	1%	Can be calibrated and have higher accuracy
★ Frequency range	40~70	Hz	1%	Can be calibrated and have higher accuracy
★ Screen refresh rate	>1000	Hz		
★ Table update	0.1~1.0	S	1%	Screen value update
★ Table algorithm	Root mean square/RMS			This algorithm should be used in mains power grid
★ Overvoltage and undervoltage backlash	5	V		Fixed 5V backlash
★ Timer range	1~999	S	1%	User settings
★ Action time	0.1~10.0	S	1%	User settings
★ Effective DC range	DC 80~300	V	1%	

Setting

No.	Option code	Option	max	min	Default	Step	Unit	Description
P1	Pt	Power-on delay	999	1	5	1/10	S	
P2	rt	Recovery delay	999	1	30	1/10	S	
P3	oU	Overvoltage	300	130	270	1/10	V	Close overvoltage if greater than 300
P4	oUr	Overvoltage recovery value	295	125	265	1/10	V	Skip this setting when overvoltage is turned off
P5	uU	Undervoltage	210	80	170	1/10	V	Close undervoltage if below 80
P6	uUr	Undervoltage recovery value	215	85	175	1/10	V	Skip this setting when undervoltage is turned off
P7	Utt	Overvoltage action delay	10.0	0.1	0.5	0.1/1.0	S	
P8	UAd	Voltage correction	+10%	-10%	0	0.5%	V	Long press setting is not recommended
P9	oC	Overcurrent	63.0	1.0	63.0	0.1/1.0	A	Close overcurrent if greater than 63.0
P10	Ctt	Overflow as delay	10.0	0.1	1.0	0.1/1.0	S	
P11	CC	Continuous overcurrent counting	20	0	0	1	Times	0: Turn off counting
P12	CAd	Current correction	+10%	-10%	0	0.5%	A	Long press setting is not recommended
P13	FAd	Frequency correction	+2.5%	-2.5%	0	0.1%	Hz	Modifying this value will affect the accuracy of the timer
P14	FPd	Rapid power failure protection	on	off	on		MS	
P15	dS	Display mode	3	1	1	1		1: Standards 2: Manual switch 3: Automatic switch
P16	Ar	Automatic reset	on	off	on			on: Self-recovery off: Manual recovery
P17	Act	Action/knife mode	on	off	on			on: Protector working properly off: knife mode
P18	EC	Energy saving mode	on	off	off			on: Open off: Close
P19	Lac	Setup lock password	999	000	112	1/10		When this value is not 112, you can only view the parameter and cannot set it





Other Operation

Function	Description
Reset	In shutdown mode, press the power key for more than 5S to reset all parameters and start up
Toggle display	Display Mode 2: $\leftrightarrow$ -Key Switch
	Display Mode 3: $\leftrightarrow$ -Key Switch
Turn on/off	Short press the power key for operation
Quick voltage adjustment	In the boot state, click the ' $\uparrow$ ' key quickly
Quick current adjustment	In the boot state, click the ' $\downarrow$ ' key quickly
Setting error	When the overvoltage is set below the undervoltage, the protector will always be in the protection state
Reference of calibration table	When correcting the voltage/current, the adjustment must be made with reference to the multimeter with root mean square (RMS)
Modify the setup lock password	Reservation

Power on

Function	Description
Power-on self-test	Turn on the digital tube to display 888, and the LED indicator lights up for 1 second
Status display	The first bit of the upper digital tube displays the overvoltage protection status 'y': turn on the overvoltage protection '-': turn off the overvoltage protection
	The second bit of the upper digital tube shows the undervoltage protection status 'y': turn on undervoltage protection '-': turn off undervoltage protection
	The third bit of the upper digital tube displays the overcurrent protection status 'y': turn on the overcurrent protection '-': turn off the overcurrent protection
	The lower digital tube displays the frequency of the current power supply 50H/60H/dC
	Knife function, skipping status display
	Automatic reset off, skipping status display
	The status display is constrained by the power-on delay which is greater than 3 seconds, and then the remaining power-on time is displayed