

Steady voltage, safer appliances.

Automatic over/under-voltage and overload protector · Model AS-OVP-80A · White model · Version 1.0



80A

- Over-voltage protection
- Under-voltage protection
- Over-current protection
- Automatic reconnect
- Live voltage and current

Single phase, 230 V AC. DIN-rail mounting.

First time? Read the safety notes (page 3), have the unit wired as shown on page 5, then check the settings A1 to A15 (page 7).

For the white AS-OVP-80A unit, SKU 1xOVER-VOL-80A. Installation and settings must be done by a qualified electrician with the supply switched off.

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SKU 1xOVER-VOL-80A · Model AS-OVP-80A · White model · Version 1.0

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01 · SAFETY

Before you start

This unit switches mains voltage. Read this page first.

Qualified electrician only

Installation, wiring and changing settings must be done by a qualified electrician. Switch off the supply at the main switch before touching the terminals.

Use with a circuit breaker

This unit does not provide short-circuit protection. Always use it together with a suitable miniature circuit breaker (MCB), as shown on page 5.

No isolation function

The unit does not isolate the circuit. Switch off the circuit breaker before any maintenance work on the circuit.

Neutral must be connected

Connect the neutral wire reliably. If the neutral is missing or loose, the unit may not work correctly.

Match the load

The load current must stay below the over-current setting (A10, maximum 80 A). Check that all terminal screws are tight before switching on.

Where to install

Inside a dry distribution board, protected from rain, snow, conductive dust and corrosive gas. Do not touch live parts after switching on.

Know the unit

Displays, indicators and keys on the front panel

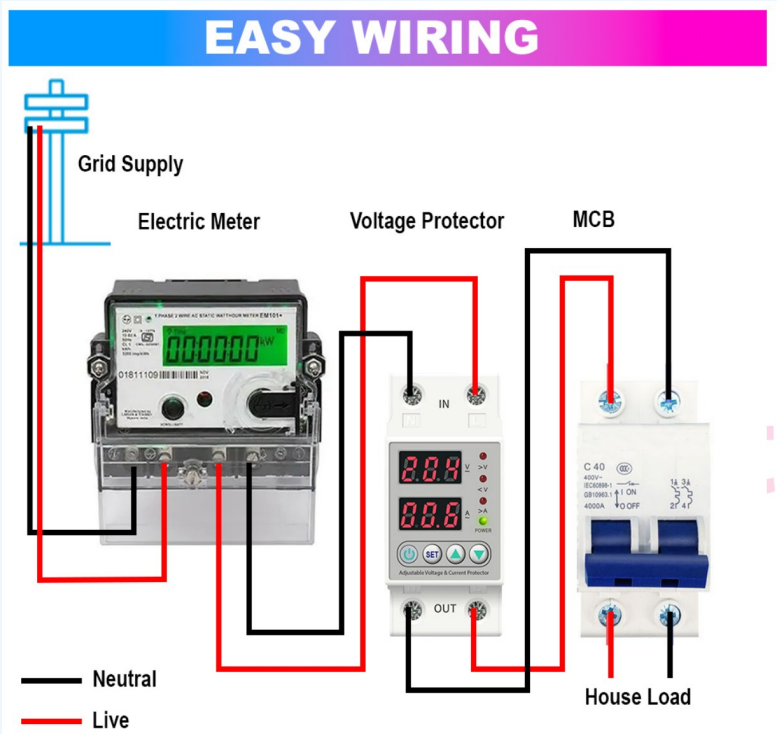


Part	What it does
Upper display	Live supply voltage (V)
Lower display	Load current (A)
>V LED	Over-voltage fault
<V LED	Under-voltage fault
>A LED	Over-current fault
POWER LED	Unit is powered
Power key	Manual switch: turns the output OFF / ON
SET	Opens the settings and steps through A1 to A15
▲ / ▼	Change the value shown

03 · INSTALLATION AND WIRING

Wire it up

Supply in at the top (IN), load out at the bottom (OUT)



Steps

1. Switch off the supply at the main switch.
2. Clip the unit onto a 35 mm DIN rail inside the distribution board.
3. Connect the incoming supply (from the meter) to the top **IN** terminals: neutral to **N**, live to **L**.
4. Connect the bottom **OUT** terminals to the MCB that feeds the house load.
5. Choose cable sizes for the load current under your local wiring rules and tighten all terminals firmly.
6. Switch on. The display shows the voltage; after the power-on delay (A1) the output switches on.

04 · OPERATION

How it protects

What the unit does when the supply or load goes outside your limits

Normal operation

The unit measures the supply voltage and load current all the time and shows both on the displays. While they stay within your settings, the output stays on.

Fault and automatic reconnect

If the voltage goes above A2 or below A6, or the current goes above A10, the output switches off after the action time (A5, A9 or A12). When the supply returns to the recovery value (A3 or A7) and the current is normal, the output switches on again after the recovery delay (A4, A8 or A11).

After an over-current trip

Switch off or remove the appliance that caused the overload and have the circuit checked. Repeated overload reconnections can damage the unit or the wiring.

Code	Meaning
HU	Supply voltage is higher than the over-voltage setting
LU	Supply voltage is lower than the under-voltage setting
HA	Load current is higher than the over-current setting
OFF	Output switched off with the power key (manual switch)

Last fault: hold ▲ for more than 6 seconds to show the most recent fault.

05 · SETTINGS

Settings A1 to A15

Press SET to step through the settings; use ▲ / ▼ to change the value shown

Code	Setting	Default	Range
A1	Power-on delay	10 s	1–500 s
A2	Over-voltage limit	270 V	230–300 V
A3	Over-voltage recovery value	265 V	225–295 V
A4	Over-voltage recovery delay	30 s	1–500 s
A5	Over-voltage action time	1 s	0.1–30 s
A6	Under-voltage limit	170 V	80–210 V
A7	Under-voltage recovery value	175 V	85–215 V
A8	Under-voltage recovery delay	30 s	1–500 s
A9	Under-voltage action time	1 s	0.1–30 s
A10	Over-current limit	40 A	1–80 A
A11	Over-current recovery delay	30 s	1–500 s
A12	Over-current action time	1 s	0.1–30 s
A13	Voltage display calibration (change only if advised by amiciKart support)	—	Factory set
A14	Repeated over-current faults	OFF	OFF, 1–20
A15	Current display calibration (change only if advised by amiciKart support)	—	Factory set

After A15, press SET to leave the settings. Step through the settings again to check that each value is as you want it.

06 · SPECIFICATIONS

Technical data

Model AS-OVP-80A · White model

Item	Value
Supply	Single phase, 230 V AC
Input voltage range	AC 80–300 V
Over-current setting	1–80 A (default 40 A)
Over-voltage setting	230–300 V (default 270 V)
Under-voltage setting	80–210 V (default 170 V)
Maximum sustained voltage	440 V
Power consumption	2 W or less
Electrical and mechanical life	100,000 cycles or more
Wiring	Supply in at the top, load out at the bottom
Mounting	35 mm DIN rail
Operating temperature	–20 to +55 °C (24-hour average up to +35 °C)
Altitude	Up to 2000 m
Humidity	Up to 50% at +40 °C, no condensation
Pollution degree	3

07 · TROUBLESHOOTING AND RESET

If something is not right

Switch off the supply before opening the distribution board

What you see	Possible cause	Next step
Display dark	No supply at the IN terminals, or neutral not connected	Have an electrician check N and L at the top terminals.
Display on, no output	Power-on delay (A1) still running, or output switched off (OFF)	Wait for A1 to finish; press the power key once.
HU shown	Supply voltage above A2	Wait for automatic reconnect; if frequent, have the supply checked.
LU shown	Supply voltage below A6	Wait for automatic reconnect; if frequent, have the supply checked.
HA shown	Load above the A10 setting	Remove the overloading appliance and have the circuit checked before reconnecting.
Frequent switching	Limits set close to the normal supply voltage	Have an electrician review A2 and A6.

Factory reset

Hold ▼ for more than 12 seconds. This returns all settings to the defaults shown on page 7.

Still unsure? Contact amiciKart support with a photo of the front panel and a short description.

Contact support

08 · CONFIGURATION RECORD

Your installed settings

Fill in after installation and keep with the distribution board

Code	Setting	Default	Set to
A1	Power-on delay	10 s	
A2	Over-voltage limit	270 V	
A3	Over-voltage recovery value	265 V	
A4	Over-voltage recovery delay	30 s	
A5	Over-voltage action time	1 s	
A6	Under-voltage limit	170 V	
A7	Under-voltage recovery value	175 V	
A8	Under-voltage recovery delay	30 s	
A9	Under-voltage action time	1 s	
A10	Over-current limit	40 A	
A11	Over-current recovery delay	30 s	
A12	Over-current action time	1 s	
A14	Repeated over-current faults	OFF	

Installed by

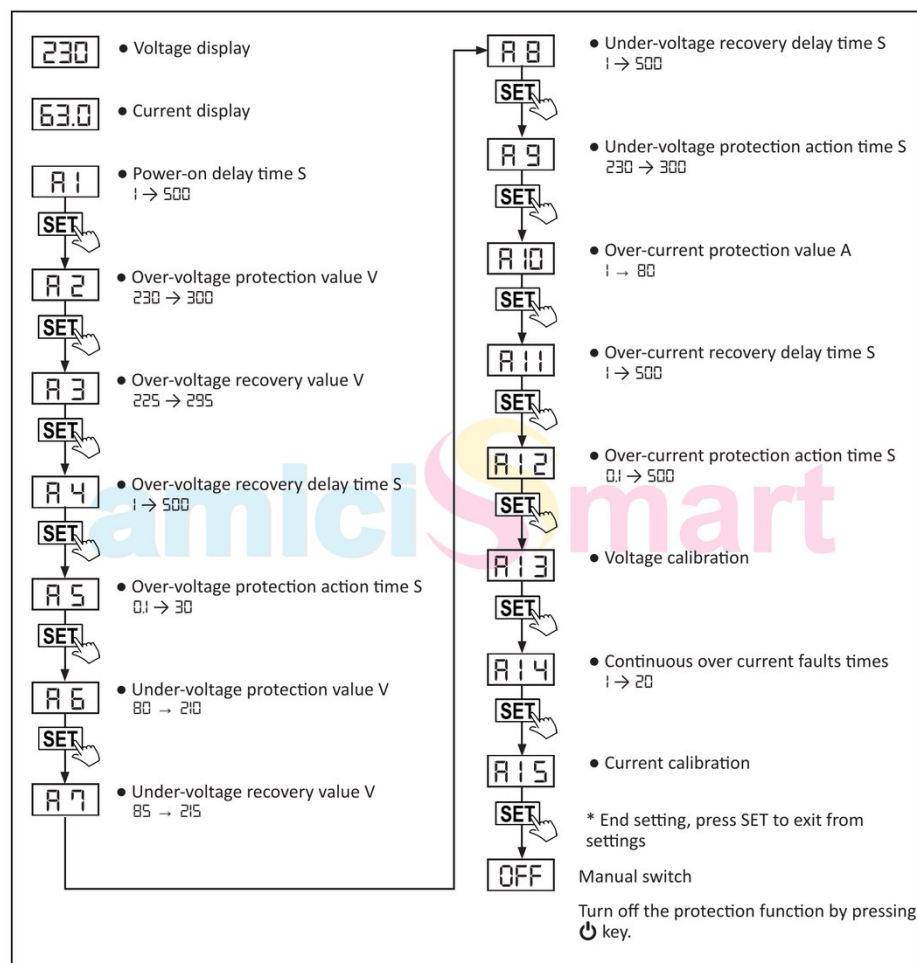
Date

Location / board

Original instruction sheet

Settings menu as printed on the original sheet

V. Product setting:



1. Change the setting value by pressing keys.
2. Press key for more than 6 seconds to query the latest fault.
3. Press key for more than 12 seconds to restore the factory settings.

Where this guide and the sheet differ, follow this guide: the action times A9 and A12 are 0.1–30 s (default 1 s).

Original instruction sheet (cont.)

Technical data as printed on the original sheet

VI. Main technical parameters

Function	Technical Parameter	Function	Technical Parameter
Input voltage	AC 80-300V	Power-on delay time	1-500s default 10s
Over-voltage protection value	230-300V default 270V	Over-voltage recovery value	225-295V default 265V
Under-voltage protection value	80-210V default 170V	Under-voltage recovery value	85-215V default 175V
Over-current protection value	80A:1-80A default 40A		
Recovery delay time	1-500s default 30s	Action time	0.1-30s default 1s
Continuous over current faults times		1-20 times default OFF	
Power consumption	≤2W	Electrical and mechanical life	≥100000cycles
Boundary dimension	86 x 38 x 68MM	Wiring	Over-entering down-out

VII. Usage

After being installed, the protector can be wired by user. Wherein, cross section of the wire shall be selected in accordance with standard applicable and based on rated current of the protector. Pay attention to the locations of incoming and outgoing wires and the phase sequence before powering on for use.

VIII. Notes

7.1 The user shall follow relevant procedures and pay attention to the following items when carrying out various operations or tests to ensure the correct and safe use of the product

7.2 The input and output shall be corrected connected based on the product marking. (Wherein, the load current shall be less than protective current of the product.)

7.3 Neutral line N cannot be improperly connected and shall be reliably wired; otherwise, the protector may not work normally.

7.4 Before powering on, please carefully check whether the wiring is correct, whether the load matches with protective current of the product and whether the binding screw is tightened; otherwise, the product may be damaged.

7.5 After powering on the product, do not touch any live part to avoid electric shock.

7.6 This product shall be combined with micro circuit breaker to play a role of short-circuit protection; otherwise, the product may not be able to realize load limit protection in case that input or load end of the product appears short circuit.

7.7 As the product has automatic reset function, after the product plays the role of protection and acts, it is necessary to remove the load (electric appliance) and check the circuit; otherwise, the product will be frequently connected and disconnected to the load. Finally, the product or its circuit may be burnt due to frequent overload connection and disconnection for long time.

7.8 Products that are not used for a long time shall be moisture-proof and dust-proof. Before use, they shall be debugged according to the above contents, and they can be put into operation only when they are normal.

7.9 This product has no isolation function. Please disconnect the front circuit breaker when maintenance circuit.

7.10 Maximum sustainable voltage of this device is 440V. In case of surge this product will destroy itself without damaging your appliances. Your appliances will safe.

Where this guide and the sheet differ, follow this guide: the action times A9 and A12 are 0.1–30 s (default 1 s).