

Walfront SVP-912

Walfront SVP-912 120V Adjustable Auto-Recovery Voltage Protector User Manual

Model: SVP-912

1. INTRODUCTION

The Walfront SVP-912 is an advanced adjustable voltage protector designed to safeguard your electrical appliances and systems from voltage fluctuations. It provides comprehensive protection against both over-voltage and under-voltage conditions, featuring an automatic recovery function to restore power once voltage returns to safe levels. This device also includes voltage display, adjustable protection and recovery values, and customizable action and delay times for enhanced performance and reliability.

This manual provides detailed instructions for the proper installation, operation, and maintenance of your Walfront SVP-912 voltage protector.



Figure 1: Walfront SVP-912 Adjustable Voltage Protector

2. SAFETY INFORMATION

- **Professional Installation Recommended:** Installation should be performed by a qualified electrician to ensure compliance with local electrical codes and safety standards.
- **Disconnect Power:** Always disconnect the main power supply before installing, wiring, or performing any maintenance on the device to prevent electric shock.
- **Proper Wiring:** Ensure all wiring connections are secure and correctly matched (Line to Line, Neutral to Neutral) as indicated in the wiring diagram. Loose connections can cause overheating or malfunction.
- **Operating Environment:** Do not expose the device to water, excessive humidity, or extreme temperatures. Operate within specified environmental conditions.
- **Load Capacity:** Do not exceed the maximum current rating of 80A. Overloading can damage the device and connected equipment.
- **Ventilation:** Ensure adequate ventilation around the device to prevent overheating.

3. PRODUCT COMPONENTS AND DISPLAY

The Walfront SVP-912 features a clear digital display and intuitive control buttons for easy configuration

and monitoring.

Front Panel

- **Digital Display:** Shows real-time voltage and parameter settings.
- **SET Button:** Used to enter the parameter setting mode and confirm selections.
- **Up (▲) Button:** Used to increase parameter values.
- **Down (▼) Button:** Used to decrease parameter values.
- **Over(V) Indicator:** Illuminates when an over-voltage condition is detected.
- **Under(V) Indicator:** Illuminates when an under-voltage condition is detected.

Terminals

- **IN (L, N):** Input terminals for connecting the incoming power supply (Line and Neutral).
- **OUT (L, N):** Output terminals for connecting to the protected load (Line and Neutral).

Voltage Protector Relay

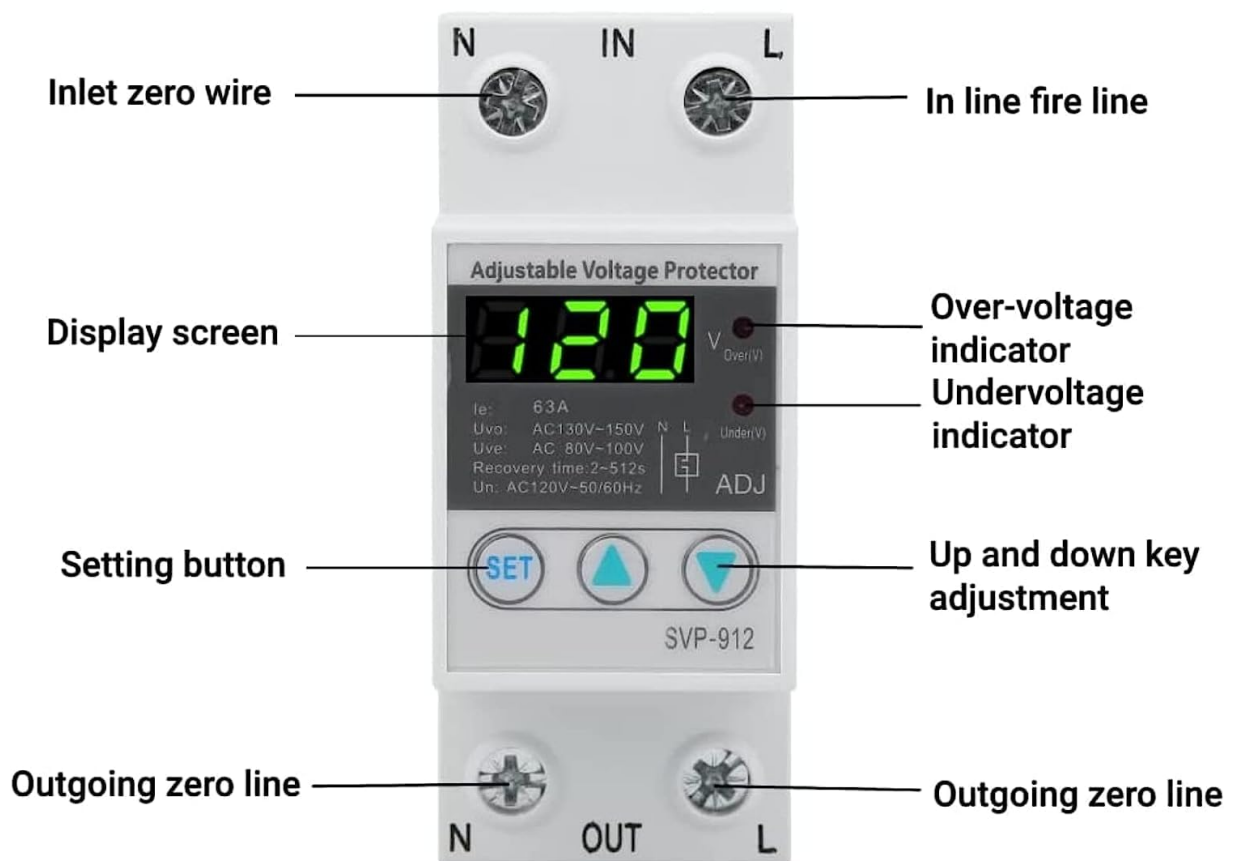


Figure 2: Front Panel Components and Labels

N

IN

L

Adjustable Voltage Protector

120

V
Over(V)

Ie: 80A
Uvo: AC130V~150V
Uve: AC 80V~100V
Recovery time: 2~512s
Un: AC120V~50/60Hz



Under(V)

ADJ

SET



SVP-912

N

OUT

L

4. SETUP AND INSTALLATION

4.1 Mounting

The Walfront SVP-912 is designed for DIN rail mounting. Securely attach the device to a standard DIN rail within an electrical panel or enclosure.

4.2 Wiring Diagram

Follow the wiring diagram below carefully. Ensure all connections are tight and correct to prevent electrical hazards and ensure proper device function.

- Connect the incoming Line (L) and Neutral (N) wires from your power source to the **IN** terminals of the protector.
- Connect the Line (L) and Neutral (N) wires leading to your protected load (appliances, circuit) to the **OUT** terminals of the protector.
- It is recommended to install a circuit breaker or power switch upstream of the voltage protector for additional safety and ease of maintenance.

Wiring Diagram

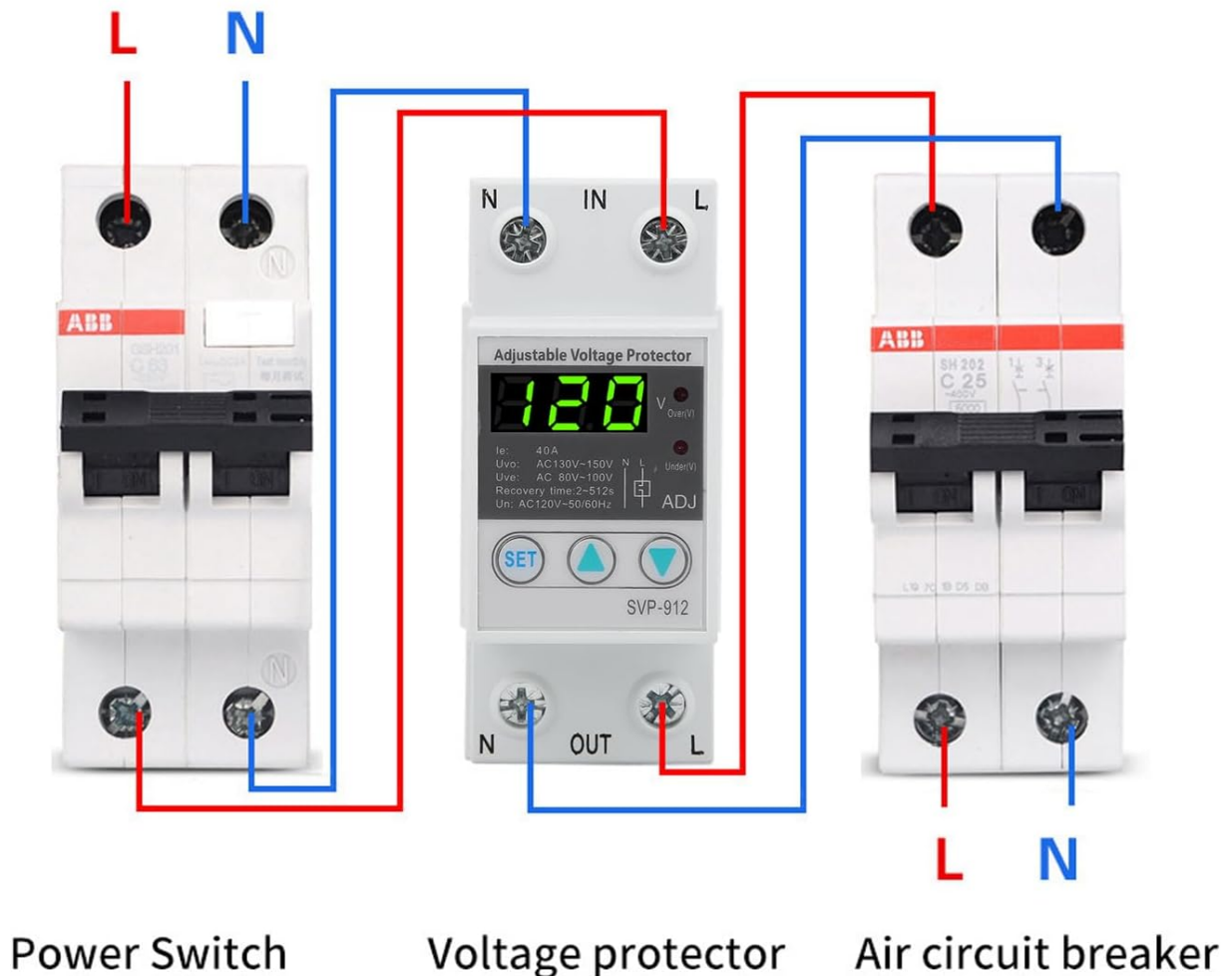


Figure 4: Typical Wiring Diagram

5. OPERATING INSTRUCTIONS

5.1 Initial Power-On

After successful installation and wiring, turn on the main power supply. The device's digital display will illuminate and show the current real-time voltage of your electrical system.

5.2 Adjusting Parameters

The Walfront SVP-912 allows you to customize various protection parameters. To enter the setting mode:

1. Press and hold the **SET** button for approximately 3-5 seconds until the display starts flashing, indicating you are in setting mode.
2. Use the **Up (▲)** and **Down (▼)** buttons to adjust the displayed parameter value.
3. Press the **SET** button briefly to confirm the current setting and advance to the next parameter.
4. Repeat steps 2 and 3 for all parameters you wish to adjust.
5. After setting the last parameter, press **SET** again to exit the setting mode. The device will save your settings and return to displaying the real-time voltage.

Adjustable parameters include:

- **Uvo (Over-voltage protection value):** The voltage threshold at which the device will trip due to over-voltage.
- **Uve (Over-voltage recovery value):** The voltage level at which the device will automatically restore power after an over-voltage event.
- **t-ov (Over-voltage action time):** The delay before the device trips after detecting an over-voltage condition.
- **Uu (Under-voltage protection value):** The voltage threshold at which the device will trip due to under-voltage.
- **Uue (Under-voltage recovery value):** The voltage level at which the device will automatically restore power after an under-voltage event.
- **t-uv (Under-voltage action time):** The delay before the device trips after detecting an under-voltage condition.
- **t-rd (Fault recovery delay time):** The delay before the device attempts to restore power after any fault condition has cleared.
- **t-pd (Power-on delay time):** The delay before the device supplies power to the load after initial power-on or manual reset.

5.3 Fault Query and Factory Reset

- **Fault Query:** The device supports fault query functionality. Consult the full product manual (if provided separately) or contact customer support for specific instructions on how to access fault history.
- **Factory Reset:** The device has a factory reset function. To perform a factory reset, typically you would press and hold a combination of buttons or a specific button for an extended period. Refer to the full product manual or contact customer support for the exact procedure.

5.4 Product Demonstration Video

Your browser does not support the video tag.

Video 1: Demonstration of an adjustable voltage current protector, showing its physical features and basic handling. Note: This video may feature a model with different voltage/current ratings (AC230V 63A) than the SVP-912 (AC120V 80A), but illustrates general device interaction.

6. MAINTENANCE

- **Cleaning:** Periodically clean the exterior of the device with a soft, dry cloth. Do not use abrasive cleaners or solvents.
- **Inspection:** Regularly inspect the wiring connections for tightness and signs of wear or damage.
- **Environmental Conditions:** Ensure the operating environment remains within the specified temperature and humidity ranges.
- **Firmware Updates:** Check the manufacturer's website for any available firmware updates, if applicable.

7. TROUBLESHOOTING

If you encounter issues with your Walfront SVP-912, refer to the following troubleshooting guide:

Problem	Possible Cause	Solution
Device does not power on or display is blank.	No power supply; incorrect wiring; internal fault.	Check main power supply. Verify wiring connections (IN L/N). If problem persists, contact support.
Incorrect voltage readings or device does not function correctly with 60Hz systems.	Frequency incompatibility; calibration issue.	Ensure the device is rated for your local frequency (50Hz/60Hz). If readings are consistently off, contact customer support for potential calibration or replacement.
Buttons are unresponsive or one button does not work.	Button malfunction; internal defect.	Attempt a factory reset (refer to section 5.3 or contact support). If buttons remain unresponsive, the device may be faulty and require replacement.
Device trips frequently without apparent voltage issues.	Protection parameters set too narrowly; unstable power supply; faulty device.	Review and adjust over-voltage and under-voltage protection/recovery values (Uvo, Uve, Uu, Uue) to appropriate ranges for your region. Monitor your power supply for hidden fluctuations. If problem persists, contact support.

8. SPECIFICATIONS

- **Model:** SVP-912
- **Rated Voltage:** 120V AC
- **Rated Current:** 80A
- **Operating Frequency:** 50/60Hz
- **Over-voltage Protection Range:** Adjustable (e.g., AC130V-150V N/L as seen on display)
- **Under-voltage Protection Range:** Adjustable (e.g., AC80V-100V as seen on display)
- **Recovery Delay Time:** Adjustable (e.g., 2-512s as seen on display)
- **Item Weight:** 170 Grams
- **Dimensions (Approximate):** 85mm (Height) x 48mm (Width) x 65mm (Depth)
- **ASIN:** B08L9FMV92

- **Product Availability:** November 19, 2020 (on Amazon.com.mx)



Figure 5: Product Dimensions

9. WARRANTY INFORMATION

Walfront products are manufactured to high-quality standards. This product comes with a standard manufacturer's warranty against defects in materials and workmanship. The specific terms and duration of the warranty may vary by region and retailer. Please retain your proof of purchase for warranty claims. For detailed warranty information, refer to the documentation included with your purchase or contact Walfront customer support.

10. CUSTOMER SUPPORT

If you have any questions, require technical assistance, or need to report an issue with your Walfront SVP-912 voltage protector, please contact Walfront customer support. Contact information can typically be found on the product packaging, the retailer's website, or the official Walfront brand store.

When contacting support, please have your product model (SVP-912) and ASIN (B08L9FMV92) readily available.

