Fafeicy SVP-916

SVP-916 Adjustable Over and Under Voltage Protector User Manual

Model: SVP-916

Brand: Fafeicy

1. Introduction

The Fafeicy SVP-916 is an advanced adjustable over and under voltage protector designed to safeguard electrical equipment from voltage fluctuations. This device provides reliable protection by automatically disconnecting power when voltage exceeds or falls below user-defined thresholds, and reconnecting it safely after a delay once voltage returns to normal. It features a clear digital display for real-time voltage monitoring and user-friendly controls for setting protection parameters.



Figure 1: Front view of the SVP-916 Adjustable Voltage Protector, showing the digital display and control buttons.

2. Key Features

The SVP-916 offers a comprehensive set of features for robust voltage protection:

- **Adjustable Overvoltage Protection:** User-definable upper voltage limit to prevent damage from high voltage.
- **Adjustable Undervoltage Protection:** User-definable lower voltage limit to protect against low voltage conditions.
- **Adjustable Overvoltage and Undervoltage Recovery Values:** Set specific voltage levels at which the device will automatically restore power after a fault.
- **Adjustable Action Time:** Configure the delay before the protector acts upon detecting an over or undervoltage condition.
- **Fault Recovery Delay Time:** Adjustable delay before power is restored after a fault condition clears.
- **Power-on Delay Time:** Adjustable delay upon initial power-up to stabilize the system before connecting the load.
- **Voltage Display (Measurement):** Real-time digital display of the current voltage.
- **Reset Mode Selection:** Choose how the device resets after a protection event.

- **Fault Query Function:** Ability to review past fault events.
- **Factory Reset Function:** Option to restore all settings to their default values.



Figure 2: Visual representation of the key adjustable features of the SVP-916.

3. Specifications

Parameter	Value
Model	SVP-916
Brand	Fafeicy
Rated Voltage Range	100-130VAC
Current Rating	40 Amps
Circuit Breaker Type	Standard
Mounting Type	Panel Mount (DIN Rail)
Number of Poles	1
Dimensions (Approx.)	85mm (H) x 35mm (W) x 65mm (D)



Figure 3: Detailed dimensions of the SVP-916 device.

4. Setup and Installation

Safety Warning: Installation should only be performed by qualified personnel. Ensure all power is disconnected before beginning installation to prevent electric shock.

4.1 Mounting

The SVP-916 is designed for panel mounting, typically on a standard DIN rail. Securely attach the device to the DIN rail in an appropriate electrical enclosure, ensuring adequate ventilation and clearance for wiring.

4.2 Wiring Diagram

Follow the wiring diagram carefully. Incorrect wiring can lead to device malfunction, damage to connected equipment, or electrical hazards.



Figure 4: Wiring diagram illustrating connections for the SVP-916 with a power switch and air circuit breaker.

1. Connect the incoming Line (L) and Neutral (N) wires from your power source to the "IN" terminals of the SVP-916.
2. Connect the outgoing Line (L) and Neutral (N) wires from the "OUT" terminals of the SVP-916 to your protected load.
3. It is recommended to install an appropriate circuit breaker upstream of the voltage protector for additional protection and isolation.

4. Ensure all connections are tight and secure.

5. Operating Instructions

The SVP-916 features a digital display and three control buttons: SET, Up (▲), and Down (▼).



Figure 5: Close-up of the SVP-916 front panel with digital display and control buttons.

5.1 Power-On and Display

Upon applying power, the device will perform a self-test and then display the current input voltage. If a power-on delay is configured, the output will remain off until the delay period expires.

5.2 Setting Parameters

To enter the parameter setting mode:

1. Press and hold the **SET** button for approximately 3 seconds until the display starts flashing, indicating entry into setting mode.
2. Use the **Up (▲)** and **Down (▼)** buttons to navigate through different parameters (e.g., overvoltage limit, undervoltage limit, recovery values, delay times).
3. Once a parameter is selected, press **SET** briefly to enter its adjustment mode. The value will flash.
4. Use the **Up (▲)** and **Down (▼)** buttons to adjust the value.
5. Press **SET** again to confirm the new value and move to the next parameter, or wait for a few seconds for the device to automatically save and exit the setting mode.

Refer to the detailed parameter list in the full product manual for specific ranges and default values for each setting.

5.3 Fault Query

To query past fault events, briefly press the **Up (▲)** button when the device is in normal operating mode. The display will cycle through recent fault codes or events. Press **Up (▲)** or **Down (▼)** to view more details if available.

5.4 Factory Reset

To restore the device to its factory default settings:

1. Ensure the device is powered on.
2. Press and hold both the **Up (▲)** and **Down (▼)** buttons simultaneously for approximately 5 seconds until the display indicates a reset (e.g., "rSt" or similar).
3. Release the buttons. The device will restart with default settings.

6. Maintenance

The SVP-916 is designed for minimal maintenance. However, regular checks can ensure optimal performance and longevity:

- **Cleaning:** Periodically clean the exterior of the device with a soft, dry cloth. Do not use abrasive cleaners or solvents.
- **Connection Inspection:** Annually inspect all wiring connections to ensure they remain tight and free from corrosion. Loose connections can lead to overheating or intermittent operation.
- **Environmental Conditions:** Ensure the device operates within its specified temperature and humidity ranges.

Avoid exposure to excessive dust or moisture.

7. Troubleshooting

If you encounter issues with your SVP-916, consider the following common troubleshooting steps:

- **No Display/No Power:**
  - Check the main power supply to the device.
  - Verify all input wiring connections are secure.
  - Ensure the upstream circuit breaker is not tripped.
- **Device Trips Frequently:**
  - Check the current input voltage using the device's display. It may be consistently outside your set overvoltage or undervoltage limits.
  - Review your set overvoltage and undervoltage thresholds. They might be too narrow for your power supply conditions.
  - Check the action time and recovery delay settings.
  - Use the fault query function to identify the type of fault causing the trips.
- **Output Not Restoring After Fault:**
  - Ensure the voltage has returned to within the acceptable recovery range.
  - Check the fault recovery delay time setting; the device will wait for this period before restoring power.
  - Verify the reset mode selection.
- **Incorrect Voltage Reading:**
  - Compare the device's reading with a calibrated multimeter. If there's a significant discrepancy, the device may require service.

If problems persist after following these steps, contact customer support.

8. Warranty Information

Specific warranty terms and conditions for the Fafeicy SVP-916 are typically provided with your purchase documentation or can be found on the official Fafeicy website. Please retain your proof of purchase for warranty claims. The warranty generally covers defects in materials and workmanship under normal use.

9. Customer Support

For technical assistance, troubleshooting beyond this manual, or warranty inquiries, please contact your retailer or the manufacturer directly. When contacting support, please have your product model (SVP-916) and purchase details ready.

You may find additional resources and contact information on the official Fafeicy website.