SINOTIMER SVP719-1-63A

SINOTIMER SVP719 120VAC 63A Adjustable Voltage Surge Protector Relay User Manual

1. Product Overview

The SINOTIMER SVP719 is a 3-in-1 adjustable voltage surge protector relay designed for single-phase 120VAC systems. It integrates over-voltage protection, under-voltage protection, current limiting, and energy metering functions. This device features three digital LED displays for real-time monitoring of voltage, current, and energy consumption (kWh). It is equipped with automatic recovery capabilities, ensuring electrical equipment protection by cutting off power during abnormal conditions and automatically restoring it when parameters return to normal. The unit is designed for easy installation on a universal DIN 35mm standard guide rail.

Front view of the SINOTIMER SVP719 Adjustable Voltage Surge Protector.

Detailed diagram of the SVP719 showing displays and controls.

2. Safety Information

Please read all safety instructions carefully before installation and operation. Failure to follow these instructions may result in electric shock, fire, or serious injury.

- Installation should only be performed by qualified personnel.
- Ensure the main power supply is disconnected before any wiring or maintenance.
- Verify correct voltage and current ratings for your application.
- Do not operate the device in wet or damp conditions.
- Do not attempt to repair or modify the device. Contact qualified service personnel.

3. Setup and Installation

The SVP719 is designed for easy installation on a standard 35mm DIN rail. Follow the wiring diagram below for proper connection.

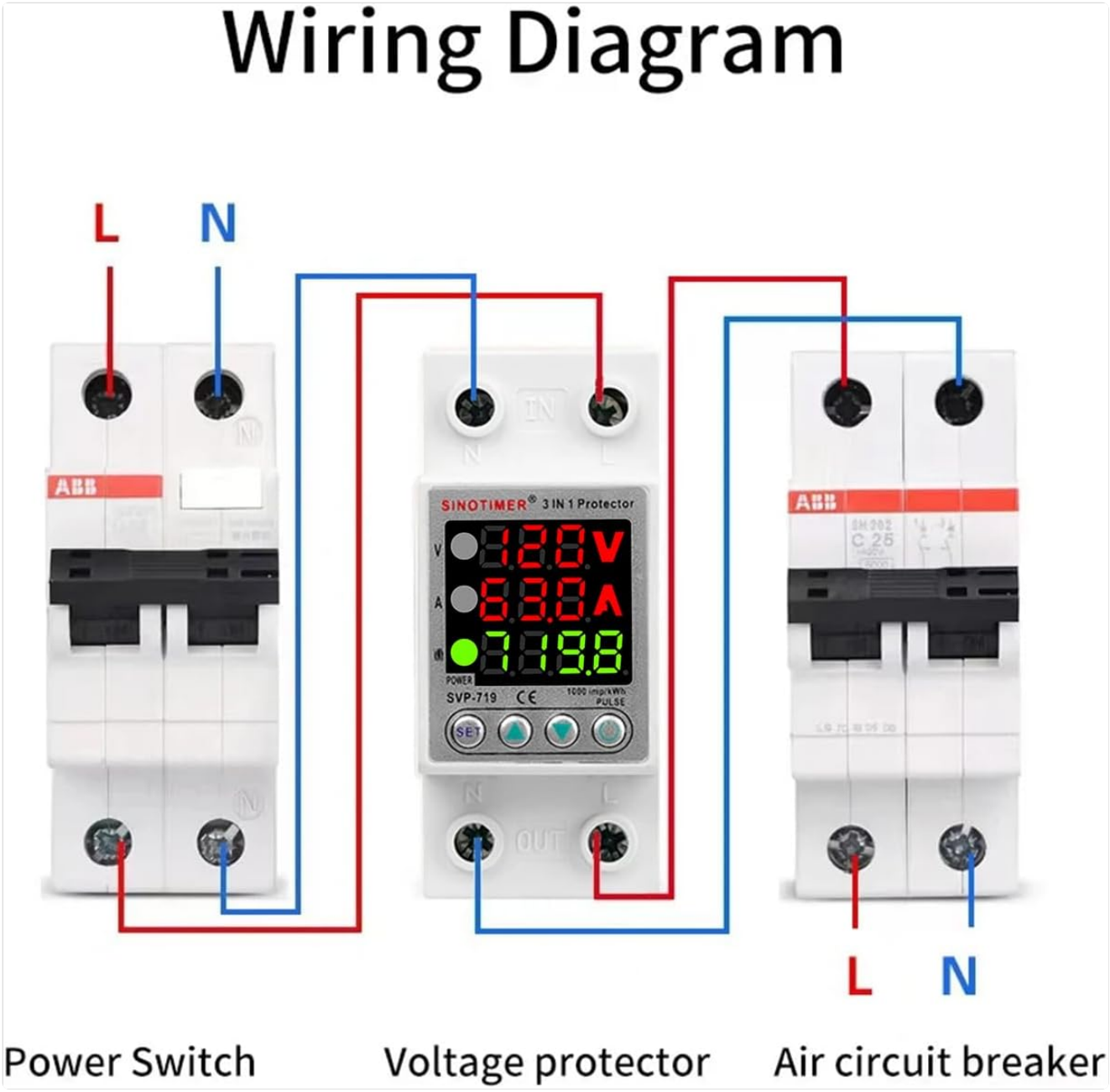
3.1 Mounting

Mount the device securely onto a 35mm DIN rail within an electrical enclosure.

3.2 Wiring Connections

Connect the device according to the provided wiring diagram. Ensure all connections are tight and secure to prevent loose contacts and potential hazards.

- **N Input:** Connect the neutral wire from the power source.
- **L Input:** Connect the live wire from the power source.
- **N Output:** Connect the neutral wire to the load.
- **L Output:** Connect the live wire to the load.



Wiring Diagram for SVP719.

4. Operating Instructions

The SVP719 features three LED displays and four control buttons for monitoring and configuration.

4.1 LED Displays

- **Voltage Display (V):** Shows the real-time voltage of the circuit.
- **Current Display (A):** Shows the real-time current flowing through the circuit.
- **Kilowatt-hour Display (kWh):** Shows the accumulated energy consumption.

4.2 Control Buttons

- **SET Button:** Used to enter the parameter setting mode and cycle through different adjustable parameters.
- **Up Arrow Button:** Used to increase the value of a selected parameter.
- **Down Arrow Button:** Used to decrease the value of a selected parameter.
- **ON/OFF Button:** Used to manually turn the power supply to the load ON or OFF.

4.3 Manual ON/OFF Operation

Press the **ON/OFF** button to manually switch the power to the connected load. The display will show 'OFF' when power is disconnected and 'ON' when connected.

4.4 Kilowatt-hour (kWh) Reset

To reset the accumulated Kilowatt-hour (kWh) reading, press the **Down Arrow** and **SET** buttons simultaneously. The kWh display will reset to 000.0.

Your browser does not support the video tag.

This video demonstrates the key features and operation of the SINOTIMER SVP719, including parameter adjustment, over-voltage protection, under-voltage protection, and manual ON/OFF control.

5. Parameter Settings

The SVP719 allows for adjustment of various protection parameters. All parameters are adjustable within specified ranges.

5.1 Entering Setting Mode

Press and hold the **SET** button for approximately 3 seconds to enter the parameter setting mode. The first adjustable parameter will appear on the display.

5.2 Cycling Through Parameters

Once in setting mode, short press the **SET** button to cycle through the parameters sequentially. Each press will display the next parameter.

5.3 Adjusting Parameter Values

When a desired parameter is displayed, use the **Up Arrow** and **Down Arrow** buttons to adjust its value. The display will flash while adjusting.

5.4 Saving Settings and Exiting

After adjusting a parameter, wait for approximately 5 seconds without pressing any button. The device will automatically save the new setting and exit the setting mode, returning to normal operation.

5.5 Adjustable Parameters

- **U> (Over-voltage Protection Value):** Sets the upper voltage limit. If the voltage exceeds this value, the protector will trip.
- **U< (Under-voltage Protection Value):** Sets the lower voltage limit. If the voltage drops below this value, the protector will trip.
- **I> (Over-current Protection Value):** Sets the maximum current limit. If the current exceeds this value, the protector will trip.
- **t-on (Fault Recovery Delay Time):** Sets the delay before the device automatically reconnects after a fault (over/under voltage, over-current) has cleared.
- **t-off (Reset/Start Delay):** Sets the delay for initial power-on or manual reset.
- **CAL-A (Current Calibration):** Allows for fine-tuning of the current measurement.
- **CAL-V (Voltage Calibration):** Allows for fine-tuning of the voltage measurement.
- **CLP (Clear kWh):** Resets the energy consumption counter.

6. Protection Features

The SVP719 provides robust protection for your electrical equipment.

6.1 Over-Voltage Protection

When the circuit voltage exceeds the set over-voltage protection value (U>), the protector will instantaneously cut off the power supply to prevent damage to connected devices. The display will indicate an over-voltage condition.

6.2 Under-Voltage Protection

If the circuit voltage drops below the set under-voltage protection value (U<), the protector will immediately disconnect the power. The display will indicate an under-voltage condition.

6.3 Over-Current Protection

Should the current drawn by the load exceed the set over-current protection value (I>), the device will trip and cut off power to protect the circuit and load.

6.4 Automatic Recovery

After a fault condition (over-voltage, under-voltage, or over-current) has been detected and the power supply is cut off, the SVP719 will continuously monitor the circuit. Once the voltage and current return to normal operating ranges for the duration of the set recovery delay time (t-on), the protector will automatically restore power to the load.

7. Maintenance

To ensure optimal performance and longevity of your SVP719, follow these simple maintenance guidelines:

- Regularly inspect the device for any signs of physical damage or loose connections.
- Keep the device clean and free from dust and debris. Use a dry, soft cloth for cleaning.
- Do not use abrasive cleaners or solvents.
- Ensure adequate ventilation around the device to prevent overheating.

8. Troubleshooting

If you encounter issues with your SVP719, refer to the following common problems and solutions:

Problem	Possible Cause	Solution
Device not powering on	No input power; incorrect wiring	Check main power supply; verify wiring connections as per diagram.
Power cuts off frequently	Voltage/current outside set limits; sensitive settings	Check actual voltage/current; adjust protection parameters (U>, U<, I>) to appropriate levels for your load.
Device does not recover automatically	Fault condition still present; recovery delay too long	Ensure voltage/current has returned to normal; check and adjust 't-on' recovery delay setting.
kWh reading is inaccurate	Calibration needed	Perform current and voltage calibration (CAL-A, CAL-V) if you have a reference meter.

9. Specifications

Technical specifications for the SINOTIMER SVP719-1-63A model:

Technical specifications printed on the device casing.

Feature	Specification
Brand	SINOTIMER
Model Number	SVP719-1-63A
Voltage	120 Volts AC
Maximum Current	63 Amps
Number of Outlets	1
Special Feature	Surge Protection, Over-voltage Protection, Under-voltage Protection, Current Limiting, Energy Metering
Power Plug Type	Type A - 2 pin (North American)
Installation	DIN 35mm Standard Guide Rail
UPC	607606586190

10. Warranty and Support

The SINOTIMER SVP719-1-63A comes with a**1 Year Manufacturer Warranty**.
For technical support, warranty claims, or further assistance, please contact SINOTIMER customer service through their official channels or the retailer from whom the product was purchased. Please have your product model number (SVP719-1-63A) and purchase details ready when contacting support.