JFUDJKLI SVP-916 10A

JFUDJKLI SVP-916 10A Automatic Voltage Relay Instruction Manual

Model: SVP-916 10A

Introduction

The JFUDJKLI SVP-916 10A Automatic Voltage Relay is designed to protect electrical appliances from damage caused by overvoltage, undervoltage, and overcurrent conditions. This device features a dual digital display for real-time voltage and current monitoring, along with adjustable protection parameters. Please read this manual carefully before installation and operation to ensure safe and correct use.

Safety Information

- Installation should only be performed by a qualified electrician to prevent electric shock or damage to the device.
- Ensure the power supply is disconnected before any installation or wiring work.
- Verify that the voltage and current ratings of your electrical system are compatible with this device.
- Do not exceed the maximum rated current of 10A for this specific model.
- Keep the device away from water, moisture, and extreme temperatures.
- Do not attempt to open or repair the device yourself. Refer to qualified personnel for service.

Product Overview

The SVP-916 features a compact design for DIN rail mounting and a clear interface for monitoring and setting protection parameters.

Components:

- **Dual Digital Display:** Shows real-time voltage (V) and current (A).
- **Indicator Lights:** OV (Overvoltage), UV (Undervoltage), OC (Overcurrent) with fast/slow indications.
- **Control Buttons:** SET, Up (▲), Down (▼) for parameter adjustment.

- **Input Terminals (IN):** For connecting the incoming power supply (N, L).
- **Output Terminals (OUT):** For connecting to the protected load (N, L).

Image: Front and side view of the JFUDJKLI SVP-916 Automatic Voltage Relay, illustrating its dimensions (85mm height, 36mm width, 65mm depth) and the layout of its dual digital display, control buttons, and input/output terminals. The display shows '88.8' for both voltage and current, indicating a test or default state. Indicator lights for OV, UV, and OC are visible, along with 'SET', '▲', and '▼' buttons. The model number 'SVP-916' is printed on the front.

Specifications

Model	SVP-916
Power Supply	230VAC 50/60Hz
Maximum Load Current	10A (adjustable 1-10A)
Overvoltage Protection Range	221V - 300V - OFF (Default: 280V)
Overvoltage Recovery Range	220V - 299V (Default: 250V)
Overvoltage Action Time	0.1s - 10s (Default: 0.1s)

Undervoltage Protection Range	219V - 150V - OFF (Default: 160V)
Undervoltage Recovery Range	151V - 220V (Default: 180V)
Undervoltage Action Time	0.1s - 10s (Default: 0.1s)
Overcurrent Adjustment Range	1A - 10A (Default: 10A for this model)
Overcurrent Action Time	0.1s - 512s (Default: 5.0s)
Recovery Delay Time	2s - 120s (Default: 60s)
Power-on Delay Time	2s - 10s (Default: 2s)
Power Consumption	<2W
Mechanical Life	>4000 times
Installation Method	35mm DIN Rail
Number of Poles	2 poles
Dimensions (L*W*H)	85mm * 36mm * 65mm
Weight	177 grams
Working Temperature	-25℃ ~ 40℃

Installation

The SVP-916 is designed for easy installation on a standard 35mm DIN rail.

1. **Power Disconnection:** Ensure the main power supply to the circuit is completely disconnected before beginning installation.
2. **Mounting:** Clip the device onto a 35mm DIN rail in your electrical panel.
3. **Wiring:**
    - Connect the incoming Neutral (N) and Live (L) wires from your power source to the **IN** terminals marked 'N' and 'L' respectively.
    - Connect the Neutral (N) and Live (L) wires leading to your protected appliance or circuit to the **OUT** terminals marked 'N' and 'L' respectively.
    - Ensure all connections are tight and secure to prevent loose contacts and overheating.
4. **Verification:** Double-check all wiring connections for correctness before restoring power.

Image: A close-up view of the JFUDJKLI SVP-916 Automatic Voltage Relay, highlighting the 'IN' and 'OUT' terminals with 'N' (Neutral) and 'L' (Live) markings. This image demonstrates the connection points for the power supply and the protected load, crucial for correct wiring during installation.

Operating Instructions

Power On and Initial Display:

After successful installation and power restoration, the device will undergo a power-on delay (default 2 seconds). During this time, the display may show a countdown or initial values. Once the delay completes, the device will display the current voltage (V) and current (A) readings.

Viewing and Setting Parameters:

To view or adjust protection parameters, follow these steps:

1. **Enter Setting Mode:** Press and hold the **SET** button for approximately 3-5 seconds until the display starts flashing, indicating you are in setting mode.
2. **Navigate Parameters:** Briefly press the **SET** button to cycle through different adjustable parameters (e.g., Overvoltage Protection Value, Undervoltage Protection Value, Overcurrent Adjustment Range, various delay times).
3. **Adjust Values:** While a parameter is flashing, use the **▲ (Up)** and **▼ (Down)** buttons to increase or

decrease its value.

4. **Save Settings:** After adjusting a parameter, briefly press **SET** to move to the next parameter. To save all changes and exit the setting mode, wait for approximately 5-10 seconds without pressing any button, and the device will automatically save the settings and return to normal operation. Alternatively, you can press and hold the **SET** button again to exit.

Default Settings:

The device comes with factory default settings. If you need to restore these defaults, consult the troubleshooting section or the manufacturer's support.

Maintenance

- **Regular Inspection:** Periodically check the device for any signs of physical damage, loose connections, or discoloration.
- **Cleaning:** Keep the device clean and free from dust. Use a dry, soft cloth for cleaning. Do not use liquid cleaners or solvents.
- **Environmental Conditions:** Ensure the operating environment remains within the specified temperature and humidity ranges.

Troubleshooting

Problem	Possible Cause	Solution
Device not powering on	No power supply; incorrect wiring; internal fault.	Check main power supply. Verify IN/OUT wiring. If problem persists, contact support.
Frequent tripping (OV, UV, OC)	Protection parameters set too sensitively; actual voltage/current outside normal range.	Adjust protection thresholds (OV, UV, OC) to appropriate levels for your system. Check your power supply for instability or your load for excessive current draw.
Display shows 'OFF' or error code	Protection activated; device in a fault state.	Identify which protection (OV, UV, OC) was triggered by checking indicator lights. Address the underlying issue (e.g., high voltage, low voltage, overcurrent). The device should automatically recover after the delay time once the condition normalizes.
Cannot adjust parameters	Not in setting mode; buttons malfunctioning.	Press and hold the SET button for 3-5 seconds to enter setting mode. If buttons are unresponsive, contact support.

Warranty & Support

This product is covered by a standard manufacturer's warranty against defects in materials and workmanship. For specific warranty terms, please refer to the product packaging or contact your retailer. For technical support, troubleshooting assistance, or service inquiries, please contact JFUDJKLI customer service through your purchase platform or the contact information provided with the product.