

## RST-15K-115

# Generic RST-15K-115 Switching Power Supply

## USER MANUAL

Model: RST-15K-115

### 1. Introduction

This manual provides essential information for the safe and efficient installation, operation, and maintenance of the Generic RST-15K-115 Switching Power Supply. Please read this manual thoroughly before using the product and retain it for future reference. This power supply is designed for industrial applications requiring a stable and high-power DC source.

### 2. Safety Information

**WARNING: Risk of Electric Shock. This unit operates at high voltages and currents. Improper installation or operation can result in serious injury or death. Only qualified personnel should install, operate, or service this equipment.**

- Always disconnect all power sources before performing any installation, maintenance, or troubleshooting.
- Ensure proper grounding of the unit according to local and national electrical codes.
- Do not operate the unit in wet or damp conditions.
- Verify input voltage and current ratings match the power supply specifications before connection.
- Do not block ventilation openings. Adequate airflow is crucial for proper operation and to prevent overheating.

### 3. Product Overview

The RST-15K-115 is a robust, enclosed switching power supply designed to deliver 15 kW of power. It features a single 115 VDC output at 130A, making it suitable for demanding industrial applications. The unit accepts a 3-phase AC input ranging from 196 VAC to 305 VAC.



This image displays the enclosed unit of the RST-15K-115 Switching Power Supply, showcasing its robust design suitable for industrial applications.

Key features include:

- Output Power: 15,000W (RST-15K)
- Input: 3-phase, 4-wire AC input with 196V to 305V wide range
- High Efficiency: Up to 95%
- Cooling: Water or forced-air cooling types selectable
- Mounting Style: Chassis

## 4. Setup and Installation

Installation of the RST-15K-115 power supply should only be performed by a qualified electrician or technician. Adhere to all local and national electrical codes.

1. **Mounting:** Securely mount the enclosed unit to a stable surface using appropriate hardware. Ensure adequate clearance around the unit for proper ventilation, especially for forced-air cooling models. If using water cooling, ensure the optional cooling plate (HS-684) is correctly installed for water-cooled models (RST-7K5L, if applicable).
2. **Input Wiring:** Connect the 3-phase, 4-wire AC input to the designated terminals. Double-check phase rotation and neutral connections. Ensure the input voltage is within the specified range of 196-305 VAC.
3. **Output Wiring:** Connect the DC output terminals to your load. Observe correct polarity (+ and -). Use appropriately sized cables capable of handling 130A.
4. **Grounding:** Connect the protective earth ground terminal to a reliable earth ground.
5. **Initial Check:** Before applying power, visually inspect all connections for tightness and correctness. Ensure no loose wires or foreign objects are present.

## 5. Operating Instructions

Once the unit is properly installed and all connections are verified:

1. **Power On:** Apply AC input power to the unit. The power supply should initiate its startup sequence.
2. **Output Verification:** Use a multimeter to verify the output voltage at the DC output terminals. It should be approximately 115 VDC.
3. **Load Connection:** Connect your load to the power supply. Monitor the load current to ensure it does not exceed the maximum rated output of 130A.
4. **Monitoring:** Continuously monitor the power supply's performance, including temperature and output stability, during operation.
5. **Power Off:** To shut down the unit, first disconnect the load, then remove the AC input power.

## 6. Maintenance

Regular maintenance helps ensure the longevity and reliable operation of your RST-15K-115 power supply.

- **Cleaning:** Periodically clean the exterior of the unit and ventilation openings to prevent dust buildup. Use a soft, dry cloth. For forced-air cooled units, ensure fan grilles are clear.
- **Connections:** Annually inspect all electrical connections for tightness and signs of corrosion. Re-tighten as necessary.
- **Environmental Check:** Ensure the operating environment remains within specified temperature and humidity ranges.
- **Cooling System:** For water-cooled models, regularly check the water cooling system for leaks and ensure proper flow.

*Always disconnect power before performing any maintenance.*

## 7. Troubleshooting

If the power supply is not operating as expected, refer to the following common issues and solutions:

Problem	Possible Cause	Solution
No output voltage	No input power; Blown fuse/breaker; Internal fault	Check input power source and connections; Check external fuses/breakers; Contact qualified service personnel.
Output voltage unstable	Loose connections; Overload; Input voltage fluctuations	Check all wiring connections; Reduce load; Ensure stable input power.
Overheating	Blocked ventilation; Excessive ambient temperature; Overload	Clear obstructions; Ensure adequate airflow; Reduce ambient temperature; Reduce load.
Unit does not power on	No input power; Incorrect wiring	Verify input power supply; Recheck input wiring according to instructions.

If troubleshooting steps do not resolve the issue, do not attempt to repair the unit yourself. Contact qualified service personnel.

## 8. Specifications

Parameter	Value
Model	RST-15K-115
Output Voltage (Channel 1)	115 VDC
Output Current (Channel 1)	130 A
Output Power	15 kW (14950W)
Number of Outputs	1
Input Voltage	196 VAC to 305 VAC (3-phase, 4-wire)
Efficiency	Up to 95%
Enclosure Type	Enclosed
Mounting Style	Chassis
Item Weight	27 pounds (approx. 12.25 kg)
Manufacturer	Mean Well
Date First Available	January 10, 2025

## 9. Warranty

This product is covered by a standard manufacturer's limited warranty. Please refer to the warranty card included with your purchase or contact the manufacturer directly for specific terms and conditions. The warranty typically covers defects in materials and workmanship under normal use and service for a specified period from the date of purchase. Damage resulting from improper installation, misuse, unauthorized modification, or environmental conditions outside the product's specifications is generally not covered.

## 10. Support

For technical assistance, service, or inquiries regarding the RST-15K-115 Switching Power Supply, please contact your distributor or the manufacturer, Mean Well. When contacting support, please have your product model number (RST-15K-115) and purchase information readily available.

*Manufacturer: Mean Well*