

CARLO GAVAZZI AP1021

Instruction Manual

CARLO GAVAZZI AP1021 18-60VAC/DC Power Supply

1. INTRODUCTION

This manual provides essential information for the safe and efficient use of the CARLO GAVAZZI AP1021 18-60VAC/DC Power Supply. Please read this manual thoroughly before installation, operation, or maintenance to ensure proper functionality and to prevent damage or injury.

The AP1021 is designed to provide reliable power conversion for industrial applications, specifically as an 18-60VAC/DC PSU for the WM3-96 Series.

2. SAFETY INSTRUCTIONS

Always observe the following safety precautions to prevent electric shock, fire, or damage to the unit and connected equipment:

- Installation and maintenance should only be performed by qualified personnel.
- Ensure the power supply is disconnected from the main voltage before any installation, wiring, or maintenance work.
- Verify that the input voltage and current ratings match the specifications of the AP1021 unit.
- Do not operate the unit in environments exceeding its specified temperature and humidity limits.
- Protect the unit from moisture, dust, and corrosive substances.
- Ensure proper grounding of the unit as per local electrical codes.
- Do not open the unit casing; there are no user-serviceable parts inside.

3. PRODUCT OVERVIEW AND COMPONENTS

The CARLO GAVAZZI AP1021 is a compact power supply unit designed for DIN rail mounting, integrating seamlessly into industrial control panels.



Figure 3.1: A range of CARLO GAVAZZI industrial power supply units, including DIN rail mounted power supplies and other electrical components, illustrating the product family. The AP1021 unit is part of this series, designed for robust industrial applications.

Key components typically include input terminals, output terminals, status indicators (e.g., LED for power on), and mounting mechanisms for DIN rail installation.

4. SETUP AND INSTALLATION

Follow these steps for proper installation of the AP1021 power supply:

1. **Mounting:** Securely attach the AP1021 unit to a standard DIN rail (35mm) in a well-ventilated enclosure. Ensure adequate clearance around the unit for heat dissipation.
2. **Input Wiring:** Connect the 18-60VAC/DC input power to the designated input terminals. Observe correct polarity for DC input. Use appropriate wire gauges as per local electrical standards and the unit's current rating.
3. **Output Wiring:** Connect the output terminals to the WM3-96 Series device or other compatible load. Ensure correct polarity and secure connections.
4. **Grounding:** Connect the protective earth (PE) terminal to a reliable ground point.
5. **Verification:** Before applying power, double-check all wiring connections for tightness and correctness. Ensure no loose strands or short circuits.

For detailed wiring diagrams, refer to the product datasheet available on the CARLO GAVAZZI official website.

5. OPERATING INSTRUCTIONS

Once installed and wired correctly, the AP1021 power supply operates automatically upon receiving input power.

- **Power On:** Apply the specified 18-60VAC/DC input voltage to the unit. The power indicator LED (if present) should illuminate, indicating normal operation.
- **Monitoring:** Periodically check the status indicator for any anomalies. Ensure the connected load is functioning as expected.
- **Overload Protection:** The unit is equipped with protection mechanisms against overcurrent and short circuits. In case of an overload, the unit may temporarily shut down or limit current. Remove the overload condition, and the unit should resume normal operation.

No user adjustments are typically required for the AP1021 during normal operation.

6. MAINTENANCE AND CARE

The CARLO GAVAZZI AP1021 is designed for minimal maintenance. However, regular checks can extend its lifespan and ensure reliable operation:

- **Cleaning:** Keep the unit clean and free from dust and debris. Use a soft, dry cloth for cleaning. Do not use liquid

cleaners or solvents.

- **Ventilation:** Ensure that ventilation openings are not obstructed to allow for proper airflow and heat dissipation.
- **Connection Checks:** Periodically inspect all wiring connections for tightness. Loose connections can lead to overheating or intermittent operation.
- **Environmental Conditions:** Verify that the operating environment remains within the specified temperature and humidity ranges.

No internal maintenance or calibration is required or recommended for this unit.

7. TROUBLESHOOTING

If the AP1021 power supply is not functioning as expected, consider the following common issues and solutions:

Problem	Possible Cause	Solution
No output voltage / Power LED off	No input power; Incorrect input voltage; Blown fuse (external); Internal fault.	Check input power source and connections. Verify input voltage is within 18-60VAC/DC. Check external fuses. If problem persists, contact technical support.
Output voltage unstable or low	Overload condition; Loose connections; Faulty load.	Reduce load current. Check all wiring connections for tightness. Disconnect load to test power supply independently.
Unit is overheating	Insufficient ventilation; Ambient temperature too high; Overload condition.	Ensure proper airflow around the unit. Relocate to a cooler environment if necessary. Reduce load current.

If troubleshooting steps do not resolve the issue, do not attempt to repair the unit yourself. Contact CARLO GAVAZZI technical support.

8. TECHNICAL SPECIFICATIONS

Parameter	Value
Model Number	AP1021
Input Voltage Range	18-60VAC/DC
Compatibility	WM3-96 Series
Manufacturer	CARLO GAVAZZI
Item Weight	2.4 pounds (approx. 1.09 kg)
Package Dimensions	1 x 1 x 1 inches (approx. 2.54 x 2.54 x 2.54 cm)
ASIN	B07M5M73GQ
Date First Available	February 19, 2019

9. WARRANTY INFORMATION

CARLO GAVAZZI products are manufactured to high quality standards. For specific warranty terms and conditions, please refer to the official CARLO GAVAZZI warranty statement available on their website or contact their customer service. Typically, warranty covers defects in materials and workmanship under normal use and service. Keep your purchase receipt as proof of purchase for any warranty claims.

10. CUSTOMER SUPPORT

For technical assistance, product inquiries, or service requests, please contact CARLO GAVAZZI customer support:

- **Website:** Visit the official CARLO GAVAZZI website for product documentation, FAQs, and contact information.
- **Technical Support:** Refer to the contact details provided on the product packaging or the official website for technical support lines.

When contacting support, please have your product model number (AP1021) and ASIN (B07M5M73GQ) ready.

ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page’s manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question