

Volt Polska 3SIP300012

Volt Polska SINUS 3000 12/230V Pure Sine Wave Inverter User Manual

Model: 3SIP300012

[Introduction](#) [Safety](#) [Overview](#) [Setup](#) [Operation](#) [Maintenance](#) [Troubleshooting](#) [Specifications](#)

1. INTRODUCTION

The Volt Polska SINUS 3000 12/230V Pure Sine Wave Inverter is designed to convert 12V DC power from batteries or vehicle electrical systems into 230V AC power. This device is ideal for powering electrical appliances that require a pure sine wave output, similar to the mains electricity grid. It is particularly well-suited for use in vehicles such as campers, and in locations where direct connection to the power grid is not available.

This inverter features a pure sine wave output, making it compatible with inductive loads such as power tools, air compressors, air conditioners, refrigerators, and freezers. The PLUS version includes a remote control panel with a cable, allowing for convenient remote operation.

2. SAFETY INSTRUCTIONS

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

- **Ventilation:** Ensure adequate ventilation around the inverter. Do not block ventilation openings.
- **Environment:** Install the inverter in a dry, cool, and well-ventilated area, away from direct sunlight, heat sources, and flammable materials. Avoid dusty or humid environments.
- **Water Exposure:** Do not expose the inverter to water, rain, or spray.
- **Connections:** Ensure all DC and AC connections are tight and secure to prevent loose connections, which can cause overheating and fire.
- **Grounding:** The inverter must be properly grounded.
- **Battery Safety:** Work with batteries in a well-ventilated area. Wear eye protection and gloves. Avoid short-circuiting battery terminals.
- **Overload:** Do not overload the inverter beyond its rated continuous power output.

- **Children:** Keep the inverter out of reach of children.
- **Servicing:** Do not attempt to service the inverter yourself. Refer all servicing to qualified personnel.

3. PRODUCT OVERVIEW

Familiarize yourself with the components and connections of your Volt Polska SINUS 3000 inverter.

3.1 Front Panel (AC Output Side)



Image 1: Front panel of the SINUS 3000 inverter.

1. **AC 230V Output Sockets:** Standard European 230V AC outlets for connecting appliances.
2. **Power Switch:** Main ON/OFF switch for the inverter.
3. **USB Port:** Provides 5V DC power for charging small electronic devices.
4. **Power Indicator:** LED light indicating the inverter is powered on and operating normally.
5. **Fault Indicator:** LED light indicating an error or fault condition (e.g., overload, low battery, overheating).

3.2 Rear Panel (DC Input Side)



Image 2: Rear panel of the SINUS 3000 inverter.

1. **DC 12V Input Terminals:** Red (+) and Black (-) terminals for connecting to a 12V DC battery bank.
2. **Cooling Fans:** Integrated fans for thermal management, activating automatically when needed.
3. **Remote Control Port:** Connector for the optional remote control panel.
4. **Grounding Terminal:** Point for connecting the inverter to an earth ground.

4. SETUP AND INSTALLATION

Follow these steps for safe and proper installation of your inverter.

1. **Choose a Location:** Select a dry, cool, and well-ventilated area. Ensure there is sufficient space around the inverter for airflow.
2. **Mounting:** Securely mount the inverter using appropriate fasteners. Ensure it is stable and cannot be easily dislodged.
3. **Grounding:** Connect the grounding terminal on the rear panel of the inverter to a reliable earth ground using a suitable gauge wire.
4. **DC Input Connection:**
 - Ensure the inverter's power switch is in the OFF position.
 - Connect the positive (+) cable (red) from your 12V battery bank to the red (+) terminal on the inverter.
 - Connect the negative (-) cable (black) from your 12V battery bank to the black (-) terminal on the inverter.
 - Ensure connections are tight and secure. Use appropriate cable gauges for the power rating.
5. **Remote Control (Optional):** If using the remote control panel, connect its cable to the dedicated port on the rear of the inverter.
6. **Initial Check:** Double-check all connections before proceeding.

5. OPERATING INSTRUCTIONS

Follow these steps to operate your Volt Polska SINUS 3000 inverter.

1. Powering On:

- Ensure all appliances are disconnected from the AC output sockets.
- Flip the main power switch on the front panel to the ON position.
- The Power Indicator LED should illuminate, indicating normal operation. If the Fault Indicator illuminates, refer to the Troubleshooting section.

2. Connecting Appliances:

- Plug your 230V AC appliances into the output sockets.
- Ensure the total power consumption of connected appliances does not exceed the inverter's continuous power rating (1500W) or peak power rating (3000W for short durations).

3. Using the USB Port: Connect compatible USB devices for charging.

4. Powering Off:

- Disconnect all appliances from the AC output sockets.
- Flip the main power switch on the front panel to the OFF position.

5. Remote Control Operation: If using the remote panel, you can power the inverter ON/OFF from a distance. The remote panel typically mirrors the main power switch functionality.

Note on Photovoltaic Panels: This inverter supports connection to photovoltaic panels via an MPPT or PWM voltage regulator. Consult a qualified technician for such installations.

6. MAINTENANCE

Regular maintenance ensures optimal performance and longevity of your inverter.

- **Cleaning:** Periodically clean the exterior of the inverter with a dry, soft cloth. Do not use liquid cleaners or solvents.
- **Ventilation:** Ensure the cooling vents are free from dust and debris. Use compressed air to clear any blockages if necessary.
- **Connections:** Regularly check all electrical connections (DC input, AC output, grounding) for tightness and corrosion. Tighten any loose connections.
- **Battery Health:** Monitor the health of your 12V battery bank. A weak battery can cause the inverter to shut down prematurely.
- **Storage:** If storing the inverter for an extended period, ensure it is clean, dry, and disconnected from all power sources.

7. TROUBLESHOOTING

This section addresses common issues you might encounter with your inverter.

Problem	Possible Cause	Solution
Inverter does not turn on.	No DC input power; Loose battery connections; Blown fuse in DC line; Low battery voltage.	Check battery connections and voltage. Ensure DC power is supplied. Check external fuses. Recharge or replace battery.
Fault Indicator is lit.	Overload; Overheating; Low/High input voltage; Short circuit at output.	Reduce load. Allow inverter to cool. Check battery voltage. Disconnect appliances and check for short circuits.
No AC output.	Inverter OFF; Fault condition; Appliance not working.	Turn inverter ON. Check fault indicator and troubleshoot accordingly. Test appliance with another power source.
Inverter shuts down frequently.	Overload; Low battery voltage; Overheating.	Reduce load. Recharge battery. Ensure adequate ventilation.

If the problem persists after attempting these solutions, contact customer support.

8. TECHNICAL SPECIFICATIONS

Feature	Specification
Total Power (Instantaneous)	3000VA
Continuous Power	1500W
Battery Voltage	12V DC
Input Voltage Range	10.5V - 15.5V DC
Output Voltage	225V - 235V AC
Output Frequency	50Hz (±2Hz)
Efficiency (Full Load)	92%
Low Voltage Protection Threshold	10.7V (±0.3V)
Operating Temperature	-10°C to 40°C
Dimensions (L x W x H)	34.2 x 20.1 x 9.4 cm
Weight	3.96 kg
Power Source	Battery and Solar Powered
Model Number	3SIP300012
Certifications	CE

9. WARRANTY AND SUPPORT



Volt Polska products are manufactured to high-quality standards. For warranty information, please refer to the documentation provided with your purchase or visit the official Volt Polska website. For technical support, troubleshooting assistance, or to inquire about repairs, please contact Volt Polska customer service directly.

Keep your purchase receipt as proof of purchase for warranty claims.

© 2023 Volt Polska. All rights reserved.

Related Documents - 3SIP300012

	<p>Volt Polska SINUS Pure Sine Wave Voltage Inverter Manual</p> <p>Comprehensive user manual for Volt Polska SINUS series pure sine wave voltage inverters, covering models from 600W to 5000W. Details include product introduction, essential safety precautions, installation guidelines, technical specifications, and warranty information.</p>
	<p>Volt Polska Sinus PRO E PLUS Pure Sine Wave Inverter/UPS User Manual</p> <p>Comprehensive user manual for Volt Polska's Sinus PRO E PLUS series of pure sine wave inverters and UPS systems, covering product features, safety precautions, operation, technical specifications, and warranty information for models like the 900 E PLUS and 1200 E PLUS.</p>
	<p>VOLT GREEN BOOST PRO 4000 SINUS BYPASS Solar Inverter Product Manual</p> <p>This product manual provides essential information on the VOLT GREEN BOOST PRO 4000 SINUS BYPASS solar inverter, covering its application in heating systems, key features like pure sine wave output and bypass functionality, operating principles, technical specifications, installation guidelines, and critical safety precautions. It details operating modes (STABLE and MPPT), connection procedures, and indicator explanations for efficient and safe use.</p>
	<p>VOLT GREEN BOOST PRO 5000 SINUS BYPASS Solar Inverter Product Manual</p> <p>Comprehensive product manual for the VOLT GREEN BOOST PRO 5000 SINUS BYPASS solar inverter, detailing its application, technical specifications, installation, safety precautions, and operation for heating water, boilers, and underfloor heating systems.</p>

<div><div>PRODUCT MANUAL</div><div>SOLAR INVERTER</div><div><div>SINUS PRO ULTRA PLUS</div><div>3000 12/230V (1500/3000W)</div><div>100A MPPT (20-500V)</div></div><div></div><div><div>VOLT</div><div>POLSKA</div><div><small>100% MODULOWA i 100% INWENTYKOWA Wszystkie części i akcesoria są dostępne w naszym sklepie</small></div><div><small>sinuspro@voltage.pl sinus@voltage.pl (22) 585 55 52</small></div></div></div>	<p>Volt Polska Sinus Pro Ultra Plus 3000 12/230V Solar Inverter Product Manual</p> <p>Comprehensive product manual for the Volt Polska Sinus Pro Ultra Plus 3000 12/230V solar inverter, covering installation, operation, specifications, and troubleshooting.</p>
<div><div>PRODUCT MANUAL</div><div>ECO SOLAR BOOST FOR HEATING WATER, BOILER</div><div><div>GREEN BOOST PRO 4000 SINUS BYPASS</div></div><div></div><div><div>VOLT</div><div>POLSKA</div><div><small>100% MODULOWA i 100% INWENTYKOWA Wszystkie części i akcesoria są dostępne w naszym sklepie</small></div><div><small>sinuspro@voltage.pl sinus@voltage.pl (22) 585 55 52</small></div></div></div>	<p>Volt Polska Green Boost Pro 4000 Sinus Bypass Product Manual</p> <p>Comprehensive product manual for the Volt Polska Green Boost Pro 4000 Sinus Bypass solar inverter, detailing its application, features, operating principles, installation, safety precautions, and technical specifications for efficient solar energy utilization in heating systems.</p>