V-Guard VG 400

V-Guard VG 400 Stabilizer User Manual

Electronic Voltage Stabilizer for Air Conditioners up to 1.5 Ton

1. Introduction

This manual provides essential information for the safe and efficient operation of your V-Guard VG 400 Electronic Voltage Stabilizer. The VG 400 is designed to protect your air conditioner (up to 1.5 Ton) from voltage fluctuations, ensuring its longevity and consistent performance. Please read these instructions carefully before installation and use.



Image 1: V-Guard VG 400 Stabilizer unit, a compact white device with V-Guard branding.

2. Key Features

- **Intelligent Time Delay System (ITDS):** Provides a necessary balancing time for the compressor during frequent power failures, preventing damage from sudden power surges. This system ensures a delay of 3 minutes ± 20 seconds before restarting.
- **Low & High Voltage Cut-off Protection:** Automatically disconnects the connected equipment from the mains supply if the voltage goes beyond the safe operating range (170V to 270V), protecting it from potentially dangerous voltage spikes.

- **Built-in Thermal Overload Protection:** In cases where the stabilizer's temperature rises due to overload or faults in the connected equipment, the output is cut off to protect both the stabilizer and the appliance.
- **Latest IC Technology:** Utilizes advanced integrated circuit technology for precise and consistent voltage regulation, ensuring uninterrupted cooling performance for your AC.
- **Wall Mounting Cabinet Design:** Features an elegant and compact design for easy wall installation, saving space and blending with your home decor.

Your browser does not support the video tag.

Video 1: An informational video highlighting the key features of the V-Guard VG 400 Stabilizer, including voltage protection, time delay, thermal overload, and IC technology.



Image 2: V-Guard VG 400 Stabilizer wall-mounted next to an AC unit, illustrating its compact design and highlighting low & high voltage cut-off protection.

3. Setup and Installation

1. **Unpacking:** Carefully remove the stabilizer from its packaging. Inspect for any signs of damage.
2. **Placement:** Mount the stabilizer on a wall near your air conditioner. Ensure adequate ventilation around the unit. The wall mounting design allows for convenient placement.
3. **Wiring:**
    - Ensure the main power supply is switched OFF before making any connections.
    - Connect the input wires from your main power supply to the designated input terminals on the stabilizer.
    - Connect the output wires from the stabilizer to your air conditioner's power input.
    - Ensure all connections are secure and properly insulated. Refer to the diagram on the unit for correct wiring.
4. **Initial Power-up:** Once all connections are secure, switch ON the main power supply. The stabilizer will perform an initial check and then provide regulated power to your AC.



Image 3: Close-up view of the V-Guard VG 400 Stabilizer's connection panel, showing input and output terminals for wiring.

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Video 2: A detailed video demonstrating the connection process and features of the V-Guard VG 400 Stabilizer, including its label and wiring.

4. Operating Instructions

The V-Guard VG 400 operates automatically to regulate voltage. Once connected and powered on, it continuously monitors the incoming voltage and adjusts the output to ensure a stable supply to your AC.

- **Indicators:** The stabilizer features LED indicators for 'Input' and 'Output' status. A 'Normal' indicator typically signifies stable operation, while a 'Cut-Off' indicator suggests voltage outside the safe range, leading to protection activation.
- **Time Delay:** After a power outage or when switching on, the Intelligent Time Delay System will initiate a delay (approximately 3 minutes) before supplying power to the AC. This protects the compressor from immediate restarts.
- **Automatic Cut-off:** If the input voltage falls below 170V or rises above 270V, the stabilizer will automatically cut off the power supply to the AC to prevent damage. Power will be restored automatically once the voltage returns to a safe operating range and the time delay period has elapsed.



Image 4: V-Guard VG 400 Stabilizer with connected cables, showing the indicator lights for input and output status.

5. Maintenance

The V-Guard VG 400 is designed for minimal maintenance. Follow these guidelines to ensure optimal performance and longevity:

- **Cleaning:** Periodically wipe the exterior of the stabilizer with a soft, dry cloth. Do not use liquid cleaners or abrasive materials.
- **Ventilation:** Ensure that the ventilation slots on the stabilizer are not blocked. Proper airflow is crucial to prevent overheating.
- **Connections:** Occasionally check the wiring connections to ensure they remain tight and secure. Loose connections can lead to poor performance or safety hazards.
- **Avoid Overloading:** Ensure that the connected appliance (AC) does not exceed the stabilizer's specified capacity (up to 1.5 Ton).

6. Troubleshooting

Problem	Possible Cause	Solution
Stabilizer not turning on.	No power from mains, loose connection, internal fault.	Check main power supply. Ensure all connections are secure. If problem persists, contact customer support.
AC not receiving power, stabilizer in 'Cut-Off' mode.	Input voltage is outside the safe operating range (below 170V or above 270V).	The stabilizer is protecting your AC. Power will be restored automatically once the voltage stabilizes and the time delay elapses.
Stabilizer overheats and cuts off.	Overload on the stabilizer, poor ventilation, internal fault.	Ensure AC capacity does not exceed 1.5 Ton. Check for blocked ventilation. Allow unit to cool down. If problem persists, contact customer support.
AC restarts frequently.	Frequent power fluctuations or outages.	The Intelligent Time Delay System is functioning as designed to protect the compressor. This is normal behavior during unstable power conditions.

For issues not listed here or if troubleshooting steps do not resolve the problem, please contact V-Guard customer support.

7. Specifications

Feature	Detail
Model	VG 400
Capacity	12 Ampere
Working Range	170 VAC - 270 VAC, 50Hz
Calibration Accuracy	± 2.5%
Time Delay	3 min ± 20 s ITDS (Intelligent Time Delay System)
Application	One Air Conditioner up to 1.5 Ton
Manufacturer	V-Guard Industries Ltd.
Country of Origin	India
Item Weight	2 kg 30 g
Item Dimensions (LxWxH)	12 x 12 x 12 Centimeters

For detailed specifications, refer to the product label on the stabilizer unit.

8. Warranty and Support

Your V-Guard VG 400 Stabilizer comes with a**3-year onsite warranty** from the date of purchase. This warranty covers manufacturing defects. Please retain your purchase invoice for warranty claims.
For any service requests, technical assistance, or warranty claims, please contact V-Guard customer support. Refer to the

contact information provided with your product or visit the official V-Guard website.

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

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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

Answered questions about this manual

Does the V-Guard VG 400 voltage stabilizer come with copper winding?

The official documentation for the V-Guard VG 400 does not explicitly state whether the internal transformer uses copper or aluminum winding. While many high-quality stabilizers use copper for better conductivity and durability, V-Guard often...

Read full answer