

Schneider Electric VX4A58863U

SCHNEIDER ELECTRIC VX4A58863U EMC Filter Kit for ATV58D46N4 Instruction Manual

Model: VX4A58863U

[Introduction](#) [Safety Information](#) [Package Contents](#) [Setup](#) [Operating](#)
[Principles](#) [Maintenance](#) [Troubleshooting](#) [Specifications](#) [Warranty](#) [Support](#)

1. INTRODUCTION

This instruction manual provides essential information for the safe and effective installation, operation, and maintenance of the Schneider Electric VX4A58863U EMC Filter Kit. This kit is specifically designed for use with the ATV58D46N4 variable speed drive to ensure compliance with electromagnetic compatibility (EMC) standards.

Please read this manual thoroughly before proceeding with installation or use. Retain this manual for future reference.

2. SAFETY INFORMATION

WARNING: Risk of Electric Shock and Equipment Damage.

- Installation and maintenance must be performed by qualified personnel only.
- Disconnect all power sources before working on the equipment. Verify that all capacitors are discharged before touching any components.
- Ensure proper grounding of the EMC filter kit and associated equipment.
- Do not operate the equipment with damaged components or wiring.
- Adhere to all local and national electrical codes and regulations.

3. PACKAGE CONTENTS

Verify that all items listed below are present and undamaged upon unpacking:

- 1 x Schneider Electric VX4A58863U EMC Filter Kit
- Associated mounting hardware (if applicable, refer to packaging)
- Instruction sheet (this document)



Figure 1: Schneider Electric VX4A58863U EMC Filter Kit. This image shows the compact design of the filter kit, typically used to reduce electromagnetic interference.

4. SETUP AND INSTALLATION

The VX4A58863U EMC Filter Kit is designed for integration with the ATV58D46N4 variable speed drive. Follow these general steps for installation:

1. Preparation:

- Ensure the ATV58D46N4 drive is completely de-energized and locked out.
- Verify that the installation environment meets the specified operating conditions (temperature, humidity, ventilation).

2. Mounting:

- Mount the EMC filter kit securely to a suitable surface, typically adjacent to the ATV58D46N4 drive, using appropriate hardware. Ensure adequate clearance for ventilation and wiring.

3. Wiring Connections:

- Connect the input terminals of the EMC filter to the main power supply.
- Connect the output terminals of the EMC filter to the input terminals of the ATV58D46N4 drive.
- Ensure all connections are tight and secure. Refer to the wiring diagrams provided with the ATV58D46N4 drive and any specific diagrams included with the filter kit for precise connection points.

4. Grounding:

- Establish a low-impedance ground connection for the EMC filter kit. Proper grounding is critical for effective EMC performance and safety.

5. Verification:

- Before re-energizing, visually inspect all connections and mounting for correctness and security.
- Confirm that no tools or foreign objects are left inside the enclosure.

5. OPERATING PRINCIPLES

The Schneider Electric VX4A58863U EMC Filter Kit is a passive component designed to reduce electromagnetic interference (EMI) generated by the ATV58D46N4 variable speed drive. It operates by attenuating high-frequency noise on the power lines, preventing it from propagating into the electrical

network and interfering with other sensitive equipment.

Once correctly installed, the filter operates continuously without requiring user intervention. Its function is integral to maintaining EMC compliance for the drive system.

6. MAINTENANCE

The VX4A58863U EMC Filter Kit is generally maintenance-free under normal operating conditions.

However, periodic inspections are recommended to ensure continued reliable performance:

- **Visual Inspection (Annually):** Check for any signs of physical damage, discoloration, or loose connections.
- **Connection Integrity:** Periodically verify that all electrical connections remain tight and free from corrosion.
- **Environmental Check:** Ensure that the operating environment remains within specified temperature and humidity limits and that ventilation is not obstructed.

WARNING: Always disconnect power before performing any inspection or maintenance tasks.

7. TROUBLESHOOTING

If issues related to electromagnetic interference persist after installing the EMC filter, consider the following:

Problem	Possible Cause	Solution
Persistent EMI issues	Improper grounding	Verify and improve the ground connection for the filter and drive. Ensure low impedance.
Persistent EMI issues	Loose or incorrect wiring	Check all connections between the power supply, filter, and drive. Ensure they are tight and follow the correct wiring diagram.
Persistent EMI issues	Filter damage or defect	Inspect the filter for any visible damage. If suspected, contact Schneider Electric support for further diagnosis.
Persistent EMI issues	External noise sources	Identify and mitigate other potential sources of electromagnetic interference in the environment.

If troubleshooting steps do not resolve the issue, contact Schneider Electric technical support.

8. SPECIFICATIONS

Feature	Detail
Model Number	VX4A58863U
Manufacturer	SCHNEIDER ELECTRIC
Part Number	VX4A58863U

Feature	Detail
Item Weight	5.5 pounds
Product Dimensions	10 x 10 x 10 inches
Item Package Quantity	1
Included Components	VX4A58863U
Batteries Required?	No
ASIN	B00CONIR92
Date First Available	May 7, 2013

9. WARRANTY INFORMATION

Schneider Electric products are covered by a standard warranty. For detailed information regarding the warranty period, terms, and conditions for the VX4A58863U EMC Filter Kit, please refer to the official Schneider Electric website or contact their customer service directly. Proof of purchase may be required for warranty claims.

10. TECHNICAL SUPPORT

For technical assistance, product inquiries, or to report issues, please contact Schneider Electric customer support:

- **Website:** Visit the official [Schneider Electric website](#) for support resources, FAQs, and contact information.
- **Phone:** Refer to the Schneider Electric website for regional contact numbers.
- When contacting support, please have your product model number (VX4A58863U) and any relevant purchase details ready.