

## Altivar<sup>®</sup> 61/71 Fan Kit VZ3V1215

Retain for future use.

### INTRODUCTION

This bulletin contains installation instructions for the Altivar 61/71 (ATV61/71) Fan Kit, VZ3V1215. The kit is for use on the Altivar 61 and 71 drives listed in Table 1.

You will need the following tools for the procedures in this bulletin:

- T-20 TORX<sup>®</sup> bit
- Torque screwdriver
- Voltmeter

**Table 1: Altivar 61/71 Drives**

Kit Part Number	Drive Frame Size	Drive Catalog Number (ATV*** <sup>1</sup> )
VZ3V1215	9	61HC11N4, 61HD75M3X, 61/71HD55M3X, 61/71HD90N4

<sup>1</sup> The drive catalog numbers designate the drive family. For example, catalog number 61/71HD55M3X designates model numbers **ATV61**HD55M3X and **ATV71**HD55M3X.

**Table 2: Altivar 61/71 Fan Kit Contents**

Quantity	Part Description
1	Fan Housing with power connectors

### RELATED DOCUMENTATION

For complete instructions, refer to the documentation set provided on the CD included with the drive; or, download the document set from the Technical Library at [www.schneider-electric.us](http://www.schneider-electric.us).

## BEFORE YOU BEGIN

Read and understand these instructions before performing any procedure on the drive.

The word “drive” as used in this bulletin refers to the controller portion of the adjustable speed drive as defined in the National Electrical Code (NEC).

### **⚠ DANGER**

#### **HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH**

- Read and understand this manual before installing or operating the Altivar 61/71 (ATV61/71) drive. Installation, adjustment, repair, and maintenance must be performed by qualified personnel.
- The user is responsible for compliance with all international and national electrical code requirements with respect to grounding of all equipment.
- Many parts of this drive, including the printed circuit boards, operate at the line voltage. **DO NOT TOUCH.** Use only electrically insulated tools.
- **DO NOT** touch unshielded components or terminal strip screw connections with voltage present.
- **DO NOT** short across terminals PA/+ and PC/- or across the DC bus capacitors.
- Before servicing the drive:
  - Disconnect all power, including external control power that may be present.
  - Place a “DO NOT TURN ON” label on all power disconnects.
  - Lock all power disconnects in the open position.
  - **WAIT 15 MINUTES** to allow the DC bus capacitors to discharge. Then follow the “Bus Voltage Measurement” on page 2 to verify that the DC voltage is less than 42 V. The drive LED is not an indicator of the absence of DC bus voltage.
- Install and close all covers before applying power or starting and stopping the drive.

**Failure to follow these instructions will result in death or serious injury.**

## BUS VOLTAGE MEASUREMENT

The DC bus voltage can exceed 1,000 Vdc. Use a properly rated voltage sensing device when performing this procedure. To measure the DC bus voltage:

1. Disconnect the drive power supply.
2. Wait 15 minutes for the DC bus capacitors to discharge.
3. Measure the voltage of the DC bus between the PA/+ and PC/- terminals to ensure that the voltage is less than 42 Vdc. These terminals are clearly labeled on each drive.
4. If the DC bus capacitors have not discharged completely, contact your local Schneider Electric representative. Do not repair or operate the drive.

### Characteristics and Functions of the Power Terminals

**Table 3: Power Terminal Characteristics**

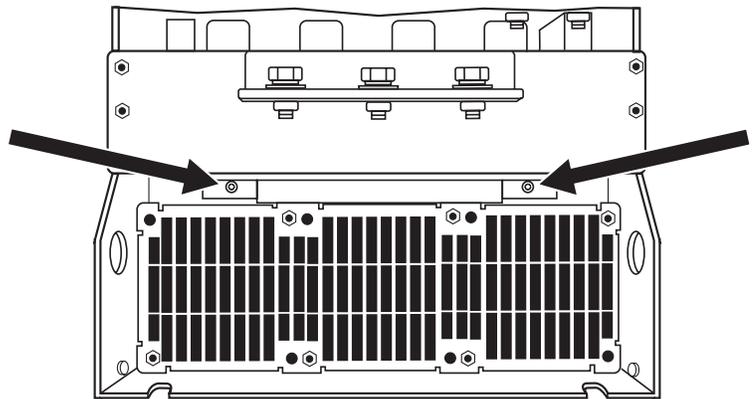
Terminal	Function	Altivar 61/71 Drive
PA/+	DC bus + polarity and DC choke connection	All ratings
PC/-	DC bus - polarity	All ratings

### REMOVING THE FAN

To remove the existing fan:

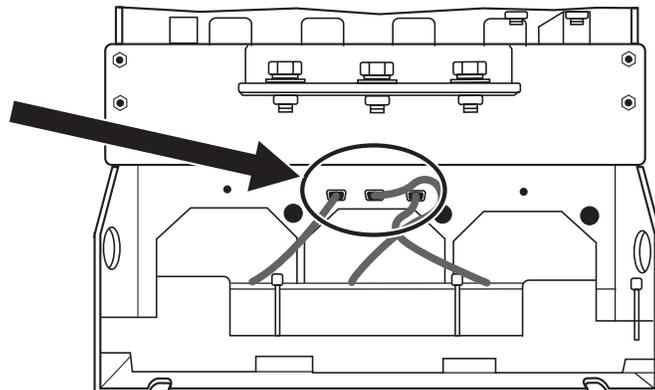
1. Before replacing the fan, perform the bus voltage measurement procedure on page 2 of this bulletin.
2. Remove the fan as follows. Refer to Figure 1.
  - a. Using a T-20 TORX® bit, remove the two retaining screws at the top of the fan housing. Refer to Figure 1.
  - b. Gently swing the fan housing down to release the hinge and pull the fan housing away from the drive.

**Figure 1: Retaining Screw Location**



- c. Unplug the three power connections from the drive by gently pulling the power connectors away from the drive. Refer to Figure 2.

**Figure 2: Power Connection Location**



## INSTALLING THE NEW FAN

Install the new fan as follows:

1. Connect the fan's power connectors to the drive by sliding the connectors into the jacks. Refer to Figure 2.
2. Position the fan housing ensuring that the bottom is seated in the hinge and swing the housing up into position.
3. Insert the retaining screw and torque it to 4.43 – 6.20 lb-in (0.5 – 0.7 N•m). Refer to Figure 1.
4. Completely test the drive operation before placing the drive into service.