

Instruction Bulletin

Altivar[®] 31, 61, and 71 Drives Simple Loader[™] VW3A8120 Instruction Sheet

Retain for future use.

For use in the USA.

INTRODUCTION

This bulletin contains operational instructions for the Simple Loader[™] VW3A8120. The Simple Loader is compatible with the Altivar[®] 31, 61, and 71 drives¹. Using the RJ45 communication port connections, the configuration of a drive can be downloaded onto the Simple Loader, then uploaded to compatible drives.

Before you begin

Read and follow these precautions before beginning any procedure with the Simple Loader and the drive.

⚠ DANGER

HAZARD OF ELECTRIC SHOCK, EXPLOSION OR ARC FLASH

- Read and understand this manual before using the Simple Loader. Operation of the Simple Loader must be performed by qualified personnel.
- Read and understand the installation and programming manuals applicable to the drive that you are using with the Simple Loader. 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 the equipment.
- Many parts in 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 before servicing the drive.
 - Place a “DO NOT TURN ON” label on the drive disconnect.
 - Lock the power disconnect in the open position.
 - **WAIT 15 MINUTES** for the DC bus capacitors to discharge. Then follow the “Bus Voltage Measurement Procedure” on page 2 to verify that the DC voltage is less than 42 V. The drive LEDs are not indicators 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.

¹ The word “drive” as used in this bulletin refers to the controller portion of the adjustable speed drive according to the NEC.

⚠ WARNING

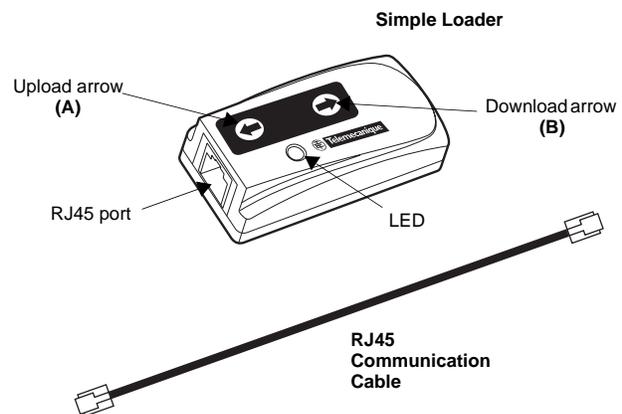
LOSS OF CONTROL

- The designer of any control scheme must consider the potential failure modes of control paths, and for certain critical control functions, provide a means to achieve a safe state during and after a path failure. Examples of critical control functions are emergency stop and overtravel stop.
- Separate or redundant control paths must be provided for critical control functions.
- System control paths may include communication links. Consideration must be given to the implications of unanticipated transmission delays or failures of the link.

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

Simple Loader Kit

Figure 1: Simple Loader Kit Contents



BUS VOLTAGE MEASUREMENT PROCEDURE

⚠ DANGER

HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH

Read and understand the precautions in "Before you begin" on page 1 before performing this procedure.

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

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 all power.
2. Wait 15 minutes to allow the DC bus 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.
4. If the DC bus capacitors do not discharge completely, contact your local Schneider Electric representative. Do not repair or operate the drive.

USING THE SIMPLE LOADER

⚠ DANGER

HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH - EXPOSURE TO ENERGIZED PARTS

- Adhere to NFPA 70E guidelines when using the Simple Loader.
- The Simple Loader is to be used only by qualified personnel as defined in NFPA 70E.
- Read and understand the manuals for the applicable drive before accessing the communication port of the drive.

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

⚠ DANGER

UNINTENDED EQUIPMENT OPERATION

- The user must ensure that the drive's programmed configuration provides the desired control scheme.
- Control schemes may include logic input and output assignments, communication networks, and installed options.

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

Schneider Electric recommends that all power from the drive and enclosures housing the drive is disconnected before performing this procedure. If you choose not to follow this recommendation, you must adhere to NFPA 70E guidelines.

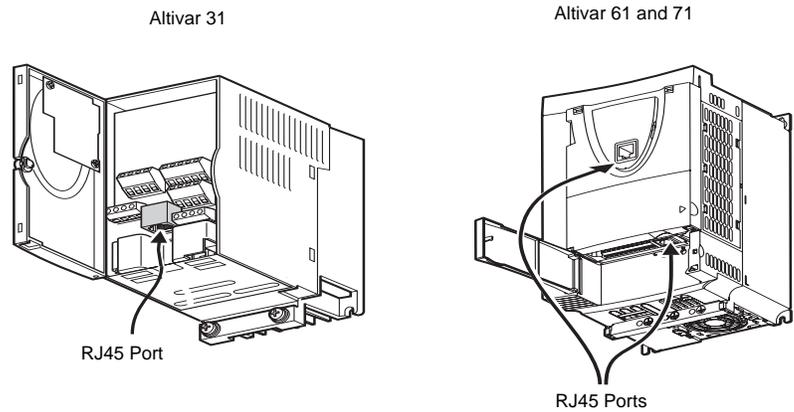
1. Remove all power from the drive and all enclosures housing the drive and wait 15 minutes to allow the DC bus of the drive to discharge. Then measure the DC bus voltage between the PA/+ and PC/- terminals following the "Bus Voltage Measurement Procedure" on page 2.
2. Insert the Simple Loader's communication cable into the drive's RJ45 communication port. Refer to the drive's installation manual for more information about how to perform this task.
3. Install and close all covers and doors before applying power to the drive. The drive must be powered on before performing an upload or download.
4. Perform the desired transfer.

NOTE:

- Only one configuration at a time can be stored on the Simple Loader.
 - An existing configuration must be erased from the Simple Loader before a new configuration can be stored.
 - The Simple loader does not perform configuration conversions.
 - An upload can only be performed on a drive that is compatible to the one used during the download (for example, same family, size, and software version).
5. Upon completing the transfer, remove all power from the drive and the enclosures housing the drive and wait 15 minutes to allow the DC bus of the drive to discharge. Then measure the DC bus voltage between the PA/+ and PC/- terminals following the "Bus Voltage Measurement Procedure" on page 2.

6. Remove the Simple Loader communication cable from the drive.
7. Install and close all covers and doors before reapplying power to the drive.
8. Confirm that the correct program is in the drive.

Figure 2: Altivar 31, 61, and 71 RJ45 Port Locations



Simple Loader Functions

Table 1: Simple Loader LED Status

LED	Status
Green	Ready
Flashing Green	Transfer in progress
Red	Stored configuration erased (task completed)
Flashing Red	Transfer error or incompatible drive

Uploading to the Drive

To upload a configuration from the Simple Loader to the drive, press and hold the upload arrow **(A)** for 1 second. See Figure 1 on page 2.

Downloading to the Simple Loader

To download a configuration from the drive to the Simple Loader, press and hold the download arrow **(B)** for 1 second. See Figure 1 on page 2.

Erasing the configuration from the Simple Loader

To erase the configuration stored on the Simple Loader, simultaneously press and hold both arrow keys **(A & B)** for 3 seconds. See Figure 1 on page 2.

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Electrical equipment should be installed, operated, serviced, and maintained only by qualified personnel. No responsibility is assumed by Schneider Electric for any consequences arising out of the use of this material.

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