Installation Guide

Bootloader

VLT® Soft Starter MCD 600

1 Introduction

1.1 Description of the Bootloader

The soft starter's operating software can be updated by loading a new version via the USB port.
This function updates:

- User interface software.
- Motor control software.
- Feedback messages (update existing or add new languages).

N O T I C E

LOSS OF PARAMETER SETTINGS
If the parameter list has changed, it may not be possible to restore parameter settings from an external file. In this case, re-enter all settings via the programming menu.

N O T I C E

The VLT® Soft StarterMCD 600 supports FAT32 file systems. The soft starter's USB functions are not compatible with NTFS file systems.

2 Using the Bootloader

2.1 Preparations

Updating the software will delete all user files and parameter settings and set the soft starter to factory defaults.
Always back up the settings before updating the software.

2.1.1 Checking the Software Versions

Procedure

1. Check the versions of the software currently installed in the soft starter in *Set-up Tools* > *Software Versions*.
2. Check the versions of software included in the updated file (readme.txt).
    a. If the parameter list version has changed, note down all parameter settings and re-enter these via the programming menu.
    b. If the parameter list version has not changed, back up the parameter settings to an external file.

2.1.2 Back-up Procedure

Procedure

1. Connect the external drive to the USB port.
2. Press [Menu/Store] to open the menu.
3. Select *Set-up Tools*.
4. Scroll to *USB Save & Load* and press [Menu/Store].

At the confirmation prompt, select *YES* to confirm or *NO* to cancel, then press [Menu/Store] to proceed.

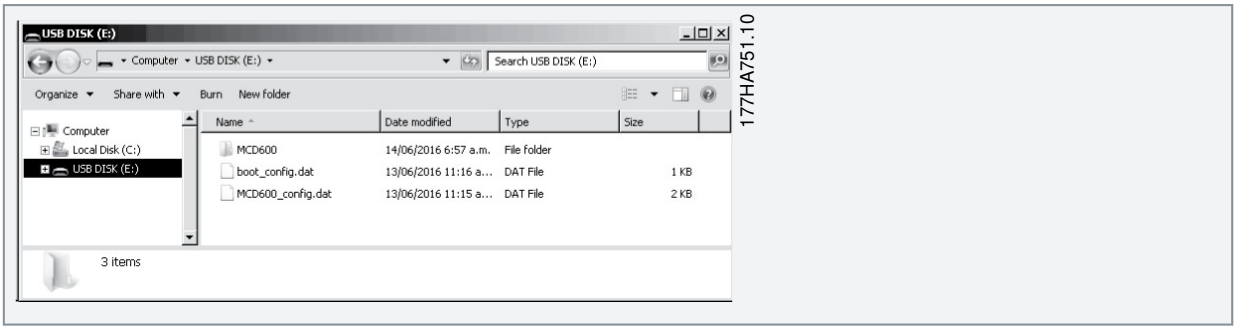
When the action has been completed, the screen returns to the previous menu level.

2.2 Files

A compressed (zipped) folder containing all the necessary files is available from the supplier.

Procedure

1. Download the zip file.
2. Extract the files to the root of a USB drive.



2.3 Updating the Software

Procedure

1. Remove control power from the soft starter.
2. Insert the USB drive.
3. Press and hold [Back] and [Menu/Store] on the LCP.
4. Reapply control power, then release the LCP keys.

The display on the LCP shows progress as the new software is installed. Once the update is complete, the display shows a confirmation message and the LEDs flash.

The LEDs flash slowly if the software has installed successfully.

The LEDs flash quickly if an error occurred, see 2.5 Error Messages.

NOTICE

If a remote LCP is connected to the soft starter, it shows the initialization screen throughout the update.

NOTICE

Do not remove the USB drive until the soft starter shows a message reporting that the update process is complete.

2.4 After Updating the Software

Final steps when updating the software.

Procedure

1. Remove the USB drive.
2. Turn off control power and wait 5 s.
3. Turn control power back on to resume normal operation.

The update is now complete.

2.5 Error Messages

Table 1: Error Messages

Display	Possible cause/suggested solution
Boot failure	The model board, user interface, and/or language files were not programmed correctly.
EEPROM register error	The language file could not be loaded into the soft starter. Contact the local supplier for advice.
EEPROM writing error	The language file did not load correctly into the soft starter. Contact your local supplier for advice.
File empty	The file was found on the USB stick but did not contain the required contents.
File not found	The required file could not be found on the USB stick.
File not valid	The required file was found on the USB stick but the contents could not be verified. • The file may be corrupt. Reload the file onto the USB stick.
Flash writing error	The user interface code was not programmed correctly.
Internal fault 88	The soft starter firmware does not match the hardware.
Model timeout error	The user interface was not able to transmit to the model board during bootloading. • Check the connection between the boards. • The model board bootloader may not be running. If the problem persists, contact the local distributor.
USB was removed	The USB stick was removed before the files were written to the soft starter. Restart the bootloader process.

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