

Control Card

VLT® Compressor Drive CDS 803

1 Introduction

1.1 Purpose of the Installation Guide

This Installation Guide describes the replacement and the software update for the control card in VLT® Compressor Drive CDS 803. VLT® is a registered trademark for Danfoss A/S.

1.2 Safety Instructions

Only Danfoss authorized, qualified personnel are allowed to repair this equipment. The personnel must be familiar with the instructions and safety measures described in the VLT® HVAC Basic Drive FC 101 Service Manual.

⚠ W A R N I N G ⚠

DISCHARGE TIME

The drive contains DC-link capacitors, which can remain charged even when the drive is not powered. High voltage can be present even when the warning indicator lights are off.

Failure to wait the specified time after power has been removed before performing service or repair work could result in death or serious injury.

- Stop the motor.
- Disconnect AC mains, permanent magnet type motors, and remote DC-link supplies, including battery back-ups, UPS, and DC-link connections to other drives.
- Wait for the capacitors to discharge fully. The minimum waiting time is specified in the table *Discharge time* and is also visible on the nameplate on the top of the drive.
- Before performing any service or repair work, use an appropriate voltage measuring device to make sure that the capacitors are fully discharged.

Table 1: Discharge Time

Voltage [V]	Power range [kW (hp)]	Minimum waiting time (minutes)
3x200	6.0–10 (8.0–15)	15
3x400	6.0–7.5 (8.0–10)	4
3x400	10–30 (15–40)	15

1.3 Item Supplied

The following item is supplied:

- Control card

Table 2: Code Numbers for Control Cards

Control card type	Code number
Control card, H3, H4, and H5	132B0700
Control card H6	132B1174

2 Replacing the Control Card

2.1 Disassembly and Replacement

Follow the instructions in the VLT® HVAC Basic Drive FC 101 Service Manual to disassemble the drive and replace the control card.

2.2 Software Compatibility

After repairing or upgrading hardware, it is important to ensure that the entire product runs on the latest released firmware. Download the latest product firmware using VLT® Motion Control Tool MCT 10.

Table 3: Available Firmware Versions

Hardware version	Firmware version
Control card H3, H4, and H5	2.xx ⁽¹⁾⁽²⁾
Control card H6	61.xx ⁽¹⁾

¹ On units produced up until week 33, 2017, fan speed control is not available and the fan runs continuously at full speed.

² 61.xx update is required for 18.5–22 kW

When downloading the latest firmware, follow the firmware update procedure in the VLT® Motion Control Tool MCT 10 Operating Guide. MCT 10 can be downloaded from www.danfoss.com in the *Service and support/Downloads* section.

N O T I C E

An internal fault, Alarm 38, occurs if a firmware update is required. Use the normal MCT 10 firmware update to resolve this error.

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