Installation Instructions
Mixing Fan Kit for D1h–D8h Drives
VLT® FC Series FC 102, FC 103, FC 202, FC 302

Description

The mixing fan replacement kit includes parts required to replace the mixing fan in D1h–D8h drives.

Kit Ordering Number

Kit number	Kit description
176F3165	Mixing fan DC 40x28

Table 1.1 Ordering Number for Kit

Items Supplied

Item	Quantity
Mixing fan	1
Installation instructions	1

Table 1.2 Items Supplied in Kit

Safety Information

Only qualified, Danfoss authorized personnel are allowed to install the parts described in these installation instructions. Handling of the drive and its parts must be done in accordance with the corresponding *operating guide*.

⚠WARNING

ELECTRICAL SHOCK HAZARD

VLT® FC series drives contain dangerous voltages when connected to mains voltage. Improper installation, and installing or servicing with power connected, can cause death, serious injury, or equipment failure.

To avoid death, serious injury, or equipment failure:
- **Only use qualified electricians for the installation.**

- **Disconnect the drive from all power sources before installation or service.**

- **Treat the drive as live whenever the mains voltage is connected.**

- **Follow the guidelines in these instructions and local electrical safety codes.**
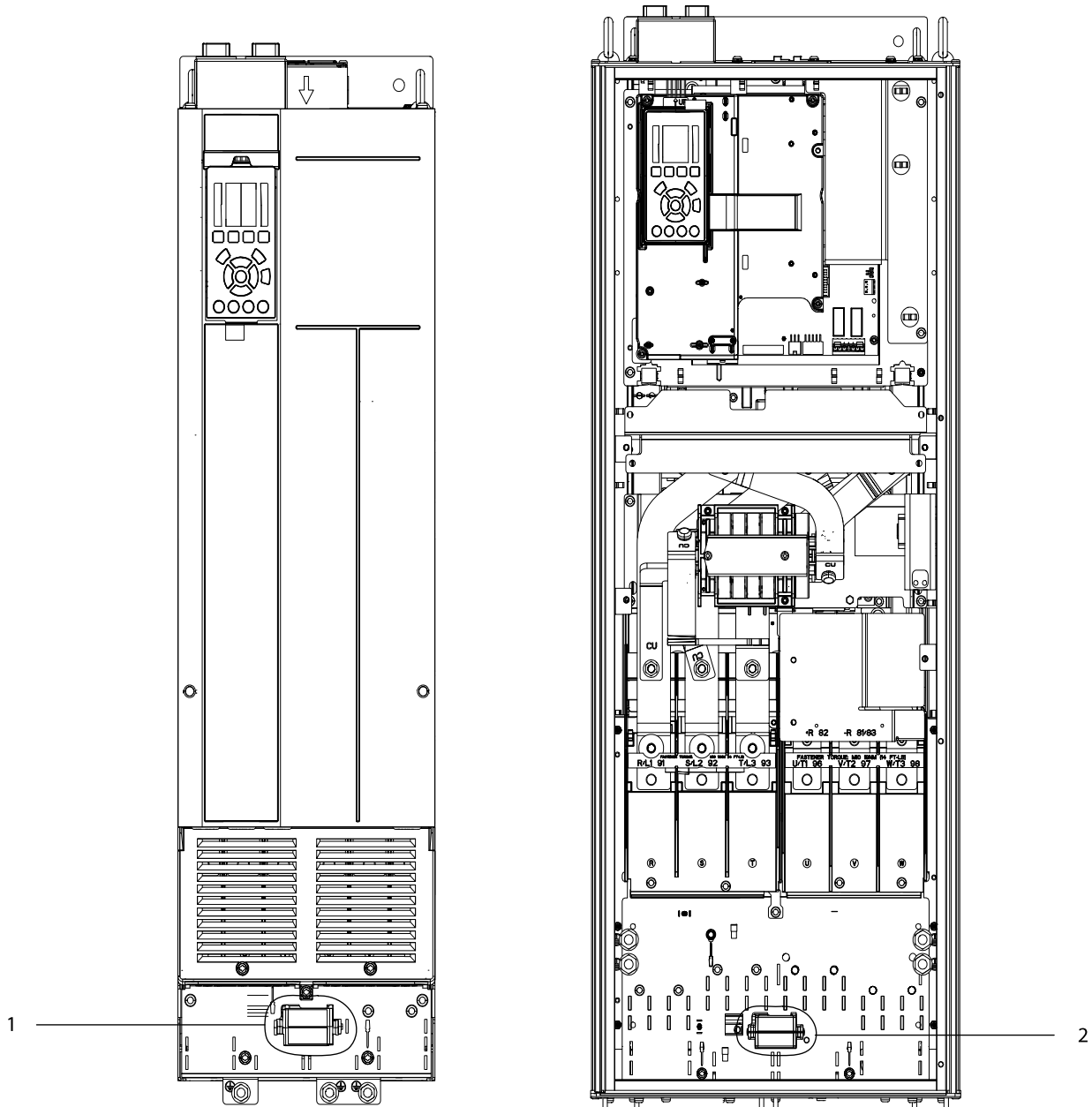
⚠WARNING

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 LED indicator lights are off. Failure to wait the specified time after power has been removed before performing service or repair work can result in death or serious injury.

- **Stop the motor.**

- **Disconnect AC mains and remote DC-link power supplies, including battery back-ups, UPS, and DC-link connections to other drives.**

- **Disconnect or lock PM motor.**

- **Wait for the capacitors to discharge fully. The minimum waiting time is 20 minutes.**

- **Before performing any service or repair work, use an appropriate voltage measuring device to make sure that the capacitors are fully discharged.**
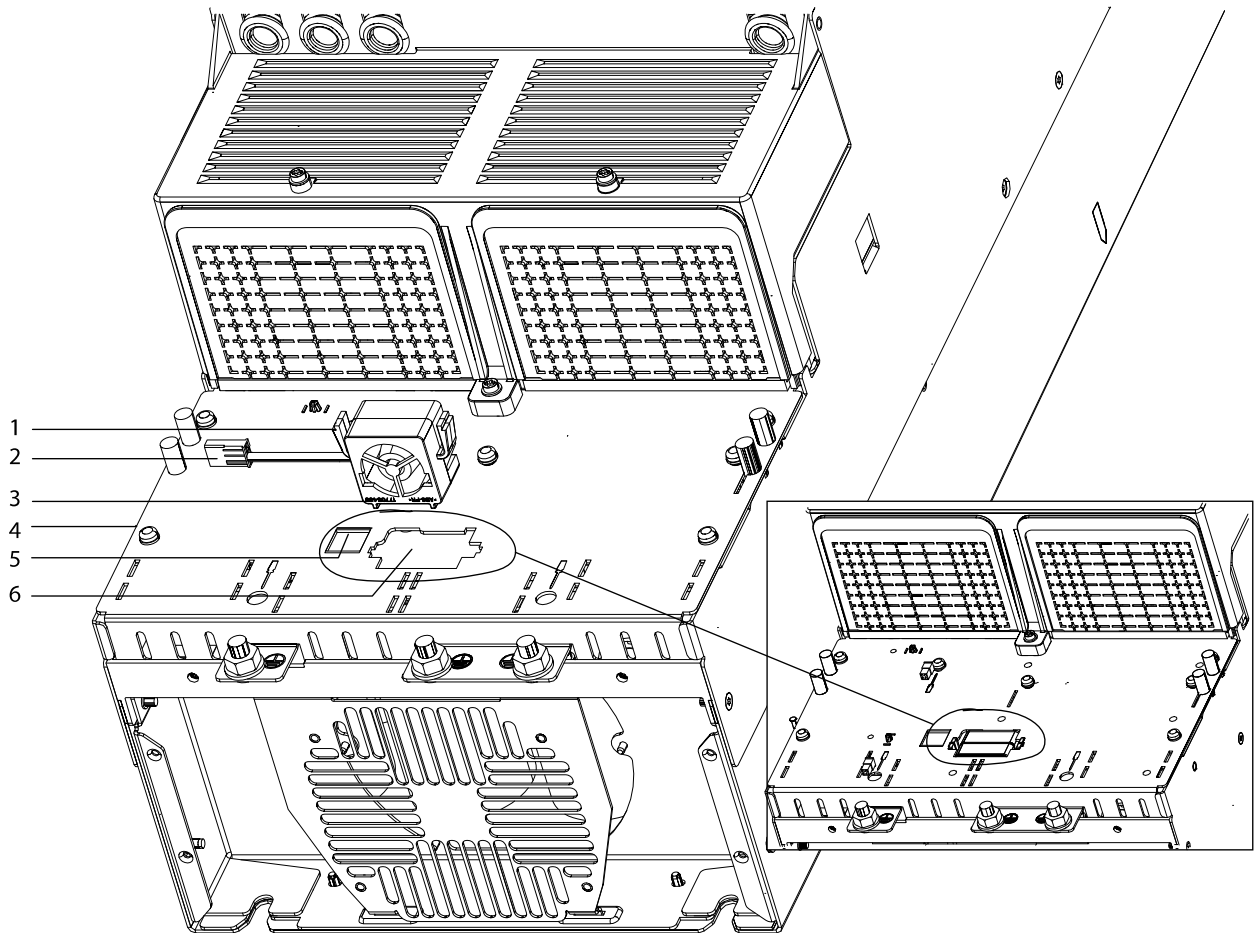
Installation Instructions

The mixing fan snaps into a slot in the power terminal mounting plate. To locate the fan, see *Illustration 1.1*. To access the fan in an enclosed drive, open the enclosure door.

| 1 | Mixing fan in IP20/Chassis drive (D3h shown) | 2 | Mixing fan in IP21/Type 1, IP54/Type 12 drive (D2h shown) |

Illustration 1.1 Location of Mixing Fan

1	Fan release tab	4	Power terminal mounting plate
2	Fan cable connector	5	Cable access hole
3	Mixing fan	6	Mixing fan slot

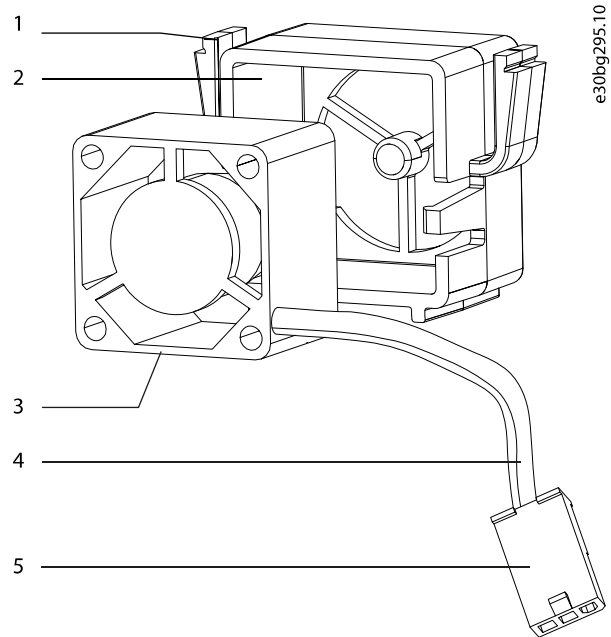**Illustration 1.2 Mixing Fan Disassembly/Assembly**

To remove the mixing fan, use the following steps. Refer to *Illustration 1.2*.

Disassembly

1. Place the end of a screwdriver under each of the mixing fan release tabs. Press in and lift to free the fan and housing from the power terminal mounting plate.

2. Unplug the mixing fan cable connector. Tape the free end of the fan cable to the mounting plate so that it does not fall back into the drive.

3. Remove the mixing fan from the fan housing.

Reassembly

1. Connect the fan cable to the next mixing fan cable connector.

2. Position the mixing fan in the fan housing. Refer to *Illustration 1.3*.

3. Position the fan and housing in the fan slot on the power terminal mounting plate. See *Illustration 1.2*.

4. Press the mixing fan into the slot until the release tabs snap into place.

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1	Fan release tab
2	Fan housing
3	Mixing fan
4	Mixing fan cable
5	Mixing fan cable connector

Illustration 1.3 Mixing Fan and Housing