Danfoss

Installation Instructions Top Fan Replacement for E3h/E4h Drives

Description

The top fan assembly in E3h and E4h drives consists of 2 fans within a single fan housing. The top fan replacement kit contains all parts required to replace 1 fan in the top fan assembly.

| Part number | Kit description | |
|-------------|----------------------------|--|
| 176F3176 | Top fan for IP20 enclosure | |

Table 1.1 Part Number for the Top Fan Kit

Items Supplied

The door fan replacement kit contains the following:

- 1 fan
- Installation instructions

Safety Instructions

Only qualified, Danfoss authorized personnel are allowed to install the parts described in these installation instructions. Disassembly and reassembly of the drive must be done in accordance with the corresponding *service manual*.

ELECTRICAL SHOCK HAZARD

VLT[®] 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.

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 40 minutes 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 DClink connections to other drives.
- Disconnect or lock PM motor.
- Wait 40 minutes for capacitors to discharge fully.
- Before performing any service or repair work, use an appropriate voltage measuring device to make sure that the capacitors are fully discharged.

Top Fan Replacement for E3h/E4h Drives

Installation Instructions

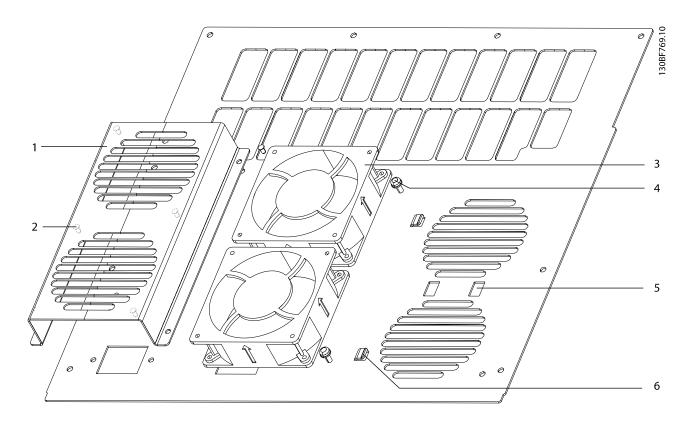
Removing the Top Fan

To remove and replace the top fan, use the following procedures. Refer to Illustration 1.1.

- 1. Remove 2 screws (T25) from the fan housing.
- 2. Slide the fan housing and fans out from under the retaining clips.
- 3. Unplug the in-line connector attaching the fan cable.
- 4. Feed the cable through the cable access hole.
- 5. Lift the fans from the pins in the fan housing.

Installing the Top Fan

- 1. Place the fans over the pins in the fan housing. Check that the air direction arrows point upward and away from the drive.
- 2. Feed the fan cables through the cable access hole on the top plate.
- 3. Reconnect the in-line cable connector.
- 4. Slide the fan housing and fans into position under the retaining clips.
- 5. Secure 2 screws (T25) in the fan housing.



| 1 | Fan housing | 4 | Screw (T25) |
|---|-------------------------------|---|-------------------|
| 2 | Mounting pin (inside housing) | 5 | Cable access hole |
| 3 | Fan | 6 | Retaining clip |

Illustration 1.1 Top Fan

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