

Danfoss FC-280 VLT Midi Drive Fan Replacement



Danfoss FC-280 VLT Midi Drive Fan Replacement Instruction Manual

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Danfoss FC-280 VLT Midi Drive Fan Replacement



Product Information

Specifications

- **Enclosure Types:** K1, K2, K3, K4, K5
- **Ordering Numbers:** 132B0351, 132B0352, 132B0353, 132B0371, 132B0372
- **Tools Required:** Flat-edged screwdriver, T10 tightening torques
- **Minimum Waiting Time for Discharge:** 4 minutes for K1 and K2, 15 minutes for K3

FAQ

- **Q:** What should I do if the warning LED indicator lights are off?
 - **A:** Even when the warning LED indicator lights are off, ensure to wait for the specified minimum waiting time before performing service or repair work to avoid potential hazards.
- **Q:** How can I ensure that the capacitors are fully discharged?
 - **A:** Use an appropriate voltage measuring device to confirm that the capacitors are fully discharged before handling the frequency converter.

The instructions provide information about fan replacement in the VLT® Midi Drive FC 280.

Only Danfoss-authorized, qualified personnel is allowed to repair this equipment. The personnel must be familiar with the instructions and safety measures described in the VLT® Midi Drive FC 280 Service Guide.

Items Supplied

Items supplied depend on the ordered code number and enclosure type of the frequency converter.

Ordering Numbers

Enclosure	Power range [kW (hp)]	Ordering number
K1	0.37–2.2 (0.5–3.0)	132B0351
K2	3.0–5.5 (4.0–7.5)	132B0352
K3	7.5 (10)	132B0353
K4	11–15 (15–20)	132B0371
K5	18.5–22 (25–30)	132B0372

Tools Required

- Screwdrivers:
 - Flat-edged
 - T10

Tightening torques

- 0.5–0.7 Nm (4.4–6.2 in-lb)

Safety Instructions

WARNING: DISCHARGE TIME

The frequency converter contains DC-link capacitors, which can remain charged even when the frequency converter is not powered. High voltage can be present even when the warning LED indicator lights are o. Failure to wait the specified time after power has been removed before performing service or repair work can result in death or serious injury.

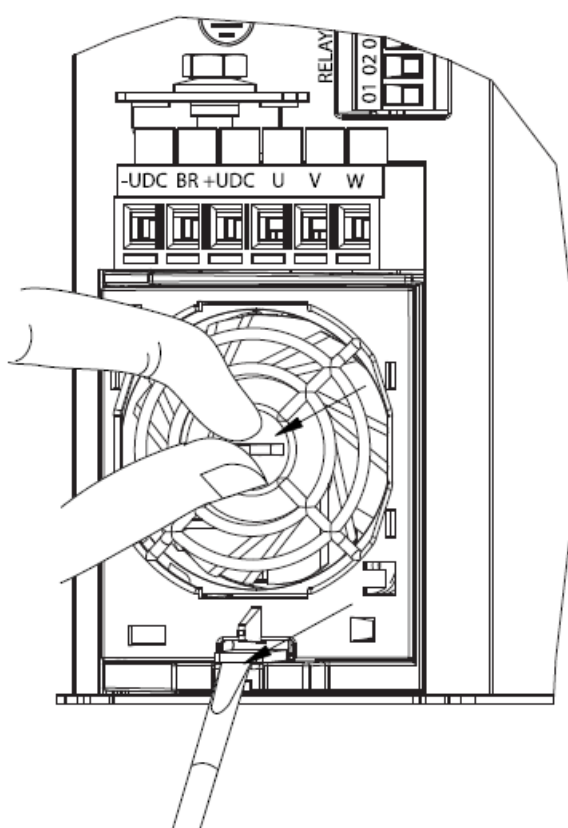
- Stop the motor.
- Disconnect AC mains and remote DC-link supplies, including battery back-ups, UPS, and DC-link connections to other frequency converters.
- Disconnect or lock PM motor.
- Wait for the capacitors to discharge fully. The minimum waiting time is specified in Table 1.1.
- Before performing any service or repair work, use an appropriate voltage measuring device to make sure that the capacitors are fully discharged.

Table 1.1 Discharge Time

Voltage [V]	Power range [kW (hp)]	Minimum waiting time (minutes)
200–240	0.37–3.7 (0.5–5)	4
380–480	0.37–7.5 (0.5–10)	4
	11–22 (15–30)	15

Installation

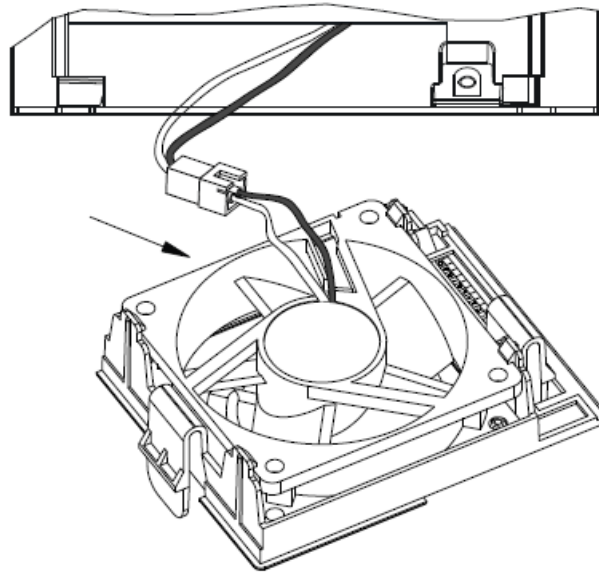
Enclosure Sizes K1, K2, and K4



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Illustration 1.1 Removing Fan on Enclosure Sizes K1, K2, and K4

1. Grab the center handle on the fan and use a flatedged screwdriver to release the retaining lever.



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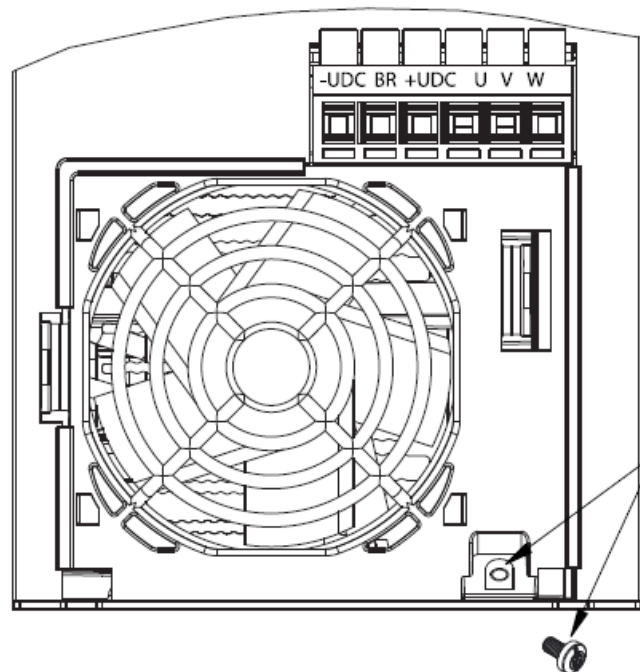
Illustration 1.2 Fan Cable Plug. Plug Location Depends on Fan Type.

2. Unplug the fan cable.

- **NOTICE:** For VLT® Midi Drive FC 280, the fan cable has 3 wires.

3. Connect the new fan cable and click the new fan into place.

Enclosure Size K3



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Illustration 1.3 Removing Fan Screw on Enclosure Size K3

1. Remove the M3x6 screw in the bottom right corner.

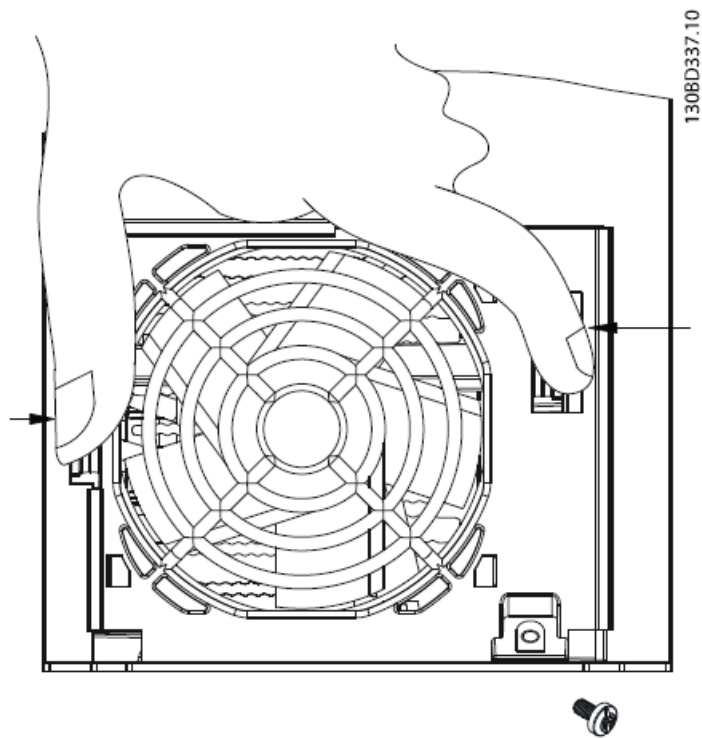


Illustration 1.4 Pulling out Fan on Enclosure Size K3

2. Press the levers on each side of the fan and pull the fan outwards.

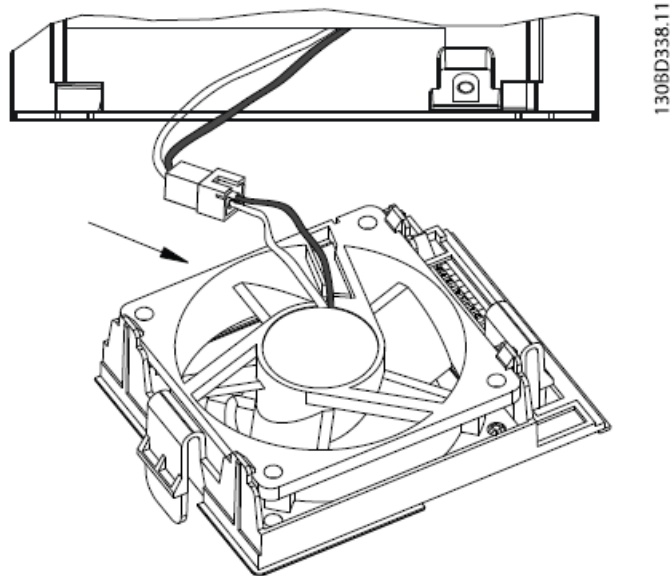
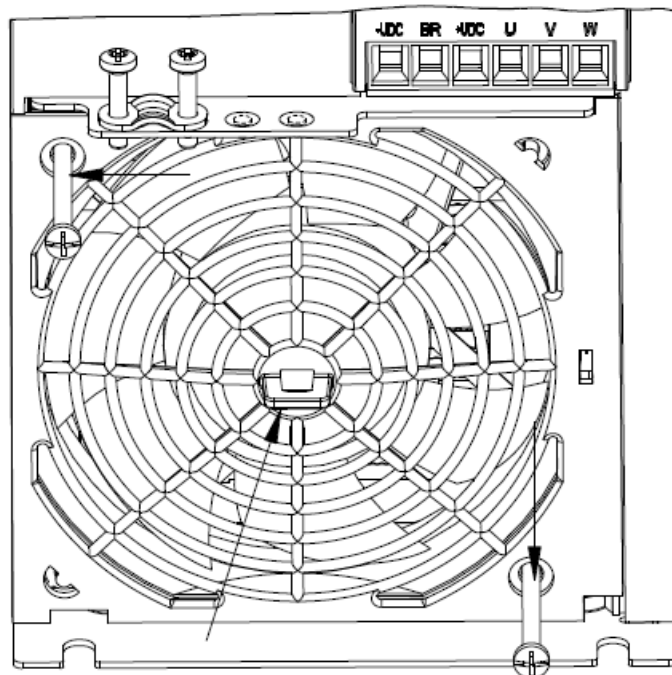


Illustration 1.5 Fan Cable Plug. Plug Location Depends on Fan Type.

3. Unplug the fan cable.
 - **NOTICE:** For VLT® Midi Drive FC 280, the fan cable has 3 wires.
4. Install the new fan in reverse order.

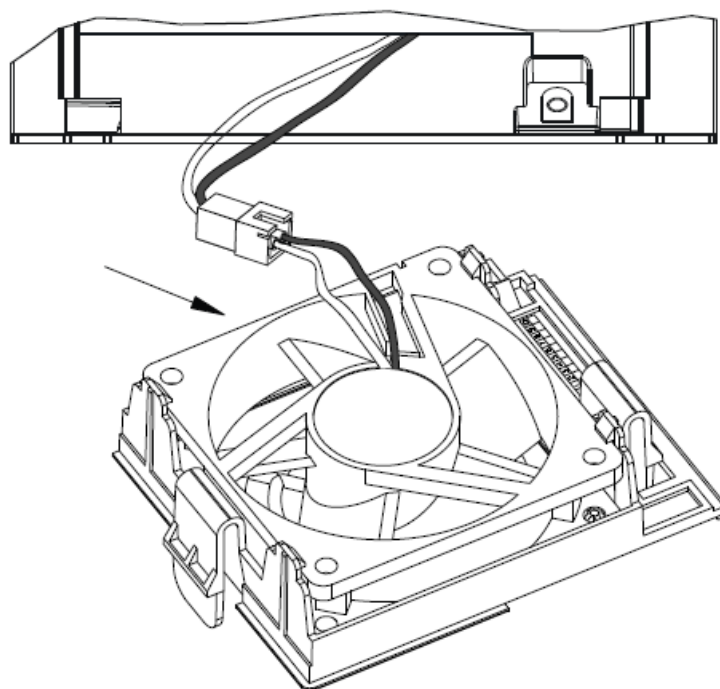
Enclosure Size K5



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Illustration 1.6 Removing Fan Screws on Enclosure Size K5

1. Remove M4x50 screws in the bottom right and upper left corners.
2. Grab the center handle and pull the fan outwards.



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Illustration 1.7 Fan Cable Plug. Plug Location Depends on Fan Type.

3. Unplug the fan cable.
 - **NOTICE:** For VLT® Midi Drive FC 280, the fan cable has 3 wires.
4. Install the new fan in reverse order.

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Contact

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Documents / Resources

	<p>Danfoss FC-280 VLT Midi Drive Fan Replacement [pdf] Instruction Manual FC-280 VLT Midi Drive Fan Replacement, FC-280, VLT Midi Drive Fan Replacement, Midi Drive Fan Replacement, Drive Fan Replacement, Fan Replacement, Replacement</p>
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References

- [Global AC drive manufacturer - Danfoss Drives | Danfoss](#)
- [User Manual](#)

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