

# **Danfoss 106 Frequency Converter Instruction Manual**

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Installation Instructions Remote Mounting of LCP

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# **Items Supplied**

- LCP cable, IP 54
- Gasket
- Screws
- Mounting plate bracket

## **Additional Items Required**

• Local control panel (LCP), order no. 132B0200

## **Safety Instructions**

For important information about safety precautions for installation, refer to

- VLT® HVAC Basic Drive FC 101 Quick Guide
- VLT® DriveMotor FCP 106 and FCM 106 Operating Instructions



The frequency converter contains DC-link capacitors, which can remain charged even when the frequency converter is not powered. Failure to wait the specified time after power has been removed before performing service or repair work, could result in death or serious injury.

- 1. Stop motor.
- 2. Disconnect AC mains, permanent magnet type motors, and remote DC-link power supplies, including battery back-ups, UPS, and DC-link connections to other frequency converters.
- 3. Wait for the capacitors to discharge fully, before performing any service or repair work. The duration of waiting time is specified in Table 1.1 and Table 1.2.

Voltage [V]	Power range [kW]	Minimum waiting time [min]
3×200	0.25–3.7	4
3×200	5.5–11	15
3×400	0.37–7.5	4
3×400	11–90	15
3×600	2.2–7.5	4
3×600	11–90	15

Table 1.1 Discharge Time for FC 101

Voltage [V]	Power Range 1) [kW]	Minimum waiting time (min)
3×400	0.55–7.5	4

High voltage can be present even when the warning LED indicator lights are off.

Table 1.2 Discharge Time for FCP 106 and FCM 106

1) Power ratings relate to normal overload (NO), see VLT® DriveMotor FCP 106 and FCM 106 Operating Instructions.

# **Mechanical Installation**

1. Fit gasket on LCP, see Illustration 1.1.

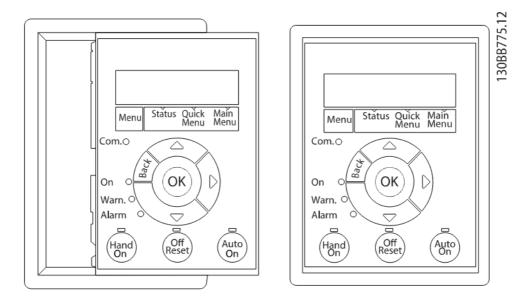
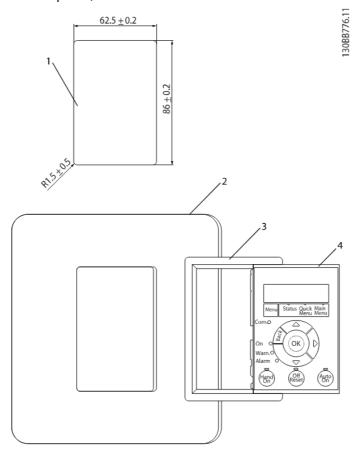


Illustration 1.1 Fit Gasket on LCP

- 2. Cut out the panel, with the dimensions shown in Illustration 1.2.
- 3. Position LCP with gasket onto the panel, as shown in Illustration 1.2.



1	Panel cut out. Panel thickness 1-3 mm
2	Panel
3	Gasket
4	LCP

- 4. Position bracket on the back of the LCP, then slide down. See Illustration 1.3
- 5. Fasten bracket to the LCP using the thread cutting screws supplied. Tightening torque is 1.3 Nm.

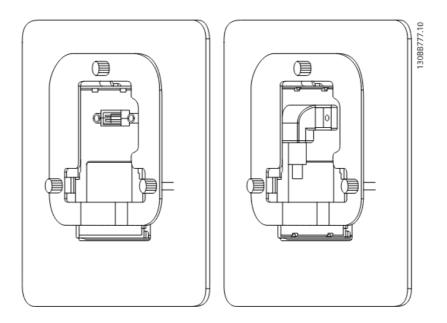


Illustration 1.3 Position Bracket and Slide Down

## **Electrical Installation for FC 101**

- 1. Connect LCP cable to the frequency converter, as shown in Illustration 1.4.
- 2. Fasten connector to the frequency converter using the thread cutting screws supplied. Tightening torque is 1.3 Nm.

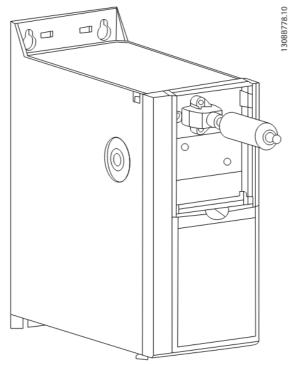


Illustration 1.4 Connection at Frequency Converter, FC 101

#### Electrical Installation for FCP 106 and FCM 106

- 1. For FCP 106 and FCM 106, remote mounting of the LCP is intended for set-up and maintenance purposes only, and is not suited for permanent installation.
  - Note that the LCP cable has ingress protection class IP 54, and is not UL listed or UL recognised.
- 2. Connect LCP cable at the panel, as shown in Illustration 1.5.
- 3. Connect LCP cable at the frequency converter as shown in Illustration 1.6.

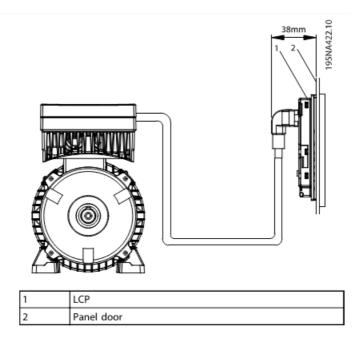


Illustration 1.5 Connection at Panel, FCP 106 and FCM 106

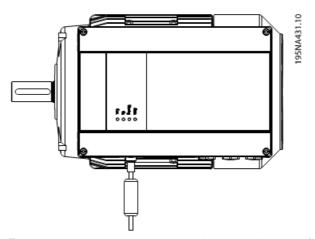


Illustration 1.6 Connection at Frequency Converter, FCP 106 and FCM 106

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#### 132R0084



# **Documents / Resources**



<u>Danfoss 106 Frequency Converter</u> [pdf] Instruction Manual 106 Frequency Converter, 106, Frequency Converter, Converter

# References

User Manual

#### Manuals+, Privacy Policy

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