

Installation Instructions

Control Cassettes

VLT[®] Midi Drive FC 280

There are 5 types of control cassettes for VLT[®] Midi Drive FC 280:

- Standard control cassette.
- Control cassette with PROFIBUS.
- Control cassette with PROFINET.
- Control cassette with CANopen[®].
- Control cassette with EtherNet/IP[™].

The installation instructions in this manual apply to all control cassettes. For all control cassettes, except for the standard cassette, mount the decoupling kit after mounting the control cassette. Find the instructions on mounting the decoupling kit in the kit package.

For information on how to program the control card, refer to:

- *VLT[®] Midi Drive FC 280 Programming Guide.*
- *VLT[®] Midi Drive FC 280 PROFIBUS Programming Guide.*
- *VLT[®] Midi Drive FC 280 PROFINET Programming Guide.*
- *VLT[®] Midi Drive FC 280 CANopen[®] Programming Guide.*
- *VLT[®] Midi Drive FC 280 EtherNet/IP[™] Programming Guide.*

CANopen[®] is a registered trademark for CAN IN AUTOMATION international users and manufacturers group e. V.

EtherNet/IP[™] is a trademark of ODVA, Inc.

Items Supplied

- One of the 5 types of control cassettes:
 - Standard control cassette (132B0345).
 - Control cassette with PROFIBUS (132B0347).
 - Control cassette with PROFINET (132B0348).
 - Control cassette with CANopen[®] (132B0346).
 - Control cassette with EtherNet/IP[™] (132B0349).
- Two screws.
- Decoupling kit (all control cassettes, except for the standard cassette).

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 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 frequency converters.
- Disconnect or lock PM motor.
- Wait for the capacitors to discharge fully. The minimum duration of 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.

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

Table 1.1 Discharge Time

Refer to the *VLT[®] Midi Drive FC 280 Operating Instructions* for detailed information about safe installation of the frequency converter.

Mounting

1. Remove the old control cassette. See *chapter Disassembly and Assembly Instructions* in the *service guide* for instructions to remove a control cassette.
2. Connect the control cassette with the frequency converter as shown in *Illustration 1.1*.

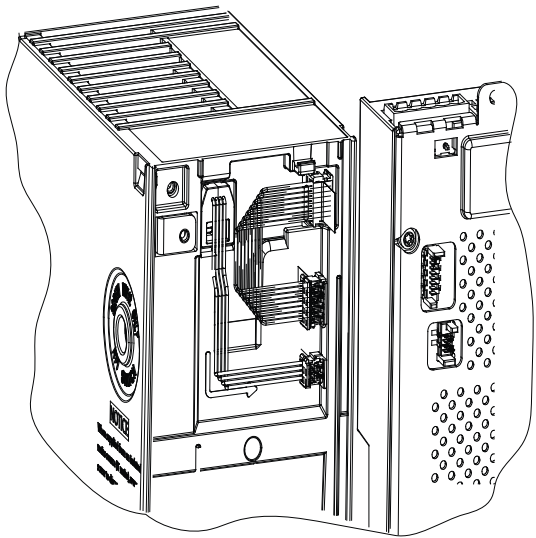


Illustration 1.1 Connect the Control Cassette

3. Place the control cassette on the frequency converter and slide it into place.

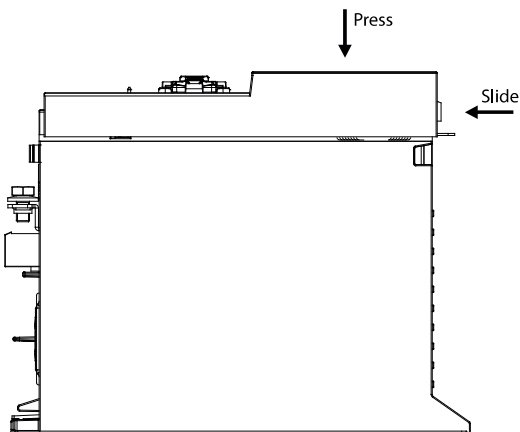
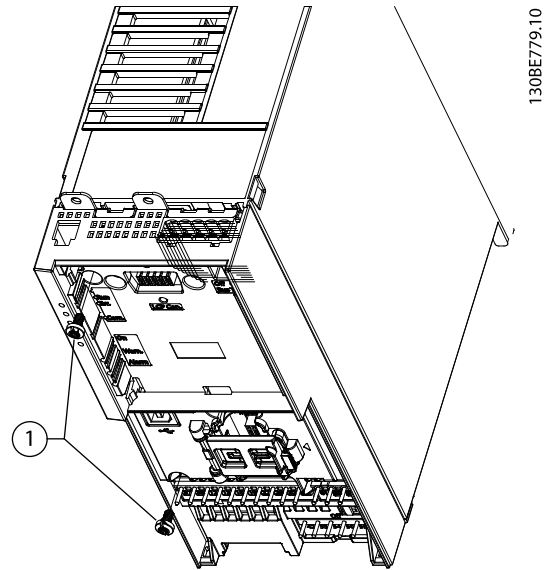


Illustration 1.2 Slide the Control Cassette into Place

4. Fasten the control cassette on the frequency converter using 2 screws (supplied). Tightening torque: 0.7–1.0 Nm (6.2–8.8 lb-in).



1	Screws
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Illustration 1.3 Tighten Screws

NOTICE

For the new control cassette to be properly recognized by the frequency converter, update the software in the frequency converter every time a new control cassette is installed. For details about how to update the software, see *chapter Flashing of Frequency Converter after Control Card Replacement* in the *VLT® Midi Drive FC 280 Service Guide*.

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