



Danfoss Graham

**READ THESE
INSTRUCTIONS FIRST**

**Unpacking and Installation
Instructions**

**VLT[®] 6000 Adjustable Frequency Drive
Option Enclosure**

General

For an option enclosure containing a bypass stored prior to installation, ensure a storage temperature range between 13° F (-25° C) to 149° F (65° C).

Dimensions for the 1200 option enclosure, 600 option enclosure and their associated shipping containers in inches and millimeters are shown in the table below.

	Height	Width	Depth
1200 mm Chassis	79.1 inches (2010 mm)	47.2 inches (1200 mm)	23.6 inches (600 mm)
Crate: 1200 mm	91.5 in. (2324 mm)	53.0 in (1346 mm)	30.0 in. (762 mm)
600 mm Chassis	79.1 inches (2010 mm)	23.6 inches (600 mm)	23.6 inches (600 mm)
Crate: 600 mm	91.5 in. (2324 mm)	53.0 in (1346 mm)	30.0 in. (762 mm)

To lessen the possibility of damage, it is recommended that the option enclosure be located as close to the final installation site as possible prior to removing the shipping crate.

Option Enclosure Base Installation

A mounting base is provided to secure the option enclosure into position (see figure 1).

1. Assemble mounting base in accordance with manufacturer's instructions.
2. Do not assemble side access panel of mounting base, on appropriate side, to allow for electrical cable access for connection to drive.
3. Ensure that mounting base is level.

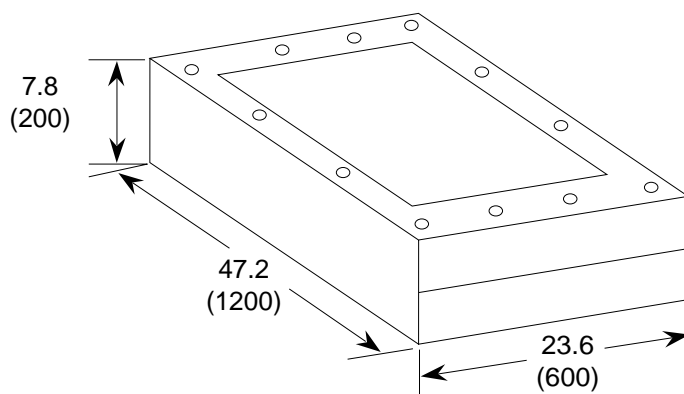


Figure 1. 1200 Chassis Mounting Base

⚠ CAUTION

A forklift or other lifting device with a qualified operator is needed to remove the option enclosure from the crate.

Unpacking the Option Enclosure

Remove the option enclosure shipping crate in accordance with the following instructions.

1. Remove top panel of crate by prying up metal locking tabs that secure top panel (see figure 2). This allows access to lifting rings located on top of option enclosure.
2. Use a forklift or other lifting device to ensure stability of option enclosure. Position lifting device securely.
3. Use a spreader bar or similar device to distribute weight evenly on all four lifting rings (see figure 3). Lift option enclosure several inches to clear crate bottom for removal.
4. Remove remaining crate panels by prying up metal locking tabs.

⚠ CAUTION

DO NOT lift unit in the following manner. Damage to casing may result, making front door panels inoperable.

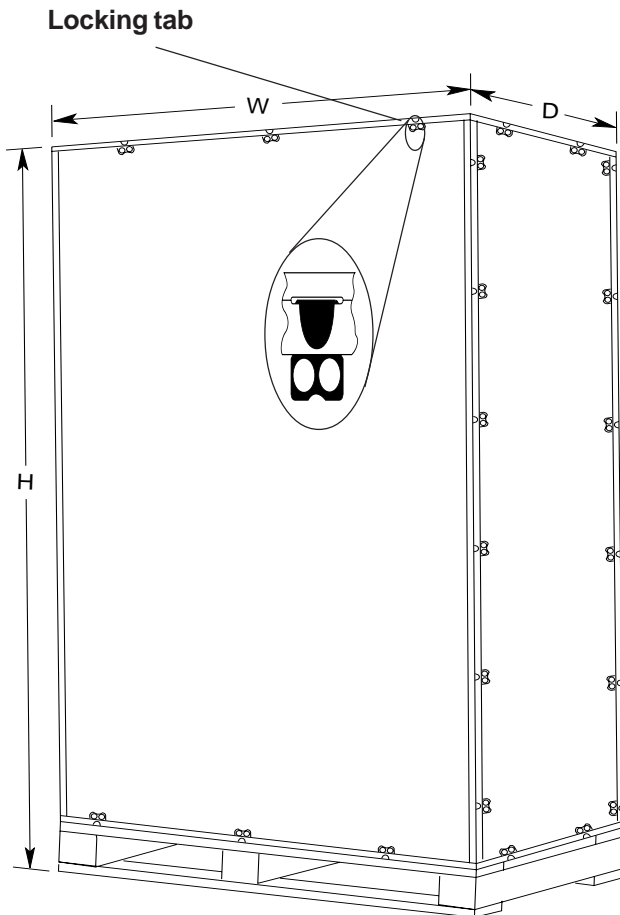
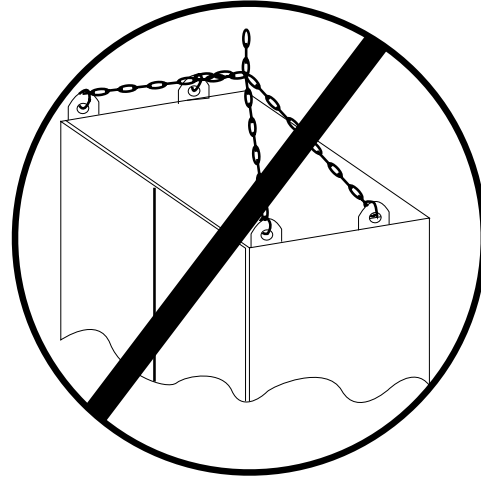


Figure 2. Shipping Crate (1200 mm shown)

Proper lifting method

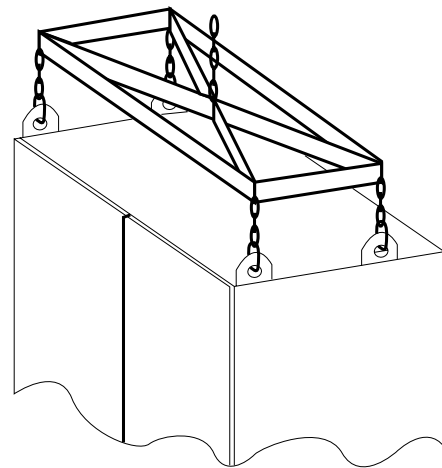
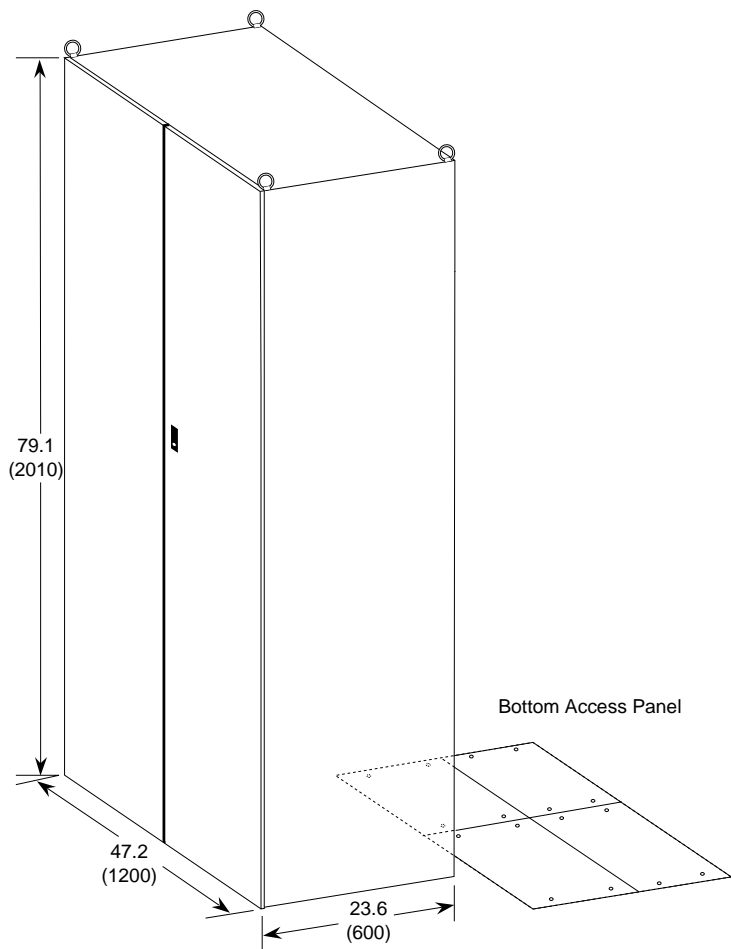


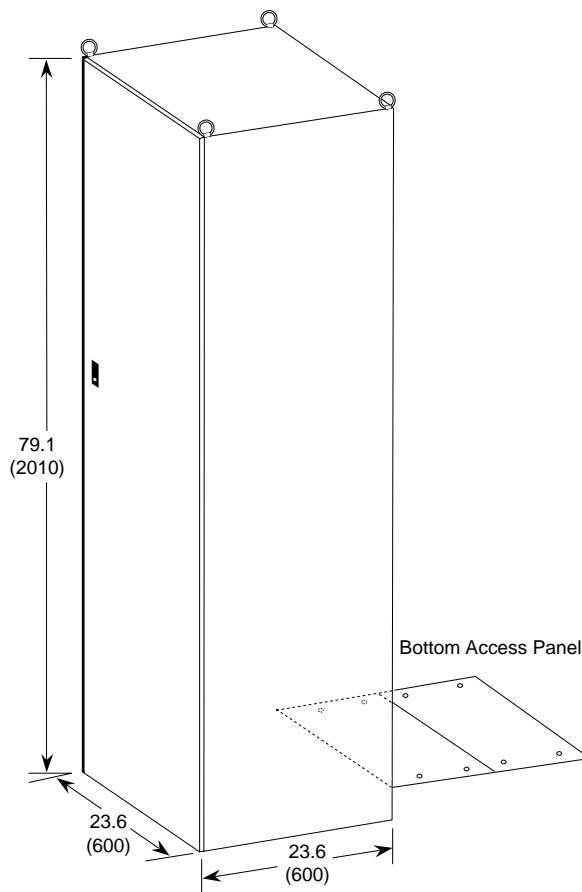
Figure 3. Option Enclosure Lift

Positioning

After unpacking, the enclosure option is ready to be lifted prior to mounting on the base.



1200 Option Enclosure



600 Option Enclosure

Bottom Access Panel Removal

The bottom access panel of the option enclosure must be removed prior to installation to provide access to the electrical cabling. The bottom panel is divided into sections. Remove the desired panel sections, as required, by removing the set screws holding the panel in place. Protect the electrical cables and connection wiring against damage during installation.

Mounting Option Enclosure to Base

Align the holes on the bottom of the option enclosure with the corresponding holes on the mounting base. Fasten the enclosure to the base with the attaching hardware supplied with the option enclosure.

WARNING

Observe all warnings and safety precautions as well as all local electrical codes and the National Electrical Code (NEC).

Electrical Connections

Wire the option enclosure to the VLT drive in accordance with the following procedure.

1. Connect input power cables (typically labeled 5L1, 5L2, and 5L3) to drive input power connections R/L1, S/L2, and T/L3 (terminals 91, 92, and 93). Refer to customer connection diagram for details.
2. Connect output power cables (typically labeled 2T1, 2T2, and 2T3) from option to drive output connection U/T1, V/T2, and W/T3 (terminals 96, 97, and 98). Refer to customer connection diagram for details.
3. Connect control wires (provided loose in bottom of option enclosure) to VLT drive control terminals in accordance with schematic diagram provided with option.

Connect the drive and option assembly to the building electrical system in accordance with the following procedure.

1. Connect 3-phase AC input power to option enclosure terminals L1, L2, and L3. Connect ground wire to ground terminal inside of option enclosure.
2. Connect 3-phase AC motor leads to option enclosure terminals T1, T2, and T3. Connect motor ground to ground terminal inside of option enclosure.
3. Connect external control wires to drive and option in accordance with customer connection diagram provided with option. Note that terminal block TB1 (TB2, etc.) is located in option enclosure.

Operating Instructions

See the *Installation, Operation and Maintenance Manual* (document number 23-6108-00) for the VLT 6000 Adjustable Frequency Drive for operating instructions.



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