# Installation Instructions
# VLT® FC Series
# Spare Brake IGBT

## 1.1.1 Pre-installation

**Pre-Installation Considerations**

- Modules contained in spare part kits may come from different manufacturers than original parts, but are compatible.
- Ensure that the environment is free of airborne dust and contaminants that can accumulate on the thermal compound.
- To avoid a premature IGBT failure, use thermal grease to create a proper thermal interface between the IGBT modules and the heatsink.

Refer to the product service manual for disassembly/reassembly procedures.

## NOTICE

**Follow proper ESD precautions to prevent damage to sensitive components**

## 1.1.2 Installation Procedure

1. Clean the heat sink with a clean cloth and a solvent or alcohol solution before installing the IGBT module.
2. Apply thermal grease to the bottom of the IGBT module.
    - Thermal grease may separate inside the packet. Apply light pressure to the outside of the packet for one minute to mix contents that may have settled.
    - Apply a layer of grease to the bottom of the module. Excess grease around the module is not a problem.
3. Place the IGBT module in position and screw hand-tight using the mounting screws provided with the spare part kit. Wait one minute before torquing the screws.
4. Slowly tighten the screws, in the order shown in *Illustration 1.1*, to 50% of the torque value provided in *Table 1.1* (maximum 20 revolutions per minute).
5. Continue to slowly tighten the mounting screws to 100% of the torque value (maximum 5 revolutions per minute).

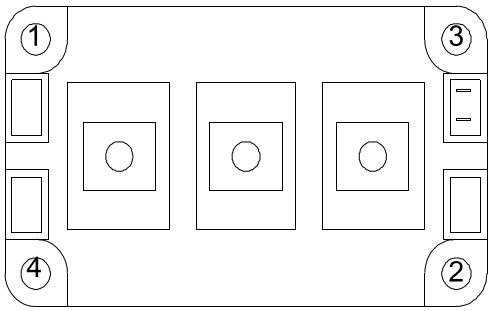


**Illustration 1.1 Torque Pattern**

| Bus bar connection torque | Mounting torque | Tightening order |
|---|---|---|
| 44 in-lb (5 Nm) | 44 in-lb (5 Nm) | Hand tight: 1-2-3-4<br>Full torque: 4-3-2-1 |

**Table 1.1 Torque Instructions**