

# Installation Instructions

## VLT<sup>®</sup> 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).

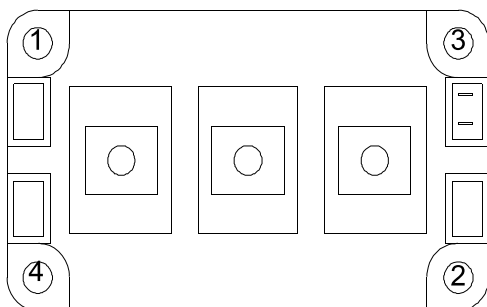


Illustration 1.1 Torque Pattern

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

Table 1.1 Torque Instructions

Danfoss can accept no responsibility for possible errors in catalogues, brochures and other printed material. Danfoss reserves the right to alter its products without notice. This also applies to products already on order provided that such alterations can be made without subsequential changes being necessary in specifications already agreed. All trademarks in this material are property of the respective companies. Danfoss and the Danfoss logotype are trademarks of Danfoss A/S. All rights reserved.

