

KIT IGBT TUBE ASSEMBLY

100311



Installation and servicing of Danfoss Turbocor® compressors by qualified and product trained personnel only. Follow these instructions and sound refrigeration/electrical/servicing practices relating to installation, commissioning, maintenance and service.

Consult the appropriate **Danfoss Turbocor** Compressors Inc. (DTC) Service Manual on turbocor.danfoss.com for detailed service instructions. Never power compressor without covers in place and secured.

Removing the mains input cover will expose you to a voltage hazard of up to 575V. Ensure the mains input power is off and locked out before removing cover.

Before removing top cover, wait at least 20 minutes after isolating AC power to allow the high voltage capacitors to discharge.

Always wear appropriately rated safety equipment when from compressor in working around equipment and/or components energized with high voltage.

This equipment contains hazardous voltages that can cause serious injury or death.

Recover all refrigerant accordance with local codes and ensure pressure is fully vented before the removal of refrigerant containing components.

1 - Introduction:

IGBT TUBE ASSEMBLY replacement.

This kit contains the IGBT Tubes and fasteners. Please refer to our Service Manual for details regarding the replacement of the IGBT Tube Assemblies.

We have made the TTS/TGS/TTH/TGH Service Manual available to anyone. To access the manual, you may scan the applicable QR code below or you may go to our DTC website at <u>www.turbocoroem.com</u>. At the top of the page there is a pull-down menu called "Quick Links." Click this menu and select the appropriate service manual.

Refer to the applicable QR code below to download the TTS/TGS/TTH/TGH Service Manual.







2 - IGBT TUBE ASSEMBLY Removal Instructions:

- 1. Isolate compressor power as described in Section "Electrical Isolation of the Compressor" of the Service Manual (M-SV-001).
- 2. Remove the top covers.
- 3. Remove the Soft Start.
- 4. Disconnect the two (2) connectors from the Thermistor Sensor Feedthroughs.
- 5. Remove and discard the Motor Bus Bar fasteners and washers from the Inverter.
- 6. Remove and discard the IGBT Tubes.

NOTE: It may be necessary to loosen the High-Power Feed Through Nuts to provide enough clearance for the replacement of the IGBT Tubes.

3 - IGBT TUBE ASSEMBLY Installation Instructions:

- 1. Install the new IGBT Tubes between the IGBT and the Motor Bus Bars.
- 2. Connect the two (2) connectors to the Thermistor Sensor Feedthroughs.
- 3. Install the Soft Start.
- 4. Install the top covers.
- 5. Return the compressor to normal operation.

4 - Kit Contents:

Kit numbers	Compressor models
100311	All TTS/TGS/TTH/TGH models

	Part(s) Description	Picture(s)
3	TUBE -CONNECTION TO IGBT	
3	SCREW M8x70 TORX PAN HEAD DBL SEMS	

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