



# KIT DIODE RECTIFIERS ASSEMBLY

100047-2



**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.**

<p>Consult the appropriate Danfoss Turbocor Compressors Inc. (DTC) Service Manual on <a href="http://turbocor.danfoss.com">turbocor.danfoss.com</a> for detailed service instructions.</p>	<p><b>Never power compressor without covers in place and secured.</b></p> <p><b>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.</b></p> <p><b>Before removing top cover, wait at least 20 minutes after isolating AC power to allow the high voltage capacitors to discharge.</b></p>	<p>Always wear appropriately rated safety equipment when working around equipment and/or components energized with high voltage.</p> <p><b>This equipment contains hazardous voltages that can cause serious injury or death.</b></p>	<p><b>Recover all refrigerant from compressor in accordance with local codes and ensure pressure is fully vented before the removal of refrigerant containing components.</b></p>
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## 1 - Introduction

### DIODE RECTIFIERS replacement.

This kit contains the Diode Rectifiers (SCRs) and the associated hardware. Please refer to our Service Manual for details regarding the replacement of the SCRs.

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 [www.turbocoroem.com](http://www.turbocoroem.com). 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.

**English**



**Chinese**



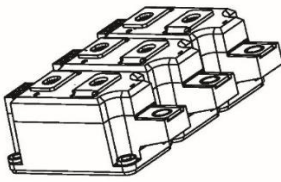


## 2 - DIODE RECTIFIERS Removal Instructions:

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 Capacitor Cover.
4. Remove the Soft Start.
5. Remove the Soft Start and AC/DC Cable Harness.
6. Remove the SCR Gate Cables from the SCRs.
7. Remove the AC mains input terminals and bus bars.
8. Remove the three (3) Snubber Capacitors.
9. Remove the DC Bus Bars and Capacitors out as an assembly.
10. Remove the three (3) SCRs.

### 3 - DIODE RECTIFIERS Installation Instruction:

1. Ensure that no residue remains on the contact surfaces of SCR Cooling Manifold.
2. Apply a line of Dow Corning Silicone Heat Sink paste (or equivalent) on the top of the SCR Cooling Manifold.
3. Using a Spatula, spread the paste evenly into a complete masking film.
4. Apply the heat sink paste to each new SCR in the same manner.
5. Install the three (3) SCRs.
6. Install the DC Bus Bars and Capacitors.
7. Install the three (3) Snubber Capacitors.
8. Install the AC mains input terminals and bus bars.
9. Install the SCR Gate Cables onto the SCRs.
10. Install the Soft Start and AC/DC Cable Harness.
11. Install the Soft Start.
12. Install the Capacitor Cover.
13. Install the top covers.
14. Return the compressor to normal operation.

### 4 - Kit Contents

QTY	Part(s) Description	Picture(s)
3	DIODE RECTIFIER MODULE	
12	SCREW M6x16 SOCKET HEAD CAP SCREW	
9	SCREW M8x20, BUTTON HEAD CAP, DBL SEMS	

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