




# KIT SOFT START FUSES

100317-1, 100317-2, 100420, 100421, 100422, 100430, 100432, 100433.

 <p><b>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.</b></p>			
<p>Consult the appropriate 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>

## 1 - Introduction:

### SOFT START FUSES Removal and Installation Instructions.

This kit contains the Soft Start Fuses. Please refer to our Service Manual for further details regarding the replacement of the fuses.

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**



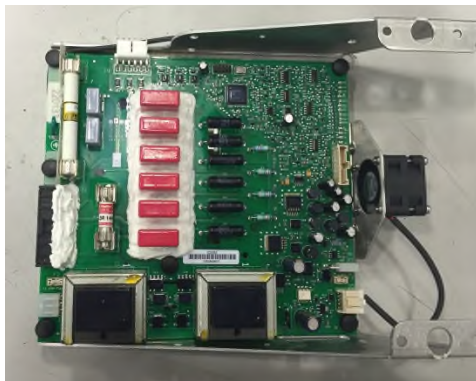
## 2 - Soft Start Removal Instructions:

- NOTE: The DC-DC Converter power supply fuse (F1), (F2) Nano fuse, (F3) Nano fuse, and the Soft Start power supply fuse (F4) and (F5 if applicable) are located on the current soft start module.
1. Isolate compressor power in accordance with the Danfoss Turbocor service manual and remove topside covers.

2. Remove the screws that secure the soft start mounting bracket to the compressor. See figure (1).
3. Lift the soft start and turn it over, placing it board side up on the AC bus bars. See figure (2).



Figure 1



Soft Start – E Revision & Earlier



Soft Start – F Revision & Later

Figure 2

3 - DC-DC Converter power supply fuse (F1) Change Instruction:

- The F1 fuse is different for F-revision and later compressors. The 3" fuse shown below is used on E-revision and earlier compressors. The smaller SPF fuse is used on F-revision and later compressors.
- Remove the DC-DC Converter fuse, figure (3), located on the soft-start and insert the appropriate replacement.



F1 Fuse – E Series & Earlier



F1 Fuse – F Series & Later

Figure 3

4 - (F2) and (F3) Nano fuse Change Instruction:

- There are two different configurations of these fuses. They will be located either as shown in figure (4) between the transformers or as pictured in figure (5) The Nano fuses are the same physical size but their capacities are different. It may require the use of long nose pliers or forceps to replace them.

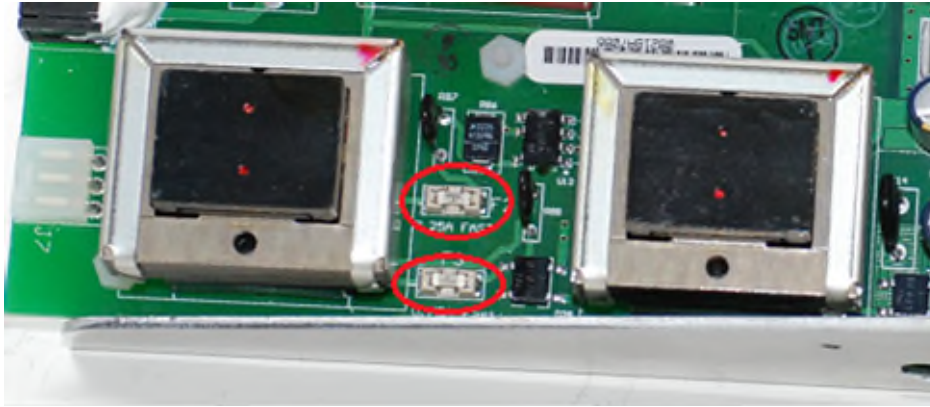


Figure 4

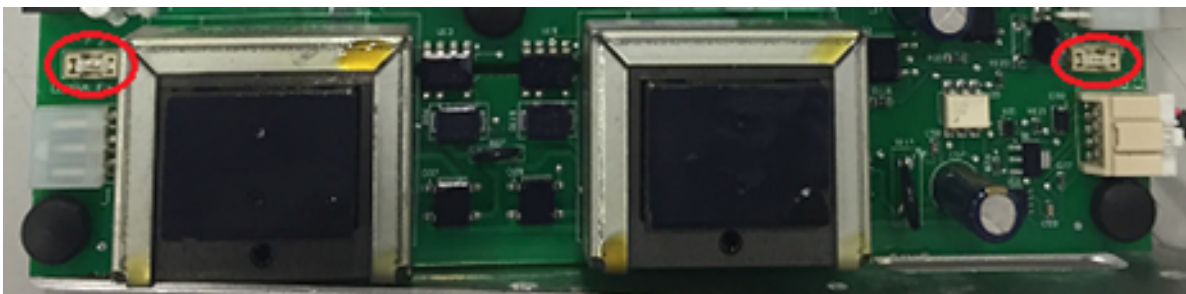
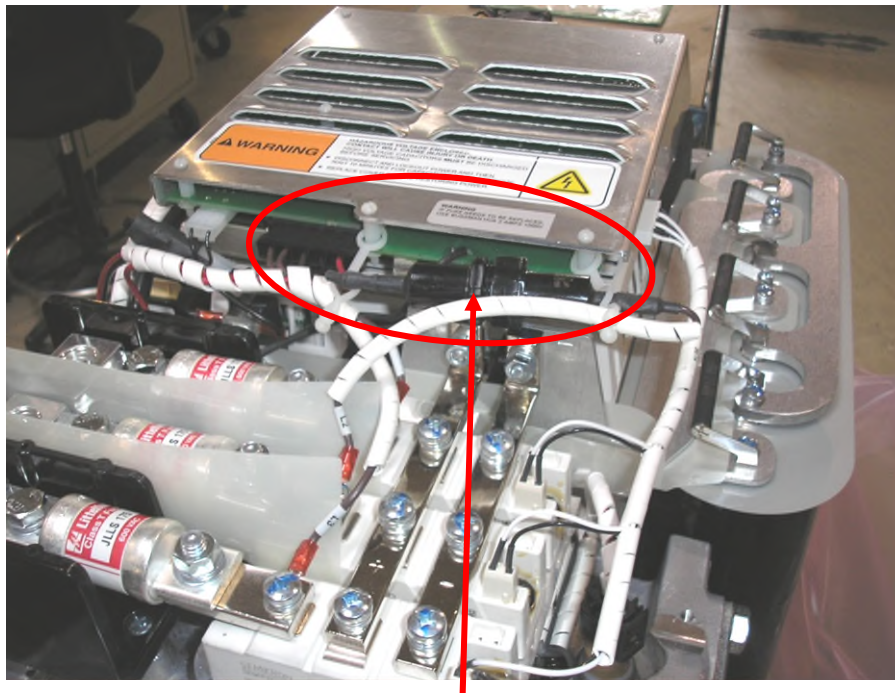


Figure 5

5 - Soft Start power supply fuse (F4) Change Instruction:

- There are two different configurations for this fuse. It is placed in the harnesses assembly in previous revisions while in the current revision soft start it is located on the soft start.
- Open the fuse case in the cable harness and change the fuse for previous revisions as pictured in figure (6).



Fuse case

Figure 6

- Repeat steps 2 and 3 to change the fuse (F4) as shown in figure (7) for current revision. For F-series and later there is another fuse (F5) to be replaced.

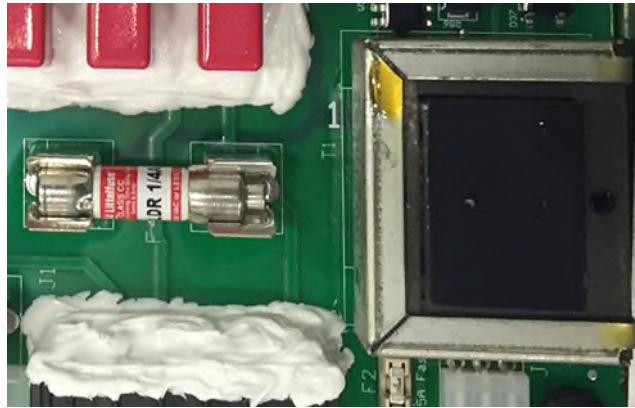


Figure 7

6 - Kit Contents:

Kit	100317-1, 100317-2*, Other kits not shown contain only one of the types of fuses shown below.	
QTY	Part(s) Description	Picture(s)
3	(F1) DC-DC Converter Power Supply Fuse (Used on Compressors with original N-revision and earlier soft starts)  <i>*Not included in 100317-2</i>	
3	(F1) DC-DC Converter Power Supply Fuse (Used on Compressors with original Q-revision and later soft starts)	
6	(F4) and (F5 if applicable) Soft Start power supply fuse	
10	(F2) Nano fuse	
10	(F3) Nano fuse	

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