TT Series Spare Part Kit



CABLE, SOFTSTART AC-DC

100381-1 & 100381-2.

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.

Consult the appropriate Danfoss LLC Service Manual on www.turbocoroem.com for detailed service instructions.	Always wear appropriately rated safety equipment when 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 from compressor in accordance with local codes and ensure pressure is fully vented before the removal of refrigerant containing components.
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1 - Introduction

CABLE, SOFTSTART AC-DC replacement.

This kit contains the Soft Start AC-DC Cable.

Please refer to our Service Manual for the replacement instructions.

We have made the **TT Series 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 bottom of the page there is a Section named "Categories" that includes various menus including one for Manuals.

Refer to the applicable QR code below to download the TT Series Service Manual.





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Classified as Business

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2 - Electrical Isolation

Before servicing the Compressor, isolate the compressor power by completing the following steps:

••• DANGER! •••

- This equipment contains hazardous voltages that can cause serious injury or death. Only qualified and trained personnel should work on Danfoss LLC equipment.
- Always wear appropriately-rated safety equipment when working around equipment and/or components energized with high voltage.
- Removing the Mains Input Cover will expose the technician to a high voltage hazard of up to 853VDC. Ensure the Mains Input power is turned off and locked out before removing the Mains Input Cover.
- 1. Turn off the Mains Input power to the compressor.
- 2. Lock Out/Tag Out (LOTO) the mains disconnect to ensure no accidental or unauthorized reapplication of the Mains Input power can occur.

NOTE

The Mains Input fast-acting fuses are installed in the power panel for all compressor models except the TTS300/TGS230.

- 3. Remove the Mains Input Cover only.
- 4. Using an appropriately-rated voltage meter, confirm the absence of AC voltage.

••• DANGER! •••

Do not touch any components when removing the Mains Input Cover.

- 5. If AC voltage is not present, reinstall the Mains Input cover and wait at least 20 minutes before removing either the Mains Input or Top Side Cover. If AC voltage still exists, go back to Step 2 to determine why the compressor voltage is not isolated.
- 6. Remove the Top Cover, taking particular care not to touch ANY components underneath.
- Using an appropriately-rated voltage meter, check the DC Bus Bars for DC voltage level. If the voltage is above 30 volts direct current (VDC), wait five (5) minutes and recheck until voltage is below 30 VDC. Refer to Figure 1 - DC Bus Voltage Test Points.

••• CAUTION •••

Even at low voltages, caution should be used around the capacitors to avoid quick discharge events, which can lead to reduced reliability.

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Figure 2 - DC Bus Voltage Test Points

3 - General Information

Isolate compressor power as described in the Electrical Isolation section above prior to performing any service procedures.

<u>Please refer to our Service Manual for the replacement instructions.</u>

4 - Kit Contents

Note: Any part numbers included in the kit contents are internal part numbers only. Please refer to our Spare Parts Manuals for any kit part numbers.

Kit num	bers	Compressor models		
100381	-1	TTS/TGS/TTH/TGH (except TTS300/TGS230)	
QTY	Part(s) Description	Pictu	e(s)
1	CABLI For use DC, sm	E HARNESS, SOFT START AC/DC - 701819 e with Soft Start (open-top style), Open- Frame DC- all SCRs, and Straight Bus Bars		

Kit		Compressor models	
numbe	rs		
100381	-2	TTS/TGS/TTH/TGH (except TTS300/TGS230)	
QTY	Part	(s) Description	Picture(s)
1	CAB For us and C	LE HARNESS, SOFT START AC/DC – 701796 se with Soft Start (open-top style), Open Frame DC-DC, Curved Bus Bars	

5 - List of Changes

Revision	Date	Description of Change
В	9/4/2023	Added kit 100381-2 and updated Kit 100381-2 information to Section 3. Added Electrical Isolation section.

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