

# KIT CABLE HARNESS - COMPRESSOR CONTROLLER

100322



**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 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:

CABLE HARNESS - COMPRESSOR CONTROLLER Removal and Installation Instructions.

## 2 - Replacement Instructions:

1. Remove the top cover of the compressor.

 In order to facilitate replacement of the cable harness, take note of the original cable harness routing before removing it.

2. At the Backplane, disconnect the following connectors: Soft Start interface connector (J22); Pressure/temperature sensor connectors (J17, J18, and J19); IGV motor drive connector (J21); motor temperature sensor connector (J20); 250VDC connector (J4).
3. Disconnect the two lug connectors from the motor thermistor.
4. Disconnect the 250VDC (+) and 250VDC (-) lug connectors from the HV DC-DC Converter module.
5. Disconnect the cables from the suction, discharge and interstage pressure sensors.
6. Disconnect the rectifier heatsink sensor connector.
7. Using an M4 Allen key, remove the two screws that secure the IGV connector.
8. Remove the cable harness in stages so that the same routing can be followed for the replacement harness.
9. Route the cable harness through the hole in the main compressor housing at the service side.


10. At the Backplane, attach the following connectors: Soft Start interface connector (J22); Pressure/temperature sensor connectors (J17, J18 and J19); IGV Motor Drive connector (J21); Motor temperature sensor connector (J20); 250VDC Connector (J4).
11. Attach the 250VDC (+) and 250VDC (-) lug connectors to the HV DC-DC Converter module.
12. Attach connector J23 to the Soft Start module.
13. Attach the two lug connectors to the two thermistor terminals next to the motor bus bars.
14. Route the cable harness between the HV DC-DC Converter and the IGBT inverter.
15. Bend the cable harness under the mains terminals block and route it toward the capacitor side of the compressor.
16. Attach the rectifier heatsink sensor heatsink connector located near the interstage temperature/pressure sensor connector.
17. Attach the suction, discharge, and interstage temperature/pressure sensor connectors.



18. Attach the IGV connector. Replace the connector clamp and secure it with two screws.
19. Insert the molded rubber grommet in the notch in the main compressor housing.
20. Replace the service-side and top covers on the compressor.

3 - Kit Contents

Kit numbers	Compressor models
100322	ALL FIE MODELS

QTY	Part(s) Description	Picture(s)
1	CABLE HARNESS COMPRESSOR CONTROLLER	

ENGINEERING  
TOMORROW



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