

## Purpose

The purpose of this bulletin is to notify customers of the implementation of a new DC-DC Converter. The new DC-DC Converter has been improved to increase reliability and current output capability which is required for new products. Additionally, this new DC-DC design will reduce complexity by having the same DC-DC converter for all voltages (i.e., it is no longer voltage specific).

While the new DC-DC has a different appearance and open frame design, it **is fully backwards compatible with all currently supported TT/TG compressors.** 

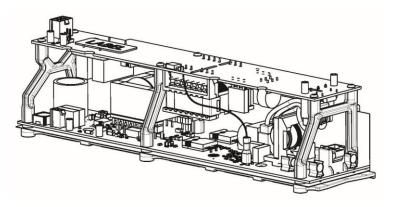


Figure 1 – New DC-DC Converter

## This new DC-DC converter does not require the trigger signal from the Soft Start and the **Soft Start AC/DC cable harnesses have been updated to eliminate the trigger signal harness for all new compressors.**

The new DC-DC Converter and associated cable harnesses will be installed on compressors manufactured in Tallahassee, FL in April 2019.

In Haiyan, China, the production release dates are split. The new DC-DC Converter and associated cable harnesses for the 380V compressors will be installed on compressors in July 2019. The new DC-DC Converter and associated cable harnesses for the 400V compressors will be installed on compressors in April 2019.

## Summary

As part of the continuous improvement of our product, we are releasing a new version of DC-DC converter which will apply to all TT, TG, TTH, and TGH-series compressors.



This new DC-DC features several new improvements:

- Higher output current range which will increase reliability but is also required for new products which have higher operating loads like the new TTH and TGH Series High Lift Compressors.
- Reduced complexity through part commonization and elimination of voltage specific versions of the DC-DC Converter. This new DC-DC converter is universally applied to all compressor voltage types.
- Automatic detection of input voltage and self-starting function which eliminates the need for a start/trigger signal from the Soft Start module.
- Design compliant to EU RoHS 2 (Directive 2011/65/EU) as part of a larger effort to have compliance for all of the components on the TT and TG Series compressors.

The new DC-DC Converter has one fewer connector as it no longer requires the 15VAC trigger signal from the Soft Start module. For new TT and TG-series compressors, the harnesses have been updated to eliminate the extra 15VAC trigger signal harness.

When replacing an older DC-DC Converter with the new one, the 15VAC trigger signal harness will remain disconnected. The spare part instructions included with the new DC-DC Converter kit will fully describe the installation.

To accommodate all applications and for ease of ordering spare parts, the kits for the two (2) Soft Start AC/DC cable harness kits (P/N 100380 for TT300/TG230 compressors and P/N 100381 for all other TT/TG compressors will include both harness types – with and without 15VAC trigger wires.

A new spare part kit, P/N 100379 has been created for the new DC-DC Converter and will replace all of the previous DC-DC Converter spare part kits, P/N 100040-X. Any OEM, Service Providers, or other Customers who has an existing inventory on hand of the DC-DC Converters and Soft Start AC/DC cable harness kits which have been made obsolete can continue to use those on the appropriate compressors.

We have updated our Spare Parts Guide to revision "D.2" to reflect these changes and it has been placed on our website.

## **Action Required**

Please refer to the table below or to our revised Spare Parts Guide when ordering replacement DC-DC Converters and corresponding harness kits.

The latest revision of our **Spare Parts Guide** is available on our website. Please navigate to <u>www.turbocoroem.com</u>, select login, and enter the **Customer Support and Service Section** of the website.

Access to our website is restricted to customers and other authorized users. If access is needed, please use the "Sign Up" link to submit your information. For additional details, please contact your Key Account Manager.

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DESCRIPTION	OBSOLETE P/N	NEW P/N	MAJOR REV	COMMENT	RELEASE DATE
DC-DC Converter	100040-3 (575V) 100040-5 (400V/460V) 100040-6 (380V) <b>NOTE:</b> 100040-6 should be available for the next few months and can continue to be ordered until stock is depleted	100379	All	Replaces all voltages	April 2019
Soft Start AC/DC Cable Harness (TT300/TG230)	100062-4	100380	-N, -P*, -C, -D, -E, -F, -G	Comes with two cables to support both versions of the DC-DCs	April 2019
Soft Start AC/DC Cable Harness	100062-3	100381	-P*, -A, -C, -E, -F	Comes with two cables to support both versions of the DC-DCs	April 2019
DC-DC to Backplane Cable Harness	100323-2	100323-2	-F, -G	No part number change.	April 2019

For further questions, please contact your Key Account Manager or our Product Support group at <u>turbocor.ps.na@danfoss.com</u> or <u>eu.support@danfoss.com</u> for inquiries within Europe.

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