

Bulletin | Danfoss Turbocor Compressors

Customer Notification

B-CN-180-EN

06/27/2019

SUBJECT: Service Monitoring Tools (SMT) 3.4.1 Released

Purpose

The purpose of this bulletin is to inform our customers of the newly released Service Monitoring Tools (SMT) software application. This new version of the SMT has been posted to the Danfoss Turbocor website. This version of the SMT is backwards compatible with all previous versions of BMCC compressor firmware and is fully compatible with the upcoming 4.2.0 BMCC firmware.

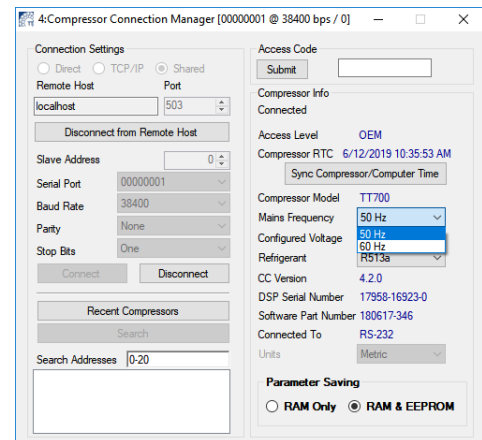
Summary

Background

This latest release contains several improvements and resolved some defects which have been identified internally and by customers. For more information on any of the features introduced by Firmware 4.2.0, please refer to Customer Notification B-CN-165-EN Software Release Notes for 4.2 Firmware.

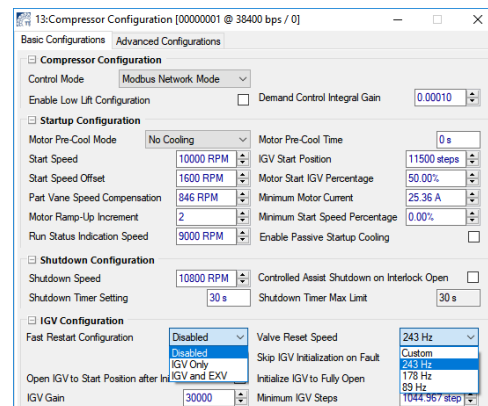
Frequency Adjustment

Firmware version 4.2.0 introduced the ability to adjust the frequency for all models and voltages.



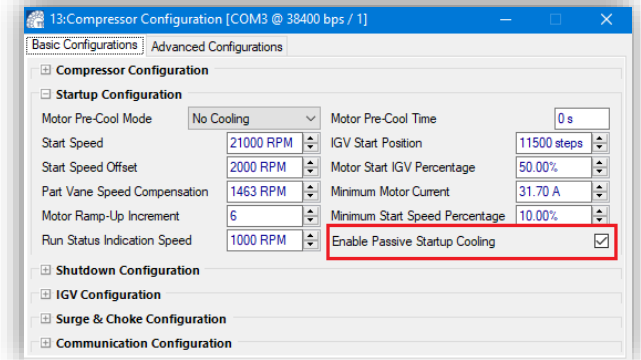
Stepper Control Changes

Firmware version 4.2.0 introduced the ability to include a Fast Restart on the EXVs, as well as the ability to adjust the Valve Reset Speed for the EXVs.



Startup Cooling

Firmware version 4.2.0 introduced the ability to disable Passive Cooling mode during startup and enable Dynamic Cooling.



Minimum Motor Current

In particular, one defect that was identified was the calculation for Minimum Motor Current, register 41817. Previous SMTs used the scaling factor of 1:88. This was incorrect and would have achieved the Minimum Motor Current criteria at a lower current setting than what was entered in SMT. In general, this would not cause any difficulties with exiting startup, because the Minimum Motor Current is usually achieved before the other criteria are reached for exiting startup. This parameter is correctly calculated with the following equation:

$$\text{Minimum Motor Current} = (\text{Register 41817 Value}/32767) * 41899 \text{ DC Bus Current Scaling Factor} * 0.707$$

If this parameter is being adjusted during commissioning, this scaling change must be considered.

Action Required

The latest revision of our SMTs are available on our website. Please navigate to www.turbocoroem.com, select login, and enter the **Customer Support and Service Section** of the website. For more information or instructions, please refer to the SMT Manual or contact your Key Account Manager or a DTC Service Technician. The SMT Manual is automatically installed and accessible under the start menu of your computer once the SMT is installed.

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.

Need Assistance

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