

Bulletin | Danfoss Turbocor Compressors

Customer Notification

B-CN-211-EN REV A

2/21/2020

SUBJECT: TTH and TGH High Lift Compressor Product Release – ST/MT

Purpose

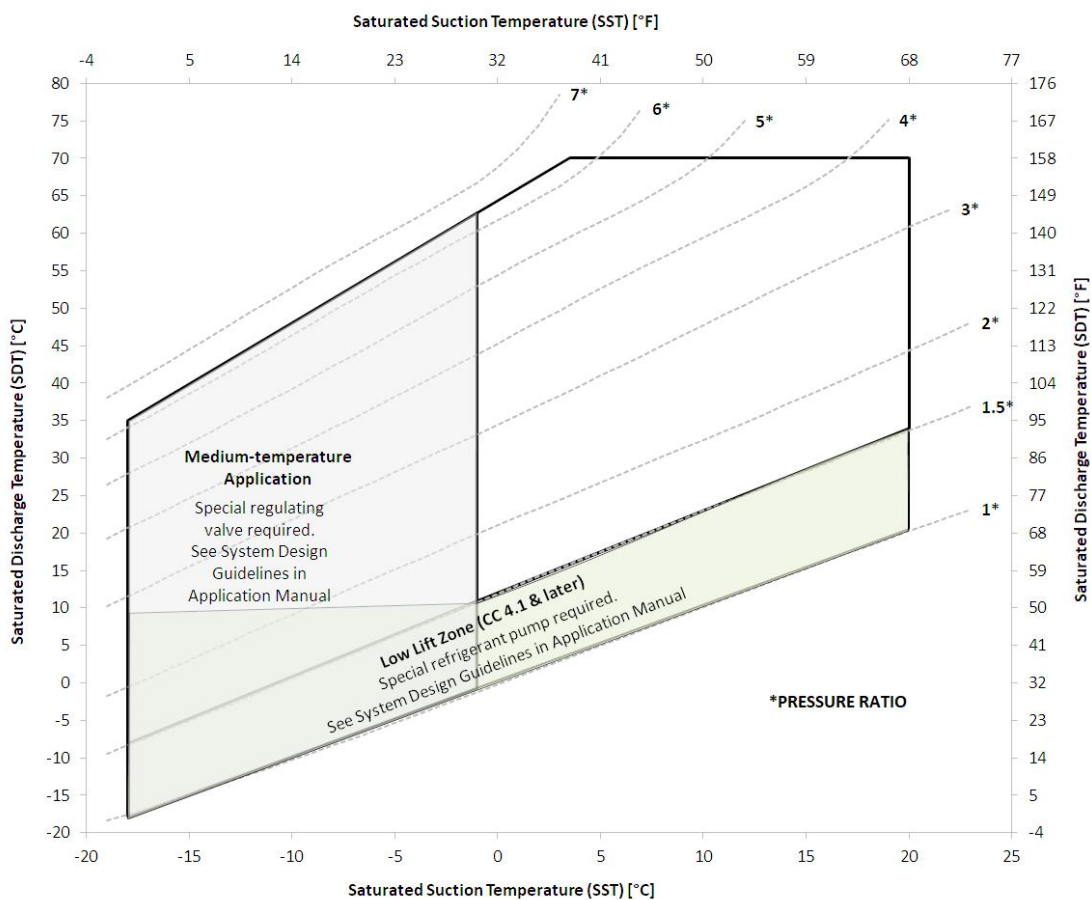
This is to inform our customers that the new **TTH/TGH High Lift Series Turbocor®** compressors have been widely released and are available for order. **This update serves to note that the Medium Temperature High Lift Turbocor® compressor is now available for order.** The software configuration for standard temperature TTH/TGH High Lift Series Turbocor® compressors has also been updated.



Two (2) models are available: TTH375 with a nominal capacity of 107 tons / 376 kW and TGH285 with a nominal capacity of 82 tons / 288 kW at typical air-cooled conditions. The TTH and TGH compressors provide a high-efficiency solution that enables an oil-free air-cooled chiller solution that can be deployed as a global platform. The TTH375 is available for use with R134a or R513A. TGH285 is available for use with R1234ze.

Applications

A medium evaporating temperature (MT) application is defined as Saturated Suction Temperature (SST) range of 0 and -18°C (between 32 and -0.4 °F) for TTH375/TGH285 as shown in the operating envelope diagram.



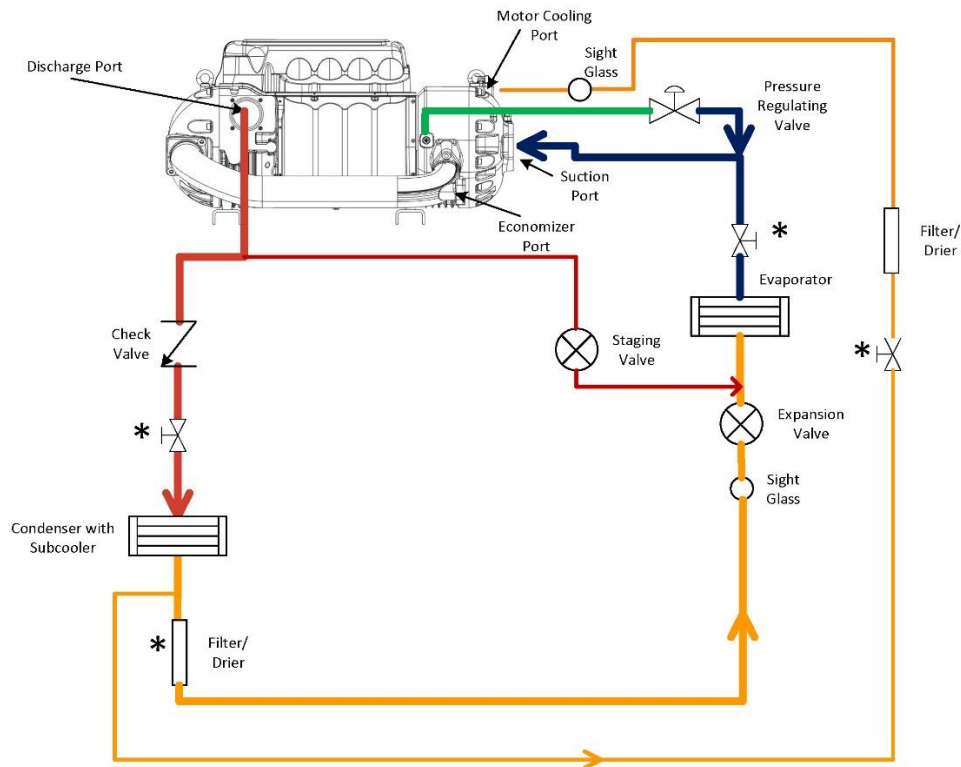
NOTE

The maximum SDT of the operating envelope represents the limit for compressors with maximum FLA settings.
The maximum SDT for compressors with an FLA less than that is lower than the upper bound of the operating envelope and depends on the FLA rating.

For this application, a pressure regulating valve must be installed external to the compressor between the main suction line and the motor/electronics cooling outlet port adjacent to the interstage port. The recommended valve is 7/8" (e.g., Danfoss KVP 22), set at a corresponding pressure to 5°C (41°F) saturated temperature (depending on the used refrigerant). The motor/electronics cooling outlet port is fitted with a 5/8" flare adapter.

Note: Danfoss pressure regulating valve PN 034L0025 is now included with all Medium Temperature application type compressors. Please refer to bulletin B-CN-208-EN Medium Temperature Pressure Regulating Valve for more information.

Refer to the refrigeration schematic below for medium temperature applications:

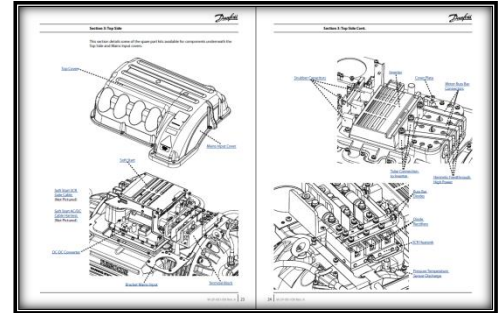


Summary

The new TTH/TGH Compressors are now available for ordering by Turbocor® OEMs. The standard lead time for these new compressors is eight (8) weeks initially.

Danfoss Turbocor® Technical Publications have been updated to include the new TTH and TGH Series compressors and can be found on our website (www.turbocoroem.com).

There are some new spare part kits that have been created which are specific to the TTH and TGH Series compressors. These have been included in the latest Spare Parts Manual.



TTH/TGH Compressor Configuration

The TTH and TGH Series compressors will be configured as a major revision "F" compressor and will come with 4.2.0 firmware. With the release of TTH/TGH, these compressors will now be available by using our new Variant Configuration system available on dtconfig.danfoss.com. Customers no longer need to use dedicated compressor part numbers for new models. Customers can place orders using the full compressor Type Code. New stock keeping unit (SKU) numbers will be of the type 199BXXXX and will be generated at the time of order or can be requested from your Key Account Manager.

The TTH and TGH series compressors will use the new compressor Type Code that was published in Bulletin B-CN-164-EN Nomenclature Update & Variant Configuration. This type code will appear in the description on all nameplates, labels, boxes, and documentation.

TTH375FEM2S010X0XX **S365**

↑
4.2.0 General OEM
Software Option

Software (character 19-22)

S365 : DTC SW 4.2.0 TTH/TGH

***NOTE:** Previous software configuration S350 for TTH/TGH Standard Temperature applications has been superseded by S365. S365 contains configurations to make TTH/TGH compatible with medium temperature applications.

Action Required

Customers wishing to purchase the new TTH and TGH Series compressors can contact their Key Account Manager to determine pricing. Customers should visit dtconfig.danfoss.com to configure their compressor according to their specifications. With compressor pricing and Type Code defined, customers can place an order with Danfoss Customer Service at turbocor.cs.na@danfoss.com.

A separate bulletin will be distributed for 4.2.0 firmware containing compressor configuration options and spare part BMCC part numbers.

As a result of the TTH/TGH product launch, many of the manuals and guides provided by DTC have been modified. These include:

- M-AP-001-EN Applications and Installation Manual Rev P (To be released for Rev H)
- M-PR-001-EN TT/TG Programming Manual Rev J.1
- M-SV-001-EN TTS/TGS/TTH/TGH Service Manual Rev F.1
- M-SM-001-EN TT/TG Service Monitoring Tools User Manual Rev G
- M-SP-001-EN TT and TG Spare Parts Manual Rev E.1

Please reference these new manuals going forward for all TT(S)/TG(S)/TTH/TGH compressors.

Need Assistance

For more information 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.