

Customer Notification

B-CN-253-EN

05/04/2021

SUBJECT: RS485 and RS232 Best Practices

Purpose

The purpose of this bulletin is to inform customers, end-users, service providers, technicians, etc. of the proper wiring and communication requirements of the Danfoss TurboCor Compressors (DTC). Following these requirements is essential in order to prevent possible catastrophic damage of the compressor(s) and loss of function of the chiller.

Action Required

All (OEM) manufacturer(s), customer(s), repair service(s), and end-users **shall follow** the internationally recognized ANSI/TIA/EIA-485-A-1998 standard and applicable DTC manuals for communication wiring. Failure to follow these standards and requirements can result in communication failures, component damage, or compressor failure.

In addition, when a laptop is connected via RS232 or USB, it **shall** be powered by its internal battery **or** connected to a power source part of, or grounded directly to, the chiller system. Using an outside power source that is **not** grounded directly to the chiller system can cause differences in the ground potential and can result in a current path which will either damage the electronic components of the compressor or cause a catastrophic failure of the compressor.

For more details, please reference the Applications and Installation Manual in the login portion of the website.

Not following these best practices can result in loss of warranty for the damaged component(s).

Need Assistance

Please contact our Applications department by emailing dteapplications@danfoss.com should you have any questions regarding this information.