

Key Features and Benefits of the Danfoss VLT® FC102 HVAC Drive



The Danfoss VLT® FC102 HVAC Drive, is known to be the most cost effective solution to motor control and air handling in the market. Key features include:

- **Electro Magnetic Interference:**
 - Radio Frequency Interference (RFI) is conducted between 150KHz to 30MHz
 - Harmonics between 50Hz to 2.5KHz
- **Higher ambient temperature operation**
- **Maintenance free drives and extended storage life**
- **Semi-F47 certified**
- **Seismic certified**

Authorised
VLT® Sales Partner
HVAC



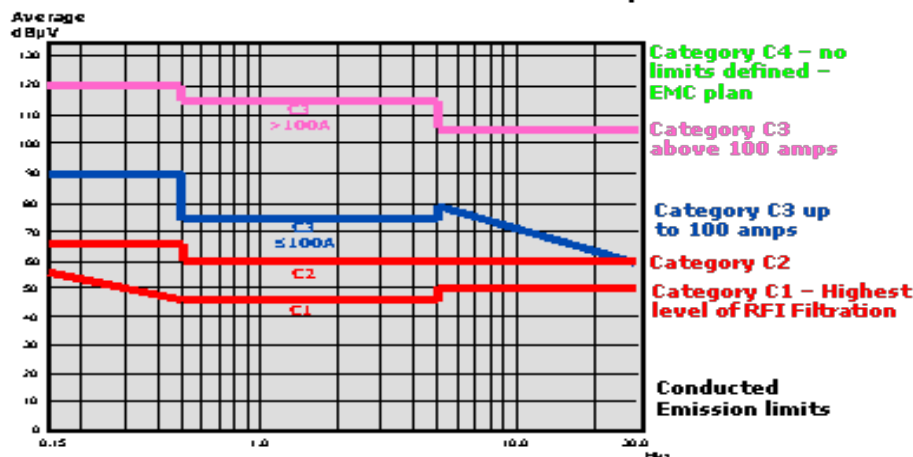
The Danfoss FC102 is available through Controlstore - the Authorised VLT® Sales Partner for Danfoss in Sydney and Brisbane.

Electro Magnetic Interference

Built in Radio Frequency Interference (RFI):

VLT® HVAC Drive FC 102 complies with the conducted emission requirements of AS 61800.3 Edition 2005 Category C1 (Class B) with 50m motor cable. It minimises risk of interference with other sensitive electronic equipment installed in the building.

Conducted Emission Limits of AS 61800-3:2005 / IEC 61800-3:2004



Harmonics:

As standard, VLT® HVAC Drive FC 102 are equipped with built-in dc-link inductances, which significantly reduce voltage and current harmonics, typically by a factor of two compared to frequency converters devoid of such harmonics filters. The built-in dc-link inductances not only ensure compliance with harmonic limits i.e as per AS61000.3.12 with short circuit ratio $R_{sce} > 120$ but also ensure a long lifetime of the dc-link capacitor.

Higher ambient temperature operation

The VLT® HVAC Drive is designed to operate at 50°C Ambient. This means if the drives are installed in plant rooms and are operating at 40°C or lower than 40°C (which will be the case for majority of the days), the semiconductor within the drive is not pushed to its limits thereby increasing the life of the drive.

Maintenance free drives and extended storage life

Danfoss drives are Maintenance free for the life of the drives and are designed to operate for 10+ years at standard operating conditions without the need of replacing cooling fans or capacitors.

Danfoss VLT HVAC FC102 drives has electrolytic capacitors of a very high quality, which allow to store it for up to 5 years without the need of forming the capacitors.

Danfoss FC102 Drives are Semi-F47 certified

Voltage snags are common occurrence on utility main supplies for a variety of reason completely outside of the control of the customer sometimes caused by starting of large loads within the plant itself. Local supply conditions govern the stability and reliability of the supply but typically, voltage snags are short duration, typically a voltage drop of 10%-15% for 80-200ms. This can be on all three phases or across two phases only. This can also occur when load is transferred from mains to Generator power on ATS (automatic transfer switch).

Whatever is the case Danfoss VLT HVAC FC102 is certified to comply and ride through this event if it occurs.

Danfoss VLT HVAC FC102 drives are Seismic certified

The ultimate public safety benefit of the Seismic certification is to have public buildings that not only are capable of remaining intact after a seismic event, but also capable of continued operation after a seismic event. The primary purpose of these regulations is to evaluate the potential earthquake performance of a building or building components and to place the building into specified seismic performance categories.

Why you should choose the VLT® HVAC Drives:

- ✓ **Replacement is simple** - The motor independent drive can be installed in any fan or pump system and provide years of reliable, maintenance-free operation.
- ✓ **Leading and reliable technology** - Every VLT® HVAC Drive is based on 25 years of experience and innovation.
- ✓ **Simple installation and use** - All models follow the same basic design and operating principle. Once you know one you know them all.
- ✓ **Technical or on-site support available** - Our Technical support is available 24/7 to help with any questions and issues. Contact us on support@controlstore.com.au or 1300 655 952.
- ✓ **Training support** - From general overview to specific topics we've got it covered.

Controlstore is your trusted partner for the best HVAC advice and products. We are passionate about discovering and meeting our customers' needs and providing you with MORE than just products – more availability, more reliability, more capability.