EU DECLARATION OF CONFORMITY

Danfoss A/S
Danfoss Drives

declares under our sole responsibility that the product VLT® HVAC Drive series

**Typecodes:**

FC-102XYZZXXXXXXXXXXXXXXXXX

Where:

Character X: N or P
Character YYY: K37, K75, 1K1, 1K5, 2K2, 3K0, 3K7, 4K0, 5K5, 7K5, 11K, 15K, 18K, 22K, 30K, 37K, 45K, 55K, 75K, 90K, 110, 132, 160, 206, 250, 315, 355, 400, 450, 500, 560, 630, 710, 800, 900, 1M0, 1M2, 1M4

Character ZZ: T2, T4, T6, T7

* may be any number or letter indicating drive options which do not impact this DoC.

Covered by this declaration is in conformity with the following directive(s), standard(s) or other normative document(s), provided that the product is used in accordance with our instructions.

**Low Voltage Directive 2014/35/EU**
EN61800-5-1:2007 + A1:2017

Adjustable speed electrical power drive systems – Part 5-1: Safety requirements – Electrical, thermal and energy.

**EMC Directive 2014/30/EU**

Adjustable speed electrical power drive systems – Part 3: EMC requirements and specific test methods.

**RoHS Directive 2011/65/EU**
EN50581:2012

Technical documentation for the assessment of electrical and electronic products with respect to the restriction of hazardous substances.

The meaning of the 39 characters in the type code string can be found in appendix 00729776.

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**Document ID:** 00730213  **Revision, Sequence:** A,3  **Page of 3**

**File Origin Date:** 2016-03-15  **File Last Modified:** 2018-04-06
For products including available Safe Torque Off (STO) function according to unit typecode on the nameplate: **T or U at character 18 of the typecode**.

**Machine Directive 2006/42/EC**  
EN/IEC 61800-5-2:2007  
(Safe Stop function conforms with STO – Safe Torque Off, SIL 2 Capability)  
Adjustable speed electrical power drive systems  
– Part 5-2: Safety requirements – Functional

**Other standards considered:**  
EN ISO 13849-1:2015  
(Safe Stop function, PL d)  
(MTTF=14000 years, DC=90%, Category 3)  
(Safe Stop function, SIL 2 (PFH = 1E-10/h, 1E-8/h for specific variants, PFD = 1E-10, 1E-4 for specific variants, SFF>99%, HFT=0))  
Safety of machinery - Safety-related parts of control systems - Part 1: General principles for design  
Functional safety of electrical/electronic/programmable electronic safety-related systems  
Part 1: General requirements  
Part 2: Requirements for electrical/electronic/programmable electronic safety-related systems  
Safety of machinery - Functional safety of safety-related electrical, electronic and programmable electronic control systems  
Safety of machinery - Electrical equipment of machines - Part 1: General requirements

For products including ATEX option, it requires STO function in the products. The products can have the VLT PTC Thermistor Card MCB112 installed from factory (**2 at character 32 in the typecode**), or it can be separately installed as an additional part.

**2014/34/EU - Equipment for explosive atmospheres (ATEX)**  
Based on EU harmonized standard:  
EN 50495: 2010  
Safety devices required for safe functioning of equipment with respect to explosion risks.
Notified Body:
PTB Physikalisch-Technische Bundesanstalt, Bundesallee 100, 38116 Braunschweig, has assessed the conformity of the “ATEX certified motor thermal protection systems” of Danfoss FC VLT Drives with Safe Torque Off function and has issued the certificate PTB 14 ATEX 3012U

Note: Under explosion protection aspects, the electronic tripping path is equivalent to an electromechanical switch-off (see EN 60079-14:2014 Chapter 11.2.1, 11.3.4, 11.4.1, 11.5.1, 11.6.1).

Further information can be found in manufacturers declarations:
EU Declaration of conformity 00730213 A.1, 00730215 A.1 and 00730217 A.1 or newer / Manufacturers declaration 00596226 A.9 or newer.