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**EU DECLARATION OF CONFORMITY**

**Danfoss A/S**

**Danfoss Drives**

declares under our sole responsibility that the

**Product category:** Frequency Converter

**Type designation(s):** FC-102XYZZ\*\*\*\*\*

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, 150, 160, 200, 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.

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

Covered by this declaration is in conformity with the following directive(s), regulation(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**

EN61800-3:2004 + A1:2012      Adjustable speed electrical power drive systems – Part 3: EMC requirements and specific test methods.

**RoHS Directive 2011/65/EU including amendment 2015/863.**

EN IEC63000:2018      Technical documentation for the assessment of electrical and electronic products with respect to the restriction of hazardous substances

Date: 2021.05.25 Place of issue:  Graasten, DK	Issued by  <b>Signature:</b>  <b>Name: Martin Skov Holm</b> <b>Title: Head of PM - EU</b>	Date: 2021.05.25 Place of issue:  Graasten, DK	Approved by  <b>Signature:</b>  <b>Name: Michael Quitzau</b> <b>Title: Head of PM&amp;D, Denmark</b>
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Danfoss only vouches for the correctness of the English version of this declaration. In the event of the declaration being translated into any other language, the translator concerned shall be liable for the correctness of the translation

**Commission Regulation (EU) 2019/1781 under the Ecodesign Directive 2009/125/EC including amendment in Commission Regulation (EU) 2021/341**

EN61800-9-2:2017

Adjustable speed electrical power drive systems - Part 9-2:  
Ecodesign for power drive systems, motor starters, power electronics and their driven applications - Energy efficiency indicators for power drive systems and motor starters.

For products including available Safe Torque Off (STO) function according to unit typecode on the nameplate: **X, B or R at character 18 of the typecode**. The following directives apply:

**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

(MTTFd=14000 years, DC=90%, Category 3)

EN/IEC 61508-1:2011, EN/IEC 61508-2:2011

(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))

EN/IEC 62061:2005 + A1:2013 + A2:2015

(Safe Stop function, SILCL 2)

EN/IEC 60204-1:2006 + A1:2009

(Stop Category 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)**

EN50495: 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 3009.

The assembly covered by the certificate PTB 14 ATEX 3009 have been evaluated internally at Danfoss to be in compliance with 2014/34 EU.

