ENGINEERING TOMORROW

Environmental Product Information I Danfoss Drives

Disposal declaration

Frequency Converters Frame Size: B1, B2, B3, B4

Production Place: Denmark, USA and India

At Danfoss, we take into account environmental considerations during the design and development of new products. We collect as much reliable data from suppliers as possible to generate lists of materials and disposal instructions.
Ways of dismantling the product depend on national and/or local legislation and the capabilities of the scrapping facilities.
This environmental information about the product is based on existing knowledge and available data.

That Danfoss facility complies with TS 16949 including ISO 9001 and ISO 14001standards.

Frequency Converters covered:

VLT® AutomationDrive
VLT® HVAC Drive
VLT® AQUA Drive
VLT® Refrigeration Drive

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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.

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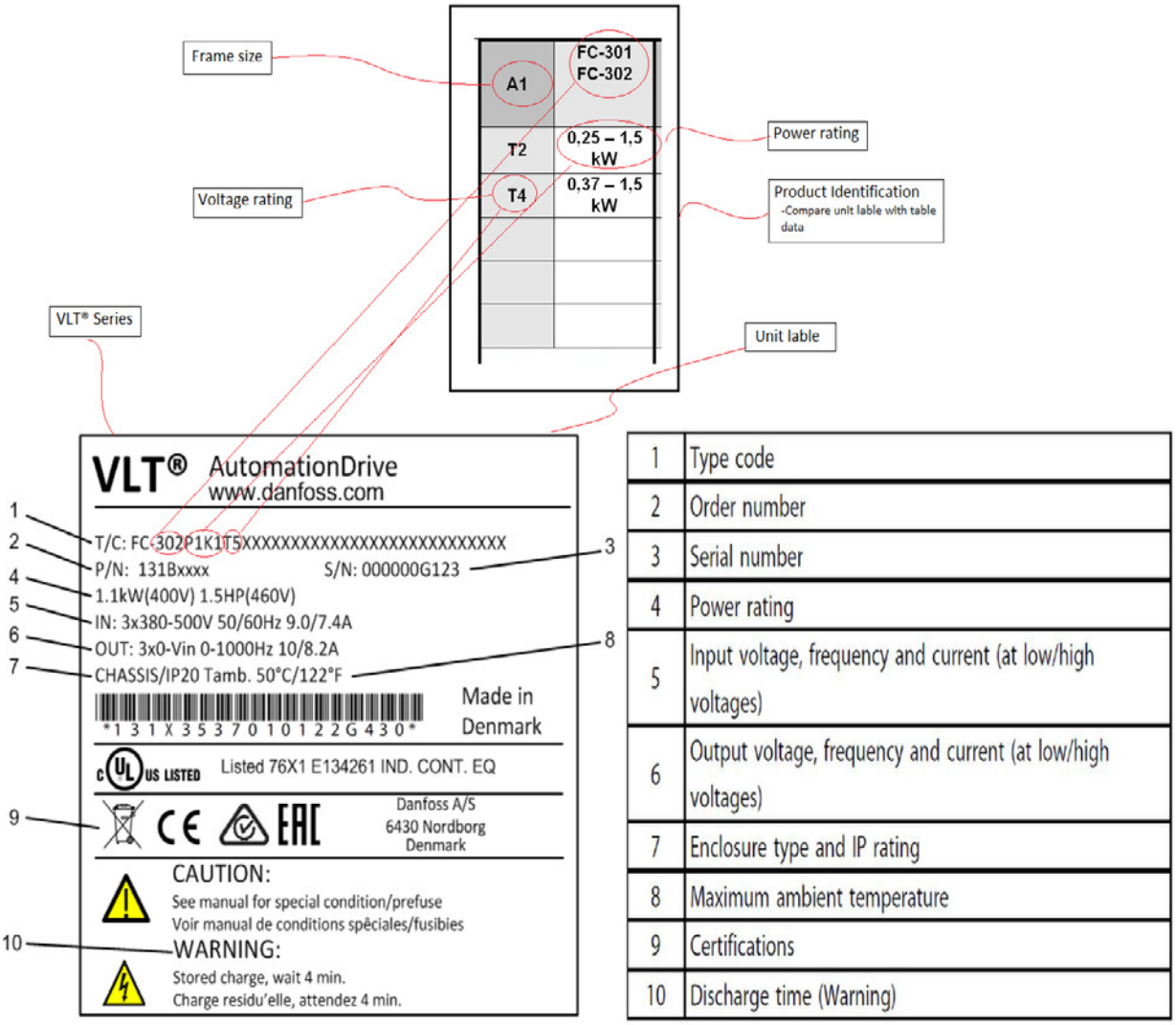
1. PRODUCT INFORMATION BUILD UP AND IDENTIFICATION



1	Type code
2	Order number
3	Serial number
4	Power rating
5	Input voltage, frequency and current (at low/high voltages)
6	Output voltage, frequency and current (at low/high voltages)
7	Enclosure type and IP rating
8	Maximum ambient temperature
9	Certifications
10	Discharge time (Warning)



VLT®

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2. MAIN MATERIAL CONTENT FOR FRAME SIZE B1 AND B2

Type	B1	FC-301 FC-302	FC-102 FC-103 FC-202	B2	FC-301 FC-302	FC-102 FC-103 FC-202
	S2		1.5-5.5kW	S2		7.5kW
	S4		7.5kW	S4		11kW
	T2	5.5-7.5kW	5.5-11kW	T2	11kW	15kW
	T4, T5, T6	11-15kW	11-18.5kW	T4, T5, T6	18.5kW- 22kW	22kW- 30kW
				T7	11-22kW	11-30kW
						

Material	Content [kg]	(%wt)	Content [kg]	(%wt)
Aluminium primary (Al): Heatsink,Control unit, Front cover, Cable entry	10.88	47	15.27	49
Iron/Steel primary (Fe): Terminal Plate, Side Cover, Coils/Transformers	1.083	5	1.41	5
Copper primary (Cu): Coils/Transformers, Busbar	0.19	1	0.452	1
Electronics: Printed Circuit Boards (PCB), Components: RFI,LCP,Terminal plate,Switchmode, Rectifier, Fan,Cables	2.58	11	4.18	13
Plastics various: (Enclosures)	0.025	0.1	0.025	0.08

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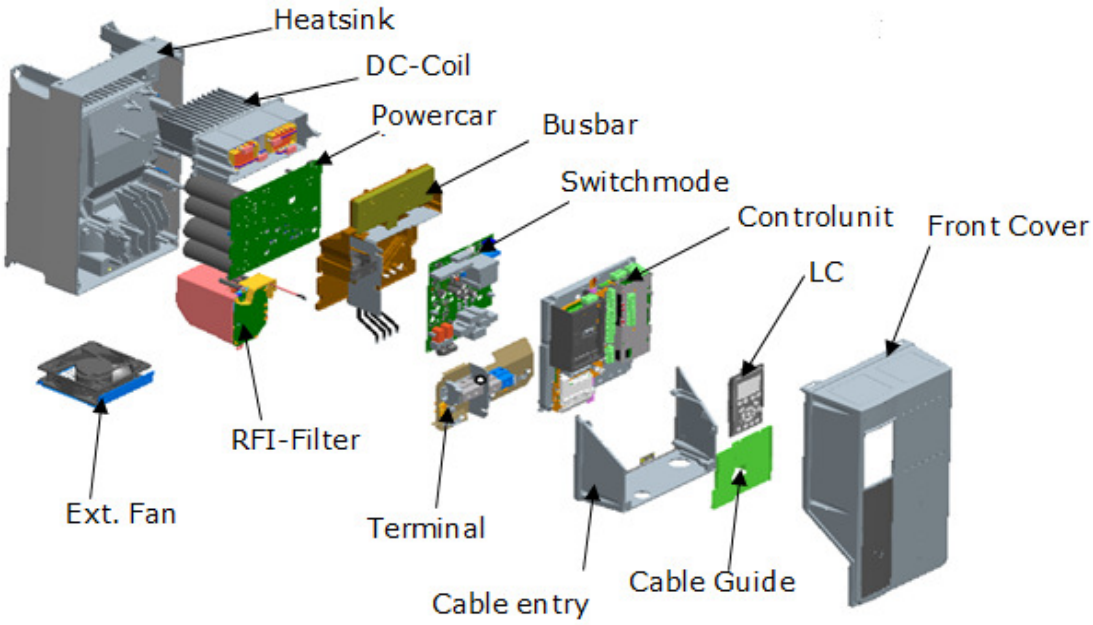
PCFR10(10% glass) Cl and Br	0.18	7	0.24	5
Glass and glassfibres	0.035	1	0.051	1
Pottet parts (Aluminium,Steel, Cooper,Potting material)	1.67	7	1.803	6
Rubber gaskets	6.52	28	8.061	26
Other Materials: (For example Ferrit)	0.077	0.33	0.080	0.25
Weight of VLT®	23.3	100	31.6	100
Nr of Printed Circuit Assemblies (With LCP, Without option)	**5**		**5**	
Number of LCD's (Maximum)	**1**		**1**	

3. DRAWINGS

3D drawing representing Frame Size B1 and B2:



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4. MAIN MATERIAL CONTENT FOR B3

Type	**B3**	**FC-301** **FC-302** **FC-311** **FC-312**	**FC-102** **FC-103** **FC-202**
	T2	**5,5-7,5 kW**	**5,5-11 kW**
	T4,T5	**11 - 15 kW**	**11 - 18 kW**
	T6	**11 - 15 kW**	**11 - 18 kW**
			

Material	**Content [Kg]**	**(%wt)**
Aluminium secondary (Al): Heatsink - Controlunit - Front cover - Cable entry	3.11	28
Iron/Steel (primary Fe): Cable guide - Terminal plate	2.83	25
Copper primary (Cu): Busbar	1.05	9.5
Electronics (Printed Circuit Boards, components): PC - RFI - CC - LCP - Terminal plate - Switchmode - Controlunit	2.69	24
Glass and glassfibres	0.085	0.77
Plastics various : DC-coil housing	1.28	11.58
Rubber gaskets	0.006	0.05
Weight of VLT®:	11.05	100
Number of printed circuit Assemblies (With LCP, Without option):	**2**	

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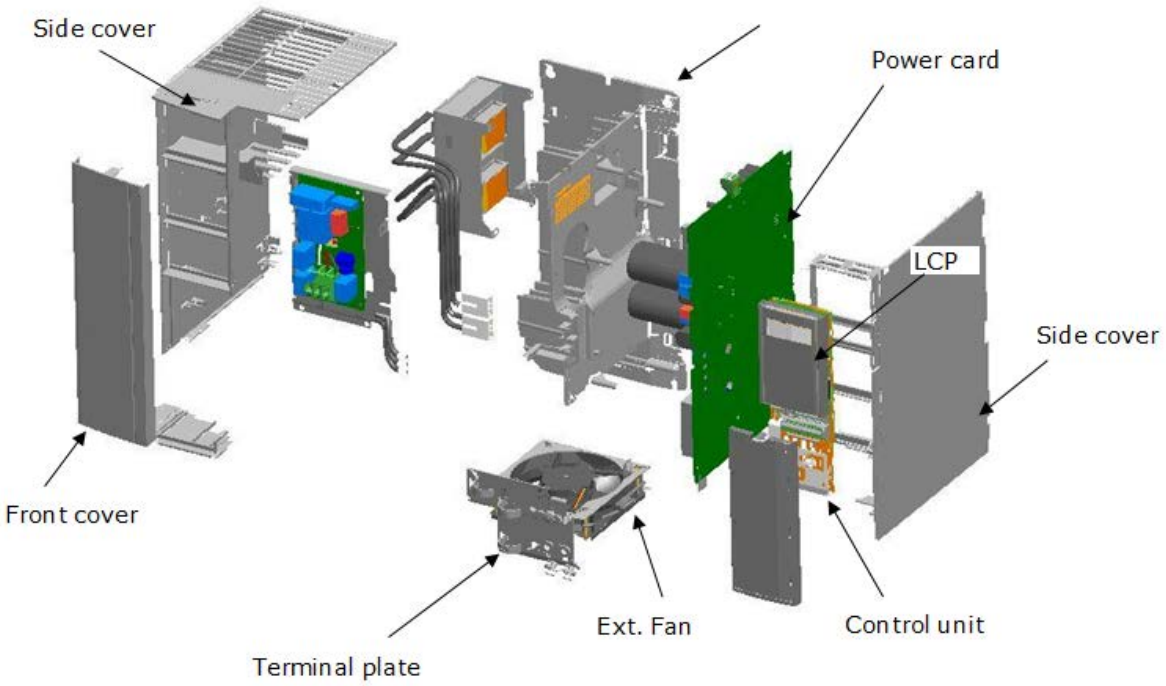
5. DRAWINGS

3D drawing representing Frame Size B3:



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6. MAIN MATERIAL CONTENT FOR B4

Type	B4	FC-301 FC-302 FC-311 FC-312	FC-102 FC-103 FC-202
	T2	11-18 kW	15 - 18 kW
	T4,T5	11 - 37 kW	15 - 37 kW
	T6	22 - 37 kW	18 - 37 kW
	T7	11 - 30 kW	11 - 37 kW
			

Material	Content [Kg]	(%wt)
Aluminium secondary (Al): Heatsink	3.4	15.4
Iron/Steel (primary Fe): Terminal plate, Side cover	7.9	36
Electronics (Printed Circuit Boards, components): PC - RFI - CC - Switchmode - Controlunit	2.25	10.2
Ferrit:	2.7	1.2
PCFR10 (10% glass) – Cl and Br PC-ABS, FR 3008 HR	1.2	5.5
Pottet parts (Aluminium, Steel, copper, plastics): RFI, DC-coil	6.65	30.3
Fan	3.12	1.4
Rubber gaskets	0.006	0
Weight of VLT®:	24.5	100
Number of printed circuit Assemblies (With LCP, Without option):	**5**	

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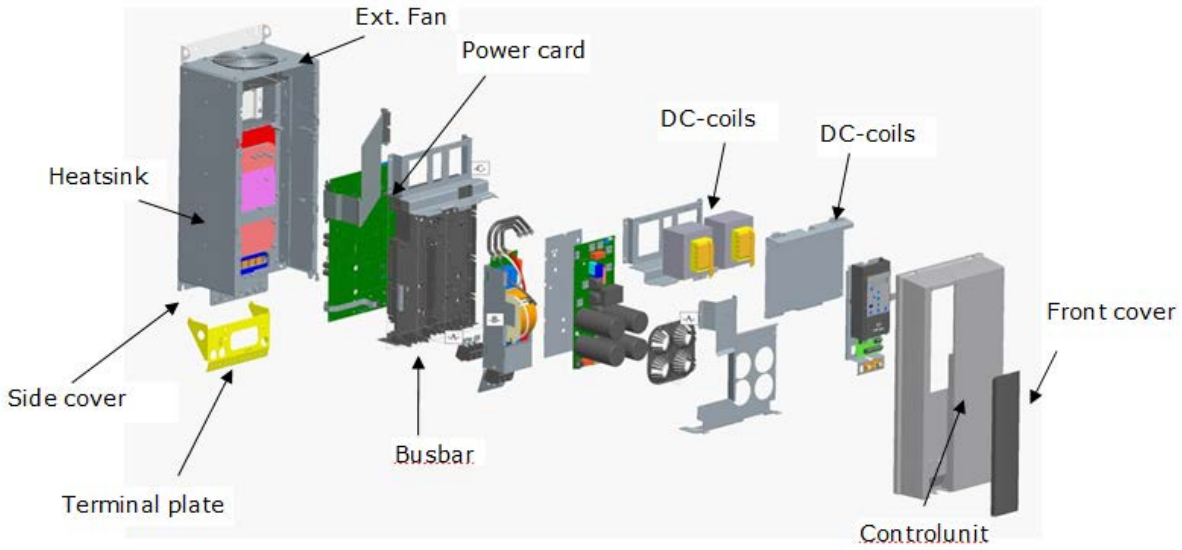
7. DRAWINGS

3D drawing representing Frame Size B4:



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