ENGINEERING TOMORROW



Environmental Product Information I Danfoss Drives

# Disposal declaration

Frequency Converters Frame Size: D1, D2, D3, D4 (Standard Design)
Production Place: 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 14001 standards.

### **Frequency Converters covered:**

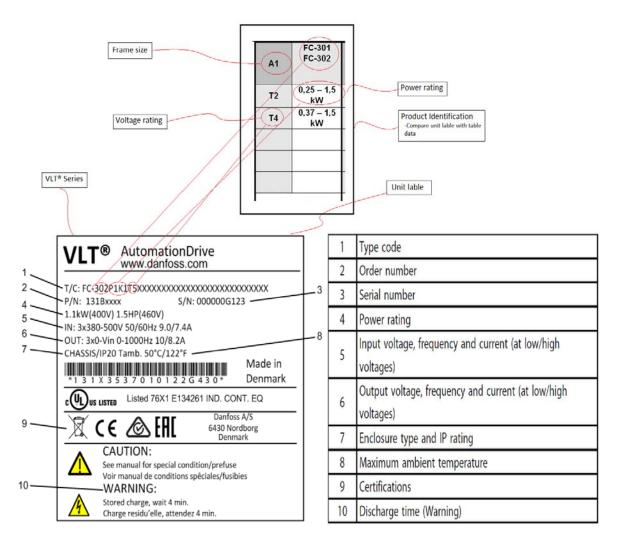
VLT® AutomationDrive VLT® HVAC Drive VLT® AQUA Drive VLT® Refrigeration Drive

Document ID: 00731415 Revision, Sequence: A,7 File Origin Date: 2016-05-31 File Last Modified: 2016-06-16



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#### 1. Product information build up and identification







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## 2. MAIN MATERIAL CONTENT FOR D1 (STANDARD DESIGN)

D1	FC-301P	FC-102P
	FC-302P	FC-202P
T4,T5	90 – 110 kW	110 – 132 kW
Т7	37 – 132 kW	45 – 160 kW
Con	tent [ka]	(%wt)
	_	25
36	.40	35
1.	04	1
		11
	2	5
		19
	T4,T5 T7  Con 26  36	FC-302P  T4,T5 90 – 110 kW  T7 37 – 132 kW



# **Disposal Declaration for VLT Frame Size D** *Drawings*

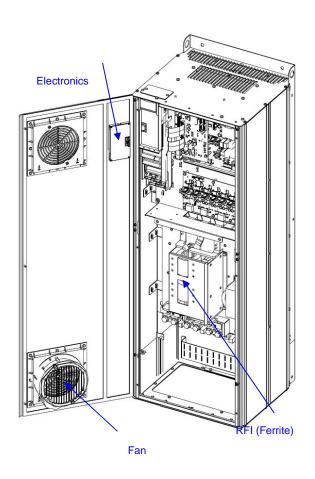
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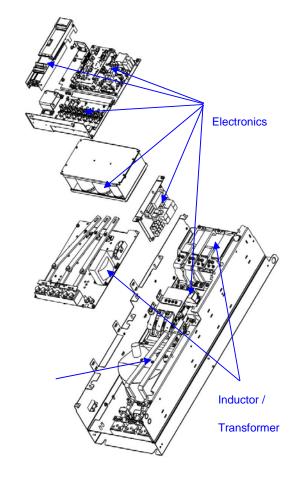
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Rubber gaskets			
	2.08	2	
Other Materials:			
(For example Ferrit)	2.08	2	
Weight of VLT®	104	100	
Nr of Printed Circuit			
Assemblies		10	
(With LCP, Without option)			
Number of LCD's (Maximum)		1	

#### 3. Drawings

## 3D drawing representing Frame Size D1







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## 4. Main Material Content for D2 (Standard Design)

Type	D2	FC-301P	FC-102P
		FC-302P	FC-202P
	T4,T5	132 – 200 kW	160 – 250 kW
	T7	160 – 315 kW	200 – 400 kW
Material	Con	tent [kg]	(%wt)
Aluminium primary (Al): Heatsink,Control unit, Front cover, Cable entry	24	.49	15
Iron/Steel primary (Fe): Terminal Plate, Side Cover, Coils/Transformers	53	.16	32
Copper primary (Cu): Coils/Transformers, Busbar	21	.28	13
Electronics: Printed Circuit Boards (PCB), Components: RFI,LCP,Terminal plate,Switchmode, Rectifier, Fan,Cables		.31	13
Plastics various: (Enclosures)	7.	28	5



# **Disposal Declaration for VLT Frame Size D** *Drawings*

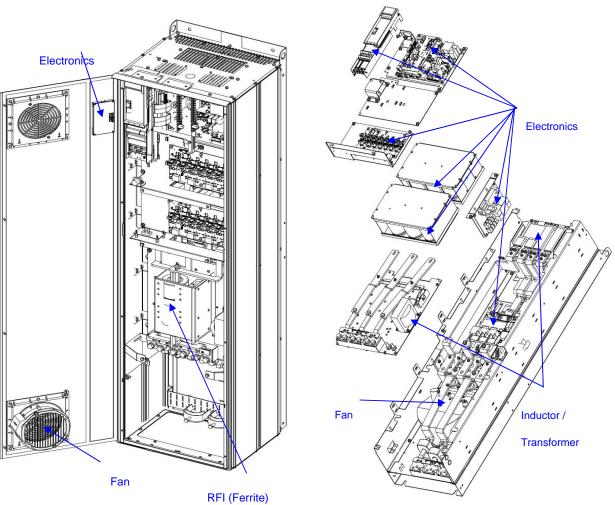
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Inductor/Transformer			
	26.82	16	
Rubber gaskets			
	2.25	1	
Other Materials:			
(For example Ferrit)	3.15	2	
Weight of VLT®	165	100	
Nr of Printed Circuit			
Assemblies		13	
(With LCP, Without option)			
Number of LCD's (Maximum)		1	

### 5. Drawings

## **3D drawing representing Frame Size D2:**





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## 6. Main Material Content for D3 (Standard Design)

Type	D3	FC-301P	FC-102P
		FC-302P	FC-202P
	T4,T5	90 – 110 kW	110 – 132 kW
	T7	37 – 132 kW	45 – 160 kW
Material	Con	tent [kg]	(%wt)
Aluminium primary (Al): Heatsink,Control unit, Front cover, Cable entry		.65	15
Iron/Steel primary (Fe): Terminal Plate, Side Cover, Coils/Transformers	40	.04	44
Copper primary (Cu): Coils/Transformers, Busbar	0.	91	1
Electronics: Printed Circuit Boards (PCB), Components: RFI,LCP,Terminal plate,Switchmode, Rectifier, Fan,Cables	11	.83	13
Plastics various: (Enclosures)	2.	73	3
Inductor/Transformer	19	.11	21
Rubber gaskets		91	1
Other Materials: (For example Ferrit)		82	2
1 7			



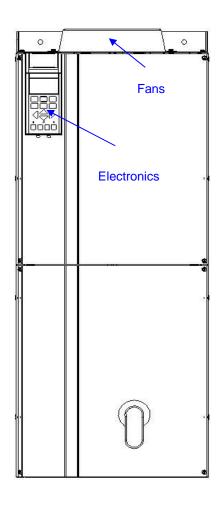
## Disposal Declaration for VLT Frame Size D

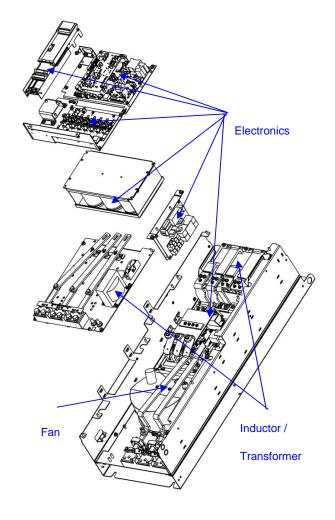
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Weight of VLT®	91	100
Nr of Printed Circuit Assemblies (With LCP, Without option)	10	
Number of LCD's (Maximum)		1

### 7. Drawings

## **3D drawing representing Frame Size D3:**







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## 8. Main Material Content for D4 (Standard Design)

Type			
Type	D4	FC-301P	FC-102P
		FC-302P	FC-202P
	T4,T5	132 – 200 kW	160 – 250 kW
	Т7	160 – 315 kW	200 – 400 kW
	T7 160 – 315 kW 200 – 400 kW		200 400 KW
Material	Con	tent [kg]	(%wt)
Aluminium primary (Al): Heatsink, Control unit, Front cover, Cable entry		.57	7
Iron/Steel primary (Fe): Terminal Plate, Side Cover, Coils/Transformers	119	0.29	79
Copper primary (Cu): Coils/Transformers, Busbar	3.	02	2
Electronics: Printed Circuit Boards (PCB), Components: RFI,LCP,Terminal plate,Switchmode, Rectifier, Fan,Cables	6.	04	4
Plastics various: (Enclosures)	1	51	1
Inductor/Transformer		55	5
Rubber gaskets		51	5 1
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# **Disposal Declaration for VLT Frame Size D** *Drawings*

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Other Materials:		
(For example Ferrit)	1.51	1
Weight of VLT®	151	100
Nr of Printed Circuit Assemblies (With LCP, Without option)		13
Number of LCD's (Maximum)		1

### 9. Drawings

### **3D drawing representing Frame Size D4:**

