

## Disposal declaration

Frequency Converters Frame Size: D1, D2, D3, D4, D5, D6, D7 and D8 (New Generation)  
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® Automation Drive**

**VLT® HVAC Drive**

**VLT® AQUA Drive**

**VLT® Refrigeration Drive**

# 1. PRODUCT INFORMATION BUILD UP AND IDENTIFICATION

Frame size

Voltage rating

VLT® Series

A1	FC-301 FC-302
T2	0,25 – 1,5 kW
T4	0,37 – 1,5 kW

Power rating

Product Identification  
-Compare unit label with table data

Unit label

**VLT® AutomationDrive**  
www.danfoss.com

1 T/C: FC-302P1K1T5XXXXXXXXXXXXXXXXXXXXXXXXXXXX

2 P/N: 131Bxxxx S/N: 000000G123

3

4 1.1kW(400V) 1.5HP(460V)

5 IN: 3x380-500V 50/60Hz 9.0/7.4A

6 OUT: 3x0-Vin 0-1000Hz 10/8.2A

7 CHASSIS/IP20 Tamb. 50°C/122°F

8

Made in Denmark

9 Danfoss A/S  
6430 Nordborg  
Denmark


10 **CAUTION:**  
See manual for special condition/prefuse  
Voir manuel de conditions spéciales/fusibles

**WARNING:**  
Stored charge, wait 4 min.  
Charge residu'elle, attendez 4 min.

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)



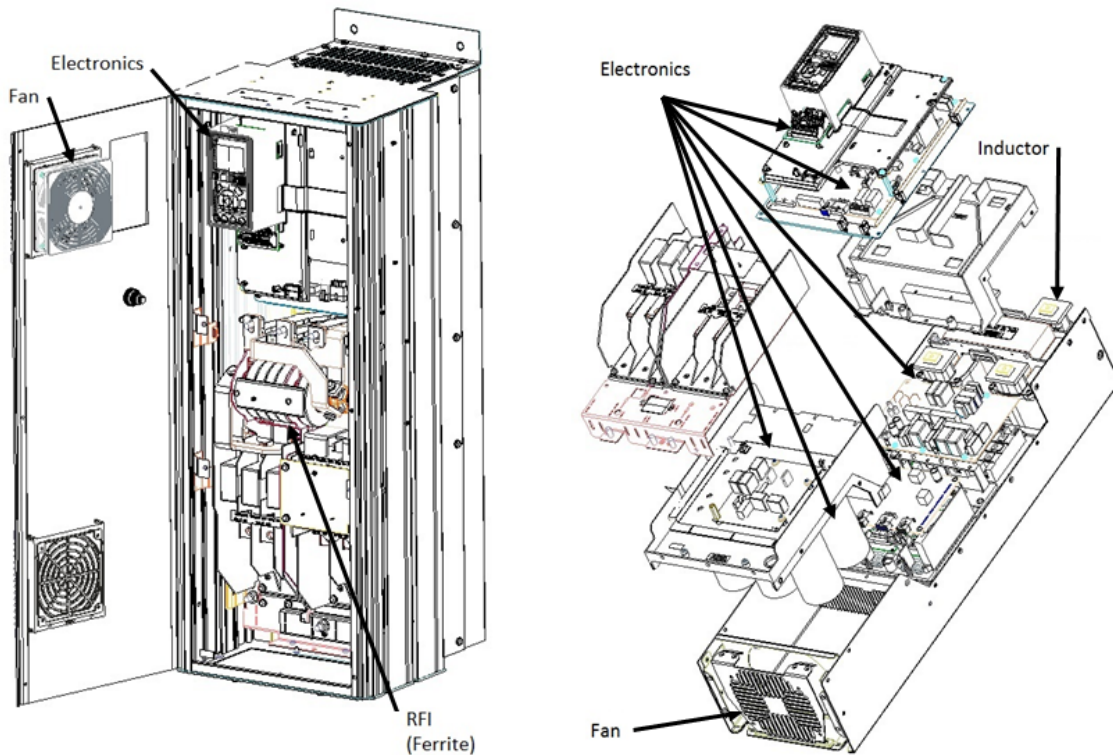
## 2. MAIN MATERIAL CONTENT FOR D1 (NEW GENERATION)

Type	D1	FC-301N FC-302N	FC-102N FC-202N
	T4,T5	90 – 132 kW	110 – 160 kW
	T7	55 – 132 kW	75 – 160 kW
			
Material	Content [kg]	(%wt)	
Aluminium primary (Al): Heatsink,Control unit, Front cover, Cable entry	22.5	29	
Iron/Steel primary (Fe): Terminal Plate, Side Cover, Coils/Transformers	13.15	16	
Copper primary (Cu): Coils/Transformers, Busbar	2.00	3	
Electronics: Printed Circuit Boards (PCB), Components: RFI,LCP,Terminal plate,Switchmode, Rectifier, Fan,Cables	10.1	13	
Plastics various: (Enclosures)	1.00	4	


Inductor/Transformer	25.00	31
Rubber gaskets	1.00	1
Other Materials: (For example Ferrit)	2.25	3
Weight of VLT®	75	100
Nr of Printed Circuit Assemblies (With LCP, Without option)	<b>10</b>	
Number of LCD's (Maximum)	<b>1</b>	

### 3. DRAWINGS

#### 3D drawing representing Frame Size D1:



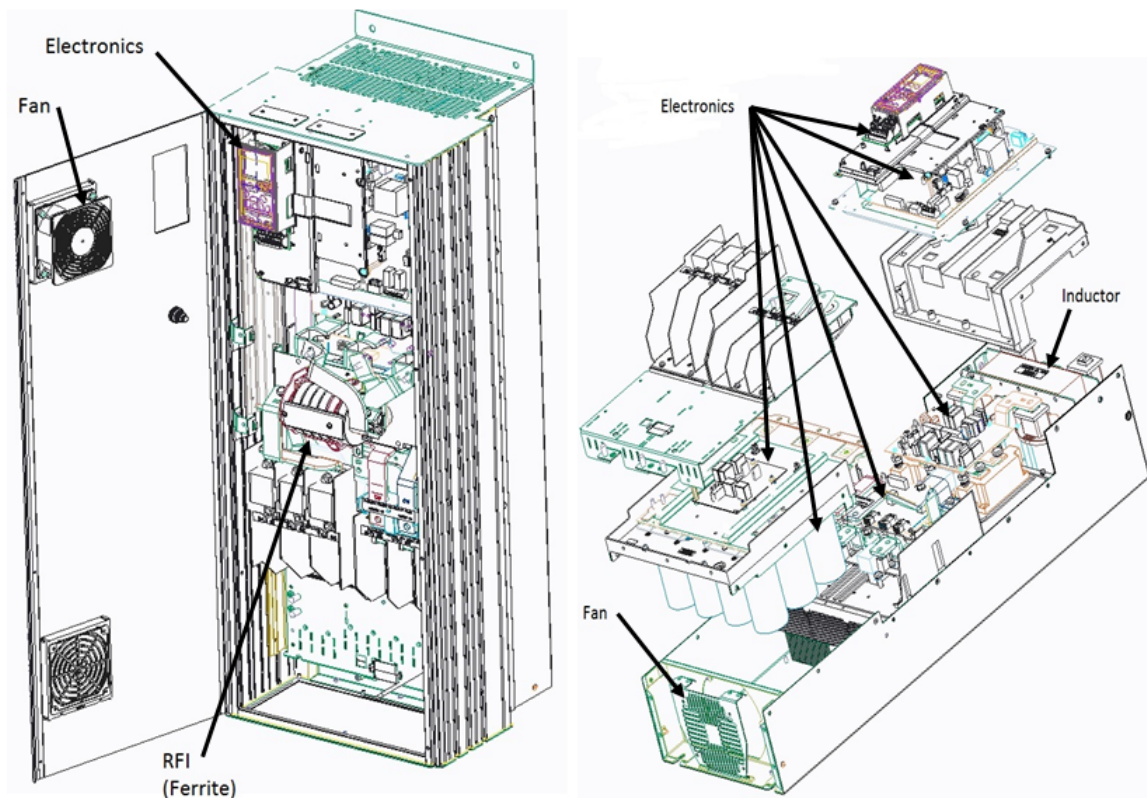
#### 4. MAIN MATERIAL CONTENT FOR D2 (NEW GENERATION)

Type	D2	FC-301N FC-302N	FC-102N FC-202N
	T4,T5	160 – 250 kW	200 – 315 kW
	T7	160 – 315 kW	200 – 355 kW
			
Material	Content [kg]	(%wt)	
Aluminium primary (Al): Heatsink,Control unit, Front cover, Cable entry	41.20	25	
Iron/Steel primary (Fe): Terminal Plate, Side Cover, Coils/Transformers	44.84	28	
Copper primary (Cu): Coils/Transformers, Busbar	4.00	2	
Electronics: Printed Circuit Boards (PCB), Components: RFI,LCP,Terminal plate,Switchmode, Rectifier, Fan,Cables	16.30	10	
Plastics various: (Enclosures)	2.20	1	


Inductor/Transformer	35.00	31
Rubber gaskets	2.25	1
Other Materials: (For example Ferrite)	3.15	2
Weight of VLT®	149	100
Nr of Printed Circuit Assemblies (With LCP, Without option)	<b>10</b>	
Number of LCD's (Maximum)	<b>1</b>	

## 5. DRAWINGS

### 3D drawing representing Frame Size D2:



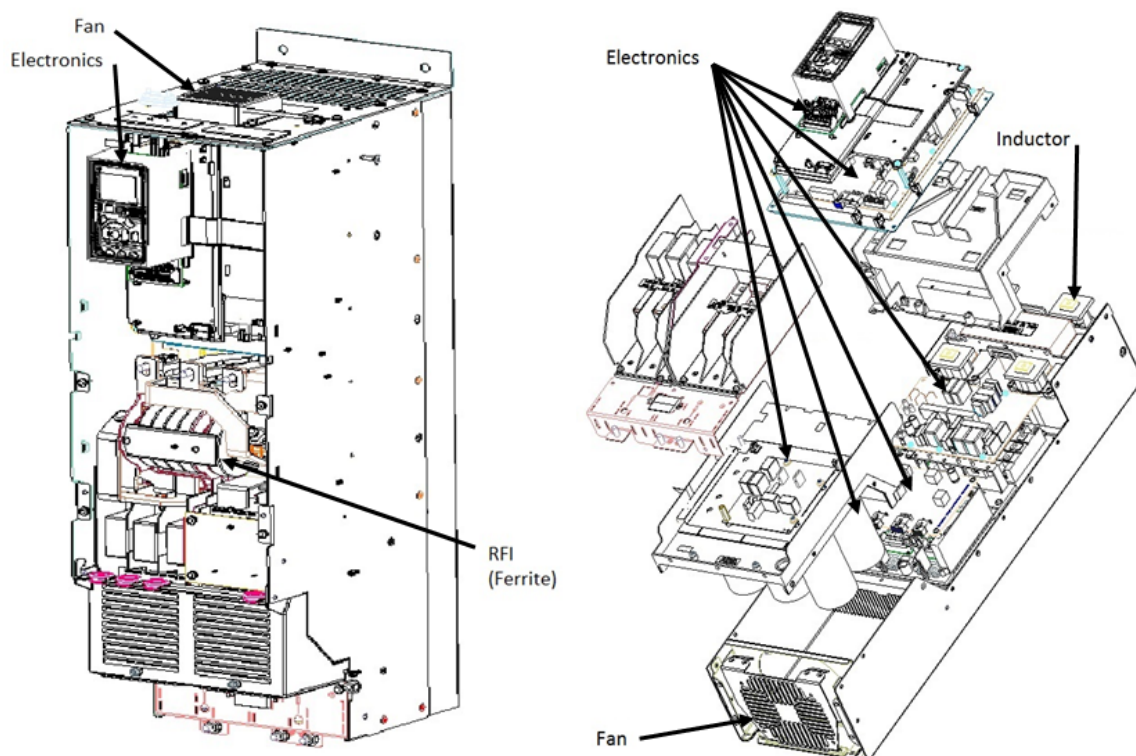
## 6. MAIN MATERIAL CONTENT FOR D3 (NEW GENERATION)

Type	D3	FC-301N FC-302N	FC-102N FC-202N
	T4,T5	90 – 132 kW	110 – 160 kW
	T7	55 – 132 kW	75 – 160 kW
			
Material	Content [kg]	(%wt)	
Aluminium primary (Al): Heatsink,Control unit, Front cover, Cable entry	13	18	
Iron/Steel primary (Fe): Terminal Plate, Side Cover, Coils/Transformers	15	20	
Copper primary (Cu): Coils/Transformers, Busbar	2	3	
Electronics: Printed Circuit Boards (PCB), Components: RFI,LCP,Terminal plate,Switchmode, Rectifier, Fan,Cables	10.1	13	
Plastics various: (Enclosures)	5.00	7	

Inductor/Transformer	25.00	35
Rubber gaskets	0.0	0
Other Materials: (For example Ferrit)	2.25	4
Weight of VLT®	72	100
Nr of Printed Circuit Assemblies (With LCP, Without option)	<b>10</b>	
Number of LCD's (Maximum)	<b>1</b>	


## 7. DRAWINGS

### 3D drawing representing Frame Size D3:





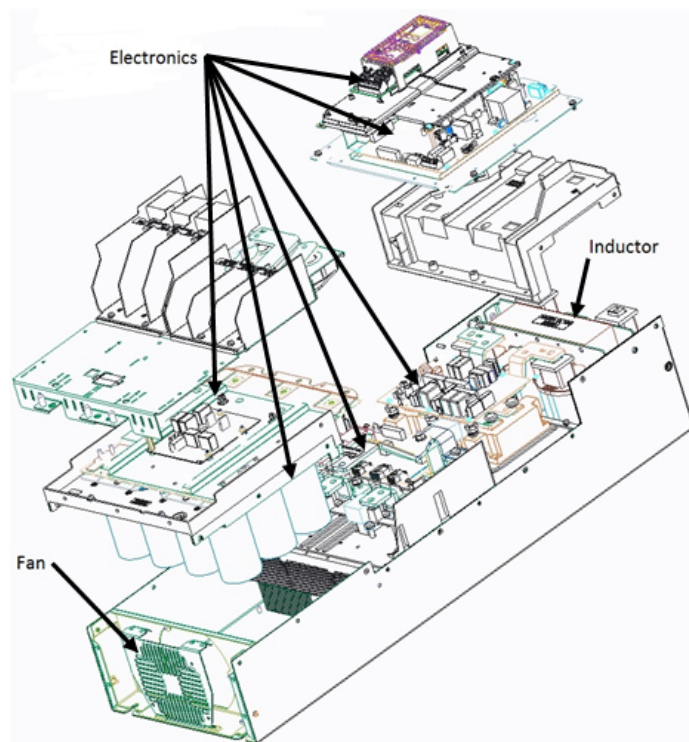
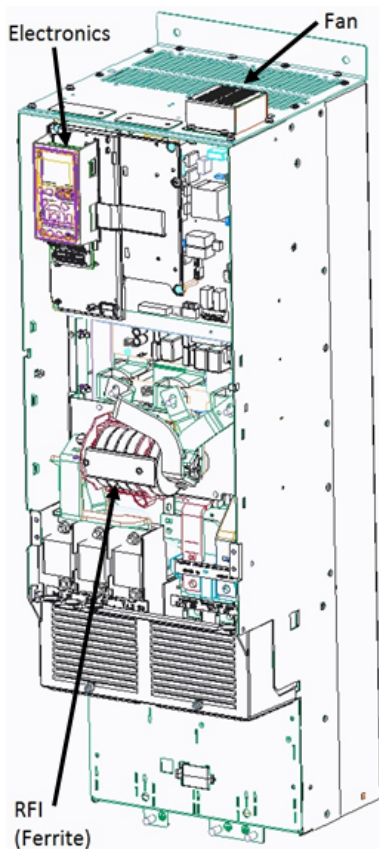
## 8. MAIN MATERIAL CONTENT FOR D4 (NEW GENERATION)

Type	D4	FC-301N FC-302N	FC-102N FC-202N
	T4,T5	160 – 250 kW	200 – 315 kW
	T7	160 – 315 kW	200 – 355 kW
			
Material	Content [kg]	(%wt)	
Aluminium primary (Al): Heatsink,Control unit, Front cover, Cable entry	22.75	15	
Iron/Steel primary (Fe): Terminal Plate, Side Cover, Coils/Transformers	46.00	31	
Copper primary (Cu): Coils/Transformers, Busbar	4.00	3	


Electronics: Printed Circuit Boards (PCB), Components: RFI,LCP,Terminal plate,Switchmode, Rectifier, Fan,Cables	12.30	8
Plastics various: (Enclosures)	5.00	4
Inductor/Transformer	35.00	34
Rubber gaskets	0.0	0
Other Materials: (For example Ferrit)	3.15	2
Weight of VLT®	132	100
Nr of Printed Circuit Assemblies (With LCP, Without option)	<b>10</b>	
Number of LCD's (Maximum)	<b>1</b>	

## 9. DRAWINGS

### 3D drawing representing Frame Size D4:



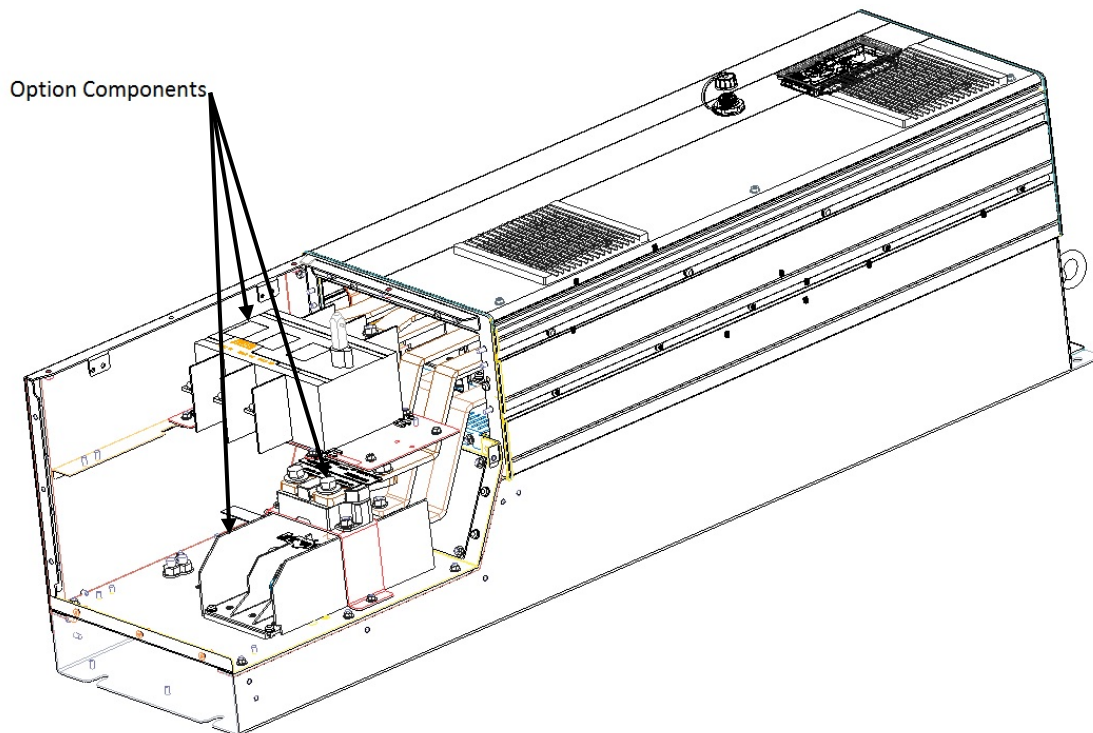
## 10. MAIN MATERIAL CONTENT FOR D5 (NEW GENERATION)

Type	D5	FC-301N FC-302N	FC-102N FC-202N
	T4,T5	90 – 132 kW	110 – 160 kW
	T7	55 – 132 kW	75 – 160 kW
			
Material	Content [kg]	(%wt)	
Aluminium primary (Al): Heatsink,Control unit, Front cover, Cable entry	0.0	0	
Iron/Steel primary (Fe): Terminal Plate, Side Cover, Coils/Transformers	26.86	23	
Copper primary (Cu): Coils/Transformers, Busbar	6.2	5	


Electronics: Printed Circuit Boards (PCB), Components: RFI,LCP,Terminal plate,Switchmode, Rectifier, Fan,Cables	7.00	6
Plastics various: (Enclosures)	0.3	0.5
Inductor/Transformer	-	-
Rubber gaskets	0.5	0.5
D1 Drive	75	65
Weight of VLT®	116	100
Nr of Printed Circuit Assemblies (With LCP, Without option)	<b>11</b>	
Number of LCD's (Maximum)	<b>1</b>	

## 11. DRAWINGS

### 3D drawing representing Frame Size D5:



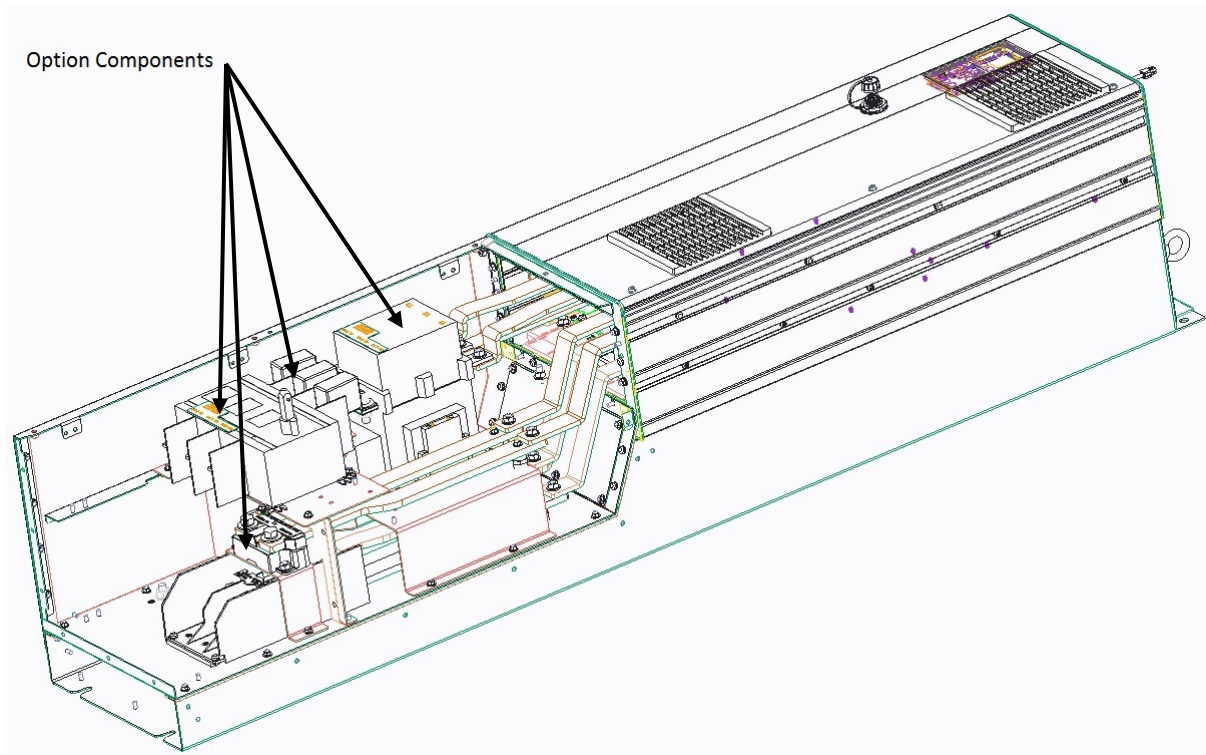
## 12. MAIN MATERIAL CONTENT FOR D6 (NEW GENERATION)

Type	D6	FC-301N FC-302N	FC-102N FC-202N
	T4,T5	90 – 132 kW	110 – 160 kW
	T7	55 – 132 kW	75 – 160 kW
			
Material	Content [kg]	(%wt)	
Aluminium primary (Al): Heatsink,Control unit, Front cover, Cable entry	0.0	0	
Iron/Steel primary (Fe): Terminal Plate, Side Cover, Coils/Transformers	38.8	27	
Copper primary (Cu): Coils/Transformers, Busbar	12.4	9	
Electronics: Printed Circuit Boards (PCB), Components: RFI,LCP,Terminal plate,Switchmode, Rectifier, Fan,Cables	14.0	10	


Plastics various: (Enclosures)	0.3	0.5
Inductor/Transformer	-	-
Rubber gaskets	0.5	0.5
D1 Drive	75	53
Weight of VLT®	141	100
Nr of Printed Circuit Assemblies (With LCP, Without option)	<b>11</b>	
Number of LCD's (Maximum)	<b>1</b>	

### 13. DRAWINGS

#### 3D drawing representing Frame Size D6:



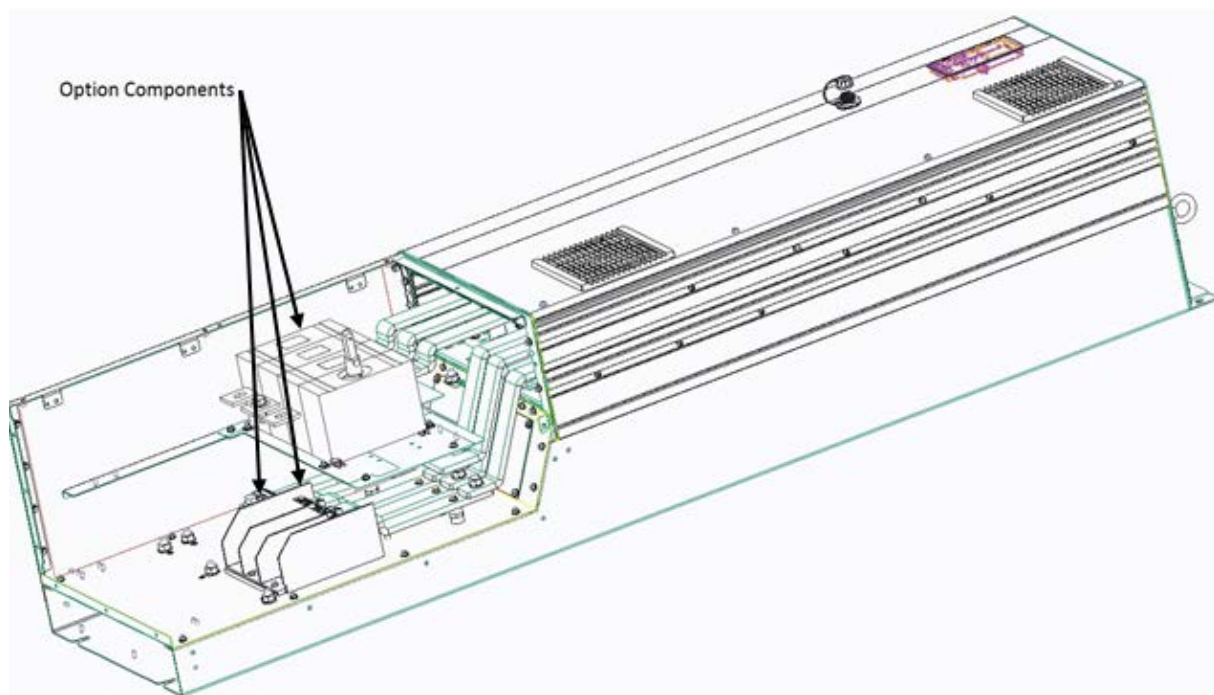
## 14. MAIN MATERIAL CONTENT FOR D7 (NEW GENERATION)

Type	D7	FC-301N FC-302N	FC-102N FC-202N
	T4,T5	160 – 250 kW	200 – 315 kW
	T7	160 – 315 kW	200 – 355 kW
			
Material	Content [kg]	(%wt)	
Aluminium primary (Al): Heatsink,Control unit, Front cover, Cable entry	0.0	0	
Iron/Steel primary (Fe): Terminal Plate, Side Cover, Coils/Transformers	38.8	27	
Copper primary (Cu): Coils/Transformers, Busbar	12.4	9	
Electronics: Printed Circuit Boards (PCB), Components: RFI,LCP,Terminal plate,Switchmode, Rectifier, Fan,Cables	14.0	10	
Plastics various: (Enclosures)	0.3	0.5	

Inductor/Transformer	-	-
Rubber gaskets	0.5	0.5
D2 Drive	75	53
Weight of VLT®	141	100
Nr of Printed Circuit Assemblies (With LCP, Without option)	<b>11</b>	
Number of LCD's (Maximum)	<b>1</b>	


## 15. DRAWINGS

### 3D drawing representing Frame Size D7:





## 16. MAIN MATERIAL CONTENT FOR D8 (NEW GENERATION)

Type	D8	FC-301N FC-302N	FC-102N FC-202N
	T4,T5	160 – 250 kW	200 – 315 kW
	T7	160 – 315 kW	200 – 355 kW
			
Material	Content [kg]	(%wt)	
Aluminium primary (Al): Heatsink,Control unit, Front cover, Cable entry	0.0	0	
Iron/Steel primary (Fe): Terminal Plate, Side Cover, Coils/Transformers	56.7	23	
Copper primary (Cu): Coils/Transformers, Busbar	17.7	7	
Electronics: Printed Circuit Boards (PCB), Components: RFI,LCP,Terminal plate,Switchmode, Rectifier, Fan,Cables	18.0	7	
Plastics various: (Enclosures)	0.5	1	

Inductor/Transformer	-	-
Rubber gaskets	0.5	1
D2 Drive	149	61
Weight of VLT®	242	100
Nr of Printed Circuit Assemblies (With LCP, Without option)	<b>11</b>	
Number of LCD's (Maximum)	<b>1</b>	

## 17. DRAWINGS

### 3D drawing representing Frame Size D8:

