













# Specifications

Mains supply (L1, L2, L3)	
Supply voltage	1 x 200–240 V ± 10%, 3 x 200–240 V ± 10% 3 x 380–480 V ± 10%
Supply frequency	50/60 Hz
Displacement Power Factor (cos φ) near unity	(> 0.98)
Switching on input supply L1, L2, L3	1–2 times/min.

Output data (U, V, W)	
Output voltage	0–100% of supply voltage
Output frequency	0–200 Hz (VVC+ mode) 0–400 Hz (U/f mode)
Switching on output	Unlimited
Ramp times	0.05–3600 sec

Digital inputs	
Programmable inputs	5
Logic	PNP or NPN
Voltage level	0–24 V
Maximum voltage on input	28 V DC
Input Resistance, Ri	Approx. 4 kΩ

Pulse inputs	
Programmable pulse inputs	1
Voltage level	0–24 V DC (PNP positive logic)
Pulse input accuracy (0,1–110 kHz)	Max. error: 0.1% of full scale
Pulse input frequency	20–5000 Hz

Analog input	
Analog inputs	2
Modes	1 current/1 voltage or current
Voltage level	0–10 V (scaleable)
Current level	0/4–20 mA (scaleable)

Analog output	
Programmable analog outputs	1
Current range at analog output	0/4–20 mA
Max. load to common at analog output	500 Ω
Accuracy on analog output	Max. error: 1% of full scale

## Ordering Numbers

Power [kW]	200–240 V			380–480 V	
	Current [I-nom.]	1 ph.	3 ph.	Current [I-nom.]	3 ph.
0.18	1.2	132F 0001			
0.25	1.5		132F 0008		
0.37	2.2	132F 0002	132F 0009	1.2	132F 0017
0.75	4.2	132F 0003	132F 0010	2.2	132F 0018
1.5	6.8	132F 0005	132F 0012	3.7	132F 0020
2.2	9.6	132F 0007	132F 0014	5.3	132F 0022
3.0				7.2	132F 0024
3.7	15.2		132F 0016		
4.0				9.0	132F 0026
5.5				12.0	132F 0028
7.5				15.5	132F 0030
11.0				23.0	132F 0058
15.0				31.0	132F 0059
18.5				37.0	132F 0060
22.0				43.0	132F 0061

Micro drives from 1.5 kW and up have built in brake chopper

On-board power supply	
Output voltage	10.5 ± 0.5 V, 24 ± 0.5 V
Max. load (10 V)	25 mA
Max. load (24 V)	100 mA

Relay outputs	
Programmable relay outputs	1
Max. terminal load	240 V AC, 2 A

Fieldbus communication	
FC Protocol, Modbus RTU	

Cable lengths	
Max. motor cable length, screened (shielded)	15 m
Max. motor cable length, unscreened (unshielded)	50 m

Surroundings/ External	
Enclosure	IP 20
Vibration test	0.7 g
Max. relative humidity	5%–95% (IEC 721-3-3; Class 3K3 (non-condensing) during operation)
Aggressive environment	(IEC 721-3-3), coated class 3C3
Ambient temperature	Max. 50° C
24-hour average	Max. 40° C

Approvals	
CE, C-tick, UL	

Protection and features	
<ul style="list-style-type: none"> <li>• Electronic thermal motor protection against overload</li> <li>• Temperature monitoring of the heat sink protects the drive from overheating</li> <li>• The drive is protected against short-circuits on motor terminals U, V, W</li> <li>• The drive is protected against earth fault on motor terminals U, V, W</li> </ul>	



## Cabinet sizes (mounting flange incl.)

[mm]	M1	M2	M3	M4	M5
Height	150	176	239	292	335
Width	70	75	90	125	165
Depth	148	168	194	241	248

+ 6 mm with potentiometer



# What VLT® is all about

Danfoss VLT Drives is the world leader among dedicated drives providers – and still gaining market share.

## Environmentally responsible

VLT® products are manufactured with respect for the safety and well-being of people and the environment.

All activities are planned and performed taking into account the individual employee, the work environment and the external environment. Production takes place with a minimum of noise, smoke or other pollution and environmentally safe disposal of the products is pre-prepared.

### UN Global Compact

Danfoss has signed the UN Global Compact on social and environmental responsibility and our companies act responsibly towards local societies.

### EU Directives

All factories are certified according to ISO 14001 standard. All products fulfil the EU Directives for General Product Safety and the Machinery directive. Danfoss VLT Drives is, in all product series, implementing the EU Directive concerning Hazardous Substances in Electrical and Electronic Equipment (RoHS) and is designing all new product series according to the EU Directive on Waste Electrical and Electronic Equipment (WEEE).

### Impact on energy savings

One year's energy savings from our annual production of VLT® drives will save the energy equivalent to the energy production from a major power plant. Better process control at the same time improves product quality and reduces waste and wear on equipment.

## Dedicated to drives

Dedication has been a key word since 1968, when Danfoss introduced the world's first mass produced variable speed drive for AC motors – and named it VLT®.

Twenty five hundred employees develop, manufacture, sell and service drives and soft starters in more than one hundred countries, focused only on drives and soft starters.

## Intelligent and innovative

Developers at Danfoss VLT Drives have fully adopted modular principles in development as well as design, production and configuration.

Tomorrow's features are developed in parallel using dedicated technology platforms. This allows the development of all elements to take place in parallel, at the same time reducing time to market and ensuring that customers always enjoy the benefits of the latest features.

## Rely on the experts

We take responsibility for every element of our products. The fact that we develop and produce our own features, hardware, software, power modules, printed circuit boards, and accessories is your guarantee of reliable products.

## Local backup – globally

VLT® motor controllers are operating in applications all over the world and Danfoss VLT Drives' experts located in more than 100 countries are ready to support our customers with application advice and service wherever they may be.

Danfoss VLT Drives experts don't stop until the customer's drive challenges are solved.

