



## IP 66 enclosed VLT® drives from 3.7 to 90 kW



**IP 66 enclosed VLT® frequency converters cover the range from 3.7 to 90 kW, allowing for mounting near the motor in harsh environments indoor as well as outdoor.**

VLT® AutomationDrive, VLT® HVAC Drive and VLT® AQUA Drive come in IP 66 versions covering 3.7 to 90 kW (normal overload).

IP 66 drives are suitable for installation in wash-down areas in food & beverage plants and are built to withstand the harsh cleaning agents used in the industry.

IP 66 drives can be installed directly at the processing equipment without the need for protective cover.

All cast aluminium parts are powder coated with a strong epoxy coating.

The corrosion resistance has been successfully tested with detergents commonly used in the industry.

### The perfect solution for:

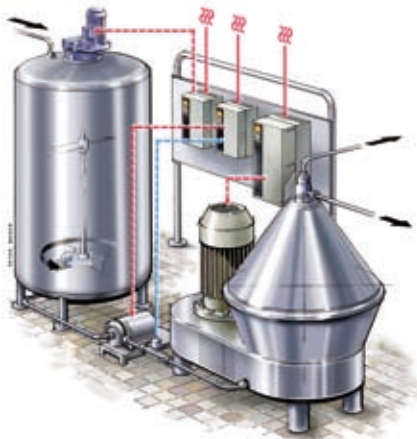
- Installations in wash-down areas
- Outdoor pump stations
- Rooftop condenser fans

### Power range

3 x 200 – 240 V: 3.7 – 45 kW  
3 x 380 – 600 V: 7.5 – 90 kW

With 110% overload torque (normal overload)

Features	Benefits
<ul style="list-style-type: none"> <li>• All cast aluminium parts are powder coated with a strong epoxy coating</li> <li>• All screws are stainless</li> <li>• Fan designed to withstand corrosion</li> <li>• Can be installed near the motor</li> </ul>	<ul style="list-style-type: none"> <li>• Excellent protection against corrosion connected with aggressive cleaning agents used in the food and beverage industry</li> <li>• No need for expensive cover or IP 66 cabinet in stainless steel</li> <li>• Less maintenance</li> <li>• Reliable operation</li> <li>• Facilitate modular plant design</li> <li>• Short motor cables/no EMC problems</li> </ul>
<h3>Reliable</h3> <ul style="list-style-type: none"> <li>• Robust single enclosure</li> <li>• Unique cooling concept with no ambient air flow over electronics</li> <li>• Max. ambient temperature 50 deg. Celsius without derating</li> </ul>	<h3>– maximum up-time</h3> <ul style="list-style-type: none"> <li>• maintenance free</li> <li>• problem free operation in harsh environments</li> <li>• no external cooling or oversizing necessary</li> </ul>
<h3>User friendly</h3> <ul style="list-style-type: none"> <li>• Easy installation</li> <li>• Watertight USB plug can be mounted in the bottom</li> </ul>	<h3>– save commissioning and operating cost</h3> <ul style="list-style-type: none"> <li>• Reduced assembly time</li> <li>• Less installation cost</li> <li>• Set-up via VLT® Setup Software MCT 10 possible without opening the drive</li> </ul>



### Stainless steel back plate

For open mounting – like on a frame – a stainless steel back plate is available to guide the air from the fan through the rear heatsink.

### Watertight USB plug

A watertight USB plug is available for mounting in a gland hole in the bottom of the drive. With this plug it is possible to commission the drive via the VLT® Set-up Software MCT 10 without opening the drive

### PC software tools

- **MCT 10**
  - ideal for commissioning and servicing the drive
- **MCT 31**
  - harmonics calculations tool

### For outdoor installations:

The drive must be installed under a suitable cover to protect from direct exposure to sun, snow and ice.

## Specifications

### Mains supply (L1, L2, L3):

Supply voltage:	200-240 V ±10%, 380-500 V ±10%, 525-600 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
Switching on output	Unlimited
Ramp times	1-3600 sec.
Closed loop	0-132 Hz

### Digital inputs:

Programmable digital inputs:	6*
Logic	PNP or NPN
Voltage level	0-24 VDC

\* Two of the inputs can be used as digital outputs.

### Analog inputs:

Analog inputs	2
Modes	Voltage or current
Voltage level:	-10 to +10 V (scaleable)
Current level:	0/4 to 20 mA (scaleable)

### Pulse inputs:

Programmable pulse inputs	2
Voltage level	0-24 VDC (PNP positive logic)
Pulse input accuracy	(0.1-110 kHz)

\* Two of the digital inputs can be used for pulse inputs.

### Analog output:

Programmable analog outputs	1
Current range at analog output:	0/4-20 mA

### Relay outputs:

Programmable relay outputs:	2 (240 VAC, 2 A and 400 VAC, 2 A)
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### Approvals:

Norske Veritas, CCI

### Fieldbus communication:

FC Protocol, N2 Metasys, FLN Apogee, Modbus RTU, LonWorks, BACnet, DeviceNet, Profibus, CanOpen available.

### Ambient temp.:

50° C

### Cabinet sizes

Power range (200-240 V) (normal overload) (380-600 V)	3.7 kW 5.5-7.5 kW	5.5-7.5 kW 11-18.5 kW	11-15 kW 22-30 kW	18.5-22 kW 37-22 kW	30-45 kW 75-90 kW
Enclosure name	A5	B1	B2	C1	C2*
Height	420	481	651	680	770
Width	242	242	242	308	370
Depth	200	260	260	310	335

\*Planned