



# VLT® 2800 Series



The VLT® 2800 series has been developed for the low power market. The drive is extremely compact and prepared for side-by-side mounting. The concept is modular with a power module and a control module.

The VLT® 2800 series is designed for stable operation in industrial environments.

### The perfect solution for:

- Fans and centrifugal pumps
- Conveyors, centrifuges, dosing pumps, compressors
- Special applications like cutting machines with constant speed, and packaging machines with a need for high precision.

### Power range:

1/3 x 200 – 240 V:      0.37 – 3.7 kW  
 3 x 380 – 480 V:      0.55 – 18.5 kW

*With 110% overload torque (normal overload)*

Features	Benefits
<ul style="list-style-type: none"> <li>• Automatic Motor Tuning</li> <li>• PID-controller</li> <li>• Interrupt start/stop</li> <li>• Dry run detection</li> <li>• Fieldbus communication</li> </ul>	<ul style="list-style-type: none"> <li>• Ensure optimal match between drive and motor</li> <li>• Increasing performance</li> <li>• Optimum process control</li> <li>• High repeatability of positional accuracy</li> <li>• No need for specific detection equipment</li> <li>• Allows for control and surveillance of the drives from a PC or a PLC</li> <li>• Profibus and DeviceNet are available</li> </ul>
<h3>Reliable</h3> <ul style="list-style-type: none"> <li>• Built-in RFI filter</li> <li>• Enhanced sleep mode</li> <li>• Max. ambient temperature 50° Celsius without derating</li> </ul>	<h3>– Maximum up-time</h3> <ul style="list-style-type: none"> <li>• Compliance with the EMC standard EN 55011 1A</li> <li>• Excellent control for shutting down the pump at low flow</li> <li>• No external cooling or oversizing necessary</li> </ul>
<h3>User-friendly</h3> <ul style="list-style-type: none"> <li>• Quick Menu</li> <li>• Pipe Fill mode</li> <li>• Fieldbus communication</li> </ul>	<h3>– Save commissioning and operating cost</h3> <ul style="list-style-type: none"> <li>• Easy to use</li> <li>• Prevents water hammering</li> <li>• Allows for control and surveillance of the drives from a PC or a PLC</li> <li>• Profibus and DeviceNet are available</li> </ul>

## PC software tools

- **MCT 10**  
– Ideal for commissioning and servicing the drive
- **MCT 31**  
– Harmonics calculations tool

## RFI filter

The RFI filter ensures that the frequency converter will not disrupt other electrical components that are connected to the mains and might cause operating disruption.

By fitting an RFI 1B filter module between the mains supply and the VLT® 2800, the solution complies with the EMC norm EN 55011-1B.

		Power	Input current	
Mains	Type	$P_{N,M}$ [kW]	$I_{INV}$ [A]	$I_{L,N}$ [A]
1 x 220 – 240 V	2803	0.37	2.2	5.9
	2805	0.55	3.2	8.3
	2807	0.75	4.2	10.6
	2811	1.1	6.0	14.5
	2815	1.5	6.8	15.2
	2822*	2.2	9.6	22.0
	2840*	3.7	16.0	31.0
3 x 200 – 240 V	2803	0.37	2.2	2.9
	2805	0.55	3.2	4.0
	2807	0.75	4.2	5.1
	2811	1.1	6.0	7.0
	2815	1.5	6.8	7.6
	2822	2.2	9.6	8.8
	2840	3.7	16.0	14.7
3 x 380 – 480 V	2805	0.55	1.7	1.6
	2807	0.75	2.1	1.9
	2811	1.1	3.0	2.6
	2815	1.5	3.7	3.2
	2822	2.2	5.2	4.7
	2830	3.0	7.0	6.1
	2840	4.0	9.1	8.1
	2855	5.5	12	10.6
	2875	7.5	16	14.9
	2880	11.0	24	24.0
2881	15.0	32	32.0	
2882	18.5	37.5	37.5	

\* Not available with RFI filter

## Specifications

Mains supply (L1, L2, L3)	
Supply voltage	200 – 240 V ±10%, 380 – 500 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	
For start/stop, reset, thermistor, etc.	5
Logic	PNP or NPN
Voltage level	0 – 24 VDC
Digital outputs	
No. of digital outputs	1
Analog inputs	
No. of analog inputs	2
Voltage level	-10 to +10 V (scaleable)
Current level	0/4 to 20 mA (scaleable)
Pulse inputs	
No. of pulse inputs	2
Voltage level	0 – 24 VDC (PNP positive logic)
Pulse input accuracy	(0.1 – 110 kHz)
Analog outputs	
Programmable analog outputs	1
Current range at analog output	0/4 – 20 mA
Relay outputs	
No. of relay outputs	1
Fieldbus communication	
RS485	
Ambient temperature	
50°C	

## Cabinet sizes [mm]

Height

	A	B	C	D
A:	200	267.5	267.5	505
a:	191	257	257	490

Width

	B	C	D
B:	75	90	140
b:	60	70	120

Depth

	C	D
C:	168	244

