

# VLT® 2800 Series

The multi purpose drive with a perfect match between price and performance in a wide range of industrial applications.



The VLT® 2800 series is designed to fit the needs in a wide range of general purpose drive applications up to 18.5 kW.

Over the years it has shown its value to a large number of customers, resulting in a large base of installed drives all over the world.

The VLT® 2800 is delivered with a factory fitted brake chopper and coated printed circuit boards for increased protection as standard features.

### Power range

1/3 x 200 – 240 V..... 0.37 – 3.7 kW  
 3 x 380 – 480 V..... 0.55 – 18.5 kW  
*With 160% overload torque (high overload)*

**18.5 kW**

**maximum motor size**

Energy efficient control of a wide range of applications, with built-in brake chopper and coated printed circuit board as standard features.

Feature	Benefit
<b>Easy to integrate and operate</b>	
Quick menu	Easy start-up and fast parameter access
Automatic Motor Tuning	Ensures optimal match and performance increase between VLT 2800 and motor
PID-controller	Optimized process control
Fieldbus communication	Control and surveillance from PLC or PC
Built-in brake chopper	Standard feature that increases flexibility. Eliminates need to decide up front if a brake chopper is needed
<b>Application dedication</b>	
Counter precise stop	The drive counts pulses and stops safely after the programmed number of counts.
Precise stop function	Increases performance in packaging applications
Dry run protection	Protects the pump in dry run situations
Enhanced sleep mode	Excellent control for shutting down the drive in low flow situations
Pipe fill mode	Prevents water hammering in pump applications
<b>Flexible and robust</b>	
Max. ambient temperature 45°C without derating	No external cooling or oversizing required
Mounting with ventilated heat sink	Flexible mounting incl. horizontal mounting
Side by side mounting	Saves space in installations
Built-in RFI filter	Complies with EMC standards incl. EN55011 1A
Coated Printed Circuit Boards	Standard feature that increases protection of electronics against condensation and hazardous substances in the surroundings

### PC software tools

- **VLT® Motion Control Tool MCT 10**  
PC software tool, which is ideal for commissioning and servicing the drive
- **VLT® Motion Control Tool MCT 31**  
Harmonic calculation software

### 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.

Mains	Type	Power		Input current	
		$P_{N,M}$ [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		

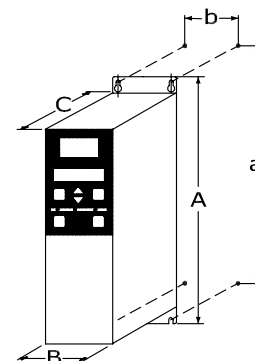
\* Not available with RFI filter

### Specifications

Mains supply (L1, L2, L3)	
Supply voltage	200-240 V ±10%, 380-480 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
Switching on output	Unlimited
Ramp times	0.02–3600 sec.
Output frequency	0–590 Hz
Digital inputs	
For start/stop, reset, thermistor, etc.	5
Logic	PNP or NPN
Voltage level	0–24 VDC
Analogue input	
No. of analogue 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 V DC (PNP positive logic)
Pulse input accuracy	(0.1–110 kHz)
Digital output	
No. of digital outputs	1
Analogue output	
Programmable analogue outputs	1
Current range	0/4–20 mA
Relay outputs	
No. of relay outputs	1
Communication	
Standard built-in	RS485 Modbus RTU Metasys N2 protocols
Fieldbus built-in	PROFIBUS DP V1 12 Mbit/s DeviceNet
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	b		
B	75	90	140	200
b	60	70	120	120
Depth				
	C			
C	168	168	168	244



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