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.

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 (normal overload)

Perfect

match for:

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

Feature	Benefit
Automatic Motor Tuning	– Ensures optimal match between drive and motor – Increases performance
PID-controller	– Optimum process control
Interrupt start/stop	– High repeatability of positional accuracy
Dry run detection	– No need for specific detection equipment
Fieldbus communication	– Allows for control and surveillance of the drives from a PC or a PLC – Profibus and DeviceNet are available
Reliable	**Maximum uptime**
Built-in RFI filter	– Compliance with the EMC standard EN 55011 1A
Enhanced sleep mode	– Excellent control for shutting down the pump at low flow
Max. ambient temperature 45° Celsius without derating	– No external cooling or oversizing necessary
User-friendly	**Save commissioning and operating cost**
Quick Menu	– Easy to use
Pipe Fill mode	– Prevents water hammering
Fieldbus communication	– Allows for control and surveillance of the drives from a PC or a PLC – Profibus and DeviceNet are available

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.

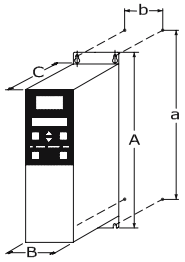
By fitting an RFI 1B filter module between the mains supply and the VLT® 2800, the solution complies with the EMC norm EN 55011-1B.

		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%, 380–480 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	1–3600 sec.
Closed loop	0–132 Hz
Digital input	
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 input	
No. of pulse inputs	2
Voltage level	0–24 VDC (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 output	
No. of relay outputs	1
Fieldbus communication	
RS485	
Ambient temperature	
50˚C	



Cabinet sizes [mm]

	A	B	C	D
Height				
A	200	267.5	267.5	505
a	191	257	257	490
Width				
B	75	90	140	200
b	60	70	120	120
Depth				
C	168	168	168	244

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