

VLT® High Power Drives



VLT® Series High Horsepower drives reduce energy usage in driven equipment. High efficiency of the VLT® series also drives down energy costs in cooling requirements.

98% efficiency greatly reduces energy consumption not only in driven equipment, but also in heat removal requirements. Smaller footprint reduces space requirements.

The perfect match for:

- Industrial appliances
- HVAC applications
- OEM

Power range:

3 x 380 – 440 V AC110 – 1000 kW
3 x 460 – 500 V AC150 – 1250 HP
3 x 690 V AC45 – 1200 kW
3 x 525 – 575 V AC100 – 1300 HP

Complete voltage range from 380-690 volts.

Available in IP00 chassis, IP 21/NEMA 1 and IP 54/NEMA 12 enclosure protection.

Modular configuration provides solutions for 125 – 1250 HP @ 460 V/ 575 V by paralleling proven power modules.

Ducted Cooling

An innovative air cooling system provides the capability to route cooling air for power components through a back channel, significantly reducing contamination of electronic components.

Cooling air can either be ducted in and out the back of the enclosure, or ducted from the bottom to the top of the enclosure. In either case, 85% of the cooling air volume never enters the controls area, making heat sink cleaning easy and reducing the air volume inside of the enclosure.

- NEMA12 seal between power and control cooling air
- Reduced air volume inside the enclosure
- Removes 85% of losses using drive main fan
- Fewer contaminants enter the enclosure
- Pre-engineered, thermally tested cooling kits available for IP 00 enclosures



Currents and powers

Normal Overload (VT) High Overload (CT)
 I_N Amps P_N kW* I_H Amps P_H kW* Frame
380 – 440 V

212 110 177 90 D1
 260 132 212 110 D1
 315 160 260 132 D2
 395 200 315 160 D2
 480 250 395 200 D2
 600 315 480 250 E1
 658 355 600 315 E1
 745 400 658 355 E1
 800 450 695 400 E1
 880 500 745 450 E2
 990 560 880 500 E2
 1120 630 990 560 E2
 1260 710 1120 630 E3
 1460 900 1260 710 E3
 1700 1000 1460 800 E3

690 V

54 45 46 37 D1
 73 55 54 45 D1
 86 75 73 55 D1
 108 90 86 75 D1
 131 110 108 90 D1
 155 132 131 110 D1
 192 160 155 132 D1
 242 200 192 160 D2
 290 250 242 200 D2
 344 315 290 250 D2
 400 400 344 315 D2
 490 500 400 400 E1
 560 560 490 500 E1
 630 630 560 560 E1
 730 710 630 630 E2
 898 800 730 710 E2
 1060 1000 898 800 E3
 1260 1200 1060 1000 E3

*kW at 400 volts

Normal Overload (VT) High Overload (CT)
 I_N Amps P_N HP_N I_H Amps P_H HP_H Frame
460 – 500 V

190 150 160 125 D1
 240 200 190 150 D1
 302 250 240 200 D2
 361 300 302 250 D2
 443 350 361 300 D2
 540 450 443 350 E1
 590 500 540 450 E1
 678 550/600 590 500 E1
 730 600 678 550 E1
 880 650 678 600 E2
 990 700 780 650 E2
 1120 800 890 700 E2
 1260 900 1050 800 E3
 1460 1100 1160 900 E3
 1530 1250 1380 1100 E3

525 – 575 V

108 100 86 75 D1
 131 125 108 100 D1
 155 150 131 125 D1
 192 200 155 150 D1
 242 250 192 200 D2
 290 300 242 250 D2
 344 350 290 300 D2
 400 400 344 350 D2
 490 500 400 400 E1
 570 550 490 500 E1
 630 650 570 550 E1
 730 750 630 650 E2
 898 900 730 750 E2
 1060 1100 898 900 E3
 1260 1300 1060 1100 E3
 * HP at 460 V for 460 – 500 V drives and 525 Volts for 525 - 575 V drives

Dimensions

Chassis Height	(in)	Width (in)	Depth (in)
D1	39	16	35
D2	50	16	15
D3	61	23	20
NEMA 1 & NEMA 12			
D1	46	17	15
D2	62	17	15
E1	79	24	19



