

380–500 VAC

D frames

		Frame	D1/D3		D1/D3		D2/D4		D2/D4		D2/D4		
VLT Type	VLT HVAC Drive		P110 T4		P132 T4		P160 T4		P200 T4		P250 T4		
	VLT AQUA Drive		P110 T4		P132 T4		P160 T4		P200 T4		P250 T4		
	VLT Automation Drive	P90K T5	P90K T5	P110 T5	P110 T5	P132 T5	P132 T5	P160 T5	P160 T5	P200 T5	P200 T5		
Overload			High	Normal	High	Normal	High	Normal	High	Normal	High	Normal	
Nominal Voltage	400V	Output Current											
		Continuous (380-440V)	$I_{VLT,N}$ [A]	177	212	212	260	260	315	315	395	395	480
		Intermittent (60 sec)*	$I_{VLT,MAX}$ [A]	266	233	318	286	390	347	473	435	593	528
		Output Power											
		Continuous	$S_{VLT,N}$ [kVA]	123	147	147	180	180	218	218	274	274	333
		Intermittent	$S_{VLT,MAX}$ [kVA]	184	162	220	198	270	240	327	301	410	366
	Typical Shaft Output												
			[kW]	90	110	110	132	132	160	160	200	200	250
	Rated Input Current												
			I_{LN} [A]	174	208	204	251	251	304	304	381	381	463
	460V	Output Current											
		Continuous (441-500V)	$I_{VLT,N}$ [A]	160	190	190	240	240	302	302	361	361	443
		Intermittent (60 sec)*	$I_{VLT,MAX}$ [A]	240	209	285	264	360	332	453	397	542	487
		Output Power											
		Continuous	$S_{VLT,N}$ [kVA]	127	151	151	191	191	241	241	288	288	353
		Intermittent	$S_{VLT,MAX}$ [kVA]	191	167	227	210	287	265	361	316	431	388
	Typical Shaft Output												
			[HP]	125	150	150	200	200	250	250	300	300	350
Rated Input Current													
		I_{LN} [A]	158	185	183	231	231	291	291	348	348	427	
500V	Output Current												
	Continuous (441-500V)	$I_{VLT,N}$ [A]	160	190	190	240	240	302	302	361	361	443	
	Intermittent (60 sec)*	$I_{VLT,MAX}$ [A]	240	209	285	264	360	332	453	397	542	487	
	Output Power												
	Continuous	$S_{VLT,N}$ [kVA]	139	165	165	208	208	262	262	313	313	384	
	Intermittent	$S_{VLT,MAX}$ [kVA]	208	181	247	229	312	288	392	344	469	422	
Typical Shaft Output													
		[kW]	110	132	132	160	160	200	200	250	250	315	
Rated Input Current													
		I_{LN} [A]	158	185	183	231	231	291	291	348	348	427	
Estimated power loss at rated maximum load			[W]	2641	3234	2995	3782	3425	4213	3910	5119	4625	5893
Efficiency				.98	.98	.98	.98	.98	.98	.98	.98	.98	
Output Frequency			[Hz]	0-800	0-800	0-800	0-800	0-800	0-800	0-800	0-800		
Max. cable cross-section to motor output terminals (per phase)			[mm ²] [AWG]	2 x 70 2 x 2/0	2 x 70 2 x 2/0	2 x 70 2 x 2/0	2 x 185 2 x 350 mcm	2 x 185 2 x 350 mcm	2 x 185 2 x 350 mcm	2 x 185 2 x 350 mcm	2 x 185 2 x 350 mcm		
Max. cable cross-section to loadsharing terminals (per -DC/+DC)			[mm ²] [AWG]	2 x 70 2 x 2/0	2 x 70 2 x 2/0	2 x 70 2 x 2/0	2 x 185 2 x 350 mcm	2 x 185 2 x 350 mcm	2 x 185 2 x 350 mcm	2 x 185 2 x 350 mcm	2 x 185 2 x 350 mcm		
Max. cable cross-section to brake resistor terminals (per -R/+R)			[mm ²] [AWG]	2 x 70 2 x 2/0	2 x 70 2 x 2/0	2 x 70 2 x 2/0	2 x 185 2 x 350 mcm	2 x 185 2 x 350 mcm	2 x 185 2 x 350 mcm	2 x 185 2 x 350 mcm	2 x 185 2 x 350 mcm		
Max. cable cross-section to input mains terminals (per phase)			[mm ²] [AWG]	2 x 70 2 x 2/0	2 x 70 2 x 2/0	2 x 70 2 x 2/0	2 x 185 2 x 350 mcm	2 x 185 2 x 350 mcm	2 x 185 2 x 350 mcm	2 x 185 2 x 350 mcm	2 x 185 2 x 350 mcm		
Max. external input line fuses (mains)			[A]	300	350	350	400	400	500	500	600		
Enclosure Ratings and Weight													
IP00/Chassis (D3, D4)			[kg]/(lbs)	82 (181)	91 (201)	91 (201)	112 (247)	112 (247)	123 (271)	123 (271)	138 (304)		
IP21/NEMA 1 (D1, D2)			[kg]/(lbs)	96 (212)	104 (230)	104 (230)	125 (276)	125 (276)	136 (300)	136 (300)	151 (333)		
IP54/NEMA 12 (D1, D2)			[kg]/(lbs)	96 (212)	104 (230)	104 (230)	125 (276)	125 (276)	136 (300)	136 (300)	151 (333)		
Supply Frequency				50/60 Hz (48-62Hz +/- 1%)									
Max. Motor Cable Length				150 meters (500 feet) shielded, 300 meters (1000 feet) unshielded									
Ambient Temperature				High Overload: -10°C to 45°C maximum with 40°C 24-hour average maximum Normal Overload: -10°C to 40°C maximum with 35°C 24-hour average maximum									
Power Factor				greater than 0.90									
Supply Voltage				3-phase, 380-500 +/- 10% (3-phase x 380/400/415/440/460/480/500)									
Output Voltage				0-100% of the AC line voltage									
Rated Motor Voltage				3-phase x 380/400/415/440/460/480/500 VAC									
Rated Motor Frequency				50/60 Hz									
Thermal protection during operation				ETR for motor (class 20)									

* Intermittent Duty rated for 110% of continuous current for Normal Overload; 150% of continuous current for High Overload.

380–500 VAC

E frames

		Frame	E1/E2		E1/E2		E1/E2		E1/E2		
VLT Type	VLT HVAC Drive		P315 T4		P355 T4		P400 T4		P450 T4		
	VLT AQUA Drive		P315 T4		P355 T4		P400 T4		P450 T4		
	VLT Automation Drive	P250 T5	P250 T5	P315 T5	P315 T5	P355 T5	P355 T5	P400 T5	P400 T5		
		Overload	High	Normal	High	Normal	High	Normal	High	Normal	
Nominal Voltage	400V	Output Current									
		Continuous (380-440V)	$I_{VLT,N}$ [A]	480	600	600	658	658	745	695	800
		Intermittent (60 sec)*	$I_{VLT,MAX}$ [A]	720	660	900	724	987	820	1043	880
		Output Power									
		Continuous	$S_{VLT,N}$ [kVA]	333	416	416	456	456	516	482	554
		Intermittent	$S_{VLT,MAX}$ [kVA]	499	457	624	501	684	568	722	610
	Typical Shaft Output	[kW]	250	315	315	355	355	400	400	450	
	Rated Input Current	I_{LN} [A]	472	590	590	647	647	733	684	787	
	460V	Output Current									
		Continuous (441-500V)	$I_{VLT,N}$ [A]	443	540	540	590	590	678	678	730
		Intermittent (60 sec)*	$I_{VLT,MAX}$ [A]	665	594	810	649	885	746	1017	803
		Output Power									
		Continuous	$S_{VLT,N}$ [kVA]	353	430	430	470	470	540	540	582
		Intermittent	$S_{VLT,MAX}$ [kVA]	529	473	645	517	705	594	810	640
	Typical Shaft Output	[HP]	350	450	450	500	500	550/600	550	600	
	Rated Input Current	I_{LN} [A]	436	531	531	580	580	667	667	718	
	500V	Output Current									
		Continuous (441-500V)	$I_{VLT,N}$ [A]	443	540	540	590	590	678	678	730
Intermittent (60 sec)*		$I_{VLT,MAX}$ [A]	665	594	810	649	885	746	1017	803	
Output Power											
Continuous		$S_{VLT,N}$ [kVA]	384	468	468	511	511	587	587	632	
Intermittent		$S_{VLT,MAX}$ [kVA]	575	514	701	562	766	646	881	695	
Typical Shaft Output	[kW]	315	355	355	400	400	500	500	530		
Rated Input Current	I_{LN} [A]	436	531	531	580	580	667	667	718		
Estimated power loss at rated maximum load		[W]	6005	7630	6960	7701	7691	8879	7964	9428	
Efficiency			.98		.98		.98		.98		
Output Frequency		[Hz]	0-600		0-600		0-600		0-600		
Max. cable cross-section to motor output terminals (per phase)		[mm ²] [AWG]	4 x 240 4 x 500 mcm		4 x 240 4 x 500 mcm		4 x 240 4 x 500 mcm		4 x 240 4 x 500 mcm		
Max. cable cross-section to loadsharing terminals (per -DC/+DC)		[mm ²] [AWG]	4 x 240 4 x 500 mcm		4 x 240 4 x 500 mcm		4 x 240 4 x 500 mcm		4 x 240 4 x 500 mcm		
Max. cable cross-section to regeneration terminals (per -DC/+DC)		[mm ²] [AWG]	4 x 240 4 x 500 mcm		4 x 240 4 x 500 mcm		4 x 240 4 x 500 mcm		4 x 240 4 x 500 mcm		
Max. cable cross-section to brake resistor terminals (per -R/+R)		[mm ²] [AWG]	2 x 185 2 x 350 mcm		2 x 185 2 x 350 mcm		2 x 185 2 x 350 mcm		2 x 185 2 x 350 mcm		
Max. cable cross-section to input mains terminals (per phase)		[mm ²] [AWG]	4 x 240 4 x 500 mcm		4 x 240 4 x 500 mcm		4 x 240 4 x 500 mcm		4 x 240 4 x 500 mcm		
Max. external input line fuses (mains)		[A]	700		900		900		900		
Enclosure Ratings and Weight											
IP00/Chassis (E2)		[kg]/(lbs)	221 (487)		234 (516)		236 (520)		277 (611)		
IP21/NEMA 1 (E1)		[kg]/(lbs)	263 (580)		270 (595)		272 (600)		313 (690)		
IP54/NEMA 12 (E1)		[kg]/(lbs)	263 (580)		270 (595)		272 (600)		313 (690)		
Supply Frequency			50/60 Hz (48-62Hz +/- 1%)								
Max. Motor Cable Length			150 meters (500 feet) shielded, 300 meters (1000 feet) unshielded								
Ambient Temperature			High Overload: -10°C to 45°C maximum with 40°C 24-hour average maximum Normal Overload: -10°C to 40°C maximum with 35°C 24-hour average maximum								
Power Factor			greater than 0.90								
Supply Voltage			3 Phase, 380-500 +/- 10% (3-phase x 380/400/415/440/460/480/500)								
Output Voltage			0-100% of the AC line voltage								
Rated Motor Voltage			3-phase x 380/400/415/440/460/480/500 VAC								
Rated Motor Frequency			50/60 Hz								
Thermal protection during operation			ETR for motor (class 20)								

* Intermittent Duty rated for 110% of continuous current for Normal Overload; 150% of continuous current for High Overload.

380–500 VAC

F frames

		Frame	F1/F3		F1/F3		F1/F3		F1/F3		F2/F4		F2/F4		
VLT Type	VLT HVAC Drive		P500 T4		P560 T4		P630 T4		P710 T4		P800 T4		P1M0 T4		
	VLT AQUA Drive		P500 T4		P560 T4		P630 T4		P710 T4		P800 T4		P1M0 T4		
	VLT Automation Drive	P450 T5	P450 T5	P500 T5	P500 T5	P560 T5	P560 T5	P630 T5	P630 T5	P710 T5	P710 T5	P800 T5	P800 T5		
		Overload	High	Normal	High	Normal	High	Normal	High	Normal	High	Normal	High	Normal	
Nominal Voltage	400V	Output Current													
		Continuous (380-440V) $I_{VLT,N}$ [A]	800	880	880	990	990	1120	1120	1260	1260	1460	1460	1720	
		Intermittent (60 sec)* $I_{VLT,MAX}$ [A]	1200	968	1320	1089	1485	1232	1680	1386	1890	1606	2190	1892	
		Output Power													
		Continuous $S_{VLT,N}$ [kVA]	554	610	610	686	686	776	776	873	873	1012	1012	1192	
		Intermittent $S_{VLT,MAX}$ [kVA]	831	671	915	754	1029	854	1164	960	1309	1113	1517	1311	
	Typical Shaft Output														
	Rated Input Current $I_{L,N}$ [A]	779	857	857	964	964	1090	1090	1227	1227	1422	1422	1675		
	460V	Output Current													
		Continuous (441-500V) $I_{VLT,N}$ [A]	730	780	780	890	890	1050	1050	1160	1160	1380	1380	1530	
		Intermittent (60 sec)* $I_{VLT,MAX}$ [A]	1095	858	1170	979	1335	1155	1575	1276	1740	1518	2070	1683	
		Output Power													
		Continuous $S_{VLT,N}$ [kVA]	582	621	621	709	709	837	837	924	924	1100	1100	1219	
		Intermittent $S_{VLT,MAX}$ [kVA]	872	684	932	780	1064	920	1255	1017	1386	1209	1649	1341	
	Typical Shaft Output														
	Rated Input Current $I_{L,N}$ [A]	711	759	759	867	867	1022	1022	1129	1129	1344	1344	1490		
	500V	Output Current													
		Continuous (441-500V) $I_{VLT,N}$ [A]	730	780	780	890	890	1050	1050	1160	1160	1380	1380	1530	
		Intermittent (60 sec)* $I_{VLT,MAX}$ [A]	1095	858	1170	979	1335	1155	1575	1276	1740	1518	2070	1683	
		Output Power													
		Continuous $S_{VLT,N}$ [kVA]	632	675	675	771	771	909	909	1005	1005	1195	1195	1325	
Intermittent $S_{VLT,MAX}$ [kVA]		948	743	1013	848	1156	1000	1364	1105	1507	1315	1793	1458		
Typical Shaft Output															
Rated Input Current $I_{L,N}$ [A]	711	759	759	867	867	1022	1022	1129	1129	1344	1344	1490			
Efficiency			.98	.98	.98	.98	.98	.98	.98	.98	.98	.98	.98		
Output Frequency [Hz]			0-600	0-600	0-600	0-600	0-600	0-600	0-600	0-600	0-600	0-600	0-600		
Max. cable cross-section to motor output terminals (per phase) [mm ²] [AWG]			8 x 150 8 x 300 mcm	8 x 150 8 x 300 mcm	8 x 150 8 x 300 mcm	8 x 150 8 x 300 mcm	8 x 150 8 x 300 mcm	8 x 150 8 x 300 mcm	8 x 150 8 x 300 mcm	12 x 150 12 x 300 mcm	12 x 150 12 x 300 mcm	12 x 150 12 x 300 mcm	12 x 150 12 x 300 mcm		
Max. cable cross-section to loadsharing terminals (per -DC/+DC) [mm ²] [AWG]			4 x 120 4 x 250 mcm	4 x 120 4 x 250 mcm	4 x 120 4 x 250 mcm	4 x 120 4 x 250 mcm	4 x 120 4 x 250 mcm	4 x 120 4 x 250 mcm	4 x 120 4 x 250 mcm	4 x 120 4 x 250 mcm	4 x 120 4 x 250 mcm	4 x 120 4 x 250 mcm	4 x 120 4 x 250 mcm		
Max. cable cross-section to regeneration terminals (per -DC/+DC) [mm ²] [AWG]			2 x 150 2 x 300 mcm	2 x 150 2 x 300 mcm	2 x 150 2 x 300 mcm	2 x 150 2 x 300 mcm	2 x 150 2 x 300 mcm	2 x 150 2 x 300 mcm	2 x 150 2 x 300 mcm	2 x 150 2 x 300 mcm	2 x 150 2 x 300 mcm	2 x 150 2 x 300 mcm	2 x 150 2 x 300 mcm		
Max. cable cross-section to brake resistor terminals (per -R/+R) [mm ²] [AWG]			4 x 185 4 x 350 mcm	4 x 185 4 x 350 mcm	4 x 185 4 x 350 mcm	4 x 185 4 x 350 mcm	4 x 185 4 x 350 mcm	4 x 185 4 x 350 mcm	4 x 185 4 x 350 mcm	6 x 185 6 x 350 mcm	6 x 185 6 x 350 mcm	6 x 185 6 x 350 mcm	6 x 185 6 x 350 mcm		
Max. cable cross-section to input mains terminals (per phase) [mm ²] [AWG]			8 x 240 8 x 500 mcm	8 x 240 8 x 500 mcm	8 x 240 8 x 500 mcm	8 x 240 8 x 500 mcm	8 x 240 8 x 500 mcm	8 x 240 8 x 500 mcm	8 x 240 8 x 500 mcm	8 x 240 8 x 500 mcm	8 x 240 8 x 500 mcm	8 x 240 8 x 500 mcm	8 x 240 8 x 500 mcm		
Max. external input line fuses (mains) [A]			2000	2000	2000	2000	2000	2000	2000	2500	2500	2500	2500		
Enclosure Ratings and Weight															
	IP21/NEMA 1 [kg]/(lbs)		1004 (2214) [†]	1004 (2214) [†]	1004 (2214) [†]	1004 (2214) [†]	1004 (2214) [†]	1004 (2214) [†]	1004 (2214) [†]	1246 (2748) [†]	1246 (2748) [†]	1246 (2748) [†]	1246 (2748) [†]		
	IP54/NEMA 12 [kg]/(lbs)		1004 (2214) [†]	1004 (2214) [†]	1004 (2214) [†]	1004 (2214) [†]	1004 (2214) [†]	1004 (2214) [†]	1004 (2214) [†]	1246 (2748) [†]	1246 (2748) [†]	1246 (2748) [†]	1246 (2748) [†]		
Supply Frequency			50/60 Hz (48-62Hz +/- 1%)												
Max. Motor Cable Length			150 meters (500 feet) shielded, 300 meters (1000 feet) unshielded												
Ambient Temperature			High Overload: -10°C to 45°C maximum with 40°C 24-hour average maximum Normal Overload: -10°C to 40°C maximum with 35°C 24-hour average maximum												
Power Factor			greater than 0.90												
Supply Voltage			3 Phase, 380-500 +/- 10% (3-phase x 380/400/415/440/460/480/500)												
Output Voltage			0-100% of the AC line voltage												
Rated Motor Voltage			3-phase x 380/400/415/440/460/480/500 VAC												
Rated Motor Frequency			50/60 Hz												
Thermal protection during operation			ETR for motor (class 20)												

* Intermittent Duty rated for 110% of continuous current for Normal Overload; 150% of continuous current for High Overload.

† Adding the F-frame option cabinet (resulting in the F3 or F4 frame) adds 295 kg (650 lbs) to estimated weight.

525–690 VAC

D frames 40–100 HP (30–90 kW)

		Frame	D1/D3		D1/D3		D1/D3		D1/D3		
VLT Type	VLT HVAC Drive		P37K T6		P45K T6		P55K T6		P75K T6		
	VLT AQUA Drive		P45K T7		P55K T7		P75K T7		P90K T7		
	VLT Automation Drive	P37K T7	P37K T7	P45K T7	P45K T7	P55K T7	P55K T7	P75K T7	P75K T7		
Overload			High	Normal	High	Normal	High	Normal	High	Normal	
Nominal Voltage	550V	Output Current									
		Continuous (525-550 V)	I _{VLT,N} [A]	48	56	56	76	76	90	90	113
		Intermittent (60 sec)*	I _{VLT,MAX} [A]	77	62	90	84	122	99	135	124
		Output Power									
		Continuous	S _{VLT,N} [kVA]	46	53	53	72	72	86	86	108
		Intermittent	S _{VLT,MAX} [kVA]	73	59	85	80	116	94	129	118
	Typical Shaft Output										
	Rated Input Current	I _{LN} [A]	53	60	60	77	77	89	89	110	
	575V	Output Current									
		Continuous (551-690 V)	I _{VLT,N} [A]	46	54	54	73	73	86	86	108
		Intermittent (60 sec)*	I _{VLT,MAX} [A]	74	59	86	80	117	95	129	119
		Output Power									
		Continuous	S _{VLT,N} [kVA]	46	54	54	73	73	86	86	108
		Intermittent	S _{VLT,MAX} [kVA]	73	59	86	80	116	94	128	118
	Typical Shaft Output										
	Rated Input Current	I _{LN} [A]	51	58	58	74	74	85	85	106	
	690V	Output Current									
		Continuous (551-690 V)	I _{VLT,N} [A]	46	54	54	73	73	86	86	108
		Intermittent (60 sec)*	I _{VLT,MAX} [A]	74	59	86	80	117	95	129	119
		Output Power									
		Continuous	S _{VLT,N} [kVA]	55	65	65	87	87	103	103	129
Intermittent		S _{VLT,MAX} [kVA]	88	71	103	96	140	113	154	142	
Typical Shaft Output											
Rated Input Current	I _{LN} [A]	50	58	58	77	77	87	87	109		
Estimated power loss at rated maximum load			[W]	1355	1458	1459	1717	1721	1913	1913	2262
Efficiency				.97		.97		.97		.97	
Output Frequency			[Hz]	0-600		0-600		0-600		0-600	
Max. cable cross-section to motor output terminals (per phase)			[mm ²] [AWG]	2 x 70 2 x 2/0		2 x 70 2 x 2/0		2 x 70 2 x 2/0		2 x 70 2 x 2/0	
Max. cable cross-section to loadsharing terminals (per -DC/+DC)			[mm ²] [AWG]	2 x 70 2 x 2/0		2 x 70 2 x 2/0		2 x 70 2 x 2/0		2 x 70 2 x 2/0	
Max. cable cross-section to brake resistor terminals (per -R/+R)			[mm ²] [AWG]	2 x 70 2 x 2/0		2 x 70 2 x 2/0		2 x 70 2 x 2/0		2 x 70 2 x 2/0	
Max. cable cross-section to input mains terminals (per phase)			[mm ²] [AWG]	2 x 70 2 x 2/0		2 x 70 2 x 2/0		2 x 70 2 x 2/0		2 x 70 2 x 2/0	
Max. external input line fuses (mains)			[A]	125		160		200		200	
Enclosure Ratings and Weight											
IP00/Chassis (D3)			[kg]/(lbs)	82 (181)		82 (181)		82 (181)		82 (181)	
IP21/NEMA 1 ((D1)			[kg]/(lbs)	96 (211)		96 (211)		96 (211)		96 (211)	
IP54/NEMA 12 (D1)			[kg]/(lbs)	96 (211)		96 (211)		96 (211)		96 (211)	
Supply Frequency				50/60 Hz (48-62Hz +/- 1%)							
Max. Motor Cable Length				150 meters (500 feet) shielded, 300 meters (1000 feet) unshielded							
Ambient Temperature				High Overload: -10°C to 45°C maximum with 40°C 24-hour average maximum Normal Overload: -10°C to 40°C maximum with 35°C 24-hour average maximum							
Power Factor				greater than 0.90							
Supply Voltage				3 Phase, 525-690 +/- 10% (3-phase x 525/550/575/600/690)							
Output Voltage				0-100% of the AC line voltage							
Rated Motor Voltage				3-phase x 525/550/575/690 VAC							
Rated Motor Frequency				50/60 Hz							
Thermal protection during operation				ETR for motor (class 20)							

* Intermittent Duty rated for 110% of continuous current for Normal Overload; 150% of continuous current for High Overload.

525–690 VAC

D frames 100–200 HP (75–132 kW)

		Frame	D1/D3		D1/D3		D1/D3		
VLT Type	VLT HVAC Drive		P90K T6		P110 T6		P132 T6		
	VLT AQUA Drive		P110 T7		P132 T7		P160 T7		
	VLT Automation Drive		P90K T7	P90K T7	P110 T7	P110 T7	P132 T7	P132 T7	
Overload			High	Normal	High	Normal	High	Normal	
Nominal Voltage	550V	Output Current							
		Continuous (525-550 V)	I _{VLT,N} [A]	113	137	137	162	162	201
		Intermittent (60 sec)*	I _{VLT,MAX} [A]	170	151	206	178	243	221
		Output Power							
		Continuous	S _{VLT,N} [kVA]	108	131	131	154	154	191
		Intermittent	S _{VLT,MAX} [kVA]	161	144	196	170	231	211
	Typical Shaft Output								
		[kW]	75	90	90	110	110	132	
	Rated Input Current	I _{L,N} [A]	110	130	130	158	158	198	
	575V	Output Current							
		Continuous (551-690 V)	I _{VLT,N} [A]	108	131	131	155	155	192
		Intermittent (60 sec)*	I _{VLT,MAX} [A]	162	144	197	171	233	211
		Output Power							
		Continuous	S _{VLT,N} [kVA]	108	130	130	154	154	191
		Intermittent	S _{VLT,MAX} [kVA]	161	144	196	170	232	210
	Typical Shaft Output								
		[HP]	100	125	125	150	150	200	
	Rated Input Current	I _{L,N} [A]	106	124	124	151	151	189	
	690V	Output Current							
		Continuous (551-690 V)	I _{VLT,N} [A]	108	131	131	155	155	192
		Intermittent (60 sec)*	I _{VLT,MAX} [A]	162	144	197	171	233	211
Output Power									
Continuous		S _{VLT,N} [kVA]	129	157	157	185	185	229	
Intermittent		S _{VLT,MAX} [kVA]	194	172	235	204	278	252	
Typical Shaft Output									
	[kW]	90	110	110	132	132	160		
Rated Input Current	I _{L,N} [A]	109	128	128	155	155	197		
Estimated power loss at rated maximum load			[W]	2264	2662	2664	3114	2953	3612
Efficiency				.98		.98		.98	
Output Frequency			[Hz]	0-600		0-600		0-600	
Max. cable cross-section to motor output terminals (per phase)			[mm ²]	2 x 70		2 x 70		2 x 70	
			[AWG]	2 x 2/0		2 x 2/0		2 x 2/0	
Max. cable cross-section to loadsharing terminals (per -DC/+DC)			[mm ²]	2 x 70		2 x 70		2 x 70	
			[AWG]	2 x 2/0		2 x 2/0		2 x 2/0	
Max. cable cross-section to brake resistor terminals (per -R/+R)			[mm ²]	2 x 70		2 x 70		2 x 70	
			[AWG]	2 x 2/0		2 x 2/0		2 x 2/0	
Max. cable cross-section to input mains terminals (per phase)			[mm ²]	2 x 70		2 x 70		2 x 70	
			[AWG]	2 x 2/0		2 x 2/0		2 x 2/0	
Max. external input line fuses (mains)			[A]	250		315		350	
Enclosure Ratings and Weight									
IP00/Chassis (D3)			[kg]/(lbs)	82 (181)		82 (181)		91 (201)	
IP21/NEMA 1 (D1)			[kg]/(lbs)	96 (211)		96 (211)		104 (230)	
IP54/NEMA 12 (D1)			[kg]/(lbs)	96 (211)		96 (211)		104 (230)	
Supply Frequency				50/60 Hz (48-62Hz +/- 1%)					
Max. Motor Cable Length				150 meters (500 feet) shielded, 300 meters (1000 feet) unshielded					
Ambient Temperature				High Overload: -10°C to 45°C maximum with 40°C 24-hour average maximum Normal Overload: -10°C to 40°C maximum with 35°C 24-hour average maximum					
Power Factor				greater than 0.90					
Supply Voltage				3 Phase, 525-690 +/- 10% (3-phase x 525/550/575/600/690)					
Output Voltage				0-100% of the AC line voltage					
Rated Motor Voltage				3-phase x 525/550/575/690 VAC					
Rated Motor Frequency				50/60 Hz					
Thermal protection during operation				ETR for motor (class 20)					

* Intermittent Duty rated for 110% of continuous current for Normal Overload; 150% of continuous current for High Overload.

525–690 VAC

D frames 200–400 HP (132–315 kW)

		Frame	D2/D4		D2/D4		D2/D4		D2/D4		
VLT Type	VLT HVAC Drive		P160 T6		P200 T6		P250 T6		P315 T6		
	VLT AQUA Drive		P200 T7		P250 T7		P315 T7		P400 T7		
	VLT Automation Drive	P160 T7	P160 T7	P200 T7	P200 T7	P250 T7	P250 T7	P315 T7	P315 T7		
Overload			High	Normal	High	Normal	High	Normal	High	Normal	
Nominal Voltage	550V	Output Current									
		Continuous (525-550 V)	I _{VLT,N} [A]	201	253	253	303	303	360	360	418
		Intermittent (60 sec)*	I _{VLT,MAX} [A]	302	278	380	333	455	396	540	460
		Output Power									
		Continuous	S _{VLT,N} [kVA]	191	241	241	289	289	343	343	398
		Intermittent	S _{VLT,MAX} [kVA]	287	265	362	318	433	377	514	438
	Typical Shaft Output										
	Rated Input Current	I _{LN} [A]	132	160	160	200	200	250	250	315	
	Rated Input Current										
			198	245	245	299	299	355	355	408	
	575V	Output Current									
		Continuous (551-690 V)	I _{VLT,N} [A]	192	242	242	290	290	344	344	400
		Intermittent (60 sec)*	I _{VLT,MAX} [A]	288	266	363	319	435	378	516	440
		Output Power									
		Continuous	S _{VLT,N} [kVA]	191	241	241	289	289	343	343	398
		Intermittent	S _{VLT,MAX} [kVA]	287	265	362	318	433	377	514	438
	Typical Shaft Output										
	Rated Input Current	I _{LN} [A]	200	250	250	300	300	350	350	400	
Rated Input Current											
		189	234	234	286	286	339	339	390		
690V	Output Current										
	Continuous (551-690 V)	I _{VLT,N} [A]	192	242	242	290	290	344	344	400	
	Intermittent (60 sec)*	I _{VLT,MAX} [A]	288	266	363	319	435	378	516	440	
	Output Power										
	Continuous	S _{VLT,N} [kVA]	229	289	289	347	347	411	411	478	
	Intermittent	S _{VLT,MAX} [kVA]	344	318	434	381	520	452	617	526	
Typical Shaft Output											
Rated Input Current	I _{LN} [A]	160	200	200	250	250	315	315	400		
Rated Input Current											
		197	240	240	296	296	352	352	400		
Estimated power loss at rated maximum load			[W]	3451	4292	4275	5156	4875	5821	5185	6149
Efficiency				.98		.98		.98		.98	
Output Frequency			[Hz]	0-600		0-600		0-600		0-500	
Max. cable cross-section to motor output terminals (per phase)			[mm ²]	2 x 185		2 x 185		2 x 185		2 x 185	
			[AWG]	2 x 350 mcm		2 x 350 mcm		2 x 350 mcm		2 x 350 mcm	
Max. cable cross-section to loadsharing terminals (per -DC/+DC)			[mm ²]	2 x 185		2 x 185		2 x 185		2 x 185	
			[AWG]	2 x 350 mcm		2 x 350 mcm		2 x 350 mcm		2 x 350 mcm	
Max. cable cross-section to brake resistor terminals (per -R/+R)			[mm ²]	2 x 185		2 x 185		2 x 185		2 x 185	
			[AWG]	2 x 350 mcm		2 x 350 mcm		2 x 350 mcm		2 x 350 mcm	
Max. cable cross-section to input mains terminals (per phase)			[mm ²]	2 x 185		2 x 185		2 x 185		2 x 185	
			[AWG]	2 x 350 mcm		2 x 350 mcm		2 x 350 mcm		2 x 350 mcm	
Max. external input line fuses (mains)			[A]	350		400		500		550	
Enclosure Ratings and Weight											
IP00/Chassis (D4)			[kg]/(lbs)	112 (247)		123 (271)		138 (304)		151 (334)	
IP21/NEMA 1 (D2)			[kg]/(lbs)	125 (277)		136 (301)		151 (334)		165 (364)	
IP54/NEMA 12 (D2)			[kg]/(lbs)	125 (277)		136 (301)		151 (334)		165 (364)	
Supply Frequency				50/60 Hz (48-62Hz +/- 1%)							
Max. Motor Cable Length				150 meters (500 feet) shielded, 300 meters (1000 feet) unshielded							
Ambient Temperature				High Overload: -10°C to 45°C maximum with 40°C 24-hour average maximum Normal Overload: -10°C to 40°C maximum with 35°C 24-hour average maximum							
Power Factor				greater than 0.90							
Supply Voltage				3 Phase, 525-690 +/- 10% (3-phase x 525/550/575/600/690)							
Output Voltage				0-100% of the AC line voltage							
Rated Motor Voltage				3-phase x 525/550/575/690 VAC							
Rated Motor Frequency				50/60 Hz							
Thermal protection during operation				ETR for motor (class 20)							

* Intermittent Duty rated for 110% of continuous current for Normal Overload; 150% of continuous current for High Overload.

525–690 VAC

E frames 400–650 HP (300–500 kW)

		Frame	E1/E2		E1/E2		E1/E2		E1/E2		
VLT Type	VLT HVAC Drive		P355 T6		P400 T6		P450 T6		P500 T6		
	VLT AQUA Drive		P450 T7		P500 T7		P560 T7		P630 T7		
	VLT Automation Drive	P355 T7	P355 T7	P400 T7	P400 T7	P500 T7	P500 T7	P560 T7	P560 T7		
		Overload	High	Normal	High	Normal	High	Normal	High	Normal	
Nominal Voltage	550V	Output Current									
		Continuous (525-550 V)	I _{VLT,N} [A]	395	470	429	523	523	596	596	630
		Intermittent (60 sec)*	I _{VLT,MAX} [A]	593	517	644	575	785	656	894	693
		Output Power									
		Continuous	S _{VLT,N} [kVA]	376	448	409	498	498	568	568	600
		Intermittent	S _{VLT,MAX} [kVA]	564	493	613	548	747	625	852	660
		Typical Shaft Output									
			[kW]	300	355	315	400	400	450	450	500
		Rated Input Current	I _{L,N} [A]	381	453	413	504	504	574	574	607
	575V	Output Current									
		Continuous (551-690 V)	I _{VLT,N} [A]	380	450	410	500	500	570	570	630
		Intermittent (60 sec)*	I _{VLT,MAX} [A]	570	495	615	550	750	627	855	693
Output Power											
Continuous		S _{VLT,N} [kVA]	378	448	408	498	498	568	568	627	
Intermittent		S _{VLT,MAX} [kVA]	568	493	612	548	747	624	852	690	
	Typical Shaft Output										
		[HP]	400	450	400	500	500	600	600	650	
	Rated Input Current	I _{L,N} [A]	366	434	395	482	482	549	549	607	
690V	Output Current										
	Continuous (551-690 V)	I _{VLT,N} [A]	380	450	410	500	500	570	570	630	
	Intermittent (60 sec)*	I _{VLT,MAX} [A]	570	495	615	550	750	627	855	693	
	Output Power										
	Continuous	S _{VLT,N} [kVA]	454	538	490	598	598	681	681	753	
	Intermittent	S _{VLT,MAX} [kVA]	681	592	735	657	896	749	1022	828	
	Typical Shaft Output										
		[kW]	355	450	400	500	500	560	560	630	
	Rated Input Current	I _{L,N} [A]	366	434	395	482	482	549	549	607	
Estimated power loss at rated maximum load		[W]	5383	6449	5818	7249	7671	8727	8715	9673	
Efficiency			.98		.98		.98		.98		
Output Frequency		[Hz]	0-500		0-500		0-500		0-500		
Max. cable cross-section to motor output terminals (per phase)		[mm ²] [AWG]	4 x 240 4 x 500 mcm		4 x 240 4 x 500 mcm		4 x 240 4 x 500 mcm		4 x 240 4 x 500 mcm		
Max. cable cross-section to loadsharing terminals (per -DC/+DC)		[mm ²] [AWG]	4 x 240 4 x 500 mcm		4 x 240 4 x 500 mcm		4 x 240 4 x 500 mcm		4 x 240 4 x 500 mcm		
Max. cable cross-section to regeneration terminals (per -DC/+DC)		[mm ²] [AWG]	4 x 240 4 x 500 mcm		4 x 240 4 x 500 mcm		4 x 240 4 x 500 mcm		4 x 240 4 x 500 mcm		
Max. cable cross-section to brake resistor terminals (per -R/+R)		[mm ²] [AWG]	2 x 185 2 x 350 mcm		2 x 185 2 x 350 mcm		2 x 185 2 x 350 mcm		2 x 185 2 x 350 mcm		
Max. cable cross-section to input mains terminals (per phase)		[mm ²] [AWG]	4 x 240 4 x 500 mcm		4 x 240 4 x 500 mcm		4 x 240 4 x 500 mcm		4 x 240 4 x 500 mcm		
Max. external input line fuses (mains)		[A]	700		700		900		900		
Enclosure Ratings and Weight											
	IP00/Chassis (E2)	[kg]/(lbs)	221 (487)		221 (487)		236 (520)		277 (611)		
	IP21/NEMA 1 (E1)	[kg]/(lbs)	263 (580)		263 (580)		272 (600)		313 (690)		
	IP54/NEMA 12 (E1)	[kg]/(lbs)	263 (580)		263 (580)		272 (600)		313 (690)		
Supply Frequency			50/60 Hz (48-62Hz +/- 1%)								
Max. Motor Cable Length			150 meters (500 feet) shielded, 300 meters (1000 feet) unshielded								
Ambient Temperature			High Overload: -10°C to 45°C maximum with 40°C 24-hour average maximum Normal Overload: -10°C to 40°C maximum with 35°C 24-hour average maximum								
Power Factor			greater than 0.90								
Supply Voltage			3 Phase, 525-690 +/- 10% (3-phase x 525/550/575/600/690)								
Output Voltage			0-100% of the AC line voltage								
Rated Motor Voltage			3-phase x 525/550/575/690 VAC								
Rated Motor Frequency			50/60 Hz								
Thermal protection during operation			ETR for motor (class 20)								

* Intermittent Duty rated for 110% of continuous current for Normal Overload; 150% of continuous current for High Overload.

525–690 VAC

F frames 650–1350 HP (500–1000 kW)

		Frame Size	F1/F3		F1/F3		F1/F3		F2/F4		F2/F4		
VLT Type	VLT HVAC Drive		P560 T6		P670 T6		P750 T6		P850 T6		P1M0 T6		
	VLT AQUA Drive		P710 T7		P800 T7		P900 T7		P1M0 T7		P1M2 T7		
	VLT Automation Drive	P630 T7	P630 T7	P710 T7	P710 T7	P800 T7	P800 T7	P900 T7	P900 T7	P1M0 T7	P1M0 T7		
Overload			High	Normal	High	Normal	High	Normal	High	Normal	High	Normal	
Nominal Voltage	550V	Output Current											
		Continuous (525-550 V)	I _{VLT,N} [A]	659	763	763	889	889	988	988	1108	1108	1317
		Intermittent (60 sec)*	I _{VLT,MAX} [A]	989	839	1145	978	1334	1087	1482	1219	1662	1449
		Output Power											
		Continuous	S _{VLT,N} [kVA]	628	727	727	847	847	941	941	1056	1056	1255
		Intermittent	S _{VLT,MAX} [kVA]	942	800	1090	932	1270	1035	1412	1161	1583	1380
	Typical Shaft Output	[kW]	500	560	560	670	670	750	750	850	850	1000	
	Rated Input Current	I _{L,N} [A]	642	743	743	866	866	962	962	1079	1079	1282	
	575V	Output Current											
		Continuous (551-690 V)	I _{VLT,N} [A]	630	730	730	850	850	945	945	1060	1060	1260
		Intermittent (60 sec)*	I _{VLT,MAX} [A]	945	803	1095	935	1275	1040	1418	1166	1590	1386
		Output Power											
		Continuous	S _{VLT,N} [kVA]	627	727	727	847	847	941	941	1056	1056	1255
		Intermittent	S _{VLT,MAX} [kVA]	941	800	1091	931	1270	1035	1412	1161	1584	1380
	Typical Shaft Output	[HP]	650	750	750	950	950	1050	1050	1150	1150	1350	
	Rated Input Current	I _{L,N} [A]	613	711	711	828	828	920	920	1032	1032	1227	
	690V	Output Current											
		Continuous (551-690 V)	I _{VLT,N} [A]	630	730	730	850	850	945	945	1060	1060	1260
		Intermittent (60 sec)*	I _{VLT,MAX} [A]	945	803	1095	935	1275	1040	1418	1166	1590	1386
		Output Power											
		Continuous	S _{VLT,N} [kVA]	753	872	872	1016	1016	1129	1129	1267	1267	1506
		Intermittent	S _{VLT,MAX} [kVA]	1129	960	1309	1117	1524	1242	1694	1394	1900	1656
	Typical Shaft Output	[kW]	630	710	710	800	800	900	900	1000	1000	1200	
	Rated Input Current	I _{L,N} [A]	613	711	711	828	828	920	920	1032	1032	1227	
Efficiency			.98		.98		.98		.98		.98		
Output Frequency [Hz]			0-500		0-500		0-500		0-500		0-500		
Max. cable cross-section to motor output terminals (per phase) [mm ²] [AWG]			8 x 150 8 x 300 mcm		8 x 150 8 x 300 mcm		8 x 150 8 x 300 mcm		12 x 150 12 x 300 mcm		12 x 150 12 x 300 mcm		
Max. cable cross-section to loadsharing terminals (per -DC/+DC) [mm ²] [AWG]			4 x 120 4 x 250 mcm		4 x 120 4 x 250 mcm		4 x 120 4 x 250 mcm		4 x 120 4 x 250 mcm		4 x 120 4 x 250 mcm		
Max. cable cross-section to regeneration terminals (per -DC/+DC) [mm ²] [AWG]			2 x 150 2 x 300 mcm		2 x 150 2 x 300 mcm		2 x 150 2 x 300 mcm		2 x 150 2 x 300 mcm		2 x 150 2 x 300 mcm		
Max. cable cross-section to brake resistor terminals (per -R/+R) [mm ²] [AWG]			4 x 185 4 x 350 mcm		4 x 185 4 x 350 mcm		4 x 185 4 x 350 mcm		6 x 185 6 x 350 mcm		6 x 185 6 x 350 mcm		
Max. cable cross-section to input mains terminals (per phase) [mm ²] [AWG]			8 x 240 8 x 500 mcm		8 x 240 8 x 500 mcm		8 x 240 8 x 500 mcm		8 x 240 8 x 500 mcm		8 x 240 8 x 500 mcm		
Max. external input line fuses (mains) [A]			2000		2000		2000		2000		2000		
Enclosure Ratings and Weight													
IP21/NEMA 1 [kg]/(lbs)			1004 (2214) [†]		1004 (2214) [†]		1004 (2214) [†]		1246 (2748) [†]		1246 (2748) [†]		
IP54/NEMA 12 [kg]/(lbs)			1004 (2214) [†]		1004 (2214) [†]		1004 (2214) [†]		1246 (2748) [†]		1246 (2748) [†]		
Supply Frequency			50/60 Hz (48-62Hz +/- 1%)										
Max. Motor Cable Length			150 meters (500 feet) shielded, 300 meters (1000 feet) unshielded										
Ambient Temperature			High Overload: -10°C to 45°C maximum with 40°C 24-hour average maximum Normal Overload: -10°C to 40°C maximum with 35°C 24-hour average maximum										
Power Factor			greater than 0.90										
Supply Voltage			3 Phase, 525-690 +/- 10% (3-phase x 525/550/575/600/690)										
Output Voltage			0-100% of the AC line voltage										
Rated Motor Voltage			3-phase x 525/550/575/690 VAC										
Rated Motor Frequency			50/60 Hz										
Thermal protection during operation			ETR for motor (class 20)										

* Intermittent Duty rated for 110% of continuous current for Normal Overload; 150% of continuous current for High Overload.

[†] Adding the F-frame option cabinet (resulting in the F3 or F4 frame) adds 295 kg (650 lbs) to estimated weight.