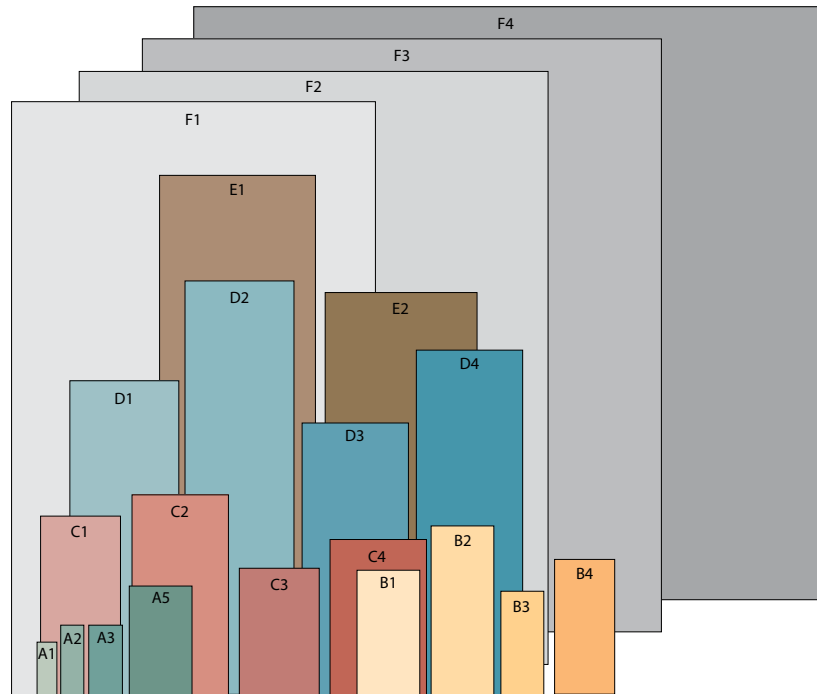


# VLT® AutomationDrive

VLT AutomationDrives are available in numerous enclosure frame sizes illustrated at right and in several power ranges shown in the charts on the following pages.



## 200 – 240 VAC 3Ø (FC 301 & FC 302)

HP	% Torque Overload <sup>(1)</sup>	Current [A]				Est. Power Loss @ Rated Max. Load (W)	Enclosure Rating/Frame Size <sup>(2)</sup>			
		Output		Input			Protected Chassis IP20	NEMA 1 IP21	NEMA 12 IP55	IP66
		Cont.	Int.	Cont.	Int.					
1/3	160%	1.8	2.9	1.6	2.6	21				
1/2	160%	2.4	3.8	2.2	3.5	29				
3/4	160%	3.5	5.6	3.2	5.1	42	A1 <sup>(3)</sup> , A2	A2	A5	A5
1	160%	4.6	7.4	4.1	6.6	54				
1-1/2	160%	6.6	10.6	5.9	9.4	63				
2	160%	7.5	12.0	6.8	10.9	82				
3	160%	10.6	17.0	9.5	15.2	116	A2	A2	A5	A5
4	160%	12.5	20.0	11.3	18.1	155	A3	A3	A5	A5
5	160%	16.7	26.7	15.0	24.0	185				
7-1/2	160%	24.2	38.7	22	35.2	239				
	110%	30.8	33.9	28	30.8	310				
10	160%	30.8	49.3	28	44.8	371	B3	B1	B1	B1
	110%	46.2	50.8	42	46.2	514				
15	160%	46.2	73.9	42	67.2	463				
	110%	59.4	65.3	54	59.4	602				
20	160%	59.4	89.1	54	81	624	B4	B2	B2	B2
	110%	74.8	82.3	68	74.8	737				
25	160%	74.8	112	68	102	740				
	110%	88	96.8	80	88	845				
30	160%	88	132	80	120	874	C3	C1	C1	C1
	110%	115	127	104	114	1140				
40	160%	115	173	104	156	1143				
	110%	143	157	130	143	1353				
50	160%	143	215	130	195	1400	C4	C2	C2	C2
	110%	170	187	154	169	1636				

<sup>(1)</sup> % Torque Overload is rated for 60 seconds. All 110% overload units provide one power size greater HP output. For example, a drive rated at 10 HP for 160% overload is rated at 15 HP for 110% overload.

<sup>(2)</sup> See pages 56–97 for frame size dimensions and weights.

<sup>(3)</sup> A1 frame size is available for FC 301 models only.

For variable torque applications, contact Danfoss

# Performance Data

380 – 480 VAC 3Ø (FC 301); 380 – 500 VAC 3Ø: (FC 302)

HP	Voltage Range VAC <sup>(1)</sup>	% Torque Overload <sup>(2)</sup>	Current [A]				Est. Power Loss @ Rated Max. Load (W)	Enclosure Rating/Frame Size <sup>(2)</sup>			
			Output		Input			Protected Chassis IP20	NEMA 1 IP21	NEMA 12 IP55	IP66
			Cont.	Int.	Cont.	Int.					
1/2	380-440	160%	1.3	2.1	1.2	1.9	35				
	441-500		1.2	1.9	1.0	1.6					
3/4	380-440	160%	1.8	2.9	1.6	2.6	42				
	441-500		1.6	2.6	1.4	2.2					
1	380-440	160%	2.4	3.8	2.2	3.5	46	A1 <sup>(3)</sup> , A2	A2	A5	A5
	441-500		2.1	3.4	1.9	3.0					
1-1/2	380-440	160%	3	4.8	2.7	4.3	58				
	441-500		2.7	4.3	2.7	4.3					
2	380-440	160%	4.1	6.6	3.7	5.9	62				
	441-500		3.4	5.4	3.1	5.0					
3	380-440	160%	5.6	9.0	5.0	8.0	88				
	441-500		4.8	7.7	4.3	6.9					
4	380-440	160%	7.2	11.5	6.5	10.4	116	A2	A2	A5	A5
	441-500		6.3	10.1	5.7	9.1					
5	380-440	160%	10	16	9.0	14.4	124				
	441-500		8.2	13.1	7.4	11.8					
7-1/2	380-440	160%	13	20.8	11.7	18.7	187				
	441-500		11	17.6	9.9	15.8					
10	380-440	160%	16	25.6	14.4	23.0	255	A3	A3	A5	A5
	441-500		14.5	23.2	13.0	20.8					
15	380-440	160%	24	38.4	22	35.2	291	B3	B1	B1	B1
		110%	32	35.2	29	31.9					
	441-500	160%	21	33.6	19	30.4	291				
		110%	27	29.7	25	27.5	392				
20	380-440	160%	32	51.2	29	46.4	379	B3	B1	B1	B1
		110%	37.5	41.3	34	37.4					
	441-500	160%	27	43.2	25	40	379				
		110%	34	37.4	31	34.1	465				
25	380-440	160%	37.5	60	34	54.4	444	B3	B1	B1	B1
		110%	44	48.4	40	44					
	441-500	160%	34	54.4	31	49.6	444				
		110%	40	44	36	39.6	525				
30	380-440	160%	44	70.4	40	64	547	B4	B2	B2	B2
		110%	61	67.1	55	60.5					
	441-500	160%	40	64	36	57.6	547				
		110%	52	57.2	47	51.7	739				
40	380-440	160%	61	91.5	55	82.5	570	B4	B2	B2	B2
		110%	73	80.3	66	72.6					
	441-500	160%	52	78	47	70.5	570				
		110%	65	71.5	59	64.9	698				
50	380-440	160%	73	110	66	99	697	C3	C1	C1	C1
		110%	90	99	82	90.2					
	441-500	160%	65	97.5	59	88.5	697				
		110%	80	88	73	80.3	843				
60	380-440	160%	90	135	82	123	891	C3	C1	C1	C1
		110%	106	117	96	106					
	441-500	160%	80	120	73	110	891				
		110%	105	116	95	105	1083				
75	380-440	160%	106	159	96	144	1022	C4	C2	C2	C2
		110%	147	162	133	146					
	441-500	160%	105	158	95	143	1022				
		110%	130	143	118	130	1384				
100	380-440	160%	147	221	133	200	1232	C4	C2	C2	C2
		110%	177	195	161	177					
	441-500	160%	130	195	118	177	1232				
		110%	160	176	145	160	1474				

<sup>(1)</sup> % Torque Overload is rated for 60 seconds. All 110% overload units provide one power size greater HP output. For example, a drive rated at 75 HP for 160% overload, is rated at 100 HP for 110% overload.

<sup>(2)</sup> See pages 56–97 for frame size dimensions and weights.

<sup>(3)</sup> A1 frame size is available for FC 301 models only.

For variable torque applications, contact Danfoss

# VLT® AutomationDrive

## 380 – 500 VAC 3Ø: (FC 302)

HP	Voltage Range VAC <sup>(1)</sup>	% Torque Overload <sup>(2)</sup>	Current [A]		Est. Power Loss @ Rated Max. Load (W)	Enclosure Rating/Frame Size <sup>(2)</sup>																	
			Output			Input	Chassis IP00	NEMA 1 IP21	NEMA 12 IP54														
			Cont.	Int.						Cont.													
125	380–440	160%	177	266	174	D3	D1	D1															
		110%	212	233	208																		
	441–500	160%	160	240	158																		
		110%	190	209	185																		
150	380–440	160%	212	318	204				D4	D2	D2												
		110%	260	286	251																		
	441–500	160%	190	285	183																		
		110%	240	264	231																		
200	380–440	160%	260	390	251	E2	E1	E1															
		110%	315	347	304																		
	441–500	160%	240	360	231																		
		110%	302	332	291																		
250	380–440	160%	315	473	304							E2	E1	E1									
		110%	395	435	381																		
	441–500	160%	302	453	291																		
		110%	361	397	348																		
300	380–440	160%	395	593	381										E2	E1	E1						
		110%	480	528	463																		
	441–500	160%	361	542	348																		
		110%	443	487	427																		
350	380–440	160%	480	720	472				E2	E1	E1												
		110%	600	660	590																		
	441–500	160%	443	665	436																		
		110%	540	594	531																		
450	380–440	160%	600	900	590													E2	E1	E1			
		110%	658	724	647																		
	441–500	160%	540	810	531																		
		110%	590	649	580																		
500	380–440	160%	658	987	647	E2	E1	E1															
		110%	745	820	733																		
	441–500	160%	590	885	580																		
		110%	678	746	667																		
550	380–440	160%	695	1043	684																E2	E1	E1
		110%	800	880	787																		
	441–500	160%	678	1017	667																		
		110%	730	803	718																		

<sup>(1)</sup> % Torque Overload is rated for 60 seconds. *All 110% overload units provide one power size greater HP output.* For example, a drive rated at 125 HP for 160% overload, is rated at 150 HP for 110% overload.

<sup>(2)</sup> See pages 56–97 for frame size dimensions and weights.

For variable torque applications, contact Danfoss

# Performance Data

380 – 500 VAC 3Ø: (FC 302)

HP	Voltage Range VAC <sup>(1)</sup>	% Torque Overload <sup>(2)</sup>	Current [A]			Enclosure Rating/Frame Size <sup>(2)</sup>	
			Output		Input	NEMA 1 IP21	NEMA 12 IP54
			Cont.	Int.	Cont.		
600	380–440	160%	800	1200	779	F1 or F3	F1 or F3
		110%	880	968	857		
	441–500	160%	730	1095	711		
		110%	780	858	759		
650	380–440	160%	880	1320	857		
		110%	990	1089	964		
	441–500	160%	780	1170	759		
		110%	890	979	867		
750	380–440	160%	990	1485	964		
		110%	1120	1232	1090		
	441–500	160%	890	1335	867		
		110%	1050	1155	1022		
900	380–440	160%	1120	1680	1090		
		110%	1260	1386	1227		
	441–500	160%	1050	1575	1022		
		110%	1160	1276	1129		
1,000	380–440	160%	1260	1890	1227	F2 or F4	F2 or F4
		110%	1460	1606	1422		
	441–500	160%	1160	1740	1129		
		110%	1380	1518	1344		
1,200	380–440	160%	1460	2190	1422		
		110%	1720	1892	1675		
	441–500	160%	1380	2070	1344		
		110%	1530	1683	1490		

<sup>(1)</sup> % Torque Overload is rated for 60 seconds. *All 110% overload units provide one power size greater HP output.* For example, a drive rated at 1,200 HP for 160% overload, is rated at 1,350 HP for 110% overload.

<sup>(2)</sup> See pages 56–97 for frame size dimensions and weights.

**For variable torque applications, contact Danfoss**

# VLT® AutomationDrive

## 525 – 600 VAC 3Ø (FC 302)

HP	Voltage Range VAC <sup>(1)</sup>	% Torque Overload <sup>(1)</sup>	Current [A]				Est. Power Loss @ Rated Max. Load (W)	Enclosure Rating/Frame Size <sup>(2)</sup>			
			Output		Input			Protected Chassis IP20	NEMA 1 IP21	NEMA 12 IP55	IP66
			Cont.	Int.	Cont.	Int.					
1	525-550	160%	1.8	2.9	1.7	2.7	35				
	551-600		1.7	2.7							
1-1/2	525-550	160%	2.6	4.2	2.4	3.8	50				
	551-600		2.4	3.8							
2	525-550	160%	2.9	4.6	2.7	4.3	65	A2	A2	A5	A5
	551-600		2.7	4.3							
3	525-550	160%	4.1	6.6	4.1	6.6	92				
	551-600		3.9	6.2							
4	525-550	160%	5.2	8.3	5.2	8.3	122				
	551-600		4.9	7.8							
5	525-550	160%	6.4	10.2	5.8	9.3	145				
	551-600		6.1	9.8							
7-1/2	525-550	160%	9.5	15.2	8.6	13.8	195	A3	A3	A5	A5
	551-600		9.0	14.4							
10	525-550	160%	11.5	18.4	10.4	16.6	261				
	551-600		18.4	11.0							
15	525-550	160%	19.0	30.0	17.2	28.0	225				
		110%	23.0	25.0	20.9	23.0					
	551-600	160%	18.0	29.0	16.0	26.0					
		110%	22.0	24.0	20.0	22.0					
20	525-550	160%	23.0	37.0	20.9	33.0	285	B3	B1	B1	B1
		110%	28.0	31.0	25.4	28.0					
	551-600	160%	22.0	35.0	20.0	32.0					
		110%	27.0	30.0	24.0	27.0					
25	525-550	160%	28.0	45.0	25.4	41.0	329				
		110%	36.0	40.0	32.7	36.0					
	551-600	160%	27.0	43.0	24.0	39.0					
		110%	34.0	37.0	31.0	34.0					
30	525-550	160%	36.0	58.0	32.7	52.0	700	B4	B2	B2	B2
		110%	43.0	47.0	39.0	43.0					
	551-600	160%	34.0	54.0	31.0	50.0					
		110%	41.0	45.0	37.0	41.0					
40	525-550	160%	43.0	65.0	39.0	59.0	700	B4	C1	C1	C1
		110%	54.0	59.0	49.0	54.0					
	551-600	160%	41.0	62.0	37.0	56.0					
		110%	52.0	57.0	47.0	52.0					
50	525-550	160%	54.0	81.0	49.0	74.0	850				
		110%	65.0	72.0	59.0	65.0					
	551-600	160%	52.0	78.0	47.0	70.0					
		110%	62.0	68.0	56.0	62.0					
60	525-550	160%	65.0	98.0	59.0	89.0	1100	C3	C1	C1	C1
		110%	87.0	96.0	78.9	87.0					
	551-600	160%	62.0	93.0	56.0	85.0					
		110%	83.0	91.0	75.0	83.0					
75	525-550	160%	87.0	131.0	78.9	118.0	1400				
		110%	105.0	116.0	95.3	105.0					
	551-600	160%	83.0	125.0	75.0	113.0					
		110%	100.0	110.0	91.0	100.0					
100	525-550	160%	105.0	158.0	95.3	143.0	1500	C4	C2	C2	C2
		110%	137.0	151.0	124.3	137.0					
	551-600	160%	100.0	150.0	91.0	137.0					
		110%	131.0	144.0	119.0	131.0					

<sup>(1)</sup> % Torque Overload is rated for 60 seconds.

<sup>(2)</sup> See pages 56–97 for frame size dimensions and weights.

**For variable torque applications, contact Danfoss**

# Performance Data

525 – 690 VAC 3Ø (FC 302)

HP	kW	% Torque Overload <sup>(1)</sup>	Current [A] (@ 575V Nominal)			Est. Power Loss @ Rated Max. Load (W)	Enclosure Rating/Frame Size <sup>(2)</sup>		
			Output		Input		Chassis IP00	NEMA 1 IP21	NEMA 12 IP54
			Cont.	Int.	Cont.				
40	30	160%	46	74	51	D3	D1	D1	
		110%	54	59	58				
50	37	160%	54	86	58				
		110%	73	80	74				
60	45	160%	73	117	74				
		110%	86	95	85				
75	55	160%	86	129	85				
		110%	108	119	106				
100	75	160%	108	162	106				
		110%	131	144	124				
125	90	160%	131	197	124				
		110%	155	171	151				
150	110	160%	155	233	151				
		110%	192	211	189				
200	132	160%	192	288	189				
		110%	242	266	234				
250	160	160%	242	363	234				
		110%	290	319	286				
300	200	160%	290	435	286				
		110%	344	378	339				
350	250	160%	344	516	339				
		110%	400	440	390				
400	300	160%	380	570	366				
		110%	450	495	434				
450	315	160%	410	615	395				
		110%	500	550	482				
500	400	160%	500	750	482				
		110%	570	627	549				
600	450	160%	570	855	549				
		110%	630	693	607				
650	500	160%	630	945	613 <sup>(3)</sup>				
		110%	730	803	711 <sup>(3)</sup>				
750	560	160%	730	1095	711 <sup>(3)</sup>				
		110%	850	935	828 <sup>(3)</sup>				
950	670	160%	850	1275	828 <sup>(3)</sup>				
		110%	945	1040	920 <sup>(3)</sup>				
1050	750	160%	945	1418	920 <sup>(3)</sup>				
		110%	1060	1166	1032 <sup>(3)</sup>				
1150	850	160%	1060	1590	1032 <sup>(3)</sup>				
		110%	1260	1386	1227 <sup>(3)</sup>				

<sup>(1)</sup> % Torque Overload is rated for 60 seconds. *All 110% overload units provide one power size greater HP output.* For example, a drive rated at 75 HP for 160% overload, is rated at 100 HP for 110% overload. The 1150 HP unit is rated for 1350 HP for 110% overload.

<sup>(2)</sup> See pages 56–97 for frame size dimensions and weights.

<sup>(3)</sup> Contact Danfoss.

**For variable torque applications, contact Danfoss**