

**400V AC and 480V AC**

Cat. No.	Light Duty kW Output	Normal Duty kW Output	Heavy Duty kW Output	Cat. No.	Light Duty Hp Output	Normal Duty Hp Output	Heavy Duty Hp Output	Enclosure Code/Frame Size					
								B, J, L, T	F	G	N	K, P, W, Y	R
<b>400 Volt</b>				<b>480 Volt</b>									
20x...C2P1	–	0.75 (0.75) <sup>(1)</sup>	0.75 (0.37) <sup>(1)</sup>	20x...D2P1	–	1 (1) <sup>(1)</sup>	1 (0.5) <sup>(1)</sup>						
20x...C3P5	–	1.5 (1.5) <sup>(1)</sup>	1.5 (0.75) <sup>(1)</sup>	20x...D3P4	–	2 (2) <sup>(1)</sup>	2 (1.5) <sup>(1)</sup>						
20x...C5P0	–	2.2 (2.2) <sup>(1)</sup>	2.2 (1.5) <sup>(1)</sup>	20x...D5P0	–	3 (3) <sup>(1)</sup>	3 (2) <sup>(1)</sup>						
20x...C8P7	–	4 (4) <sup>(1)</sup>	4 (2.2) <sup>(1)</sup>	20x...D8P0	–	5 (5) <sup>(1)</sup>	5 (3) <sup>(1)</sup>		2	2	2		1
20x...C011	–	5.5 (5.5) <sup>(1)</sup>	5.5 (4) <sup>(1)</sup>	20x...D011	–	7.5 (7.5) <sup>(1)</sup>	7.5 (5) <sup>(1)</sup>						
20x...C015	–	7.5 (7.5) <sup>(1)</sup>	5.5 (5.5) <sup>(1)</sup>	20x...D014	–	10 (10) <sup>(1)</sup>	7.5 (7.5) <sup>(1)</sup>						
20x...C022	–	11	7.5	20x...D022	–	15	10						
20x...C030	–	15	11	20x...D027	–	20	15						
20x...C037	–	18.5	15	20x...D034	–	25	20		3	3	3		
20x...C043	–	22	18.5	20x...D040	–	30	25						
20x...C060	–	30	22	20x...D052	–	40	30	–	4	4	4	–	
20x...C072	–	37	30	20x...D065	–	50	40			5			
20x...C085	–	45	37	20x...D077	–	60	50		5		5		
20x...C104	–	55	45	20x...D096	–	75	60						
20x...C140	–	75	55	20x...D125	–	100	75						
20x...C170	–	90	75	20x...D156	–	125	100		6 <sup>(2)</sup>	6	6		
20x...C205	–	110	90	20x...D186	–	150	125						
20x...C260	–	132	110	20x...D248	–	200	150						
20x...C302	–	160	132	20x...D302	–	250	200						
20x...C367	–	200	160	20x...D361	–	300	250		7 <sup>(2)</sup>	7	7		
20x...C456	–	250	200	20x...D415	–	350	300						
2xG...C460	315	250	200	20x...D430	400	350	300	8	–	–	–	8	
2xG...C477	–	270	200	20x...D477	–	400	300	–	7 <sup>(2)</sup>	–	7	–	
2xG...C540	315	315	250	20x...D485	450	400	350						
2xG...C567	355	315	250	20x...D545	500	450	350						
2xG...C650	400	355	315	20x...D617	600	500	400	8				8	
2xG...C750	450	400	355	20x...D710	650	600	450						
2xG...C770	450	400	355	20x...D740	700	650	500						
2xG...C910	560	500	400	20x...D800	800	700	600						
2xG...C1K0	630	560	500	20x...D960	900	800	700		–	–	–		
2xG...C1K1	710	630	500	20x...D1K0	1000	900	750						
2xG...C1K2	800	710	560	20x...D1K2	1100	1000	800	9				9	
2xG...C1K4	850	800	630	20x...D1K3	1250	1100	900						
2xG...C1K5	900	850	710	20x...D1K4	1350	1250	1000						
2xG...C1K6	1000	900	710	20x...D1K5	1500	1350	1100						
2xG...C2K1	1400	1250	1000	20x...D2K0	2000	1750	1650	10				10	

(1) Ratings in parenthesis are only applicable for Frame 1.

(2) For Frames 6 and 7, a user-installed flange kit (catalog number 20-750-FLNG4-Fx) is available to convert a code N drive that provides a NEMA/UL Type 4X/12 back.

480 Volt AC and 650 Volt DC Input Protection Devices – Wall Mount Frames 1...7

Applied Rating <sup>(1)</sup>	Frame <sup>(2)</sup>	Drive Sized For Normal Duty				Drive Sized For Heavy Duty				AC Input Protection Devices										Input Quantities		DC Input Protection <sup>(14)</sup>										
		Cont. Output Amps		Output Overload Amps		Cat. No.		Output Overload Amps		Cat. No.		Dual-element Time-delay Fuse	Non-Time Delay Fuse	Circuit Breaker Max Size <sup>(5)</sup>	Circuit Breaker, Dual-element Time-delay Fuse	Motor Circuit Protector <sup>(7)</sup>	140M Type E Combination Motor Controller with Adjustable Current Range <sup>(8) (9)</sup>	Cat. No.	Min Enclosure Volume (in. <sup>3</sup> ) <sup>(13)</sup>	Min Enclosure Volume (in. <sup>3</sup> ) <sup>(6)</sup>	Continuous DC Input	Amps	Non-Time Delay Fuse	DC Input Protection <sup>(14)</sup>								
		1 Min	3 s	(x = F or G)	1 Min	3 s	(x = F or G)	1 Min	3 s	Min <sup>(3)</sup>	Max <sup>(4)</sup>														Min <sup>(3)</sup>	Max <sup>(4)</sup>	Min <sup>(3)</sup>	Max <sup>(4)</sup>	Min Enclosure Volume (in. <sup>3</sup> ) <sup>(6)</sup>	Min Enclosure Volume (in. <sup>3</sup> ) <sup>(13)</sup>		
<b>480 Volt AC Input</b>																																
0.5 Hp	1	1.1				20x...D2P1	2.3	3.2	0.7	0.9	2	3	2	3	15	3840	3	M-xxx-B25 <sup>(10)</sup>	7269	3840	3	3	2	3	3	15	3840	3	M-xxx-B25 <sup>(10)</sup>	7269	JKS-6	JKS-6
1.0 Hp	1	2.1	20x...D2P1	2.3	3.2	20x...D3P4	3.7	5.1	1.3	1.6	2	3	2	3	15	3840	3	M-xxx-B25 <sup>(11)</sup>	7269	3840	3	3	2	3	3	15	3840	3	M-xxx-B25 <sup>(11)</sup>	7269	JKS-6	JKS-6
2.0 Hp	1	3.4	20x...D3P4	3.7	5.1	20x...D5P0	5.5	7.5	2.2	2.6	6	6	6	6	15	3840	7	M-xxx-B40 <sup>(11)</sup>	7269	3840	7	6	6	6	6	15	3840	7	M-xxx-B40 <sup>(11)</sup>	7269	JKS-6	JKS-6
3.0 Hp	1	5	20x...D5P0	5.5	7.5	20x...D8P0	8.8	12.0	3.2	3.9	6	6	6	6	20	3840	7	M-xxx-B63 <sup>(11)</sup>	7269	3840	7	6	6	6	6	20	3840	7	M-xxx-B63 <sup>(11)</sup>	7269	JKS-10	JKS-10
5.0 Hp	1	8	20x...D8P0	8.8	12.0	20x...D011	12.1	16.5	5.7	6.9	10	15	10	15	30	3840	15	M-xxx-C10 <sup>(11)</sup>	7269	3840	15	10	15	10	15	30	3840	15	M-xxx-C10 <sup>(11)</sup>	7269	HSJ15	HSJ15
7.5 Hp	1	11	20x...D011	12.1	16.5	20x...D014	16.5	21.0	7.9	9.5	15	20	15	20	40	3840	15	M-xxx-C16 <sup>(11)</sup>	7269	3840	15	20	15	20	15	40	3840	15	M-xxx-C16 <sup>(11)</sup>	7269	HSJ20	HSJ20
10 Hp	1	14	20x...D014	15.4	21.0				10.4	12.5	20	25	20	25	50	3840	20	M-xxx-C16 <sup>(11)</sup>	7269	3840	20	25	20	25	20	50	3840	20	M-xxx-C16 <sup>(11)</sup>	7269	HSJ30	HSJ30
1.0 Hp	2	2.1	20x...D2P1	3.1	3.7	20x...D2P1	3.1	3.7	1.3	1.6	2	6	2	8	15	3840	3	M-xxx-B25 <sup>(11)</sup>	9086	3840	3	2	8	2	8	15	3840	3	M-xxx-B25 <sup>(11)</sup>	9086	JKS-6	JKS-6
2.0 Hp	2	3.4	20x...D3P4	5.1	6.1	20x...D3P4	5.1	6.1	2.2	2.6	4	7	4	12	15	3840	7	M-xxx-B40 <sup>(11)</sup>	9086	3840	7	4	12	4	12	15	3840	7	M-xxx-B40 <sup>(11)</sup>	9086	JKS-6	JKS-6
3.0 Hp	2	5	20x...D5P0	7.5	9.0	20x...D5P0	7.5	9.0	3.2	3.9	6	10	6	20	20	3840	7	M-xxx-B63 <sup>(11)</sup>	9086	3840	7	6	20	6	20	20	3840	7	M-xxx-B63 <sup>(11)</sup>	9086	JKS-10	JKS-10
5.0 Hp	2	8	20x...D8P0	12.0	14.4	20x...D8P0	12.0	14.4	5.7	6.9	10	17.5	10	30	30	3840	15	M-xxx-C10 <sup>(11)</sup>	9086	3840	15	10	30	10	30	30	3840	15	M-xxx-C10 <sup>(11)</sup>	9086	HSJ15	HSJ15
7.5 Hp	2	11	20x...D011	16.5	19.8	20x...D011	16.5	19.8	7.9	9.5	12	20	12	40	40	3840	15	M-xxx-C16 <sup>(11)</sup>	9086	3840	15	12	40	12	40	40	3840	15	M-xxx-C16 <sup>(11)</sup>	9086	HSJ20	HSJ20
10 Hp	2	14	20x...D014	15.4	21.0	20x...D022	21.0	33.0	10.4	12.5	20	30	20	55	50	3840	20	M-xxx-C16 <sup>(11)</sup>	9086	3840	20	30	20	55	50	3840	20	M-xxx-C16 <sup>(11)</sup>	9086	HSJ30	HSJ30	
15 Hp	2	22	20x...D022	24.2	33.0	20x...D027 <sup>(3)</sup>	33.0	40.5	16.6	19.9	30	50	30	80	80	3840	30	M-xxx-C25 <sup>(12)</sup>	9086	3840	30	50	30	80	80	80	3840	30	M-xxx-C25 <sup>(12)</sup>	9086	HSJ40	HSJ40
20 Hp	3	27	20x...D027	29.7	40.5	20x...D034	40.5	51.0	20.6	24.8	35	60	35	100	100	4800	50	M-F8E-C32	9086	4800	50	35	100	35	100	4800	50	M-F8E-C32	9086	HSJ50	HSJ50	
25 Hp	3	34	20x...D034	37.4	51.0	20x...D040	51.0	61.2	25.9	31.2	45	75	45	125	100	4800	50	M-F8E-C45	9086	4800	50	45	125	45	125	4800	50	M-F8E-C45	9086	HSJ60	HSJ60	
30 Hp	3	40	20x...D040	44.0	60.0	20x...D052 <sup>(3)</sup>	60.0	78.0	30.5	36.7	50	90	50	150	120	4800	50	M-F8E-C45	9086	4800	50	50	150	50	150	4800	50	M-F8E-C45	9086	HSJ80	HSJ80	
40 Hp	4	52	20x...D052	57.2	78.0	20x...D065	78.0	97.5	39.7	47.7	65	110	65	200	150	4800	70			4800	70	65	200	65	200	4800	70			HSJ90	HSJ90	
50 Hp	4	65	20x...D065	71.5	97.5	20x...D077 <sup>(3)</sup>	97.5	117.0	49.6	59.6	90	125	90	250	175	4800	100			4800	100	90	250	90	250	4800	100			HSJ100	HSJ100	
60 Hp	5	77	20x...D077	84.7	115.5	20x...D096	115.5	144.0	60.1	72.3	100	170	100	300	225	7200	100			7200	100	100	300	100	300	7200	100			HSJ150	HSJ150	
75 Hp	5	96	20x...D096	105.6	144.0	20x...D125 <sup>(3)</sup>	144.0	187.5	74.9	90.1	125	200	125	375	275	7200	125			7200	125	125	375	125	375	7200	125			HSJ175	HSJ175	
100 Hp	6	125	20x...D125	137.5	187.5	20x...D156	187.5	234.0	97.6	117.4	175	275	175	500	375		250					250	500	250	500					HSJ200	HSJ200	
125 Hp	6	156	20x...D156	171.6	234.0	20x...D186	234.0	280.8	121.8	146.5	200	350	200	600	450		250					250	600	250	600					HSJ300	HSJ300	
150 Hp	6	186	20x...D186	204.6	279.0	20x...D248	279.0	372.0	145.2	174.6	250	400	250	600	550		250					250	600	250	600					HSJ400	HSJ400	
200 Hp	6	248	20x...D248	272.8	372.0	20x...D302 <sup>(3)</sup>	372.0	453.0	193.6	232.8	325	550	325	700	700		400					400	700	400	700					HSJ400	HSJ400	
250 Hp	7	302	20x...D302	332.2	453.0	20x...D361	453.0	543.6	235.7	283.5	400	675	400	900	900		600					600	900	600	900					Bussman	170M6608	

**Brake Resistance for 400/480V Drives (continued)**

Frame	480V				400V			
	ND Hp	Catalog Code	Min Resistance	Max DB Current	ND kW	Catalog Code	Min Resistance	Max DB Current
2	1.0	D2P1	31.6	25	0.75	C2P1	31.6	25
	2.0	D3P4	31.6	25	1.5	C3P5	31.6	25
	3.0	D5P0	31.6	25	2.2	C5P0	31.6	25
	5.0	D8P0	31.6	25	4	C8P0	31.6	25
	7.5	D011	31.6	25	5.5	C011	31.6	25
	10	D014	31.6	25	7.5	C015	31.6	25
	15	D022	22.6	34.9	11	C022	22.6	34.9
3	20	D027	31.6	25	15	C030	31.6	25
	25	D034	31.6	25	18.5	C037	31.6	25
	30	D040	16.6	47.6	22	C043	16.6	47.6
4	40	D052	15.8	50	30	C060	15.8	50
	50	D065	15.8	50	37	C072	15.8	50
5	50 <sup>(1)</sup>	D065 <sup>(1)</sup>	7.9	100	37 <sup>(1)</sup>	C075 <sup>(1)</sup>	7.9	100
	60	D077	7.9	100	45	C085	7.9	100
	75	D096	7.9	100	55	C104	7.9	100
6	75 <sup>(1)</sup>	D096 <sup>(1)</sup>	3.3	239.4	55 <sup>(1)</sup>	C104 <sup>(1)</sup>	3.3	239.4
	100	D125	3.3	239.4	75	C140	3.3	239.4
	125	D156	3.3	239.4	90	C170	3.3	239.4
	150	D186	3.3	239.4	110	C205	3.3	239.4
	200	D248	3.3	239.4	132	C260	3.3	239.4
7	200 <sup>(1)</sup>	D248 <sup>(1)</sup>	2.4	329	132 <sup>(1)</sup>	C260 <sup>(1)</sup>	2.4	329
	250	D302	2.4	329	160	C302	2.4	329
	300	D361	2.4	329	200	C367	2.4	329
	350	D415	1.65	478.8	250	C456	1.65	478.8
	400	D477	1.65	478.8	270	C477	1.65	478.8

(1) IP54, NEMA/UL Type 12 (enclosure code G).

**Brake Resistance for 600V Drives (Frames 3...5)**

Frame	600V			
	ND Hp	Catalog Code	Min Resistance	Max DB Current
3	1.0	E1P7	92	11
	2.0	E2P7	92	11
	3.0	E3P9	92	11
	5.0	E6P1	32	30
	7.5	E9P0	32	30
	10	E011	32	30
	15	E017	32	30
	20	E022	32	30

**Ambient Temperature/Load and Altitude/Load – 480V AC (Frames 1...7) (continued)**

Cat. No. (see page 19)	480V AC Power Rating						Derating for IP20 NEMA/UL Type Open (Frames 1...5) and IP00 NEMA/UL Type Open (Frames 6 and 7) <sup>(1)</sup>	
	Light Duty		Normal Duty		Heavy Duty		Ambient Temperature/Load	Altitude/Load
	Hp	Cont. Amps	Hp	Cont. Amps	Hp	Cont. Amps	— 2 kHz    - - - 4 kHz    - - - 8 kHz    — 12 kHz — 2 kHz w/Cabinet Option (21G)    — 4 kHz w/Cabinet Option (21G)	
20x...D027	—	—	20	27	15	22		
20x...D034	—	—	25	34	20	27		
20x...D040	—	—	30	40	25	34		
20x...D052	—	—	40	52	30	40		
20x...D065	—	—	50	65	40	52		

## Watts Loss for 400/480V Drives

Drive Cat. No. <sup>(1)(2)</sup>	Normal Duty		External Watts <sup>(3)</sup>	Internal Watts <sup>(3)</sup>	Total Watts <sup>(3)</sup>	Drive Cat. No. <sup>(1)(2)</sup>	Normal Duty		External Watts <sup>(3)</sup>	Internal Watts <sup>(3)</sup>	Total Watts <sup>(3)</sup>
	kW	Continuous Output Amps					Hp	Continuous Output Amps			
<b>400 Volt</b>						<b>480 Volt</b>					
20x...C2P1	0.75	2.1	16 (16)	55 (56)	71 (72)	20x...D2P1	1.0	2.1	17 (21)	60 (61)	77 (82)
20x...C3P5	1.5	3.5	26 (33)	57 (60)	83 (93)	20x...D3P4	2.0	3.4	27 (39)	61 (64)	88 (103)
20x...C5P0	2.2	5	39 (44)	58 (62)	97 (106)	20x...D5P0	3.0	5	41 (54)	63 (67)	104 (121)
20x...C8P7	4.0	8.7	75 (79)	64 (80)	139 (159)	20x...D8P0	5.0	8	71 (91)	68 (82)	139 (173)
20x...C011	5.5	11.5	108 (107)	70 (85)	178 (192)	20x...D011	7.5	11	108 (118)	74 (88)	182 (206)
20x...C015	7.5	15.4	161 (166)	80 (80)	241 (246)	20x...D014	10	14	149 (152)	81 (81)	230 (233)
20x...C022	11	22	225	86	311	20x...D022	15	22	237	91	328
20x...C030	15	30	300	103	403	20x...D027	20	27	273	101	374
20x...C037	18.5	37	362	115	477	20x...D034	25	34	368	115	483
20x...C043	22	43	505	126	631	20x...D040	30	40	503	126	629
20x...C060	30	60	487	130	617	20x...D052	40	52	422	125	547
20x...C072	37	72	615	147	762	20x...D065	50	65	559	144	703
20x...C085	45	85	705	162	867	20x...D077	60	77	646	158	804
20x...C104	55	104	928	201	1129	20x...D096	75	96	855	189	1044
20x...C140	75	140	1239	319	1558	20x...D125	100	125	1109	299	1408
20x...C170	90	170	1381	300	1681	20x...D156	125	156	1299	294	1593
20x...C205	110	205	1893	381	2274	20x...D186	150	186	1718	358	2076
20x...C260	132	260	2449	502	2951	20x...D248	200	248	2384	492	2876
20x...C302	160	302	2566	461	3027	20x...D302	250	302	2704	491	3195
20x...C367	200	367	3322	586	3908	20x...D361	300	361	3409	606	4015
20x...C456	250	456	3922	743	4665	20x...D415	350	415	3604	683	4287
2xG...C460	250	460	4779	1090	5869	2xG...D430	350	430	4385	971	5356
20x...C477	270	477	4199	793	4992	20x...D477	400	477	4392	828	5220
2xG...C540	315	540	5316	1216	6532	2xG...D485	400	485	5091	1126	6217
2xG...C567	315	567	5652	1298	6950	2xG...D545	450	545	5649	1253	6902
2xG...C650	355	650	7011	1577	8588	2xG...D617	500	617	6942	1489	8431
2xG...C750	400	750	7577	1726	9303	2xG...D710	600	710	7631	1659	9290
2xG...C770	400	770	8086	1848	9934	2xG...D740	650	740	8133	1776	9909
2xG...C910	500	910	9155	2251	11406	2xG...D800	700	800	8710	2216	10926
2xG...C1K0	560	1040	9732	2357	12089	2xG...D960	800	960	9696	2391	12087
2xG...C1K1	630	1090	10745	2548	13293	2xG...D1K0	900	1045	10784	2589	13373
2xG...C1K2	710	1175	13778	2978	16756	2xG...D1K2	1000	1135	13378	2899	16277
2xG...C1K4	800	1465	13959	3013	16973	2xG...D1K3	1100	1365	14055	3025	17080
2xG...C1K5	850	1480	15441	3308	18749	2xG...D1K4	1250	1420	15573	3314	18887
2xG...C1K6	900	1590	15569	3717	19286	2xG...D1K5	1350	1525	15619	3779	19398
2xG...C2K1	1250	2150	22320	4790	27110	2xG...D2K0	1750	2070	22495	4802	27297

(1) Select the watts loss based on the catalog number.

(2) Frames 8...10, enclosure codes B, J, L, P, and W.

(3) Frame 1 watts loss in parentheses.