

Reactors and Filters

DC Bus Reactors



Additional Information

DC Reactors

DC Bus Reactor- For use on the DC bus terminals of a drive to reduce the effect of line-side transients and input current total harmonic distortion (THD). Large HP drives include a 3% bus impedance as standard. The DC bus reactor is available, loose, in a separate Type 1 enclosure.

Table 21: 240 Volt DC Bus Reactor

HP	Catalog Code GA80U . .		3% DC Bus Reactor		5% DC Bus Reactor	
	Normal Duty	Heavy Duty	Open Type	Enclosed Type 1	Open Type	Enclosed Type 1
			Part Number	Part Number	Part Number	Part Number
0.5	2004 . . .	2004 . . .	URX000036	URX000207	URX000037	URX000217
0.75	2004 . . .	2004 . . .	05P00608-3007	URX000208	URX000041	URX000207
1	2006 . . .	2006 . . .	05P00608-3007	URX000208	URX000041	URX000207
1.5	2006 . . .	2008 . . .	05P00620-0110	URX000257	05P00620-0111	URX000208
2	2008 . . .	2010 . . .	05P00620-0110	URX000257	05P00620-0111	URX000208
3	2010 . . .	2012 . . .	URX000371	URX000258	05P00652-0213	URX000209
4	2012 . . .	2018 . . .	05P00620-0115	URX000259	URX000048	URX000210
5	2018 . . .	2021 . . .	05P00620-0115	URX000259	URX000048	URX000210
7.5	2021 . . .	2030 . . .	URX000051	URX000212	URX000052	URX000211
10	2030 . . .	2042 . . .	05P00620-0120	URX000261	URX000055	URX000223
15	2042 . . .	2056 . . .	URX000059	URX000262	URX000060	URX000222
20	2056 . . .	2070 . . .	URX000063	URX000264	URX000064	URX000213
25	2070 . . .	2082 . . .	05P00620-0129	URX000214	URX000069	URX000265
30	2082 . . .	--	URX000072	URX000266	URX000073	URX000265
40 to 150	Drive models 2110 through 2415 have built-in DC reactors.					

Table 22: 480 Volt DC Bus Reactor

HP	Catalog Code GA80U . .		3% DC Bus Reactor		5% DC Bus Reactor	
	Normal Duty	Heavy Duty	Open Type	Enclosed Type 1	Open Type	Enclosed Type 1
			Part Number	Part Number	Part Number	Part Number
0.5	4002 . . .	4002 . . .	URX000033	URX000215	URX000034	URX000215
0.75	4002 . . .	4002 . . .	URX000038	URX000216	URX000039	URX000215
1	4002 . . .	4004 . . .	URX000038	URX000216	URX000039	URX000215
1.5	4004 . . .	4004 . . .	05P00620-0109	URX000217	URX000042	URX000216
2	4004 . . .	4005 . . .	URX000041	URX000207	URX000042	URX000216
3	4005 . . .	4007 . . .	URX000044	URX000218	URX000044	URX000218
4	4007 . . .	4009 . . .	URX000044	URX000218	URX000044	URX000218
5	4009 . . .	4012 . . .	05P00620-0111	URX000208	URX000044	URX000218
7.5	4012 . . .	4018 . . .	05P00652-0213	URX000209	URX000046	URX000219
10	4018 . . .	4023 . . .	05P00652-0216	URX000220	URX000049	URX000260
15	4023 . . .	4031 . . .	URX000052	URX000211	URX000054	URX000224
20	4031 . . .	4038 . . .	URX000055	URX000223	URX000056	URX000221
25	4038 . . .	4044 . . .	URX000057	URX000184	URX000058	URX000225
30	4044 . . .	--	URX000061	URX000222	URX000062	URX000263
40 to 1000	Drive models 4060 through 4H12 have built-in DC reactors.					

AC Input Reactors



Additional Information	
AC Input Reactors	

3% and 5% impedance reactors may be used on the input of a drive to reduce the effect of line-side transients on the drive. The reactors are available loose or in a separate Type 1 enclosure.

Table 23: 240 Volt AC Input Reactors

HP	Catalog Code GA80U . .		3% Input Reactor		5% Input Reactor	
	Normal Duty	Heavy Duty	Open Type	Enclosed Type 1	Open Type	Enclosed Type 1
			Part Number	Part Number	Part Number	Part Number
0.5	2004 . . .	2004 . . .	URX000287	URX000583	URX000292	URX000502
0.75	2004 . . .	2006 . . .	URX000295	URX000409	URX000296	URX000584
1	2004 . . .	2006 . . .	URX000295	URX000409	URX000300	URX000503
1.5	2006 . . .	2008 . . .	URX000299	URX000410	URX000300	URX000503
2	2008 . . .	2010 . . .	URX000303	URX000411	URX000304	URX000504
3	2010 . . .	2012 . . .	URX000307	URX000413	URX000308	URX000414
4	2012 . . .	2018 . . .	URX000307	URX000413	URX000312	URX000416
5	2018 . . .	2021 . . .	URX000311	URX000415	URX000316	URX000419
7.5	2021 . . .	2030 . . .	URX000315	URX000418	URX000320	URX000421
10	2030 . . .	2042 . . .	URX000319	URX000420	URX000324	URX000423
15	2042 . . .	2056 . . .	URX000326	URX000424	URX000330	URX000553
20	2056 . . .	2070 . . .	URX000332	URX000426	URX000333	URX000554
25	2070 . . .	2082 . . .	URX000335	URX000427	URX000336	URX000555
30	2082 . . .	-	URX000338	URX000428	URX000339	URX000556
30	-	2110 . . .	URX000338	URX000428	5% input reactor not recommended for these drive sizes	
40	2110 . . .	2138 . . .	URX000338	URX000428		
50	2138 . . .	2169 . . .	URX000341	URX000429		
60	2169 . . .	2211 . . .	URX000344	URX000430		
75	2211 . . .	2257 . . .	URX000347	URX000431		
100	2257 . . .	2313 . . .	URX000350	URX000432		
125	2313 . . .	2360 . . .	URX000356	URX000434		
150	2360 . . .	2415 . . .	URX000356	URX000434		

Table 24: 480 Volt AC Input Reactors

HP	Catalog Code GA80U . .		3% Input Reactor		5% Input Reactor	
	Normal Duty	Heavy Duty	Open Type	Enclosed Type 1	Open Type	Enclosed Type 1
			Part Number	Part Number	Part Number	Part Number
0.5	4002 . . .	4002 . . .	URX000284	URX000585	URX000286	URX000569
0.75	4002 . . .	4002 . . .	URX000288	URX000551	URX000285	URX000570
1	4002 . . .	4004 . . .	URX000292	URX000502	URX000289	URX000571
1.5	4004 . . .	4004 . . .	URX000301	URX000552	URX000293	URX000572
2	4004 . . .	4005 . . .	URX000296	URX000584	URX000297	URX000573
3	4005 . . .	4007 . . .	URX000300	URX000503	URX000301	URX000552
4	4007 . . .	4009 . . .	URX000304	URX000504	URX000306	URX000412
5	4009 . . .	4012 . . .	URX000304	URX000504	URX000305	URX000574
7.5	4012 . . .	4018 . . .	URX000308	URX000414	URX000309	URX000505
10	4018 . . .	4023 . . .	URX000312	URX000416	URX000313	URX000417
15	4023 . . .	4031 . . .	URX000316	URX000419	URX000317	URX000568
20	4031 . . .	4038 . . .	URX000320	URX000421	URX000321	URX000575
25	4038 . . .	4044 . . .	URX000324	URX000423	URX000325	URX000576
30	4044 . . .	-	URX000327	URX000425	URX000328	URX000577
30	-	4060 . . .	URX000327	URX000425	5% input reactor not recommended for these drive sizes	
40	4060 . . .	4075 . . .	URX000330	URX000553		
50	4075 . . .	4089 . . .	URX000333	URX000554		
60	4089 . . .	4103 . . .	URX000336	URX000555		
75	4103 . . .	4140 . . .	URX000339	URX000556		
100	4140 . . .	4168 . . .	URX000342	URX000557		
125	4168 . . .	4208 . . .	URX000345	URX000558		
150	4208 . . .	4250 . . .	URX000348	URX000559		
200	4250 . . .	4302 . . .	URX000351	URX000560		
250	4302 . . .	4371 . . .	URX000354	URX000561		
300	4371 . . .	4414 . . .	URX000357	URX000562		
350	4414 . . .	4477 . . .	URX000360	URX000563		
400	4477 . . .	4568 . . .	URX000360	URX000563		
450	4568 . . .	4605 . . .	URX000363	URX000564		
500	4605 . . .	4720 . . .	URX000363	URX000564		
600	4720 . . .	4810 . . .	URX000366	URX000565		
700	4810 . . .	4930 . . .	URX000230	URX000254		
800	4930 . . .	4H11 . . .	URX000236	URX000244		
900	4H11 . . .	4H12 . . .	URX000239	URX000246		
1000	4H12 . . .	-	URX000239	URX000246		

Table 25: 600 V AC Input Reactor

HP	Catalog Code GA80U . .		3% Input Reactor		5% Input Reactor	
	Normal Duty	Heavy Duty	Open Type	Enclosed Type 1	Open Type	Enclosed Type 1
			Part Number	Part Number	Part Number	Part Number
250	-	5289 . . .	URX000351	URX000560	5% input reactor not recommended for these drive sizes	
300	5289 . . .	5382 . . .	URX000354	URX000561		
350	5382 . . .	5382 . . .	URX000357	URX000562		
400	5382 . . .	5412 . . .	URX000357	URX000562		
450	5412 . . .	5472 . . .	URX000357	URX000562		
500	5472 . . .	-	URX000360	URX000563		

AC Output Reactors



Additional Information

[AC Output Reactors](#)

3% impedance reactors may be used on the output of a drive to reduce the effect of load-side transients on the motor. The reactors are available loose or in a separate Type 1 enclosure.

Table 26: 240 Volt AC Output Reactors

HP	Catalog Code GA80U . .		3% Output Reactor	
	Normal Duty	Heavy Duty	Open Type	Enclosed Type 1
			Part Number	Part Number
0.5	2004 . . .	2004 . . .	05P00620-0132	05P00620-0021
0.75	2004 . . .	2004 . . .	05P00620-0017	05P00620-0020
1	2004 . . .	2006 . . .	05P00620-0133	05P00620-0028
1.5	2006 . . .	2008 . . .	05P00620-0133	05P00620-0028
2	2008 . . .	2010 . . .	05P00620-0024	05P00620-0027
3	2010 . . .	2012 . . .	05P00620-0134	05P00620-0032
4	2012 . . .	2018 . . .	05P00620-0134	05P00620-0032
5	2018 . . .	2021 . . .	05P00620-0136	05P00620-0036
7.5	2021 . . .	2030 . . .	URX000083	05P00620-0041
10	2030 . . .	2042 . . .	05P00620-0044	05P00620-0046
15	2042 . . .	2056 . . .	05P00620-0140	05P00620-0050

HP	Catalog Code GA80U ..		3% Output Reactor	
	Normal Duty	Heavy Duty	Open Type	Enclosed Type 1
			Part Number	Part Number
20	2056 ...	2070 ...	05P00620-0143	05P00620-0058
25	2070 ...	2082 ...	05P00620-0143	05P00620-0058
30	2082 ...	2110 ...	05P00620-0143	05P00620-0058
40	2110 ...	2138 ...	URX000085	URX000204
50	2138 ...	2169 ...	05P00620-0064	05P00620-0066
60	2169 ...	2211 ...	05P00620-0069	URX000206
75	2211 ...	2257 ...	05P00620-0075	05P00620-0077
100	2257 ...	2313 ...	URX000175	URX000248
125	2313 ...	2360 ...	05P00620-0085	URX000249
150	2360 ...	2415 ...	URX000181	URX000250
150	2415 ...	-	URX000181	URX000250

Table 27: 480 Volt AC Output Reactors

HP	Catalog Code GA80U ..		3% Output Reactor	
	Normal Duty	Heavy Duty	Open Type	Enclosed Type 1
			Part Number	Part Number
0.5	4002 ...	4002 ...	05P00620-0014	05P00620-0016
0.75	4002 ...	4002 ...	05P00620-0131	05P00620-0015
1	4002 ...	4004 ...	05P00620-0131	05P00620-0015
1.5	4004 ...	4004 ...	05P00620-0018	05P00620-0022
2	4004 ...	4005 ...	05P00620-0132	05P00620-0021
3	4005 ...	4007 ...	05P00620-0025	05P00620-0029
4	4007 ...	4009 ...	05P00620-0025	05P00620-0029
5	4009 ...	4012 ...	05P00620-0133	05P00620-0028
7.5	4012 ...	4018 ...	05P00620-0135	05P00620-0033
10	4018 ...	4023 ...	05P00620-0137	05P00620-0037
15	4023 ...	4031 ...	05P00620-0138	05P00620-0042
20	4031 ...	4038 ...	05P00620-0139	05P00620-0047
25	4038 ...	4044 ...	05P00620-0139	05P00620-0047
30	4044 ...	4060 ...	05P00620-0049	05P00620-0051
40	4060 ...	4075 ...	05P00620-0142	05P00620-0055
50	4075 ...	4089 ...	05P00620-0144	05P00620-0059
60	4089 ...	4103 ...	05P00620-0144	05P00620-0059
75	4103 ...	4140 ...	05P00620-0145	05P00620-0062
100	4140 ...	4168 ...	05P00620-0013	05P00620-0067
125	4168 ...	4208 ...	05P00620-0070	05P00620-0073
150	4208 ...	4250 ...	URX000586	05P00620-0078

HP	Catalog Code GA80U . .		3% Output Reactor	
	Normal Duty	Heavy Duty	Open Type	Enclosed Type 1
			Part Number	Part Number
200	4250 . . .	4302 . . .	URX000175	05P00620-0083
250	4302 . . .	4371 . . .	URX000179	05P00620-0088
300	4371 . . .	4414 . . .	URX000182	05P00620-0092
350	4414 . . .	4477 . . .	05P00620-0094	05P00620-0096
400	4477 . . .	4568 . . .	05P00620-0094	05P00620-0096
450	4568 . . .	4605 . . .	05P00620-0098	05P00620-0100
500	4605 . . .	4720 . . .	05P00620-0098	05P00620-0100
600	4720 . . .	4810 . . .	05P00620-0102	05P00620-0104
700	4810 . . .	4930 . . .	URX000230	URX000254
800	4930 . . .	4H11 . . .	URX000236	URX000244
900	4H11 . . .	4H12 . . .	URX000239	URX000246
1000	4H12 . . .	-	URX000239	URX000246

Table 28: 600 Volt AC Output Reactors

HP	Catalog Code GA80U . .		3% Output Reactor	
	Normal Duty	Heavy Duty	Open Type	Enclosed Type 1
			Part Number	Part Number
250	-	5289 . . .	URX000176	05P00620-0083
300	5289 . . .	5382 . . .	URX000179	05P00620-0088
350	5382 . . .	5382 . . .	URX000182	05P00620-0092
400	5382 . . .	5412 . . .	URX000182	05P00620-0092
450	5412 . . .	5472 . . .	05P00620-0094	05P00620-0096
500	5472 . . .	-	05P00620-0094	05P00620-0096

EMC Input Filters



Install external EMC filters to the drive input to comply with C2 levels of the EN 61800-3 EMC directive.

Table 29: 240 Volt EMC Input Filters

Catalog Code GA80U . . .	Input EMC Filter	
	Part Number	Figure #
2004 . . .	B84743A0008R176	15
2006 . . .		
2008 . . .	B84743A0017R176	16
2010 . . .		
2012 . . .		
2018 . . .		
2021 . . .	B84743A0033R176	17
2030 . . .	B84743A0044R176	
2042 . . .	B84743A0060R176	18
2056 . . .	B84243A6083Z000	19
2070 . . .	B84243A6120Z000	
2082 . . .		
2110 . . .	B84243A6180Z000	
2138 . . .	B84743A0300R176	20
2169 . . .		
2211 . . .	B84743B0410S176	21
2257 . . .		
2313 . . .		
2360 . . .	B84743B0410S176	21
2415 . . .		

Table 30: 480 Volt EMC Input Filters

Catalog Code GA80U . .	Input EMC Filter	
	Part Number	Figure #
4002 . . .	B84743A0008R176	15
4004 . . .		
4005 . . .		
4007 . . .	B84743A0017R176	16
4009 . . .		
4012 . . .		
4018 . . .	B84743A0033R176	17
4023 . . .		
4031 . . .	B84743A0044R176	17
4038 . . .	B84743A0060R176	18
4044 . . .		
4060 . . .		
4075 . . .	B84243A6083Z000	19
4089 . . .	B84243A6120Z000	
4103 . . .	B84243A6180Z000	
4140 . . .		
4168 . . .	B84743A0300R176	20
4208 . . .		
4250 . . .		
4302 . . .		
4371 . . .	B84743B0410S176	21
4414 . . .		
4477 . . .		
4568 . . .	Consult Factory	-
4605 . . .		
4720 . . .		
4810 . . .		
4930 . . .		
4H11 . . .		
4H12 . . .		