

# BRAKE MODULES and RESISTORS

Effective 12-01-08  
Supercedes 03-01-08



Can be used for the N3, MA7200 PLUS , PA7300, and 7200GS product families.

## 230V 3-Phase

AC DRIVE HP RATING	BRAKING TRANSISTOR			BRAKING RESISTOR							
	MODEL NUMBER	QTY USED	LIST PRICE	MODEL NUMBER	QTY USED	RESISTANCE		ENCLOSURE DIMENSIONS	BRAKING TORQUE %	DUTY CYCLE %	LIST PRICE
						OHMS	WATTS				
1	X	-	-	DBR-019	1	200	70	12"L X 5"W X 5"D	125	10	325
2	X	-	-	DBR-027	1	100	260	12"L X 5"W X 5"D	125	10	325
3	X	-	-	DBR-035	1	70	260	12"L X 5"W X 5"D	120	10	325
5	X	-	-	DBR-043	1	40	390	12"L X 5"W X 5"D	125	10	325
7.5	X	-	-	DBR-051	1	30	520	12"L X 7"W X 5"D	115	10	500
10	X	-	-	DBR-060	1	20	780	12"L X 7"W X 5"D	125	10	500
15	X	-	-	DBR-078	1	13.6	2400	19"L X 10"W X 5"D	125	10	1,050
20	X	-	-	DBR-086	1	10	3000	19"L X 13"W X 5"D	125	10	1,300
25	JUVPLV-60	1	712	DBR-094	1	8	4800	26.5"L X 10"W X 5"D	125	10	1,450
30	JUVPLV-60	1	712	DBR-108	1	6.8	4800	26.5"L X 10"W X 5"D	125	10	1,450
40	JUVPLV-40	2	535	DBR-086	2	10	3000	19"L X 13"W X 5"D	125	10	1,300
50	JUVPLV-40	2	535	DBR-086	2	10	3000	19"L X 13"W X 5"D	100	10	1,300
60	JUVPLV-60	2	712	DBR-094	2	8	4800	26.5"L X 10"W X 5"D	120	10	1,450
75	JUVPLV-60	2	712	DBR-094	2	8	4800	26.5"L X 10"W X 5"D	100	10	1,450
100	JUVPLV-60	3	712	DBR-094	3	8	4800	26.5"L X 10"W X 5"D	110	10	1,450

X= Transistor built-in for all MA7200, PA7300, and N3 Drives at these ratings.

For braking applications above 100 HP at 230V or above 200 HP at 460V, please consult the factory.

**NOTE:**

All brake resistor units include thermal overload switches.

# BRAKE MODULES and RESISTORS

Effective 12-01-08  
Supercedes 03-01-08



## 460V 3-Phase

AC DRIVE HP RATING	BRAKING TRANSISTOR			BRAKING RESISTOR							
	MODEL NUMBER	QTY USED	LIST PRICE	MODEL NUMBER	QTY USED	RESISTANCE		ENCLOSURE DIMENSIONS	BRAKING TORQUE %	DUTY CYCLE %	LIST PRICE
						OHMS	WATTS				
1	X	-	-	DBR-116	1	750	70	12"L X 5"W X 5"D	130	10	325
2	X	-	-	DBR-124	1	400	260	12"L X 5"W X 5"D	125	10	325
3	X	-	-	DBR-132	1	250	260	12"L X 5"W X 5"D	135	10	325
5	X	-	-	DBR-141	1	150	390	12"L X 5"W X 5"D	135	10	325
7	X	-	-	DBR-159	1	100	520	12"L X 7"W X 5"D	135	10	500
10	X	-	-	DBR-167	1	75	780	12"L X 7"W X 5"D	130	10	500
15	X	-	-	DBR-175	1	50	1040	12"L X 10"W X 5"D	135	10	630
20	X	-	-	DBR-183	1	40	1560	12"L X 13"W X 5"D	125	10	775
25	JNTBU-430	1	605	DBR-191	1	32	4800	26.5"L X 13"W X 5"D	125	10	1,800
30	JNTBU-430	1	605	DBR-205	1	27.2	4800	26.5"L X 13"W X 5"D	125	10	1,800
40	JNTBU-430	1	605	DBR-213	1	20	6000	26.5"L X 13"W X 5"D	125	10	1,800
50	JUVPHV-60	1	783	DBR-221	1	16	9600	28"L X 10"W X 10"D	125	10	2,475
60	JUVPHV-60	1	783	DBR-230	1	13.6	9600	28"L X 10"W X 10"D	125	10	2,475
75	JNTBU-430	2	605	DBR-213	2	20	6000	26.5"L X 13"W X 5"D	135	10	1,800
100	JUVPHV-60	2	783	DBR-230	2	13.6	9600	28"L X 10"W X 10"D	145	10	2,475
125	JNTBU-430	3	605	DBR-213	3	20	6000	26.5"L X 13"W X 5"D	125	10	1,800
150	JNTBU-430	3	605	DBR-213	3	20	6000	26.5"L X 13"W X 5"D	100	10	1,800
175 - 200	JUVPHV-60	4	783	DBR-230	4	13.6	9600	28"L X 10"W X 10"D	140	10	2,475

X = Transistor Built-in on all MA7200, PA7300, and N3 Drives at these ratings.

For braking applications above 100 HP at 230V or above 200 HP at 460V, please consult the factory.

**NOTE:**

All brake resistor units include thermal overload switches.

Low priced and easy to install, Line Reactors provide input transient protection from harmonic distortion. When applying a reactor between the drive output and the motor, please contact the Factory.

### 3% IMPEDANCE, 230V

HP	AMPS	CHASSIS UNIT				UL TYPE 1 ENCLOSURE			
		PRODUCT CODE	DIMENSIONS W x H x D (in.)	WEIGHT (LBS.)	LIST PRICE	PRODUCT CODE	Dimensions W x H x D (in.)	WEIGHT (LBS.)	LIST PRICE
1	4.6	KDRULA25L	4.00 x 4.18 x 3.75	4	152	KDRULA25LE01	12.25 x 12.50 x 6.75	14.5	415
1.5	6.6	KDRULA26L	4.00 x 4.18 x 3.75	4	170	KDRULA26LE01	12.25 x 12.50 x 6.75	14.5	420
2	7.5	KDRULA27L	4.00 x 4.18 x 3.75	4	172	KDRULA27LE01	12.25 x 12.50 x 6.75	14.5	430
3	10.6	KDRULA28L	4.00 x 4.18 x 3.75	4	195	KDRULA28LE01	12.25 x 12.50 x 6.75	14.5	440
5	16.7	KDRULB22L	5.00 x 6.00 x 4.00	8	260	KDRULB22LE01	12.25 x 12.50 x 6.75	18.5	525
7.5	24.2	KDRULB23L	5.00 x 6.00 x 4.00	8	281	KDRULB23LE01	12.25 x 12.50 x 6.75	18.5	535
10	30.8	KDRULD25L	5.75 x 7.20 x 4.25	12	299	KDRULD25LE01	12.25 x 12.50 x 6.75	22.5	550
15	46.2	KDRULD24L	5.75 x 7.20 x 4.25	12	306	KDRULD24LE01	12.25 x 12.50 x 6.75	22.5	595
20	59.4	KDRULD26L	5.75 x 7.20 x 4.25	12	350	KDRULD26LE01	12.25 x 12.50 x 6.75	22.5	617
25	74.8	KDRULC22L	5.75 x 7.20 x 5.00	15	500	KDRULC22LE01	12.25 x 12.50 x 6.75	25.5	780
30	88	KDRULF24L	7.00 x 9.00 x 6.00	33	540	KDRULF24LE01	19.13 x 15.43 x 15.43	67	1,050
40	114	KDRULF25L	7.00 x 9.00 x 6.00	33	750	KDRULF25LE01	19.13 x 15.43 x 15.43	67	1,250
50	143	KDRULF26L	7.00 x 9.00 x 6.00	36	900	KDRULF26LE01	19.13 x 15.43 x 15.43	67	1,400
60	169	KDRULH22L	9.00 x 11.00 x 7.00	51	1,050	KDRULH22LE01	22.12 x 20.43 x 24.37	113	1,950
75	211	KDRULI23L	9.00 x 11.00 x 7.00	56	1,072	KDRULI23LE01	22.12 x 20.43 x 24.37	117	2,000
100	273	KDRULI24L	9.00 x 11.00 x 7.00	56	1,200	KDRULI24LE01	22.12 x 20.43 x 24.37	117	2,100

### 5% IMPEDANCE, 230V

HP	AMPS	CHASSIS UNIT				UL TYPE 1 ENCLOSURE			
		PRODUCT CODE	DIMENSIONS W x H x D (in.)	WEIGHT (lbs.)	LIST PRICE	PART #	DIMENSIONS W x H x D (in.)	WEIGHT (lbs.)	LIST PRICE
1	4.6	KDRULA25H	4.00 x 4.18 x 3.75	4	170	KDRULA25HE01	12.25 x 12.50 x 6.75	14.5	430
1.5	6.6	KDRULA27H	4.00 x 4.18 x 3.75	4	187	KDRULA27HE01	12.25 x 12.50 x 6.75	14.5	440
2	7.5	KDRULA26H	4.00 x 4.18 x 3.75	4	193	KDRULA26HE01	12.25 x 12.50 x 6.75	14.5	450
3	10.6	KDRULA28H	4.00 x 4.18 x 3.75	4	200	KDRULA28HE01	12.25 x 12.50 x 6.75	14.5	460
5	16.7	KDRULB25H	5.00 x 6.00 x 4.00	8	281	KDRULB25HE01	12.25 x 12.50 x 6.75	18.5	530
7.5	24.2	KDRULB26H	5.00 x 6.00 x 4.00	8	291	KDRULB26HE01	12.25 x 12.50 x 6.75	18.5	550
10	30.8	KDRULD21H	5.75 x 7.20 x 4.25	12	305	KDRULD21HE01	12.25 x 12.50 x 6.75	22.5	561
15	46.2	KDRULD22H	5.75 x 7.20 x 4.25	12	375	KDRULD22HE01	12.25 x 12.50 x 6.75	22.5	635
20	59.4	KDRULC22H	5.75 x 7.20 x 5.00	15	425	KDRULC22HE01	12.25 x 12.50 x 6.75	25.5	690
25	74.8	KDRULF28H	7.00 x 9.00 x 6.00	30	510	KDRULF28HE01	19.13 x 15.43 x 15.43	67	1,050
30	88	KDRULF25H	7.00 x 9.00 x 6.00	33	590	KDRULF25HE01	19.13 x 15.43 x 15.43	67	1,125
40	114	KDRULF26H	7.00 x 9.00 x 6.00	33	780	KDRULF26HE01	19.13 x 15.43 x 15.43	67	1,300
50	143	KDRULH24H	9.00 x 11.00 x 7.00	40	920	KDRULH24HE01	19.13 x 15.43 x 15.43	70	1,450
60	169	KDRULH23H	9.00 x 11.00 x 7.00	51	1,075	KDRULH23HE01	19.13 x 15.43 x 15.43	81	1,600
75	211	KDRULI22H	9.00 x 11.00 x 7.00	56	1,300	KDRULI22HE01	22.12 x 20.43 x 24.37	117	2,250
100	273	KDRULI21H	9.00 x 11.00 x 7.00	56	1,590	KDRULI21HE01	22.12 x 20.43 x 24.37	117	2,550

# LINE REACTORS

## 3% IMPEDANCE, 460V

HP	AMPS	CHASSIS UNIT				UL TYPE 1 ENCLOSURE			
		PRODUCT CODE	DIMENSIONS W x H x D (in.)	WEIGHT (lbs.)	LIST PRICE	PART #	DIMENSIONS W x H x D (in.)	WEIGHT (lbs.)	LIST PRICE
1	2.1	KDRULA8L	4.00 x 4.18 x 3.75	4	157	KDRULA8LE01	12.25 x 12.50 x 6.75	14.5	405
2	3.4	KDRULA1L	4.00 x 4.18 x 3.75	4	165	KDRULA1LE01	12.25 x 12.50 x 6.75	14.5	415
3	4.8	KDRULA2L	4.00 x 4.18 x 3.75	4	184	KDRULA2LE01	12.25 x 12.50 x 6.75	14.5	425
5	7.6	KDRULA3L	4.00 x 4.18 x 3.75	4	190	KDRULA3LE01	12.25 x 12.50 x 6.75	14.5	430
7.5	11	KDRULA4L	4.00 x 4.18 x 3.75	4	195	KDRULA4LE01	12.25 x 12.50 x 6.75	14.5	435
10	14	KDRULA5L	4.00 x 4.18 x 3.75	5	260	KDRULA5LE01	12.25 x 12.50 x 6.75	14.5	515
15	21	KDRULB2L	5.00 x 6.00 x 4.00	8	270	KDRULB2LE01	12.25 x 12.50 x 6.75	18.5	525
20	27	KDRULB1L	5.00 x 6.00 x 4.00	8	280	KDRULB1LE01	12.25 x 12.50 x 6.75	18.5	530
25	34	KDRULD1L	5.75 x 7.20 x 4.25	10	290	KDRULD1LE01	12.25 x 12.50 x 6.75	20.5	545
30	40	KDRULD2L	5.75 x 7.20 x 4.25	10	365	KDRULD2LE01	12.25 x 12.50 x 6.75	20.5	616
40	52	KDRULC1L	5.75 x 7.20 x 5.00	15	400	KDRULC1LE01	12.25 x 12.50 x 6.75	25.5	650
50	65	KDRULF2L	7.00 x 9.00 x 6.00	25	470	KDRULF2LE01	19.13 x 15.43 x 15.43	67.0	945
60	77	KDRULF4L	7.00 x 9.00 x 6.00	25	490	KDRULF4LE01	19.13 x 15.43 x 15.43	67.0	975
75	96	KDRULF3L	7.00 x 9.00 x 6.00	33	730	KDRULF3LE01	19.13 x 15.43 x 15.43	67.0	1,215
100	124	KDRULH3L	7.00 x 9.00 x 7.00	46	830	KDRULH3LE01	19.13 x 15.43 x 15.43	78.0	1,300
125	156	KDRULH2L	9.00 x 11.00 x 7.00	46	1,000	KDRULH2LE01	19.13 x 15.43 x 15.43	78.0	1,475
150	180	KDRULH1L	9.00 x 11.00 x 7.00	46	1,150	KDRULH1LE01	22.12 x 20.43 x 24.37	108.0	2,050
200	240	KDRULG3L	9.00 x 11.00 x 8.00	74	1,530	KDRULG3LE01	22.12 x 20.43 x 24.37	131.0	2,450
250	302	KDRULG1L	9.00 x 11.00 x 8.00	74	1,650	KDRULG1LE01	22.12 x 20.43 x 24.37	132.0	2,575
300	361	KDRULG2L	9.00 x 11.00 x 8.00	74	1,690	KDRULG2LE01	22.12 x 20.43 x 24.37	132.0	2,600
350	414	KDRULJ2L	9.00 x 11.00 x 9.00	80	2,000	KDRULJ2LE01	22.12 x 20.43 x 24.37	150.0	2,900
400	477	KDRULJ1L	9.00 x 11.00 x 9.00	80	2,200	KDRULJ1LE01	22.12 x 20.43 x 24.37	150.0	3,100
450	515	KDRULL1L	11.38 x 14.50 x 9.50	120	2,575	KDRULL1LE01	22.12 x 20.43 x 24.37	190.0	3,450
500	590	KDRULL2L	11.38 x 14.50 x 9.50	120	3,775	KDRULL2LE01	22.12 x 20.43 x 24.37	190.0	4,644

### 5% IMPEDANCE, 460V

HP	AMPS	CHASSIS UNIT				UL TYPE 1 ENCLOSURE			
		PART #	DIMENSIONS W x H x D (in.)	WEIGHT (lbs.)	LIST PRICE	PART #	DIMENSIONS W x H x D (in.)	WEIGHT (lbs.)	LIST PRICE
1	2.1	KDRULA8H	4.00 x 4.18 x 3.75	4	165	KDRULA8HE01	12.25 x 12.50 x 6.75	14.5	410
2	3.4	KDRULA1H	4.00 x 4.18 x 3.75	4	175	KDRULA1HE01	12.25 x 12.50 x 6.75	14.5	416
3	4.8	KDRULA2H	4.00 x 4.18 x 3.75	4	215	KDRULA2HE01	12.25 x 12.50 x 6.75	14.5	454
5	7.6	KDRULA3H	4.00 x 4.18 x 3.75	4	225	KDRULA3HE01	12.25 x 12.50 x 6.75	14.5	464
7.5	11	KDRULA4H	4.00 x 4.18 x 3.75	5	250	KDRULA4HE01	12.25 x 12.50 x 6.75	15.5	490
10	14	KDRULA5H	4.00 x 4.18 x 3.75	5	315	KDRULA5HE01	12.25 x 12.50 x 6.75	15.5	560
15	21	KDRULB2H	5.00 x 6.00 x 4.00	7	325	KDRULB2HE01	12.25 x 12.50 x 6.75	17.5	575
20	27	KDRULC3H	5.75 x 7.20 x 5.00	15	370	KDRULC3HE01	12.25 x 12.50 x 6.75	25.5	625
25	34	KDRULC1H	5.75 x 7.20 x 5.00	15	440	KDRULC1HE01	12.25 x 12.50 x 6.75	25.5	691
30	40	KDRULE2H	5.75 x 7.20 x 5.00	16	500	KDRULE2HE01	12.25 x 12.50 x 6.75	26.5	743
40	52	KDRULF4H	7.00 x 9.00 x 6.00	25	525	KDRULF4HE01	19.13 x 15.43 x 15.43	67.0	990
50	65	KDRULF1H	7.00 x 9.00 x 6.00	25	700	KDRULF1HE01	19.13 x 15.43 x 15.43	67.0	1,215
60	77	KDRULF2H	7.00 x 9.00 x 6.00	25	730	KDRULF2HE01	19.13 x 15.43 x 15.43	67.0	1,242
75	96	KDRULH2H	9.00 x 11.00 x 7.00	52	900	KDRULH2HE01	19.13 x 15.43 x 15.43	82.0	1,380
100	124	KDRULI2H	9.00 x 11.00 x 7.00	52	1,029	KDRULI2HE01	19.13 x 15.43 x 15.43	82.0	1,575
125	156	KDRULG3H	9.00 x 11.00 x 8.00	57	1,250	KDRULG3HE01	22.12 x 20.43 x 24.37	122.0	2,100
150	180	KDRULG1H	9.00 x 11.00 x 8.00	60	1,488	KDRULG1HE01	22.12 x 20.43 x 24.37	127.0	2,350
200	240	KDRULJ1H	9.00 x 11.00 x 9.00	75	2,152	KDRULJ1HE01	22.12 x 20.43 x 24.37	136.0	2,900
250	302	KDRULL1H	11.38 x 14.50 x 9.50	105	2,307	KDRULL1HE01	22.12 x 20.43 x 24.37	162.0	3,075
300	361	KDRULL2H	11.38 x 14.50 x 9.31	105	2,350	KDRULL2HE01	22.12 x 20.43 x 24.37	162.0	3,150
350	414	KDRULL3H	11.38 x 14.50 x 9.31	109	2,700	KDRULL3HE01	22.12 x 20.43 x 24.37	166.0	3,450
400	477	KDRULL4H	11.38 x 14.50 x 9.50	135	3,400	KDRULL4HE01	22.12 x 20.43 x 24.37	176.0	4,200
450	515	KDRULL5H	11.38 x 14.50 x 11.00	135	3,500	KDRULL5HE01	36.00 x 28.39 x 30.19	295.0	5,200
500	590	KDRULL6H	11.38 x 14.50 x 11.00	135	4,200	KDRULL6HE01	36.00 x 28.39 x 30.19	295.0	5,975

# OUTPUT REACTORS/ LOW PASS FILTER COMBINATIONS

Output Reactors/ Low Pass Filter Combinations installed between an AC Drive and a motor limit the magnitude of voltage spikes at the motor. The filters also protect cables and the motor's insulation from damage caused by PWM reflected waves.

## OUTPUT REACTOR / LOW PASS FILTER COMBINATION, 460V

HP	AMPS	CHASSIS UNIT				UL TYPE 1 ENCLOSURE			
		PRODUCT CODE	DIMENSIONS W x H x D (in.)	WEIGHT (IBS.)	LIST PRICE	PRODUCT CODE	DIMENSIONS W x H x D (in.)	WEIGHT (IBS.)	LIST PRICE
1	3	V1K3A00	9.00 x 5.50 x 7.25	8	530	V1K3A01	9.00 x 5.50 x 10.00	11	830
2	4	V1K4A00	9.00 x 5.50 x 7.25	8	540	V1K4A01	9.00 x 5.50 x 10.00	11	840
3	6	V1K6A00	9.00 x 5.50 x 7.25	8	550	V1K6A01	9.00 x 5.50 x 10.00	11	860
5	8	V1K8A00	9.00 x 5.50 x 8.25	8	560	V1K8A01	9.00 x 5.50 x 10.00	11	875
7.5	12	V1K12A00	9.00 x 5.50 x 8.25	8	590	V1K12A01	9.00 x 5.50 x 10.00	11	900
10	18	V1K18A00	9.00 x 5.50 x 8.25	12	648	V1K18A01	9.00 x 5.50 x 10.00	15	975
15	25	V1K25A00	9.00 x 5.50 x 8.25	12	783	V1K25A01	9.00 x 5.50 x 10.00	15	1,050
20	27	V1K27A00	9.00 x 5.50 x 8.25	14	810	V1K27A01	9.00 x 5.50 x 10.00	15	1,075
25	35	V1K35A00	12.00 x 8.00 x 9.00	17	837	V1K35A01	12.00 x 8.00 x 11.50	23	1,100
30	45	V1K45A00	12.00 x 8.00 x 9.00	17	864	V1K45A01	12.00 x 8.00 x 11.50	23	1,175
40	55	V1K55A00	12.00 x 8.00 x 9.00	23	891	V1K55A01	12.00 x 8.00 x 11.50	23	1,282
50	80	V1K80A00	12.00 x 8.00 x 9.00	23	1,296	V1K80A01	12.00 x 8.00 x 11.50	29	1,648
60	80	V1K80A00	12.00 x 8.00 x 9.00	23	1,296	V1K80A01	12.00 x 8.00 x 11.50	29	1,648
75	110	V1K110A00	12.00 x 8.00 x 10.25	40	1,525	V1K110A01	16.50 x 18.00 x 15.00	68	2,268
100	130	V1K130A00	8.50 x 11.75 x 9.50	55	1,800	V1K130A01	16.50 x 18.00 x 15.00	83	2,484
125	160	V1K160A00	8.50 x 11.75 x 10.50	60	1,944	V1K160A01	16.50 x 18.00 x 15.00	83	2,592
150	200	V1K200A00	8.50 x 11.75 x 9.25	60	2,106	V1K200A01	16.50 x 18.00 x 15.00	93	2,700
200	250	V1K250A00	8.50 x 11.75 x 9.25	65	2,160	V1K250A01	16.50 x 18.00 x 15.00	93	2,900
250	305	V1K305A00	8.75 x 11.75 x 12.25	80	2,376	V1K305A01	16.50 x 18.00 x 30.00	117	3,000
300	362	V1K362A00	8.75 x 11.75 x 12.00	80	2,775	V1K362A01	16.50 x 18.00 x 30.00	117	3,200
350	420	V1K420A00	10.00 x 11.75 x 13.75	95	3,200	V1K420A01	16.50 x 18.00 x 30.00	132	3,700
400	480	V1K480A00	10.00 x 11.75 x 13.75	100	3,456	V1K480A01	16.50 x 18.00 x 30.00	138	4,000
500	600	V1K600A00	12.75 x 15.00 x 13.75	130	3,564	V1K600A01	16.50 x 18.00 x 30.00	168	4,400
600	750	V1K750A00	12.75 x 15.00 x 14.50	135	5,724	V1K750A01	16.50 x 18.00 x 30.00	180	7,600