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Adjustable Frequency Drives

PowerXL DG1 Series Drives

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Brake Chopper Options

The brake chopper circuit option is used for applications that require dynamic braking. Dynamic braking resistors are not included with drive purchase. Consult the factory for additional dynamic braking resistor selections that are supplied separately. A list of common resistors are listed below and are complete indoor assemblies, include a pre-wired terminal block and a thermal switch, and are not UL Listed.

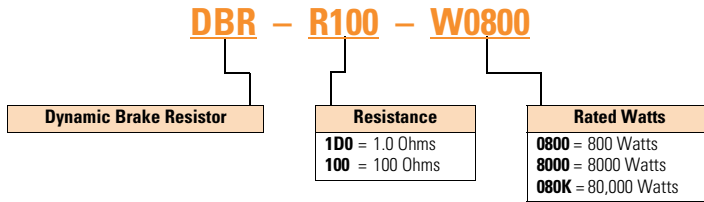
Duty Cycle

The duty cycle rating is based on a 60-second period. For example, the 20% duty cycle resistor can carry 100% current for 12 seconds out of every 60 seconds, while the 50% duty cycle resistor can carry 150% current for 30 seconds out of every 60 seconds.

Torque

If the braking torque required is less than 15%, dynamic braking is not required because the regenerated energy will be dissipated in the drive and motor losses.

Dynamic Brake Resistor—Catalog Number Selection



230 V Brake Resistors

Drive hp (CT/I _H)	Minimum Ohms	20% Duty Cycle, 100% Torque		50% Duty Cycle, 150% Torque	
		Catalog Number	Dimensions (Inches)	Catalog Number	Dimensions (Inches)
0.75	30.0	DBR-R100-W0400	12W x 5D x 5H	DBR-R100-W0800	12W x 7D x 5H
1	30.0	DBR-R100-W0400	12W x 5D x 5H	DBR-R100-W0800	12W x 7D x 5H
1.5	30.0	DBR-R100-W0400	12W x 5D x 5H	DBR-R036-W1200	12W x 10D x 5H
2	30.0	DBR-R100-W0400	12W x 5D x 5H	DBR-R036-W1200	12W x 10D x 5H
3	30.0	DBR-R036-W0800	12W x 7D x 5H	DBR-R036-W2000	12W x 16D x 5H
4	30.0	DBR-R036-W0800	12W x 7D x 5H	DBR-R030-W2400	19W x 10D x 5H
5	30.0	DBR-R036-W0800	12W x 7D x 5H	DBR-R030-W2800	19W x 13D x 5H
7.5	20.0	DBR-R020-W1200	12W x 10D x 5H	DBR-R020-W4800	26.5W x 13D x 5H
10	10.0	DBR-R015-W1600	12W x 13D x 5H	DBR-R112-W6000	26.5W x 13D x 5H
15	10.0	DBR-R012-W2400	19W x 10D x 5H	DBR-R010-W9000	28W x 10D x 10H
20	3.3	DBR-R9D3-W3200	19W x 10D x 5H	DBR-R3D4-W012K	28W x 10D x 10H
25	3.3	DBR-R5D5-W4000	26.5W x 10D x 5H	DBR-R5D1-W015K	28W x 16D x 10H
30	3.3	DBR-R4D8-W4800	26.5W x 10D x 5H	DBR-R4D1-W020K	28W x 16D x 10H
40	1.4	DBR-R004-W6000	26.5W x 13D x 5H	DBR-R3D4-W025K	30W x 18D x 16H
50	1.4	DBR-R3D1-W7500	26.5W x 16D x 5H	DBR-R2D1-W030K	30W x 18D x 24H
60	1.4	DBR-R2D8-W9000	26.5W x 16D x 5H	DBR-R002-W036K	30W x 18D x 24H
75	1.4	DBR-R2D6-W012K	28W x 10D x 10H	DBR-R1D5-W045K	30W x 18D x 32H
100	1.4	DBR-R002-W015K	28W x 16D x 10H	DBR-R1D4-W060K	30W x 18D x 40H

480 V Brake Resistors

Drive hp (CT/l _H)	Minimum Ohms	20% Duty Cycle, 100% Torque		50% Duty Cycle, 150% Torque	
		Catalog Number	Dimensions (Inches)	Catalog Number	Dimensions (Inches)
1	63.0	DBR-R100-W0400	12W x 5D x 5H	DBR-R100-W0800	12W x 7D x 5H
1.5	63.0	DBR-R100-W0400	12W x 5D x 5H	DBR-R100-W1200	12W x 10D x 5H
2	63.0	DBR-R100-W0400	12W x 5D x 5H	DBR-R100-W1200	12W x 10D x 5H
3	63.0	DBR-R100-W0800	12W x 7D x 5H	DBR-R100-W2000	12W x 16D x 5H
5	63.0	DBR-R100-W0800	12W x 7D x 5H	DBR-R100-W2800	19W x 13D x 5H
6	63.0	DBR-R100-W1200	12W x 10D x 5H	DBR-R070-W4000	19W x 16D x 5H
7.5	63.0	DBR-R100-W1200	12W x 10D x 5H	DBR-R063-W4800	26.5W x 13D x 5H
10	63.0	DBR-R063-W1600	12W x 13D x 5H	DBR-R063-W6000	26.5W x 16D x 5H
15	42.0	DBR-R042-W2400	19W x 10D x 5H	DBR-R042-W9000	28W x 10D x 10H
20	21.0	DBR-R030-W3200	19W x 13D x 5H	DBR-R023-W012K	28W x 13D x 10H
25	21.0	DBR-R030-W4000	19W x 16D x 5H	DBR-R021-W015K	28W x 13D x 10H
30	14.0	DBR-R020-W4800	26.5W x 13D x 5H	DBR-R014-W020K	30W x 18D x 24H
40	6.5	DBR-R112-W6000	26.5W x 13D x 5H	DBR-R007-W025K	30W x 18D x 16H
50	6.5	DBR-R013-W7500	26.5W x 16D x 5H	DBR-R8D5-W030K	30W x 18D x 24H
60	6.5	DBR-R010-W9000	28W x 10D x 10H	DBR-R7D3-W036K	30W x 18D x 24H
75	3.3	DBR-R009-W012K	28W x 13D x 10H	DBR-R3D3-W045K	30W x 18D x 32H
100	3.3	DBR-R5D1-W015K	28W x 16D x 10H	DBR-R004-W060K	30W x 18D x 40H
125	3.3	DBR-R4D1-W020K	28W x 16D x 10H	DBR-R004-W070K	30W x 18D x 48H
150	3.3	DBR-R3D4-W025K	30W x 18D x 16H	DBR-R3D5-W085K	30W x 18D x 56H
200	3.3	DBR-R3D3-W030K	30W x 18D x 24H	DBR-R3D3-W110K	30W x 18D x 72H
250	1.4	DBR-R2D5-W036K	30W x 18D x 24H	Ⓢ	—
300	1.4	DBR-R1D5-W045K	30W x 18D x 32H	Ⓢ	—
350	1.4	DBR-R1D4-W060K	30W x 18D x 40H	Ⓢ	—
400	0.9	DBR-R1D4-W060K	30W x 18D x 40H	Ⓢ	—
500	0.9	DBR-R0D9-W080K	30W x 18D x 48H	Ⓢ	—
550	0.9	DBR-R001-W085K	30W x 18D x 56H	Ⓢ	—

Note

Ⓢ Consult factory.

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Adjustable Frequency Drives

PowerXL DG1 Series Drives

575 V Brake Resistors

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Drive hp (CT/l _H)	Minimum Ohms	20% Duty Cycle, 100% Torque		50% Duty Cycle, 150% Torque	
		Catalog Number	Dimensions (Inches)	Catalog Number	Dimensions (Inches)
2	100.0	DBR-R100-W0400	12W x 5D x 5H	DBR-R100-W1200	12W x 10D x 5H
3	100.0	DBR-R100-W0800	12W x 7D x 5H	DBR-R100-W2000	12W x 16D x 5H
4	100.0	DBR-R100-W0800	12W x 7D x 5H	DBR-R100-W2400	19W x 10D x 5H
5	100.0	DBR-R100-W0800	12W x 7D x 5H	DBR-R100-W2800	19W x 13D x 5H
7.5	100.0	DBR-R100-W1200	12W x 10D x 5H	DBR-R100-W4800	26.5W x 13D x 5H
10	30.0	DBR-R063-W1600	12W x 13D x 5H	DBR-R063-W6000	26.5W x 16D x 5H
15	30.0	DBR-R042-W2400	19W x 10D x 5H	DBR-R042-W9000	28W x 10D x 10H
20	30.0	DBR-R030-W3200	19W x 13D x 5H	DBR-R030-W012K	28W x 13D x 10H
25	30.0	DBR-R030-W4000	19W x 16D x 5H	DBR-R030-W015K	28W x 16D x 10H
30	18.0	DBR-R020-W4800	26.5W x 13D x 5H	DBR-R020-W020K	30W x 18D x 16H
40	18.0	DBR-R030-W6000	26.5W x 16D x 5H	DBR-R184-W025K	30W x 18D x 16H
50	9.0	DBR-R013-W7500	26.5W x 16D x 5H	DBR-R012-W030K	30W x 18D x 24H
60	9.0	DBR-R010-W9000	28W x 10D x 10H	DBR-R010-W036K	30W x 18D x 24H
75	9.0	DBR-R009-W012K	28W x 13D x 10H	DBR-R009-W045K	30W x 18D x 24H
100	7.0	DBR-R013-W015K	28W x 16D x 10H	DBR-R8D4-W060K	30W x 18D x 40H
125	7.0	DBR-R8D2-W020K	30W x 18D x 10H	DBR-R007-W070K	30W x 18D x 40H
150	7.0	DBR-R007-W025K	30W x 18D x 16H	DBR-R006-W085K	30W x 18D x 56H
175	7.0	DBR-R007-W030K	30W x 18D x 24H	DBR-R007-W100K	30W x 18D x 72H
200	2.5	DBR-R3D3-W030K	30W x 18D x 24H	DBR-R2D6-W110K	30W x 18D x 64H
250	2.5	DBR-R2D5-W036K	30W x 18D x 24H	DBR-R003-W140K	30W x 18D x 72H
300	2.5	DBR-R3D3-W045K	30W x 18D x 32H	①	—
400	1.7	DBR-R002-W060K	30W x 18D x 48H	①	—
450	1.7	DBR-R1D8-W070K	30W x 18D x 48H	①	—
500	1.7	DBR-R002-W080K	30W x 18D x 56H	①	—

Note

① Consult factory.