

LB460 Series

Low Voltage Grade Brushless Motors



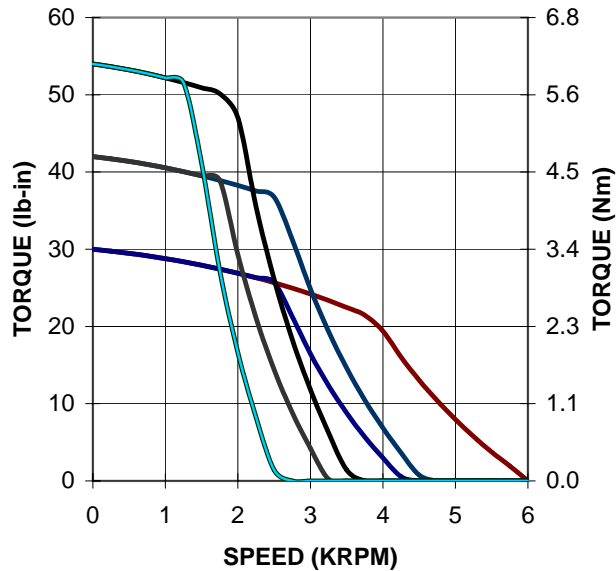
Performance Features

- Low Voltage windings, 24, 36 and 48 Vdc
- Continuous Torques from 24 to 44 lb-in
- High Peak Torque capability
- Speeds up to 5000 rpm
- 8 Pole Ceramic Magnet Structure
- NEMA 56 mounting
- Mounting for optional 48V Parking Brake
- No Brush Maintenance
- Smooth Sinusoidal, Low Torque ripple design
- 18 inch Heavy Duty cabled Motor Leads

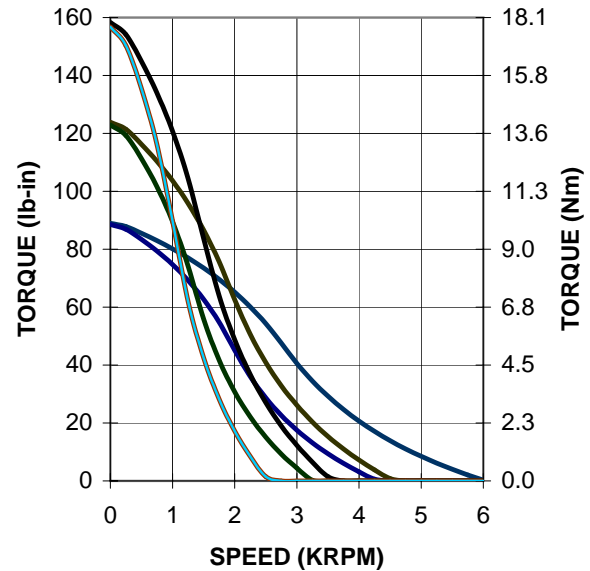
Options

- Transaxle Flange Mount
- 36 & 48V, Parking Brake w/ Mechanical Release
- Cable connectors

Cont. Torque LB460 Series @ 48 Vdc



Peak Torque LB460 Series @ 48 Vdc



- | | | |
|-------------|-------------|-------------|
| 1 = LB462-C | 2 = LB462-E | 3 = LB463-C |
| 4 = LB463-E | 5 = LB464-C | 6 = LB464-E |

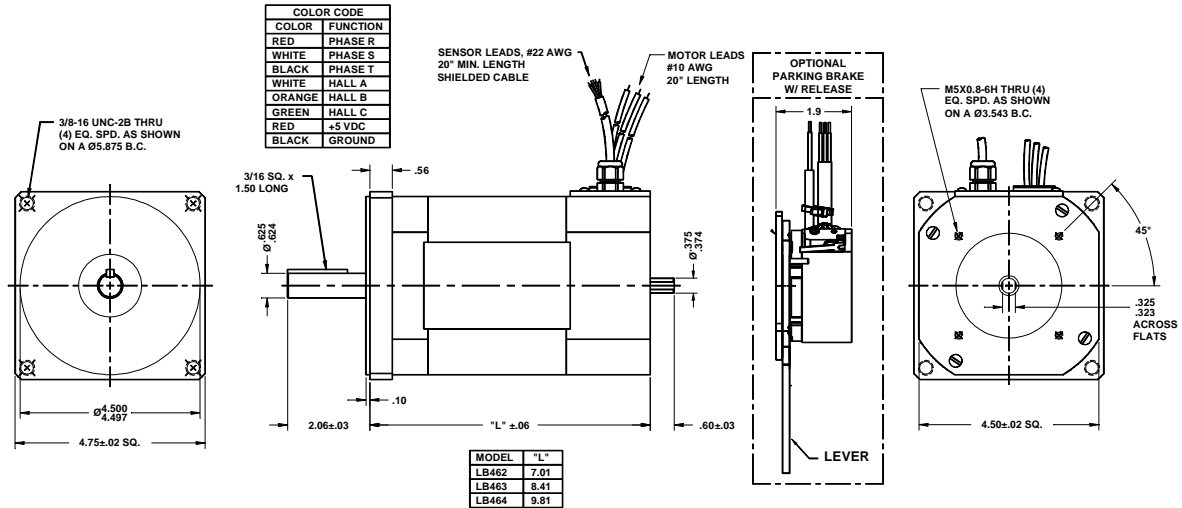
Curves reflect motor performance using peak and continuous ratings. System performance may differ depending on the drive capability.



Contact us at: www.mcg-net.com

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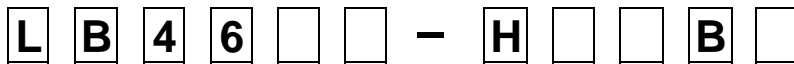
DIMENSIONS



GENERAL	Condition	Units	LB462	LB463	LB464			
Continuous Stall Torque	1)	Nm / lb-in	3.39 / 30	4.75 / 42	6.1 / 54			
Peak Stall Torque	1)	Nm / lb-in	10.17 / 90	14.24 / 126	18.3 / 162			
WINDING - TRAPEZOIDAL DC VALUES			C	E	C	E	C	E
DC Torque Constant	(+ / -10%)	Nm / A	0.076	0.106	0.100	0.140	0.128	0.179
		lb-in / A	0.672	0.941	0.887	1.242	1.133	1.586
DC Voltage Constant (L-L,DC)	(+ / -10%)	V / KRPM	7.95	11.13	10.50	14.70	13.40	18.76
Current at Cont. Stall Torque	1)	A	45.1	32.2	47.8	34.1	48.2	34.4
Current at Peak Torque		A	135.3	96.6	143.4	102.4	144.5	103.2
Resistance (L-L)	(+ / -10%)	ohms	0.030	0.059	0.040	0.078	0.049	0.097
Inductance (L-L)	(+ / -15%)	mH	0.19	0.36	0.26	0.51	0.34	0.66
Max. Terminal Voltage		V dc	48	48	48	48	48	48
Speed @ 48 Vdc		RPM	4600	3300	3400	2500	2750	1900
WINDING - SINUSOIDAL AC VALUES			C	E	C	E	C	E
RMS Torque Constant (L-L,RMS)	(+ / -10%)	Nm / A	0.097	0.136	0.129	0.180	0.164	0.230
		lb-in / A	0.862	1.206	1.138	1.593	1.453	2.034
RMS Voltage Constant (L-L,RMS)	(+ / -10%)	V / rad / s	0.056	0.079	0.074	0.104	0.095	0.133
		V / KRPM	5.89	8.24	7.78	10.89	9.92	13.89
Current at Cont. Stall Torque	1)	A (rms)	35.2	25.1	37.3	26.6	37.6	26.8
Current at Peak Torque		A (rms)	105.5	75.4	111.8	79.9	112.7	80.5
MECHANICAL			C	E	C	E	C	E
Rotor Inertia (including hall effects)		kg-cm ²	12.4		16.9		21.5	
		lb-in-s ²	0.011		0.015		0.019	
Thermal Resistance		°C / W	1.08		0.75		0.61	
Environmental Protection		IP	42		42		42	
Weight		Kg / lb	8.84 / 19.5		11.34 / 25		13.83 / 30.5	

1) 125 C winding temp., all others at 25C .

HOW TO ORDER



Models

LB462
LB463
LB464

Winding, Letter

Hall Effect Commutation
Mounting Flange - Drive End
N6 - NEMA 56 Flange and HD Shaft

Mounting Flange - Option End

B1 - Std. Brake Mount Surface w/o Brake
BA - w/ 48V Std. Mech. Release Brake

Please Contact your Local MCG Representative for Assistance with your needs
MCG Representatives can be located at: www.mcg-net.com