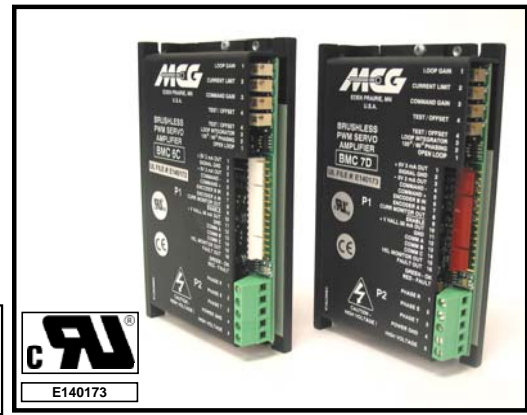




# BMC 6C & 7D Servo Drives

- Economical Analog, 4 Quadrant Brushless Servo Drive
- 20 - 80 Vdc Rated Supply Input
- Current Ratings 6 & 7A Continuous, 12 & 15 Peak
- Dip Switch Selectable Settings
- Torque & Velocity Control Modes
- Output short circuit and over temperature protection
- Compact, Surface-mount Drive Technology
- Inaudible, High Frequency PWM switching
- UL Recognized, CE Marked



Drive Performance											
Catalog Number	Voltage Range Vdc	Maximum Voltage Vdc	Max. Current Rating		Input Command Vdc range	Min. Load Inductance mH	Switching Frequency kHz	Bandwidth kHz	Over Voltage Shut Down V dc	Weight	
			Cont. Amps	Peak Amps						Kg	Lb
BMC 6C	20 - 60 V	60	6	12	+ / - 10	0.200	33	2.5	62	0.28	0.63
BMC 7D	20 - 80 V	80	7.5	15	+ / - 10	0.200	33	2.5	86	0.28	0.63

Motor / Drive System Performance											
Torque Limits		Speed Limit Wnl rpm	Rated Torque		Rated Speed Wr rpm	Rated Bus Voltage Vb Vdc	Motor Inertia Jm oz-in-s <sup>2</sup>	Motor Diameter inch	Motor Catalog Number	Drive Catalog Number	
Cont. Stall Tcs oz-in	Peak Stall Tps oz-in		Cont. Rated Tcr oz-in	Peak Rated Tpr oz-in							
2	10	9000	1	3	9000	40	0.00001	1	IB10000	BMC 6C	
4	20	9000	2	5	9000	60	0.00002	1	IB10001	BMC 6C	
10	50	9000	7	14	7500	60	0.00024	1.75	IB17000	BMC 6C	
30	92	9000	26	40	6000	60	0.00062	1.75	IB17001	BMC 6C	
20	60	6000	15	27	4000	60	0.0011	2.25	IB23810	BMC 6C	
38	114	6000	29	52	4000	60	0.0017	2.25	IB23820	BMC 6C	
55	131	6000	40	75	4000	60	0.0025	2.25	IB23830	BMC 6C	
50	150	5200	45	75	3750	60	0.0019	2.25	IB23000	BMC 6C	
50	150	3450	45	84	2000	60	0.0019	2.25	IB23003	BMC 6C	
90	218	4150	82	152	3000	60	0.0037	2.25	IB23001	BMC 6C	
90	270	2600	83	155	1750	60	0.0037	2.25	IB23004	BMC 6C	
110	245	6000	98	183	5000	80	0.0055	2.25	IB23002	BMC 7D	
110	327	2750	101	190	2100	60	0.0055	2.25	IB23006	BMC 6C	
Tcs lb-in	Tps lb-in	Wnl rpm	Tcr lb-in	Tpr lb-in	Wr rpm	Vb Vdc	Jm lb-in-s <sup>2</sup>	Diameter inch	Catalog Number	Catalog Number	
5.6	17	3200	4.69	7.80	1250	80	0.0006	3.25	IB34007	BMC 7D	
8.4	18	5100	7.03	10.69	2500	80	0.0009	3.25	IB34002	BMC 7D	
3.8	11	4800	2.91	4.75	3500	60	0.00014	2.25	AB23000	BMC 6C	
3.8	11	2350	2.97	4.63	1400	60	0.00014	2.25	AB23003	BMC 6C	
7.5	23	3900	6.00	9.50	3000	80	0.00026	2.25	AB23001	BMC 7D	
7.5	23	2400	6.00	9.00	1750	60	0.00026	2.25	AB23004	BMC 6C	
11.3	33	1700	9.20	14.50	1000	60	0.00037	2.25	AB23006	BMC 6C	
17.0	63	1450	15.57	23.00	750	80	0.001	3.25	AB34003	BMC 7D	
30.0	62	1500	27.50	46.00	800	80	0.0018	3.25	AB34004	BMC 7D	
44.0	93	1000	40.75	66.00	500	80	0.0026	3.25	AB34005	BMC 7D	

Notes 1) System Performance may differ somewhat from these nominal values 2) The BMC 7D can be used in place of the BMC 6C for greater intermittent duty. Check motor data sheet

The BMC 6C and 7D are stand alone, compact, high efficiency brushless drives providing economical analog torque or velocity control of low to medium power permanent magnet brushless motors. These Drives require an unregulated DC power supply. These Models interface with typical digital position loop controllers or can be operated as a stand-alone drive.

### Protection / Diagnostics

- Over-voltage protection
- Over-current protection
- Over Temperature protection
- Build in Test mode
- LED Status Indicator
- Short Circuit Protection

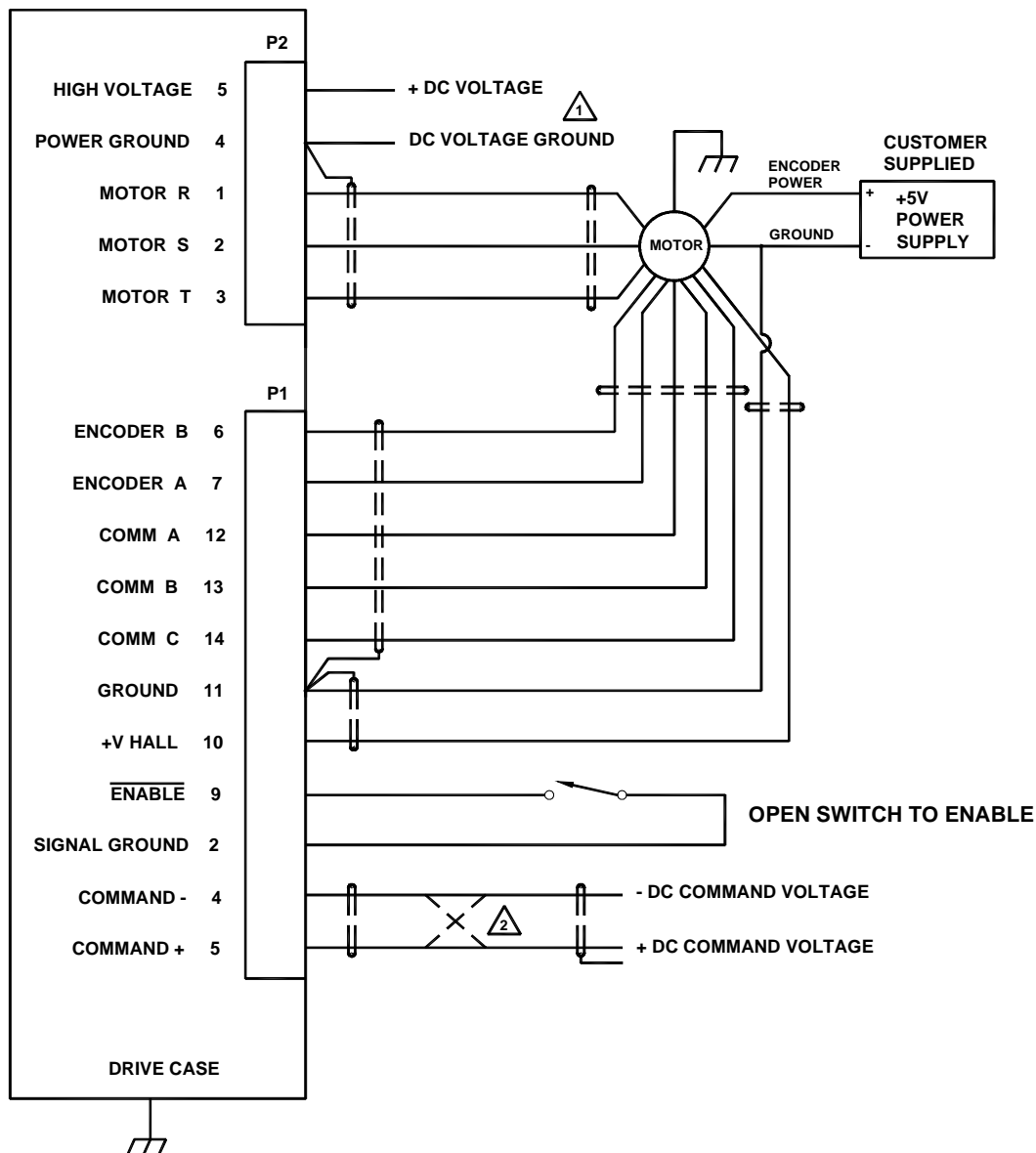
### Adjustments

- Loop & Command Gain
- Current Limit (Peak and continuous)
- Offset

### General Features

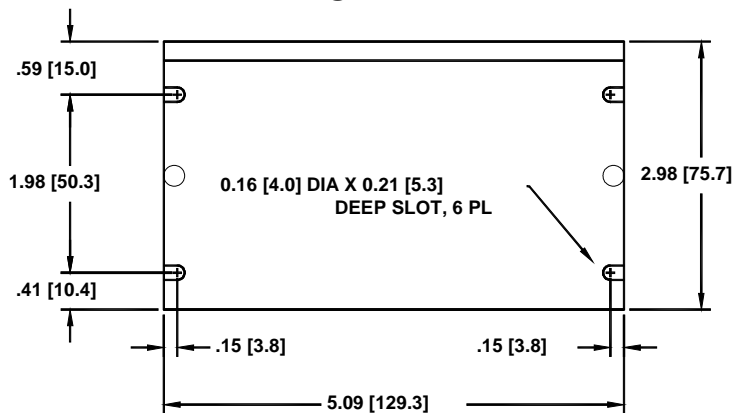
- Back or Side Panel Mounting
- +/- 5V Regulated Outputs (5 mA)
- Current Monitor Output
- Velocity Monitor Output
- Fault Output
- Modes (current, encoder, open loop)
- 120/60 degree Hall Phasing (switch select)
- Differential analog Command Input +/- 10V
- Contact MCG for Motor power cables

# Typical Connection Diagram - BMC 6C & 7D

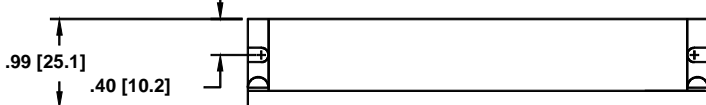


## Dimensions - BMC6C & 7D

### TOP VIEW



### FRONT VIEW



### SIDE VIEW

