

Motor Winding	C4-161								C4-162									
	K			I		F		D			M			J			H	
Nominal Supply Voltage, V <sub>T</sub> (V)	90	75	48	75	48	48	24	24	12	90	75	48	75	48	24	48	24	12
Max Speed, n <sub>max</sub> (rpm)	3,500	2,700	1,400	5400	3100	6500	3000	4500	1800	3,500	2,700	1,500	5,200	3,000	1,400	5,000	2,200	1,000
Cont. Torque, T <sub>c</sub> (Nm) @ 20°C		0.21		0.21		0.19		0.18		0.41		0.38		0.38		0.37		0.37
Standstill Torque, T <sub>s</sub> (Nm) @ 20°C	1.19	1.02	0.69	1.57*	1.14	1.67*	1.02*	1.33*	0.73*	2.85*	2.54	1.73	3.58*	2.76*	1.54	3.38*	2.07*	1.08
Max Cont. Power, P (W)		55		60		70		75		85		100		110		110		110
Current @ Cont. Torque, I <sub>c</sub> (A)		1.37		2.35		4.1		5.5		2.24		3.96		5.5		5.5		5.5
Current @ Standstill Torque, I <sub>s</sub> (A)	8.5	7.1	4.5	21.6*	13.7	46.5*	22.8*	46*	22.0*	18.7*	15.5	9.8	53.3*	33.7*	16.3	67.0*	33.0*	15.7
No Load Current, I <sub>NL</sub> (A)	0.19	0.18	0.15	0.39	0.31	0.84	0.58	0.99	0.72	0.22	0.2	0.16	0.53	0.41	0.3	0.72	0.49	0.38
Torque Const., K <sub>T</sub> (Nm/A)		0.165		0.096		0.051		0.035		0.192		0.101		0.071		0.071		0.071
Back EMF Const, K <sub>e</sub> (V/krpm)		17.4		10.2		5.35		3.75		20.3		10.7		7.5		7.5		7.5
DC Resistance, R (Ω)		10.4		3.4		1.01		0.5		4.74		1.38		0.7		0.7		0.7
Inductance, L (mH)		14.4		4.9		1.36		0.67		7.7		2.1		1.03		1.03		1.03
Elec Time Const., T <sub>e</sub> (msec)		1.4		1.4		1.3		1.3		1.6		1.5		1.5		1.5		1.5
Mech Time Const., T <sub>m</sub> (msec)		19		18		19		20		12		13		13		13		13
Inertia, J <sub>M</sub> (kgcm <sup>2</sup> ) excl. feedback		0.49		0.49		0.49		0.49		0.927		0.927		0.927		0.927		0.927
Weight, M (kg), excl. feedback		1.6		1.6		1.6		1.6		2.1		2.1		2.1		2.1		2.1
Static Friction, T <sub>F</sub> (Nm)		0.017		0.017		0.017		0.017		0.02		0.02		0.02		0.02		0.02
Viscous Damping, F <sub>1</sub> (Nm/krpm)		0.003		0.003		0.003		0.003		0.005		0.005		0.005		0.005		0.005

\* Max Recommended value of peak current (I<sub>PK</sub>) = 18A for good brush life

#### Tachogenerator Option

Tachogenerator Model	TGF 1568
Voltage, K <sub>G</sub> (V/krpm)	3.0 / 7.0
Ripple (pk-pk/avg)	3%
Inertia, J <sub>T</sub> (kgm <sup>2</sup> )	0.13x10 <sup>-4</sup>
Weight, M <sub>T</sub> (kg)	0.5

#### Encoder Option

Encoder Type	Incremental (A quad B with index Z & complements)
Power Supply	5V DC ± 5%, 200mA max
Output	Line Driver, 20mA Max source/sink
Resolution (ppr)	1024 / 2048 / 4096
Frequency Response	200 kHz max