

ENTER DRIVE LETTER BELOW ( S for Sine, T for Trap)

ENTER BUS VOLT BELOW(Vdc)

s

325

ENTER UNIT LETTER BELOW ( M for SI, E for English)

m

SELECT WINDING FROM DROP DOWN LIST

Ke = G3(Ke = 77 Vpk/krpm)

Symbol	Units	NOM	MIN	MAX
Tpk	Torque,peak stall	Nm		21.9
Tc	Torque,continuous stall	Nm	8.39	7.55 9.23
Ktp	Torque sensitivity ( L TO L )	Nm/Apeak	0.637	0.573 0.701
Kt	Torque sensitivity ( L TO L )	Nm/Arms	0.900	0.810 0.990
Ra	Armature resistance ( L TO L )	ohms	.932	0.79 1.07
La	Armature inductance ( L TO L )	millihenry	5.9	4.13 7.67
Ip	Amps at Tpk	Apeak	34.4	31.0 37.8
Isp	Amps at Tc stall	Apeak	15.51	13.96 17.06
Is	Amps at Tc stall	Arms	10.97	9.87 12.07
Kep	Back EMF constant	Vpeak/Krpm	77.00	69.30 84.70
Ke	Back EMF constant	Vrms/Krpm	54.46	49.01 59.91
Ke	Back EMF constant	Vpeak/rad/sec	0.735	0.573 0.701
Ke	Back EMF constant	Vrms/rad/sec	0.520	0.468 0.572
Ep	Volts @ Tpk	Vpeak	32.06	
Fi	Viscous friction	Nm/Krpm	0.350	
Tf	Static friction torque	Nm	0.500	
Ec	volts @ Tc	Vpeak	21.683	
Jm	Moment of inertia	Kg-cm2	4.29379	
Tm	Time constant,mech	milliseconds	0.74	
Te	Time constant,elect	milliseconds	6.33	
Rth	Thermal resistance	deg C/watt	0.45	
Tth	Time constant,thermal	minutes	28	
Oa	Max armature temp	deg C		155
Km	Figure of Merit	Nm/(amp-ohm)	0.66	
Nls	Max operating speed	rpmmax		4000
	# of motor poles		8	
Wt	weight	Kg	6.7	

**MODE NUMBER**  
T1102 G3(Ke = 77 Vpk/krpm)

DRAWN: AR  
APPROVED: SD

**TORQUE & CURRENT AT 40 Deg C AMBIENT**

**^SPECIFICATIONS**

RPM	Rated Nm	Peak Voltage	Peak Current	RMS Current	Watts
0	8.393	21.7	15.51	10.97	252
200	8.363	37.0	15.45	10.92	456
400	8.327	52.3	15.39	10.88	659
800	8.238	82.9	15.22	10.76	1055
1200	8.126	113.4	15.01	10.61	1437
1600	7.991	143.8	14.76	10.44	1804
2000	7.830	174.2	14.47	10.23	2149
2400	7.642	204.5	14.12	9.98	2468
2800	7.427	234.8	13.72	9.70	2759
3200	7.181	265.0	13.27	9.38	3015
3600	6.901	295.0	12.75	9.02	3233
4000	6.585	325.0	12.17	8.61	3403

**TORQUE (Nm)**

OTHER SPECIFICATIONS

REV(Dt)	Description
A(11/11/05)	Initial Release
B(2/10/06)	Add RMS Kt and Ke
C(3/20/06)	Add # of poles
D(4/6/06)	Sine SI Ke values corrected
E(2/20/07)	Add G3 winding
F(5/07/07)	Reconfigured speed/torque

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Rated Speed	Rated Torque
4000	6.6
Rated watts 2763	

**SINUSOIDAL DRIVE**

MOTOR IS MOUNTED ON A 304.8 mmx304.8 mmx12.7 mm ALUMINUM PLATE IN A 40 DEG.C AMBIENT  
SPEED/ TORQUE CURVE SHOWN IS RATED. TYPICAL VALUES ARE WITH IN +/- 10% OF RATING