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

s

ENTER BUS VOLT BELOW(Vdc)

48

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

m

SELECT WINDING FROM DROP DOWN LIST

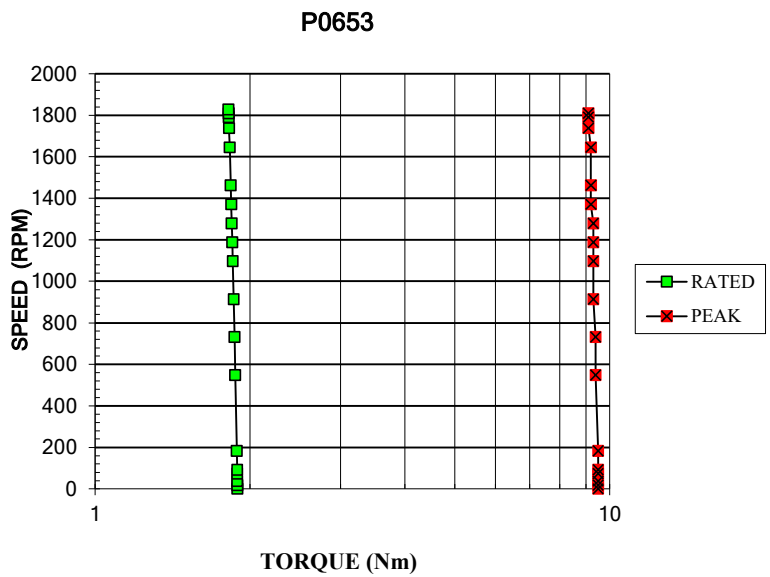
Ke = A0(Kv = 20 Vpk/krpm)

MODE NUMBER

CHECKED:	SD				P0653 A0(Kv = 20 Vpk/krpm)	DRAWN:	SD
all values at 25 deg c unless stated otherwise				STD	CUST	APPROVED:	
TORQUE & CURRENT AT AMBIENT		25 DEG. C		YES		SD	

SPECIFICATIONS

Symbol		Units	NOM	MIN	MAX
Tpk	Torque,peak stall	Nm			9.5
Tc	Torque,continuous stall	Nm	1.89	1.70	2.08
Ktp	Torque sensitivity (L TO L)	Nm/Apeak	0.165	0.15	0.18
Kt	Torque sensitivity (L TO L)	Nm/Arms	0.234	0.21	0.26
Ra	Armature resistance (L TO L)	ohms	0.59	0.50	0.68
La	Armature inductance (L TO L)	millihenry	1.70	1.19	2.21
Ip	Amps at Tpk	Apeak	57.4	51.7	63.1
Isp	Amps at Tc stall	Apeak	13.46	12.11	14.81
Is	Amps at Tc stall	Arms	9.52	8.57	10.47
Kep	Back EMF constant	Vpeak/Krpm	**20.00**	18.00	22.00
Ke	Back EMF constant	Vrms/Krpm	14.14	12.73	15.55
Kep	Back EMF constant	Vpeak/rad/sec	0.191	0.15	0.18
Ke	Back EMF constant	Vrms/rad/sec	0.135	0.12	0.15
Ep	Volts @ Tpk	Vpeak	33.87		
Fi	Viscous friction	Nm/Krpm	0.007		
Tf	Static friction torque	Nm	0.028		
Ec	volts @ Tc	Vpeak	11.912		
Jm	Moment of inertia	Kg-cm2	0.75706		
Tm	Time constant,mechanical	milliseconds	1.22		
Te	Time constant,electrical	milliseconds	2.88		
Rth	Thermal resistance	deg C/watt	1.05		
Tth	Time constant,thermal	minutes	21		
Oa	Max armature temp	deg C			155
Km	Figure of Merit	Nm/(amp-ohm)	0.22		
Nls	Max operating speed	rpmmax			1828
	# of motor poles		16		
Wt	weight	Kg	1.2		



RPM	Trated Nm	Peak Voltage	Peak Current	RMS Current
0	1.892	11.9	13.46	9.52
91	1.889	13.7	13.44	9.50
183	1.886	15.5	13.42	9.49
366	1.880	19.2	13.37	9.45
548	1.874	22.8	13.33	9.43
731	1.867	26.4	13.28	9.39
914	1.860	30.0	13.23	9.36
1097	1.852	33.6	13.17	9.31
1280	1.844	37.2	13.12	9.28
1462	1.836	40.8	13.06	9.23
1645	1.827	44.4	13.00	9.19
1828	1.818	48.0	12.93	9.14

Rated Speed	Rated Torque
1828	1.8
Rated watts	349

MOTOR IS MOUNTED ON A 254 x 254 x 6.35 mm ALUMINUM PLATE

SPEED/ TORQUE CURVE SHOWN IS RATED. TYPICAL VALUES ARE WITH IN +/- 10% OF RATING

OTHER SPECIFICATIONS

SINUSOIDAL DRIVE

REV(Dt)	Description
A (3/19/2007)	Initial released