

SIZE CONSTANTS **

Parameter	Symbol	Unit	VALUE
Maximum Rated Torque	Tr	ozin Nm	2146.336 15.156
Maximum Continuous Stall Torque @Temperature Rise 100.000 °C	Tc	ozin Nm	214.591 1.515
Motor Constant [Sqw. drive]	Km	ozin/sqrt.w Nm/sqrt.w	28.352 0.200
Electrical Time Constant	Te	msec	1.463
Mechanical Time Constant	Tm	msec	0.785
Angular Acceleration (theoretical)		rad/sec ²	341992.892
Thermal Resistance *	TPR	°C/watts	1.260
Maximum Cogging Torque	Tf	ozin Nm	6.300 0.044
Viscous Damping (Infinite Source Impedance)	Fi	ozin/rpm Nm/rpm	1.562E-03 1.103E-05
Hysteresis Drag Torque	Th	ozin Nm	1.892 0.013
Rotor Inertia Frameless	Jm	ozins ² kg.m2	4.453E-03 3.145E-05
Motor Weight Frameless	Wt	oz kg	36.077 1.023
Rotor Inertia Housed	Jm	ozins ² kg.m2	4.522E-03 3.193E-05
Motor Weight Housed	Wt	oz kg	52.717 1.495
No. of Poles		P	6

* TPR Assumes motor mounted to aluminium heat sink
8.000 8.000 0.250 inches (Still air)
** @ Ambient Temperature , 25.000°C

Winding Constants *

Parameter	Symbol	Unit	VALUE
Design Voltage	Vp	volt	50.000
Peak Torque, +/-25%	Tp	ozin Nm	1546.603 10.921
Peak Current, +/-15%	Ip	ampere	59.513
Torque Sensitivity +/-10%	Kt	ozin/amp Nm/Amp	25.988 0.184
No Load Speed	Snl	rpm rad/sec	2410.686 252.446
Voltage Constant +/-10%	Kb	v/Krpm v/rad/sec	19.218 0.184
Terminal Resistance +/-12%	Rm	ohms	0.840
Terminal Inductance +/-30%	Lm	mH	1.229

* Performance @ 25.000°C
RMS TORQUE PERFORMANCE

Design Voltage	Vp	volt	50.000
Continuous Power Output @	Power	watt	142.073
		Horsepower	0.191
Temperature Rise: 100.489°C	Torque	ozin	192.124
COOLING : { Still air}		Nm	1.357
Ambient temperature 25.000°C	Speed	rpm	1000.000
	Iphase	A [peak]	8.320
	I (dc-link)	amperes	4.437
	Efficiency	%	64.047

No. Of Phases	3	
Phase Connection	DELTA	
Lead Wire Gage	20 AWG	
Lead Wire Length	12.000 inch	304.800 mm
No. Of Poles	6	

HOUSED :	MOTOR COOLING : (Still air)
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Motor Length	5.050 inch	128.270 mm
Motor OD	2.300 inch	58.420 mm
Shaft OD	0.375 inch	9.525 mm
Shaft Length (Total)	6.320 inch	160.528 mm
