

BY: D. Marks DATE: 6/11/84

TORQUER CATALOG DATA SHEET

CHECKED BY: CRW DATE: 6-14-84

MODEL QT-12509

CDE- 12444  
 ISSUE A  
 SHEET 1 OF 1

MOTOR SIZE CONSTANTS	UNITS	SYMBOL	VALUE
Peak Torque	lb·ft	T <sub>p</sub>	200
Motor Constant	lb·ft/√watt	K <sub>M</sub>	6.04
Electrical Time Constant	ms	T <sub>E</sub>	3.78
Mechanical Time Constant	ms	T <sub>M</sub>	5.5
Power Input, Stalled, At Peak Torque (25°C)	watts	P <sub>p</sub>	1095
Viscous Damping	Zero Z Source	F <sub>O</sub>	49.5
	Inf. Z Source	F <sub>I</sub>	0.30
Motor Friction Torque	lb·ft	T <sub>F</sub>	1.6
Ripple Torque, Ave. to Peak	percent	T <sub>R</sub>	2
Ripple Cycles Per Rev.	cycles/rev	-	139
Ultimate Temp. Rise Per Watt	deg C	TPR	0.1
Max. Permissible Winding Temperature	deg C	-	155
Rotor Moment of Inertia	lb·ft·s <sup>2</sup>	J <sub>M</sub>	0.27
Max. Power Rate	lb·ft/s <sup>2</sup>	P	1.48x10 <sup>5</sup>
Max. Theoretical Accel.	rad/s <sup>2</sup>	α <sub>M</sub>	740
No Load Speed Theor @ V <sub>p</sub>	rad/s	ω <sub>NL</sub>	4
Motor Weight	lbs	-	67

Slots	-
Bars	-
Poles	-
M.L. Rotor	-
M.L. Stator	-
φ / Pole	-
MLT	-
Rad. Gap	-
No. Brush	-
Type Brush	-
Brush Area	-
Magnet Mat.	-
Rotor O.D.	-
Rotor I.D.	-
Stator O.D.	-
Stator I.D.	-
Overall Width	-
NOTE:	THESE DATA TO BE BLANKED OUT BEFORE GOING TO A CUSTOMER OR REPRESENTATIVE.

FORM ED-728/REV. 5-84

WINDING CONSTANTS	UNITS	TOL	SYMBOL	A	B	C	D	E	F	G	H
DC Resistance (25°C)	ohms	±12.5%	R <sub>M</sub>	4.50	2.86	1.70					
Volts At Pk. Torque (25°C)	volts	nom	V <sub>p</sub>	70.2	56.1	44.4					
Amps At Peak Torque	amps	rated	I <sub>p</sub>	15.6	19.6	26.1					
Torque Sensitivity	lb·ft/amp	±10%	K <sub>T</sub>	12.8	10.2	7.68					
Back EMF	V per rad/s	±10%	K <sub>B</sub>	17.4	13.9	10.4					
Inductance	mH	±30%	L <sub>M</sub>	17	11	6.1					

NO.	ECN. NO.	DATE	APP'D	NO.	ECN. NO.	DATE	APP'D	NO.	ECN. NO.	DATE	APP'D
A	64464	5/9/94	REH								