

Grainger 3XE22D

TYPICAL MOTOR PERFORMANCE DATA

M2005 OPERATED ON 90 VOLTS D.C.

MOTOR DATA

<u>TORQUE</u>	<u>SPEED</u>	<u>CURRENT</u>	<u>HP</u>	<u>EFF</u>
0.0	2066	.08	.000	.00
5.0	2000	.17	.010	49.50
10.0	1934	.25	.019	62.73
15.0	1868	.34	.028	67.59
20.0	1802	.43	.036	69.20
25.0	1737	.51	.043	69.21
30.0	1671	.60	.050	68.33
35.0	1605	.69	.056	66.88
40.0	1539	.78	.061	65.06

21.0 1789 .44 .037 69.30

(PRIMARY LOAD POINT)

21.5 1782 .45 .038 69.33

(CONTINUOUS DUTY RATING - FORMFACTOR = 1.30)

Stall Torque = 156.91 In-Oz (For Reference Only)

Stall Current = 2.82 Amps (For Reference Only)

MOTOR DESIGN DATA and CONSTANTS

WINDING - T/C :	Ke = 42.3545 V/Krpm	+/- 10.0 %
C/S :	Kt = 57.3056 In-Oz/Amp	+/- 10.0 %
GA :	Ra = 31.3270 Ohms	+/- 7.5 %
BARS :	Rt = 31.9536 Ohms	+/- 12.5 %
FILL :		
	Friction Torque (Nom) =	4.5000 In-Oz
	Friction Torque (Max) =	7.0000 In-Oz
	Ja (Inertia) =	.0081 In-Oz-Sec ²
	La (Inductance) =	85.1773 MHenry
	Te (Elec Time Const) =	2.6657 MSec
	Tm (Mech Time Const) =	11.2084 MSec
	Theoretical Accel at Stall =	19300 Rads/Sec ²
	Bandwidth =	14.20 Hz

ENGINEERING APPROVAL :

DATE :