

Motor Test Report- Customer Copy

Data Date: 1/12/2015

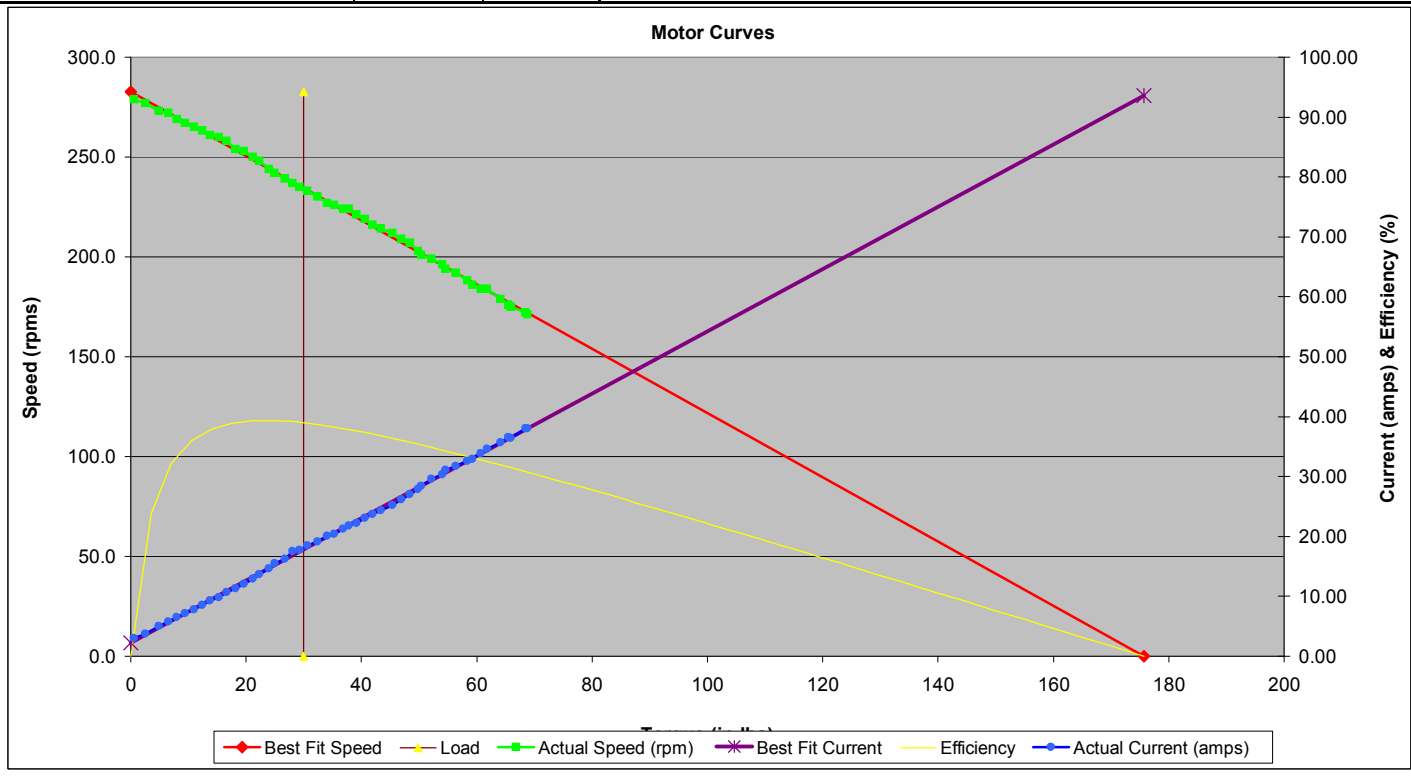
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Motor Constant Summary Table

Motor Test Voltage	12 Vdc	
Torque Constant: Kt	30.766	In.Oz./A
Voltage Constant: Ke	22.750	Volts/KRPM
Back EMF Constant: Kb	0.2172	Volts/rad/s
Polar Moment of Inertia: Jm	0.0000	In.Oz.s^2
Mechanical Time Constant: Tm	0.0000	milliseconds
Electrical Time Constant: Te	#DIV/0!	milliseconds
Armature Resistance: Ra	0	ohms
Terminal Resistance: Rt	0	ohms
Terminal Inductance: La	0	mH

Estimated Operating Data Using Constants

At Load Torque of	30	in-lbs
Load Speed	234.5	rpm
Load Current	17.80	amps
Load Power Out	83.2	watts
Load Horsepower	0.11	hp
Efficiency at Load	38.9%	0
Stall Torque	176	in-lbs
Stall Current	93.5	amps
Peak Horsepower	0.20	hp
No-Load Speed	282.8	rpm
No-Load Current	2.20	amps



Notes:

Dyno Test Points

Data Date

1/12/2015

	Actual Torque (in-lb):	Actual Speed (rpm)	Actual Current (amps)	Power Out (watts)	Hp	Efficiency (%)
1	0.58	279.00	2.95	1.90	0.003	5.4%
2	2.56	277.00	3.78	8.38	0.011	18.5%
3	4.90	273.00	4.97	15.80	0.021	26.5%
4	6.55	272.00	5.79	21.04	0.028	30.3%
5	7.98	269.00	6.53	25.38	0.034	32.4%
6	9.47	267.00	7.20	29.87	0.040	34.6%
7	11.01	265.00	7.84	34.49	0.046	36.6%
8	12.42	263.00	8.56	38.61	0.052	37.6%
9	13.78	261.00	9.27	42.51	0.057	38.2%
10	15.28	260.00	9.84	46.96	0.063	39.8%
11	16.63	258.00	10.63	50.71	0.068	39.7%
12	18.20	254.00	11.31	54.64	0.073	40.3%
13	19.68	253.00	12.11	58.85	0.079	40.5%
14	21.15	250.00	12.94	62.50	0.084	40.2%
15	22.33	248.00	13.63	65.46	0.088	40.0%
16	23.97	244.00	14.61	69.13	0.093	39.4%
17	24.98	242.00	15.45	71.45	0.096	38.5%
18	26.78	239.00	16.24	75.65	0.101	38.8%
19	28.05	237.00	17.49	78.58	0.105	37.4%
20	29.35	235.00	17.70	81.53	0.109	38.4%
21	30.63	233.00	18.47	84.36	0.113	38.1%
22	32.46	230.00	19.17	88.25	0.118	38.4%
23	34.09	227.00	20.08	91.47	0.123	38.0%
24	35.34	226.00	20.42	94.40	0.127	38.5%
25	36.80	224.00	21.30	97.43	0.131	38.1%
26	37.82	224.00	21.78	100.14	0.134	38.3%
27	39.23	221.00	22.19	102.48	0.137	38.5%
28	40.66	219.00	23.12	105.25	0.141	37.9%
29	41.94	216.00	23.68	107.08	0.144	37.7%
30	43.45	214.00	24.39	109.91	0.147	37.6%
31	45.36	212.00	25.18	113.66	0.152	37.6%
32	46.92	209.00	26.17	115.91	0.155	36.9%
33	48.41	207.00	27.03	118.45	0.159	36.5%
34	49.88	203.00	27.84	119.69	0.161	35.8%
35	50.41	201.00	28.40	119.77	0.161	35.1%
36	52.17	199.00	29.63	122.71	0.165	34.5%
37	54.03	196.00	30.31	125.17	0.168	34.4%
38	54.56	194.00	31.06	125.11	0.168	33.6%
39	56.41	192.00	31.78	128.02	0.172	33.6%
40	58.37	188.00	32.54	129.71	0.174	33.2%
41	59.25	186.00	32.90	130.26	0.175	33.0%
42	60.70	184.00	33.88	132.02	0.177	32.5%
43	61.79	184.00	34.58	134.39	0.180	32.4%
44	64.12	179.00	35.69	135.66	0.182	31.7%
45	65.50	176.00	36.58	136.26	0.183	31.0%
46	65.90	175.00	36.44	136.31	0.183	31.2%
47	68.43	172.00	38.04	139.12	0.187	30.5%
48	68.77	171.00	38.07	139.00	0.186	30.4%
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