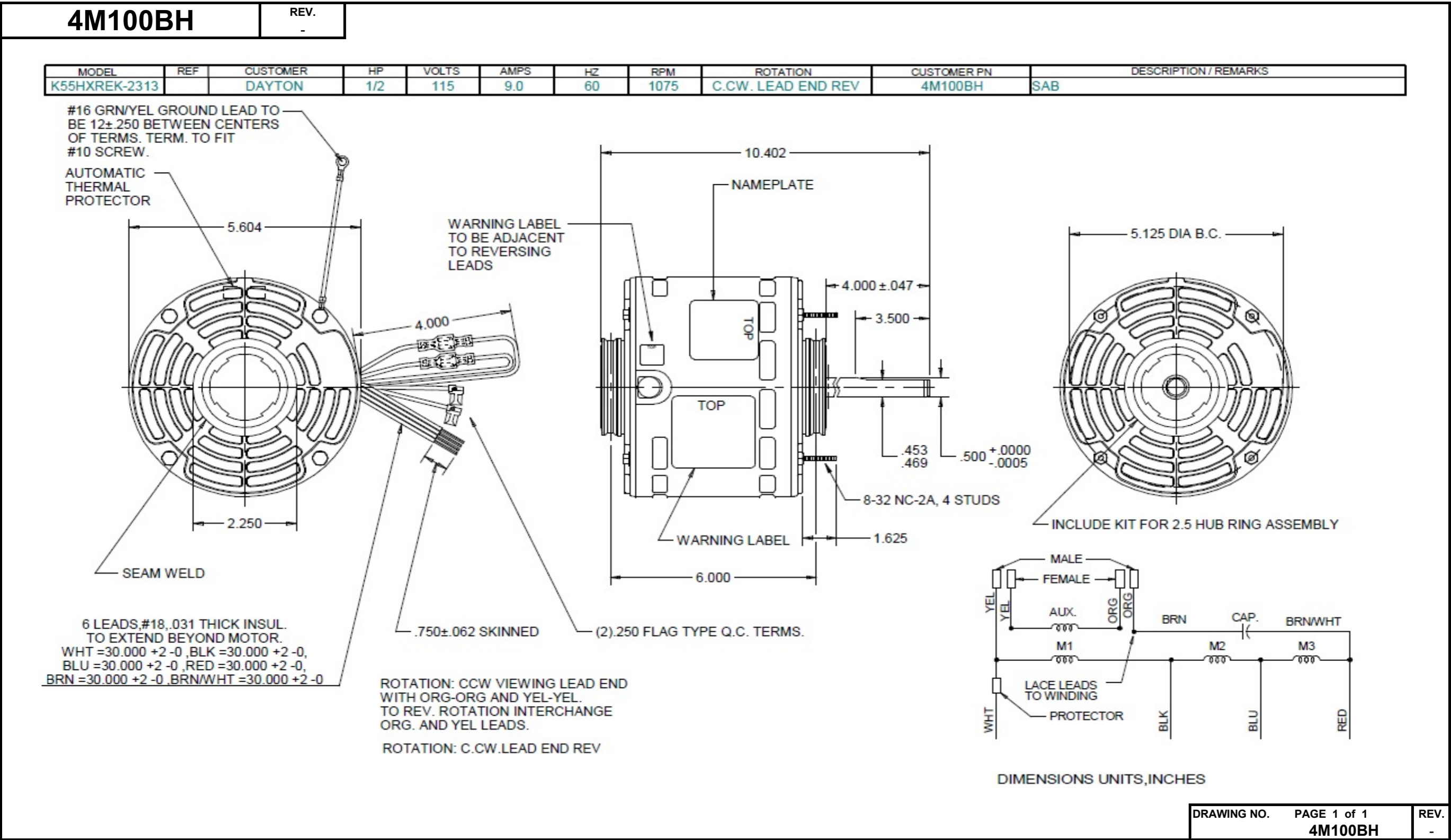


Dimensional Drawing



Performance Data



4M100BH

REV.

-

SHADED-POLE & PSC MOTOR PERFORMANCE

HP:	1/2							
Poles:	6							
Ambient (°C):	40							
Altitude (FASL):	1000							
No. of Speeds:	3							
HIGH SPEED								
Volts:	115	115	208	230	277	460	100	200
HZ:	60	60	60	60	60	60	50	50
Service Factor:	1.0							
Efficiency:	@ Rated Load	59.1						
Power Factor:	@ Rated Load	78.5						
Amps:	@ No Load	6.3						
	@ Rated Load	10.8						
	@ Locked Rotor	22						
RPM:	@ Rated Load	1075						
Torques: Oz.Ft.	Breakdown	66.9						
	Locked Rotor	6.5						
	Pull-Up							
	Rated Load	60.4						
	Service Factor	1.0						
Watts:	Rated Load	975						
Temperature Rise:	@ Rated Load							
Thermal Protector:	Trip Temp (°C)	140~150						
Winding Material:	Start (Auxiliary)	Copper						
	Run (Main)	Copper						
Capacitor:	Run (MFD / Volts)	5.0 MFD 370V						
	No. of Run Capacitors	1						

MEDIUM-HIGH SPEED

HP:	1/2							
Volts:	115	115	208	230	277	460	100	200
HZ:	60	60	60	60	60	60	50	50
Efficiency:	@ Rated Load							
Power Factor:	@ Rated Load							
Amps:	@ No Load	3.3						
	@ Rated Load							
	@ Locked Rotor							
Torques: Oz.Ft.	Breakdown	34.4						
	Locked Rotor	2.2						
	Pull-Up							
	Rated Load							
Watts:	Rated Load							
Temperature Rise:	@ Rated Load							

DRAWING NO. PAGE 1 REV.
4M100BH -

Dayton Electric Mfg. Co. Lake Forest, IL 60045 USA

Performance Data



4M100BH

REV.

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SHADED-POLE & PSC MOTOR PERFORMANCE

MEDIUM-LOW SPEED

HP:	1/2							
Volts:	115	115	208	230	277	460	100	200
HZ:	60	60	60	60	60	60	50	50
Efficiency:	@ Rated Load							
Power Factor:	@ Rated Load							
Amps:	@ No Load							
	@ Rated Load							
Torques: Oz.Ft.	Breakdown							
	Locked Rotor							
	Pull-Up							
	Rated Load							
Watts:	Rated Load							
Temperature Rise:	@ Rated Load							
Watts:	Rated Load							
Temperature Rise:	@ Rated Load							
Thermal Protector:	Trip Temp (°C)							
Winding Material:	Start (Auxiliary)							
	Run (Main)							

LOW SPEED

HP:	1/2							
Volts:	115	120	208	230	277	460	100	200
HZ:	60	60	60	60	60	60	50	50
Efficiency:	@ Rated Load							
Power Factor:	@ Rated Load							
Amps:	@ No Load	2.6						
	@ Rated Load							
Torques: Oz.Ft.	Breakdown	26.3						
	Locked Rotor	1.5						
	Pull-Up							
	Rated Load							
Watts:	Rated Load							
Temperature Rise:	@ Rated Load							

Notes:

DRAWING NO. PAGE 1 REV.
4M100BH -

Dayton Electric Mfg. Co. Lake Forest, IL 60045 USA

Performance Data



4M100BH

REV.

-

Dayton Manufacturing Company

Motor Description

Model: 4M100BG
Motor ID: 5490
Poles: 6
Volts: 115
Frequency: 60
HP: 1/2
Speed: 1075
Phase: 1
Protector:

Test Conditions

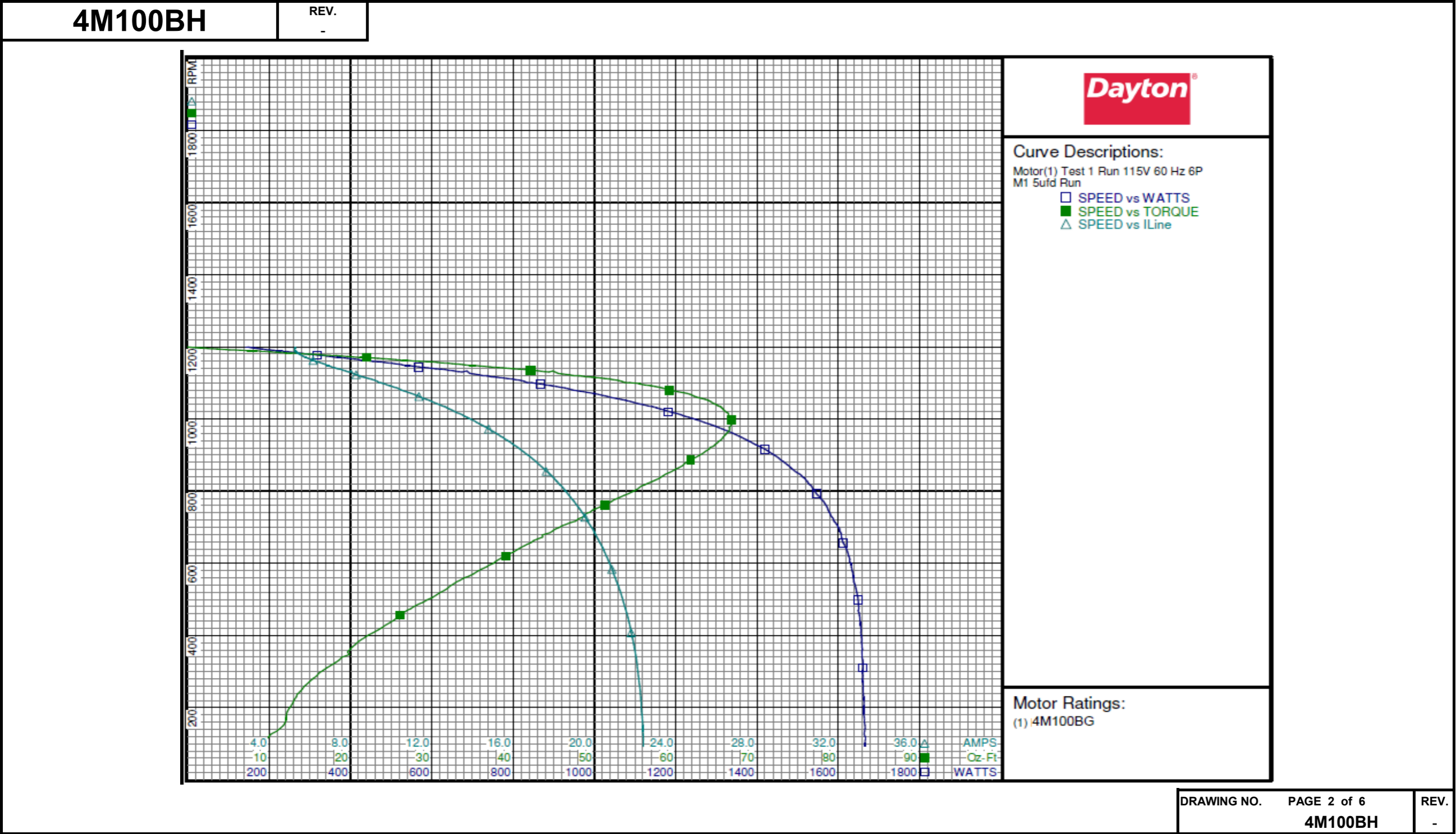
Test Type: Run
Test Number: 1
Poles: 6
Volts: 115
Hz: 60
Rotation:
Special Cond: M1
Speed Conn:
TestBoard: Amtps Performance Fixture #3
Run Cap: 5
Start Cap: 0ufd
Environment:
Tested: 8/23/2000 6:11:40 PM
Tested By: Crocker, Jason
Gear Ratio: 1:1
Bearing Friction: -0.45 Oz-Ft
Windage Torque: -1.08 Oz-Ft

Special Points	Vline (V)	Vaux (V)	Vcap (V)	Iline (A)	Watts	RPM	Tq (Oz-ft)	HP	Eff (%)	PF (%)
	115.0	385.9	428.6	5.29	143.5	1199	0.00	0.000	0.0	23.6
	115.0	380.6	421.6	5.26	196.3	1192	5.11	0.072	27.5	32.4
	115.0	374.6	413.5	5.35	249.0	1186	10.30	0.145	43.5	40.5
	115.0	367.7	404.4	5.54	311.3	1178	16.21	0.227	54.5	48.9
	115.0	360.3	394.3	5.87	384.8	1169	22.71	0.316	61.2	57.0
	115.0	350.6	382.5	6.35	465.9	1159	29.34	0.405	64.8	63.8
	115.0	340.2	370.1	6.92	545.8	1148	35.37	0.483	66.1	68.6
0.5 HP	115.0	338.2	367.8	7.03	561.6	1145	36.68	0.500	66.4	69.5
	115.0	327.0	354.9	7.65	642.4	1135	42.19	0.570	66.2	73.0
	115.0	312.9	339.1	8.47	735.6	1119	48.15	0.642	65.1	75.6
	115.0	296.4	321.3	9.41	835.5	1100	53.88	0.706	63.0	77.2
1075 RPM	115.0	279.5	302.7	10.41	938.2	1083	58.80	0.758	60.3	78.4
	115.0	273.4	296.1	10.77	975.1	1075	60.36	0.772	59.1	78.8
	115.0	260.5	282.8	11.50	1042.2	1059	62.76	0.791	56.6	78.8
	115.0	240.3	262.4	12.63	1142.3	1034	65.53	0.807	52.7	78.6
	115.0	220.6	243.2	13.72	1231.8	1005	66.65	0.797	48.3	78.0
BDT OZ-FT	115.0	216.2	239.2	13.97	1251.2	997	66.87	0.794	47.3	77.9
	115.0	200.4	224.6	14.81	1315.3	972	66.67	0.771	43.7	77.2
	115.0	181.1	208.0	15.82	1383.3	937	65.28	0.728	39.3	76.0
	115.0	163.1	193.6	16.74	1443.3	900	62.96	0.674	34.9	75.0
	115.0	147.2	182.4	17.55	1488.4	860	59.96	0.614	30.8	73.7
	115.0	133.4	173.5	18.24	1526.9	821	56.56	0.553	27.0	72.8
	115.0	120.5	166.6	18.88	1557.3	779	52.78	0.490	23.4	71.7
	115.0	109.5	161.8	19.44	1579.6	738	49.03	0.431	20.3	70.7
	115.0	100.1	158.7	19.92	1603.2	695	45.23	0.374	17.4	70.0
	115.0	91.8	157.1	20.36	1616.1	648	41.35	0.319	14.7	69.0
	115.0	84.4	156.1	20.75	1631.9	600	37.60	0.269	12.3	68.4
	115.0	78.2	156.6	21.11	1638.4	547	33.01	0.215	9.8	67.5
	115.0	72.3	157.1	21.43	1649.8	492	28.94	0.169	7.7	66.9
	115.0	67.9	158.9	21.72	1654.1	435	24.86	0.129	5.8	66.2
	115.0	63.8	160.8	21.94	1658.1	375	20.62	0.092	4.1	65.7
	115.0	61.7	163.2	22.12	1660.6	310	17.14	0.063	2.8	65.3
	115.0	61.0	166.6	22.27	1661.2	243	13.79	0.040	1.8	64.9
	115.0	61.8	170.0	22.36	1664.0	173	12.09	0.025	1.1	64.7
	115.0	63.3	173.3	22.42	1665.8	102	9.38	0.011	0.5	64.6

DRAWING NO.	PAGE 1 of 6	REV.
	4M100BH	-

Dayton Electric Mfg. Co. Lake Forest, IL 60045 USA

Performance Data



Dayton Electric Mfg. Co. Lake Forest, IL 60045 USA

Performance Data



4M100BH

REV.

-

Dayton Manufacturing Company

Motor Description

Model: 4M100BG
Motor ID: 5490
Poles: 6
Volts: 115
Frequency: 60
HP: 1/2
Speed: 1075
Phase: 1
Protector:

Test Conditions

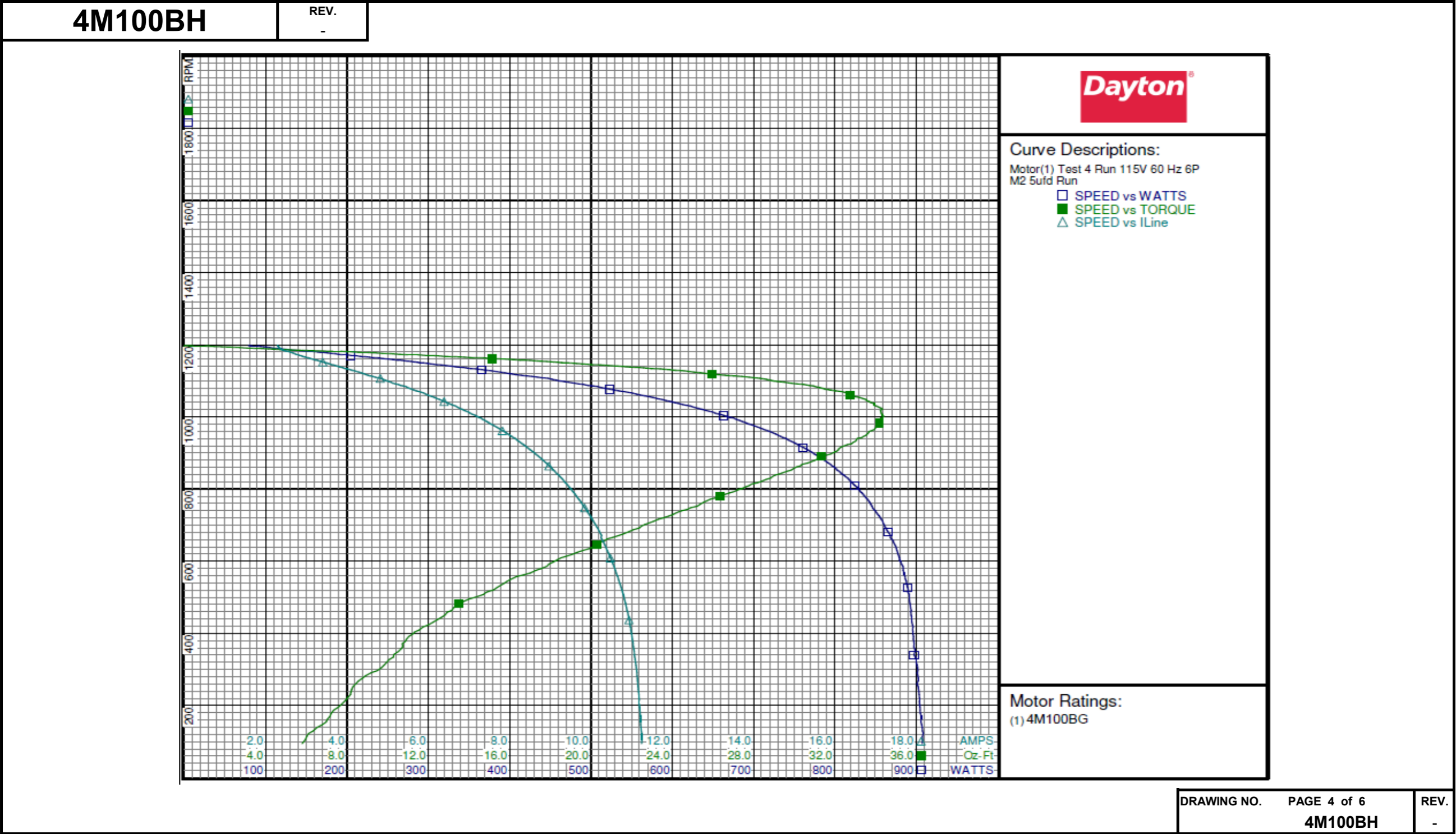
Test Type: Run
Test Number: 4
Poles: 6
Volts: 115
Hz: 60
Rotation:
Special Cond: M2
Speed Conn:
TestBoard: Aamps Performance Fixture #3
Run Cap: 5
Start Cap: 0µfd
Environment:
Tested: 8/23/2000 6:17:29 PM
Tested By: Crocker, Jason
Gear Ratio: 1:1
Bearing Friction: -0.36 Oz-Ft
Windage Torque: -0.95 Oz-Ft

Special Points	Vline (V)	Vaux (V)	Vcap (V)	Iline (A)	Watts	RPM	Tq (Oz-ft)	HP	Eff (%)	PF (%)
	115.0	301.5	341.8	2.293	79.2	1197	0.00	0.000	0.0	30.0
	115.0	293.0	330.4	2.358	114.1	1189	3.59	0.051	33.2	42.1
	115.0	284.0	316.9	2.573	160.5	1181	8.05	0.113	52.6	54.2
	115.0	278.1	308.0	2.805	200.0	1172	11.46	0.160	59.6	62.0
	115.0	268.9	295.7	3.142	250.5	1160	15.69	0.217	64.5	69.3
	115.0	258.3	283.1	3.538	299.4	1148	19.28	0.263	65.7	73.6
	115.0	247.7	269.9	3.957	352.5	1134	22.99	0.310	65.7	77.5
	115.0	235.7	256.6	4.430	403.1	1118	25.97	0.346	64.0	79.1
	115.0	222.8	242.3	4.938	457.2	1102	28.82	0.378	61.7	80.5
	115.0	210.4	228.6	5.444	507.7	1084	31.01	0.400	58.8	81.1
1075 RPM	115.0	205.7	223.5	5.630	526.9	1075	31.70	0.406	57.4	81.4
	115.0	197.8	215.3	5.941	556.2	1063	32.67	0.413	55.4	81.4
	115.0	184.6	201.9	6.447	602.6	1040	33.78	0.418	51.7	81.3
	115.0	171.7	189.6	6.936	645.3	1015	34.26	0.414	47.9	80.9
BDT OZ-FT	115.0	164.7	183.4	7.200	667.2	1001	34.40	0.410	45.8	80.6
	115.0	159.5	178.6	7.391	682.9	990	34.29	0.404	44.1	80.3
	115.0	147.7	168.5	7.824	717.1	962	33.80	0.387	40.3	79.7
	115.0	136.4	159.9	8.222	746.0	932	33.02	0.366	36.6	78.9
	115.0	125.6	152.3	8.596	772.1	902	31.96	0.343	33.1	78.1
	115.0	115.6	145.9	8.935	794.5	868	30.39	0.314	29.5	77.3
	115.0	106.4	141.0	9.242	813.3	834	28.92	0.287	26.3	76.5
	115.0	97.8	137.1	9.526	829.9	797	27.24	0.259	23.2	75.8
	115.0	89.2	133.9	9.793	844.3	757	25.35	0.229	20.2	75.0
	115.0	81.6	131.9	10.037	857.2	716	23.31	0.199	17.3	74.3
	115.0	74.5	130.6	10.262	868.6	671	21.37	0.171	14.6	73.6
	115.0	68.1	130.2	10.424	877.1	624	19.31	0.144	12.2	73.2
	115.0	61.8	130.1	10.602	883.8	574	17.29	0.118	10.0	72.5
	115.0	56.0	130.0	10.761	890.3	521	15.23	0.094	7.9	71.9
	115.0	50.8	130.5	10.888	894.1	463	13.15	0.072	6.0	71.4
	115.0	44.9	131.6	10.994	896.3	403	11.33	0.054	4.5	70.9
	115.0	41.1	134.0	11.072	897.3	341	10.30	0.042	3.5	70.5
	115.0	39.3	137.4	11.141	902.5	275	8.75	0.029	2.4	70.4
	115.0	37.9	139.3	11.191	904.2	204	7.76	0.019	1.6	70.3
	115.0	37.1	141.5	11.240	907.7	130	6.34	0.010	0.8	70.2

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4M100BH -

Dayton Electric Mfg. Co. Lake Forest, IL 60045 USA

Performance Data



Performance Data



4M100BH

REV.
-

Dayton Manufacturing Company

Motor Description

Model: 4M100BG
Motor ID: 5490
Poles: 6
Volts: 115
Frequency: 60
HP: 1/2
Speed: 1075
Phase: 1
Protector:

Test Conditions

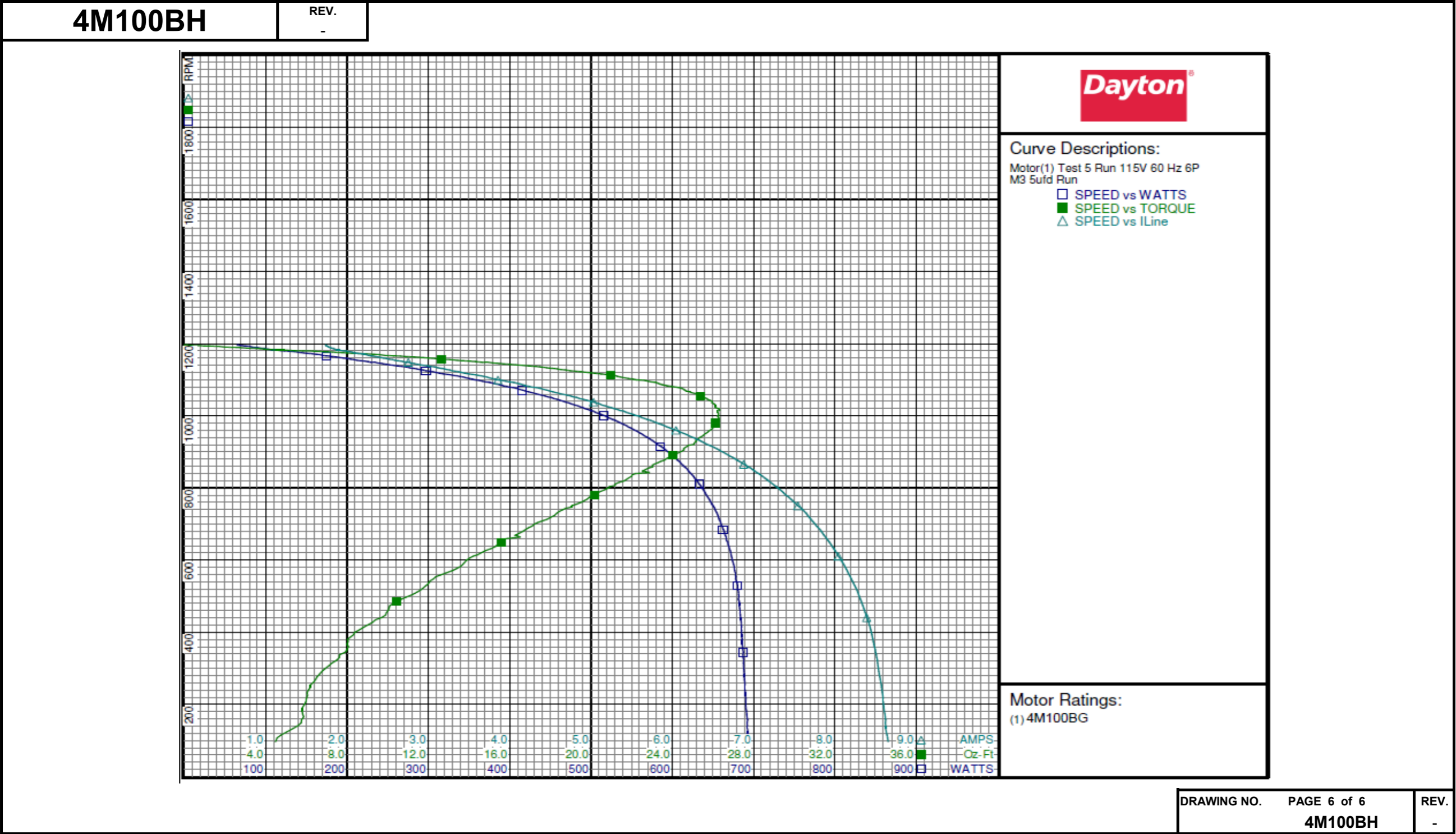
Test Type: Run
Test Number: 5
Poles: 6
Volts: 115
Hz: 60
Rotation:
Special Cond: M3
Speed Conn:
TestBoard: Amps Performance Fixture #3
Run Cap: 5
Start Cap: 0µfd
Environment:
Tested: 8/23/2000 6:22:11 PM
Tested By: Crocker, Jason
Gear Ratio: 1:1
Bearing Friction: -0.58 Oz-Ft
Windage Torque: -1.01 Oz-Ft

Special Points	Vline (V)	Vaux (V)	Vcap (V)	Iline (A)	Watts	RPM	Tq (Oz-ft)	HP	Eff (%)	PF (%)
	115.0	267.1	306.1	1.734	64.8	1196	0.00	0.000	0.0	32.5
	115.0	258.8	293.9	1.810	93.7	1187	3.10	0.044	34.9	45.0
	115.0	251.7	280.9	2.037	135.6	1178	6.97	0.098	53.8	57.9
	115.0	244.7	271.3	2.265	170.2	1167	9.89	0.137	60.2	65.3
	115.0	236.2	259.7	2.559	208.4	1156	13.05	0.180	64.3	70.8
	115.0	227.6	248.6	2.859	247.3	1143	15.95	0.217	65.5	75.2
	115.0	217.0	235.8	3.230	289.7	1128	18.53	0.249	64.1	78.0
	115.0	206.8	223.6	3.599	329.3	1112	20.99	0.278	63.0	79.6
	115.0	196.8	212.3	3.953	366.4	1096	22.82	0.298	60.6	80.6
	115.0	186.3	200.9	4.326	404.3	1078	24.33	0.312	57.6	81.3
1075 RPM	115.0	184.5	198.9	4.390	409.8	1075	24.50	0.314	57.1	81.2
	115.0	175.2	189.2	4.711	439.8	1057	25.37	0.319	54.1	81.2
	115.0	164.4	178.7	5.072	472.8	1035	25.96	0.320	50.5	81.1
BDT OZ-FT	115.0	155.4	170.0	5.361	499.7	1014	26.33	0.318	47.5	81.1
	115.0	154.2	168.9	5.398	502.8	1013	26.23	0.316	46.9	81.0
	115.0	143.6	159.7	5.737	530.1	987	26.17	0.308	43.3	80.3
	115.0	133.9	151.5	6.048	554.2	960	25.86	0.295	39.8	79.7
	115.0	124.5	144.7	6.332	575.0	932	25.15	0.279	36.2	79.0
	115.0	115.8	138.6	6.604	594.1	901	24.45	0.262	32.9	78.2
	115.0	107.0	133.3	6.854	610.2	869	23.28	0.241	29.5	77.4
	115.0	98.9	129.3	7.088	624.6	836	22.03	0.219	26.2	76.6
	115.0	91.2	126.1	7.303	636.6	799	20.87	0.199	23.3	75.8
	115.0	84.0	123.6	7.503	647.6	760	19.50	0.176	20.3	75.0
	115.0	77.0	122.0	7.686	656.9	718	18.03	0.154	17.5	74.3
	115.0	70.8	121.3	7.851	664.5	674	16.47	0.132	14.8	73.6
	115.0	65.0	121.1	8.004	671.4	626	14.82	0.110	12.3	72.9
	115.0	59.2	121.0	8.138	676.5	576	13.39	0.092	10.1	72.3
	115.0	53.8	121.3	8.255	680.3	524	11.79	0.073	8.1	71.7
	115.0	48.5	121.6	8.354	682.8	467	10.07	0.056	6.1	71.1
	115.0	43.4	122.8	8.441	685.2	406	8.61	0.042	4.5	70.6
	115.0	39.3	124.6	8.502	687.4	344	7.91	0.032	3.5	70.3
	115.0	36.8	126.6	8.553	688.4	276	6.53	0.021	2.3	70.0
	115.0	34.3	128.7	8.596	690.4	207	5.98	0.015	1.6	69.8
	115.0	33.0	131.3	8.626	692.5	132	5.34	0.008	0.9	69.8

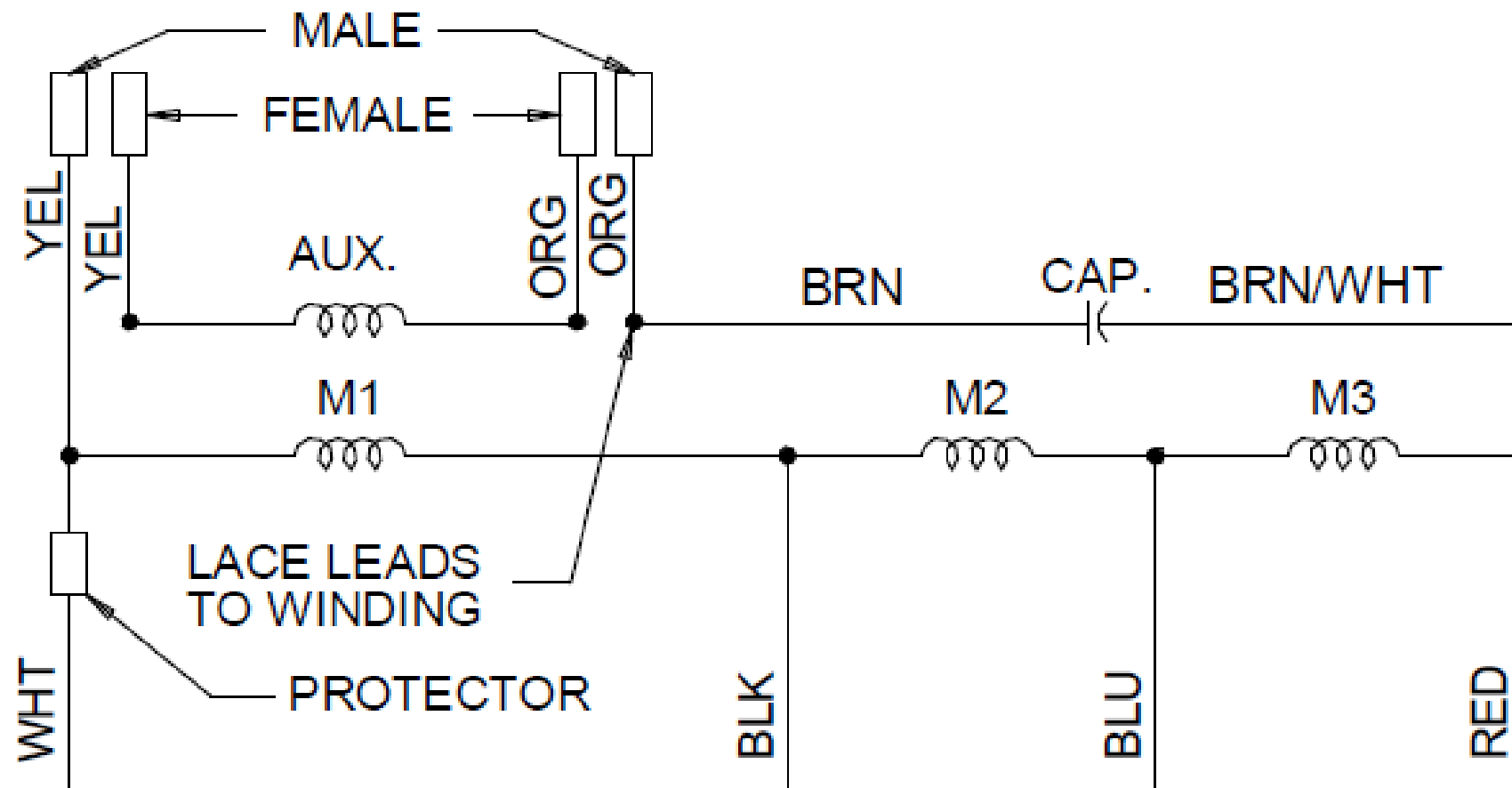
DRAWING NO. PAGE 5 of 6 REV.
4M100BH -

Dayton Electric Mfg. Co. Lake Forest, IL 60045 USA

Performance Data



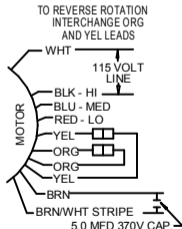
Wiring Diagram



ROTATION: CCW VIEWING LEAD END
WITH ORG-ORG AND YEL-YEL.
TO REV. ROTATION INTERCHANGE
ORG. AND YEL LEADS.

DRAWING NO.	PAGE 1 of 1	REV.
	4M100BH	-

Dayton Electric Mfg. Co. Lake Forest, IL 60045 USA

Dayton[®]**DIRECT DRIVE
BLOWER MOTOR****HP:** 1/2**VOLTS:** 115**AMPS:** 9.0**RPM:** 1075 / 3SPD**DUTY:** CONT**SF:** 1.0**KVA CODE:****ENCL:** OAO**THERMALLY PROTECTED:** AUTO**MFG. NO.** **PROT. CODE :** 7A010**AVG.F.L
EFF.****MTR REF:** K55HXREK-2313**BAR CODE****Part
No** 4M100BH**PH:** 1**HZ:** 60**FR:** 48YZ**INS CL:** B**AMB:** 40 °C**SFA:****Disconnect Power Before Making Any
Electrical Connections or Changes**

E37403



258501

Mfd for Dayton Electric Mfg. Co., Lake Forest, IL 60045 USA

 Made In China