

Dimensional Drawing

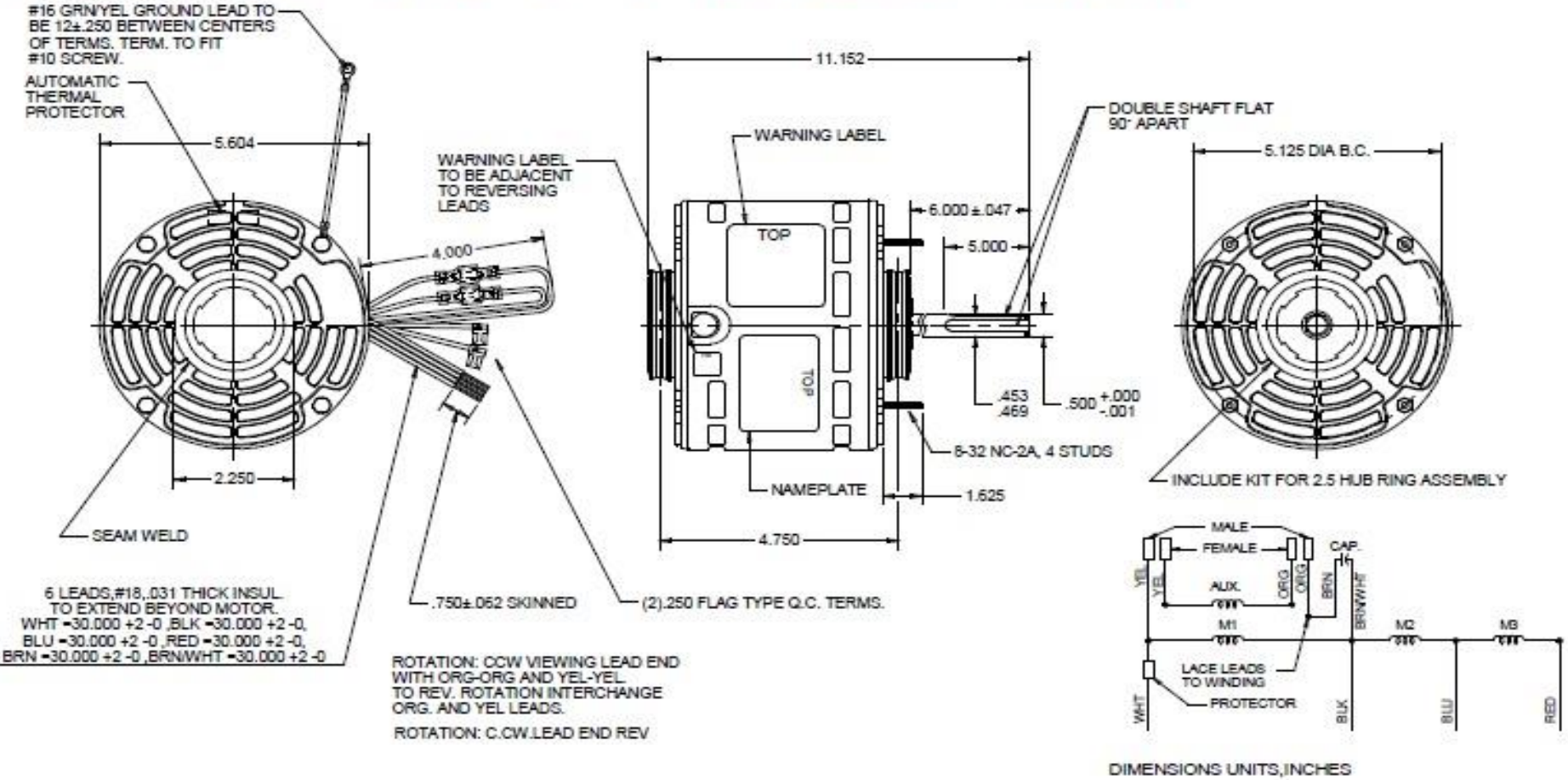


6GC93BH

REV.

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MODEL	REF	CUSTOMER	HP	VOLTS	AMPS	HZ	RPM	ROTATION	CUSTOMER PN	DESCRIPTION / REMARKS
K55HXJYY-2358	042358	DAYTON	1/6	277	0.9	60	1075	C.C.W. LEAD END REV	6GC93BH	SAB



6GC93BH

REV.

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SHADED-POLE & PSC MOTOR PERFORMANCE

HP:	1/6							
Poles:	6							
Ambient (°C):	40							
Altitude (FASL):	1000							
No. of Speeds:	3							
HIGH SPEED								
Volts:		115	208	230	277	460	100	200
HZ:		60	60	60	60	60	50	50
Service Factor:					1.0			
Efficiency:	@ Rated Load				54.7			
Power Factor:	@ Rated Load				93.5			
Amps:	@ No Load				0.46			
	@ Rated Load				0.9			
	@ Locked Rotor				1.7			
RPM:	@ Rated Load				1075			
Torques: Oz.Ft. / Lb.In. (Circle One)	Breakdown				16.6			
	Locked Rotor				5.1			
	Pull-Up							
	Rated Load				13.3			
	Service Factor				1			
Watts:	Rated Load				233			
Temperature Rise:	@ Rated Load							
Thermal Protector:	Trip Temp (°C)				140~150			
Winding Material:	Start (Auxiliary)				COPPER			
	Run (Main)				AL+COPPER			
Capacitor:	Run (MFD / Volts)	4.0MFD 370V						
	No. of Run Capacitors	1						

MEDIUM-HIGH SPEED

HP:								
Volts:		120	208	230	277	460	100	200
HZ:		60	60	60	60	60	50	50
Efficiency:	@ Rated Load							
Power Factor:	@ Rated Load							
Amps:	@ No Load				0.27			
	@ Rated Load							
	@ Locked Rotor				1.1			
Torques: Oz.Ft. / Lb.In. (Circle One)	Breakdown				10.5			
	Locked Rotor				2.7			
	Pull-Up							
	Rated Load							
Watts:	Rated Load							
Temperature Rise:	@ Rated Load							

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6GC93BH

REV.

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SHADED-POLE & PSC MOTOR PERFORMANCE

MEDIUM-LOW SPEED

HP:								
Volts:		120	208	230	277	460	100	200
HZ:		60	60	60	60	60	50	50
Efficiency:	@ Rated Load							
Power Factor:	@ Rated Load							
Amps:	@ No Load							
	@ Rated Load							
Torques: Oz.Ft. / Lb.In. (Circle One)	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:								
Volts:		120	208	230	277	460	100	200
HZ:		60	60	60	60	60	50	50
Efficiency:	@ Rated Load							
Power Factor:	@ Rated Load							
Amps:	@ No Load				0.19			
	@ Rated Load							
Torques: Oz.Ft. / Lb.In. (Circle One)	Breakdown				7.2			
	Locked Rotor				1.7			
	Pull-Up							
	Rated Load							
Watts:	Rated Load							
Temperature Rise:	@ Rated Load							

Notes:

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

Performance Data



6GC93BH

REV.

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Dayton Manufacturing Company

Filtered

Motor Description

Model: 6GC93BH
Motor ID: 2 of 3
Poles: 6
Volts: 277
Frequency: 60
HP: 1/6
Speed: 1075
Phase: 1
Protector: 7AM036-A5

Test Conditions

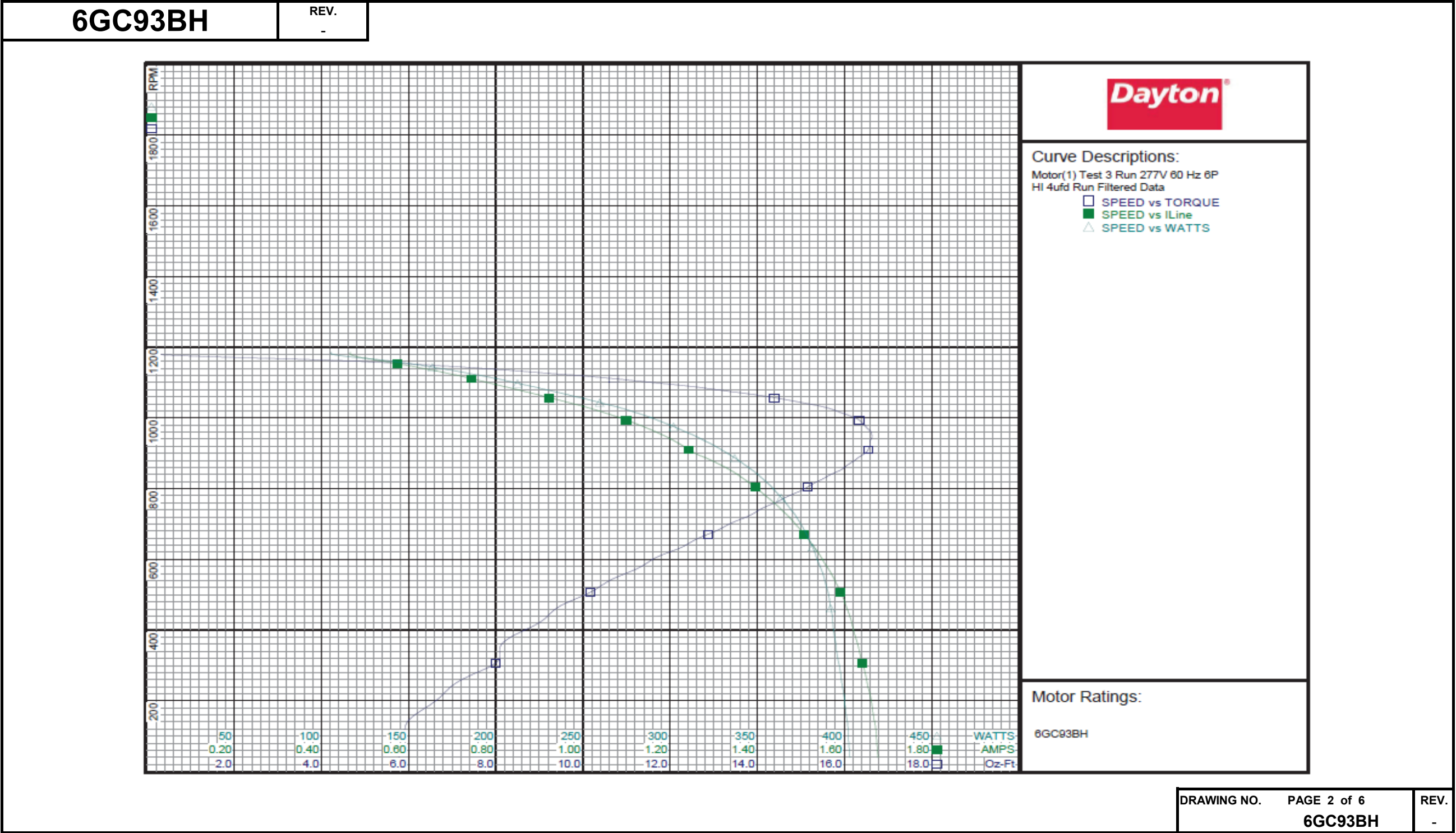
Test Type: Run
Test Number: 3
Poles: 6
Volts: 277
Hz: 60
Rotation:
Special Cond:
Speed Conn: HI
TestBoard: NMQC Plotter Fixture #1
Run Cap: 4
Start Cap: 0µfd
Environment:
Tested: 2/3/2016 4:20:51 PM
Tested By: Liu, Bingmin
Gear Ratio: 1:1
Bearing Friction: -0.69 Oz-Ft
Windage Torque: -1.04 Oz-Ft

Special Points	Vline (V)	Vaux (V)	Vcap (V)	Iline (A)	Watts	RPM	Tq (Oz-ft)	HP	Eff (%)	PF (%)
	277.0	285.7	450.8	0.466	105.6	1185	0.000	0.000	0.0	0.0
	277.0	285.5	450.0	0.466	106.5	1180	0.229	0.003	2.4	0.0
	277.0	279.4	437.4	0.515	131.0	1166	3.546	0.049	27.5	0.0
	277.0	273.7	425.8	0.580	153.1	1152	6.144	0.084	41.6	0.0
	277.0	268.8	416.8	0.643	171.0	1138	7.965	0.108	47.2	0.0
	277.0	262.9	408.5	0.701	187.6	1123	9.520	0.127	50.6	0.0
	277.0	254.9	399.4	0.757	204.0	1107	10.999	0.145	53.1	0.0
0.16 HP	277.0	245.8	389.1	0.810	218.6	1091	12.317	0.160	54.6	0.0
	277.0	244.5	387.5	0.819	220.8	1089	12.495	0.162	54.7	0.0
1075 RPM	277.0	237.9	380.0	0.865	232.9	1075	13.341	0.171	54.7	0.0
	277.0	235.8	377.7	0.880	236.9	1070	13.639	0.174	54.7	0.0
	277.0	226.7	368.7	0.942	253.1	1051	14.661	0.184	54.1	0.0
	277.0	216.5	359.3	1.005	269.5	1031	15.517	0.190	52.7	0.0
	277.0	206.0	351.0	1.066	284.6	1008	16.075	0.193	50.6	0.0
	277.0	196.1	343.4	1.122	298.1	983	16.435	0.192	48.1	0.0
	277.0	185.9	336.7	1.175	311.0	956	16.616	0.189	45.3	0.0
BDT OZ-FT	277.0	182.8	334.8	1.190	314.9	947	16.632	0.188	44.4	0.0
	277.0	175.6	330.6	1.222	323.5	926	16.588	0.183	42.2	0.0
	277.0	165.7	325.4	1.269	334.9	893	16.387	0.174	38.8	0.0
	277.0	155.8	321.1	1.329	345.3	858	15.988	0.163	35.3	0.0
	277.0	146.3	317.8	1.377	354.8	820	15.387	0.150	31.6	0.0
	277.0	137.6	315.5	1.420	362.9	779	14.714	0.136	28.0	0.0
	277.0	129.3	313.6	1.460	370.3	734	13.976	0.122	24.6	0.0
	277.0	121.7	312.5	1.497	376.5	686	13.159	0.107	21.3	0.0
	277.0	114.5	312.4	1.530	381.7	634	12.267	0.093	18.1	0.0
	277.0	107.8	312.4	1.560	386.1	578	11.323	0.078	15.1	0.0
	277.0	101.8	313.1	1.586	389.9	519	10.339	0.064	12.2	0.0
	277.0	96.5	314.4	1.608	392.4	455	9.322	0.050	9.6	0.0
	277.0	91.7	315.7	1.623	394.1	387	8.449	0.039	7.4	0.0
	277.0	88.1	317.8	1.640	396.4	313	8.053	0.030	5.6	0.0
	277.0	85.4	320.8	1.655	399.0	236	6.935	0.019	3.6	0.0
	277.0	83.4	323.9	1.667	401.2	153	6.068	0.011	2.0	0.0
	277.0	81.8	327.0	1.675	402.7	65	5.879	0.004	0.8	0.0

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	6GC93BH	-

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

Performance Data



Performance Data



6GC93BH		REV. -								
Dayton Manufacturing Company										
Filtered										
Motor Description				Test Conditions						
Model: 6GC93BH		Test Type: Run		Run Cap: 4						
Motor ID: 2 of 3		Test Number: 8		Start Cap: 0µfd						
Poles: 6		Poles: 6		Environment:						
Volts: 277		Volts: 277		Tested: 2/3/2016 4:18:12 PM						
Frequency: 60		Hz: 60		Tested By: Liu, Bingmin						
HP: 1/6		Rotation:		Gear Ratio: 1:1						
Speed: 1075		Special Cond:		Bearing Friction: -0.70 Oz-Ft						
Phase: 1		Speed Conn: MED		Windage Torque: -1.06 Oz-Ft						
Protector: 7AM036-A5		TestBoard: NMQC Plotter		Fixture #1						
Special Points	Vline (V)	Vaux (V)	Vcap (V)	Iline (A)	Watts	RPM	Tq (Oz-ft)	HP	Eff (%)	PF (%)
	277.0	246.5	372.2	0.247	64.2	1186	0.000	0.000	0.0	0.0
	277.0	245.5	371.5	0.255	67.0	1181	-0.015	0.000	0.5	0.0
	277.0	238.6	360.0	0.303	82.5	1166	1.865	0.026	22.6	0.0
	277.0	229.6	345.0	0.356	97.6	1152	3.630	0.050	38.6	0.0
	277.0	222.8	333.7	0.403	110.1	1137	4.932	0.067	45.4	0.0
	277.0	215.6	323.5	0.453	123.8	1122	6.175	0.083	49.7	0.0
	277.0	207.2	314.6	0.496	135.4	1107	7.131	0.094	51.8	0.0
	277.0	199.2	306.3	0.534	145.0	1091	7.952	0.103	53.1	0.0
1075 RPM	277.0	192.2	298.5	0.569	154.1	1075	8.567	0.110	53.1	0.0
	277.0	191.2	297.4	0.575	155.5	1073	8.674	0.111	53.1	0.0
	277.0	182.4	289.2	0.620	166.9	1052	9.325	0.117	52.2	0.0
	277.0	174.0	282.0	0.660	176.5	1031	9.833	0.121	51.0	0.0
	277.0	165.3	275.9	0.701	186.5	1009	10.153	0.122	48.8	0.0
	277.0	156.6	273.9	0.742	195.9	984	10.375	0.122	46.3	0.0
	277.0	148.5	266.1	0.781	204.6	958	10.511	0.120	43.7	0.0
BDT OZ-FT	277.0	147.0	264.6	0.788	206.2	952	10.528	0.119	43.2	0.0
	277.0	140.7	259.9	0.818	212.6	929	10.495	0.116	40.7	0.0
	277.0	132.6	256.1	0.854	220.0	897	10.346	0.110	37.4	0.0
	277.0	124.8	252.9	0.888	226.6	862	10.115	0.104	34.2	0.0
	277.0	117.5	250.3	0.920	232.6	825	9.740	0.096	30.7	0.0
	277.0	110.2	248.5	0.951	238.1	783	9.322	0.087	27.2	0.0
	277.0	103.6	247.3	0.979	242.5	739	8.824	0.078	23.9	0.0
	277.0	97.3	246.4	1.004	246.2	692	8.235	0.068	20.5	0.0
	277.0	91.6	246.5	1.027	249.5	640	7.640	0.058	17.4	0.0
	277.0	86.4	246.6	1.047	252.1	585	7.036	0.049	14.5	0.0
	277.0	81.4	247.3	1.066	254.4	526	6.392	0.040	11.7	0.0
	277.0	77.0	248.0	1.081	255.9	462	5.826	0.032	9.3	0.0
	277.0	73.5	249.6	1.093	256.8	394	5.154	0.024	7.0	0.0
	277.0	70.7	251.8	1.104	258.0	322	4.554	0.017	5.1	0.0
	277.0	68.6	254.1	1.114	259.3	245	4.269	0.012	3.5	0.0
	277.0	67.1	256.4	1.122	260.4	162	3.788	0.007	2.1	0.0
	277.0	66.2	259.2	1.127	261.4	75	3.084	0.003	0.8	0.0
DRAWING NO.								PAGE 3 of 6		REV.
6GC93BH										

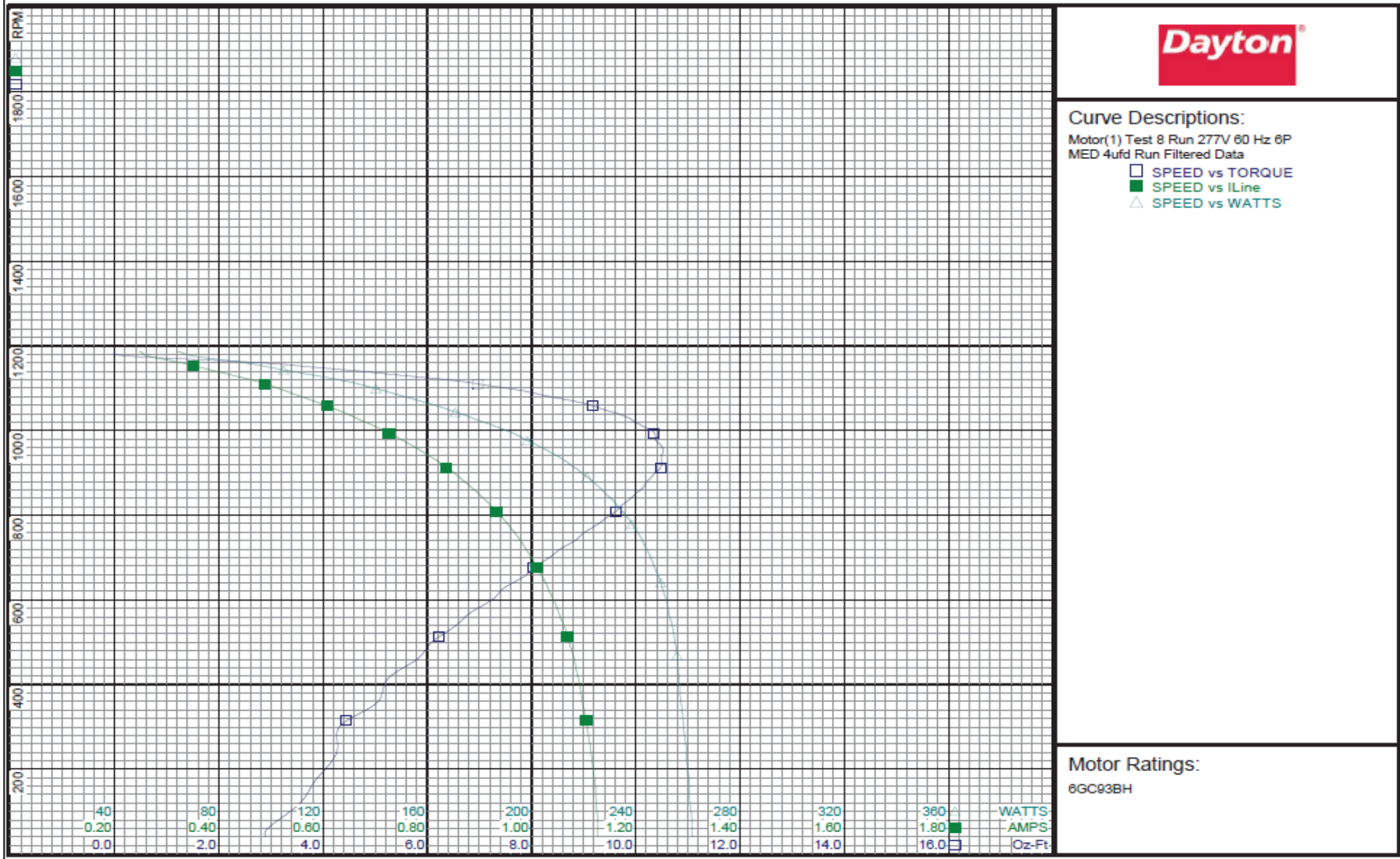
Dayton Electric Mfg. Co. Lake Forest, IL 60045 USA

Performance Data



6GC93BH

REV.
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Performance Data



6GC93BH

REV.
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Dayton Manufacturing Company

Filtered

Motor Description

Model: 6GC93BH
Motor ID: 2 of 3
Poles: 6
Volts: 277
Frequency: 60
HP: 1/6
Speed: 1075
Phase: 1
Protector: 7AM036-A5

Test Conditions

Test Type: Run
Test Number: 12
Poles: 6
Volts: 277
Hz: 60
Rotation:
Special Cond:
Speed Conn: LOW
TestBoard: NMQC Plotter Fixture #1
Run Cap: 4
Start Cap: 0µfd
Environment:
Tested: 2/3/2016 4:07:40 PM
Tested By: Liu, Bingmin
Gear Ratio: 1:1
Bearing Friction: -0.90 Oz-Ft
Windage Torque: -1.12 Oz-Ft

Special Points	Vline (V)	Vaux (V)	Vcap (V)	Iline (A)	Imain (A)	Iaux (A)	Watts	RPM	Tq (Oz-ft)	HP	Eff (%)	PF (%)	Cap
	277.0	210.6	314.2	0.185	0.178	0.005	50.80	1179	0.000	0.000	0.0	0.0	0.0
	277.0	209.6	312.8	0.189	0.183	0.005	52.15	1173	0.081	0.001	2.5	0.0	0.0
	277.0	200.0	297.6	0.230	0.224	0.005	64.09	1158	1.664	0.023	26.5	0.0	0.0
	277.0	190.5	282.0	0.268	0.263	0.005	74.27	1144	2.785	0.038	38.5	0.0	0.0
	277.0	183.7	271.6	0.307	0.301	0.004	84.53	1129	3.717	0.050	44.2	0.0	0.0
	277.0	177.1	264.1	0.339	0.334	0.004	92.95	1114	4.497	0.060	47.9	0.0	0.0
	277.0	170.4	257.2	0.367	0.362	0.004	100.23	1098	5.059	0.066	49.2	0.0	0.0
	277.0	163.7	250.4	0.396	0.391	0.004	107.53	1081	5.612	0.072	50.1	0.0	0.0
1075 RPM	277.0	161.4	248.0	0.406	0.401	0.004	110.02	1075	5.786	0.074	50.2	0.0	0.0
	277.0	156.9	243.7	0.425	0.420	0.004	114.78	1063	6.116	0.077	50.3	0.0	0.0
	277.0	149.5	237.4	0.457	0.453	0.004	122.48	1042	6.528	0.081	49.3	0.0	0.0
	277.0	141.9	231.3	0.489	0.485	0.004	130.06	1020	6.860	0.083	47.8	0.0	0.0
	277.0	134.5	225.7	0.520	0.516	0.004	136.92	996	7.095	0.084	45.8	0.0	0.1
	277.0	127.7	220.9	0.547	0.543	0.004	142.96	971	7.176	0.083	43.3	0.0	0.1
BDT OZ-FT	277.0	122.3	217.6	0.569	0.566	0.005	147.45	949	7.248	0.082	41.4	0.0	0.1
	277.0	121.0	216.9	0.574	0.571	0.005	148.66	943	7.234	0.081	40.8	0.0	0.1
	277.0	114.2	213.4	0.601	0.598	0.005	154.02	913	7.207	0.078	37.9	0.0	0.1
	277.0	107.7	210.4	0.627	0.624	0.005	158.91	880	7.042	0.074	34.6	0.0	0.1
	277.0	101.4	208.0	0.652	0.649	0.005	163.41	844	6.850	0.069	31.4	0.0	0.1
	277.0	95.2	206.4	0.675	0.673	0.006	167.41	804	6.586	0.063	28.1	0.0	0.1
	277.0	89.6	205.4	0.697	0.694	0.006	170.66	762	6.204	0.056	24.6	0.0	0.1
	277.0	84.1	204.7	0.716	0.714	0.006	173.67	716	5.822	0.050	21.3	0.0	0.1
	277.0	79.1	204.6	0.735	0.732	0.006	176.18	667	5.414	0.043	18.2	0.0	0.1
	277.0	74.5	204.8	0.751	0.749	0.007	178.24	613	4.959	0.036	15.1	0.0	0.1
	277.0	70.4	205.7	0.766	0.764	0.007	179.84	556	4.497	0.030	12.3	0.0	0.1
	277.0	66.5	206.6	0.778	0.776	0.007	180.96	495	3.971	0.023	9.6	0.0	0.1
	277.0	63.2	207.8	0.787	0.786	0.008	181.51	429	3.548	0.018	7.5	0.0	0.1
	277.0	60.5	209.6	0.796	0.794	0.008	182.30	359	3.312	0.014	5.8	0.0	0.1
	277.0	58.6	211.5	0.804	0.802	0.008	183.09	284	2.681	0.009	3.7	0.0	0.1
	277.0	57.3	213.4	0.811	0.809	0.009	184.03	205	2.608	0.006	2.6	0.0	0.1
	277.0	56.7	216.4	0.816	0.815	0.009	184.80	120	2.259	0.003	1.3	0.0	0.1

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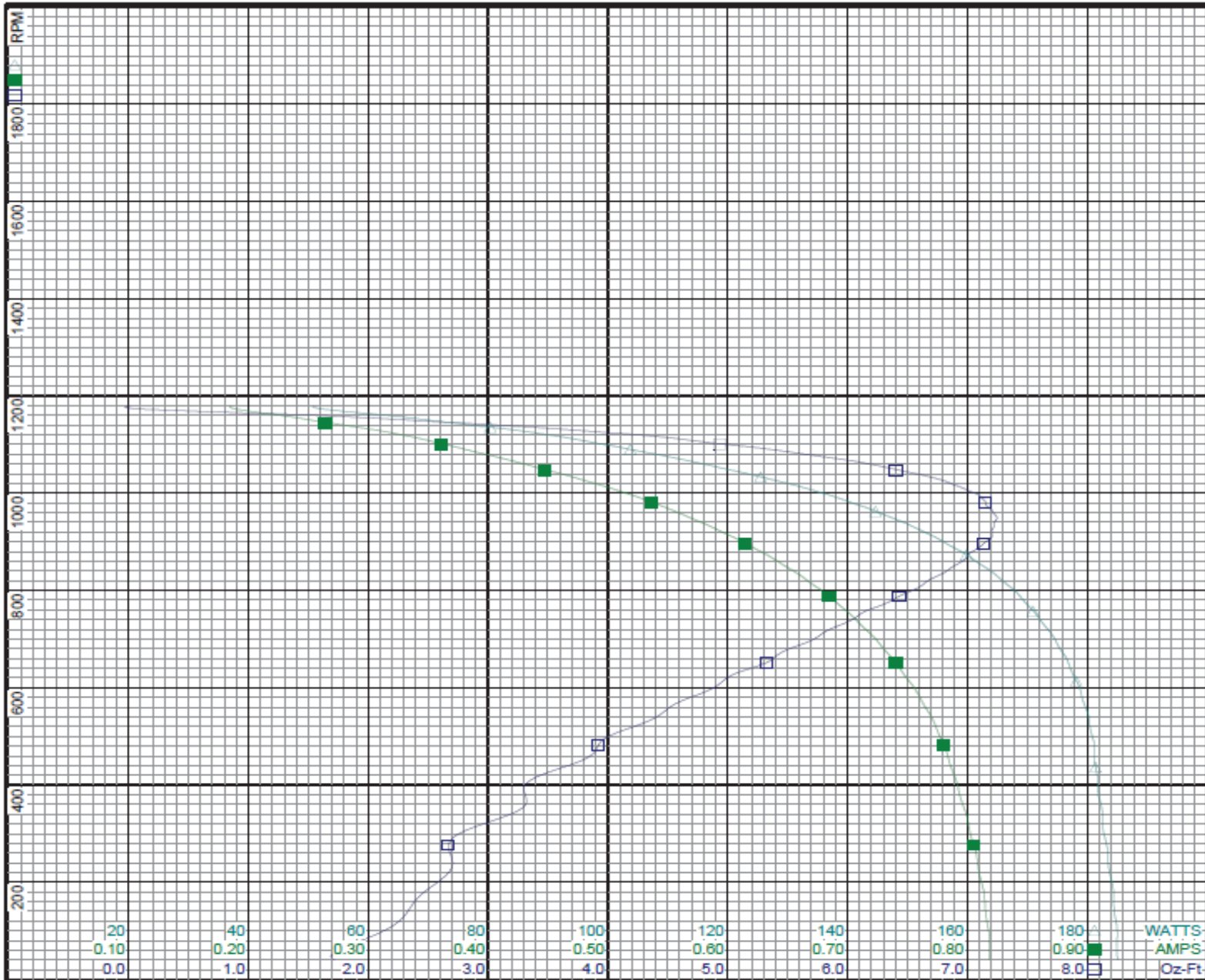
Dayton Electric Mfg. Co. Lake Forest, IL 60045 USA

Performance Data



6GC93BH

REV.
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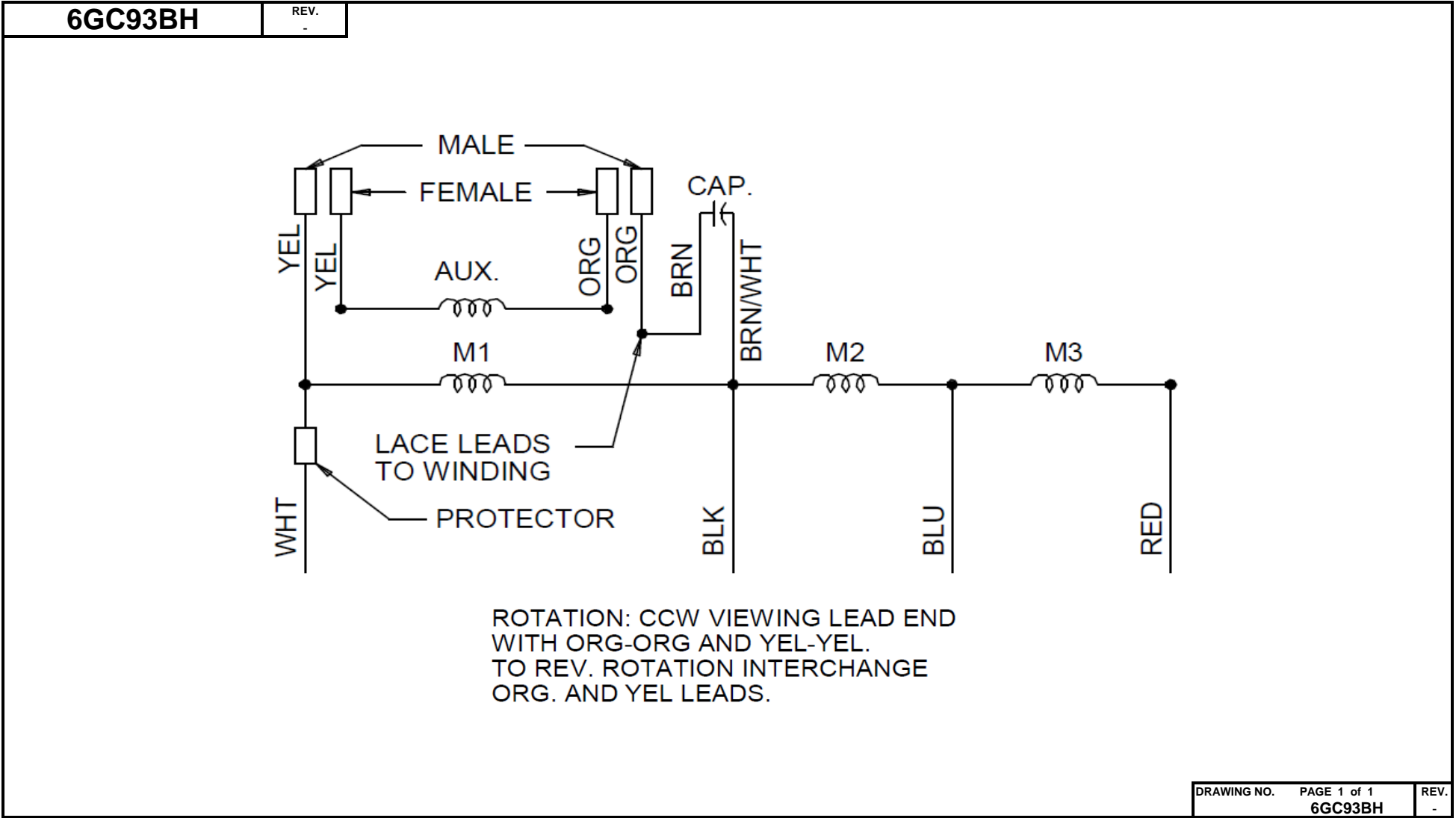
Curve Descriptions:
Motor(1) Test 12 Run 277V 60 Hz 8P
LOW 4ufd Run Filtered Data
□ SPEED vs TORQUE
■ SPEED vs ILine
△ SPEED vs WATTS

Motor Ratings:
6GC93BH

DRAWING NO.	PAGE 6 of 6	REV.
6GC93BH		-

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

Wiring Diagram



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

Dayton®

DIRECT DRIVE BLOWER MOTOR

Part No
6GC93BG

BAR CODE

HP: 1/6

VOLTS: 277


AMPS: 0.9

RPM: 1075 / 3SPD

DUTY: CONT

ENCL: OAO

THERMALLY PROTECTED: AUTO

MFG. NO.  PROT. CODE : 7A010 AVG.F.L

MTR REF: K55HXJYY-2358

PH: 1

HZ: 60

FR: 48YZ

INS CL: B

AMB: 40 °C

EFF.

**Disconnect Power Before Making Any
Electrical Connections or Changes**

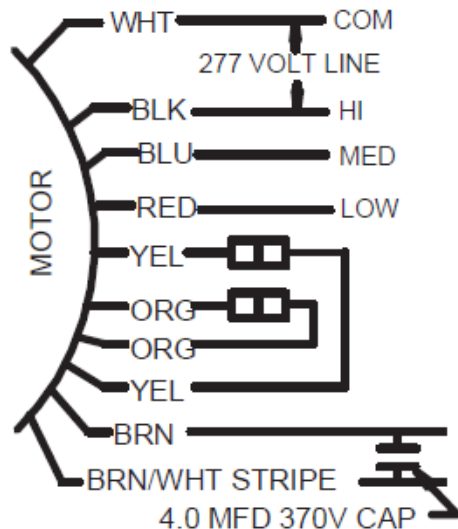


E37403



LR63596

TO REVERSE ROTATION
INTERCHANGE ORG AND YEL LEADS



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

Made in China