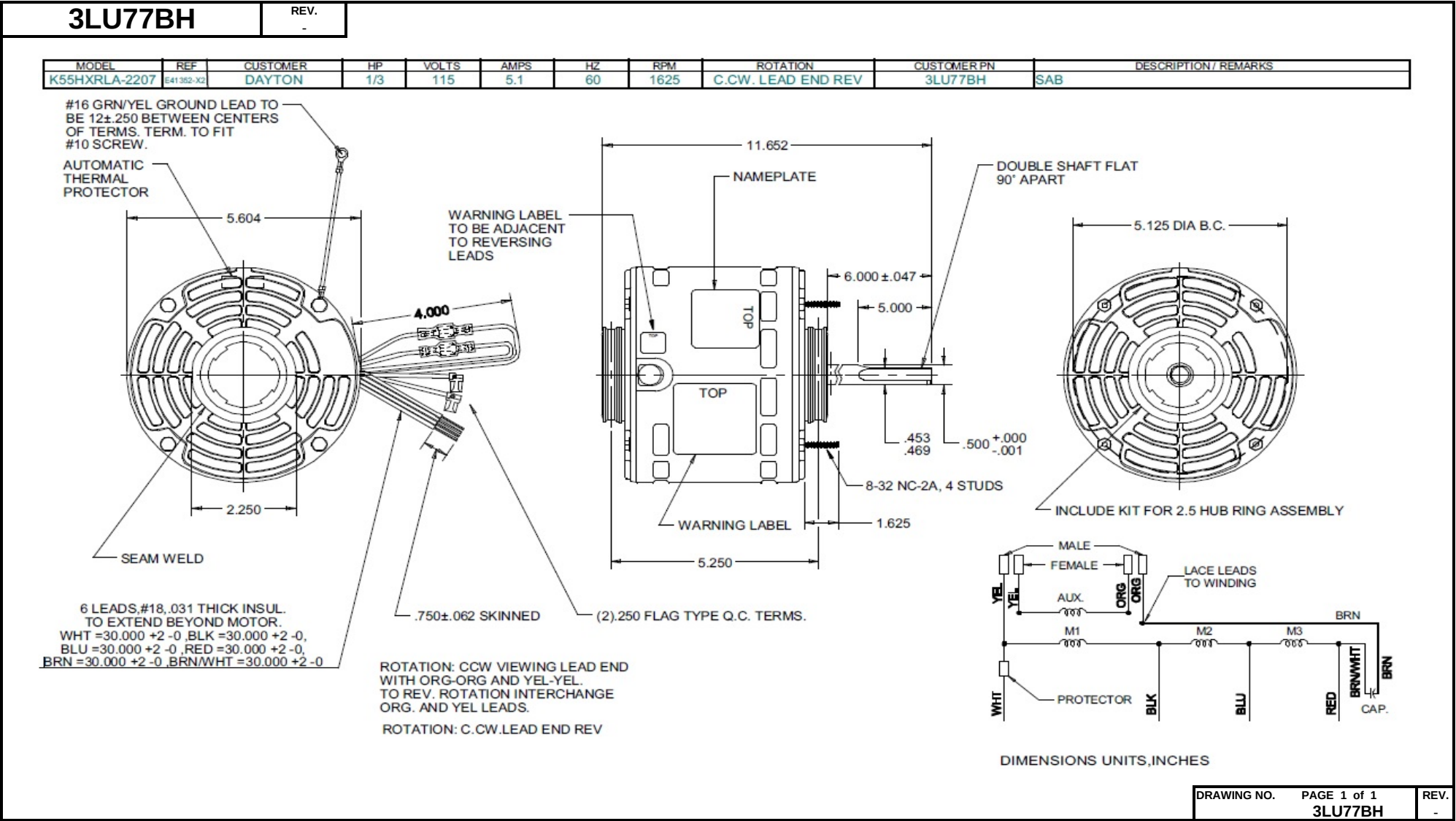


Dimensional Drawing



3LU77BH

REV.

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SHADED-POLE & PSC MOTOR PERFORMANCE

HP:	1/3							
Poles:	4							
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	61.6						
Power Factor:	@ Rated Load	98.3						
Amps:	@ No Load							
	@ Rated Load	5.1						
	@ Locked Rotor							
RPM:	@ Rated Load	1625						
Torques: Oz.Ft. / Lb.In. (Circle One)	Breakdown	34						
	Locked Rotor	10.5						
	Pull-Up	10.5						
	Rated Load	24.8						
	Service Factor	1.0						
Watts:	Rated Load	581						
Temperature Rise:	@ Rated Load							
Thermal Protector:	Trip Temp (°C)	140~150						
Winding Material:	Start (Auxiliary)	AL						
	Run (Main)	AL						
Capacitor:	Run (MFD / Volts)	15.0 MFD 370V						
	No. of Run Capacitors	1						
MEDIUM-HIGH SPEED								
HP:	1/3							
Volts:	115	115	208	230	277	460	100	200
HZ:	60	60	60	60	60	60	50	50
Efficiency:	@ Rated Load	63						
Power Factor:	@ Rated Load	98.9						
Amps:	@ No Load							
	@ Rated Load	3.5						
	@ Locked Rotor							
Torques: Oz.Ft. / Lb.In. (Circle One)	Breakdown	23.5						
	Locked Rotor	7.5						
	Pull-Up	8.1						
	Rated Load	17.3						
Watts:	Rated Load	396.4						
Temperature Rise:	@ Rated Load							

 DRAWING NO. PAGE 3 REV.
 3LU77BH -

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

3LU77BH

 REV.
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SHADED-POLE & PSC MOTOR PERFORMANCE

MEDIUM-LOW SPEED

HP:	1/3							
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. / 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:	1/3							
Volts:	115	115	208	230	277	460	100	200
HZ:	60	60	60	60	60	60	50	50
Efficiency:	@ Rated Load	62.7						
Power Factor:	@ Rated Load	99.5						
Amps:	@ No Load							
	@ Rated Load	2.5						
Torques: Oz.Ft. / Lb.In. (Circle One)	Breakdown	17.3						
	Locked Rotor	5.4						
	Pull-Up	6.1						
	Rated Load	12.6						
Watts:	Rated Load	289.2						
Temperature Rise:	@ Rated Load							

Notes:

 DRAWING NO. PAGE 1 REV.
3LU77BH -

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

Performance Data



3LU77BH

REV.

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Dayton Manufacturing Company

Filtered

Motor Description

Model: 3LU77BH
Motor ID: 1 of 2
Poles: 4
Volts: 115
Frequency: 60
HP: 1/3
Speed: 1625
Phase: 1
Protector: 7AM036-A5

Test Conditions

Test Type: Run
Test Number: 3
Poles: 4
Volts: 115
Hz: 60
Rotation:
Special Cond:
Speed Conn: HI
TestBoard: NMQC Plotter Fixture #1
Run Cap: 15
Start Cap: 0µfd
Environment:
Tested: 7/27/2015 10:09:56 AM
Tested By: Liu, Bingmin
Gear Ratio: 1:1
Bearing Friction: -0.62 Oz-Ft
Windage Torque: -0.93 Oz-Ft

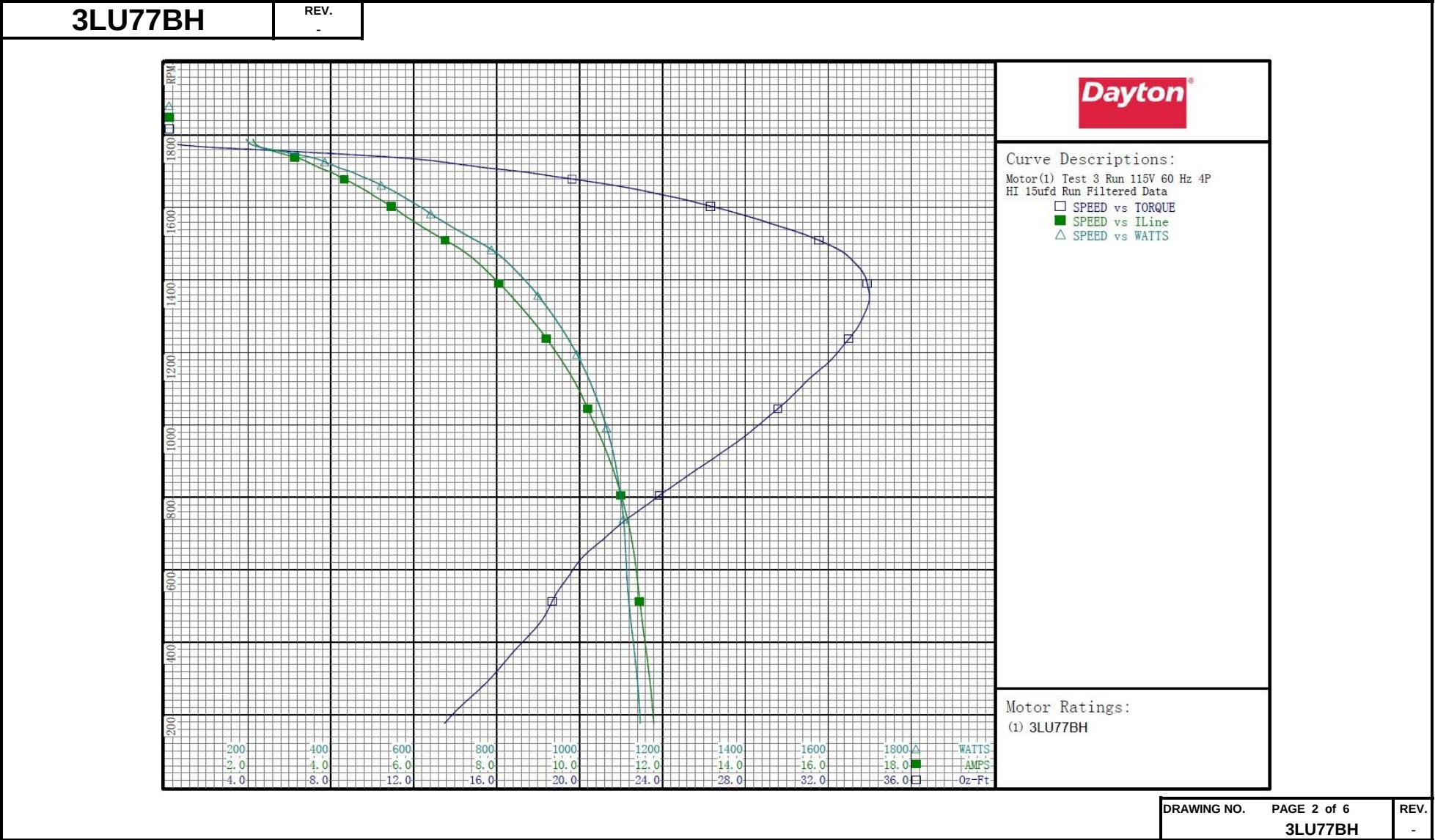
Special Points	Vline (V)	Vaux (V)	Vcap (V)	Iline (A)	Watts	RPM	Tq (Oz-ft)	HP	Eff (%)	PF (%)
	115.0	299.6	343.4	2.122	195.9	1788	0.00	0.000	0.0	0.0
	115.0	298.9	342.8	2.155	201.3	1780	0.17	0.004	1.3	0.0
	115.0	295.8	334.0	2.509	262.7	1758	4.73	0.099	26.0	0.0
	115.0	288.3	318.6	3.180	356.2	1737	11.33	0.234	50.1	0.0
	115.0	279.5	308.4	3.579	402.4	1717	14.41	0.295	55.0	0.0
0.333 HP	115.0	274.4	301.7	3.853	435.0	1703	16.42	0.333	57.1	0.0
	115.0	270.5	298.1	4.003	451.3	1697	17.40	0.352	58.1	0.0
	115.0	262.7	288.1	4.416	500.0	1673	20.25	0.403	60.2	0.0
	115.0	254.9	278.8	4.812	545.2	1649	22.85	0.449	61.4	0.0
1625 RPM	115.0	247.6	271.2	5.141	581.0	1625	24.80	0.480	61.6	0.0
	115.0	246.9	270.5	5.172	584.1	1623	24.97	0.482	61.6	0.0
	115.0	238.7	261.8	5.582	626.0	1594	26.95	0.512	61.0	0.0
	115.0	230.1	253.3	5.972	667.6	1563	28.81	0.536	59.9	0.0
	115.0	220.1	243.5	6.438	716.3	1530	30.60	0.558	58.1	0.0
	115.0	208.8	232.5	6.985	772.2	1495	32.11	0.571	55.2	0.0
	115.0	198.1	222.7	7.465	819.3	1456	33.13	0.574	52.3	0.0
	115.0	188.5	214.6	7.862	856.3	1413	33.74	0.568	49.5	0.0
	115.0	178.4	206.3	8.264	893.0	1367	33.97	0.553	46.2	0.0
BDT OZ-FT	115.0	175.3	204.0	8.381	903.2	1352	33.99	0.547	45.2	0.0
	115.0	168.0	198.6	8.658	927.2	1316	33.82	0.530	42.6	0.0
	115.0	157.6	191.2	9.053	960.0	1261	33.32	0.500	38.9	0.0
	115.0	147.6	184.7	9.431	990.7	1201	32.47	0.464	35.0	0.0
	115.0	137.4	178.9	9.792	1018.6	1136	31.28	0.423	31.0	0.0
	115.0	127.8	174.3	10.111	1043.4	1067	30.02	0.381	27.2	0.0
	115.0	118.5	170.4	10.401	1065.5	992	28.48	0.336	23.5	0.0
	115.0	109.1	167.2	10.703	1083.4	911	26.55	0.288	19.8	0.0
	115.0	99.7	164.5	10.958	1096.7	823	24.31	0.238	16.2	0.0
	115.0	90.4	162.3	11.174	1106.8	730	22.06	0.192	12.9	0.0
	115.0	81.1	161.3	11.333	1112.2	630	20.08	0.151	10.1	0.0
	115.0	73.3	163.2	11.444	1117.8	524	18.78	0.117	7.8	0.0
	115.0	68.2	166.9	11.566	1128.6	411	17.43	0.085	5.6	0.0
	115.0	63.8	169.9	11.700	1140.0	291	15.54	0.054	3.5	0.0

DRAWING NO. PAGE 1 of 6
3LU77BH

REV.
-

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

Performance Data



Performance Data



3LU77BH

REV.
-

Dayton Manufacturing Company

Filtered

Motor Description

Model: 3LU77BH
Motor ID: 1 of 2
Poles: 4
Volts: 115
Frequency: 60
HP: 1/3
Speed: 1625
Phase: 1
Protector: 7AM036-A5

Test Conditions

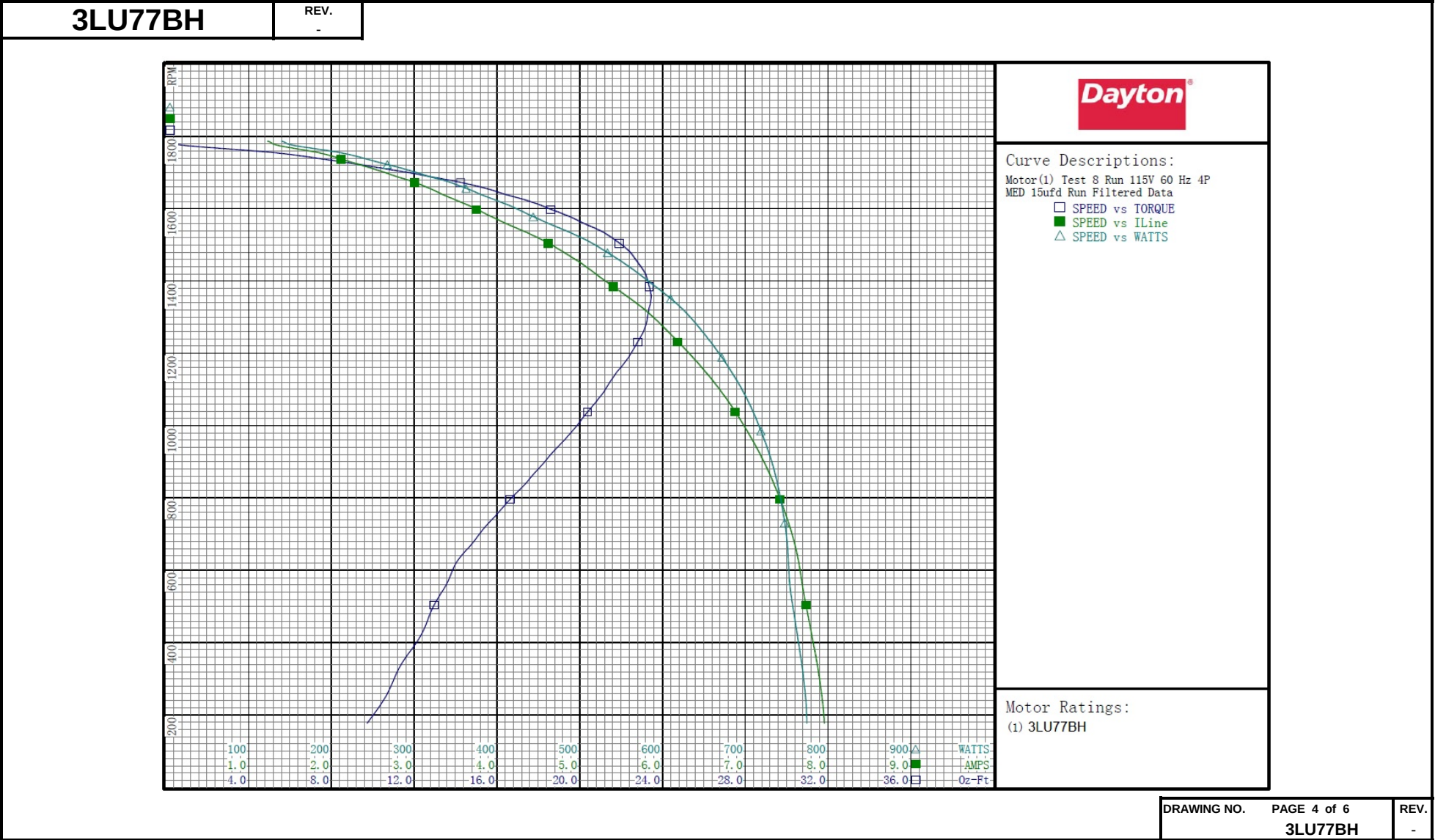
Test Type: Run
Test Number: 8
Poles: 4
Volts: 115
Hz: 60
Rotation:
Special Cond:
Speed Conn: MED
TestBoard: NMQC Plotter Fixture #1
Run Cap: 15
Start Cap: 0µfd
Environment:
Tested: 7/27/2015 10:06:01 AM
Tested By: Liu, Bingmin
Gear Ratio: 1:1
Bearing Friction: -0.60 Oz-Ft
Windage Torque: -1.00 Oz-Ft

Special Points	Vline (V)	Vaux (V)	Vcap (V)	Iline (A)	Watts	RPM	Tq (Oz-ft)	HP	Eff (%)	PF (%)
	115.0	263.9	293.6	1.230	139.8	1786	0.00	0.000	0.0	0.0
	115.0	263.2	292.3	1.303	148.3	1778	0.45	0.009	4.5	0.0
	115.0	255.9	280.3	1.793	205.0	1757	4.80	0.100	35.7	0.0
	115.0	248.0	269.2	2.150	245.9	1735	7.84	0.162	50.0	0.0
	115.0	239.1	257.9	2.458	282.1	1713	10.25	0.209	55.4	0.0
	115.0	230.2	247.3	2.760	315.4	1691	12.56	0.253	59.8	0.0
	115.0	221.9	238.3	3.061	349.3	1668	14.61	0.290	62.0	0.0
	115.0	213.0	229.7	3.301	375.9	1643	16.16	0.316	62.8	0.0
1625 RPM	115.0	207.6	224.1	3.487	396.4	1625	17.29	0.335	63.0	0.0
	115.0	205.3	221.8	3.566	404.9	1617	17.71	0.341	62.8	0.0
	115.0	197.5	214.5	3.828	432.9	1589	18.99	0.359	61.9	0.0
	115.0	189.5	206.9	4.107	462.1	1559	20.21	0.375	60.5	0.0
	115.0	180.4	198.3	4.436	496.0	1526	21.39	0.389	58.4	0.0
	115.0	171.8	190.8	4.730	525.6	1490	22.24	0.395	56.0	0.0
	115.0	163.4	183.9	5.006	552.5	1450	22.81	0.394	53.2	0.0
	115.0	155.1	177.6	5.263	578.3	1407	23.25	0.390	50.2	0.0
	115.0	146.4	171.1	5.551	604.7	1361	23.44	0.380	46.8	0.0
BDT OZ-FT	115.0	145.5	170.4	5.581	607.3	1356	23.45	0.379	46.5	0.0
	115.0	137.5	164.8	5.839	629.4	1310	23.31	0.363	43.1	0.0
	115.0	129.2	159.7	6.089	650.0	1255	23.03	0.344	39.5	0.0
	115.0	120.7	155.0	6.340	669.7	1195	22.43	0.319	35.5	0.0
	115.0	112.6	151.0	6.587	688.3	1130	21.58	0.290	31.4	0.0
	115.0	104.8	147.8	6.815	704.9	1060	20.71	0.261	27.7	0.0
	115.0	97.2	145.2	7.023	719.0	985	19.64	0.230	23.9	0.0
	115.0	89.6	143.3	7.217	731.5	903	18.36	0.197	20.1	0.0
	115.0	82.2	141.7	7.388	741.1	815	16.97	0.165	16.6	0.0
	115.0	74.9	140.4	7.536	748.3	722	15.46	0.133	13.2	0.0
	115.0	67.6	140.1	7.645	752.1	621	14.04	0.104	10.3	0.0
	115.0	61.6	142.3	7.723	756.4	514	13.06	0.080	7.9	0.0
	115.0	57.8	145.5	7.820	764.2	401	12.12	0.058	5.6	0.0
	115.0	54.5	148.1	7.909	771.5	279	10.87	0.036	3.5	0.0

DRAWING NO. PAGE 3 of 6 REV.
3LU77BH -

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

Performance Data



Performance Data



3LU77BH

REV.
-

Dayton Manufacturing Company

Filtered

Motor Description

Model: 3LU77BH
Motor ID: 1 of 2
Poles: 4
Volts: 115
Frequency: 60
HP: 1/3
Speed: 1625
Phase: 1
Protector: 7AM036-A5

Test Conditions

Test Type: Run
Test Number: 12
Poles: 4
Volts: 115
Hz: 60
Rotation:
Special Cond:
Speed Conn: LOW
TestBoard: NMQC Plotter Fixture #1
Run Cap: 15
Start Cap: 0µfd
Environment:
Tested: 7/27/2015 10:02:27 AM
Tested By: Liu, Bingmin
Gear Ratio: 1:1
Bearing Friction: -0.68 Oz-Ft
Windage Torque: -1.10 Oz-Ft

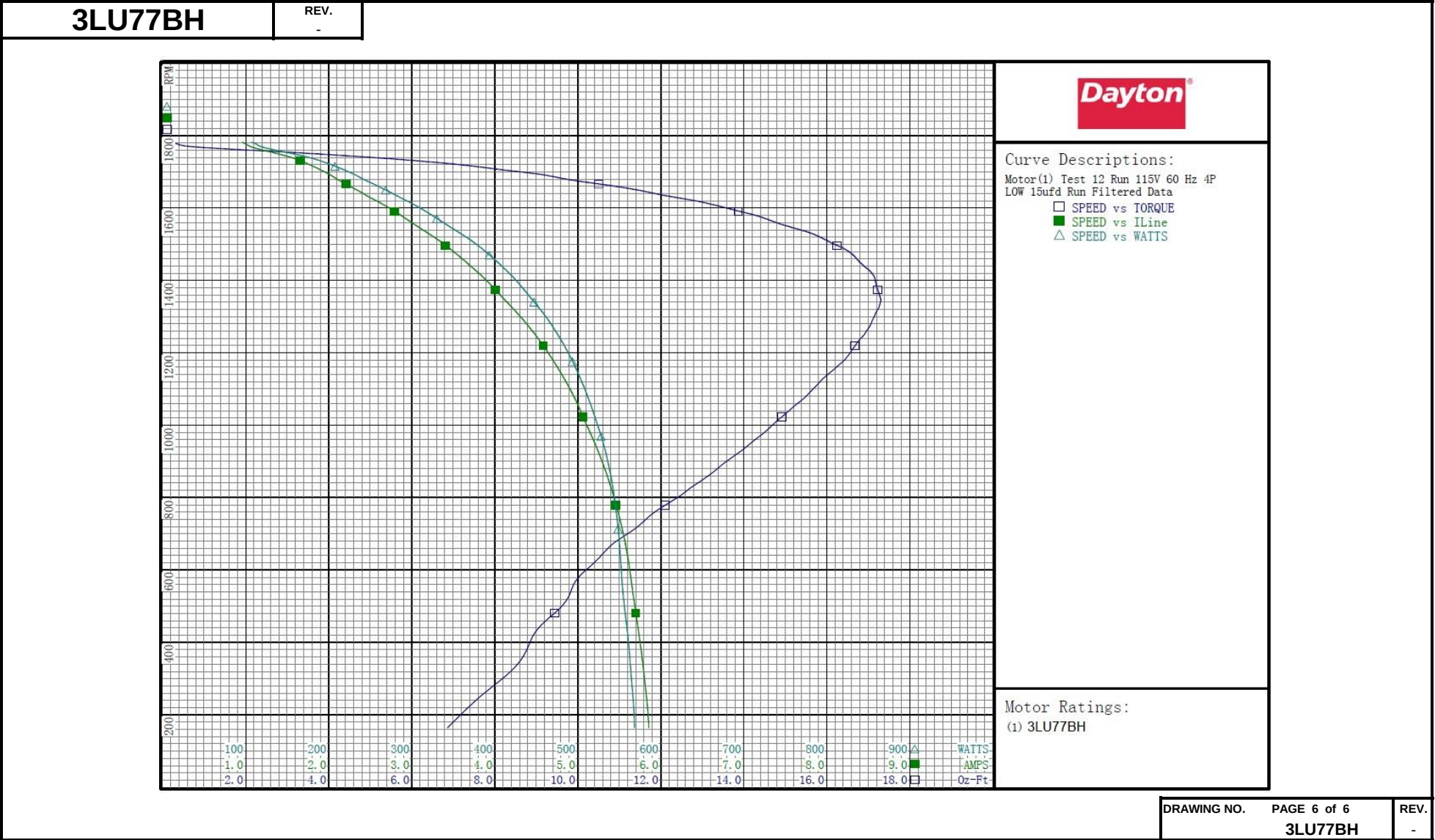
Special Points	Vline (V)	Vaux (V)	Vcap (V)	Iline (A)	Watts	RPM	Tq(Oz-ft)	HP	Eff (%)	PF (%)
	115.0	230.4	253.8	0.959	106.8	1781	0.000	0.000	0.0	0.0
	115.0	230.0	251.6	1.027	115.0	1773	0.453	0.010	6.0	0.0
	115.0	223.9	241.8	1.355	153.2	1751	3.400	0.071	33.5	0.0
	115.0	215.1	228.5	1.681	192.1	1728	6.308	0.130	51.2	0.0
	115.0	204.6	218.3	1.884	216.3	1707	8.055	0.164	56.7	0.0
	115.0	196.9	210.6	2.062	237.1	1685	9.474	0.190	59.8	0.0
	115.0	189.2	202.8	2.242	257.8	1661	10.798	0.214	61.8	0.0
	115.0	182.7	195.2	2.435	279.2	1637	11.975	0.233	62.4	0.0
1625 RPM	115.0	179.0	192.2	2.527	289.2	1625	12.568	0.243	62.7	0.0
	115.0	174.7	188.6	2.643	301.0	1611	13.181	0.253	62.7	0.0
	115.0	167.5	182.1	2.847	322.1	1583	14.172	0.267	61.8	0.0
	115.0	160.6	175.8	3.049	343.2	1552	14.987	0.277	60.2	0.0
	115.0	153.1	169.0	3.277	366.4	1518	15.863	0.287	58.4	0.0
	115.0	145.7	163.0	3.492	387.8	1481	16.502	0.291	56.0	0.0
	115.0	138.5	157.5	3.697	407.1	1442	16.872	0.290	53.1	0.0
	115.0	131.0	152.1	3.907	426.3	1398	17.167	0.286	50.0	0.0
	115.0	124.0	147.2	4.102	443.7	1350	17.295	0.278	46.7	0.0
BDT OZ-FT	115.0	123.3	146.7	4.123	445.5	1345	17.302	0.277	46.4	0.0
	115.0	116.3	142.5	4.311	461.7	1299	17.139	0.265	42.8	0.0
	115.0	109.0	138.4	4.509	477.7	1243	16.846	0.249	38.9	0.0
	115.0	102.2	134.8	4.693	492.4	1182	16.443	0.231	35.0	0.0
	115.0	95.4	132.1	4.866	505.3	1116	15.810	0.210	31.0	0.0
	115.0	88.9	129.8	5.022	517.2	1046	15.146	0.189	27.2	0.0
	115.0	82.4	128.1	5.168	528.2	969	14.377	0.166	23.4	0.0
	115.0	76.1	126.8	5.314	537.3	886	13.432	0.142	19.7	0.0
	115.0	69.9	125.9	5.439	544.1	798	12.372	0.117	16.1	0.0
	115.0	63.8	125.3	5.545	549.0	703	11.244	0.094	12.8	0.0
	115.0	57.7	125.5	5.625	552.2	601	10.213	0.073	9.9	0.0
	115.0	53.2	127.8	5.690	556.4	493	9.553	0.056	7.5	0.0
	115.0	50.3	130.5	5.763	561.9	377	8.762	0.039	5.2	0.0
	115.0	47.7	132.7	5.825	566.2	255	7.695	0.023	3.1	0.0

DRAWING NO. PAGE 5 of 6
3LU77BH

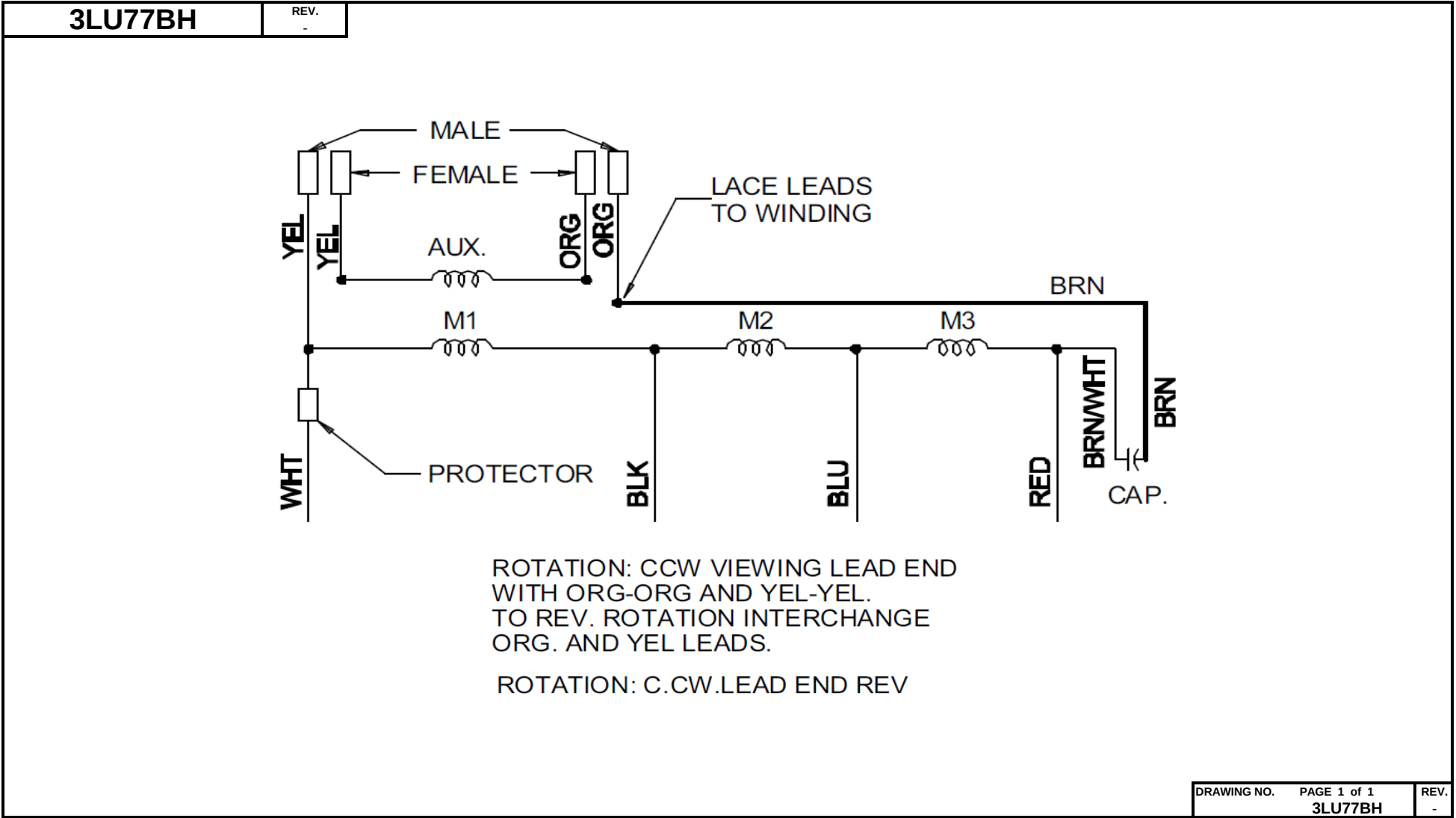
REV.
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Dayton Electric Mfg. Co. Lake Forest, IL 60045 USA

Performance Data



Wiring Diagram



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

Dayton



DIRECT DRIVE BLOWER MOTOR

Part No
3LU77BH

BAR CODE

HP: 1/3

VOLTS: 115

AMPS: 5.1

RPM: 1625 / 3SPD

DUTY: CONT

ENCL: OAO

THERMALLY PROTECTED: AUTO

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

MTR REF: K55HXRLA-2207

PH: 1

HZ: 60

FR: 48YZ

INS CL: B

AMB: 40 °C

SF: 1.0

EFF.

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



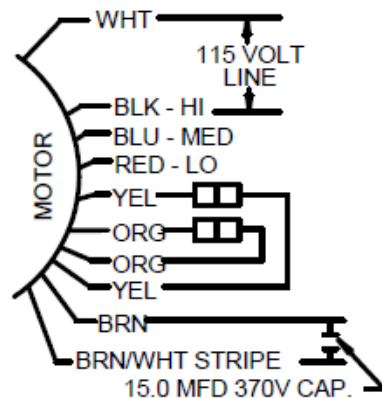
E37403



258501

US PAT
7709992

TO REVERSE ROTATION
INTERCHANGE ORG AND YEL LEADS



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

Made in China