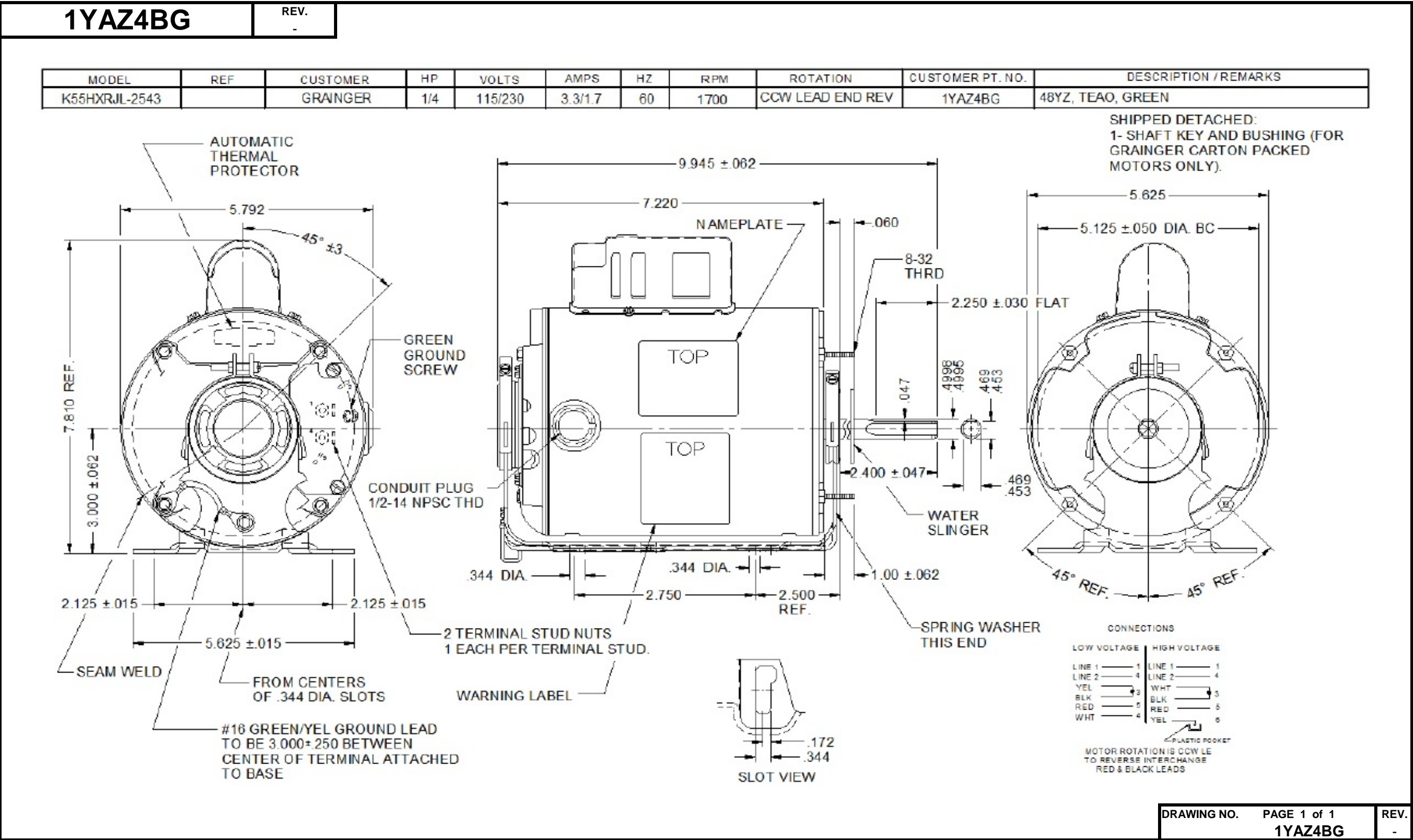


Dimensional Drawing



1YAZ4BG

REV.

-

SHADED-POLE & PSC MOTOR PERFORMANCE

HP:	1/4							
Poles:	4							
Ambient (°C):	40							
Altitude (FASL):								
No. of Speeds:	1							
HIGH SPEED								
Volts:	115/230	115	230					
HZ:	60	60	60					
Service Factor:	1							
Efficiency:	@ Rated Load	65.4	65.4					
Power Factor:	@ Rated Load	71.1	71.1					
Amps:	@ No Load							
	@ Rated Load	3.5	1.8					
	@ Locked Rotor	14.8	7.6					
RPM:	@ Rated Load	1729	1730					
Torques:	Breakdown	32.8	33.5					
	Locked Rotor	2.6	2.9					
	Pull-Up	2.6	2.9					
	Rated Load	12.2	12.1					
	Service Factor	12.2	12.1					
Watts:	Rated Load	286	299					
Temperature Rise:	@ Rated Load	-	-					
Thermal Protector:	Trip Temp (°C)	-	-					
Winding Material:	Start (Auxiliary)	Cu	Cu					
	Run (Main)	Cu	Cu					
Capacitor(s):	Run (MFD / Volts)	7.5 mFd, 440 v						
	No. of Run Capacitors							

MEDIUM-HIGH SPEED

HP:								
Volts:								
HZ:								
Efficiency:	@ Rated Load							
Power Factor:	@ Rated Load							
Amps:	@ No Load							
	@ Rated Load							
	@ Locked Rotor							
Torques:	Breakdown							
	Locked Rotor							
	Pull-Up							
	Rated Load							
Watts:	@ Rated Load							
Temperature Rise:	@ Rated Load							

 DRAWING NO. PAGE 1 of 1
 1YAZ4BG

 REV.
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Performance Data



1YAZ4BG

REV.
-

Dayton Manufacturing Company

Motor Description

Model: K055RJL2543 1YAZ4BG
Motor ID:
Poles: 4
Volts: 115/230
Frequency: 60
HP: 1/4
Speed: 1700
Phase: 1
Protector: 7AM036-A5

Test Conditions

Test Type: Start
Test Number: 1
Poles: 4
Volts: 115
Hz: 60
Rotation: CCW
Special Cond:
Speed Conn:
TestBoard: CMD InLine Three Phase #2 Fixture #1
Run Cap: 7.5
Start Cap: 0µfd
Environment: 24.9 Deg C 51 % RH 961 hPa
Tested: 7/26/2016 1:24:43 PM
Tested By: Navarro, Susana
Gear Ratio: 1:1
Bearing Friction: -0.48 Oz-Ft
Windage Torque: -2.03 Oz-Ft

Special Points	Vline (V)	Vaux (V)	Vcap (V)	Iline (A)	Watts	RPM	Tq (Oz-ft)	HP	Eff (%)	PF (%)
PUT OZ-FT	115.0	13.8	119.2	15.434	1300.3	31	0.58	0.000	0.0	73.3
	115.0	13.8	119.2	15.434	1300.3	31	0.58	0.000	0.0	73.3
	115.0	17.1	115.5	15.389	1297.7	194	2.32	0.005	0.3	73.3
	115.0	22.7	113.5	15.268	1293.5	341	3.89	0.016	0.9	73.7
	115.0	28.5	111.5	15.048	1283.5	486	8.17	0.047	2.7	74.2
14.85 AMPS	115.0	32.3	110.8	14.850	1273.0	593	10.05	0.071	4.2	74.5
	115.0	33.1	110.5	14.803	1270.9	618	10.70	0.079	4.6	74.7
	115.0	38.6	108.4	14.485	1258.5	738	13.15	0.116	6.9	75.6
	115.0	45.5	106.8	14.049	1237.2	853	17.06	0.173	10.4	76.6
	115.0	53.0	106.4	13.546	1209.8	961	20.21	0.231	14.3	77.7
	115.0	60.6	107.2	12.991	1176.1	1058	23.08	0.291	18.4	78.7
	115.0	69.8	109.6	12.282	1130.6	1160	27.11	0.374	24.7	80.0
	115.0	76.7	112.6	11.697	1088.2	1230	27.77	0.407	27.9	80.9
	115.0	84.8	116.9	10.999	1035.4	1302	29.54	0.458	33.0	81.9
	115.0	93.5	122.6	10.224	973.8	1371	30.26	0.494	37.8	82.8
	115.0	102.1	129.2	9.420	906.2	1433	30.74	0.524	43.2	83.7
	115.0	110.6	136.7	8.591	832.1	1488	30.23	0.536	48.0	84.2
	115.0	118.9	144.7	7.749	753.6	1538	28.97	0.530	52.5	84.6
	115.0	127.0	153.1	6.910	671.8	1582	27.27	0.514	57.0	84.5
	115.0	134.5	161.7	6.078	586.2	1622	25.01	0.483	61.4	83.9
	115.0	141.2	169.7	5.330	506.4	1655	21.26	0.419	61.7	82.6
	115.0	147.0	177.3	4.661	430.9	1683	18.53	0.371	64.3	80.4
	115.0	151.7	183.7	4.083	362.2	1705	15.84	0.322	66.2	77.1
	115.0	156.2	190.7	3.514	288.6	1731	11.20	0.231	59.6	71.4
	115.0	159.1	195.8	3.104	228.8	1748	8.43	0.175	57.2	64.1
	115.0	161.0	200.3	2.799	176.3	1762	6.28	0.132	55.7	54.8
2.766 OZ-FT	115.0	162.4	203.6	2.619	141.6	1774	3.50	0.074	38.9	47.0
	115.0	162.7	204.3	2.594	134.9	1776	2.77	0.058	32.2	45.2
	115.0	163.7	206.6	2.519	113.8	1783	1.10	0.023	15.3	39.3
	115.0	164.5	208.5	2.477	96.9	1787	0.03	0.001	0.4	34.0

DRAWING NO. PAGE 1 of 8
1YAZ4BG

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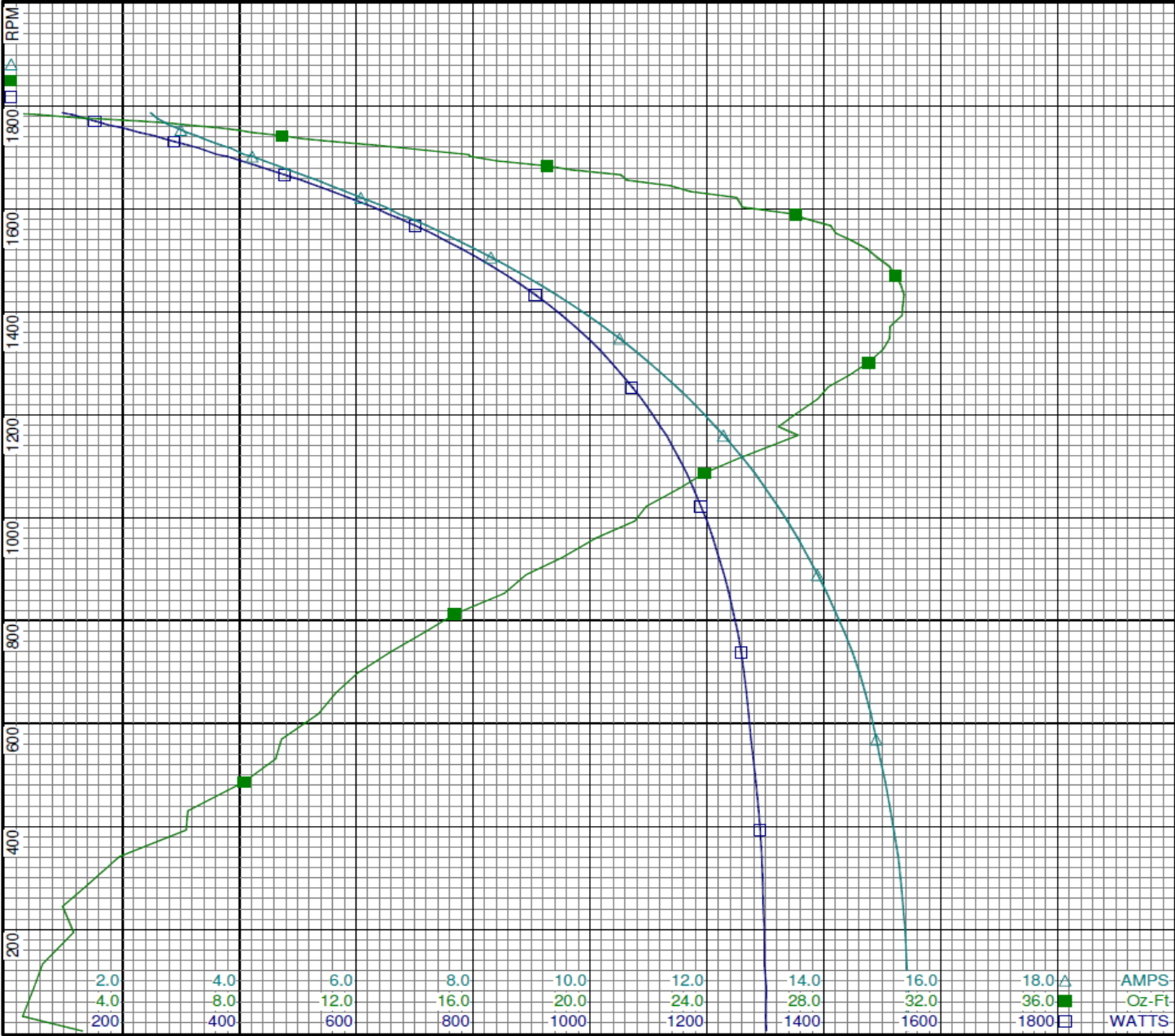
Dayton Electric Mfg. Co. Lake Forest, IL 60045 USA

Performance Data



1YAZ4BG

REV.
-



Curve Descriptions:
Motor(1) Test 1 Start 115V 60 Hz 4P
CCW 7.5ufd Run
□ SPEED vs WATTS
■ SPEED vs TORQUE
△ SPEED vs ILine

Motor Ratings:
(1) IK055RJL2543 1YAZ4BG

DRAWING NO. PAGE 2 of 8 REV.
1YAZ4BG -

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

Performance Data



1YAZ4BG

REV.
-

Dayton Manufacturing Company

Motor Description

Model: K055RJL2543 1YAZ4BG
Motor ID:
Poles: 4
Volts: 115/230
Frequency: 60
HP: 1/4
Speed: 1700
Phase: 1
Protector: 7AM036-A5

Test Conditions

Test Type: Run
Test Number: 3
Poles: 4
Volts: 115
Hz: 60
Rotation: CCW
Special Cond:
Speed Conn:
TestBoard: CMD InLine Three Phase #2 Fixture #1
Run Cap: 7.5
Start Cap: 0µfd
Environment: 24.9 Deg C 51 % RH 961 hPa
Tested: 7/26/2016 1:26:06 PM
Tested By: Navarro, Susana
Gear Ratio: 1:1
Bearing Friction: -0.45 Oz-Ft
Windage Torque: -1.91 Oz-Ft

Special Points	Vline(V)	Vaux(V)	Vcap(V)	Iline(A)	Watts	RPM	Tq(Oz-ft)	HP	Eff(%)	PF(%)
	115.0	164.6	208.9	2.474	89.2	1787	0.00	0.000	0.0	31.3
	115.0	163.9	207.2	2.509	104.5	1782	1.33	0.028	20.1	36.2
	115.0	162.5	203.9	2.595	133.4	1774	3.51	0.074	41.5	44.7
	115.0	161.3	200.7	2.771	170.7	1762	6.07	0.127	55.6	53.6
	115.0	159.2	196.2	3.073	222.5	1747	9.29	0.193	64.8	63.0
	115.0	156.6	191.0	3.492	285.0	1730	12.14	0.250	65.4	71.0
12.18 OZ-FT	115.0	156.5	190.9	3.499	286.1	1729	12.18	0.251	65.4	71.1
	115.0	152.6	184.9	3.972	347.5	1711	15.28	0.311	66.8	76.1
	115.0	147.5	177.6	4.635	427.5	1684	19.21	0.385	67.2	80.2
	115.0	141.5	169.7	5.345	508.2	1654	23.27	0.458	67.3	82.7
	115.0	135.0	161.6	6.111	590.9	1621	25.71	0.496	62.6	84.1
	115.0	128.1	153.9	6.859	667.2	1585	28.26	0.533	59.6	84.6
	115.0	119.5	144.6	7.791	759.0	1538	30.77	0.563	55.4	84.7
	115.0	111.0	136.3	8.659	840.3	1488	32.09	0.568	50.5	84.4
	115.0	102.6	129.0	9.482	913.2	1434	32.75	0.559	45.7	83.7
BDT OZ-FT	115.0	99.5	126.5	9.770	937.7	1413	32.82	0.552	43.9	83.5
	115.0	94.0	122.3	10.285	980.8	1373	32.70	0.534	40.6	82.9
	115.0	85.2	116.7	11.060	1041.9	1303	31.76	0.493	35.3	81.9
	115.0	77.0	112.3	11.763	1094.7	1230	30.39	0.445	30.3	80.9
	115.0	68.9	109.2	12.411	1140.1	1148	28.54	0.390	25.5	79.9
	115.0	60.9	107.1	13.007	1178.7	1057	25.64	0.323	20.4	78.8
	115.0	53.5	106.4	13.525	1210.2	961	23.03	0.264	16.2	77.8
	115.0	46.2	106.8	13.993	1236.3	856	19.92	0.203	12.3	76.8
	115.0	39.1	108.4	14.394	1255.6	740	16.13	0.142	8.4	75.9
	115.0	33.5	110.5	14.678	1267.5	620	13.49	0.100	5.9	75.1
	115.0	29.3	111.6	14.871	1277.5	491	11.80	0.069	4.0	74.7
	115.0	23.3	113.0	15.039	1286.3	356	8.44	0.036	2.1	74.4
	115.0	17.5	115.2	15.131	1289.5	203	6.60	0.016	0.9	74.1

DRAWING NO. PAGE 3 of 8

1YAZ4BG

REV.

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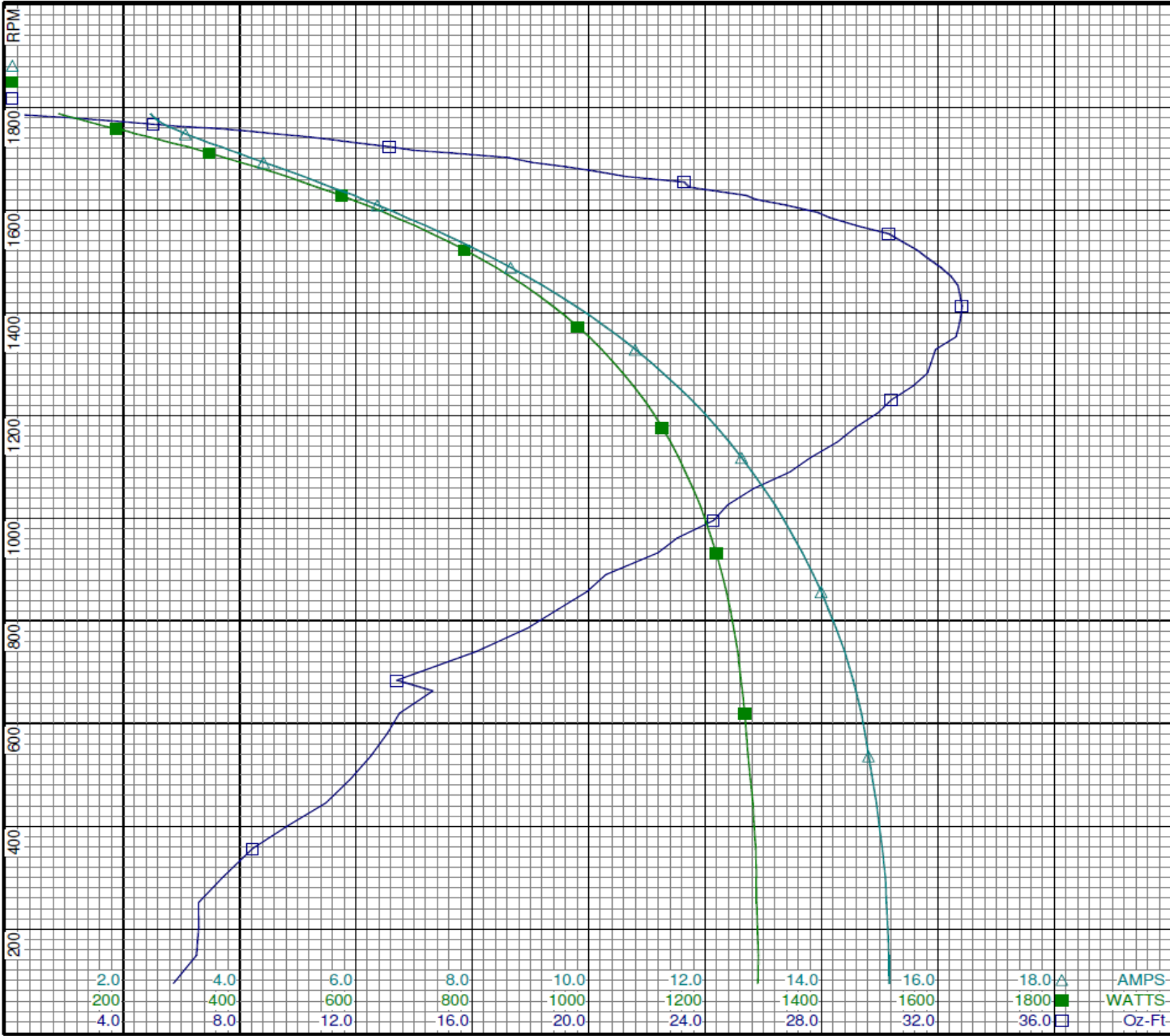
Dayton Electric Mfg. Co. Lake Forest, IL 60045 USA

Performance Data



1YAZ4BG

REV.
-



Curve Descriptions:
Motor(1) Test 3 Run 115V 60 Hz 4P
CCW 7.5ufd Run
□ SPEED vs TORQUE
■ SPEED vs WATTS
△ SPEED vs ILine

Motor Ratings:
(1) K055RJL2543 1YAZ4BG

DRAWING NO. PAGE 4 of 8 REV.
1YAZ4BG -

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

Performance Data



1YAZ4BG

REV.
-

Dayton Manufacturing Company

Motor Description

Model: K055RJL2543 1YAZ4BG
Motor ID:
Poles: 4
Volts: 115/230
Frequency: 60
HP: 1/4
Speed: 1700
Phase: 1
Protector: 7AM036-A5

Test Conditions

Test Type: Start
Test Number: 2
Poles: 4
Volts: 230
Hz: 60
Rotation: CCW
Special Cond:
Speed Conn:
TestBoard: CMD InLine Three Phase #2 Fixture #1
Run Cap: 7.5
Start Cap: 0µfd
Environment: 24.9 Deg C 51 % RH 961 hPa
Tested: 7/26/2016 1:18:19 PM
Tested By: Navarro, Susana
Gear Ratio: 1:1
Bearing Friction: -0.57 Oz-Ft
Windage Torque: -2.17 Oz-Ft

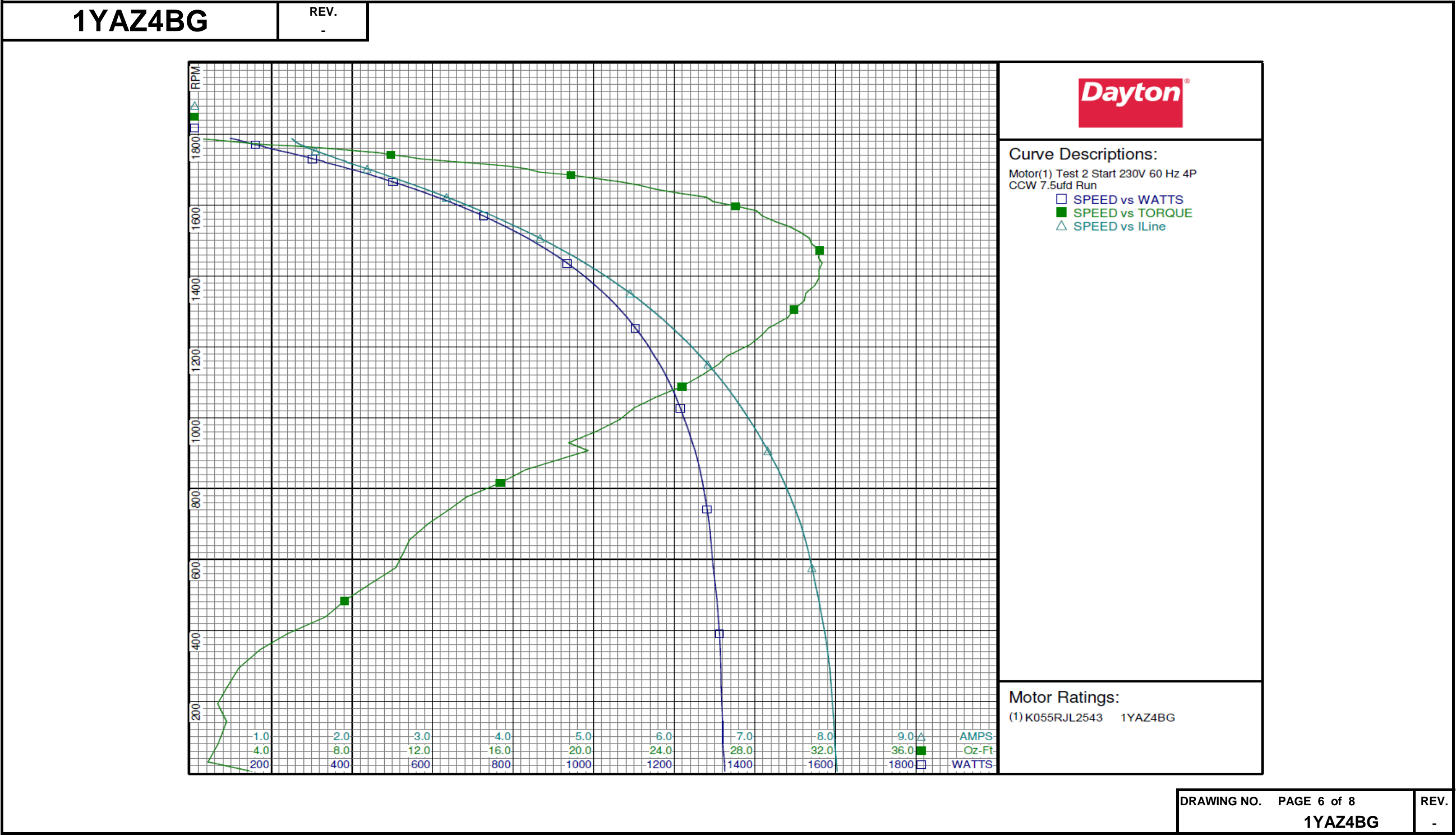
Special Points	Vline (V)	Vaux (V)	Vcap (V)	Iline (A)	Watts	RPM	Tq (Oz-ft)	HP	Eff (%)	PF (%)
PUT OZ-FT	230.0	12.7	117.5	8.009	1323.8	29	0.85	0.000	0.0	71.9
	230.0	12.7	117.5	8.009	1323.8	29	0.85	0.000	0.0	71.9
	230.0	16.4	113.3	7.960	1317.3	193	1.33	0.003	0.2	71.9
	230.0	22.0	111.2	7.899	1313.8	346	3.44	0.014	0.8	72.3
	230.0	27.5	109.8	7.793	1305.5	484	7.63	0.044	2.5	72.8
	230.0	32.3	108.9	7.665	1292.7	619	10.55	0.078	4.5	73.3
	230.0	37.7	106.9	7.499	1281.1	742	12.84	0.113	6.6	74.3
	230.0	44.5	105.3	7.288	1263.3	853	16.62	0.169	10.0	75.4
7.118 AMPS	230.0	49.2	104.9	7.118	1246.2	924	18.98	0.209	12.5	76.1
	230.0	51.8	104.9	7.020	1235.3	962	20.15	0.231	13.9	76.5
	230.0	59.4	105.7	6.737	1203.1	1059	23.15	0.292	18.1	77.6
	230.0	67.5	107.9	6.417	1163.5	1150	26.19	0.359	23.0	78.8
	230.0	75.7	111.2	6.072	1116.8	1232	28.32	0.415	27.8	80.0
	230.0	83.9	115.6	5.711	1064.6	1306	29.93	0.465	32.6	81.1
	230.0	92.4	121.2	5.313	1003.0	1373	30.98	0.506	37.7	82.1
	230.0	101.2	127.9	4.893	934.0	1435	31.33	0.535	42.8	83.0
	230.0	109.6	135.3	4.471	860.4	1490	30.81	0.547	47.4	83.7
	230.0	118.0	143.3	4.036	781.0	1539	29.71	0.544	52.0	84.1
	230.0	126.1	151.9	3.595	695.6	1583	28.07	0.529	56.7	84.1
	230.0	133.6	160.3	3.175	610.8	1622	25.59	0.494	60.3	83.6
	230.0	140.4	168.4	2.777	526.6	1656	22.25	0.439	62.1	82.4
	230.0	146.5	176.1	2.418	448.0	1684	18.86	0.378	63.0	80.6
	230.0	151.6	183.2	2.085	368.7	1710	15.71	0.320	64.7	76.9
	230.0	155.7	189.4	1.819	302.2	1730	11.36	0.234	57.8	72.2
	230.0	158.5	194.3	1.606	241.8	1748	9.26	0.193	59.4	65.5
	230.0	160.7	198.9	1.436	187.2	1762	6.26	0.131	52.3	56.7
5.509 OZ-FT	230.0	160.9	199.5	1.414	179.7	1765	5.51	0.116	47.9	55.2
	230.0	162.1	202.5	1.333	148.3	1773	3.05	0.064	32.4	48.4
	230.0	162.9	205.0	1.274	118.5	1783	1.26	0.027	16.9	40.5
	230.0	163.8	207.2	1.250	97.5	1788	0.00	0.000	0.0	33.9

DRAWING NO. PAGE 5 of 8
1YAZ4BG

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

Performance Data



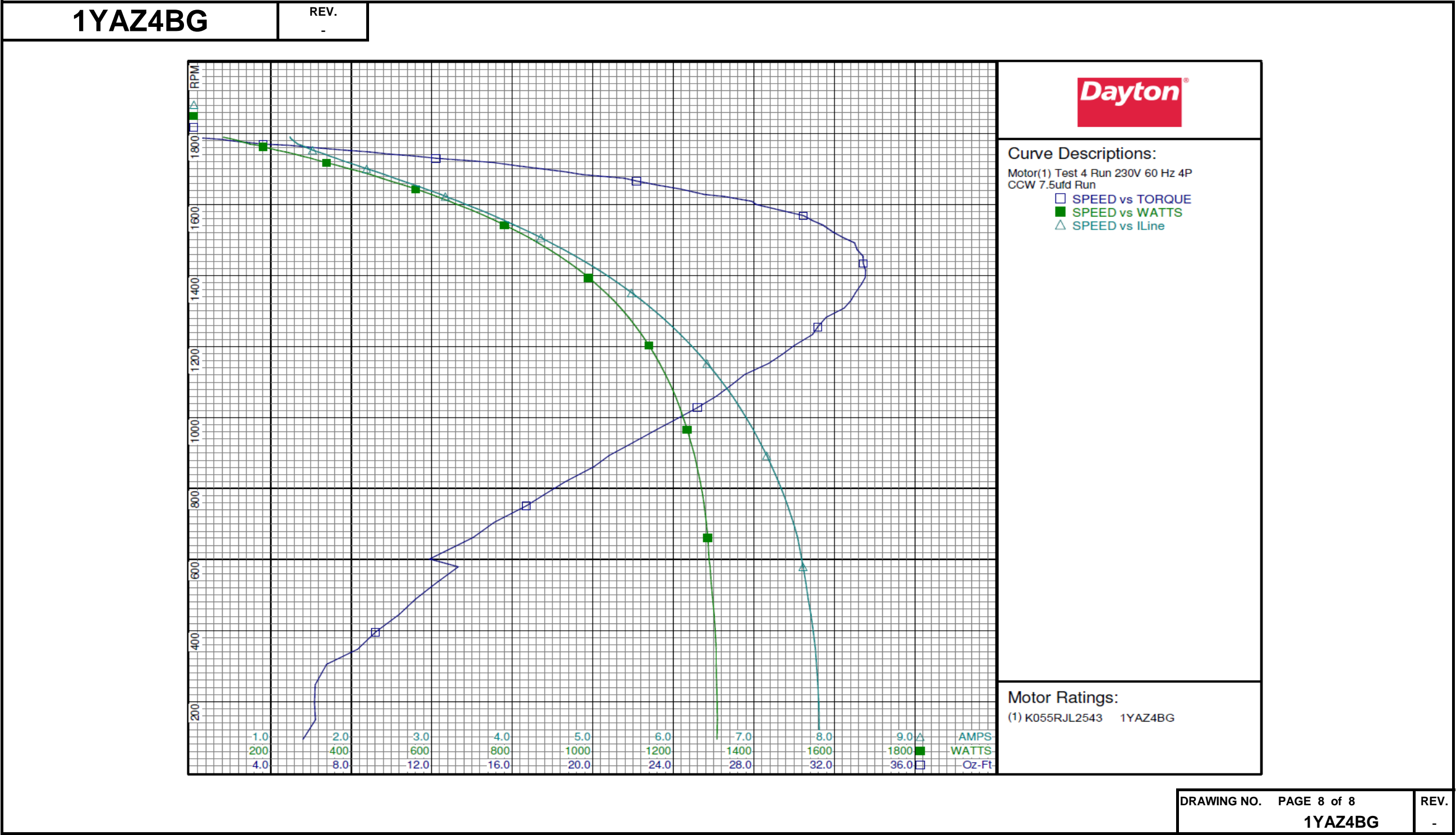
Performance Data



1YAZ4BG			REV. -							
Dayton Manufacturing Company										
Motor Description				Test Conditions						
Model:		K055RJL2543 1YAZ4BG		Test Type:		Run		Run Cap:		7.5
Motor ID:				Test Number:		4		Start Cap:		0µfd
Poles:		4		Poles:		4		Environment:		24.9 Deg C 51 % RH 961 hPa
Volts:		115/230		Volts:		230		Tested:		7/26/2016 1:20:31 PM
Frequency:		60		Hz:		60		Tested By:		Navarro, Susana
HP:		1/4		Rotation:		CCW		Gear Ratio:		1:1
Speed:		1700		Special Cond:				Bearing Friction:		-0.53 Oz-Ft
Phase:		1		Speed Conn:				Windage Torque:		-2.37 Oz-Ft
Protector:		7AM036-A5		TestBoard:		CMD InLine Three Phase #2 Fixture #1				
Special Points	Vline (V)	Vaux (V)	Vcap (V)	Iline (A)	Watts	RPM	Tq (Oz-ft)	HP	Eff (%)	PF (%)
	230.0	164.7	209.0	1.240	82.2	1789	0.00	0.000	0.0	28.8
	230.0	163.7	206.8	1.254	100.8	1785	1.15	0.024	18.0	34.9
	230.0	162.5	204.2	1.293	125.4	1777	2.37	0.050	29.8	42.2
	230.0	161.3	200.4	1.382	167.7	1766	4.88	0.103	45.6	52.8
	230.0	160.0	196.9	1.521	214.6	1753	7.67	0.160	55.6	61.4
	230.0	157.2	191.6	1.727	276.1	1737	11.11	0.230	62.0	69.5
12.14 OZ-FT	230.0	155.9	189.4	1.808	298.6	1730	12.14	0.250	62.5	71.8
	230.0	153.4	185.7	1.969	339.4	1717	15.11	0.309	67.9	74.9
	230.0	148.5	178.4	2.312	424.1	1692	18.61	0.375	65.9	79.7
	230.0	143.1	171.4	2.643	497.8	1666	22.18	0.440	65.9	81.9
	230.0	135.1	161.6	3.118	599.6	1628	25.55	0.495	61.6	83.6
	230.0	129.8	155.4	3.424	662.8	1599	28.10	0.535	60.2	84.1
	230.0	121.2	146.0	3.910	758.7	1554	30.92	0.572	56.2	84.4
	230.0	112.8	137.6	4.356	841.8	1506	32.42	0.581	51.5	84.0
	230.0	104.4	130.0	4.785	917.5	1454	33.41	0.578	47.0	83.4
BDT OZ-FT	230.0	98.5	125.1	5.076	966.9	1414	33.54	0.565	43.6	82.8
	230.0	95.6	122.9	5.216	989.7	1394	33.52	0.556	41.9	82.5
	230.0	87.2	117.1	5.604	1050.8	1330	32.81	0.520	36.9	81.5
	230.0	78.5	112.2	5.987	1106.9	1255	31.16	0.466	31.4	80.4
	230.0	70.4	108.6	6.325	1153.3	1176	29.38	0.411	26.6	79.3
	230.0	62.4	106.2	6.638	1193.2	1090	26.84	0.348	21.8	78.2
	230.0	55.0	105.0	6.906	1225.0	997	24.22	0.287	17.5	77.1
	230.0	47.6	105.1	7.159	1252.4	892	20.80	0.221	13.2	76.1
	230.0	40.6	106.1	7.370	1272.4	781	17.55	0.163	9.6	75.1
	230.0	34.7	108.3	7.540	1285.3	662	14.05	0.111	6.4	74.1
	230.0	29.8	109.7	7.643	1293.8	533	12.21	0.078	4.5	73.6
	230.0	24.5	110.8	7.736	1303.9	395	9.21	0.043	2.5	73.3
	230.0	18.6	112.8	7.793	1307.0	248	6.22	0.018	1.0	72.9
	230.0	14.3	115.8	7.809	1308.2	94	5.61	0.006	0.4	72.8
DRAWING NO. PAGE 7 of 8										REV.
1YAZ4BG										-

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

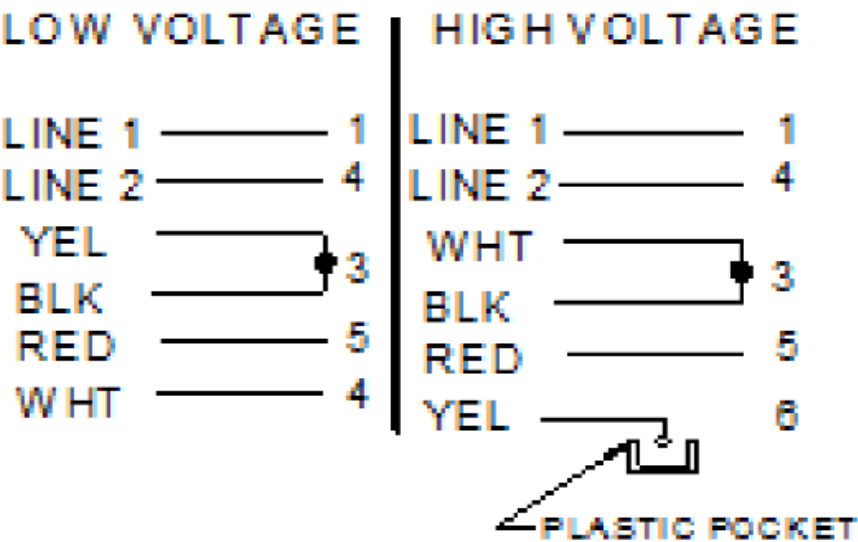
Performance Data



1YAZ4BG

REV.
0

CONNECTIONS



MOTOR ROTATION IS CCW LE
TO REVERSE INTERCHANGE
RED & BLACK LEADS

Dayton®

AGRICULTURAL FAN MOTOR

HP: 1/4
VOLTS: 115/230

AMPS: 3.3/1.7

RPM: 1700

DUTY: CONT

SF: 1.00

KVA CODE: H

ENCL: TEAO

THERMALLY PROTECTED: AUTO

MFG. NO.

PROT. CODE:

MTR REF: K55HXRJL-2543

[BAR CODE]

Part No **1YAZ4BG**

PH: 1

HZ: 60

FR: 48YZ

INS CL: B

AMB: 40 °C

SFA: 3.3/1.7

AVG. F.L.
EFF.

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

CONNECTIONS

LOW VOLTAGE

LINE 1 ——— 1
LINE 2 ——— 4
YEL ——— 3
BLK ——— 3
RED ——— 5
WHT ——— 4

HIGH VOLTAGE

LINE 1 ——— 1
LINE 2 ——— 4
WHT ——— 3
BLK ——— 3
RED ——— 5
YEL ——— 6



MOTOR ROTATION IS CCW LE
TO REVERSE INTERCHANGE
RED & BLACK LEADS



E37403



258501

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

