

Dayton®

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Performance Data



1YBV9BG

REV.
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SPLIT-PHASE & CAPACITOR START MOTOR PERFORMANCE

HP:	1/2						
Poles:	4						
Ambient (°C):	40						
Altitude (FASL):							
No. of Speeds:	1						
Volts:	115/230	115	230				
HZ:	60	60	60				
Service Factor:	1.25						
Efficiency:	@ Rated Load	68.7	68.7				
Power Factor:	@ Rated Load	68.3	68.5				
Amps:	@ No Load						
	@ Rated Load	7	3.5				
	@ Service Factor	7.9	4				
	@ Locked Rotor					44.6	
RPM:	@ Rated Load					1749	
Torques:	Breakdown	67.6	68.6				
	Locked Rotor	27.7	22.5				
	Pull-Up	27.6	22.5				
	Rated Load	24.3	24.3				
	Service Factor	30.3	30.3				
Watts:	Rated Load	550	549				
KVA Code:	M	M	M				
Temperature Rise:	@ Rated Load	TEAO	TEAO				
	@ Service Factor	-	-				
Thermal Protector:	Trip Temp (°C)	-	-				
Winding Material:	Start (Auxiliary)	Cu	Cu				
	Run (Main)	Cu	Cu				
Capacitor(s):	Start (MFD / Volts)					NA	
	No. of Start Capacitors						
	Run (MFD / Volts)					NA	
	No. of Run Capacitors						

LOW SPEED PERFORMANCE DATA:

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

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1YBV9BG

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

Performance Data



1YBV9BG

REV.

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Dayton Manufacturing Company

Motor Description

Model: S063JGE8168 1YBV9BG
 Motor ID:
 Poles: 4
 Volts: 115/230
 Frequency: 60
 HP: 1/2
 Speed: 1725
 Phase: 1
 Protector: MEJ38AR

Test Conditions

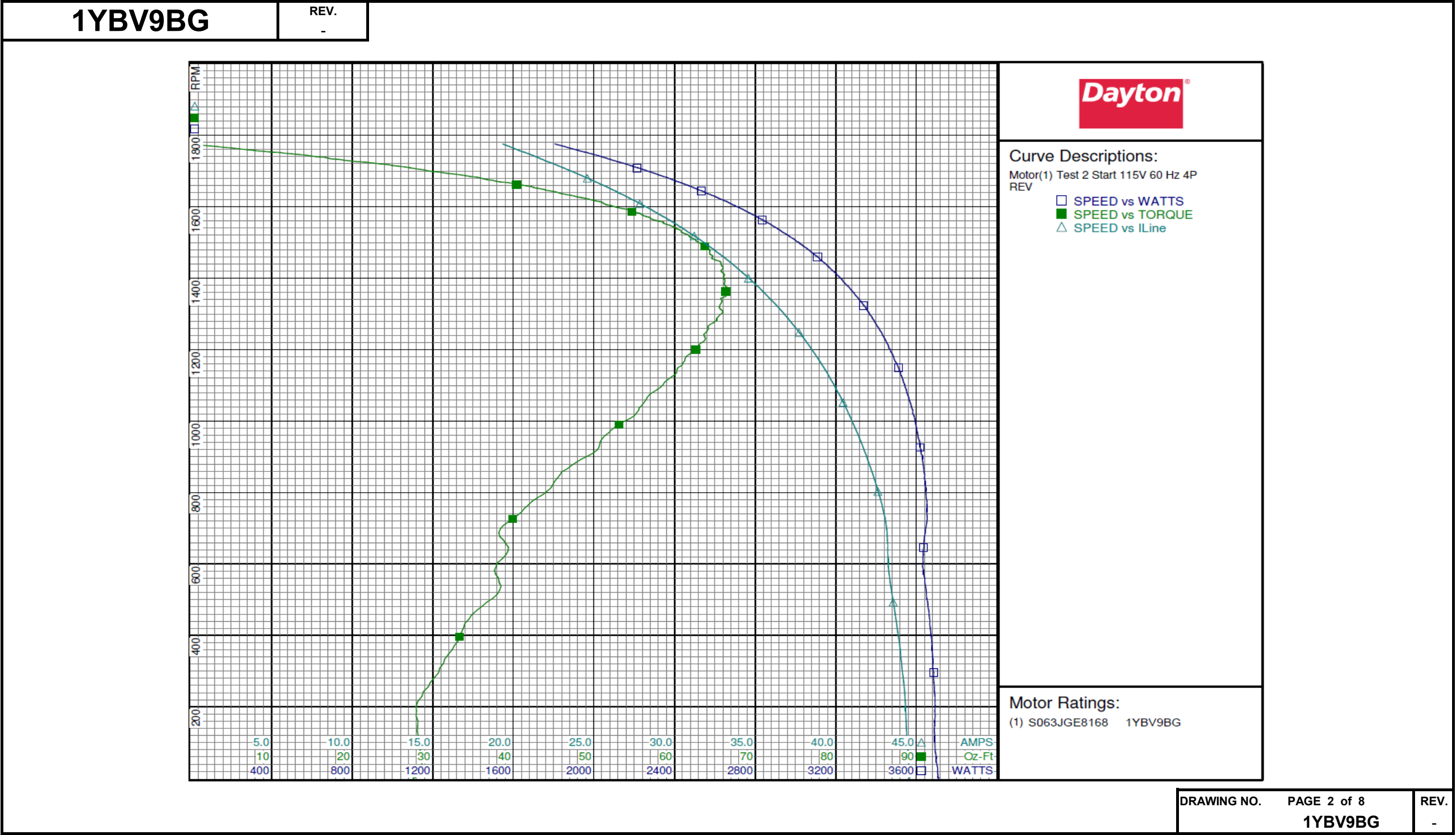
Test Type: Start
 Test Number: 2
 Poles: 4
 Volts: 115
 Hz: 60
 Rotation: REV
 Special Cond:
 Speed Conn:
 TestBoard: Amps Performance Fixture #1
 Run Cap: 0
 Start Cap: 0µfd
 Environment:
 Tested: 8/6/2015 1:39:33 PM
 Tested By: Sharp, Gerald
 Gear Ratio: 1:1
 Bearing Friction: -0.27 Oz-Ft
 Windage Torque: -2.14 Oz-Ft

Special Points	Vline (V)	Iline (A)	Imain (A)	Iaux (A)	Watts	RPM	Tq (Oz-ft)	HP	Eff (%)	PF (%)
	115.0	44.60	35.75	10.012	3712	1	27.70	0.000	0.0	72.4
PUT OZ-FT	115.0	44.58	35.76	9.984	3709	0	27.56	0.000	0.0	72.3
	115.0	44.53	35.75	9.919	3705	31	28.47	0.011	0.2	72.3
	115.0	44.35	35.70	9.683	3693	174	27.94	0.058	1.2	72.4
	115.0	44.10	35.55	9.483	3681	308	30.86	0.113	2.3	72.6
	115.0	43.76	35.37	9.220	3665	433	33.98	0.175	3.6	72.8
	115.0	43.36	35.16	8.895	3641	548	38.24	0.250	5.1	73.0
	115.0	43.21	35.06	8.642	3636	656	39.08	0.305	6.3	73.2
	115.0	42.91	34.65	8.592	3651	755	41.37	0.372	7.6	74.0
	115.0	42.31	34.08	8.467	3641	849	45.77	0.462	9.5	74.8
	115.0	41.62	33.44	8.313	3618	934	50.71	0.564	11.6	75.6
	115.0	40.86	32.75	8.159	3588	1014	54.99	0.664	13.8	76.4
	115.0	40.04	32.00	8.023	3549	1087	57.82	0.748	15.7	77.1
	115.0	39.16	31.20	7.905	3505	1156	60.93	0.838	17.8	77.8
	115.0	38.23	30.34	7.809	3453	1218	63.26	0.917	19.8	78.6
	115.0	37.24	29.43	7.746	3394	1276	64.86	0.985	21.6	79.3
	115.0	36.21	28.47	7.719	3332	1328	65.75	1.040	23.3	80.0
	115.0	35.13	27.46	7.721	3259	1377	66.30	1.087	24.9	80.7
	115.0	34.04	26.42	7.763	3182	1421	65.77	1.113	26.1	81.3
	115.0	32.93	25.36	7.838	3102	1462	64.69	1.126	27.1	81.9
	115.0	31.80	24.28	7.945	3015	1500	62.92	1.124	27.8	82.4
	115.0	30.65	23.18	8.080	2920	1534	60.67	1.108	28.3	82.9
	115.0	29.53	22.08	8.242	2825	1566	57.06	1.063	28.1	83.2
	115.0	28.41	20.97	8.418	2728	1595	53.40	1.014	27.7	83.5
	115.0	27.29	19.85	8.618	2626	1621	49.28	0.951	27.0	83.7
	115.0	26.20	18.75	8.833	2525	1645	44.02	0.862	25.5	83.8
	115.0	25.11	17.63	9.059	2420	1668	38.39	0.762	23.5	83.8
	115.0	24.04	16.53	9.285	2314	1690	32.91	0.662	21.3	83.7
	115.0	22.97	15.41	9.524	2204	1711	26.56	0.541	18.3	83.4
	115.0	21.91	14.27	9.784	2093	1729	19.11	0.393	14.0	83.1
	115.0	20.85	13.09	10.041	1976	1749	11.72	0.244	9.2	82.4
	115.0	19.76	11.86	10.320	1855	1768	3.26	0.068	2.8	81.6
	115.0	19.34	11.35	10.436	1805	1775	0.00	0.000	0.0	81.2

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

Performance Data



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

Performance Data



1YBV9BG

REV.

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Dayton Manufacturing Company

Motor Description

Model: S063JGE8168 1YBV9BG
 Motor ID:
 Poles: 4
 Volts: 115/230
 Frequency: 60
 HP: 1/2
 Speed: 1725
 Phase: 1
 Protector: MEJ38AR

Test Conditions

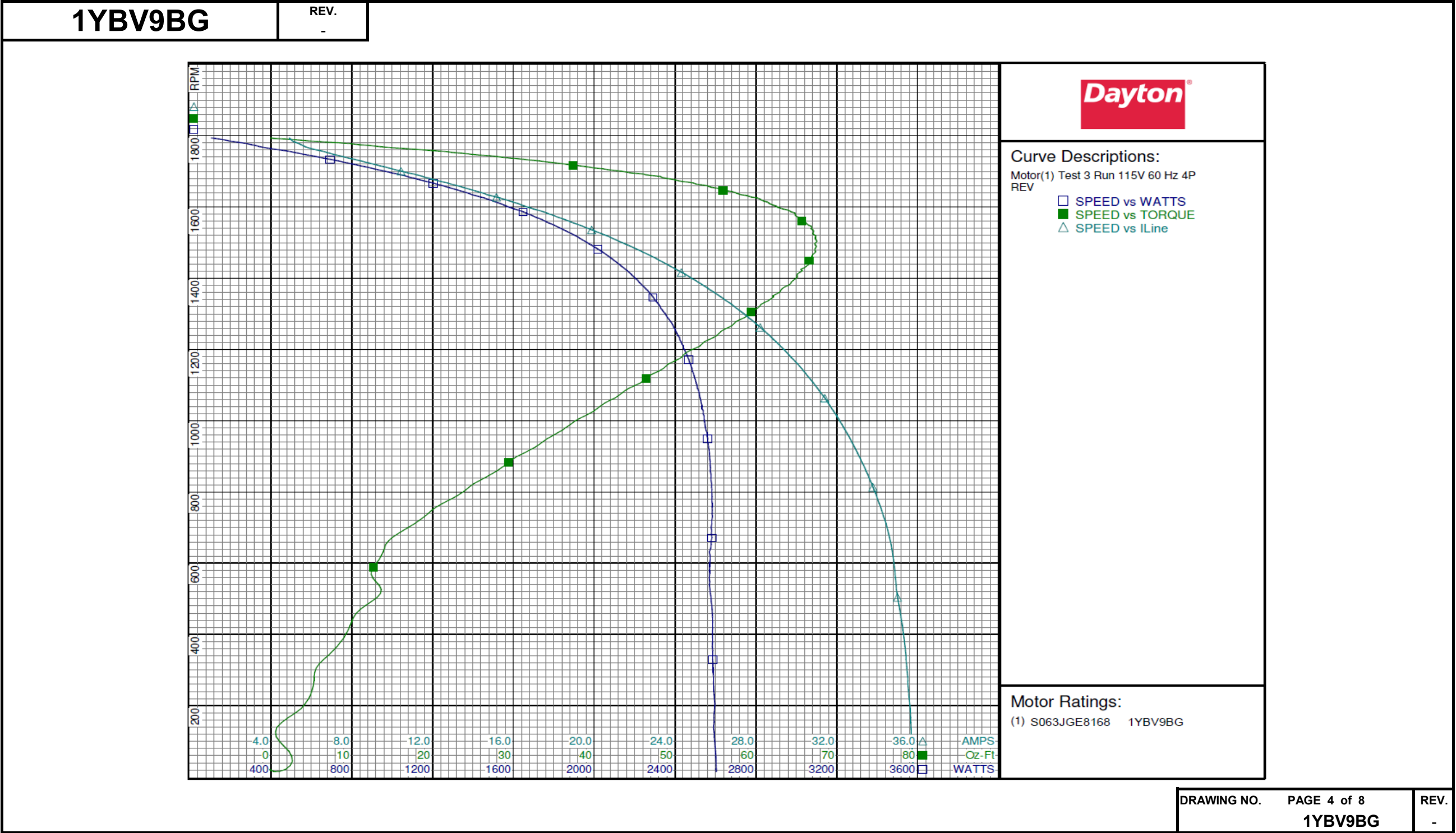
Test Type: Run
 Test Number: 3
 Poles: 4
 Volts: 115
 Hz: 60
 Rotation: REV
 Special Cond:
 Speed Conn:
 TestBoard: Amtps Performance Fixture #1
 Run Cap: 0
 Start Cap: 0µfd
 Environment:
 Tested: 8/6/2015 1:38:31 PM
 Tested By: Sharp, Gerald
 Gear Ratio: 1:1
 Bearing Friction: -0.31 Oz-Ft
 Windage Torque: -2.21 Oz-Ft

Special Points	Vline(V)	Iline(A)	Watts	RPM	Tq(Oz-ft)	HP	Eff(%)	PF(%)
	115.0	4.90	105	1793	0.00	0.000	0.0	18.6
	115.0	5.41	285	1777	10.02	0.212	55.6	45.8
	115.0	6.65	499	1755	21.75	0.454	67.9	65.3
0.5 HP	115.0	6.96	544	1749	24.01	0.500	68.5	68.0
24.3 OZ-FT	115.0	7.00	550	1749	24.30	0.506	68.7	68.3
0.625 HP	115.0	7.93	671	1736	30.25	0.625	69.5	73.5
30.4 OZ-FT	115.0	7.95	674	1735	30.40	0.628	69.6	73.6
	115.0	7.98	676	1735	30.56	0.631	69.6	73.7
	115.0	9.42	845	1715	38.28	0.781	69.0	78.0
	115.0	10.91	1011	1694	45.27	0.913	67.3	80.6
	115.0	12.41	1169	1671	50.89	1.012	64.6	81.9
	115.0	13.96	1324	1647	55.95	1.097	61.8	82.4
	115.0	15.49	1470	1622	60.50	1.168	59.3	82.5
	115.0	17.01	1607	1593	63.40	1.203	55.8	82.1
	115.0	18.54	1741	1564	65.48	1.219	52.2	81.7
	115.0	20.03	1862	1532	67.12	1.224	49.0	80.8
BDT OZ-FT	115.0	21.22	1954	1503	67.55	1.209	46.1	80.1
	115.0	21.50	1973	1496	67.26	1.198	45.3	79.8
	115.0	22.96	2078	1458	66.91	1.161	41.7	78.7
	115.0	24.32	2171	1416	65.43	1.103	37.9	77.6
	115.0	25.64	2254	1370	63.22	1.031	34.1	76.4
	115.0	26.91	2325	1321	60.45	0.950	30.5	75.1
	115.0	28.10	2389	1267	57.08	0.861	26.9	74.0
	115.0	29.21	2441	1209	53.07	0.764	23.3	72.7
	115.0	30.26	2484	1146	48.54	0.662	19.9	71.4
	115.0	31.21	2519	1077	43.41	0.557	16.5	70.2
	115.0	32.09	2544	1004	38.05	0.455	13.3	68.9
	115.0	32.88	2565	925	32.69	0.360	10.5	67.8
	115.0	33.59	2577	840	26.53	0.265	7.7	66.7
	115.0	34.21	2584	749	19.88	0.177	5.1	65.7
	115.0	34.69	2578	652	14.19	0.110	3.2	64.6
	115.0	34.92	2571	548	12.99	0.085	2.5	64.0
	115.0	35.20	2585	437	10.01	0.052	1.5	63.9
	115.0	35.45	2587	318	5.99	0.023	0.7	63.5
	115.0	35.63	2595	192	3.75	0.009	0.2	63.3
	115.0	35.74	2600	58	2.55	0.002	0.1	63.3

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

Performance Data



Performance Data



1YBV9BG

REV.

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Dayton Manufacturing Company

Motor Description

Model: S063JGE8168 1YBV9BG
 Motor ID:
 Poles: 4
 Volts: 115/230
 Frequency: 60
 HP: 1/2
 Speed: 1725
 Phase: 1
 Protector: MEJ38AR

Test Conditions

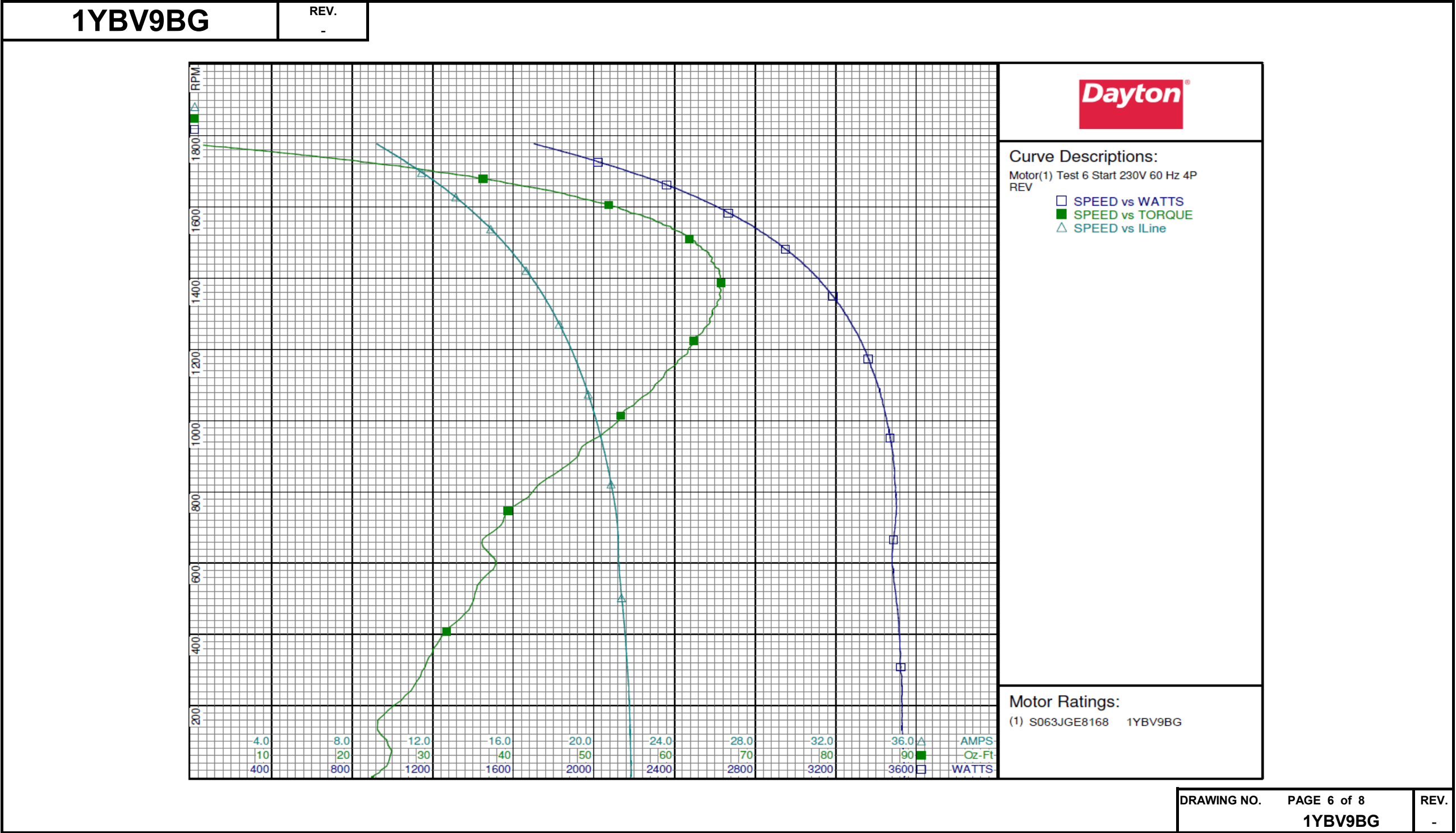
Test Type: Start
 Test Number: 6
 Poles: 4
 Volts: 230
 Hz: 60
 Rotation: REV
 Special Cond:
 Speed Conn:
 TestBoard: Aamps Performance Fixture #1
 Run Cap: 0
 Start Cap: 0µfd
 Environment:
 Tested: 8/6/2015 2:54:35 PM
 Tested By: Sharp, Gerald
 Gear Ratio: 1:1
 Bearing Friction: -0.24 Oz-Ft
 Windage Torque: -1.92 Oz-Ft

Special Points	Vline (V)	Iline (A)	Imain (A)	Iaux (A)	Watts	RPM	Tq (Oz-ft)	HP	Eff (%)	PF (%)
	230.0	21.86	14.191	9.072	3542	1	22.48	0.000	0.0	70.5
PUT OZ-FT	230.0	21.85	14.192	9.066	3542	2	22.45	0.000	0.0	70.5
	230.0	21.83	14.213	8.994	3537	31	24.30	0.009	0.2	70.4
	230.0	21.78	14.219	8.799	3530	173	23.87	0.049	1.0	70.5
	230.0	21.65	14.143	8.624	3523	308	29.05	0.107	2.3	70.7
	230.0	21.49	14.075	8.389	3512	433	32.80	0.169	3.6	71.0
	230.0	21.30	14.008	8.090	3488	549	35.92	0.235	5.0	71.2
	230.0	21.21	13.920	7.866	3484	656	36.09	0.282	6.0	71.4
	230.0	21.06	13.618	7.830	3501	756	39.83	0.359	7.6	72.3
	230.0	20.76	13.297	7.735	3491	849	45.02	0.455	9.7	73.1
	230.0	20.42	12.966	7.621	3475	934	48.98	0.545	11.7	74.0
	230.0	20.05	12.614	7.508	3448	1014	53.34	0.644	13.9	74.8
	230.0	19.64	12.240	7.407	3417	1088	57.29	0.742	16.2	75.7
	230.0	19.20	11.842	7.322	3373	1156	60.09	0.827	18.3	76.4
	230.0	18.73	11.418	7.265	3329	1218	62.43	0.905	20.3	77.3
	230.0	18.24	10.982	7.234	3273	1276	64.39	0.978	22.3	78.0
	230.0	17.72	10.524	7.235	3210	1329	65.25	1.032	24.0	78.8
	230.0	17.18	10.062	7.268	3144	1377	65.50	1.074	25.5	79.6
	230.0	16.64	9.593	7.330	3072	1421	65.54	1.109	26.9	80.3
	230.0	16.08	9.118	7.427	2993	1462	64.39	1.121	27.9	80.9
	230.0	15.51	8.647	7.544	2908	1500	62.62	1.118	28.7	81.5
	230.0	14.94	8.182	7.690	2819	1534	60.04	1.097	29.0	82.0
	230.0	14.38	7.735	7.855	2727	1565	57.26	1.067	29.2	82.5
	230.0	13.81	7.299	8.036	2628	1594	53.23	1.010	28.7	82.7
	230.0	13.25	6.886	8.233	2530	1621	48.83	0.942	27.8	83.0
	230.0	12.71	6.504	8.440	2432	1646	44.47	0.871	26.7	83.2
	230.0	12.17	6.143	8.661	2331	1668	38.81	0.771	24.7	83.3
	230.0	11.61	5.804	8.878	2215	1690	32.88	0.662	22.3	83.0
	230.0	11.08	5.509	9.111	2109	1711	26.72	0.544	19.3	82.7
	230.0	10.56	5.256	9.353	2000	1731	19.95	0.411	15.3	82.3
	230.0	10.03	5.027	9.594	1886	1749	12.55	0.261	10.3	81.8
	230.0	9.49	4.849	9.857	1765	1768	4.29	0.090	3.8	80.9
	230.0	9.22	4.785	9.999	1702	1777	0.00	0.000	0.0	80.3

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 1YBV9BG -

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

Performance Data



Performance Data



1YBV9BG

REV.

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Dayton Manufacturing Company

Motor Description

Model: S063JGE8168 1YBV9BG
 Motor ID:
 Poles: 4
 Volts: 115/230
 Frequency: 60
 HP: 1/2
 Speed: 1725
 Phase: 1
 Protector: MEJ38AR

Test Conditions

Test Type: Run Run Cap: 0
 Test Number: 7 Start Cap: 0µfd
 Poles: 4 Environment:
 Volts: 230 Tested: 8/6/2015 2:53:37 PM
 Hz: 60 Tested By: Sharp, Gerald
 Rotation: REV Gear Ratio: 1:1
 Special Cond: Bearing Friction: -0.29 Oz-Ft
 Speed Conn: Windage Torque: -2.09 Oz-Ft
 TestBoard: Amps Performance Fixture #1

Special Points	Vline (V)	Iline (A)	Watts	RPM	Tq (Oz-ft)	HP	Eff (%)	PF (%)
	230.0	2.436	103	1794	0.00	0.000	0.0	18.4
	230.0	2.678	279	1776	9.61	0.203	54.3	45.4
	230.0	3.277	490	1754	21.18	0.442	67.4	65.0
0.5 HP	230.0	3.463	543	1749	24.02	0.500	68.7	68.1
24.3 OZ-FT	230.0	3.486	549	1748	24.30	0.506	68.7	68.5
	230.0	3.935	666	1735	30.11	0.622	69.7	73.6
0.625 HP	230.0	3.951	669	1735	30.26	0.625	69.7	73.7
30.4 OZ-FT	230.0	3.964	672	1734	30.40	0.628	69.6	73.7
	230.0	4.622	826	1715	37.64	0.769	69.4	77.7
	230.0	5.367	993	1694	45.02	0.908	68.2	80.4
	230.0	6.106	1148	1671	50.98	1.014	65.9	81.7
	230.0	6.860	1298	1648	55.98	1.098	63.1	82.3
	230.0	7.644	1447	1622	60.52	1.169	60.3	82.3
	230.0	8.408	1586	1594	64.09	1.216	57.2	82.0
	230.0	9.164	1716	1565	66.06	1.231	53.5	81.4
	230.0	9.926	1839	1532	67.85	1.238	50.2	80.6
	230.0	10.668	1955	1497	68.47	1.220	46.5	79.7
BDT OZ-FT	230.0	10.742	1965	1493	68.57	1.219	46.3	79.5
	230.0	11.387	2059	1458	68.07	1.182	42.8	78.6
	230.0	12.109	2158	1416	66.60	1.123	38.8	77.5
	230.0	12.775	2240	1371	64.93	1.060	35.3	76.2
	230.0	13.415	2315	1321	62.11	0.977	31.5	75.0
	230.0	14.023	2378	1267	58.25	0.879	27.6	73.7
	230.0	14.592	2433	1209	54.69	0.787	24.1	72.5
	230.0	15.120	2474	1146	50.17	0.684	20.6	71.1
	230.0	15.605	2509	1078	45.17	0.580	17.2	69.9
	230.0	16.046	2536	1005	39.65	0.474	14.0	68.7
	230.0	16.448	2557	925	34.10	0.376	11.0	67.6
	230.0	16.811	2570	840	27.74	0.277	8.1	66.5
	230.0	17.125	2575	749	21.36	0.190	5.5	65.4
	230.0	17.373	2570	651	15.82	0.123	3.6	64.3
	230.0	17.491	2563	547	14.51	0.095	2.8	63.7
	230.0	17.640	2574	437	11.20	0.058	1.7	63.4
	230.0	17.759	2578	318	6.89	0.026	0.8	63.1
	230.0	17.851	2583	192	3.77	0.009	0.2	62.9
	230.0	17.900	2591	58	2.34	0.002	0.0	62.9

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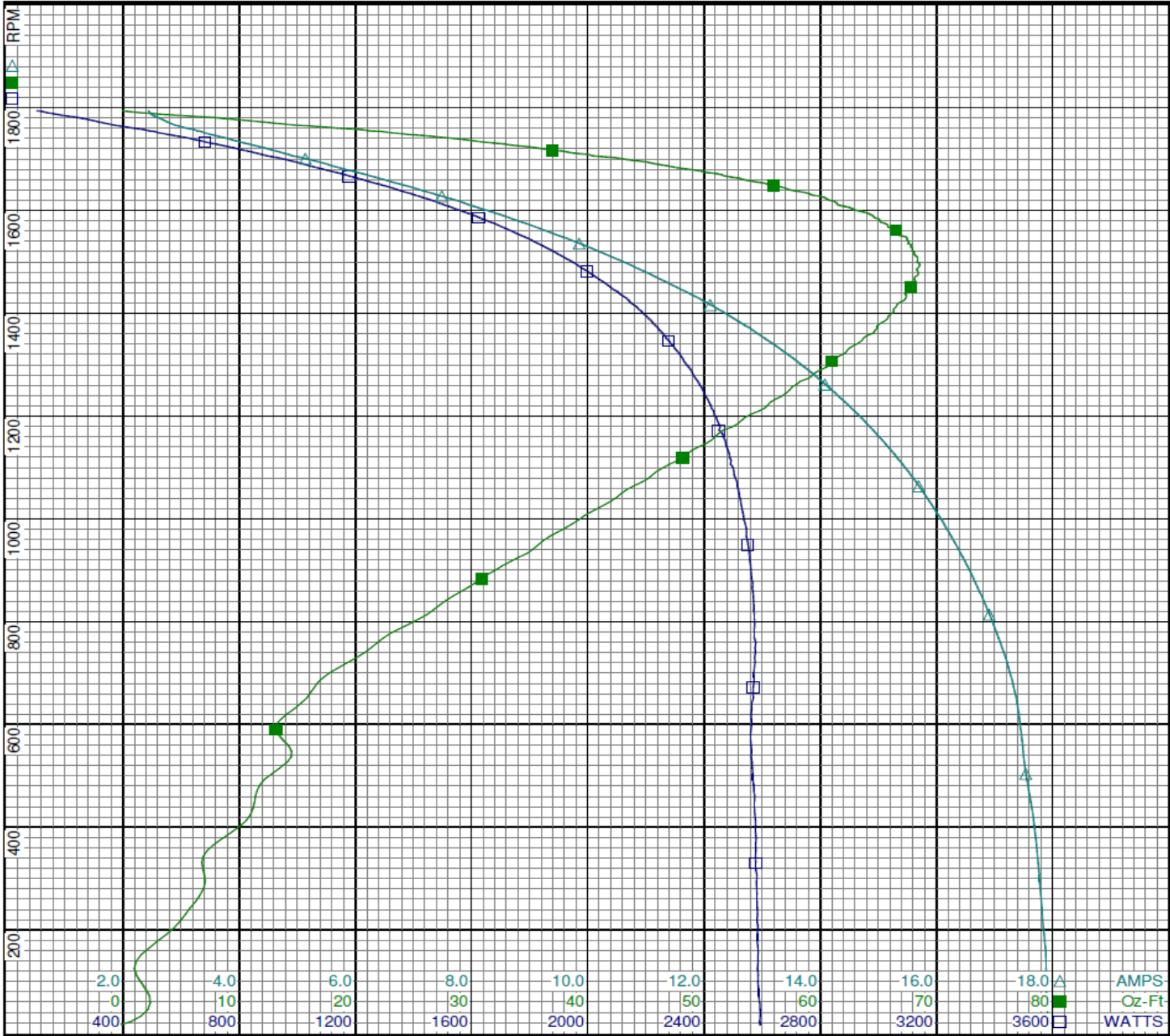
Dayton Electric Mfg. Co. Lake Forest, IL 60045 USA

Performance Data



1YBV9BG

REV.
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Curve Descriptions:
Motor(1) Test 7 Run 230V 60 Hz 4P
REV
□ SPEED vs WATTS
■ SPEED vs TORQUE
△ SPEED vs ILine

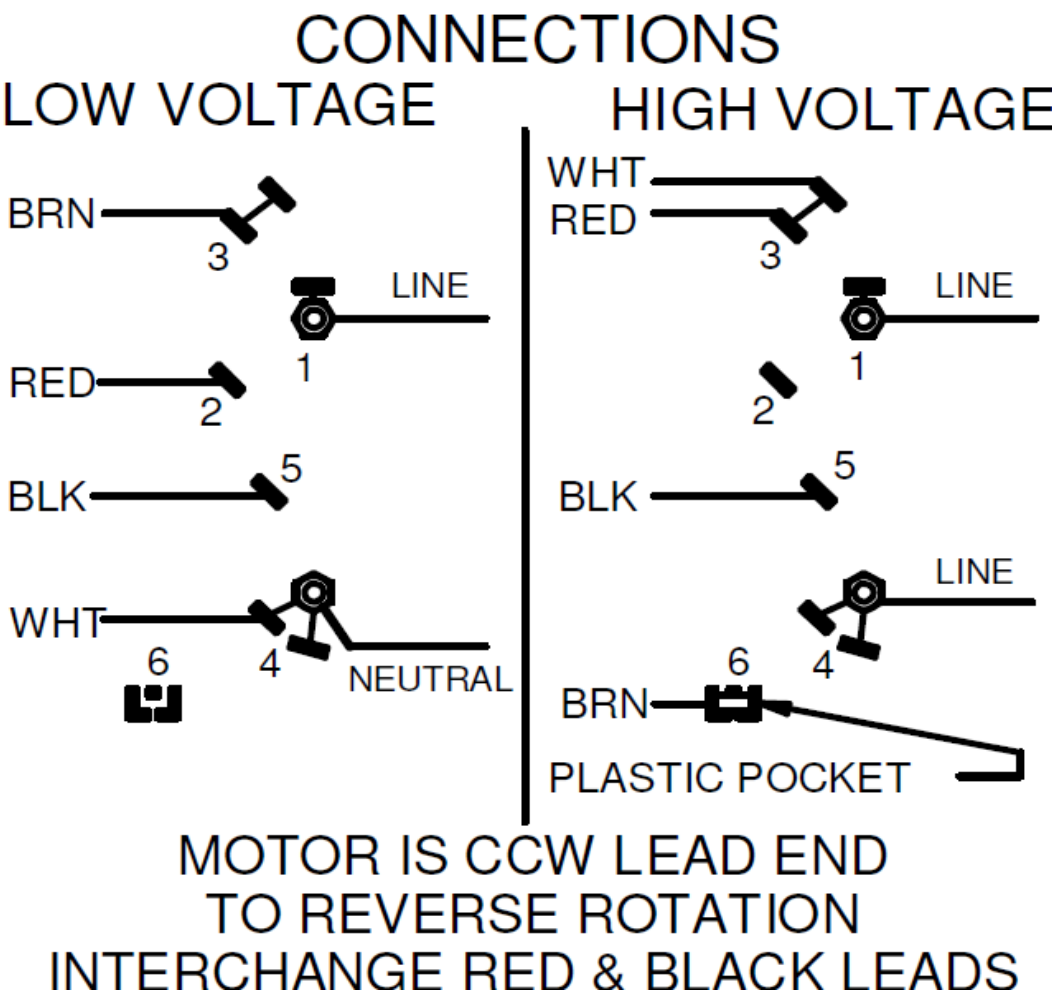
Motor Ratings:
(1) S063JGE8168 1YBV9BG

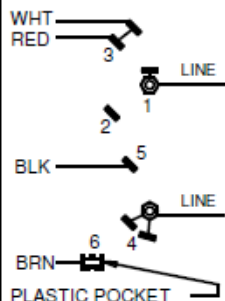
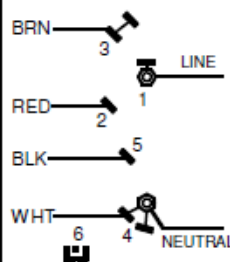
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1YBV9BG		-

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

1YBV9BG

REV.
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Dayton**AGRICULTURAL FAN MOTOR****HP:** 1/2
VOLTS: 115/230**BAR CODE****Part No** 1YBV9BG**AMPS:** 7.6/3.8**PH:** 1**RPM:** 1725**HZ:** 60**DUTY:** CONT**FR:** 56**SF:** 1.25**INS CL:** B**KVA CODE:** M**AMB:** 40 °C**ENCL:** TEAO**SFA:** 8.2/4.1**THERMALLY PROTECTED:** AUTO**MFG. NO.** **PROT. CODE:** 04401 **AVG. F.L.
EFF.****MTR REF:** S63KZJGE-8168**Disconnect Power Before Making Any
Electrical Connections or Changes****CONNECTIONS**
LOW VOLTAGE **HIGH VOLTAGE****MOTOR IS CCW LEAD END
TO REVERSE ROTATION
INTERCHANGE RED & BLACK LEADS****Mfd for Dayton Electric Mfg. Co., Lake Forest, IL 60045 USA****Made in Mexico**