

Performance Data



3K344BG

REV.
-

MOTOR PERFORMANCE

HP:	2HP							
Poles:	2P							
No. of Speeds:	1 Spd							
Volts:	115/208-230	115	208	230				
HZ:	60	60	60	60				
Service Factor:								
Efficiency:	@ Rated Load	79.9	78.6	79.7				
Power Factor:	@ Rated Load	92.9	93.5	93.4				
Amps:	@ No Load							
	@ Rated Load	17.7	9.77	8.7				
	@ Service Factor	17.7	9.77	8.7				
	@ Locked Rotor	110.2	50	56.10				
RPM:	@ Rated Load	3497	3454	3454				
Ambient (°C):	40							
Altitude (FASL):								
Torques:	Breakdown	123.1	96.4	118.69				
	Locked Rotor	104.8	86.6	107.2				
	Pull-Up	81	60	83.5				
	Rated Load	48.64	48.64	48.64				
	Service Factor	48.64	48.64	48.64				
Watts:	Rated Load	1892	1899	1899				
KVA Code:								
Temperature Rise:	@ Rated Load							
	@ Service Factor							
Thermal Protector:	Trip Temp (°C)							
Winding Material:	Start (Auxiliary)	Cu						
	Run (Main)	Cu						
Capacitor(s):	Start (MFD / Volts)	594 mFd, 110 V						
	No. of Start Capacitors							
	Run (MFD / Volts)	30 mFd, 370 V						
	No. of Run Capacitors							

PERFORMANCE DATA:

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

DRAWING NO. PAGE 1 REV.
3K344BG -

Performance Data



3K344BG REV.
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Dayton Manufacturing Company

Motor Description

Model: T063CZJ226601 3K344BG
 Motor ID: No. 1 Of 3
 Poles: 2
 Volts: 115
 Frequency: 60
 HP: 2
 Speed: 3450
 Phase: 1
 Protector:

Test Conditions

Test Type: Start
 Test Number: 1
 Poles: 2
 Volts: 115
 Hz: 60
 Rotation:
 Special Cond:
 Speed Conn: 3 line
 TestBoard: Amtps Performance Fixture #1
 Run Cap: 30 μ fd
 Start Cap: 594 μ fd
 Environment:
 Tested: 6/28/2005 9:12:33 AM
 Tested By: Sharp, Gerald
 Gear Ratio: 1:1
 Bearing Friction: -0.48 Oz-Ft
 Windage Torque: -3.04 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
	115.0	83.7	127.9	110.22	110.83	30.50	10193	10	104.8	0.013	0.1	80.4	632.5
	115.0	84.1	127.3	110.07	110.47	30.33	10180	81	107.1	0.103	0.8	80.4	632.1
PUT OZ-FT	115.0	84.9	123.8	110.01	109.86	29.44	10143	309	81.8	0.300	2.2	80.2	630.6
	115.0	85.1	123.2	109.84	109.48	29.27	10147	363	84.0	0.363	2.7	80.3	630.0
	115.0	87.3	119.9	109.49	107.95	28.42	10174	637	97.5	0.740	5.4	80.8	628.6
	115.0	90.0	116.8	108.83	105.98	27.63	10212	890	114.1	1.209	8.8	81.6	627.5
	115.0	93.7	114.7	108.27	103.85	27.05	10273	1123	128.0	1.710	12.4	82.5	625.5
	115.0	97.0	113.8	107.84	102.13	26.81	10352	1336	131.0	2.084	15.0	83.5	624.9
	115.0	99.1	109.9	106.88	100.02	25.79	10353	1535	143.0	2.614	18.8	84.2	622.6
	115.0	103.3	107.0	106.04	97.62	25.10	10407	1721	154.1	3.157	22.6	85.3	622.3
	115.0	108.3	104.9	105.09	95.04	24.58	10467	1895	163.5	3.687	26.3	86.6	621.4
	115.0	113.5	103.2	104.29	92.41	24.14	10516	2053	172.6	4.219	29.9	87.7	620.6
	115.0	119.3	102.2	103.47	89.71	23.84	10572	2201	180.0	4.714	33.3	88.8	618.9
	115.0	125.7	101.6	102.65	86.95	23.70	10634	2336	187.0	5.200	36.5	90.1	618.5
	115.0	132.4	101.8	101.79	84.16	23.73	10679	2461	193.6	5.672	39.6	91.2	618.1
	115.0	139.7	102.8	100.96	81.40	23.97	10739	2576	196.9	6.039	42.0	92.5	618.2
	115.0	147.2	104.4	100.07	78.66	24.38	10771	2681	199.8	6.377	44.2	93.6	619.2
	115.0	155.2	107.2	99.21	75.91	24.98	10789	2780	199.5	6.600	45.6	94.6	618.2
	115.0	163.0	110.3	98.28	73.31	25.75	10802	2870	197.3	6.741	46.6	95.6	619.3
	115.0	170.6	113.7	97.09	70.69	26.66	10770	2950	192.3	6.754	46.8	96.5	621.7
	115.0	178.5	118.4	95.81	68.01	27.85	10726	3026	183.7	6.617	46.0	97.3	623.9
	115.0	185.6	123.0	94.78	65.75	29.06	10672	3093	175.1	6.446	45.1	97.9	626.6
	115.0	193.7	128.6	93.47	63.38	30.56	10609	3157	163.5	6.147	43.2	98.7	630.6
	115.0	200.4	133.9	92.18	61.23	32.05	10504	3213	151.2	5.784	41.1	99.1	634.9
	115.0	207.2	139.7	90.67	58.99	33.68	10379	3266	134.9	5.243	37.7	99.5	639.6
	115.0	214.0	145.8	89.18	56.92	35.47	10238	3314	117.0	4.615	33.6	99.8	645.5
	115.0	220.6	152.0	87.54	54.88	37.35	10069	3361	99.0	3.963	29.4	100.0	651.7
	115.0	226.6	157.8	86.12	53.33	39.14	9912	3405	79.5	3.224	24.3	100.1	658.0
	115.0	232.4	163.6	84.41	51.85	40.99	9708	3445	56.4	2.313	17.8	100.0	664.5
	115.0	238.1	169.4	82.22	50.02	42.86	9450	3486	33.5	1.392	11.0	99.9	671.3
	115.0	242.5	174.0	80.28	48.89	44.48	9208	3520	10.5	0.438	3.5	99.7	678.1
	115.0	244.3	175.8	79.30	48.25	45.21	9089	3536	0.0	0.000	0.0	99.7	682.0

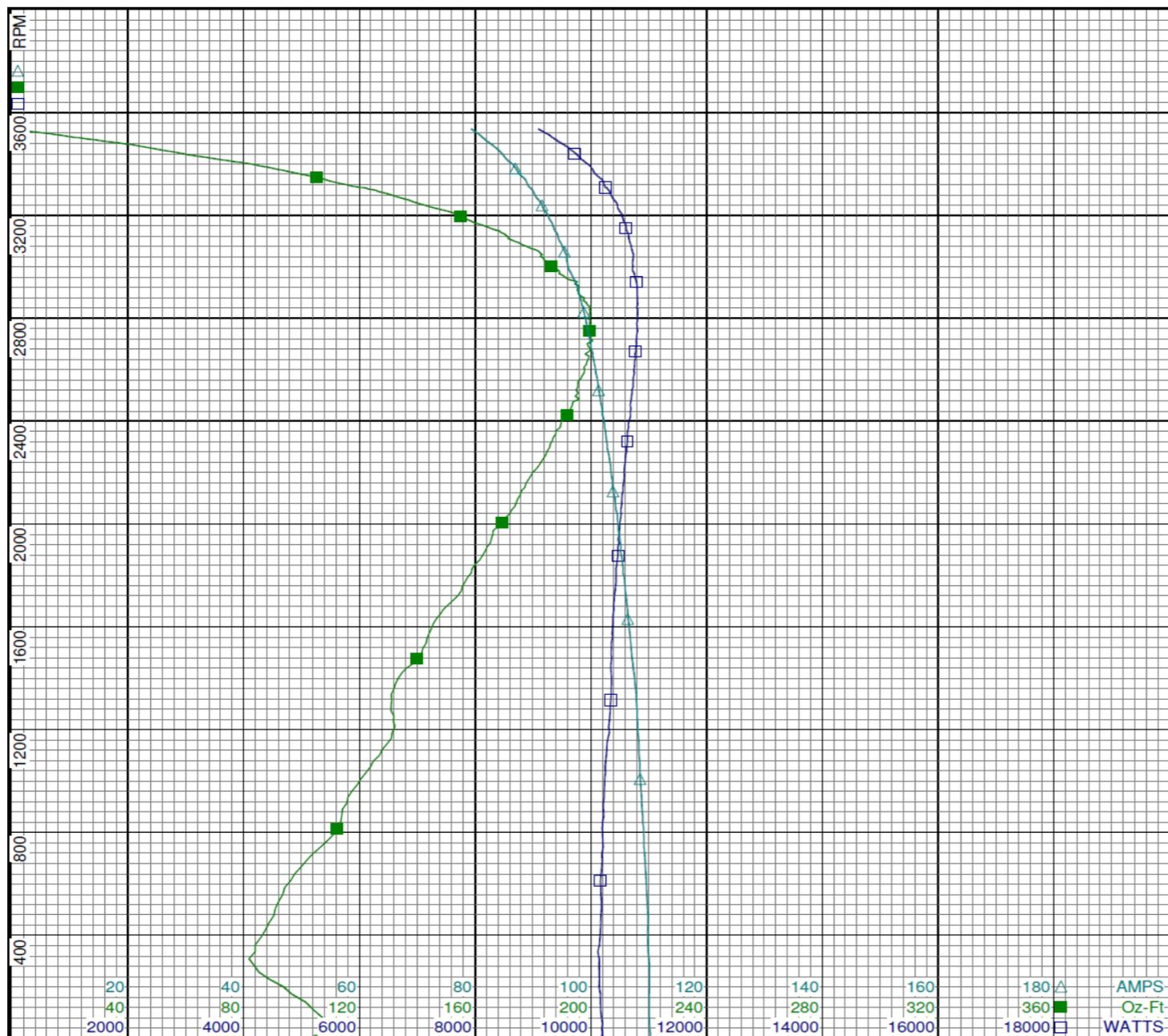
DRAWING NO. PAGE 1 of 8 REV.
3K344BG -

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

Performance Data



3K344BG REV.
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Dayton

Curve Descriptions:
Motor(1) Test 1 Start 115V 60 Hz 2P
3 line

- SPEED vs WATTS
- SPEED vs TORQUE
- △ SPEED vs ILine

Motor Ratings:
(1) T063CZJ226601 3K344BG

DRAWING NO. PAGE 2 of 8 REV.
3K344BG -

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

Performance Data



3K344BG REV.
-

Dayton Manufacturing Company

Motor Description

Model: T063CZJ226601 3K344BG
 Motor ID: No. 1 Of 3
 Poles: 2
 Volts: 115
 Frequency: 60
 HP: 2
 Speed: 3450
 Phase: 1
 Protector:

Test Conditions

Test Type: Run
 Test Number: 2
 Poles: 2
 Volts: 115
 Hz: 60
 Rotation:
 Special Cond:
 Speed Conn:
 TestBoard: Amps Performance Fixture #1
 Run Cap: 30 µfd
 Start Cap: 594 µfd
 Environment:
 Tested: 6/27/2005 4:03:14 PM
 Tested By: Sharp, Gerald
 Gear Ratio: 1:1
 Bearing Friction: -0.32 Oz-Ft
 Windage Torque: -3.36 Oz-Ft

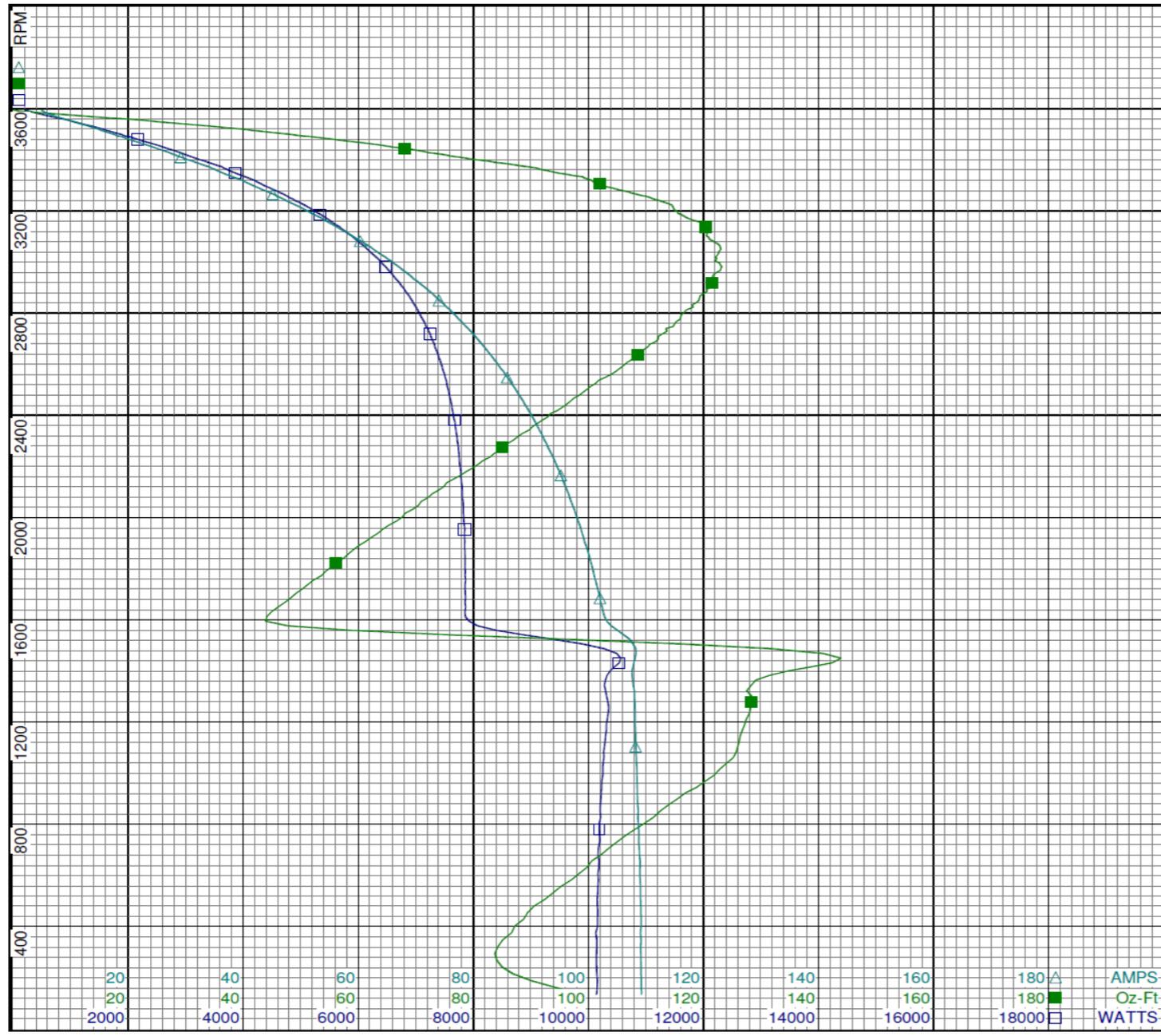
Special Points	Vline(V)	Iline(A)	Watts	RPM	Tq(Oz-ft)	HP	Eff(%)	PF(%)
	115.0	4.94	203	3594	0.00	0.000	0.0	35.8
12.16 OZ-FT	115.0	7.15	615	3571	12.16	0.517	62.7	74.8
	115.0	9.37	915	3556	21.22	0.898	73.3	84.9
24.32 OZ-FT	115.0	10.24	1025	3550	24.32	1.028	74.8	87.0
36.48 OZ-FT	115.0	13.81	1448	3526	36.48	1.531	78.9	91.1
	115.0	14.77	1558	3520	39.59	1.659	79.4	91.7
2 HP	115.0	17.53	1871	3499	48.01	2.000	79.7	92.8
48.64 OZ-FT	115.0	17.71	1892	3497	48.64	2.025	79.9	92.9
	115.0	20.26	2171	3479	55.75	2.309	79.4	93.2
55.93 OZ-FT	115.0	20.32	2177	3479	55.93	2.316	79.4	93.2
60.8 OZ-FT	115.0	22.04	2367	3466	60.80	2.509	79.1	93.4
3450 RPM	115.0	24.18	2595	3450	65.81	2.703	77.7	93.3
	115.0	26.06	2793	3436	70.40	2.879	76.9	93.2
	115.0	31.27	3346	3393	82.87	3.347	74.6	93.0
	115.0	36.45	3861	3348	94.67	3.773	72.9	92.1
	115.0	42.05	4399	3295	102.89	4.036	68.5	91.0
	115.0	46.92	4858	3247	111.21	4.299	66.0	90.0
	115.0	52.35	5343	3185	116.12	4.403	61.5	88.7
	115.0	57.29	5752	3123	120.82	4.492	58.3	87.3
	115.0	62.20	6123	3056	122.93	4.472	54.5	85.6
BDT OZ-FT	115.0	67.00	6473	2981	123.18	4.372	50.4	84.0
	115.0	67.00	6473	2981	123.18	4.372	50.4	84.0
	115.0	71.55	6773	2900	121.57	4.197	46.2	82.3
	115.0	75.93	7029	2813	117.03	3.918	41.6	80.5
	115.0	79.91	7243	2719	112.89	3.654	37.6	78.8
	115.0	83.69	7421	2615	107.33	3.342	33.6	77.1
	115.0	87.30	7559	2502	99.77	2.972	29.3	75.3
	115.0	90.56	7669	2381	92.01	2.608	25.4	73.6
	115.0	93.56	7750	2249	83.55	2.237	21.5	72.0
	115.0	96.26	7804	2107	73.92	1.854	17.7	70.5
	115.0	98.69	7851	1954	64.25	1.495	14.2	69.2
	115.0	100.83	7860	1790	54.31	1.157	11.0	67.8
	115.0	102.79	7860	1613	44.11	0.847	8.0	66.5
PUT OZ-FT	115.0	16.08	1709	3509	43.83	1.831	79.9	92.4
	115.0	107.86	10535	1432	142.42	2.428	17.2	84.9
	115.0	108.13	10339	1233	127.97	1.878	13.5	83.1
	115.0	108.41	10249	1016	122.87	1.486	10.8	82.2
	115.0	108.72	10191	780	108.12	1.005	7.4	81.5
	115.0	109.00	10161	531	93.84	0.594	4.4	81.1
	115.0	109.09	10140	267	84.04	0.267	2.0	80.8

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Performance Data



3K344BG REV. -



Dayton

Curve Descriptions:
Motor(1) Test 2 Run 115V 60 Hz 2P

- SPEED vs WATTS
- SPEED vs TORQUE
- △ SPEED vs ILine

Motor Ratings:
(1) T063CZJ226601 3K344BG

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3K344BG		-

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

Performance Data



3K344BG REV.
-

Dayton Manufacturing Company

Motor Description

Model: T063CZJ226601 3K344BG
 Motor ID: No. 1 Of 3
 Poles: 2
 Volts: 115
 Frequency: 60
 HP: 2
 Speed: 3450
 Phase: 1
 Protector: 1

Test Conditions

Test Type: Start
 Test Number: 9
 Poles: 2
 Volts: 230
 Hz: 60
 Rotation:
 Special Cond:
 Speed Conn: 3 line
 TestBoard: Amps Performance Fixture #1
 Run Cap: 30 μ fd
 Start Cap: 594 μ fd
 Environment:
 Tested: 6/27/2005 10:58:43 PM
 Tested By: Taylor, Melvin
 Gear Ratio: 1:1
 Bearing Friction: -0.16 Oz-Ft
 Windage Torque: -2.40 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
	230.0	79.9	118.8	56.19	58.26	28.25	10210	11	107.23	0.014	0.1	79.0	630.6
	230.0	80.6	117.9	56.07	57.82	28.02	10192	82	104.23	0.101	0.7	79.0	630.2
PUT OZ-FT	230.0	81.8	113.9	55.90	56.70	26.95	10158	364	83.50	0.362	2.7	79.0	627.9
	230.0	81.8	113.9	55.90	56.70	26.95	10158	364	83.50	0.362	2.7	79.0	627.9
	230.0	84.5	110.6	55.73	55.20	26.14	10202	639	97.34	0.741	5.4	79.6	626.8
	230.0	87.6	107.7	55.39	53.47	25.41	10239	890	117.63	1.246	9.1	80.4	625.8
	230.0	91.7	105.6	55.03	51.53	24.88	10288	1122	128.79	1.721	12.5	81.3	624.6
	230.0	95.4	104.7	54.74	49.87	24.64	10374	1337	133.71	2.128	15.3	82.4	624.0
	230.0	98.2	101.5	54.26	48.07	23.79	10385	1536	141.04	2.580	18.5	83.2	621.7
	230.0	102.5	99.0	53.76	45.93	23.20	10414	1722	151.46	3.105	22.2	84.2	621.8
	230.0	107.5	97.3	53.24	43.66	22.76	10463	1893	161.67	3.644	26.0	85.4	620.5
	230.0	113.0	96.1	52.74	41.32	22.45	10513	2052	170.27	4.159	29.5	86.7	619.7
	230.0	118.8	95.5	52.22	38.88	22.29	10535	2200	177.22	4.641	32.9	87.7	619.1
	230.0	125.1	95.6	51.67	36.38	22.30	10575	2336	182.92	5.086	35.9	89.0	618.9
	230.0	131.8	96.3	51.10	33.85	22.48	10601	2461	186.83	5.473	38.5	90.2	619.4
	230.0	137.5	97.6	50.19	31.24	22.79	10571	2575	187.16	5.737	40.5	91.6	619.4
	230.0	144.9	99.8	49.64	28.73	23.34	10590	2680	188.10	6.002	42.3	92.8	620.6
	230.0	151.7	102.4	48.92	26.26	23.98	10559	2778	186.01	6.151	43.5	93.9	620.9
	230.0	158.7	105.7	48.10	23.85	24.81	10513	2868	182.59	6.233	44.2	95.0	622.7
	230.0	165.4	109.4	47.38	21.76	25.77	10456	2948	175.76	6.168	44.0	95.9	624.8
	230.0	173.2	114.2	46.72	19.72	27.02	10384	3026	168.37	6.065	43.6	96.6	627.6
	230.0	180.4	119.3	46.09	18.16	28.36	10326	3092	159.27	5.862	42.4	97.4	630.5
	230.0	187.7	124.9	45.39	16.86	29.88	10238	3155	149.03	5.598	40.8	98.1	634.8
	230.0	194.9	131.0	44.63	16.05	31.56	10132	3214	135.19	5.173	38.1	98.7	639.0
	230.0	201.4	136.7	43.93	15.93	33.16	10022	3267	119.71	4.656	34.7	99.2	643.7
	230.0	207.2	142.0	43.11	16.25	34.73	9861	3316	105.91	4.180	31.6	99.5	648.7
	230.0	213.2	147.6	42.21	17.03	36.40	9684	3362	86.58	3.466	26.7	99.7	653.9
	230.0	218.5	152.7	41.26	18.15	37.95	9482	3403	69.81	2.828	22.3	99.9	659.2
	230.0	223.6	157.8	40.22	19.50	39.57	9252	3446	49.36	2.025	16.3	100.0	665.2
	230.0	228.2	162.2	39.22	21.22	41.00	9020	3483	27.86	1.155	9.6	100.0	670.5
	230.0	232.6	166.4	38.07	22.93	42.43	8749	3522	6.75	0.283	2.4	99.9	676.3
	230.0	233.7	167.8	37.68	23.48	42.89	8649	3533	0.00	0.000	0.0	99.8	678.1

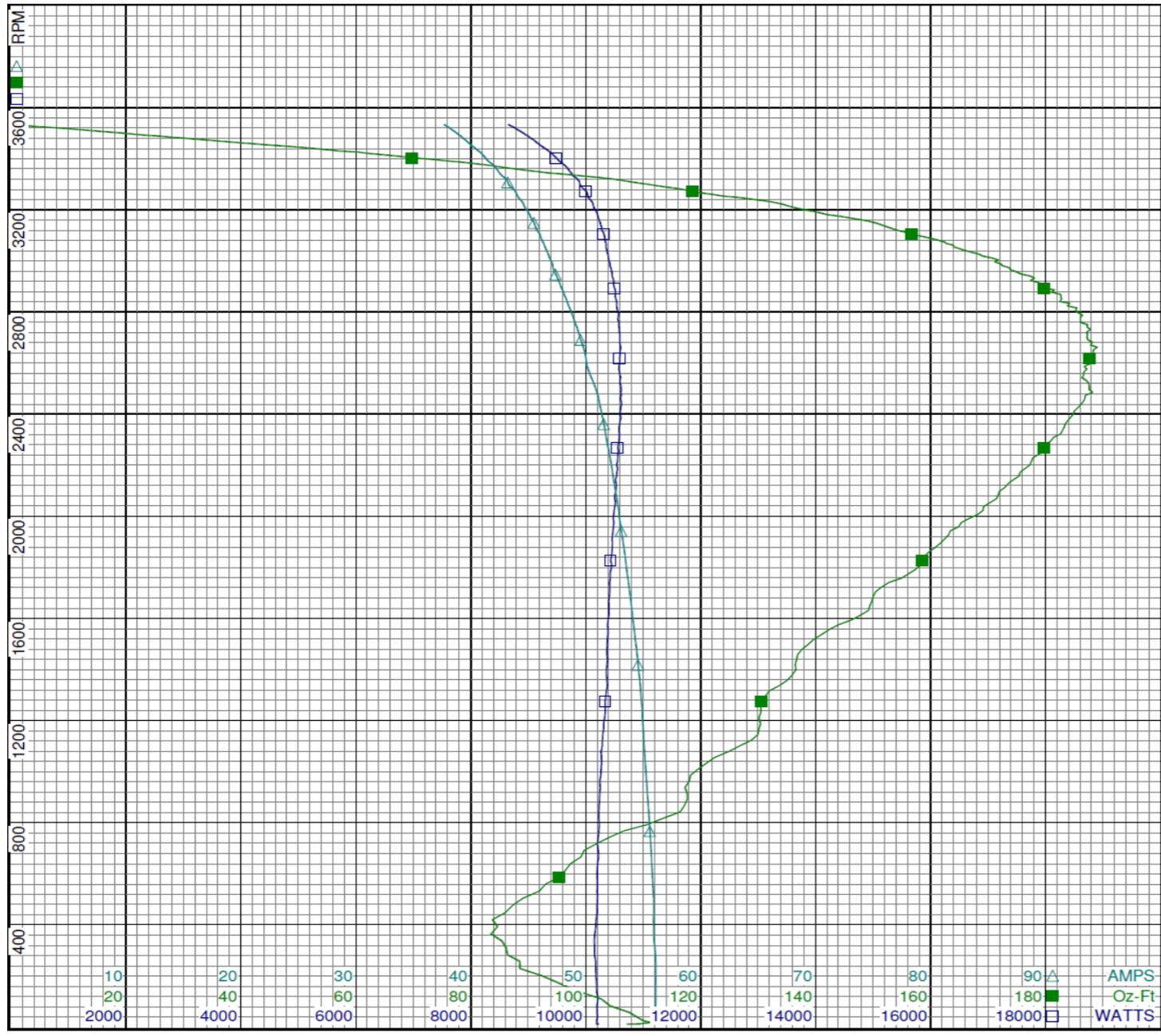
DRAWING NO. PAGE 5 of 8 REV.
3K344BG -

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

Performance Data



3K344BG REV. -



Dayton

Curve Descriptions:
 Motor(1) Test 9 Start 230V 60 Hz 2P
 3 line

- SPEED vs WATTS
- SPEED vs TORQUE
- △ SPEED vs ILine

Motor Ratings:
 (1) T063CZJ226601 3K344BG

DRAWING NO.	PAGE 6 of 8	REV.
3K344BG		-

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

Performance Data



3K344BG REV.
-

Dayton Manufacturing Company

Motor Description

Model: T063CZJ226601 3K344BG
 Motor ID: No. 1 Of 3
 Poles: 2
 Volts: 115
 Frequency: 60
 HP: 2
 Speed: 3450
 Phase: 1
 Protector:

Test Conditions

Test Type: Run Run Cap: 30 µfd
 Test Number: 10 Start Cap: 594 µfd
 Poles: 2 Environment:
 Volts: 230 Tested: 6/27/2005 11:03:47 PM
 Hz: 60 Tested By: Taylor, Melvin
 Rotation:
 Special Cond:
 Speed Conn:
 TestBoard: Amps Performance Fixture #1 Gear Ratio: 1:1
 Bearing Friction: -0.32 Oz-Ft
 Windage Torque: -2.72 Oz-Ft

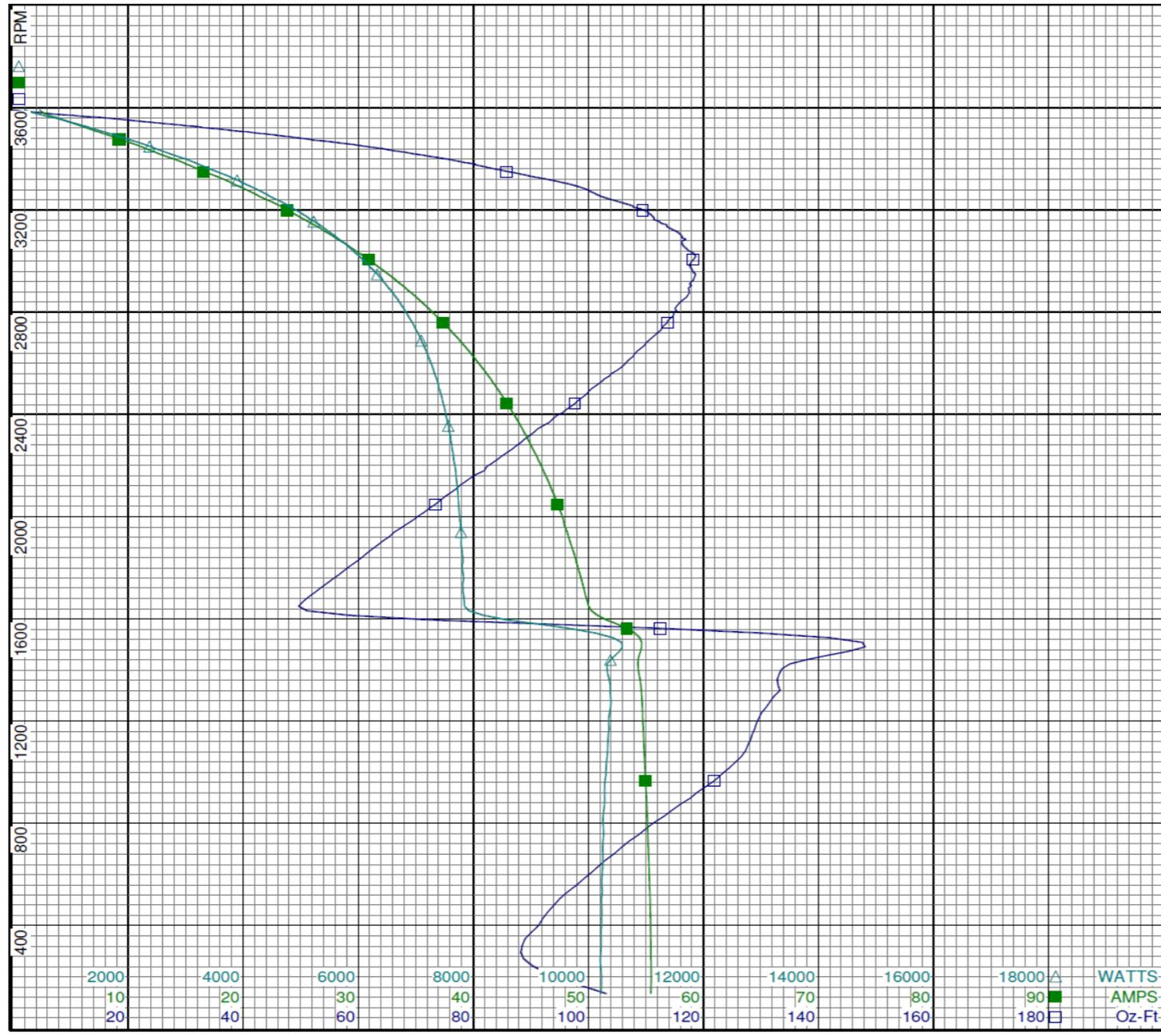
Special Points	Vline (V)	Iline (A)	Watts	RPM	Tq (Oz-ft)	HP	Eff (%)	PF (%)
	230.0	2.30	201	3591	0.00	0.000	0.0	37.9
12.16 OZ-FT	230.0	3.35	590	3565	12.16	0.516	65.3	76.5
	230.0	4.36	853	3551	19.76	0.835	73.1	85.1
24.32 OZ-FT	230.0	5.00	1013	3541	24.32	1.025	75.5	88.0
36.48 OZ-FT	230.0	6.76	1434	3514	36.48	1.526	79.4	92.2
	230.0	6.84	1450	3513	36.98	1.547	79.5	92.2
2 HP	230.0	8.70	1869	3485	48.21	2.000	79.8	93.4
48.64 OZ-FT	230.0	8.79	1888	3484	48.64	2.017	79.7	93.4
	230.0	9.49	2041	3472	52.33	2.163	79.1	93.5
55.93 OZ-FT	230.0	10.06	2166	3464	55.93	2.307	79.5	93.6
60.8 OZ-FT	230.0	10.98	2357	3450	60.80	2.497	79.0	93.3
3450 RPM	230.0	10.95	2352	3450	60.66	2.491	79.0	93.3
	230.0	12.01	2579	3431	66.21	2.704	78.2	93.3
	230.0	14.53	3109	3389	77.58	3.130	75.1	93.0
	230.0	17.12	3645	3340	88.13	3.504	71.7	92.6
	230.0	19.51	4107	3293	97.82	3.835	69.7	91.5
	230.0	22.22	4619	3236	104.57	4.028	65.1	90.4
	230.0	24.54	5042	3181	110.85	4.197	62.1	89.3
	230.0	27.08	5478	3116	115.24	4.275	58.2	87.9
	230.0	29.49	5868	3047	117.02	4.246	54.0	86.5
BDT OZ-FT	230.0	30.49	6022	3017	118.69	4.263	52.8	85.9
	230.0	31.78	6207	2975	117.76	4.170	50.1	84.9
	230.0	34.08	6527	2894	117.38	4.044	46.2	83.3
	230.0	36.31	6810	2805	115.26	3.849	42.2	81.6
	230.0	38.40	7055	2708	111.53	3.596	38.0	79.9
	230.0	40.37	7252	2604	106.61	3.305	34.0	78.1
	230.0	42.21	7420	2492	100.12	2.970	29.9	76.4
	230.0	43.92	7551	2368	93.23	2.629	26.0	74.7
	230.0	45.49	7653	2237	84.96	2.262	22.1	73.1
	230.0	46.92	7730	2093	76.02	1.894	18.3	71.6
	230.0	48.14	7790	1940	66.26	1.530	14.7	70.4
	230.0	49.27	7822	1773	56.60	1.194	11.4	69.0
PUT OZ-FT	230.0	8.98	1932	3481	49.60	2.055	79.4	93.5
	230.0	51.56	8585	1596	72.76	1.382	12.0	72.4
	230.0	54.29	10321	1423	134.99	2.286	16.5	82.7
	230.0	54.72	10353	1210	129.60	1.867	13.5	82.3
	230.0	54.94	10305	991	123.12	1.453	10.5	81.6
	230.0	55.17	10265	755	108.72	0.977	7.1	80.9
	230.0	55.35	10225	505	95.03	0.572	4.2	80.3
	230.0	55.44	10208	242	90.23	0.260	1.9	80.1

DRAWING NO. PAGE 7 of 8 REV.
3K344BG -

Performance Data



3K344BG REV. -



Dayton

Curve Descriptions:
Motor(1) Test 10 Run 230V 60 Hz 2P

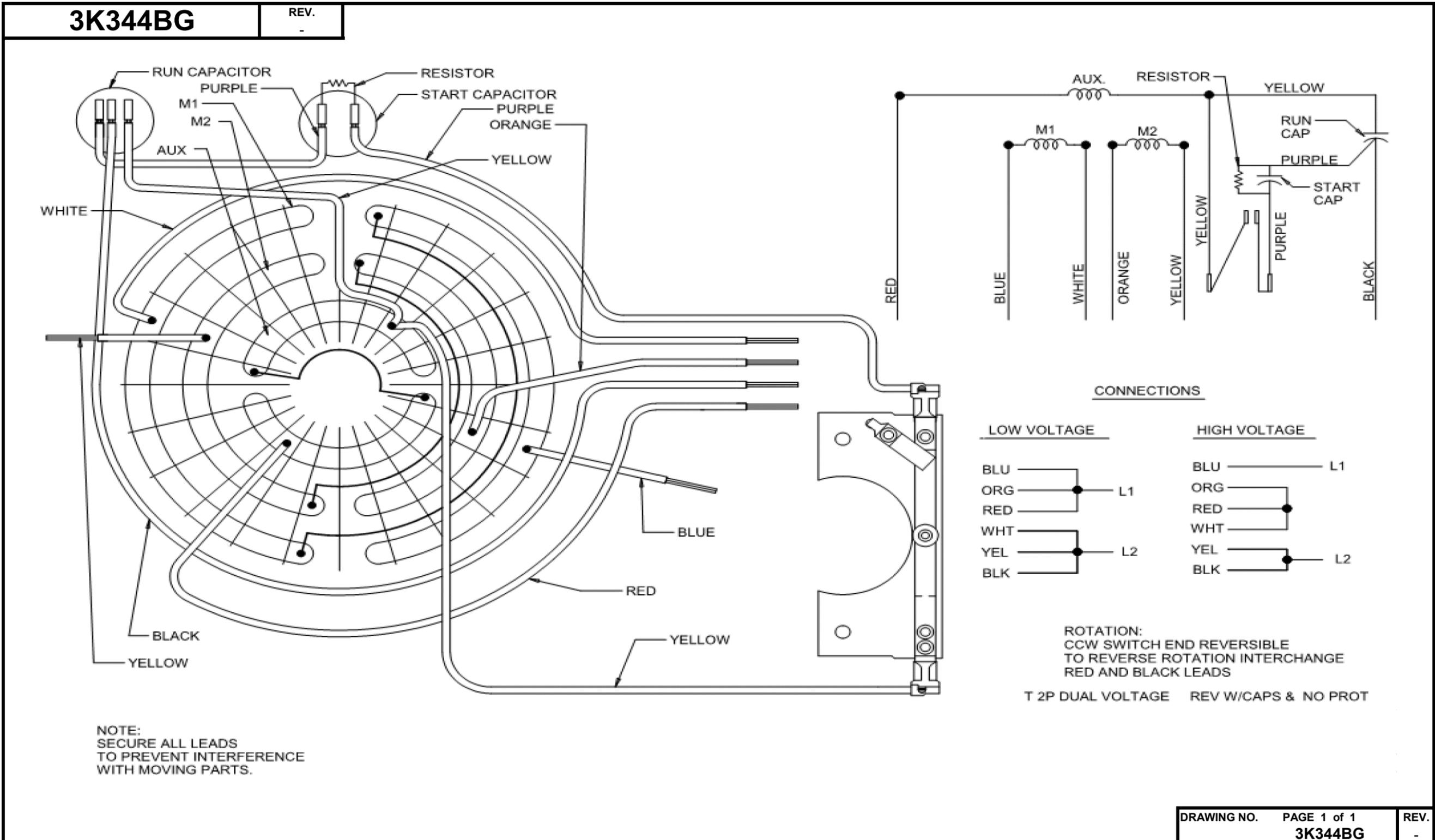
- SPEED vs TORQUE
- SPEED vs ILine
- △ SPEED vs WATTS

Motor Ratings:
(1) T063CZJ226601 3K344BG

DRAWING NO.	PAGE 8 of 8	REV.
	3K344BG	-

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

Wiring Diagram



Dayton[®]**INDUSTRIAL MOTOR**

HP: 2

VOLTS: 115/208-230

AMPS: 19.5/10.8-9.7

RPM: 3450

DUTY: CONT

SF: 1.0

KVA CODE: H

ENCL: TEFC

THERMALLY PROTECTED: NONE

MFG. NO. PROT. CODE:

MTR REF: T63CZJ-2266

S.F. AT 208 V IS 1.0

Part
No 3K344BG

PH: 1

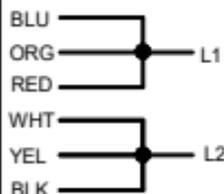
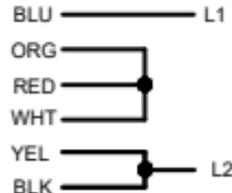
HZ: 60

FR: 145T

INS CL: B

AMB: 40 °C

SFA: 21.3/10.8-10.6

AVG. F.L.
EFF.**Disconnect Power Before Making
Any Electrical Connections or Changes**CONNECTIONSLOW VOLTAGEHIGH VOLTAGEROTATION:
CCW SWITCH END REVERSIBLE
TO REVERSE ROTATION INTERCHANGE
RED AND BLACK LEADS

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

Made in Mexico