

# Dimensional Drawing

[illegible]

# Performance Data



**6K831BG**

REV.  
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## MOTOR PERFORMANCE

HP:	3/4							
Poles:	2							
No. of Speeds:	1							
Volts:	115/208-230	115	208	230				
HZ:	60	60	60	60				
Service Factor:	1.15							
Efficiency:	@ Rated Load	65.6	66.2	65.9				
Power Factor:	@ Rated Load	76.9	81.9	75.8				
Amps:	@ No Load							
	@ Rated Load	9.8	5	4.9				
	@ Service Factor	10.5	5.5	5.4				
	@ Locked Rotor	54	24.8	27.7				
RPM:	@ Rated Load	3499	3477	3499				
Ambient (°C):	40							
Altitude (FASL):								
Torques:	Breakdown	47.3	39.1	48.4				
	Locked Rotor	54.2	40	49.6				
	Pull-Up	49.8	37.5	45.7				
	Rated Load	18.3	18.3	18.3				
	Service Factor	21	21	21				
Watts:	Rated Load	865	852	861				
KVA Code:	K	K	H	K				
Temperature Rise:	@ Rated Load	56.7	56.1	56.2				
	@ Service Factor	64.6	68.9	67.1				
Thermal Protector:	Trip Temp (°C)	115.8	119.1	119.4				
Winding Material:	Start (Auxiliary)	Al	Al	Al				
	Run (Main)	Al	Al	Al				
Capacitor(s):	Start (MFD / Volts)	519						
	No. of Start Capacitors							
	Run (MFD / Volts)	n/a						
	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:	Bead Down							
	Locked Rotor							
	Pull-Up							
	Rated Load							
	Service Factor							
Watts:	@ Rated Load							
Temperature Rise:	@ Rated Load							
	@ Service Factor							

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

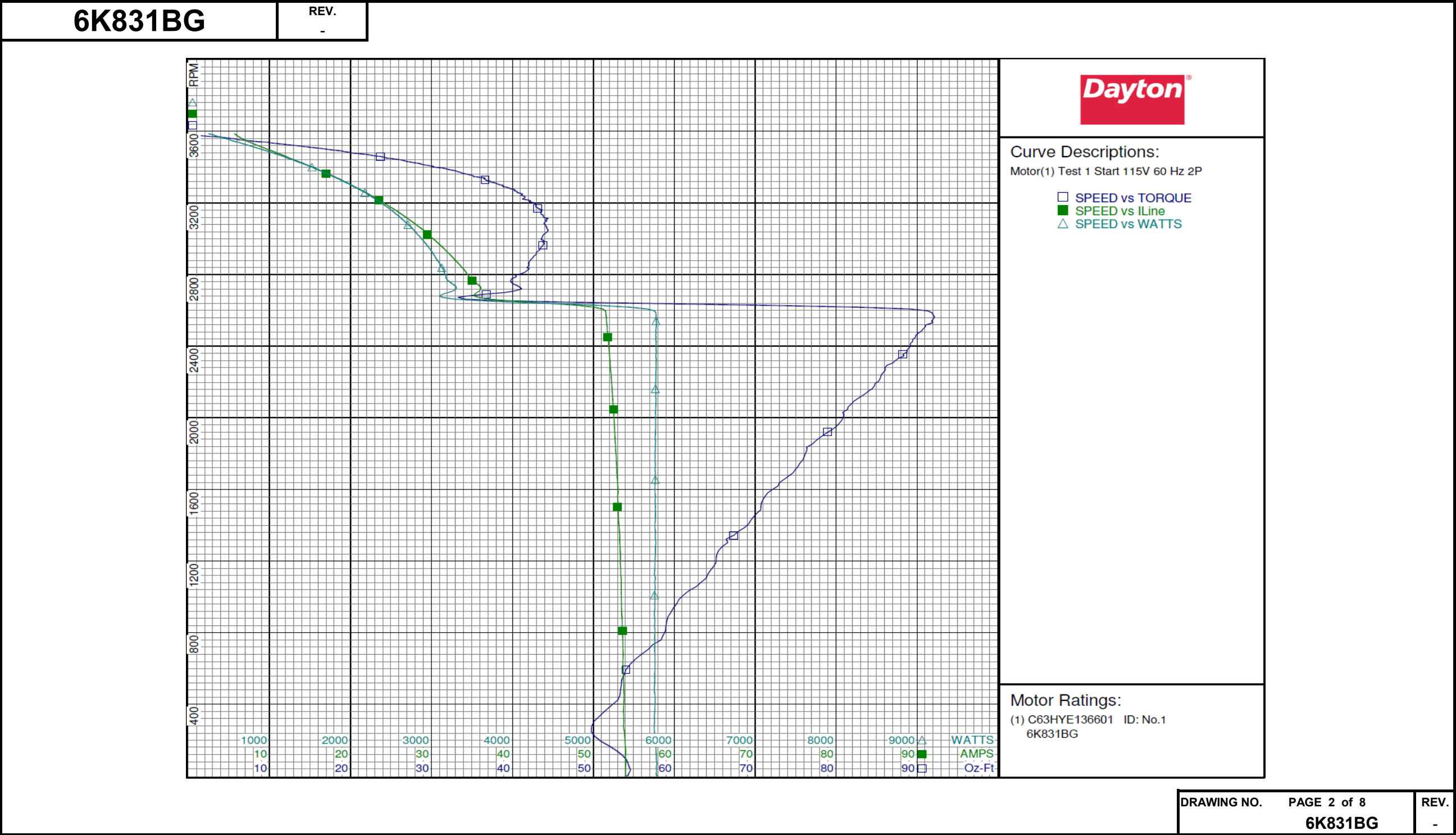
# Performance Data



6K831BG		REV. -												
Dayton Manufacturing Company														
Motor Description				Test Conditions										
Model: C63HYE136601 6K831BG		Test Type: Start		Run Cap: 0										
Motor ID: No.1		Test Number: 1		Start Cap: 519 MFD 110 VOLTS										
Poles: 2		Poles: 2		Environment:										
Volts: 115/208-230		Volts: 115		Tested: 4/19/2005 8:36:04 AM										
Frequency: 60		Hz: 60		Tested By: Sharp, Gerald										
HP: 3/4		Rotation:		Gear Ratio: 1:1										
Speed: 3450		Special Cond:		Bearing Friction: -0.11 Oz-Ft										
Phase: 1		Speed Conn:		Windage Torque: -2.49 Oz-Ft										
Protector: AUTO		TestBoard: Amtps Performance		Fixture #3										
Comments:														
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	90.4	120.2	54.03	48.24	23.79	5790	0	54.16	0.000	0.0	93.2	525.1
		115.0	90.8	119.9	53.98	48.09	23.71	5776	49	54.44	0.032	0.4	93.0	524.6
PUT	OZ-FT	115.0	91.5	118.4	53.83	47.76	23.39	5753	247	49.75	0.146	1.9	92.9	524.2
		115.0	91.7	118.0	53.75	47.62	23.31	5755	305	50.11	0.182	2.4	93.1	524.1
		115.0	93.4	116.1	53.70	46.98	22.91	5763	595	54.04	0.383	5.0	93.3	523.2
		115.0	95.1	114.4	53.56	46.21	22.52	5760	863	59.07	0.607	7.9	93.5	522.0
		115.0	97.1	112.6	53.43	45.41	22.12	5767	1104	63.94	0.840	10.9	93.8	521.0
		115.0	99.0	110.8	53.25	44.52	21.77	5765	1322	66.41	1.045	13.5	94.2	521.1
		115.0	101.3	109.1	53.04	43.60	21.39	5764	1524	70.75	1.283	16.6	94.5	520.1
		115.0	103.6	107.4	52.90	42.60	21.03	5762	1709	74.93	1.525	19.7	94.7	519.5
		115.0	106.6	105.8	52.68	41.55	20.67	5761	1887	77.93	1.751	22.7	95.1	518.2
		115.0	109.8	104.2	52.48	40.49	20.36	5771	2046	81.40	1.983	25.6	95.6	518.2
		115.0	113.0	102.9	52.26	39.40	20.07	5769	2190	84.79	2.210	28.6	96.0	517.5
		115.0	116.7	101.8	52.05	38.30	19.86	5776	2319	87.31	2.410	31.1	96.5	517.3
		115.0	120.5	101.2	51.84	37.21	19.68	5770	2437	89.45	2.595	33.5	96.8	516.1
		115.0	124.9	100.5	51.60	36.02	19.55	5776	2553	92.03	2.797	36.1	97.3	515.9
		115.0	172.1	129.4	39.34	38.03	3.04	3589	2654	38.85	1.227	25.5	79.3	62.3
		115.0	169.7	129.3	35.65	35.46	0.24	3259	2747	40.10	1.311	30.0	79.5	4.9
		115.0	169.6	129.4	33.77	33.72	0.02	3128	2839	41.80	1.413	33.7	80.5	0.3
		115.0	170.0	129.8	31.97	31.93	0.00	3008	2925	42.98	1.496	37.1	81.8	-0.1
		115.0	170.4	130.3	30.12	30.09	-0.01	2872	3002	43.60	1.559	40.5	82.9	-0.2
		115.0	170.9	131.1	28.27	28.24	-0.01	2726	3072	44.10	1.613	44.1	83.8	-0.1
		115.0	171.6	132.2	26.33	26.30	0.00	2569	3135	43.60	1.627	47.3	84.8	-0.1
		115.0	172.1	132.8	24.29	24.28	0.00	2393	3194	42.81	1.628	50.7	85.7	-0.1
		115.0	172.8	133.6	22.27	22.26	0.00	2216	3248	41.26	1.595	53.7	86.5	0.0
		115.0	173.5	134.5	20.20	20.19	0.00	2020	3297	38.84	1.525	56.3	87.0	-0.1
		115.0	174.3	135.5	18.06	18.08	-0.01	1811	3344	35.83	1.426	58.8	87.2	-0.1
		115.0	174.8	136.2	15.91	15.93	0.00	1592	3386	32.09	1.293	60.6	87.0	-0.1
		115.0	175.6	137.2	13.73	13.75	0.00	1357	3428	27.43	1.119	61.5	86.0	0.0
		115.0	175.9	137.7	11.61	11.65	0.00	1122	3467	22.45	0.926	61.6	84.1	-0.1
		115.0	176.8	138.7	9.40	9.45	0.00	855	3505	16.16	0.674	58.8	79.1	-0.1
		115.0	176.9	139.2	7.37	7.43	-0.01	581	3542	8.50	0.358	46.0	68.5	-0.2
		115.0	177.5	139.8	5.90	5.97	0.01	307	3579	1.08	0.046	11.2	45.4	0.2
		115.0	177.2	139.6	5.67	5.75	0.00	247	3586	0.00	0.000	0.0	37.8	-0.1
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Dayton Electric Mfg. Co. Lake Forest, IL 60045 USA

Performance Data





# Performance Data



6K831BG		REV. -						
Dayton Manufacturing Company								
Motor Description				Test Conditions				
Model:	C63HYE136601 6K831BG			Test Type:	Run	Run Cap:	0	
Motor ID:	No.1			Test Number:	2	Start Cap:	519 MFD 110 VOLTS	
Poles:	2			Poles:	2	Environment:		
Volts:	115/208-230			Volts:	115	Tested:	4/19/2005 8:34:45 AM	
Frequency:	60			Hz:	60	Tested By:	Sharp, Gerald	
HP:	3/4			Rotation:		Gear Ratio:	1:1	
Speed:	3450			Special Cond:		Bearing Friction:	-0.11 Oz-Ft	
Phase:	1			Speed Conn:		Windage Torque:	-2.64 Oz-Ft	
Protector:	AUTO			TestBoard:	Amps Performance	Fixture #3		
Special Points	Vline(V)	Iline(A)	Watts	RPM	Tq(Oz-ft)	HP	Eff(%)	PF(%)
	115.0	6.55	185	3580	0.00	0.000	0.0	24.5
	115.0	6.90	362	3561	4.57	0.194	39.8	45.6
	115.0	7.57	516	3543	9.13	0.385	55.7	59.3
	115.0	7.71	544	3539	9.89	0.417	57.1	61.3
	115.0	8.52	682	3522	13.70	0.574	62.8	69.5
0.75 HP	115.0	9.73	857	3500	18.00	0.750	65.3	76.6
	115.0	9.74	858	3500	18.03	0.751	65.3	76.7
18.26 OZ-FT	115.0	9.79	865	3499	18.26	0.761	65.6	76.9
21 OZ-FT	115.0	10.53	964	3486	21.00	0.871	67.4	79.6
	115.0	10.84	1002	3482	22.00	0.912	67.9	80.4
	115.0	12.10	1157	3460	25.43	1.048	67.5	83.2
3450 RPM	115.0	12.68	1227	3450	26.84	1.102	67.1	84.1
	115.0	14.47	1429	3418	31.17	1.268	66.2	85.9
	115.0	16.94	1697	3375	36.13	1.452	63.8	87.1
	115.0	19.25	1937	3330	39.93	1.583	60.9	87.5
	115.0	21.53	2160	3281	43.09	1.683	58.1	87.3
	115.0	23.76	2376	3228	45.20	1.737	54.5	87.0
	115.0	25.89	2561	3173	46.46	1.755	51.1	86.0
	115.0	27.97	2739	3112	47.07	1.744	47.5	85.1
	115.0	30.00	2898	3046	46.97	1.703	43.8	84.0
BDT OZ-FT	115.0	30.20	2915	3040	47.27	1.710	43.8	83.9
	115.0	31.94	3044	2973	46.39	1.642	40.2	82.9
	115.0	33.75	3169	2896	45.28	1.561	36.7	81.7
	115.0	35.48	3282	2811	43.53	1.457	33.1	80.4
	115.0	37.10	3374	2718	41.36	1.338	29.6	79.1
	115.0	38.60	3455	2617	38.97	1.214	26.2	77.8
	115.0	39.98	3523	2507	36.03	1.075	22.8	76.6
	115.0	41.24	3579	2390	33.28	0.947	19.7	75.5
	115.0	42.44	3622	2255	30.16	0.810	16.7	74.2
	115.0	43.49	3656	2114	26.88	0.676	13.8	73.1
	115.0	44.44	3682	1961	23.23	0.542	11.0	72.0
	115.0	45.22	3701	1806	20.42	0.439	8.8	71.2
	115.0	45.92	3713	1639	17.03	0.332	6.7	70.3
	115.0	46.59	3725	1452	13.63	0.236	4.7	69.5
	115.0	47.13	3734	1257	9.98	0.149	3.0	68.9
	115.0	47.52	3735	1056	7.75	0.097	1.9	68.4
	115.0	47.85	3740	829	3.92	0.039	0.8	68.0
	115.0	48.02	3740	584	-0.03	0.000	0.0	67.7
	115.0	48.13	3741	324	-2.45	-0.009	0.0	67.6
PUT OZ-FT	115.0	48.12	3732	245	-2.69	-0.008	0.0	67.4

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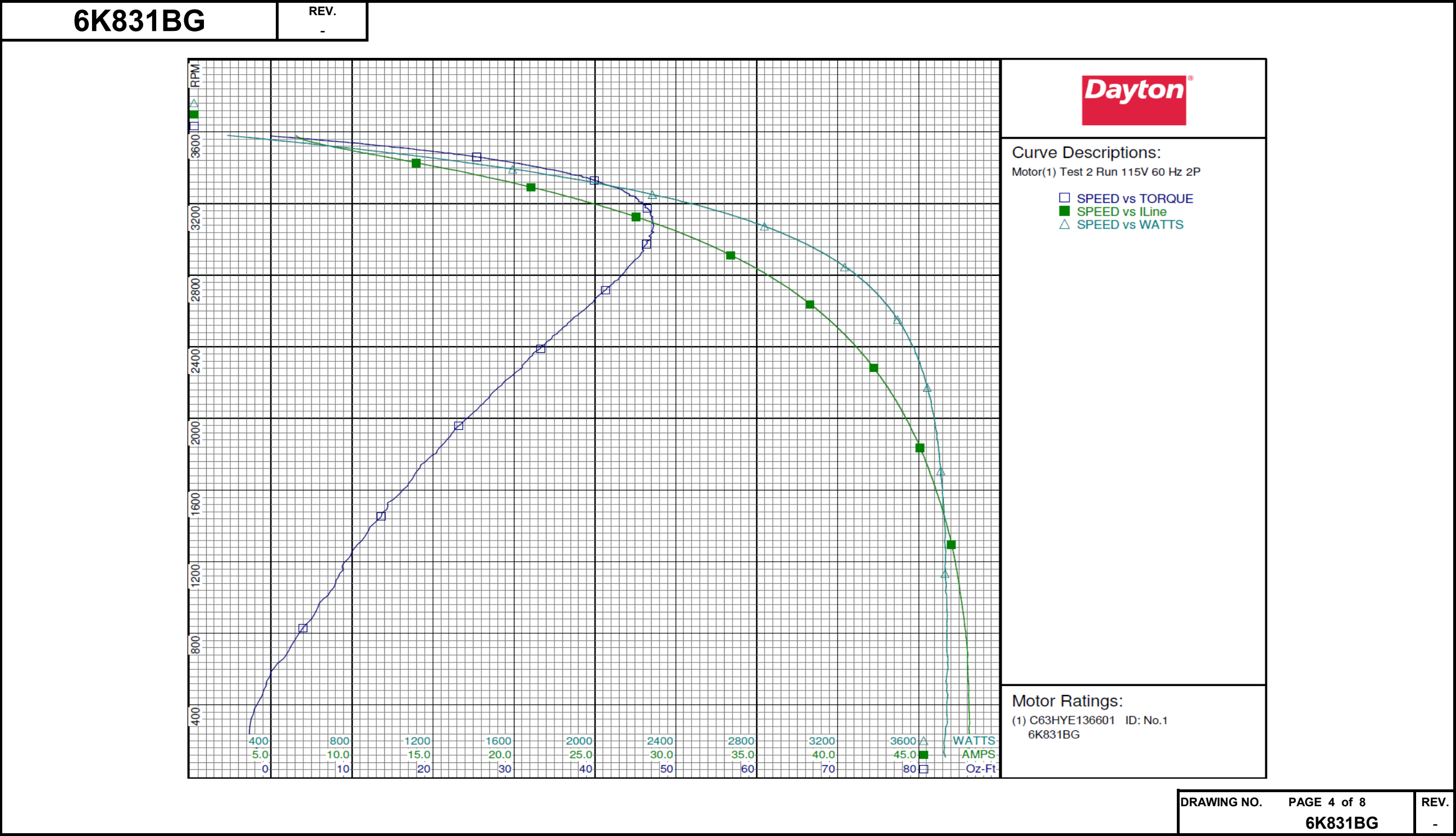
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REV.  
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Dayton Electric Mfg. Co. Lake Forest, IL 60045 USA

Performance Data



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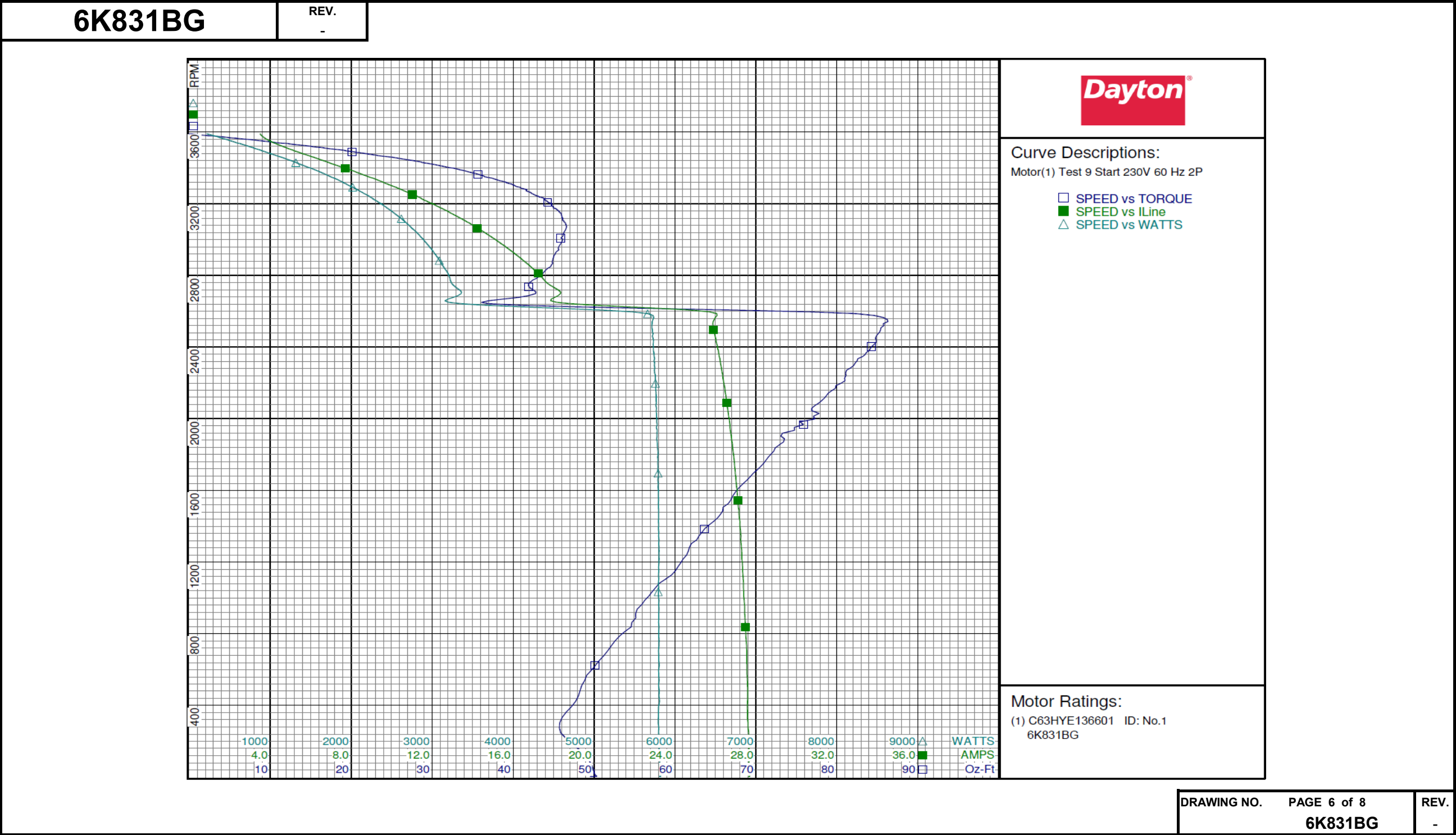
# Performance Data



6K831BG		REV. -												
Dayton Manufacturing Company														
Motor Description				Test Conditions										
Model: C63HYE136601 6K831BG		Test Type: Start		Run Cap: 0										
Motor ID: No.1		Test Number: 9		Start Cap: 519 MFD 110 VOLTS										
Poles: 2		Poles: 2		Environment:										
Volts: 115/208-230		Volts: 230		Tested: 4/19/2005 10:18:40 AM										
Frequency: 60		Hz: 60		Tested By: Sharp, Gerald										
HP: 3/4		Rotation:		Gear Ratio: 1:1										
Speed: 3450		Special Cond:		Bearing Friction: -0.19 Oz-Ft										
Phase: 1		Speed Conn:		Windage Torque: -2.64 Oz-Ft										
Protector: AUTO		TestBoard: Amtps Performance		Fixture #3										
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	179.7	110.8	27.69	25.29	21.72	5827	3	49.55	0.002	0.0	91.5	519.8	
	230.0	180.2	110.3	27.66	25.18	21.64	5816	49	49.84	0.029	0.4	91.4	520.3	
PUT OZ-FT	230.0	182.0	108.7	27.61	24.84	21.31	5800	275	45.73	0.150	1.9	91.3	519.8	
	230.0	182.0	108.5	27.60	24.80	21.27	5792	303	45.78	0.165	2.1	91.2	519.8	
	230.0	184.7	106.5	27.55	24.11	20.86	5799	595	49.64	0.351	4.5	91.5	519.4	
	230.0	187.3	104.8	27.47	23.40	20.48	5799	862	54.67	0.561	7.2	91.8	518.3	
	230.0	190.3	102.9	27.37	22.63	20.09	5801	1105	58.86	0.774	10.0	92.1	517.9	
	230.0	193.2	101.1	27.25	21.78	19.73	5802	1324	62.70	0.988	12.7	92.6	517.5	
	230.0	196.2	99.3	27.12	20.91	19.38	5793	1526	66.58	1.209	15.6	92.9	517.3	
	230.0	199.5	97.6	26.97	19.96	19.01	5787	1714	70.14	1.431	18.4	93.3	516.5	
	230.0	202.9	95.9	26.79	18.95	18.65	5773	1887	73.52	1.651	21.3	93.7	516.2	
	230.0	206.8	94.3	26.62	17.90	18.35	5769	2044	76.91	1.871	24.2	94.2	516.0	
	230.0	210.6	93.0	26.44	16.84	18.08	5767	2183	79.87	2.076	26.9	94.8	515.7	
	230.0	214.7	91.7	26.23	15.63	17.82	5741	2323	82.52	2.282	29.7	95.2	515.5	
	230.0	218.8	90.8	26.03	14.52	17.65	5735	2437	84.87	2.462	32.0	95.8	515.6	
	230.0	225.1	90.4	25.94	13.15	17.50	5729	2553	86.23	2.620	34.1	96.0	513.6	
	230.0	250.1	102.2	18.15	19.30	-0.73	3202	2649	36.09	1.138	26.5	76.7	-18.9	
	230.0	247.7	99.1	17.81	17.85	-0.03	3259	2746	41.89	1.369	31.3	79.5	-0.9	
	230.0	247.1	98.2	16.96	16.93	-0.01	3152	2839	44.28	1.496	35.4	80.8	-0.3	
	230.0	246.9	97.7	16.04	16.01	-0.01	3025	2924	45.23	1.575	38.8	82.0	-0.3	
	230.0	246.8	97.2	15.10	15.07	-0.01	2887	3002	46.14	1.649	42.6	83.1	-0.3	
	230.0	246.7	96.7	14.12	14.10	-0.01	2733	3071	46.60	1.704	46.5	84.1	-0.4	
	230.0	246.5	96.2	13.12	13.10	-0.02	2565	3135	45.97	1.716	49.9	85.0	-0.5	
	230.0	246.4	96.1	12.13	12.10	-0.01	2388	3193	44.79	1.703	53.2	85.6	-0.2	
	230.0	246.2	95.7	11.13	11.11	-0.02	2198	3247	42.75	1.652	56.1	85.9	-0.4	
	230.0	246.0	95.3	10.10	10.07	-0.01	1997	3295	40.40	1.585	59.2	86.0	-0.4	
	230.0	246.2	95.2	9.07	9.04	0.00	1790	3342	37.38	1.487	62.0	85.8	-0.1	
	230.0	245.9	94.8	8.05	8.03	-0.01	1576	3384	33.93	1.367	64.7	85.1	-0.4	
	230.0	246.0	94.6	6.98	6.95	-0.01	1340	3425	29.46	1.201	66.9	83.4	-0.4	
	230.0	245.8	94.3	6.01	5.98	-0.01	1105	3463	24.18	0.997	67.3	80.0	-0.4	
	230.0	245.8	94.1	5.02	5.00	-0.01	855	3501	18.25	0.761	66.4	74.0	-0.3	
	230.0	245.7	93.7	4.18	4.15	-0.02	595	3538	11.18	0.471	59.1	61.8	-0.6	
	230.0	245.5	93.7	3.61	3.58	-0.01	327	3576	3.24	0.138	31.5	39.3	-0.3	
	230.0	245.5	93.6	3.50	3.47	-0.01	216	3590	0.00	0.000	0.0	26.8	-0.4	
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Dayton Electric Mfg. Co. Lake Forest, IL 60045 USA

Performance Data





# Performance Data



6K831BG		REV.						
		-						
Dayton Manufacturing Company								
Motor Description				Test Conditions				
Model:	C63HYE136601 6K831BG			Test Type:	Run	Run Cap:	0	
Motor ID:	No.1			Test Number:	10	Start Cap:	519 MFD 110 VOLTS	
Poles:	2			Poles:	2	Environment:		
Volts:	115/208-230			Volts:	230	Tested:	4/19/2005 10:16:37 AM	
Frequency:	60			Hz:	60	Tested By:	Sharp, Gerald	
HP:	3/4			Rotation:		Gear Ratio:	1:1	
Speed:	3450			Special Cond:		Bearing Friction:	-0.21 Oz-Ft	
Phase:	1			Speed Conn:		Windage Torque:	-2.68 Oz-Ft	
Protector:	AUTO			TestBoard:	Amps Performance	Fixture #3		
Special Points	Vline (V)	Iline (A)	Watts	RPM	Tq(Oz-ft)	HP	Eff (%)	PF (%)
	230.0	3.33	201	3579	0.00	0.000	0.0	26.3
	230.0	3.53	368	3559	4.57	0.194	39.1	45.4
	230.0	3.86	521	3541	9.13	0.385	55.0	58.7
	230.0	3.93	547	3538	10.00	0.421	57.4	60.5
	230.0	4.31	676	3522	13.70	0.574	63.4	68.2
18.26 OZ-FT	230.0	4.94	861	3499	18.26	0.761	65.9	75.8
0.75 HP	230.0	4.90	850	3500	18.00	0.750	65.8	75.4
	230.0	4.94	862	3499	18.28	0.761	65.9	75.8
21 OZ-FT	230.0	5.36	971	3485	21.00	0.871	66.9	78.8
	230.0	5.53	1015	3478	22.00	0.911	67.0	79.8
	230.0	6.13	1161	3458	25.57	1.052	67.6	82.3
3450 RPM	230.0	6.35	1212	3450	26.68	1.096	67.5	83.0
	230.0	7.30	1428	3417	31.42	1.278	66.8	85.1
	230.0	8.53	1693	3374	36.22	1.455	64.1	86.3
	230.0	9.69	1935	3328	40.53	1.606	61.9	86.8
	230.0	10.85	2162	3280	43.65	1.704	58.8	86.6
	230.0	11.94	2372	3228	45.59	1.752	55.1	86.4
	230.0	13.03	2563	3171	47.29	1.785	52.0	85.5
	230.0	14.10	2742	3110	48.24	1.786	48.6	84.6
BDT OZ-FT	230.0	14.20	2761	3104	48.37	1.788	48.3	84.5
	230.0	15.10	2902	3044	48.19	1.746	44.9	83.5
	230.0	16.08	3046	2972	47.47	1.680	41.1	82.4
	230.0	17.01	3173	2895	46.27	1.594	37.5	81.1
	230.0	17.88	3282	2809	44.47	1.487	33.8	79.8
	230.0	18.70	3377	2716	42.44	1.372	30.3	78.5
	230.0	19.46	3453	2617	40.11	1.249	27.0	77.2
	230.0	20.16	3520	2507	37.22	1.111	23.5	75.9
	230.0	20.82	3576	2385	34.39	0.976	20.4	74.7
	230.0	21.42	3617	2253	31.26	0.839	17.3	73.4
	230.0	21.95	3650	2112	27.91	0.702	14.3	72.3
	230.0	22.41	3672	1964	24.29	0.568	11.5	71.2
	230.0	22.83	3694	1805	21.03	0.452	9.1	70.3
	230.0	23.18	3705	1639	17.69	0.345	7.0	69.5
	230.0	23.50	3717	1452	13.73	0.237	4.8	68.8
	230.0	23.78	3723	1258	10.76	0.161	3.2	68.1
	230.0	23.97	3726	1056	7.63	0.096	1.9	67.6
	230.0	24.14	3724	826	3.86	0.038	0.8	67.1
	230.0	24.27	3726	581	0.15	0.001	0.0	66.8
PUT OZ-FT	230.0	24.30	3716	375	-3.20	-0.014	0.0	66.5
	230.0	24.31	3722	323	-3.14	-0.012	0.0	66.6

DRAWING NO.

PAGE 7 of 8

6K831BG

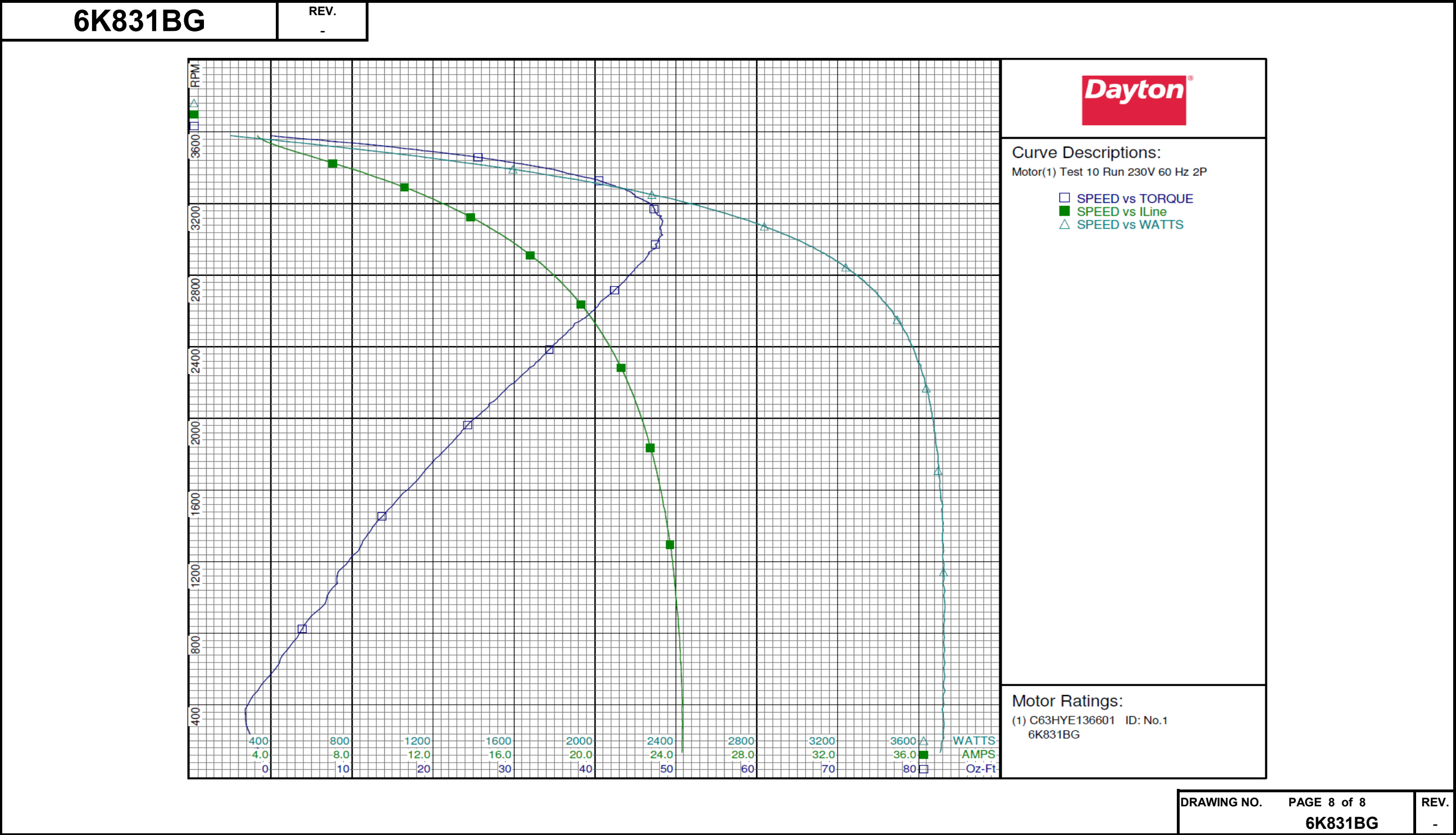
REV.

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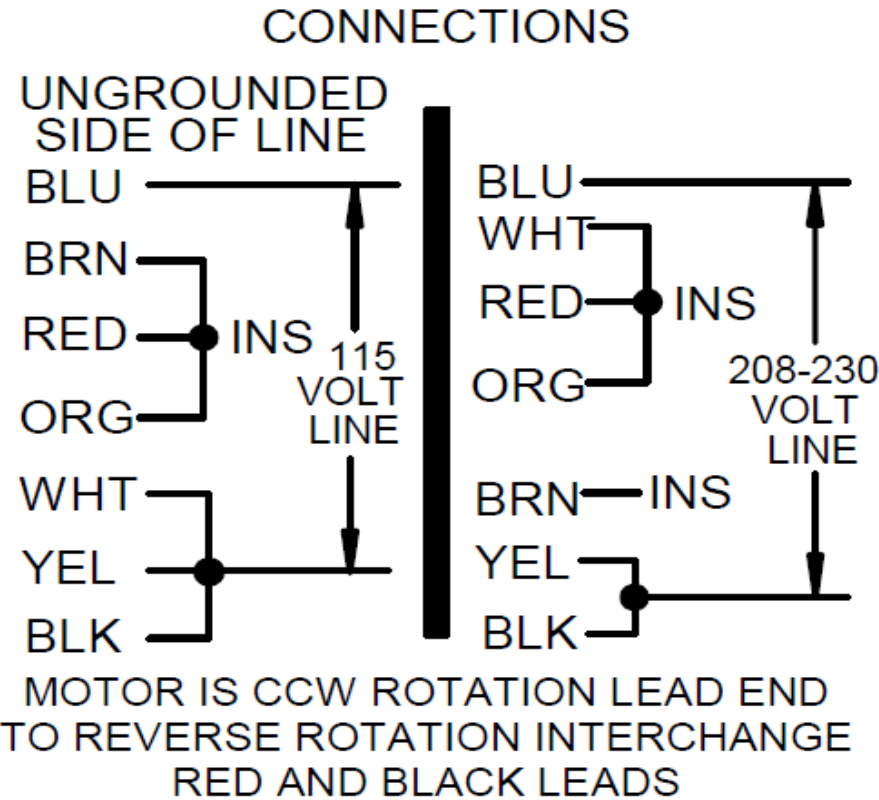
DRAWING NO.	PAGE 7 of 8	REV.
	6K831BG	-

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

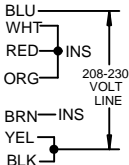
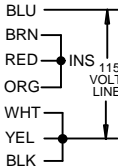
Performance Data



6K831BG	REV. -
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DRAWING NO.	PAGE 1 of 1	REV.
6K831BG		-

**Dayton**<sup>®</sup>**INDUSTRIAL MOTOR****HP:** 3/4**VOLTS:** 115/208-230**AMPS:** 10.4/5.3-5.2**RPM:** 3450**DUTY:** CONT**SF:** 1.15**KVA CODE:** K**ENCL:** TEFC**THERMALLY PROTECTED:** AUTO**MFG. NO.** ☐ **PROT. CODE** ☐ 00060 **AVG. F.L.**  
**MTR REF:** C63CXHYE-1366 **EFF.****PH:** 1**HZ:** 60**FR:** 56C**INS CL:** B**AMB:** 40 °C**SFA:** 12.1/6.3-6.1**Part No** 6K831BG**Disconnect Power Before Making Any Electrical Connections or Changes****CONNECTIONS****UNGROUND  
SIDE OF LINE****MOTOR IS CCW ROTATION LEAD END  
TO REVERSE ROTATION INTERCHANGE  
RED AND BLACK LEADS****Mfd for Dayton Electric Mfg. Co., Lake Forest, IL 60045 USA****Made in Mexico**