

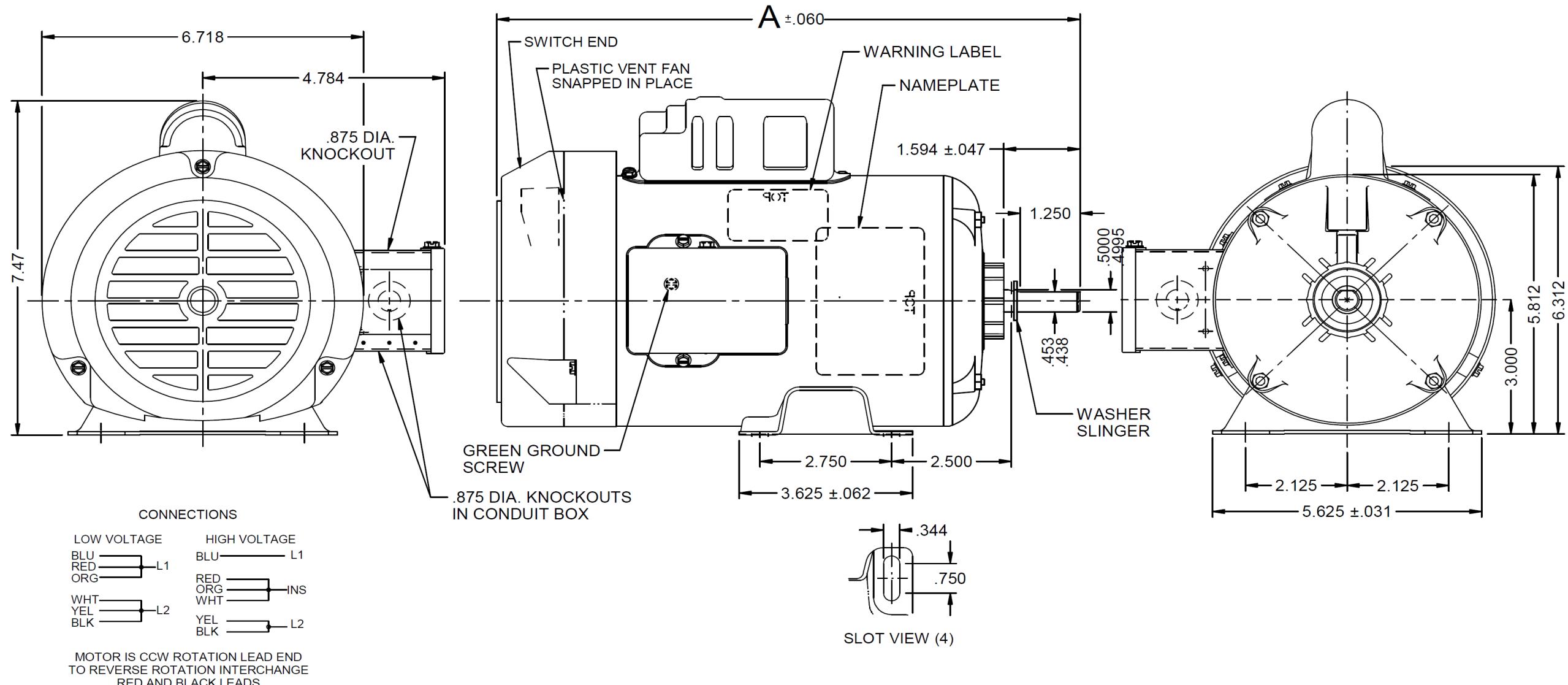
Dimensional Drawing

Dayton®

6K177BG

REV.
-

VAR	MODEL	CUST. PT. NO.	A	B	C	D	HP	VOLTS	SF	AMPS	Hz	RPM	CONN VOLTS	PROT.	DESCRIPTION / REMARKS
001	C55JMB-2141	6K177BG	11.057	-----	-----	-----	1/2	115/208-230	1	8.2/4.1-4.1	60	1725	---	NONE 48, TEFC, BALL BEARING	



DRAWING NO. PAGE 1 of 1
6K177BG REV. -

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

6K177BG

REV.
-

MOTOR PERFORMANCE

HP:	1/2						
Poles:	4						
No. of Speeds:	1						
Volts:	115/208-230	115	208	230			
Hz:	60	60	60	60			
Service Factor:	1						
Efficiency:	@ Rated Load	62.3	63.0	62.5			
Power Factor:	@ Rated Load	64.5	72.3	64.8			
Amps:	@ No Load						
	@ Rated Load	8.1	3.9	4			
	@ Service Factor	N/A	N/A	N/A			
	@ Locked Rotor	36.4	17	17			
RPM:	@ Rated Load	1736	1717	1736			
Ambient (°C):	40						
Altitude (FASL):							
Torques:	Breakdown	59.5	47	59.2			
	Locked Rotor	90	63	78			
	Pull-Up	89.5	65.5	78.9			
	Rated Load	24.2	24.5	24.2			
	Service Factor	N/A	N/A	N/A			
Watts:	Rated Load	599	592	597			
KVA Code:	K	K	H	J			
Temperature Rise:	@ Rated Load	87.1	88.1	89.8			
	@ Service Factor	N/A	N/A	N/A			
Thermal Protector:	Trip Temp (°C)	N/A	N/A	N/A			
Winding Material:	Start (Auxiliary)	Al	Al	Al			
	Run (Main)	Cu	Cu	Cu			
Capacitor(s):	Start (MFD / Volts)	451.5 mFd, 110V					
	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						

DRAFTING NO. PAGE 1 of 1
6K177BG REV. -

6K177BG

REV.
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Dayton Manufacturing Company

Motor Description

Model:	C055JMB2141012E	6K177BG	Test Type:	Start	Run Cap:	0
Motor ID:	1		Test Number:	1	Start Cap:	452 μ fd
Poles:	4		Poles:	4	Environment:	
Volts:	115/208-230		Volts:	115	Tested:	11/4/2008 3:10:18 PM
Frequency:	60		Hz:	60	Tested By:	TestBoard, MTC
HP:	1/2		Rotation:	CCW	Gear Ratio:	1:1
Speed:	1725		Special Cond:	2 Line st thru switch for PUT	Bearing Friction:	-0.56 Oz-Ft
Phase:	1		Speed Conn:		Windage Torque:	-2.32 Oz-Ft
Protector:			TestBoard:	Ammps Performance	Fixture #3	

Special Points	Vline(V)	Iline(A)	Watts	RPM	Tq(Oz-ft)	HP	Eff (%)	PF (%)
PUT OZ-FT	115.0	36.71	4115	172	89.52	0.183	3.3	97.5
	115.0	36.66	4117	301	95.00	0.340	6.2	97.7
	115.0	36.54	4122	434	100.99	0.522	9.5	98.1
	115.0	36.33	4094	554	102.83	0.678	12.4	98.0
	115.0	36.14	4072	663	100.69	0.795	14.6	98.0
	115.0	36.14	4093	763	105.39	0.958	17.5	98.5
	115.0	36.09	4111	857	113.10	1.154	20.9	99.1
	115.0	36.10	4116	946	120.00	1.351	24.5	99.2
	115.0	36.01	4111	1024	125.87	1.535	27.9	99.2
	115.0	35.93	4114	1097	131.26	1.715	31.1	99.6
	115.0	35.88	4109	1164	135.88	1.883	34.2	99.6
	115.0	35.79	4107	1227	139.76	2.041	37.1	99.8
	115.0	35.72	4109	1284	142.75	2.182	39.6	100.0
	115.0	35.66	4102	1336	144.83	2.304	41.9	100.0
	115.0	35.62	4091	1383	145.58	2.396	43.7	99.9
	115.0	35.59	4091	1429	145.61	2.477	45.2	99.9
	115.0	20.19	1801	1451	49.81	0.860	35.6	77.6
	115.0	19.84	1823	1484	57.02	1.008	41.2	79.9
	115.0	18.44	1712	1525	57.31	1.040	45.3	80.7
	115.0	16.98	1584	1563	55.90	1.040	49.0	81.1
	115.0	15.58	1454	1594	53.91	1.023	52.5	81.2
	115.0	14.23	1316	1624	50.94	0.985	55.8	80.4
	115.0	12.98	1188	1648	47.18	0.925	58.1	79.6
	115.0	11.72	1054	1672	42.81	0.852	60.3	78.2
	115.0	10.50	916	1694	37.59	0.758	61.7	75.9
	115.0	9.45	780	1713	32.04	0.653	62.5	71.8
	115.0	8.50	652	1732	26.26	0.541	62.0	66.6
	115.0	7.58	503	1751	18.49	0.385	57.2	57.6
	115.0	6.82	351	1771	10.36	0.218	46.4	44.8
	115.0	6.45	210	1789	1.97	0.042	14.9	28.4
	115.0	6.42	181	1793	0.00	0.000	0.0	24.5

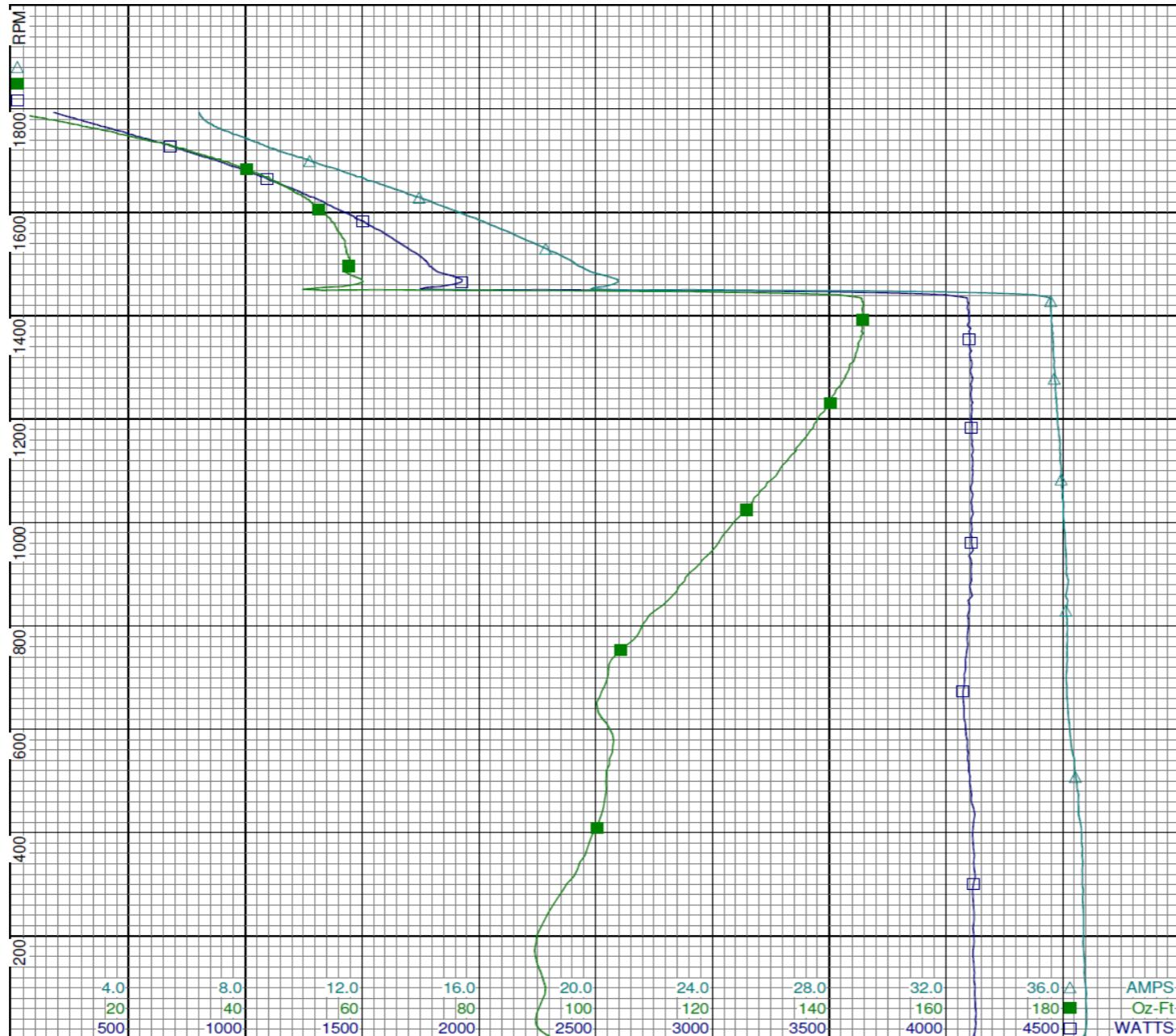
DRAWING NO.	PAGE 1 of 8	REV.
6K177BG		-

Performance Data

Dayton®

6K177BG

REV.
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Dayton®

Curve Descriptions:

Motor(1) Test 1 Start 115V 60 Hz 4P
2 Line st thru switch for PUT CCW 452ufd Run

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

Motor Ratings:

(1) C055JMB2141012E 6K177BG

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6K177BG

REV.
-

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

Performance Data

Dayton®

6K177BG

REV.
-

Dayton Manufacturing Company

Motor Description

Model: C055JMB2141012E 6K177BG
 Motor ID: 1
 Poles: 4
 Volts: 115/208-230
 Frequency: 60
 HP: 1/2
 Speed: 1725
 Phase: 1
 Protector:

Test Conditions

Test Type: Run
 Test Number: 2
 Poles: 4
 Volts: 115
 Hz: 60
 Rotation: CCW
 Special Cond:
 Speed Conn:
 TestBoard: TestBoard, MTC
 Amtps Performance
 Fixture #3
 Run Cap: 0
 Start Cap: 0μfd
 Environment:
 Tested: 11/4/2008 3:09:21 PM
 Tested By: TestBoard, MTC
 Gear Ratio: 1:1
 Bearing Friction: -0.62 Oz-Ft
 Windage Torque: -2.34 Oz-Ft

Special Points	Vline (V)	Iline (A)	Watts	RPM	Tq (Oz-ft)	HP	Eff (%)	PF (%)
24.3 OZ-FT	115.0	8.11	601	1736	24.30	0.502	62.3	64.5
0.5 HP	115.0	8.08	599	1736	24.19	0.500	62.3	64.4
1725 RPM	115.0	8.58	672	1728	27.11	0.558	61.9	68.1
	115.0	8.75	688	1725	28.60	0.587	63.7	68.4
	115.0	9.64	816	1708	34.36	0.698	63.8	73.6
	115.0	10.92	969	1685	40.51	0.813	62.6	77.1
	115.0	12.32	1126	1662	46.02	0.910	60.3	79.4
	115.0	13.66	1266	1637	50.61	0.986	58.1	80.6
	115.0	15.01	1402	1611	53.93	1.034	55.0	81.2
	115.0	16.47	1540	1579	57.11	1.073	52.0	81.3
	115.0	17.82	1663	1548	58.64	1.081	48.5	81.2
	115.0	19.21	1781	1514	59.32	1.069	44.8	80.6
BDT OZ-FT	115.0	19.64	1817	1503	59.54	1.065	43.7	80.5
	115.0	20.51	1897	1475	58.89	1.034	40.7	80.4
	115.0	21.86	1991	1434	58.40	0.997	37.4	79.2
	115.0	23.08	2082	1391	56.47	0.935	33.5	78.4
	115.0	24.26	2161	1342	53.97	0.862	29.8	77.4
	115.0	25.41	2228	1288	50.77	0.779	26.1	76.3
	115.0	26.44	2290	1231	46.99	0.689	22.4	75.3
	115.0	27.44	2343	1170	42.91	0.598	19.0	74.2
	115.0	28.32	2385	1103	38.38	0.504	15.8	73.2
	115.0	29.15	2417	1032	33.46	0.411	12.7	72.1
	115.0	29.87	2448	954	28.10	0.319	9.7	71.2
	115.0	30.56	2464	872	22.92	0.238	7.2	70.1
	115.0	32.25	2752	783	29.14	0.272	7.4	74.2
	115.0	35.91	4060	708	101.08	0.852	15.7	98.3
	115.0	36.09	4068	602	100.69	0.722	13.2	98.0
	115.0	36.38	4095	496	102.34	0.604	11.0	97.9
	115.0	36.64	4117	372	98.74	0.438	7.9	97.7
	115.0	36.73	4128	245	92.48	0.270	4.9	97.7
	115.0	36.80	4122	109	90.20	0.117	2.1	97.4

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6K177BG		-

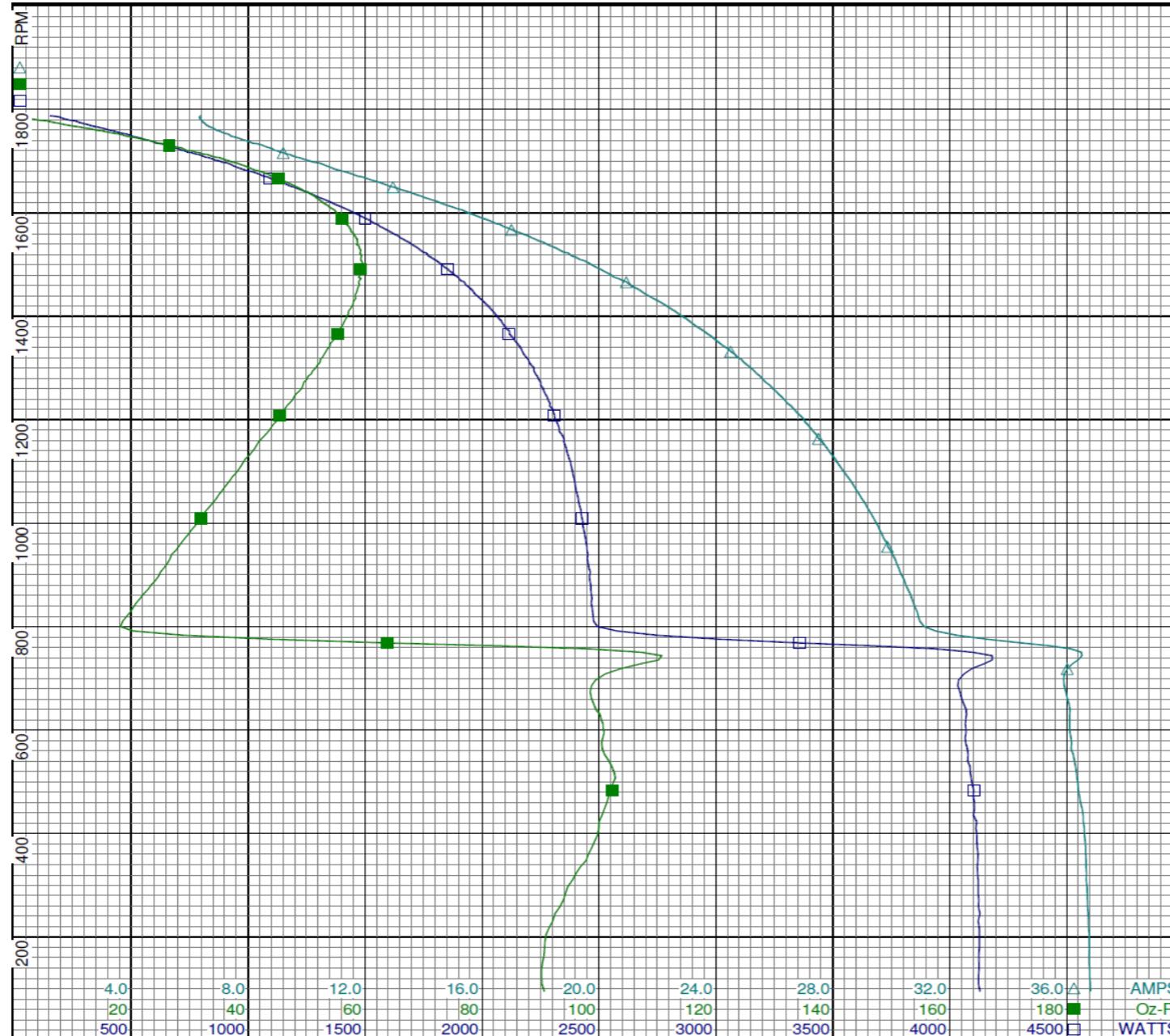
Dayton Electric Mfg. Co. Lake Forest, IL 60045 USA

Performance Data

Dayton®

6K177BG

REV.
-



Dayton®

Curve Descriptions:

Motor(1) Test 2 Run 115V 60 Hz 4P
CCW

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

Motor Ratings:

(1) C055JMB2141012E 6K177BG

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6K177BG

REV.
-

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

Performance Data

Dayton®

6K177BG

REV.
-

Dayton Manufacturing Company

Motor Description

Model:	C055JMB2141012E	6K177BG	Test Type:	Start	Run Cap:	0
Motor ID:	1		Test Number:	9	Start Cap:	452 μ fd
Poles:	4		Poles:	4	Environment:	
Volts:	115/208-230		Volts:	230	Tested:	11/4/2008 4:05:23 PM
Frequency:	60		Hz:	60	Tested By:	TestBoard, MTC
HP:	1/2		Rotation:	CCW	Gear Ratio:	1:1
Speed:	1725		Special Cond:	2 Line thru switch for PUT	Bearing Friction:	-0.56 Oz-Ft
Phase:	1		Speed Conn:		Windage Torque:	-2.24 Oz-Ft
Protector:			TestBoard:	Amtps Performance Fixture #3		

Special Points PUT OZ-FT	Vline(V)	Iline(A)	Imain(A)	Iaux(A)	Watts	RPM	Tq(Oz-ft)	HP	Eff(%)	PF(%)
	230.0	19.083	19.070	0.107	4133	5	78.90	0.004	0.1	94.2
	230.0	19.083	19.070	0.107	4133	5	78.90	0.004	0.1	94.2
	230.0	19.035	19.024	0.110	4124	27	81.65	0.026	0.5	94.2
	230.0	18.994	18.982	0.119	4118	157	80.99	0.151	2.7	94.3
	230.0	18.951	18.941	0.146	4118	301	85.33	0.306	5.5	94.5
	230.0	18.868	18.854	0.127	4109	434	91.86	0.474	8.6	94.7
	230.0	18.725	18.711	0.125	4084	553	93.41	0.615	11.2	94.8
	230.0	18.597	18.586	0.125	4067	662	90.88	0.716	13.1	95.1
	230.0	18.547	18.536	0.152	4075	762	94.93	0.861	15.8	95.5
	230.0	18.468	18.457	0.083	4072	858	101.73	1.039	19.0	95.9
	230.0	18.377	18.364	0.152	4083	942	108.11	1.213	22.2	96.6
	230.0	18.264	18.253	0.164	4067	1023	113.61	1.384	25.4	96.8
	230.0	18.136	18.126	0.185	4060	1098	118.27	1.546	28.4	97.3
	230.0	18.010	18.000	0.167	4051	1164	122.30	1.694	31.2	97.8
	230.0	17.871	17.860	0.171	4037	1226	125.55	1.832	33.9	98.2
	230.0	17.730	17.717	0.171	4020	1283	128.18	1.958	36.3	98.6
	230.0	17.585	17.567	0.160	4003	1335	129.57	2.060	38.4	99.0
	230.0	17.432	17.419	0.175	3978	1383	129.95	2.140	40.1	99.2
	230.0	17.264	17.253	0.180	3948	1426	129.13	2.193	41.4	99.4
	230.0	9.809	9.810	0.187	1767	1449	52.95	0.913	38.6	78.3
	230.0	9.633	9.621	0.148	1773	1489	56.68	1.004	42.3	80.0
	230.0	8.978	8.973	0.135	1660	1529	56.46	1.028	46.2	80.4
	230.0	8.277	8.272	0.151	1540	1564	54.99	1.024	49.6	80.9
	230.0	7.625	7.620	0.163	1416	1595	52.91	1.005	52.9	80.7
	230.0	6.960	6.955	0.154	1283	1623	50.25	0.971	56.5	80.1
	230.0	6.342	6.338	0.158	1157	1649	46.36	0.910	58.7	79.3
	230.0	5.771	5.769	0.163	1033	1671	42.15	0.839	60.6	77.8
	230.0	5.193	5.191	0.166	897	1693	36.98	0.746	62.0	75.1
	230.0	4.673	4.672	0.152	769	1714	31.69	0.647	62.7	71.5
	230.0	4.146	4.147	0.155	631	1733	25.13	0.518	61.3	66.2
	230.0	3.766	3.768	0.181	506	1752	18.90	0.394	58.1	58.4
	230.0	3.477	3.480	0.119	366	1771	11.34	0.239	48.8	45.8
	230.0	3.221	3.226	0.134	228	1787	3.36	0.072	23.4	30.8
	230.0	3.181	3.184	0.159	173	1794	0.00	0.000	0.0	23.6

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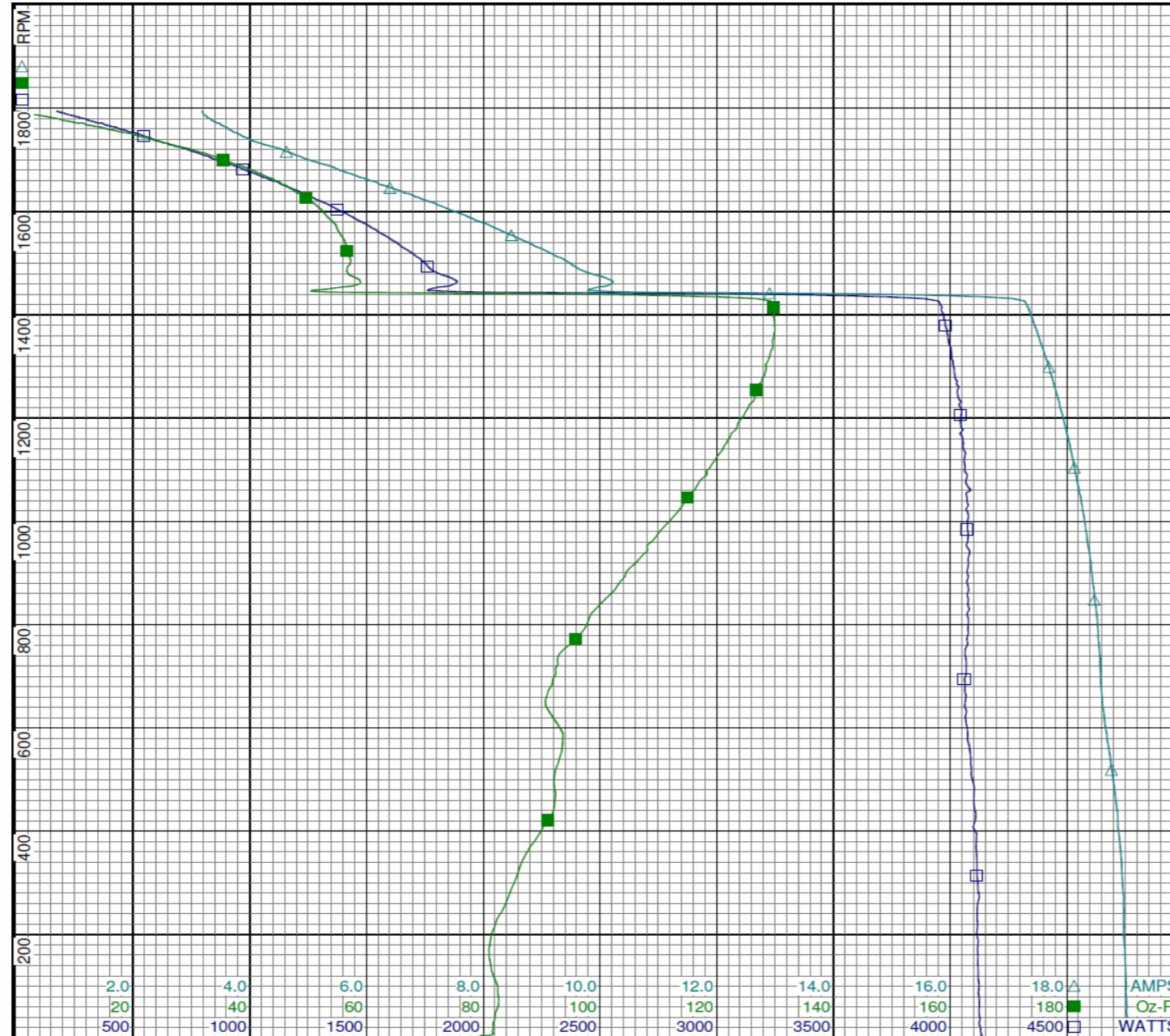
Dayton Electric Mfg. Co. Lake Forest, IL 60045 USA

Performance Data

Dayton®

6K177BG

REV.
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Dayton®

Curve Descriptions:

Motor(1) Test 9 Start 230V 60 Hz 4P

2 Line thru switch for PUT CCW 452ufd Run

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

Motor Ratings:

(1) C055JMB2141012E 6K177BG

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6K177BG

REV.
-

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

6K177BG

REV.
-

Dayton Manufacturing Company

Motor Description

Model:	C055JMB2141012E	6K177BG	Test Type:	Run	Run Cap:	0
Motor ID:	1		Test Number:	10	Start Cap:	0 μ fd
Poles:	4		Poles:	4	Environment:	
Volts:	115/208-230		Volts:	230	Tested:	11/4/2008 4:03:33 PM
Frequency:	60		Hz:	60	Tested By:	TestBoard, MTC
HP:	1/2		Rotation:	ccw	Gear Ratio:	1:1
Speed:	1725		Special Cond:		Bearing Friction:	-0.59 Oz-Ft
Phase:	1		Speed Conn:		Windage Torque:	-2.30 Oz-Ft
Protector:			TestBoard:	Amtps Performance	Fixture #3	

Special Points	Vline(V)	Iline(A)	Imain(A)	Iaux(A)	Watts	RPM	Tq (Oz-ft)	HP	Eff (%)	PF (%)
24.3 OZ-FT	230.0	4.021	4.023	0.169	599	1736	24.30	0.502	62.5	64.8
0.5 HP	230.0	4.014	4.016	0.170	597	1736	24.19	0.500	62.5	64.7
1725 RPM	230.0	4.315	4.316	0.177	676	1725	27.91	0.573	63.3	68.1
	230.0	4.262	4.264	0.159	662	1728	27.24	0.560	63.1	67.6
	230.0	4.262	4.264	0.159	662	1708	33.91	0.689	63.8	73.3
	230.0	5.392	5.391	0.161	947	1687	39.72	0.798	62.8	76.4
	230.0	6.054	6.052	0.144	1098	1662	45.44	0.899	61.1	78.9
	230.0	6.745	6.743	0.111	1242	1636	49.82	0.970	58.3	80.1
	230.0	7.411	7.408	0.109	1377	1610	53.43	1.024	55.5	80.8
	230.0	8.090	8.087	0.123	1505	1580	56.09	1.055	52.3	80.9
	230.0	8.789	8.787	0.148	1632	1547	57.90	1.067	48.7	80.8
	230.0	9.451	9.451	0.147	1747	1515	58.85	1.061	45.3	80.4
BDT OZ-FT	230.0	9.855	9.854	0.086	1810	1491	59.15	1.050	43.3	79.9
	230.0	10.123	10.123	0.131	1858	1476	58.92	1.035	41.6	79.8
	230.0	10.762	10.757	0.102	1955	1435	58.21	0.994	37.9	79.0
	230.0	11.391	11.387	0.130	2050	1390	56.47	0.934	34.0	78.2
	230.0	11.984	11.980	0.116	2127	1341	54.20	0.865	30.4	77.2
	230.0	12.546	12.541	0.124	2199	1289	51.11	0.784	26.6	76.2
	230.0	13.070	13.064	0.121	2262	1232	47.50	0.697	23.0	75.3
	230.0	13.564	13.562	0.105	2314	1170	43.53	0.606	19.5	74.2
	230.0	14.016	14.013	0.113	2356	1103	39.03	0.513	16.2	73.1
	230.0	14.432	14.429	0.102	2397	1031	34.00	0.417	13.0	72.2
	230.0	14.808	14.806	0.130	2420	954	28.66	0.325	10.0	71.1
	230.0	15.145	15.138	0.122	2439	871	23.18	0.240	7.3	70.0
	230.0	15.533	15.537	0.124	2489	781	17.99	0.167	5.0	69.7
	230.0	18.689	18.664	0.127	4129	706	95.13	0.800	14.5	96.1
	230.0	18.670	18.658	0.138	4073	597	91.29	0.649	11.9	94.8
	230.0	18.815	18.806	0.127	4092	483	93.31	0.537	9.8	94.6
	230.0	18.929	18.919	0.118	4114	362	88.95	0.384	7.0	94.5
	230.0	18.980	18.970	0.118	4118	236	83.67	0.235	4.3	94.3
	230.0	19.008	18.995	0.108	4121	119	81.47	0.115	2.1	94.3

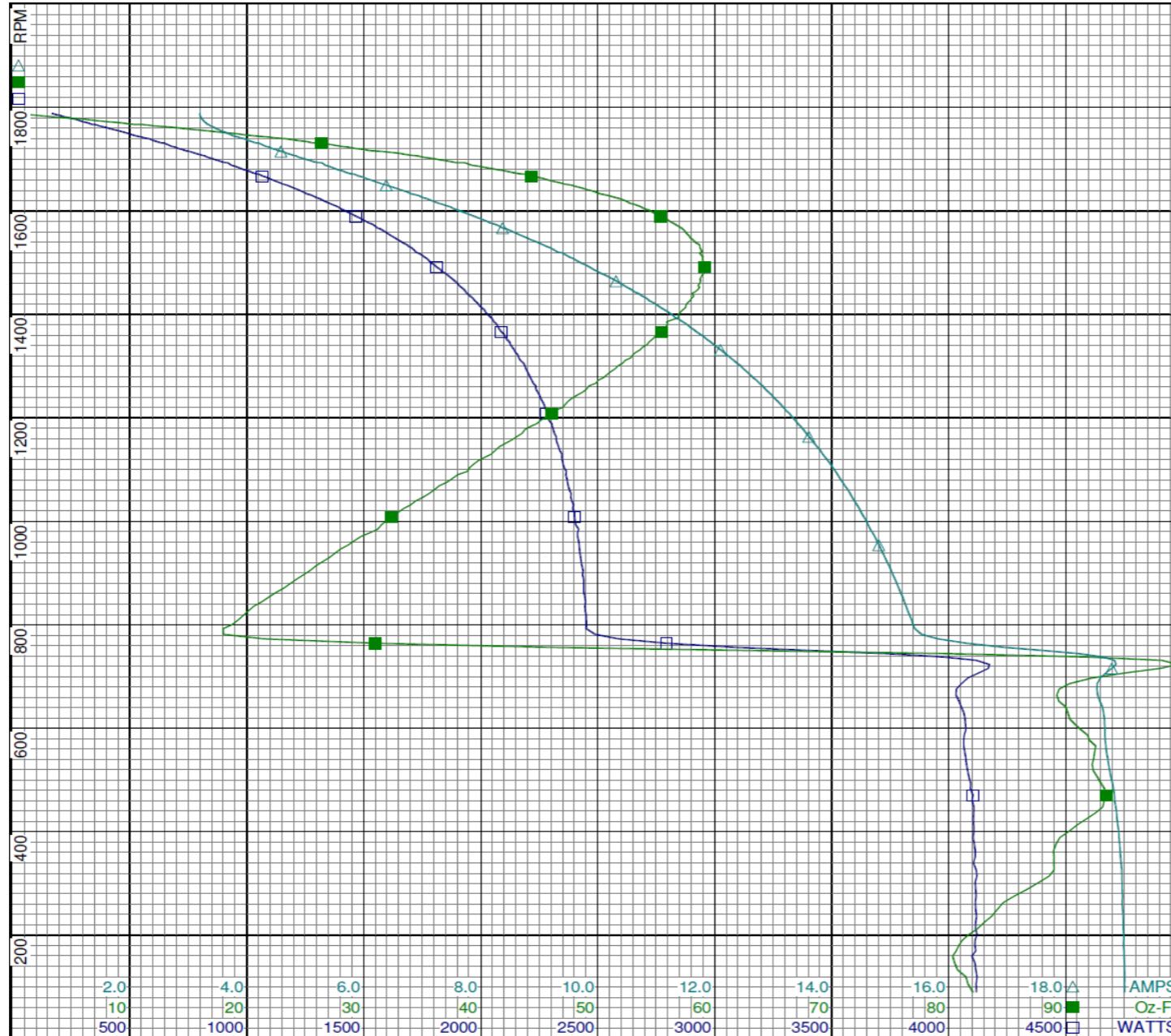
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6K177BG		-

Performance Data

Dayton®

6K177BG

REV.
-



Dayton®

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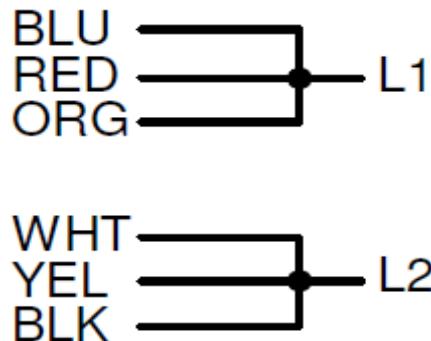
Dayton Electric Mfg. Co. Lake Forest, IL 60045 USA

6K177BG

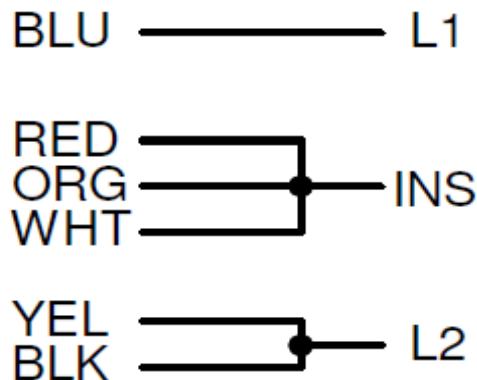
REV.
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CONNECTIONS

LOW VOLTAGE



HIGH VOLTAGE



MOTOR IS CCW ROTATION LEAD END
TO REVERSE ROTATION INTERCHANGE
RED AND BLACK LEADS

DRAWING NO. PAGE 1 of 1
6K177BG REV. -



INDUSTRIAL MOTOR

HP: 1/2

VOLTS: 115/208-230

AMPS: 8.2/4.1-4.1

RPM: 1725

DUTY: CONT

SF: 1.0

KVA CODE: L

ENCL: TEFC

THERMALLY PROTECTED: NONE

MFG. NO.

PROT. CODE:

AVG. F.L.
EFF.

MTR REF: C55JMB-2141



Part No 6K177BG

PH: 1

HZ: 60

FR: 48

INS CL: B

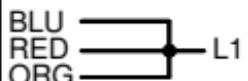
AMB: 40 °C

SFA: 8.2/4.1-4.1

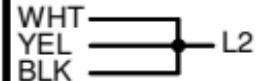
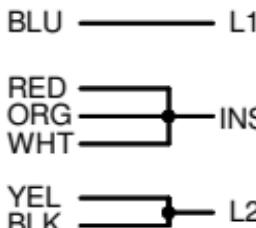
Disconnect Power Before Making
Any Electrical Connections or Changes

CONNECTIONS

LOW VOLTAGE



HIGH VOLTAGE



MOTOR IS CCW ROTATION LEAD END
TO REVERSE ROTATION INTERCHANGE
RED AND BLACK LEADS



E47479



258501