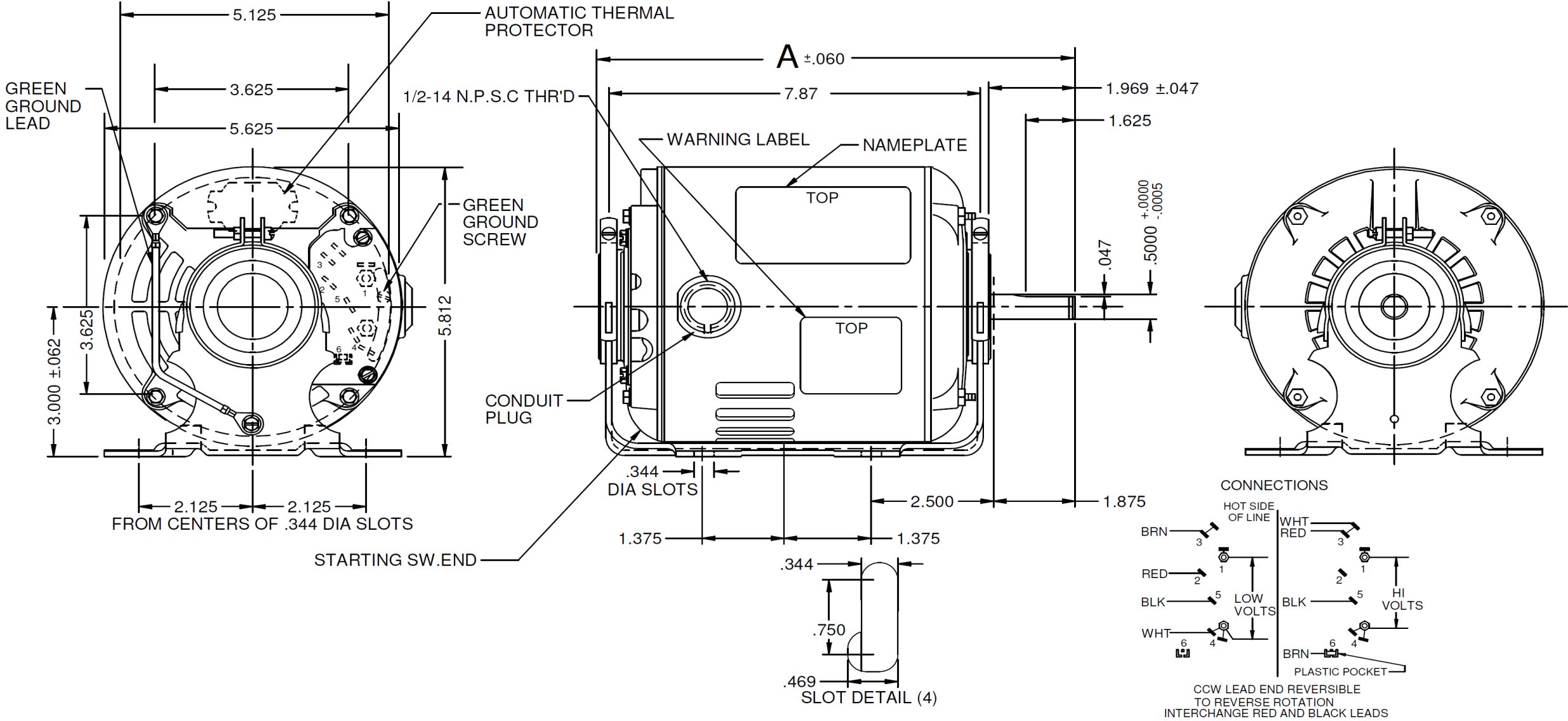


Dimensional Drawing



4K259BG REV. -

VAR	MODEL	CUST. PT. NO.	A	B	C	D	HP	VOLTS	SF	AMPS	HZ	RPM	CONN VOLTS	PROT.	DESCRIPTION / REMARKS
001	S55JXREY-8486	4K259BG	10.28	-----	-----	-----	1/2	115/208-230	1.25	8.6/4.2-4.3	60	1725	---	AUTO	48Z, ODP



DRAWING NO. PAGE 1 of 1 REV. -
4K259BG

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4K259BG		REV.						
SPLIT-PHASE & CAPACITOR START MOTOR PERFORMANCE								
HP:	1/2							
Poles:	4							
Ambient (°C):	40							
Altitude (FASL):								
No. of Speeds:	1							
Volts:	115/208-230	115	208	230	-	-	-	-
HZ:	60	60	60	60	-	-	-	-
Service Factor:	1.25							
Efficiency:	@ Rated Load	65.80	66.20	66.20				
Power Factor:	@ Rated Load	66.20	73.10	66.10				
Amps:	@ No Load	5.78	2.47	2.85				
	@ Rated Load	7.44	3.71	3.71				
	@ Service Factor	8.52	4.43	4.20				
	@ Locked Rotor	41.44	17.98	20.31				
RPM:	@ Rated Load	1737	1721	1736				
Torques:	Breakdown	60.2	48.8	59.9				
	Locked Rotor	26.69	21.27	24.18				
	Pull-Up	25.00	18.85	23.71				
	Rated Load	24.19	24.40	24.19				
	Service Factor	30.54	30.94	30.49				
Watts:	Rated Load	567	563	564				
KVA Code:		L						
Temperature Rise:	@ Rated Load	49.30		48.00				
	@ Service Factor	56.60		65.00				
Thermal Protector:	Trip Temp (°C)							
Winding Material:	Start (Auxiliary)	Cu						
	Run (Main)	Cu						
Capacitor(s):	Start (MFD / Volts)							
	No. of Start Capacitors							
	Run (MFD / Volts)							
	No. of Run Capacitors							
LOW SPEED PERFORMANCE DATA:								
HP:								
Poles:								
Volts:		120	208	230	277	460	100	200
HZ:		60	60	60	60	60	50	50
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							
		DRAWING NO. PAGE 1 of 1						REV.
		4K259BG						-

Performance Data



4K259BG

REV.

-

Dayton Manufacturing Company

Motor Description

Model: **S55JXREY-8486**
 Motor ID: 1
 Poles: 4
 Volts: 115/208-230
 Frequency: 60/ 50
 HP: 1/2
 Speed: 1725
 Phase: 1
 Protector: MEJ55AR

Test Conditions

Test Type: Start
 Test Number: 1
 Poles: 4
 Volts: 115
 Hz: 60
 Rotation: CCW
 Special Cond:
 Speed Conn:
 TestBoard: Amtps Performance Fixture #3
 Environment:
 Tested: 2/17/2010 12:48:08 PM
 Tested By: Sharp, Gerald
 Bearing Friction: -0.69 Oz-Ft
 Windage Torque: -2.04 Oz-Ft

Special Points	Vline (V)	Iline (A)	Imain (A)	Iaux (A)	Watts	RPM	Tq (Oz-ft)	HP	Eff (%)	PF (%)
	115.0	41.44	33.14	8.884	3467	2	26.69	0.001	0.0	72.7
	115.0	41.44	33.16	8.841	3464	16	27.48	0.005	0.1	72.7
	115.0	41.49	33.34	8.608	3460	126	27.82	0.042	0.9	72.5
PUT OZ-FT	115.0	41.37	33.30	8.506	3452	201	25.00	0.060	1.3	72.6
	115.0	41.38	33.33	8.394	3457	256	26.46	0.081	1.7	72.6
	115.0	41.15	33.22	8.177	3442	378	27.85	0.125	2.7	72.7
	115.0	40.89	33.11	7.960	3437	491	29.79	0.174	3.8	73.1
	115.0	40.54	32.90	7.730	3422	596	32.55	0.231	5.0	73.4
	115.0	40.14	32.64	7.520	3406	692	34.74	0.286	6.3	73.8
	115.0	39.68	32.32	7.316	3384	781	37.00	0.344	7.6	74.2
	115.0	39.17	31.97	7.117	3354	863	38.99	0.400	8.9	74.5
	115.0	38.59	31.54	6.938	3326	940	40.31	0.451	10.1	74.9
	115.0	37.98	31.08	6.786	3295	1011	42.03	0.506	11.5	75.4
	115.0	37.34	30.61	6.637	3258	1076	43.34	0.555	12.7	75.9
	115.0	36.63	30.06	6.528	3211	1139	43.92	0.595	13.8	76.2
	115.0	35.90	29.45	6.473	3172	1197	43.74	0.623	14.7	76.8
	115.0	35.14	28.80	6.447	3120	1249	43.43	0.646	15.4	77.2
	115.0	34.39	28.17	6.469	3071	1299	42.40	0.655	15.9	77.7
	115.0	33.60	27.48	6.505	3013	1345	41.28	0.661	16.4	78.0
	115.0	32.83	26.80	6.583	2959	1386	39.90	0.658	16.6	78.4
	115.0	32.04	26.10	6.686	2895	1426	38.09	0.647	16.7	78.6
	115.0	31.27	25.41	6.823	2836	1461	35.93	0.625	16.4	78.9
	115.0	30.48	24.67	6.988	2769	1496	33.35	0.594	16.0	79.0
	115.0	29.70	23.94	7.175	2700	1528	30.35	0.552	15.3	79.0
	115.0	28.96	23.26	7.381	2633	1556	27.28	0.505	14.3	79.1
	115.0	28.21	22.53	7.605	2562	1582	23.59	0.444	12.9	79.0
	115.0	27.44	21.78	7.840	2488	1607	20.22	0.387	11.6	78.8
	115.0	26.76	21.10	8.076	2422	1630	15.90	0.308	9.5	78.7
	115.0	26.06	20.37	8.321	2351	1650	11.88	0.233	7.4	78.5
	115.0	25.38	19.64	8.578	2276	1672	7.33	0.146	4.8	78.0
	115.0	24.80	19.01	8.814	2212	1691	3.44	0.069	2.3	77.5
	115.0	24.36	18.52	8.994	2164	1703	0.00	0.000	0.0	77.2

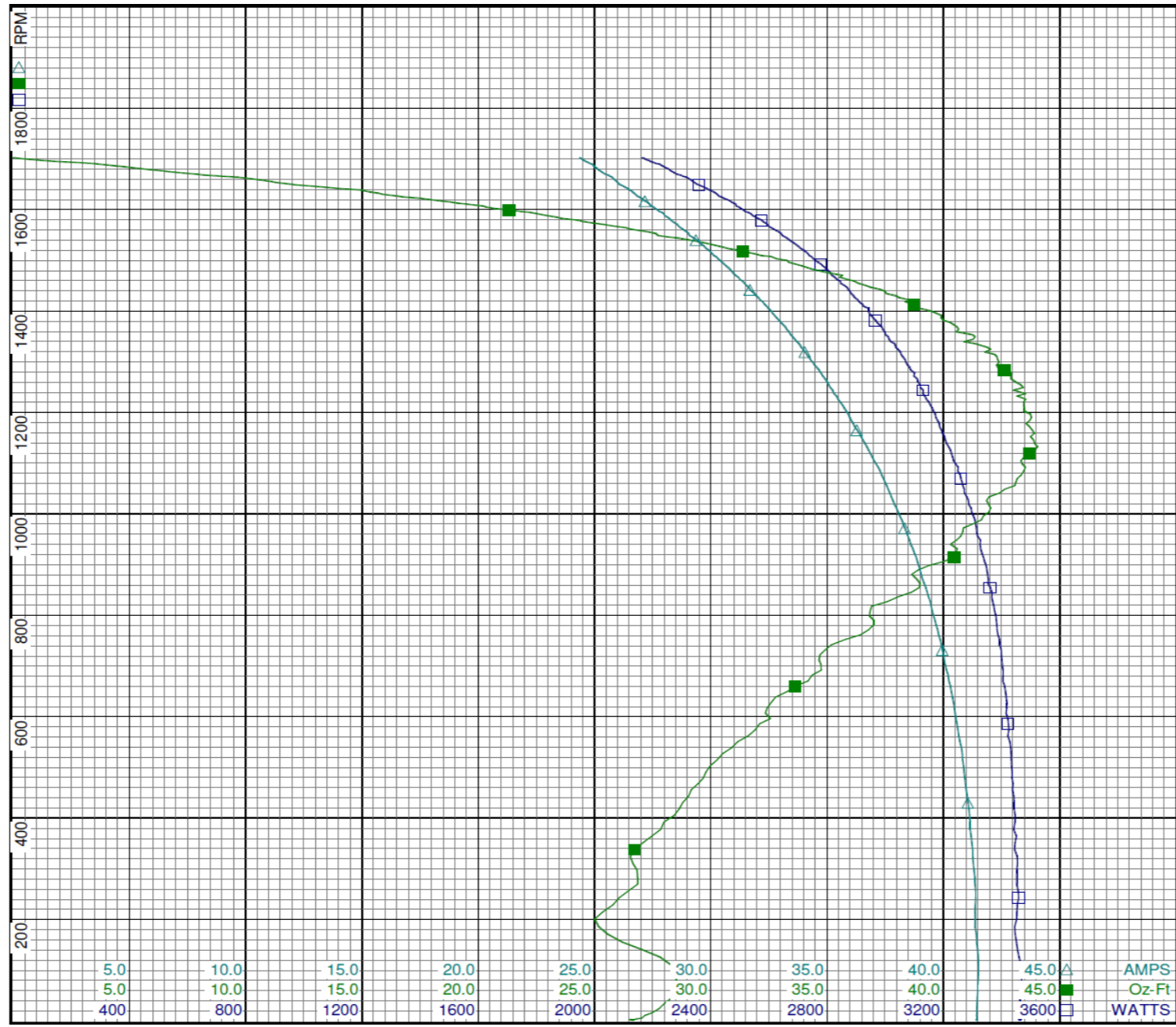
DRAWING NO. PAGE 1 of 8 REV.
4K259BG -

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

Performance Data



4K259BG REV. -



Dayton

Curve Descriptions:
 Motor(1) Test 1 Start 115V 60 Hz 4P
 CCW

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

Motor Ratings:
 S55JXREY-8486 ID: 1

DRAWING NO.	PAGE 2 of 8	REV.
4K259BG		-

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

Performance Data



4K259BG

REV.

-

Dayton Manufacturing Company

Motor Description

Model: **S55JXREY-8486**
 Motor ID: 1
 Poles: 4
 Volts: 115/208-230
 Frequency: 60/ 50
 HP: 1/2
 Speed: 1725
 Phase: 1
 Protector: MEJ55AR

Test Conditions

Test Type: Run
 Test Number: 2
 Poles: 4
 Volts: 115
 Hz: 60
 Rotation: CWLE
 Special Cond:
 Speed Conn:
 TestBoard: Amps Performance Fixture #3
 Environment:
 Tested: 2/17/2010 10:34:54 AM
 Tested By: Sharp, Gerald
 Bearing Friction: -0.20 Oz-Ft
 Windage Torque: -1.55 Oz-Ft

Special Points	Vline (V)	Iline (A)	Watts	RPM	Tq (Oz-ft)	HP	Eff (%)	PF (%)
	115.0	5.64	130	1785	0.00	0.000	0.0	20.0
	115.0	5.99	306	1767	10.59	0.223	54.2	44.5
	115.0	6.86	483	1747	19.76	0.411	63.4	61.2
0.5 HP	115.0	7.44	567	1737	24.19	0.500	65.8	66.2
	115.0	8.08	647	1726	27.87	0.573	66.1	69.6
0.625 HP	115.0	8.52	702	1719	30.54	0.625	66.4	71.7
	115.0	9.18	796	1707	34.88	0.709	66.4	75.4
	115.0	10.59	951	1683	41.08	0.823	64.6	78.1
	115.0	11.96	1104	1660	46.59	0.921	62.2	80.2
	115.0	13.22	1237	1637	50.57	0.986	59.4	81.4
	115.0	14.68	1381	1609	53.85	1.032	55.7	81.8
	115.0	16.11	1515	1580	56.47	1.062	52.3	81.8
	115.0	17.46	1634	1550	58.37	1.077	49.2	81.4
	115.0	18.85	1752	1516	59.99	1.082	46.1	80.8
BDT OZ-FT	115.0	19.27	1787	1505	60.16	1.078	45.0	80.7
	115.0	20.17	1856	1479	59.82	1.053	42.3	80.0
	115.0	21.48	1956	1438	59.07	1.011	38.6	79.2
	115.0	22.71	2043	1395	57.47	0.954	34.8	78.2
	115.0	23.90	2120	1347	55.12	0.884	31.1	77.1
	115.0	25.02	2189	1296	52.24	0.806	27.5	76.1
	115.0	26.06	2246	1240	48.94	0.722	24.0	74.9
	115.0	27.03	2300	1180	45.29	0.636	20.6	74.0
	115.0	27.92	2338	1114	41.13	0.546	17.4	72.8
	115.0	28.74	2373	1044	36.60	0.455	14.3	71.8
	115.0	29.48	2403	968	32.12	0.370	11.5	70.9
	115.0	30.15	2421	886	27.61	0.291	9.0	69.8
	115.0	30.74	2441	798	22.92	0.218	6.7	69.1
	115.0	31.27	2451	705	17.94	0.151	4.6	68.1
	115.0	31.71	2463	605	13.65	0.098	3.0	67.5
	115.0	32.06	2471	497	9.76	0.058	1.7	67.0
	115.0	32.33	2470	383	5.69	0.026	0.8	66.4
	115.0	32.49	2473	262	2.96	0.009	0.3	66.2
	115.0	32.58	2474	132	1.88	0.003	0.1	66.0
	115.0	32.56	2466	16	-0.69	0.000	0.0	65.8

DRAWING NO. PAGE 3 of 8 REV.
4K259BG -

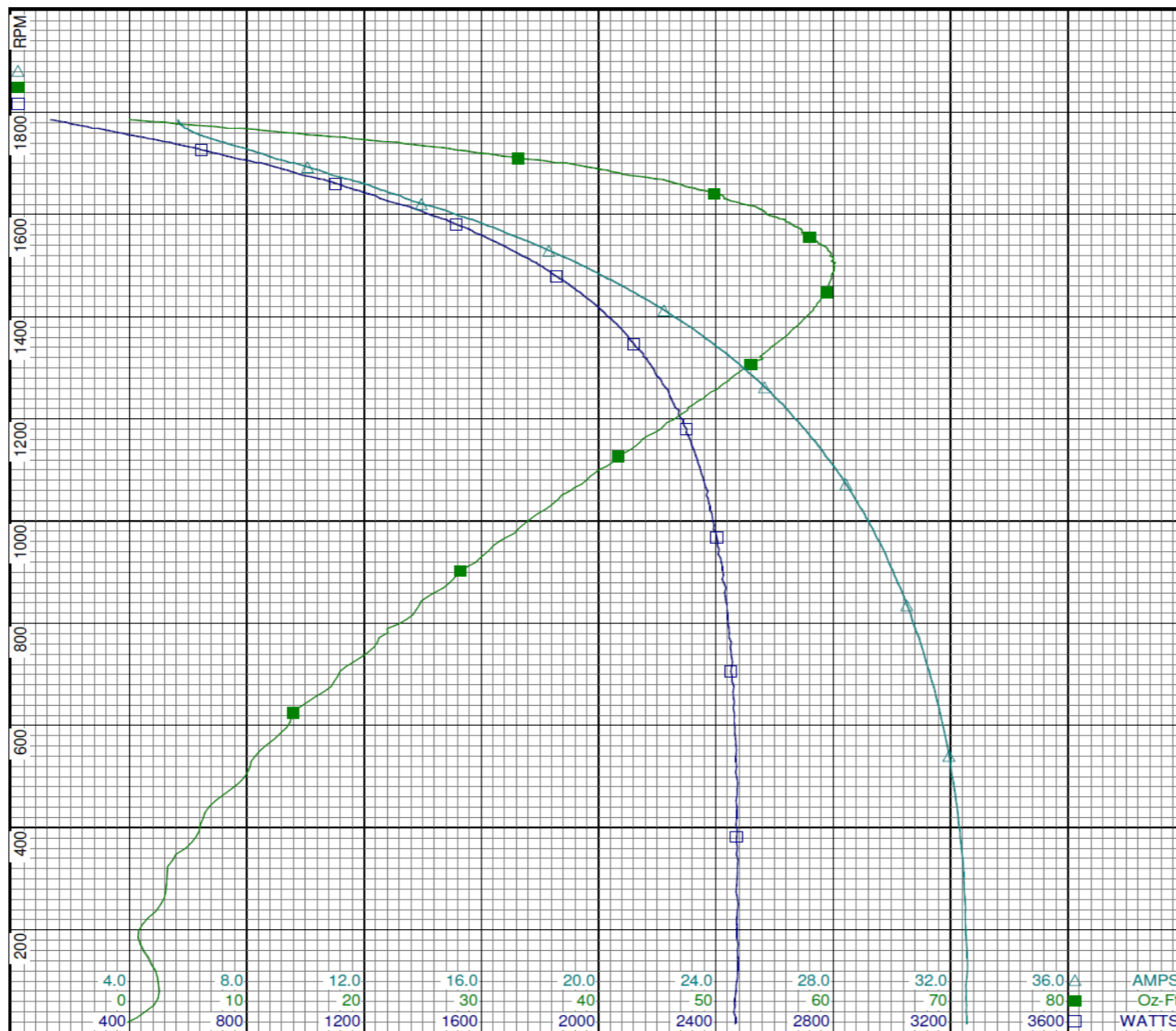
Performance Data



4K259BG

REV.

-



Curve Descriptions:

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

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

Motor Ratings:

S55JXREY-8486 ID: 1

DRAWING NO.	PAGE 4 of 8	REV.
4K259BG		-

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

Performance Data



4K259BG

REV.

-

Dayton Manufacturing Company

Motor Description

Model: **S55JXREY-8486**
 Motor ID: 1
 Poles: 4
 Volts: 115/208-230
 Frequency: 60/ 50
 HP: 1/2
 Speed: 1725
 Phase: 1
 Protector: MEJ55AR

Test Conditions

Test Type: Start
 Test Number: 15
 Poles: 4
 Volts: 230
 Hz: 60
 Rotation:
 Special Cond:
 Speed Conn:
 TestBoard: Amtps Performance Fixture #3
 Environment:
 Tested: 2/17/2010 2:11:34 PM
 Tested By: Sharp, Gerald
 Bearing Friction: -0.54 Oz-Ft
 Windage Torque: -1.50 Oz-Ft

Special Points	Vline (V)	Iline (A)	Imain (A)	Iaux (A)	Watts	RPM	Tq(Oz-ft)	HP	Eff (%)	PF (%)
	230.0	20.31	13.037	8.054	3326	1	24.18	0.000	0.0	71.2
PUT OZ-FT	230.0	20.29	13.025	8.036	3321	10	23.71	0.003	0.1	71.2
	230.0	20.29	13.031	8.030	3326	17	24.00	0.005	0.1	71.3
	230.0	20.31	13.080	7.864	3340	127	26.04	0.039	0.9	71.5
	230.0	20.24	13.105	7.632	3319	257	25.19	0.077	1.7	71.3
	230.0	20.16	13.080	7.460	3327	377	26.65	0.120	2.7	71.8
	230.0	20.02	13.035	7.257	3309	491	28.60	0.167	3.8	71.9
	230.0	19.85	12.963	7.059	3301	597	31.25	0.222	5.0	72.3
	230.0	19.65	12.869	6.864	3278	693	33.71	0.278	6.3	72.5
	230.0	19.42	12.742	6.695	3265	781	36.09	0.336	7.7	73.1
	230.0	19.16	12.558	6.568	3242	863	37.19	0.382	8.8	73.6
	230.0	18.89	12.383	6.455	3223	939	38.36	0.429	9.9	74.2
	230.0	18.60	12.185	6.357	3198	1011	39.99	0.481	11.2	74.7
	230.0	18.29	11.976	6.277	3161	1078	40.86	0.524	12.4	75.2
	230.0	17.94	11.751	6.218	3125	1139	41.61	0.564	13.5	75.7
	230.0	17.59	11.511	6.189	3088	1196	42.21	0.601	14.5	76.3
	230.0	17.23	11.268	6.186	3038	1250	42.05	0.626	15.4	76.6
	230.0	16.85	11.019	6.211	2987	1299	41.91	0.648	16.2	77.1
	230.0	16.48	10.768	6.276	2938	1345	40.99	0.656	16.7	77.5
	230.0	16.09	10.510	6.364	2884	1388	39.94	0.660	17.1	77.9
	230.0	15.70	10.248	6.478	2818	1426	38.33	0.651	17.2	78.0
	230.0	15.30	9.984	6.625	2759	1463	36.30	0.632	17.1	78.4
	230.0	14.91	9.715	6.797	2696	1495	33.96	0.604	16.7	78.6
	230.0	14.52	9.460	6.980	2635	1527	31.31	0.569	16.1	78.9
	230.0	14.13	9.187	7.181	2563	1556	28.27	0.524	15.2	78.9
	230.0	13.76	8.946	7.387	2497	1583	25.06	0.472	14.1	78.9
	230.0	13.40	8.700	7.597	2424	1607	21.49	0.411	12.7	78.7
	230.0	13.04	8.461	7.830	2359	1630	17.77	0.345	10.9	78.6
	230.0	12.71	8.244	8.045	2290	1652	13.94	0.274	8.9	78.3
	230.0	12.38	8.043	8.278	2226	1671	9.87	0.196	6.6	78.2
	230.0	12.02	7.787	8.537	2150	1691	4.86	0.098	3.4	77.8
	230.0	11.72	7.567	8.766	2077	1710	0.31	0.006	0.2	77.1
	230.0	11.68	7.533	8.798	2072	1711	0.00	0.000	0.0	77.1

DRAWING NO. PAGE 5 of 8 REV.
4K259BG -

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

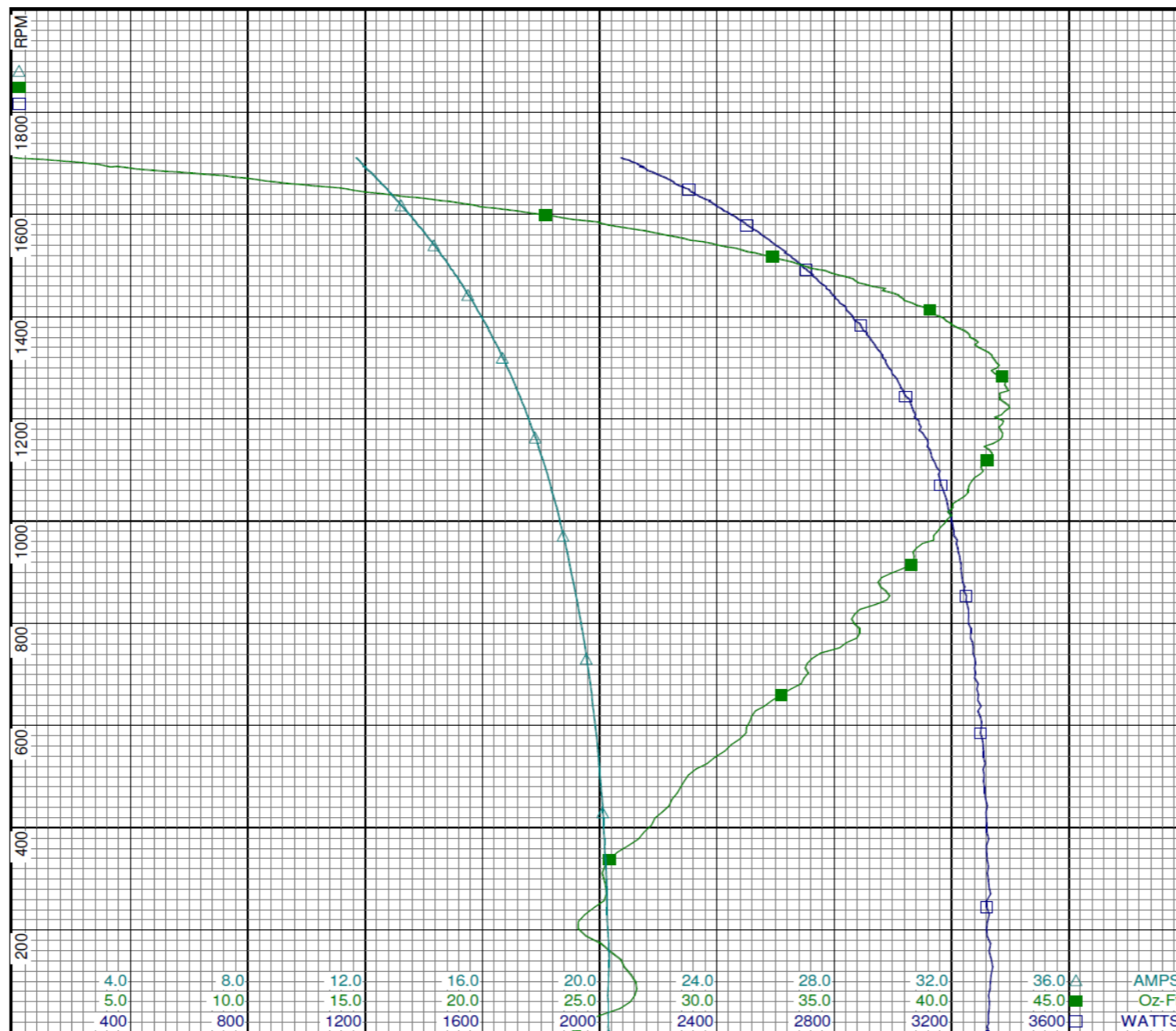
Performance Data



4K259BG

REV.

-



Curve Descriptions:

Motor(1) Test 15 Start 230V 60 Hz 4P

- SPEED vs WATTS
- SPEED vs TORQUE
- △ SPEED vs IL

Motor Ratings:

S55JXREY-8486 ID: 1

4.0 8.0 12.0 16.0 20.0 24.0 28.0 32.0 36.0 AMPS
 5.0 10.0 15.0 20.0 25.0 30.0 35.0 40.0 45.0 Oz-Ft
 400 800 1200 1600 2000 2400 2800 3200 3600 WATTS

DRAWING NO.	PAGE 6 of 8	REV.
	4K259BG	-

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

Performance Data



4K259BG	REV. -
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Dayton Manufacturing Company

Motor Description

Model: S55JXREY-8486
Motor ID: 1
Poles: 4
Volts: 115/208-230
Frequency: 60/ 50
HP: 1/2
Speed: 1725
Phase: 1
Protector: MEJ55AR

Test Conditions

Test Type: Run
Test Number: 16
Poles: 4
Volts: 230
Hz: 60
Rotation:
Special Cond:
Speed Conn:
TestBoard: Amps Performance Fixture #3
Environment:
Tested: 2/17/2010 1:09:12 PM
Tested By: Sharp, Gerald
Bearing Friction: -0.58 Oz-Ft
Windage Torque: -1.53 Oz-Ft

Special Points	Vline (V)	Iline (A)	Watts	RPM	Tq (Oz-ft)	HP	Eff (%)	PF (%)
	230.0	2.832	118	1788	0.00	0.000	0.0	18.1
	230.0	3.030	294	1768	9.59	0.202	51.3	42.1
	230.0	3.413	462	1748	18.98	0.395	63.8	58.8
0.5 HP	230.0	3.710	564	1736	24.19	0.500	66.2	66.1
	230.0	3.994	643	1727	28.24	0.581	67.3	70.0
0.625 HP	230.0	4.200	693	1722	30.49	0.625	67.2	71.8
	230.0	4.611	788	1707	34.78	0.707	66.9	74.3
	230.0	5.257	946	1686	41.43	0.831	65.6	78.3
	230.0	5.951	1096	1663	46.84	0.928	63.2	80.0
	230.0	6.610	1232	1637	50.90	0.992	60.0	81.1
	230.0	7.385	1385	1611	54.59	1.047	56.4	81.5
	230.0	8.131	1523	1582	57.32	1.080	52.9	81.4
	230.0	8.847	1649	1550	58.84	1.086	49.1	81.1
	230.0	9.532	1761	1517	59.77	1.079	45.7	80.3
BDT OZ-FT	230.0	9.818	1807	1503	59.90	1.072	44.2	80.0
	230.0	10.231	1878	1479	59.75	1.052	41.8	79.8
	230.0	10.874	1969	1440	59.13	1.013	38.4	78.7
	230.0	11.512	2058	1396	57.87	0.961	34.9	77.7
	230.0	12.121	2139	1348	55.97	0.898	31.3	76.7
	230.0	12.690	2203	1297	53.51	0.826	28.0	75.5
	230.0	13.221	2257	1241	50.13	0.741	24.5	74.2
	230.0	13.718	2305	1180	46.25	0.650	21.0	73.1
	230.0	14.174	2350	1115	42.01	0.558	17.7	72.1
	230.0	14.591	2383	1044	37.51	0.466	14.6	71.0
	230.0	14.965	2408	968	32.93	0.379	11.8	69.9
	230.0	15.305	2428	886	28.21	0.298	9.1	69.0
	230.0	15.597	2445	798	23.44	0.223	6.8	68.1
	230.0	15.866	2451	705	18.30	0.154	4.7	67.2
	230.0	16.087	2464	604	13.66	0.098	3.0	66.6
	230.0	16.266	2468	496	9.45	0.056	1.7	66.0
	230.0	16.398	2470	382	5.32	0.024	0.7	65.5
	230.0	16.471	2464	262	2.79	0.009	0.3	65.1
	230.0	16.492	2469	132	1.03	0.002	0.0	65.1

DRAWING NO.	PAGE 7 of 8	REV.
	4K259BG	-

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

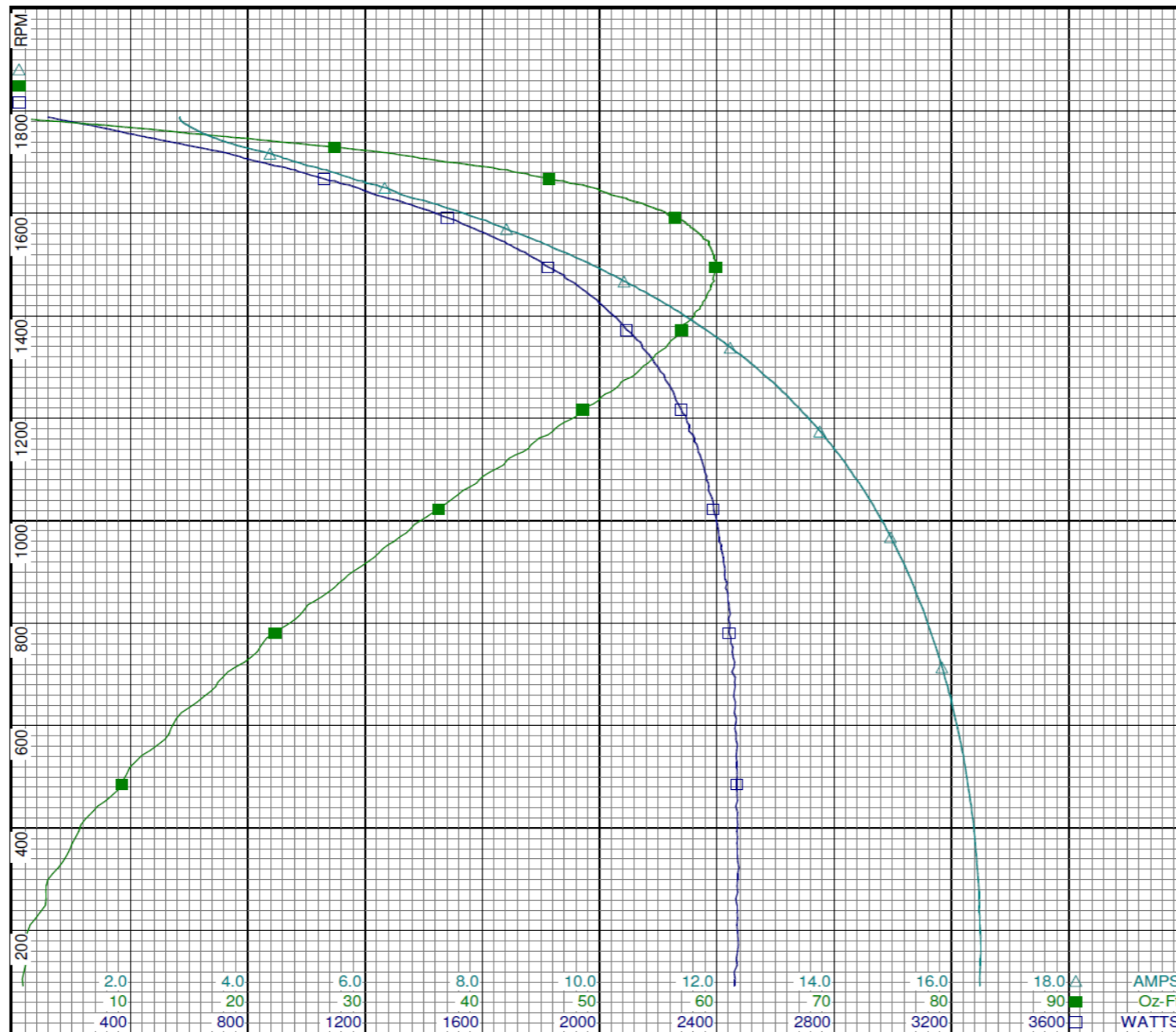
Performance Data



4K259BG

REV.

-



Curve Descriptions:

Motor(1) Test 16 Run 230V 60 Hz 4P

- SPEED vs WATTS
- SPEED vs TORQUE
- △ SPEED vs IL

Motor Ratings:

S55JXREY-8486 ID: 1

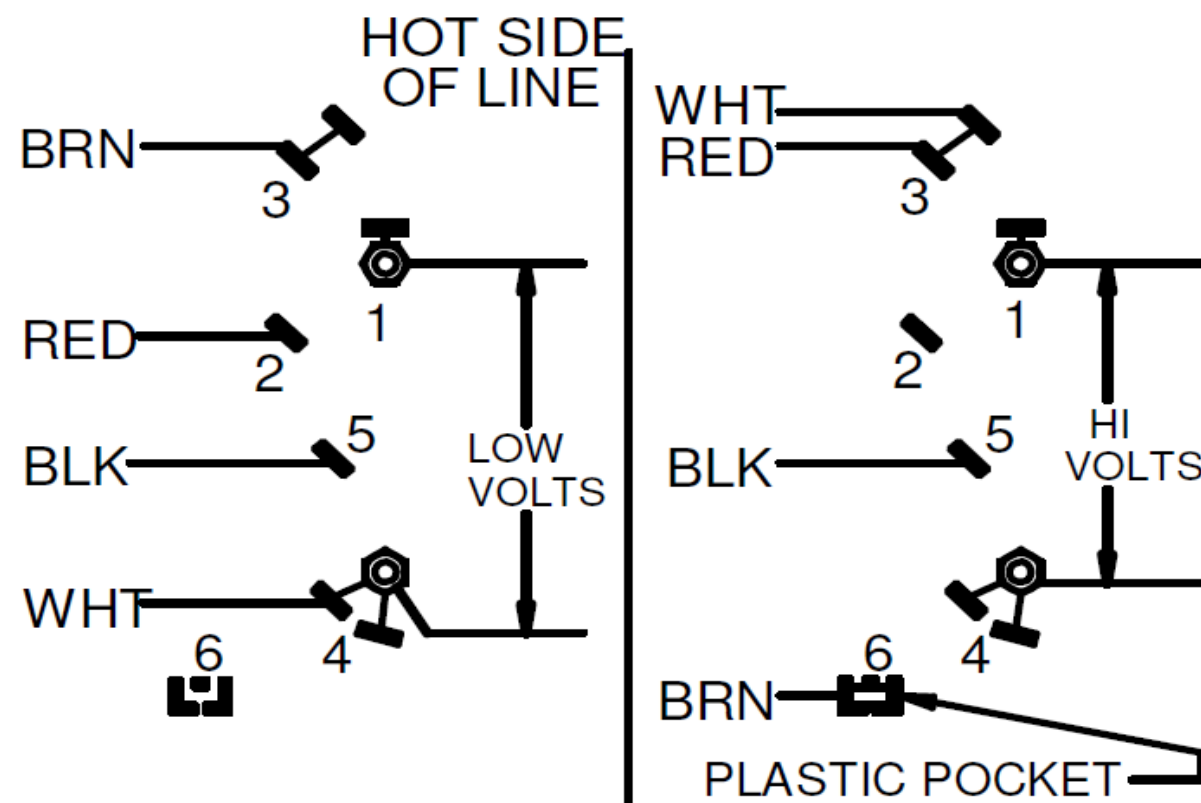
DRAWING NO.	PAGE 8 of 8	REV.
4K259BG		-

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

4K259BG

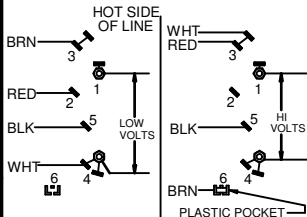
REV.
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CONNECTIONS



CCW LEAD END REVERSIBLE
TO REVERSE ROTATION
INTERCHANGE RED AND BLACK LEADS

DRAWING NO.	PAGE 1 of 1	REV.
4K259BG		-

Dayton[®]**BELT DRIVE FAN &
BLOWER MOTOR****HP:** 1/2**VOLTS:** 115/208-230**AMPS:** 8.6/4.2-4.3**RPM:** 1725**DUTY:** CONT**SF:** 1.25**KVA CODE:** L**ENCL:** ODP**THERMALLY PROTECTED:** AUTOMFG. NO. PROT. CODE: **MTR REF:** S55JXREY-8486**PH:** 1**HZ:** 60**FR:** 48Z**INS CL:** B**AMB:** 40 °C**SFA:** 9.4/4.9-4.7AVG. F.L.
EFF.Part
No **4K259BG****Disconnect Power Before Making Any
Electrical Connections or Changes****CONNECTIONS**CCW LEAD END REVERSIBLE
TO REVERSE ROTATION
INTERCHANGE RED AND BLACK LEADS

E37403



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

Made in Mexico