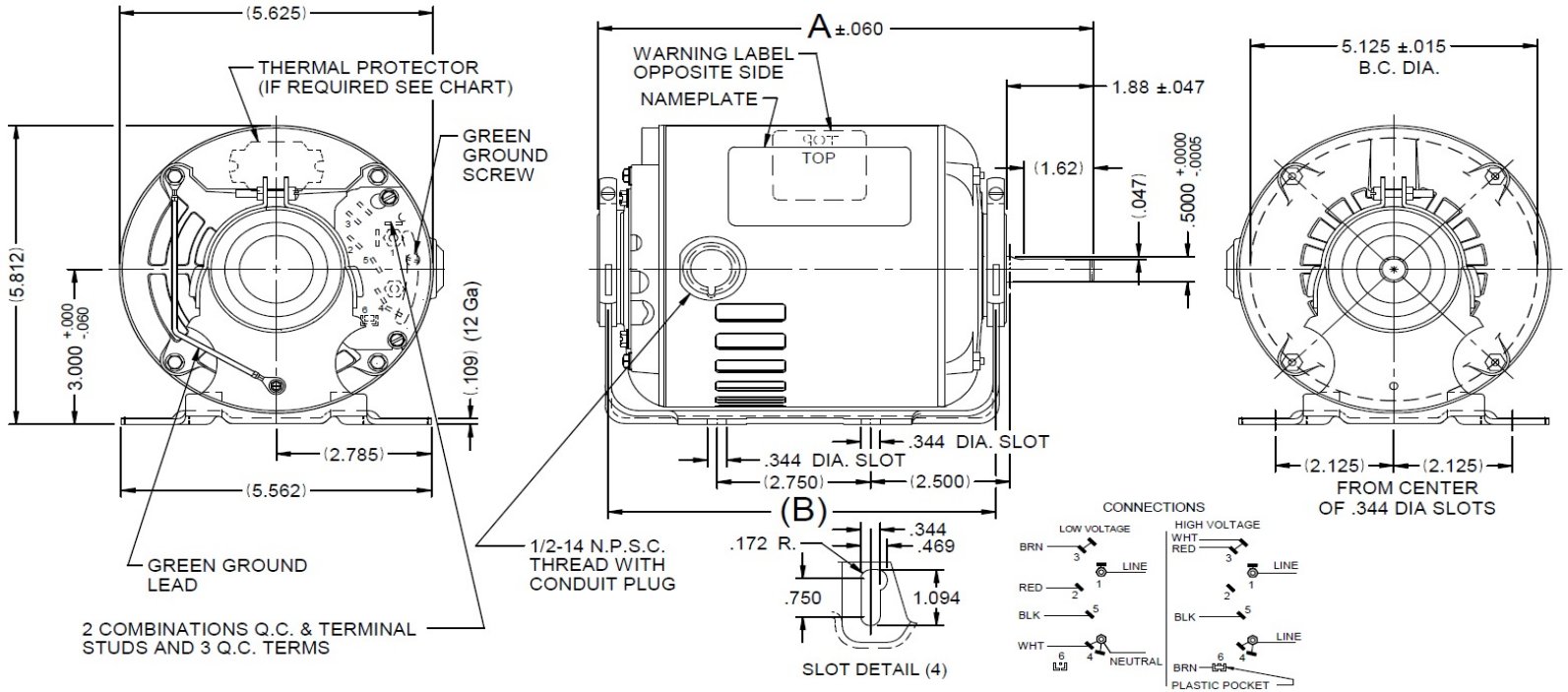
Dimensional Drawing

4K252BG

REV. -

VAR	MODEL	CUST. PT. NO.	A	B	C	D	HP	VOLTS	SF	AMPS	HZ	RPM	CONN VOLTS	PROT.	DESCRIPTION / REMARKS
001	S55JXREW-8491	4K252BG	10.212	8.062	-------	-------	1/3	115/208-230	1.35	6.6/3.1-3.3	60	1725	---	AUTO	48YZ, ODP, BALL BEARING



ROTATION IS CCW SWITCH END, TO REVERSE ROTATION INTERCHANGE RED & BLACK LEADS

DRAWING NO.	PAGE 1 of 1	REV.
4K252BG		-

Performance Data

4K252BG	REV. -

SPLIT-PHASE & CAPACITOR START MOTOR PERFORMANCE

HP:	1/3							
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:	1.35							
Efficiency:	@ Rated Load	56.6	63.4	56.6				
Power Factor:	@ Rated Load	61.8	64.0	61.8				
Amps:	@ No Load							
	@ Rated Load	6.26	2.95	3.13				
	@ Service Factor	7.12	3.5	3.56				
	@ Locked Rotor	37.2						
RPM:	@ Rated Load	1749						
Torques:	Breakdown	46.15	39.03	46.43				
	Locked Rotor	26.08	16.52	22.57				
	Pull-Up	22.16	15.86	20.33				
	Rated Load	16.2	16.14	16.2				
	Service Factor	22.7	21.78	22.7				
Watts:	Rated Load	445	394	444				
KVA Code:	P	P	L	N				
Temperature Rise:	@ Rated Load	42.7	34.7	43.2				
	@ Service Factor	60.1	50.7	58.3				
Thermal Protector:	Trip Temp (°C)	123	133.4	128.3				
Winding Material:	Start (Auxiliary)	Cu	Cu	Cu				
	Run (Main)	Cu	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							

DRAWING NO.	PAGE 1 of 1	REV.
	4K252BG	-

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

Performance Data

4K252BG	REV. -

Dayton Manufacturing Company

Motor Description

Model:	S055REW849101	4K252BG
Motor ID:	1Of 2	
Poles:	4	
Volts:	115/230	
Frequency:	60/50	
HP:	1/3	
Speed:	1725/1425	
Phase:	1	
Protector:	MEJ56RR	

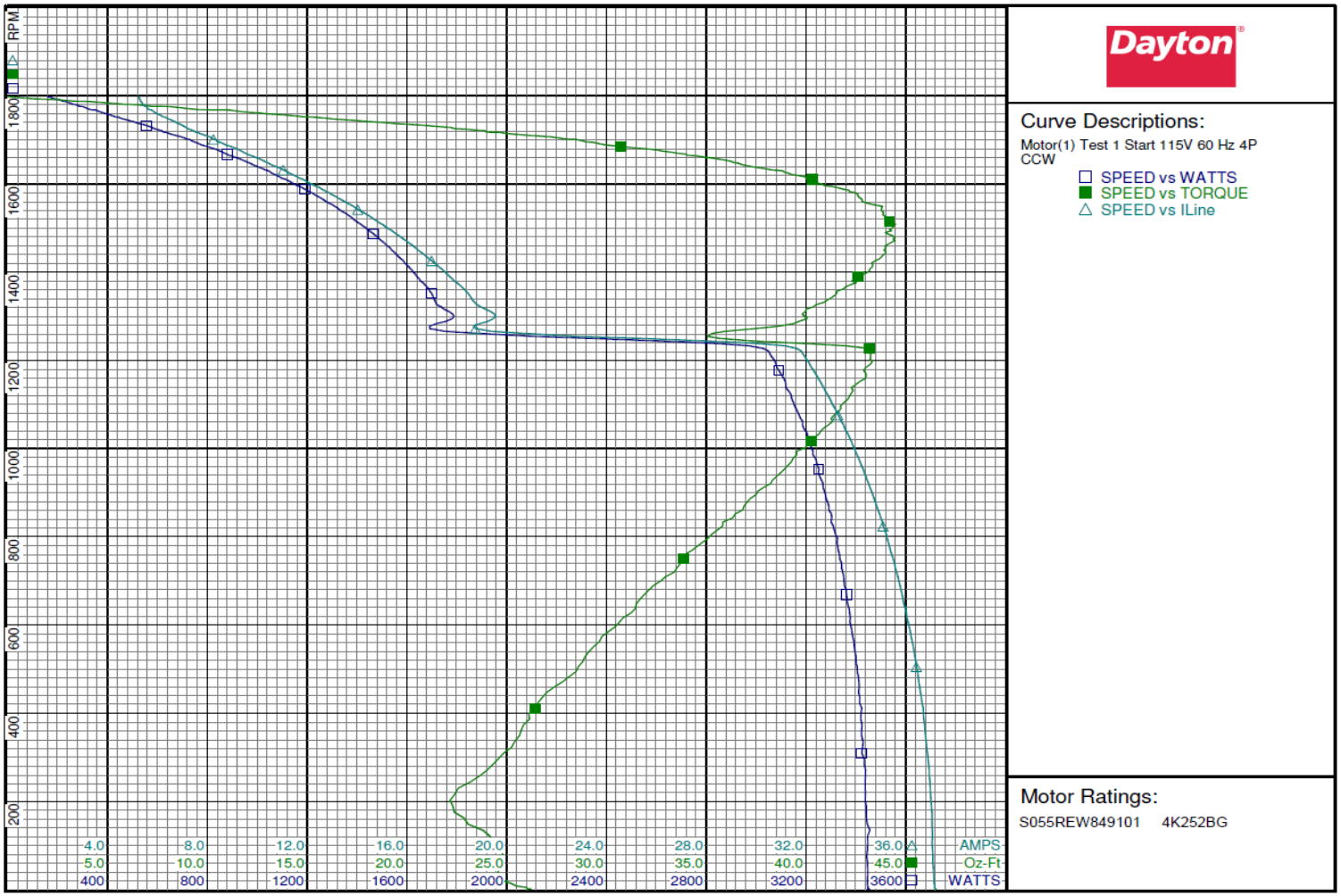
Test Conditions

Test Type:	Start	Run Cap:	0
Test Number:	1	Start Cap:	0µfd
Poles:	4	Environment:	
Volts:	115	Tested:	9/14/2009 10:48:37 AM
Hz:	60	Tested By:	Sharp, Gerald
Rotation:	CCW	Gear Ratio:	1:1
Special Cond:		Bearing Friction:	-2.20 Oz-Ft
Speed Conn:		Windage Torque:	-5.05 Oz-Ft
TestBoard:	Amtps Performance	Fixture #1	

Special Points	Vline(V)	Iline(A)	Watts	RPM	Tq(Oz-ft)	HP	Eff(%)	PF(%)
	115.0	37.22	3456	1	26.08	0.000	0.0	80.8
	115.0	37.12	3447	33	24.56	0.010	0.2	80.7
	115.0	37.05	3442	175	22.38	0.047	1.0	80.8
PUT OZ-FT	**115.0**	**37.01**	**3438**	**202**	**22.16**	**0.053**	**1.2**	**80.8**
	115.0	36.87	3424	310	24.85	0.092	2.0	80.8
	115.0	36.63	3416	435	26.79	0.139	3.0	81.1
	115.0	36.30	3394	551	29.36	0.193	4.2	81.3
	115.0	35.89	3364	659	31.69	0.249	5.5	81.5
	115.0	35.45	3335	759	33.89	0.306	6.8	81.8
	115.0	34.95	3302	852	36.46	0.370	8.4	82.2
	115.0	34.40	3255	937	38.54	0.430	9.9	82.3
	115.0	33.81	3215	1017	40.27	0.487	11.3	82.7
	115.0	33.17	3160	1090	41.75	0.542	12.8	82.8
	115.0	32.49	3112	1159	42.98	0.593	14.2	83.3
	115.0	31.82	3050	1221	43.28	0.629	15.4	83.4
	115.0	18.68	1691	1277	38.65	0.588	25.9	78.7
	115.0	18.72	1716	1331	40.90	0.648	28.2	79.7
	115.0	17.90	1655	1379	42.31	0.695	31.3	80.4
	115.0	17.00	1585	1426	43.48	0.738	34.7	81.1
	115.0	16.06	1507	1467	44.26	0.773	38.3	81.6
	115.0	15.10	1425	1505	44.40	0.795	41.6	82.0
	115.0	14.14	1337	1538	43.81	0.802	44.8	82.2
	115.0	13.17	1246	1571	42.63	0.797	47.7	82.3
	115.0	12.19	1150	1599	40.80	0.777	50.4	82.1
	115.0	11.22	1053	1627	38.90	0.753	53.4	81.6
	115.0	10.30	955	1651	36.27	0.713	55.7	80.6
	115.0	9.38	853	1674	32.90	0.656	57.4	79.0
	115.0	8.45	746	1695	29.00	0.585	58.5	76.7
	115.0	7.61	636	1717	24.66	0.504	59.1	72.7
	115.0	6.90	536	1736	19.87	0.411	57.2	67.5
	115.0	6.15	418	1755	14.21	0.297	53.0	59.1
	115.0	5.58	308	1774	8.42	0.178	43.1	48.0
	115.0	5.29	196	1792	1.85	0.039	15.0	32.2
	115.0	5.26	161	1798	0.00	0.000	0.0	26.6

Performance Data

4K252BG	REV. -



DRAWING NO.	PAGE 2 of 8	REV.
4K252BG		-

4K252BG	REV. -

Dayton Manufacturing Company

Motor Description

Model:	S055RSE821801
Motor ID:	1Of 2
Poles:	4
Volts:	115/230
Frequency:	60/50
HP:	1/3
Speed:	1725/1425
Phase:	1
Protector:	MEJ56RR

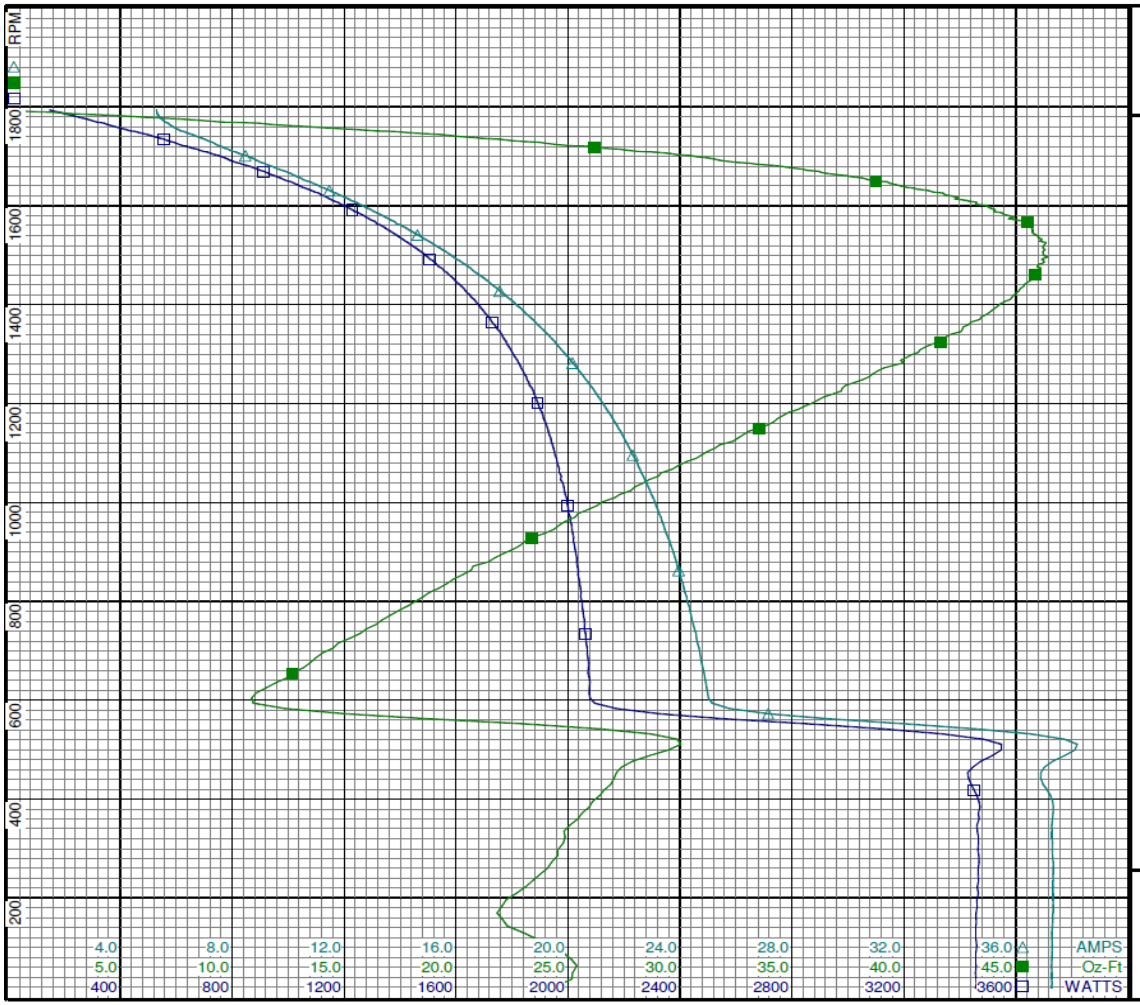
Test Conditions

Test Type:	Run	Run Cap:	0
Test Number:	9	Start Cap:	0µfd
Poles:	4	Environment:	
Volts:	115	Tested:	9/14/2009 10:25:06 AM
Hz:	60	Tested By:	Sharp, Gerald
Rotation:	CWLE	Gear Ratio:	1:1
Special Cond:		Bearing Friction:	-1.71 Oz-Ft
Speed Conn:		Windage Torque:	-5.10 Oz-Ft
TestBoard:	Amtps Performance	Fixture #1	

Special Points	Vline(V)	Iline(A)	Watts	RPM	Tq(Oz-ft)	HP	Eff(%)	PF(%)
	115.0	5.12	152	1792	0.00	0.000	0.0	25.8
	115.0	5.41	285	1774	7.75	0.164	42.8	45.8
	115.0	6.11	421	1752	14.95	0.312	55.2	59.9
16.2 OZ-FT	**115.0**	**6.26**	**445**	**1749**	**16.20**	**0.337**	**56.6**	**61.8**
0.333 HP	**115.0**	**6.23**	**440**	**1749**	**15.99**	**0.333**	**56.4**	**61.5**
	115.0	6.88	542	1732	20.99	0.433	59.6	68.4
21.1 OZ-FT	**115.0**	**6.90**	**544**	**1732**	**21.10**	**0.435**	**59.6**	**68.6**
22.7 OZ-FT	**115.0**	**7.12**	**579**	**1726**	**22.70**	**0.466**	**60.1**	**70.8**
1725 RPM	**115.0**	**7.15**	**585**	**1725**	**22.97**	**0.472**	**60.1**	**71.2**
24.3 OZ-FT	**115.0**	**7.36**	**615**	**1720**	**24.30**	**0.498**	**60.3**	**72.7**
0.5 HP	**115.0**	**7.38**	**618**	**1719**	**24.43**	**0.500**	**60.3**	**72.9**
	115.0	7.79	668	1711	26.55	0.541	60.4	74.6
	115.0	8.66	775	1691	30.94	0.623	59.9	77.8
	115.0	9.68	888	1668	35.06	0.696	58.5	79.8
	115.0	10.69	998	1643	38.15	0.746	55.7	81.2
	115.0	11.70	1104	1616	41.39	0.796	53.8	82.1
	115.0	12.73	1208	1589	43.20	0.817	50.5	82.5
	115.0	13.75	1305	1558	44.42	0.824	47.1	82.5
	115.0	14.77	1397	1525	45.54	0.827	44.1	82.3
BDT OZ-FT	**115.0**	**15.67**	**1480**	**1492**	**46.15**	**0.820**	**41.3**	**82.1**
	115.0	15.77	1487	1489	45.93	0.814	40.8	82.0
	115.0	16.74	1568	1449	45.41	0.783	37.3	81.5
	115.0	17.67	1641	1406	44.29	0.742	33.7	80.8
	115.0	18.57	1709	1360	42.94	0.695	30.3	80.0
	115.0	19.43	1773	1309	41.20	0.642	27.0	79.4
	115.0	20.25	1829	1254	38.76	0.579	23.6	78.5
	115.0	21.01	1878	1195	36.07	0.513	20.4	77.7
	115.0	21.71	1920	1130	32.97	0.443	17.2	76.9
	115.0	22.35	1959	1061	29.97	0.378	14.4	76.2
	115.0	22.94	1985	985	26.31	0.309	11.6	75.2
	115.0	23.48	2014	905	22.99	0.248	9.2	74.6
	115.0	23.96	2036	818	19.45	0.189	6.9	73.9
	115.0	24.39	2057	725	15.63	0.135	4.9	73.3
	115.0	29.25	2606	626	22.73	0.169	4.9	77.5
	115.0	36.55	3420	521	28.62	0.178	3.9	81.4
	115.0	37.03	3460	408	26.52	0.129	2.8	81.2
	115.0	37.16	3465	285	24.42	0.083	1.8	81.1
	115.0	37.15	3462	157	22.87	0.043	0.9	81.0
	115.0	37.13	3464	25	25.07	0.007	0.2	81.1

Performance Data

4K252BG	REV. -



Dayton

Curve Descriptions:

Motor(1) Test 9 Run 115V 60 Hz 4P CWLE

- □ SPEED vs WATTS
- ■ SPEED vs TORQUE
- △ SPEED vs ILine

Motor Ratings:

S055REW849101 4K252BG

DRAWING NO.	PAGE 4 of 8	REV.
4K252BG		-

4K252BG	REV. -

Dayton Manufacturing Company

Motor Description

Model:	S055REW849101	4K252BG
Motor ID:	1Of 2	
Poles:	4	
Volts:	115/230	
Frequency:	60/50	
HP:	1/3	
Speed:	1725/1425	
Phase:	1	
Protector:	MEJ56RR	

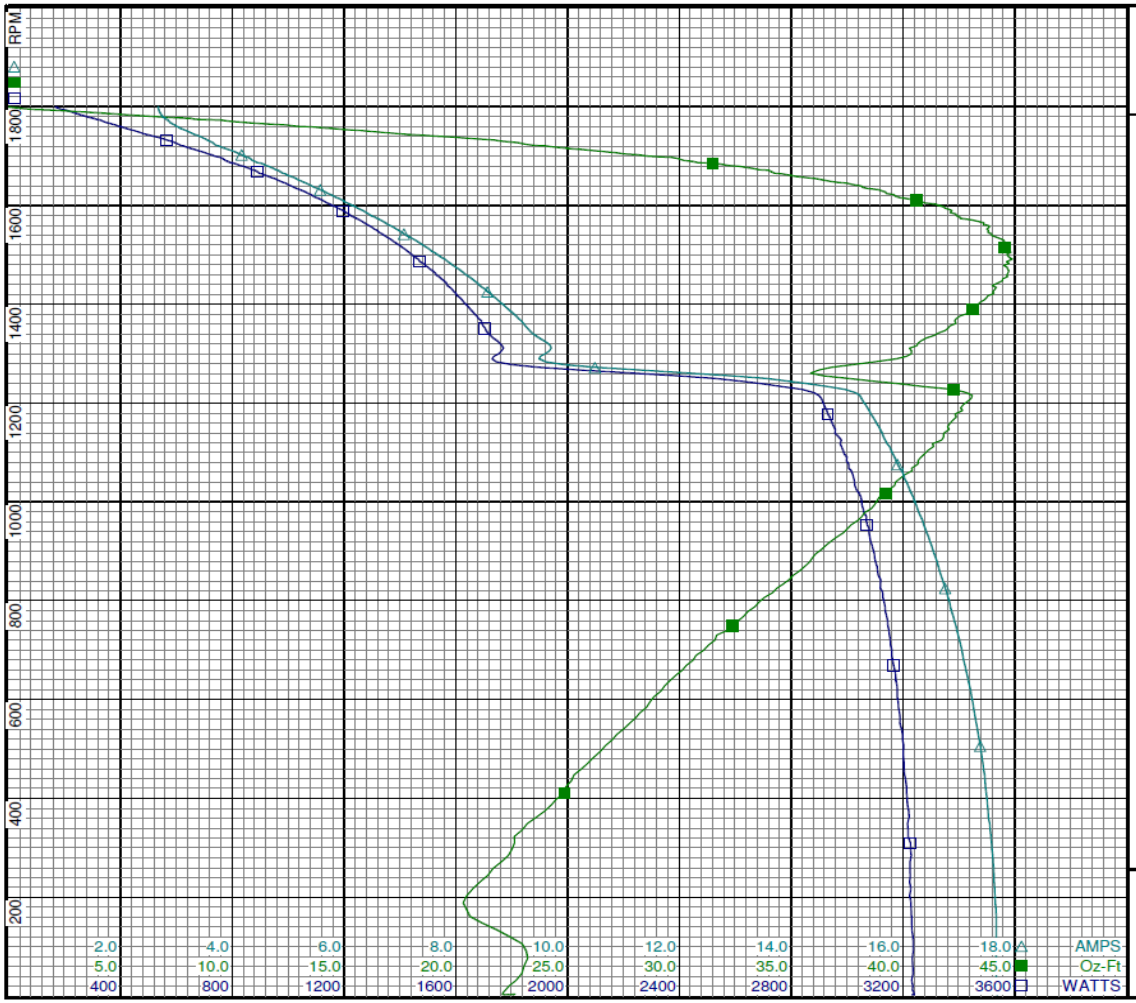
Test Conditions

Test Type:	Start	Run Cap:	0
Test Number:	13	Start Cap:	0µfd
Poles:	4	Environment:	
Volts:	230	Tested:	9/14/2009 9:37:47 AM
Hz:	60	Tested By:	Sharp, Gerald
Rotation:		Gear Ratio:	1:1
Special Cond:		Bearing Friction:	-2.44 Oz-Ft
Speed Conn:		Windage Torque:	-4.19 Oz-Ft
TestBoard:	Amtps Performance	Fixture #1	

Special Points	Vline(V)	Iline(A)	Watts	RPM	Tq(Oz-ft)	HP	Eff(%)	PF(%)
	230.0	17.692	3237	2	22.57	0.001	0.0	79.6
	230.0	17.668	3231	32	22.70	0.009	0.2	79.5
	230.0	17.665	3230	175	20.48	0.043	1.0	79.5
PUT OZ-FT	**230.0**	**17.654**	**3229**	**188**	**20.33**	**0.046**	**1.1**	**79.5**
	230.0	17.585	3227	310	22.63	0.083	1.9	79.8
	230.0	17.470	3210	435	25.17	0.130	3.0	79.9
	230.0	17.313	3190	552	27.78	0.182	4.3	80.1
	230.0	17.130	3171	659	30.13	0.236	5.6	80.5
	230.0	16.922	3146	759	32.62	0.295	7.0	80.8
	230.0	16.680	3112	851	35.10	0.356	8.5	81.1
	230.0	16.425	3078	937	37.33	0.416	10.1	81.5
	230.0	16.153	3044	1017	39.23	0.475	11.6	81.9
	230.0	15.853	3000	1090	40.80	0.529	13.2	82.3
	230.0	15.534	2948	1158	42.09	0.580	14.7	82.5
	230.0	15.154	2882	1221	42.85	0.623	16.1	82.7
	230.0	9.935	1800	1278	37.77	0.574	23.8	78.8
	230.0	9.490	1733	1332	41.06	0.651	28.0	79.4
	230.0	9.030	1666	1381	42.89	0.705	31.6	80.2
	230.0	8.566	1593	1425	44.03	0.747	35.0	80.9
	230.0	8.094	1517	1468	44.74	0.782	38.4	81.5
	230.0	7.614	1433	1505	44.84	0.803	41.8	81.8
	230.0	7.122	1346	1539	44.00	0.806	44.7	82.2
	230.0	6.646	1255	1571	43.07	0.805	47.9	82.1
	230.0	6.150	1159	1599	41.63	0.793	51.0	81.9
	230.0	5.666	1062	1627	39.22	0.760	53.4	81.5
	230.0	5.190	963	1651	36.48	0.717	55.5	80.7
	230.0	4.744	862	1675	33.30	0.664	57.5	79.0
	230.0	4.279	755	1697	29.61	0.598	59.1	76.7
	230.0	3.835	644	1717	24.76	0.506	58.6	73.0
	230.0	3.481	543	1736	20.41	0.422	57.9	67.8
	230.0	3.091	426	1755	14.67	0.306	53.7	59.8
	230.0	2.818	314	1774	8.31	0.176	41.8	48.4
	230.0	2.686	204	1793	1.78	0.038	13.9	33.0
	230.0	2.673	167	1799	0.00	0.000	0.0	27.2

Performance Data

4K252BG	REV. -



Dayton

Curve Descriptions:

Motor(1) Test 13 Start 230V 60 Hz 4P

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

Motor Ratings:

S055REW849101 4K252BG

DRAWING NO.	PAGE 6 of 8	REV.
4K252BG		-

4K252BG	REV. -

Dayton Manufacturing Company

Motor Description

Model:	S055REW849101	4K252BG
Motor ID:	1Of 2	
Poles:	4	
Volts:	115/230	
Frequency:	60/50	
HP:	1/3	
Speed:	1725/1425	
Phase:	1	
Protector:	MEJ56RR	

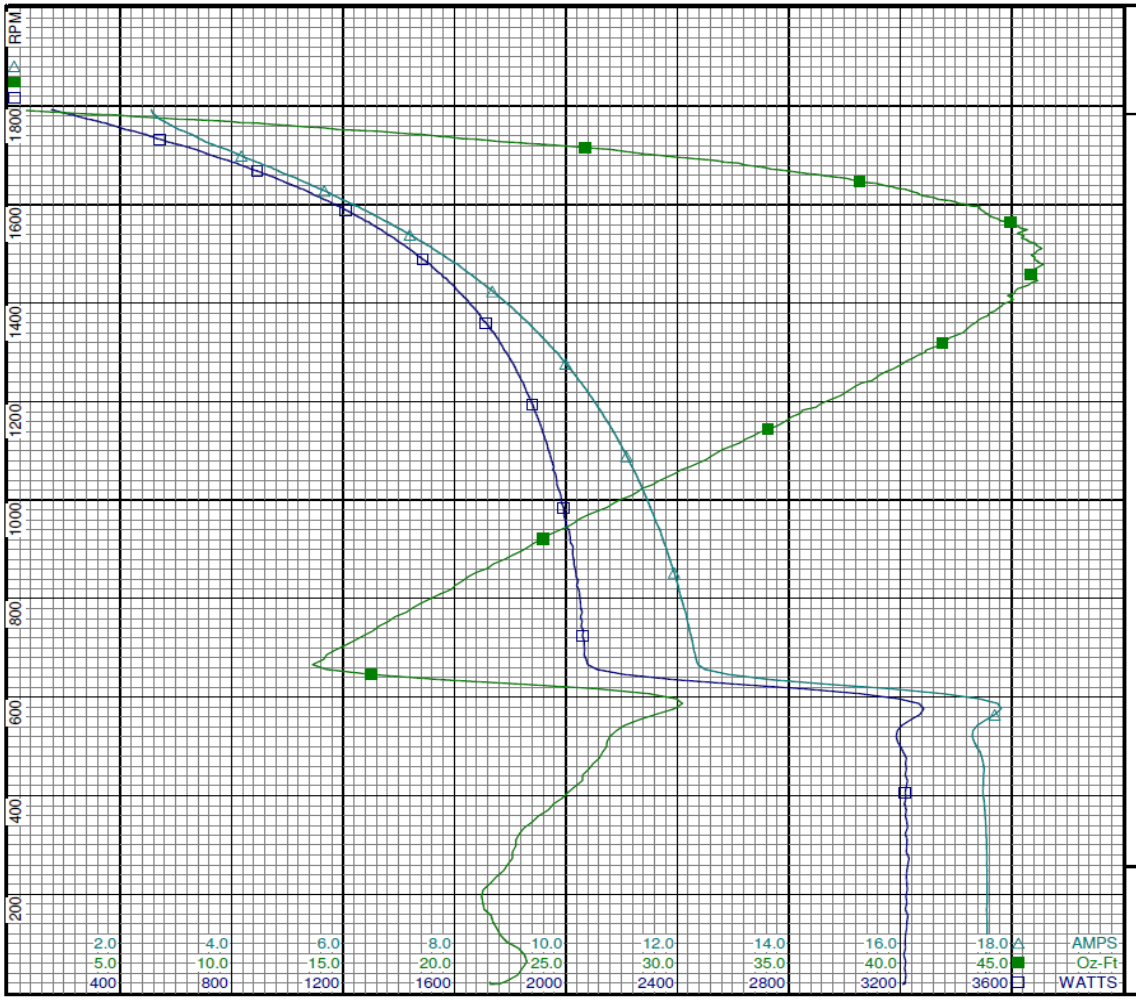
Test Conditions

Test Type:	Run	Run Cap:	0
Test Number:	17	Start Cap:	0µfd
Poles:	4	Environment:	
Volts:	230	Tested:	9/14/2009 8:47:33 AM
Hz:	60	Tested By:	Sharp, Gerald
Rotation:		Gear Ratio:	1:1
Special Cond:		Bearing Friction:	-2.47 Oz-Ft
Speed Conn:		Windage Torque:	-4.11 Oz-Ft
TestBoard:	Amtps Performance	Fixture #1	

Special Points	Vline(V)	Iline(A)	Watts	RPM	Tq(Oz-ft)	HP	Eff(%)	PF(%)
	230.0	2.557	153	1793	0.00	0.000	0.0	26.0
	230.0	2.706	285	1773	7.68	0.162	42.4	45.8
	230.0	3.054	420	1752	14.83	0.309	54.9	59.8
16.2 OZ-FT	**230.0**	**3.127**	**444**	**1749**	**16.20**	**0.337**	**56.6**	**61.8**
0.333 HP	**230.0**	**3.115**	**441**	**1750**	**15.99**	**0.333**	**56.4**	**61.5**
	230.0	3.443	542	1733	20.91	0.431	59.4	68.4
21.1 OZ-FT	**230.0**	**3.457**	**546**	**1732**	**21.10**	**0.435**	**59.4**	**68.7**
22.7 OZ-FT	**230.0**	**3.563**	**580**	**1726**	**22.70**	**0.466**	**60.0**	**70.7**
1725 RPM	**230.0**	**3.587**	**587**	**1725**	**23.05**	**0.473**	**60.2**	**71.1**
24.3 OZ-FT	**230.0**	**3.679**	**614**	**1721**	**24.30**	**0.498**	**60.5**	**72.5**
0.5 HP	**230.0**	**3.687**	**616**	**1721**	**24.41**	**0.500**	**60.6**	**72.6**
	230.0	3.905	669	1712	26.92	0.549	61.2	74.5
	230.0	4.346	780	1691	31.41	0.632	60.4	78.1
	230.0	4.846	893	1668	35.01	0.695	58.1	80.1
	230.0	5.360	1000	1643	38.87	0.761	56.7	81.2
	230.0	5.861	1107	1617	41.14	0.792	53.4	82.1
	230.0	6.379	1210	1589	43.64	0.825	50.9	82.5
	230.0	6.900	1308	1558	45.15	0.837	47.7	82.5
	230.0	7.409	1399	1525	45.78	0.831	44.3	82.1
	230.0	7.901	1487	1488	46.01	0.815	40.9	81.8
BDT OZ-FT	**230.0**	**8.059**	**1513**	**1479**	**46.43**	**0.817**	**40.3**	**81.7**
	230.0	8.393	1572	1449	45.96	0.793	37.6	81.4
	230.0	8.868	1646	1407	45.07	0.755	34.2	80.7
	230.0	9.321	1713	1360	43.39	0.703	30.6	79.9
	230.0	9.752	1774	1309	41.47	0.646	27.2	79.1
	230.0	10.159	1830	1255	39.09	0.584	23.8	78.3
	230.0	10.541	1879	1195	36.42	0.518	20.6	77.5
	230.0	10.898	1922	1130	33.41	0.450	17.5	76.7
	230.0	11.217	1953	1062	30.18	0.381	14.6	75.7
	230.0	11.516	1991	985	26.85	0.315	11.8	75.2
	230.0	11.791	2026	905	23.33	0.251	9.3	74.7
	230.0	12.027	2045	819	19.86	0.194	7.1	73.9
	230.0	12.244	2060	725	15.92	0.137	5.0	73.1
	230.0	14.726	2621	626	23.18	0.173	4.9	77.4
	230.0	17.294	3186	521	26.99	0.167	3.9	80.1
	230.0	17.486	3219	407	25.10	0.121	2.8	80.0
	230.0	17.554	3222	286	22.60	0.077	1.8	79.8
	230.0	17.556	3227	157	21.64	0.040	0.9	79.9
	230.0	17.529	3218	24	22.38	0.006	0.1	79.8

Performance Data

4K252BG	REV. -



Dayton

Curve Descriptions:

Motor(1) Test 17 Run 230V 60 Hz 4P

- □ SPEED vs WATTS
- ■ SPEED vs TORQUE
- △ SPEED vs ILine

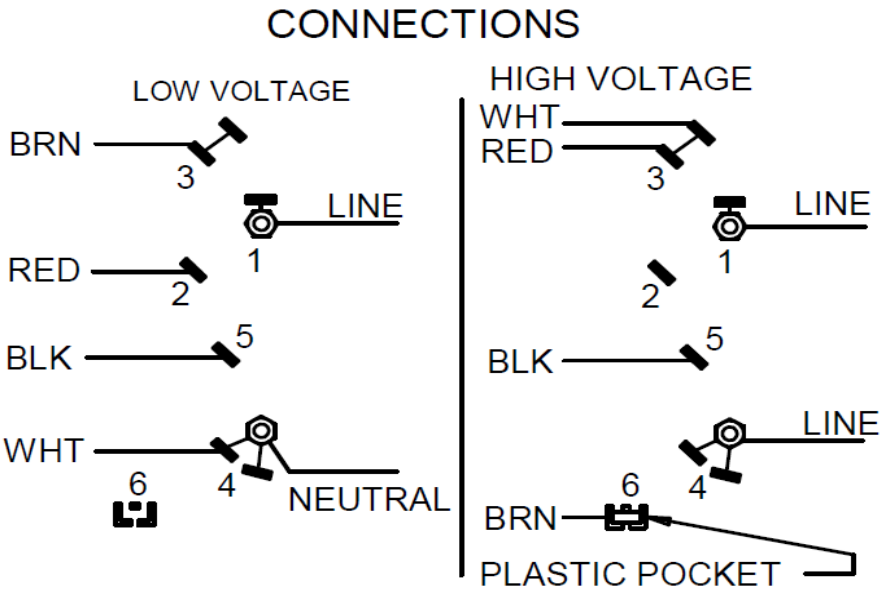
Motor Ratings:

S055REW849101 4K252BG

DRAWING NO.	PAGE 8 of 8	REV.
4K252BG		-

Wiring Diagram

4K252BG	REV. -



ROTATION IS CCW SWITCH END,
TO REVERSE ROTATION INTERCHANGE
RED & BLACK LEADS

DRAWING NO.	PAGE 1 of 1	REV.
4K252BG		-

Dayton®

BELT DRIVE FAN & BLOWER MOTOR

BAR CODE

Part No 4K252BG

HP: 1/3
VOLTS: 115/208-230
AMPS: 6.6/3.1-3.3
RPM: 1725
DUTY: CONT
SF: 1.35
KVA CODE: P
ENCL: ODP

PH: 1
HZ: 60
FR: 48YZ
INS CL: B
AMB: 40 ℃
SFA: 7.4/3.7-3.7

THERMALLY PROTECTED: AUTO

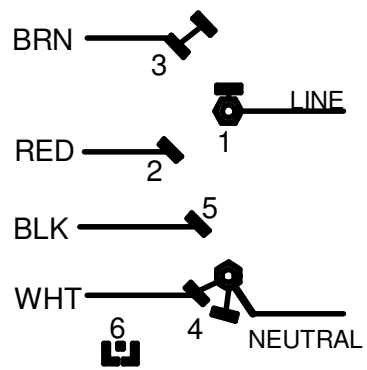
MFG. NO. PROT. CODE : 04380 AVG. F.L. EFF.

MTR REF: S55JXREW-8491

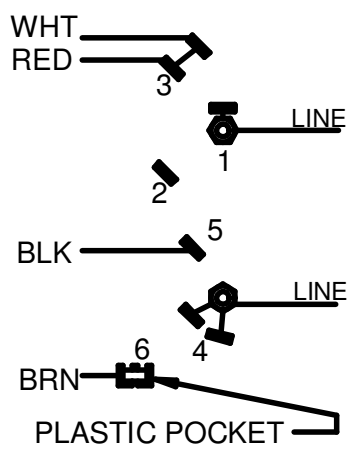
Disconnect Power Before Making Any Electrical Connections or Changes

CONNECTIONS

LOW VOLTAGE



HIGH VOLTAGE



ROTATION IS CCW SWITCH END
TO REVERSE ROTATION
INTERCHANGE RED & BLK LEADS

E37403

258501

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

Made in Mexico