

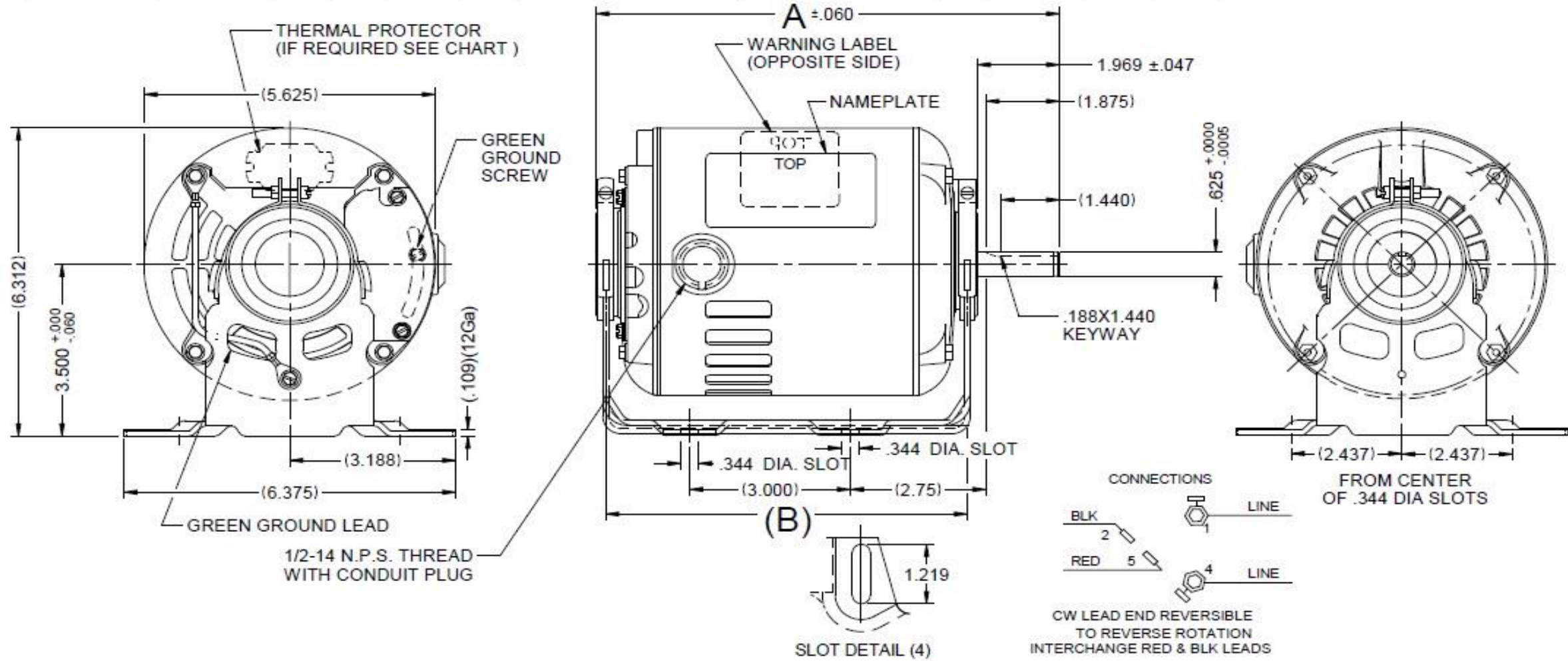
Dimensional Drawing

5K416BG

REV.
-

VS2 DAYTON pg 1 English

VAR	MODEL	CUST. PT. NO.	A	B	C	D	HP	VOLTS	SF	AMPS	HZ	RPM	CONN VOLTS	PROT.	DESCRIPTION / REMARKS
001	S55JXMG-8494	5K416BG	11.282	8.968	---	---	1/2	115	1.25	7.2	60	1725	---	AUTO	56, ODP



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5K416BG		-

Performance Data



5K416BG

REV.
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MOTOR PERFORMANCE

HP:	1/2								
Poles:	4								
Ambient (°C)	60								
Altitude (FASL):									
No. of Speeds:	1								
Volts:	115V	115V							
HZ:	60	60							
Service Factor:	1.25								
Efficiency:	@ Rated Load								
Power Factor:	@ Rated Load								
Amps:	@ No Load								
	@ Rated Load	6.8							
	@ Service Factor	7.9							
	@ Locked Rotor	29.1							
RPM:	@ Rated Load	1731							
Torques: Oz.Ft. / Lb.In. (Circle One)	Breakdown	53.5							
	Locked Rotor	30.9							
	Pull-Up	28.2							
	Rated Load	24.3							
	Service Factor	30.7							
Watts:	@ Rated Load	551							
KVA Code:									
Temperature Rise:	@ Rated Load	36.8							
	@ Service Factor	54.6							
Thermal Protector:	Trip Temp (°C)	129							
Winding Material:	Start (Auxiliary)							CU	
	Run (Main)							CU	
Capacitor(s):	Start (MFD / Volts)							N/A	
	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: Oz.Ft. / Lb.In. (Circle One)	Breakdown								
	Locked Rotor								
	Pull-Up								
	Rated Load								
	Service Factor								
Watts:	@ Rated Load								
Temperature Rise:	@ Rated Load								
	@ Service Factor								

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5K416BG -

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

Performance Data



5K416BG

REV.

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Dayton Manufacturing Company

Motor Description

Model: S055MGA8494 5K416BG
 Motor ID:
 Poles: 4
 Volts: 115
 Frequency: 60
 HP: 1/2
 Speed: 1725
 Phase: 1
 Protector: MEJ

Test Conditions

Test Type: Start
 Test Number: 1
 Poles: 4
 Volts: 115
 Hz: 60
 Rotation:
 Special Cond:
 Speed Conn:
 TestBoard: Amtps Performance Fixture #4
 Run Cap: 0
 Start Cap: 0µfd
 Environment:
 Tested: 12/16/2010 9:12:20 AM
 Tested By: Sharp, Gerald
 Gear Ratio: 1:1
 Bearing Friction: -0.41 Oz-Ft
 Windage Torque: -1.31 Oz-Ft

Special Points	Vline (V)	Iline (A)	Imain (A)	Iaux (A)	Watts	RPM	Tq (Oz-ft)	HP	Eff (%)	PF (%)
	115.0	38.59	29.11	10.835	3408	46	30.86	0.017	0.4	76.8
	115.0	38.54	29.12	10.723	3410	54	31.30	0.020	0.4	76.9
PUT OZ-FT	115.0	38.37	29.07	10.537	3386	164	28.21	0.055	1.2	76.7
	115.0	38.37	29.08	10.515	3390	176	28.44	0.060	1.3	76.8
	115.0	38.18	28.96	10.260	3380	338	31.87	0.128	2.8	77.0
	115.0	37.84	28.72	9.993	3364	491	35.13	0.205	4.6	77.3
	115.0	37.40	28.37	9.716	3345	630	39.00	0.292	6.5	77.8
	115.0	36.91	27.96	9.476	3324	751	42.89	0.384	8.6	78.3
	115.0	36.33	27.47	9.245	3298	861	46.60	0.478	10.8	78.9
	115.0	35.69	26.89	9.030	3269	958	49.96	0.570	13.0	79.6
	115.0	34.98	26.26	8.838	3231	1047	53.32	0.665	15.3	80.3
	115.0	34.21	25.58	8.657	3188	1127	56.03	0.751	17.6	81.0
	115.0	33.40	24.86	8.509	3140	1197	57.84	0.824	19.6	81.7
	115.0	32.53	24.03	8.420	3087	1260	58.22	0.874	21.1	82.5
	115.0	31.66	23.23	8.345	3028	1317	59.10	0.926	22.8	83.2
	115.0	30.90	22.51	8.314	2972	1361	58.98	0.956	24.0	83.6
	115.0	29.86	21.53	8.313	2900	1415	58.63	0.988	25.4	84.4
	115.0	28.90	20.62	8.338	2823	1458	57.36	0.996	26.3	85.0
	115.0	28.01	19.78	8.394	2751	1494	55.91	0.994	27.0	85.4
	115.0	27.12	18.91	8.476	2676	1528	53.78	0.978	27.3	85.8
	115.0	26.23	18.06	8.578	2599	1559	51.17	0.950	27.3	86.2
	115.0	25.35	17.21	8.703	2520	1586	47.96	0.906	26.8	86.4
	115.0	24.53	16.40	8.836	2443	1610	44.61	0.855	26.1	86.6
	115.0	23.65	15.53	8.990	2364	1635	40.82	0.794	25.1	86.9
	115.0	22.84	14.73	9.145	2286	1655	36.46	0.719	23.4	87.0
	115.0	22.01	13.89	9.317	2201	1676	32.00	0.638	21.6	87.0
	115.0	21.19	13.03	9.500	2114	1694	27.00	0.545	19.2	86.8
	115.0	20.39	12.19	9.695	2028	1713	21.92	0.447	16.4	86.5
	115.0	19.60	11.36	9.896	1944	1731	16.07	0.331	12.7	86.2
	115.0	18.80	10.44	10.117	1850	1748	9.96	0.207	8.4	85.6
	115.0	17.92	9.46	10.367	1750	1766	2.56	0.054	2.3	84.9
	115.0	17.59	9.10	10.463	1711	1772	0.00	0.000	0.0	84.6

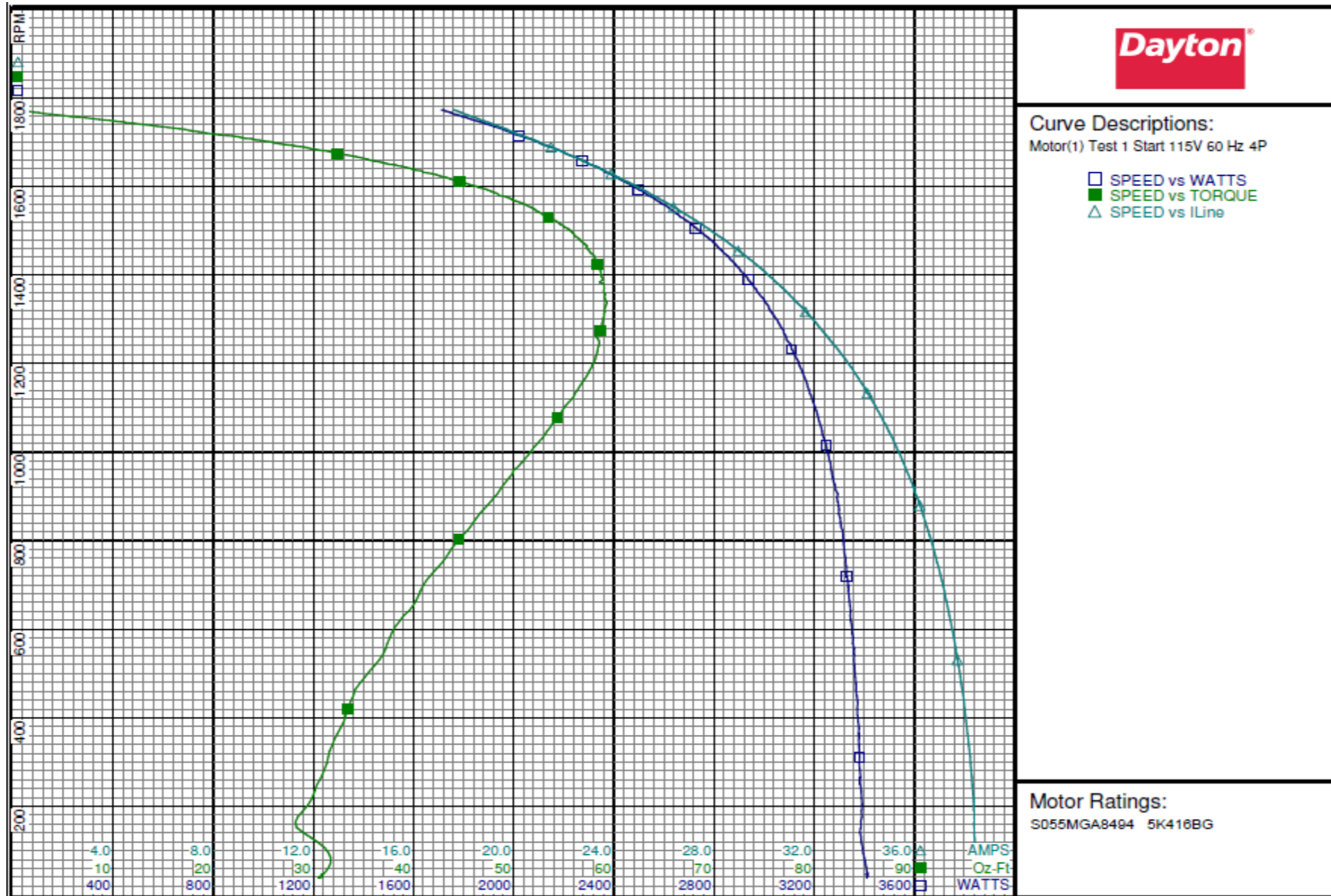
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Dayton Electric Mfg. Co. Lake Forest, IL 60045 USA

Performance Data



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

Performance Data



5K416BG REV.
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Dayton Manufacturing Company

Motor Description

Model: S055MGA8494 5K416BG
 Motor ID:
 Poles: 4
 Volts: 115
 Frequency: 60
 HP: 1/2
 Speed: 1725
 Phase: 1
 Protector: MEJ

Test Conditions

Test Type: Run Run Cap: 0
 Test Number: 2 Start Cap: 0µfd
 Poles: 4 Environment:
 Volts: 115 Tested: 12/16/2010 9:11:25 AM
 Hz: 60 Tested By: Sharp, Gerald
 Rotation:
 Special Cond: Gear Ratio: 1:1
 Speed Conn: Bearing Friction: -0.30 Oz-Ft
 TestBoard: Windage Torque: -1.14 Oz-Ft
 Amps Performance Fixture #4

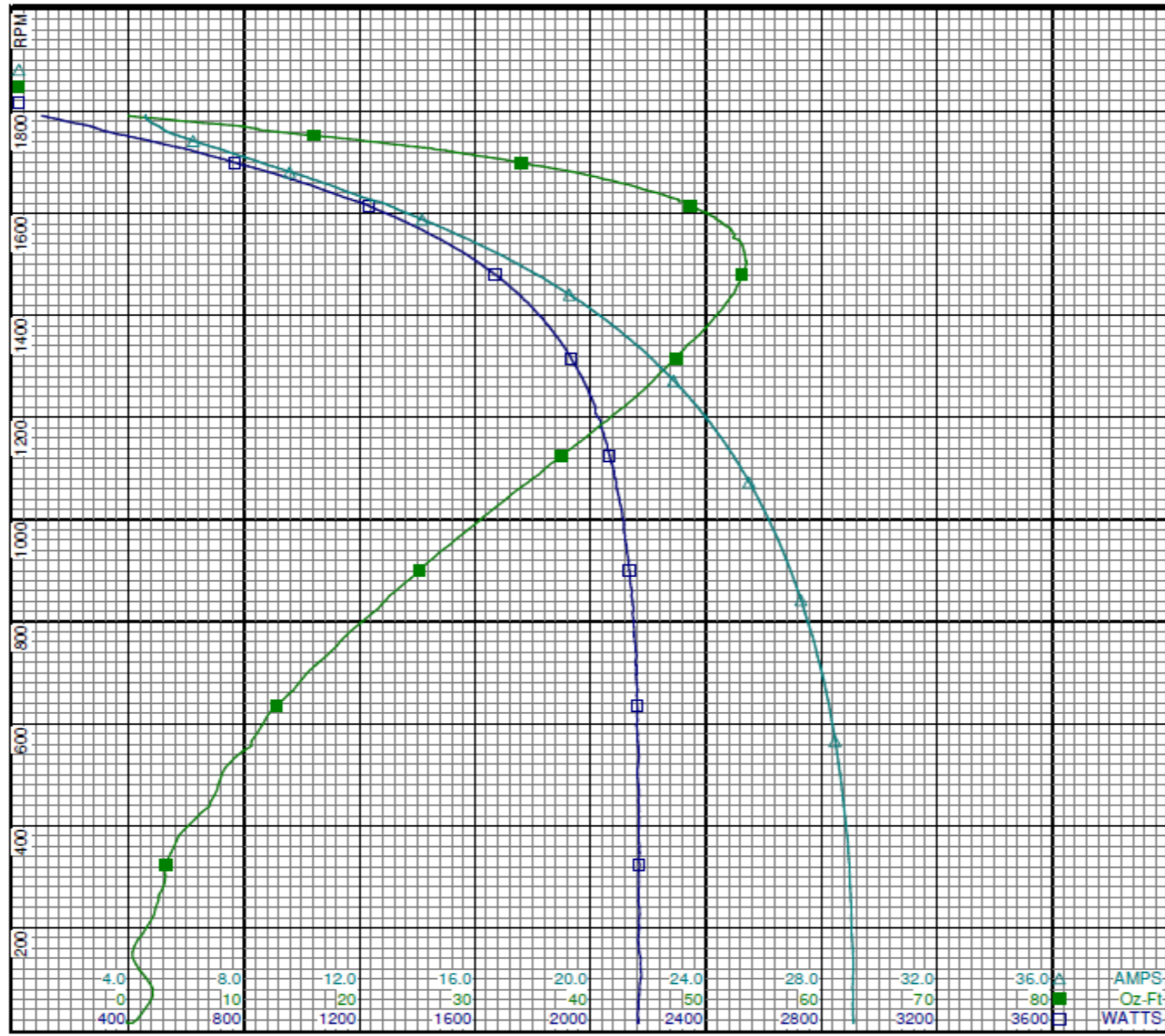
Special Points	Vline (V)	Iline (A)	Watts	RPM	Tq(Oz-ft)	HP	Eff (%)	PF (%)
	115.0	4.57	99	1791	0.00	0.000	0.0	18.7
	115.0	4.73	186	1779	4.97	0.105	42.2	34.2
	115.0	5.12	284	1767	10.53	0.221	58.2	48.2
	115.0	5.76	398	1750	16.62	0.346	65.0	60.0
	115.0	6.61	523	1734	22.98	0.474	67.7	68.8
24.3 OZ-FT	115.0	6.81	551	1731	24.30	0.501	67.8	70.4
0.5 HP	115.0	6.80	550	1731	24.27	0.500	67.8	70.4
	115.0	7.64	658	1716	29.14	0.596	67.5	74.8
0.625 HP	115.0	7.94	693	1711	30.69	0.625	67.3	75.9
	115.0	8.85	799	1693	35.09	0.707	66.0	78.5
	115.0	10.31	959	1667	41.04	0.814	63.4	80.9
	115.0	12.14	1148	1630	46.96	0.912	59.2	82.3
	115.0	13.46	1272	1604	49.64	0.948	55.6	82.2
	115.0	15.25	1434	1561	52.34	0.973	50.6	81.8
	115.0	17.13	1591	1511	53.40	0.960	45.0	80.7
BDT OZ-FT	115.0	17.47	1618	1500	53.47	0.955	44.0	80.5
	115.0	18.81	1720	1456	52.70	0.914	39.6	79.5
	115.0	20.27	1820	1401	50.96	0.850	34.8	78.1
	115.0	21.54	1901	1344	48.50	0.776	30.4	76.7
	115.0	22.67	1964	1284	45.92	0.702	26.7	75.3
	115.0	23.68	2016	1222	43.01	0.626	23.2	74.0
	115.0	24.61	2053	1153	39.16	0.537	19.5	72.5
	115.0	25.43	2085	1080	35.03	0.451	16.1	71.3
	115.0	26.13	2111	1005	30.71	0.367	13.0	70.3
	115.0	26.75	2130	925	26.46	0.291	10.2	69.2
	115.0	27.30	2145	842	22.32	0.224	7.8	68.3
	115.0	27.78	2156	752	18.03	0.161	5.6	67.5
	115.0	28.19	2160	656	13.77	0.107	3.7	66.6
	115.0	28.51	2166	555	10.60	0.070	2.4	66.1
	115.0	28.76	2166	449	7.13	0.038	1.3	65.5
	115.0	28.95	2167	334	3.41	0.014	0.5	65.1
	115.0	29.04	2167	213	1.92	0.005	0.2	64.9
	115.0	29.09	2170	92	1.81	0.002	0.1	64.9

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Performance Data



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Dayton

Curve Descriptions:
Motor(1) Test 2 Run 115V 60 Hz 4P

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

Motor Ratings:
S055MGA8494 5K416BG

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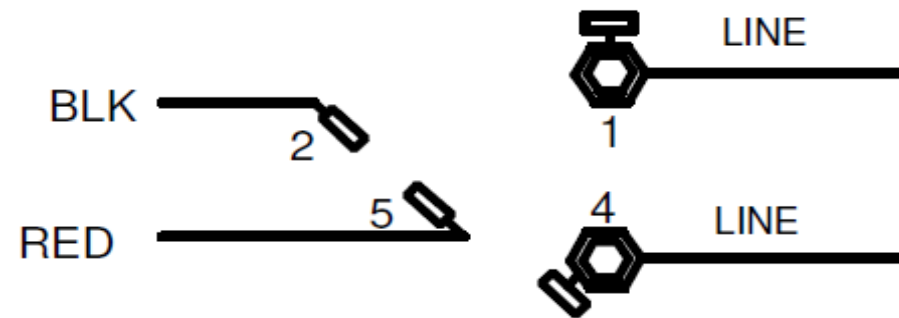
Dayton Electric Mfg. Co. Lake Forest, IL 60045 USA

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5K416BG

REV.
-

CONNECTIONS



CW LEAD END REVERSIBLE
TO REVERSE ROTATION INTERCHANGE
RED & BLACK LEADS

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Dayton[®]**BELT DRIVE FAN &
BLOWER MOTOR**

HP: 1/2

VOLTS: 115

AMPS: 7.2

RPM: 1725

DUTY: CONT

SF: 1.25

KVA CODE: H

ENCL: ODP

THERMALLY PROTECTED: AUTO

MFG. NO. PROT. CODE: 04431

MTR REF: S55JXMGA-8494

PH: 1

HZ: 60

FR: 56

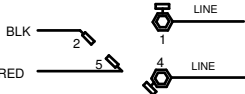
INS CL: B

AMB: 60 °C

SFA: 8.0

AVG. F.L.
EFF. 67.0Part
No 5K416BG**Disconnect Power Before Making Any
Electrical Connections or Changes**

CONNECTIONS

CW LEAD END REVERSIBLE
TO REVERSE ROTATION INTERCHANGE
RED & BLACK LEADS

E37403



258501

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

Made in Mexico