

Performance Data



5K410BE

REV.
-

MOTOR PERFORMANCE

HP:	1/4HP							
Poles:	4P							
No. of Speeds:	1							
Volts:	115/230V	115	230					
HZ:	60	60	60					
Service Factor:	1							
Efficiency:	@ Rated Load	54.3	55.1					
Power Factor:	@ Rated Load	56.3	55.3					
Amps:	@ No Load							
	@ Rated Load	5.34	2.67					
	@ Service Factor	5.34	2.67					
	@ Locked Rotor	30.71	15.07					
RPM:	@ Rated Load							
Ambient (°C):	40							
Altitude (FASL):								
Torques:	Breakdown	44.39	44.72					
	Locked Rotor	72.11	61.82					
	Pull-Up	72.11	61.82					
	Rated Load							
	Service Factor							
Watts:	Rated Load							
KVA Code:								
Temperature Rise:	@ Rated Load							
	@ Service Factor							
Thermal Protector:	Trip Temp (°C)							
Winding Material:	Start (Auxiliary)	Al						
	Run (Main)	Cu						
Capacitor(s):	Start (MFD / Volts)	233-280 MFD / 110 VAC						
	No. of Start Capacitors							
	Run (MFD / Volts)	N/A						
	No. of Run Capacitors							
HP:								
Poles:								
Volts:								
HZ:								
Efficiency:	@ Rated Load							
Power Factor:	@ Rated Load							
Amps:	@ No Load							
	@ Rated Load							
	@ Service Factor							
	@ Locked Rotor							
Torques:	@ Rated Load							
	Locked Rotor							
	Pull-Up							
	Rated Load							
	Service Factor							
Watts:	@ Rated Load							
Temperature Rise:	@ Rated Load							
	@ Service Factor							

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Dayton Electric Mfg. Co. Lake Forest, IL 60045

Performance Data



5K410BE REV.
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Dayton Manufacturing Company

Motor Description

Model: C055JXKNL2032
 Motor ID: 1
 Poles: 4
 Volts: 115/230
 Frequency: 60
 HP: 1/4
 Speed: 1725
 Phase: 1
 Protector: MEJ57RX

Test Conditions

Test Type: Start Run Cap: 0
 Test Number: 10 Start Cap: 0µfd
 Poles: 4
 Volts: 115 Tested: 4/10/2012 8:49:27 AM
 Hz: 60 Tested By: Sharp, Gerald
 Rotation:
 Special Cond: 2 Line Test Gear Ratio: 1:1
 Speed Conn: Bearing Friction: -0.44 Oz-Ft
 TestBoard: Amps Performance Fixture #3 Windage Torque: -1.98 Oz-Ft

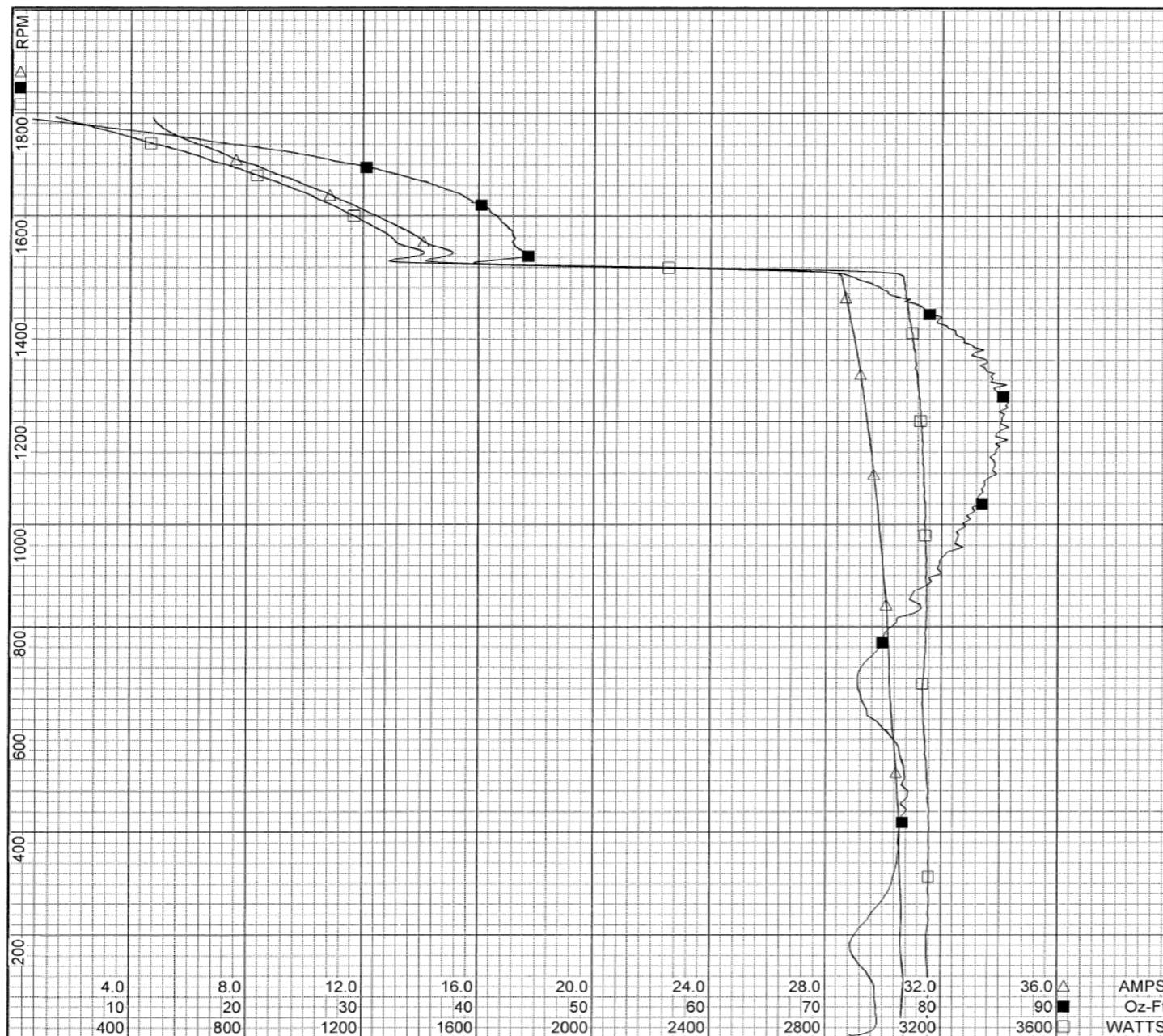
Special Points	Vline (V)	Iline (A)	Watts	RPM	Tq (Oz-ft)	HP	Eff (%)	PF (%)
PUT OZ-FT	115.0	30.71	3156	5	72.11	0.004	0.1	89.4
	115.0	30.71	3156	5	72.11	0.004	0.1	89.4
	115.0	30.66	3157	27	74.50	0.024	0.6	89.6
	115.0	30.65	3151	158	72.51	0.136	3.2	89.4
	115.0	30.61	3157	299	75.74	0.270	6.4	89.7
	115.0	30.55	3157	431	76.60	0.393	9.3	89.9
	115.0	30.41	3144	552	76.44	0.502	11.9	89.9
	115.0	30.24	3136	660	73.09	0.574	13.7	90.2
	115.0	30.18	3144	759	74.70	0.675	16.0	90.6
	115.0	30.09	3148	852	77.25	0.784	18.6	91.0
	115.0	29.96	3147	939	80.22	0.897	21.3	91.3
	115.0	29.81	3145	1018	82.14	0.995	23.6	91.7
	115.0	29.68	3138	1091	84.09	1.092	26.0	91.9
	115.0	29.52	3136	1158	84.62	1.166	27.7	92.4
	115.0	29.38	3128	1219	84.89	1.232	29.4	92.6
	115.0	29.23	3117	1277	84.19	1.280	30.6	92.7
	115.0	29.08	3108	1329	82.51	1.305	31.3	92.9
	115.0	28.92	3095	1377	81.15	1.330	32.1	93.0
	115.0	28.76	3083	1421	78.41	1.327	32.1	93.2
	115.0	28.60	3071	1462	74.59	1.298	31.5	93.4
	115.0	24.93	2584	1497	59.33	1.057	30.5	90.1
	115.0	15.08	1409	1526	44.39	0.806	42.7	81.2
	115.0	13.87	1296	1559	43.05	0.799	46.0	81.2
	115.0	12.77	1197	1591	41.91	0.794	49.5	81.5
	115.0	11.74	1102	1619	40.47	0.780	52.8	81.6
	115.0	10.76	1003	1644	38.24	0.748	55.6	81.1
	115.0	9.69	894	1668	34.98	0.694	57.9	80.2
	115.0	8.68	787	1689	31.48	0.633	60.0	78.8
	115.0	7.73	675	1708	27.31	0.555	61.4	75.9
	115.0	6.90	567	1728	22.51	0.463	60.9	71.5
	115.0	5.94	433	1748	16.27	0.339	58.4	63.4
	115.0	5.25	315	1766	10.08	0.212	50.2	52.1
	115.0	4.84	189	1784	2.94	0.062	24.7	33.9
	115.0	4.77	138	1792	0.00	0.000	0.0	25.2

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Performance Data



5K410BE REV. -



Dayton

Motor Ratings:
 (1) C055JXKNL2032 ID: 1

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

Performance Data



5K410BE	REV. -
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Dayton Manufacturing Company

Motor Description

Model: C055JXKNL2032
 Motor ID: 1
 Poles: 4
 Volts: 115/230
 Frequency: 60
 HP: 1/4
 Speed: 1725
 Phase: 1
 Protector: MEJ57RX

Test Conditions

Test Type: Run
 Test Number: 4
 Poles: 4
 Volts: 115
 Hz: 60
 Rotation:
 Special Cond:
 Speed Conn:
 TestBoard: Amtps Performance Fixture #3
 Run Cap: 0
 Start Cap: 0μfd
 Tested: 4/10/2012 8:46:21 AM
 Tested By: Sharp, Gerald
 Gear Ratio: 1:1
 Bearing Friction: -0.49 Oz-Ft
 Windage Torque: -2.17 Oz-Ft

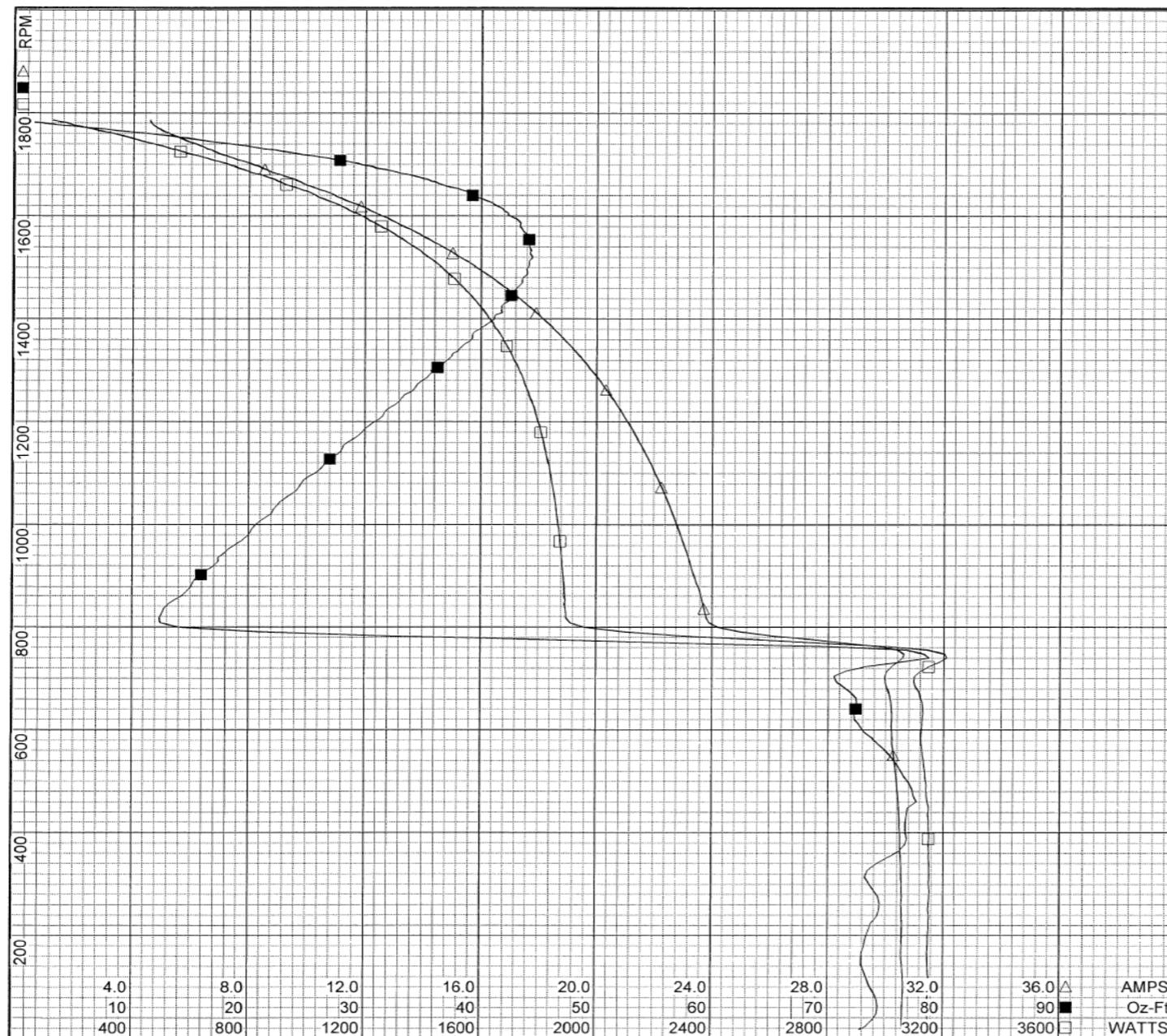
Special Points	Vline (V)	Iline (A)	Watts	RPM	Tq (Oz-ft)	HP	Eff (%)	PF (%)
	115.0	4.56	121	1786	0.00	0.000	0.0	23.0
	115.0	4.98	279	1766	8.45	0.178	47.5	48.7
0.25 HP	115.0	5.31	343	1758	11.95	0.250	54.3	56.3
12.2 OZ-FT	115.0	5.34	348	1757	12.20	0.255	54.7	56.7
16.2 OZ-FT	115.0	5.82	425	1746	16.20	0.337	59.0	63.5
	115.0	5.82	426	1746	16.22	0.337	59.1	63.6
	115.0	6.76	561	1725	22.75	0.467	62.1	72.2
1725 RPM	115.0	6.78	564	1725	22.86	0.469	62.1	72.4
	115.0	7.92	705	1704	28.80	0.584	61.9	77.4
	115.0	8.91	818	1683	33.04	0.662	60.4	79.9
	115.0	9.96	929	1661	36.63	0.724	58.2	81.1
	115.0	11.14	1048	1635	39.88	0.776	55.3	81.8
	115.0	12.25	1156	1608	42.12	0.806	52.1	82.0
	115.0	13.31	1253	1580	43.33	0.815	48.5	81.9
	115.0	14.39	1346	1548	44.25	0.815	45.2	81.3
BDT OZ-FT	115.0	15.21	1413	1522	44.39	0.804	42.4	80.8
	115.0	15.41	1430	1515	44.27	0.798	41.6	80.7
	115.0	16.41	1508	1478	43.54	0.766	37.9	79.9
	115.0	17.35	1575	1438	42.48	0.727	34.5	78.9
	115.0	18.26	1637	1394	40.81	0.677	30.9	78.0
	115.0	19.10	1690	1347	38.38	0.615	27.2	76.9
	115.0	19.89	1735	1296	35.76	0.552	23.7	75.9
	115.0	20.62	1775	1240	32.99	0.487	20.5	74.8
	115.0	21.30	1808	1180	29.78	0.418	17.3	73.8
	115.0	21.92	1837	1114	26.42	0.351	14.2	72.8
	115.0	22.48	1857	1044	22.71	0.282	11.3	71.9
	115.0	22.99	1875	968	19.33	0.223	8.9	70.9
	115.0	23.45	1889	887	15.17	0.160	6.3	70.0
	115.0	24.24	1965	799	14.22	0.135	5.1	70.5
	115.0	30.19	3148	723	73.24	0.630	14.9	90.7
	115.0	30.19	3125	620	72.27	0.533	12.7	90.0
	115.0	30.35	3135	507	76.60	0.463	11.0	89.8
	115.0	30.50	3150	388	76.81	0.355	8.4	89.8
	115.0	30.55	3149	263	74.49	0.233	5.5	89.6
	115.0	30.58	3146	143	72.91	0.124	2.9	89.5
	115.0	30.63	3152	18	72.98	0.016	0.4	89.5

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Performance Data



5K410BE REV.
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Curve Descriptions:
 Motor(1) Test 4 Run 115V 60 Hz 4P
 Attempt #1
 □ SPEED vs WATTS
 ■ SPEED vs TORQUE
 △ SPEED vs ILine

Motor Ratings:
 (1) C055JXKNL2032 ID: 1

4.0 8.0 12.0 16.0 20.0 24.0 28.0 32.0 36.0 △ AMPS
 10 20 30 40 50 60 70 80 90 ■ Oz-Ft
 400 800 1200 1600 2000 2400 2800 3200 3600 □ WATTS

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

Performance Data



5K410BE

REV.

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Dayton Manufacturing Company

Motor Description

Model: C055JXKNL2032
 Motor ID: 1
 Poles: 4
 Volts: 115/230
 Frequency: 60
 HP: 1/4
 Speed: 1725
 Phase: 1
 Protector: MEJ57RX

Test Conditions

Test Type: Start
 Test Number: 15
 Poles: 4
 Volts: 230
 Hz: 60
 Rotation:
 Special Cond: 2 Line Test
 Speed Conn:
 TestBoard: Amtps Performance Fixture #3
 Run Cap: 0
 Start Cap: 0μfd
 Tested: 4/10/2012 9:30:06 AM
 Tested By: Sharp, Gerald
 Gear Ratio: 1:1
 Bearing Friction: -0.44 Oz-Ft
 Windage Torque: -1.79 Oz-Ft

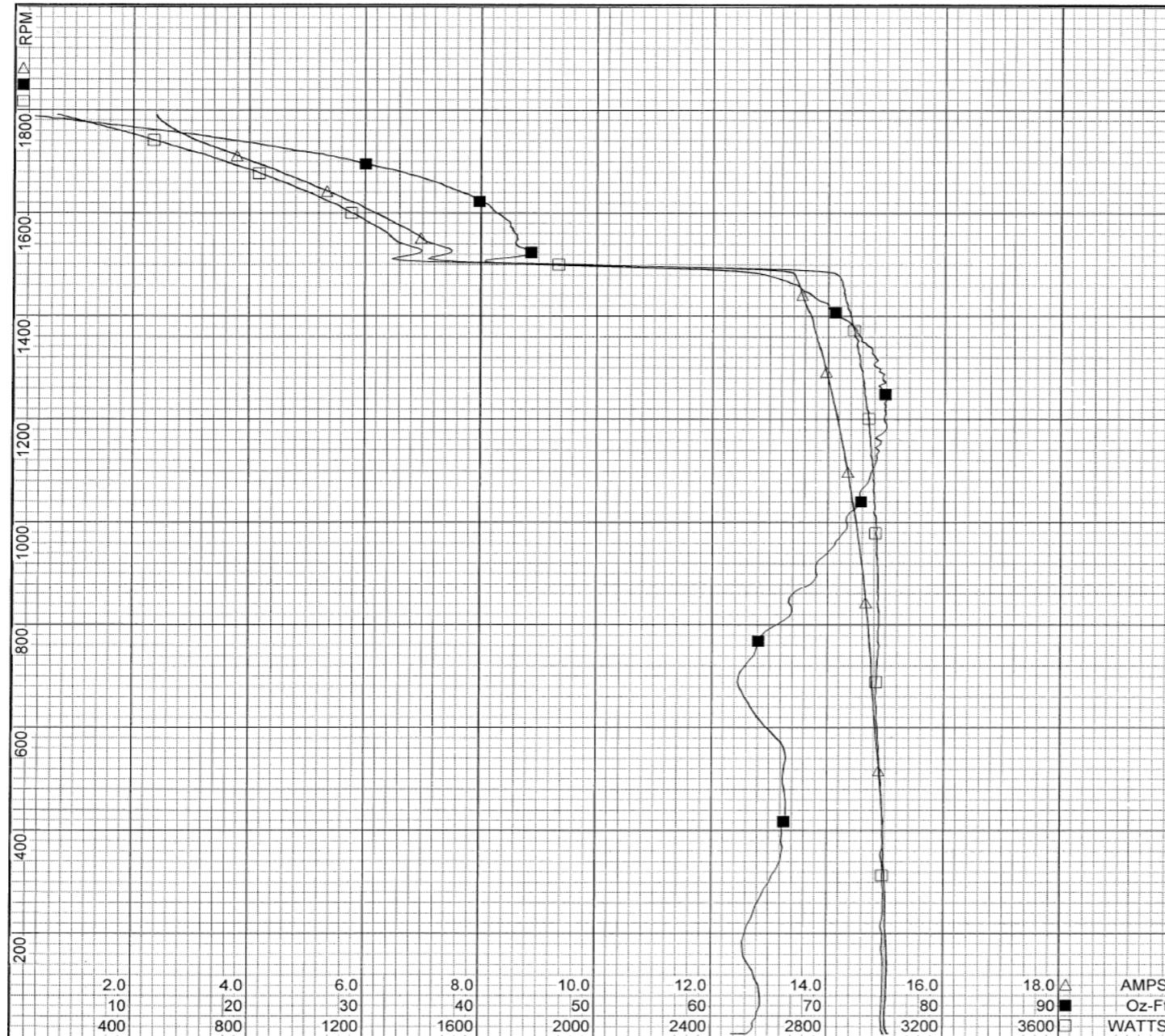
Special Points	Vline (V)	Iline (A)	Watts	RPM	Tq (Oz-ft)	HP	Eff (%)	PF (%)
PUT OZ-FT								
	230.0	15.070	2997	5	61.82	0.004	0.1	86.5
	230.0	15.070	2997	5	61.82	0.004	0.1	86.5
	230.0	15.007	2988	37	63.99	0.028	0.7	86.6
	230.0	15.024	2992	185	62.70	0.138	3.4	86.6
	230.0	14.976	2989	341	65.96	0.268	6.7	86.8
	230.0	14.914	2985	481	66.31	0.380	9.5	87.0
	230.0	14.816	2971	606	64.46	0.465	11.7	87.2
	230.0	14.749	2971	720	62.88	0.539	13.5	87.6
	230.0	14.673	2976	825	66.89	0.657	16.5	88.2
	230.0	14.581	2970	923	69.09	0.759	19.1	88.6
	230.0	14.469	2966	1011	71.61	0.862	21.7	89.1
	230.0	14.354	2956	1090	73.60	0.955	24.1	89.5
	230.0	14.223	2945	1164	74.06	1.026	26.0	90.0
	230.0	14.100	2931	1232	74.83	1.097	27.9	90.4
	230.0	13.969	2919	1293	74.37	1.144	29.3	90.8
	230.0	13.833	2899	1348	73.19	1.175	30.2	91.1
	230.0	13.707	2880	1399	70.85	1.180	30.6	91.3
	230.0	13.540	2853	1446	68.20	1.174	30.7	91.6
	230.0	13.229	2766	1487	61.91	1.096	29.6	90.9
	230.0	7.410	1375	1520	44.30	0.802	43.5	80.7
	230.0	6.888	1283	1558	43.06	0.799	46.5	81.0
	230.0	6.329	1182	1592	41.95	0.795	50.2	81.2
	230.0	5.748	1072	1623	39.89	0.770	53.6	81.1
	230.0	5.181	961	1650	37.26	0.732	56.8	80.7
	230.0	4.659	853	1673	34.09	0.679	59.4	79.6
	230.0	4.097	726	1697	29.57	0.597	61.4	77.0
	230.0	3.617	608	1720	24.73	0.506	62.1	73.0
	230.0	3.114	482	1740	19.08	0.395	61.2	67.3
	230.0	2.755	360	1759	12.76	0.267	55.5	56.7
	230.0	2.483	223	1778	5.23	0.111	37.1	39.0
	230.0	2.391	135	1791	0.00	0.000	0.0	24.6

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5K410BE REV.
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Dayton

Motor Ratings:
 (1) C055JXKNL2032 ID: 1

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5K410BE -

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

Performance Data



5K410BE REV.
-

Dayton Manufacturing Company

Motor Description

Model: C055JXKNL2032
 Motor ID: 1
 Poles: 4
 Volts: 115/230
 Frequency: 60
 HP: 1/4
 Speed: 1725
 Phase: 1
 Protector: MEJ57RX

Test Conditions

Test Type: Run Run Cap: 0
 Test Number: 12 Start Cap: 0µfd
 Poles: 4
 Volts: 230 Tested: 4/10/2012 9:29:13 AM
 Hz: 60 Tested By: Sharp, Gerald
 Rotation:
 Special Cond: Gear Ratio: 1:1
 Speed Conn: Bearing Friction: -0.50 Oz-Ft
 TestBoard: Windage Torque: -1.88 Oz-Ft
 Amps Performance Fixture #3

Special Points	Vline (V)	Iline (A)	Watts	RPM	Tq (Oz-ft)	HP	Eff (%)	PF (%)
	230.0	2.351	122	1786	0.00	0.000	0.0	22.5
	230.0	2.514	268	1766	8.29	0.174	48.5	46.4
0.25 HP	230.0	2.662	338	1756	11.96	0.250	55.1	55.3
12.2 OZ-FT	230.0	2.672	342	1756	12.20	0.255	55.5	55.7
16.2 OZ-FT	230.0	2.861	414	1746	16.20	0.337	60.6	62.9
	230.0	2.862	415	1746	16.22	0.337	60.7	63.0
	230.0	3.367	557	1726	22.97	0.472	63.2	72.0
1725 RPM	230.0	3.379	561	1725	23.13	0.475	63.2	72.2
	230.0	3.895	684	1703	28.45	0.577	62.9	76.4
	230.0	4.419	804	1684	32.89	0.659	61.2	79.1
	230.0	4.966	926	1660	37.05	0.732	59.0	81.1
	230.0	5.529	1039	1635	40.25	0.783	56.3	81.7
	230.0	6.076	1141	1608	42.23	0.809	52.8	81.7
	230.0	6.603	1237	1580	43.68	0.821	49.5	81.5
	230.0	7.143	1332	1548	44.51	0.820	45.9	81.1
BDT OZ-FT	230.0	7.394	1372	1532	44.72	0.815	44.3	80.7
	230.0	7.644	1414	1515	44.69	0.806	42.5	80.4
	230.0	8.149	1492	1478	43.97	0.773	38.7	79.6
	230.0	8.621	1560	1438	42.72	0.731	35.0	78.7
	230.0	9.073	1622	1394	41.02	0.681	31.3	77.7
	230.0	9.499	1677	1347	38.93	0.624	27.8	76.8
	230.0	9.899	1723	1295	36.30	0.560	24.2	75.7
	230.0	10.268	1762	1240	33.52	0.495	21.0	74.6
	230.0	10.611	1796	1180	30.49	0.428	17.8	73.6
	230.0	10.921	1823	1114	27.14	0.360	14.7	72.6
	230.0	11.205	1844	1045	23.41	0.291	11.8	71.6
	230.0	11.466	1865	967	19.65	0.226	9.1	70.7
	230.0	11.718	1885	886	15.64	0.165	6.5	69.9
	230.0	12.067	1949	799	14.11	0.134	5.1	70.2
	230.0	14.846	2995	720	63.70	0.546	13.6	87.7
	230.0	14.848	2974	620	63.00	0.465	11.7	87.1
	230.0	14.925	2982	505	67.41	0.406	10.1	86.9
	230.0	14.988	2989	389	66.77	0.309	7.7	86.7
	230.0	15.018	2993	263	64.57	0.202	5.0	86.7
	230.0	15.028	2996	136	62.86	0.102	2.5	86.7
	230.0	15.060	2997	18	64.06	0.014	0.3	86.5

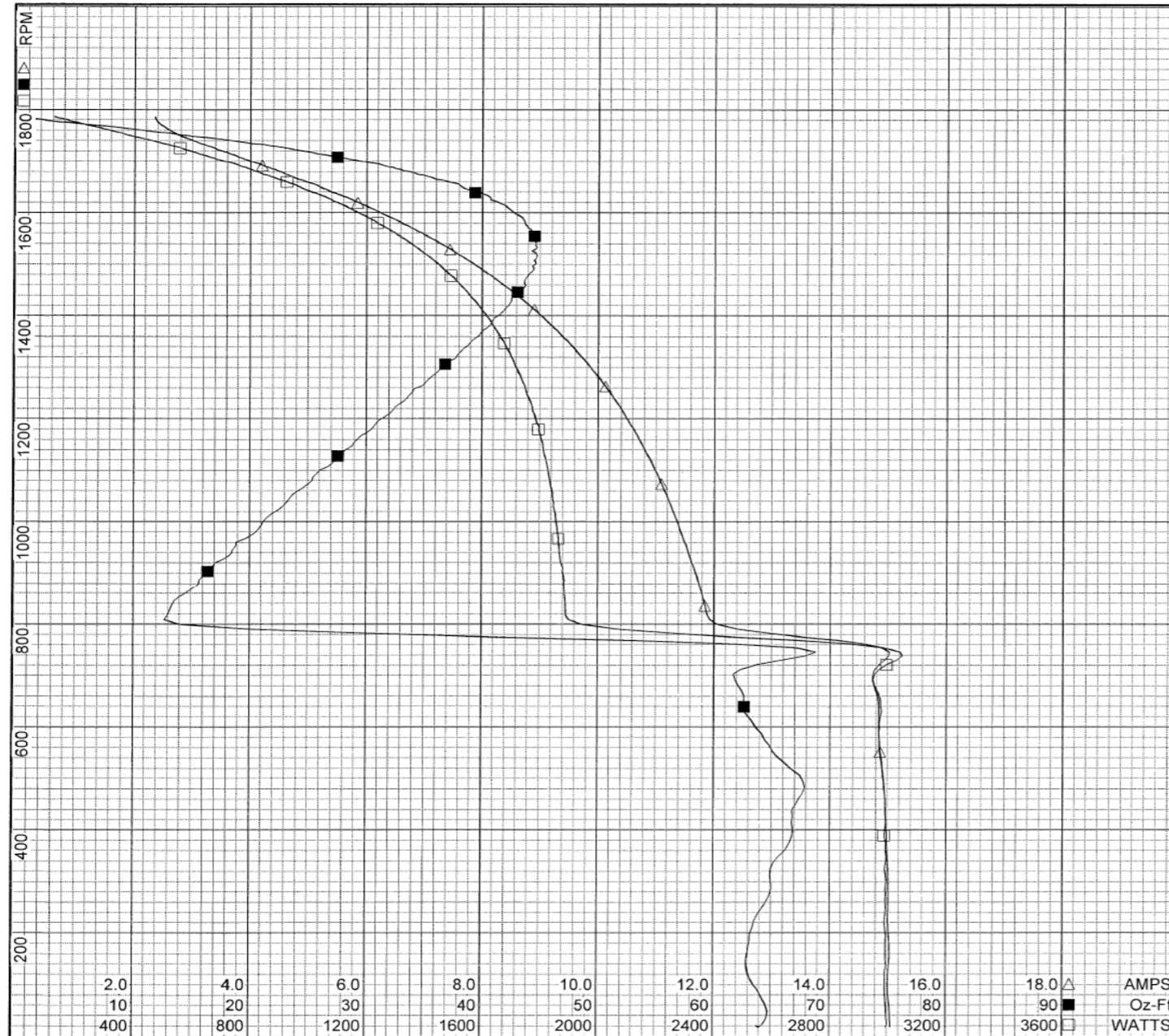
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Dayton Electric Mfg. Co. Lake Forest, IL 60045 USA

Performance Data



5K410BE REV.
-



Dayton

Curve Descriptions:
Motor(1) Test 12 Run 230V 60 Hz 4P Attempt #1

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

Motor Ratings:
(1) C055JXKNL2032 ID: 1

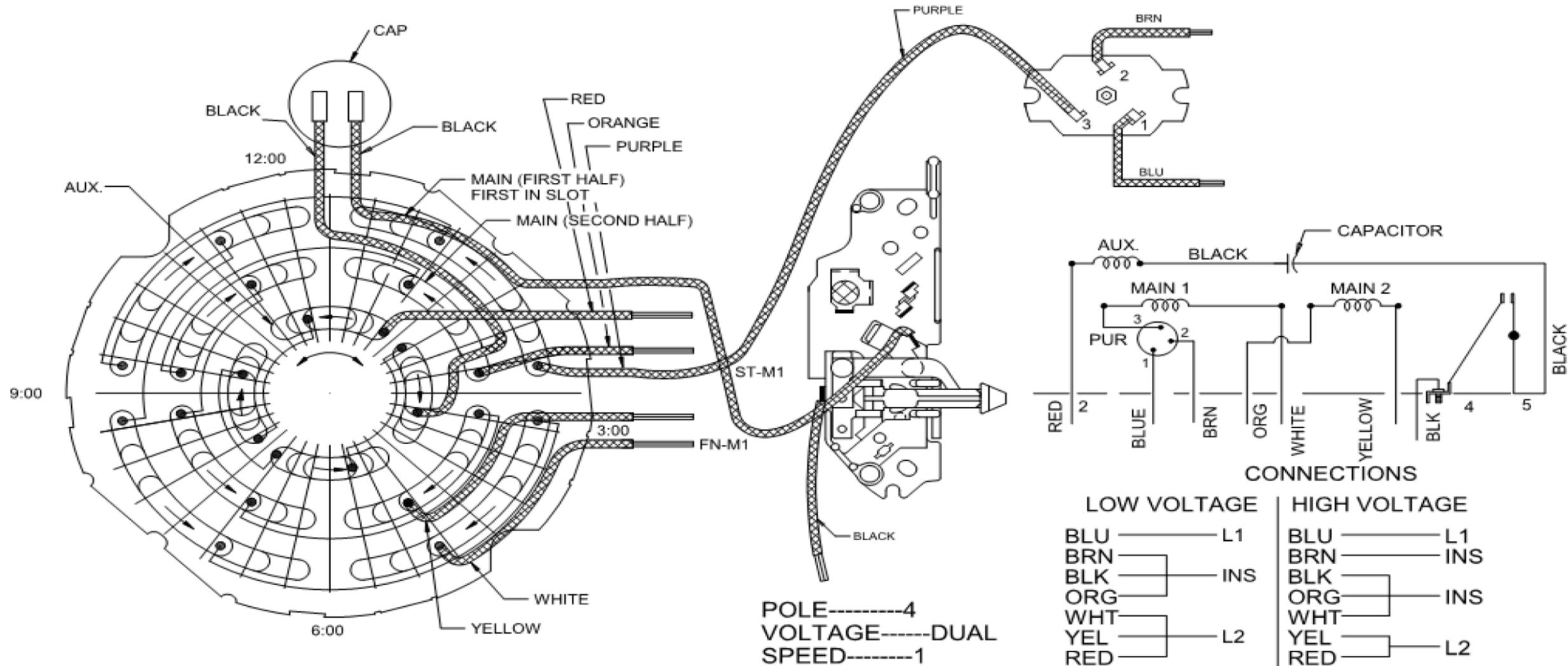
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Dayton Electric Mfg. Co. Lake Forest, IL 60045 USA

Wiring Diagram

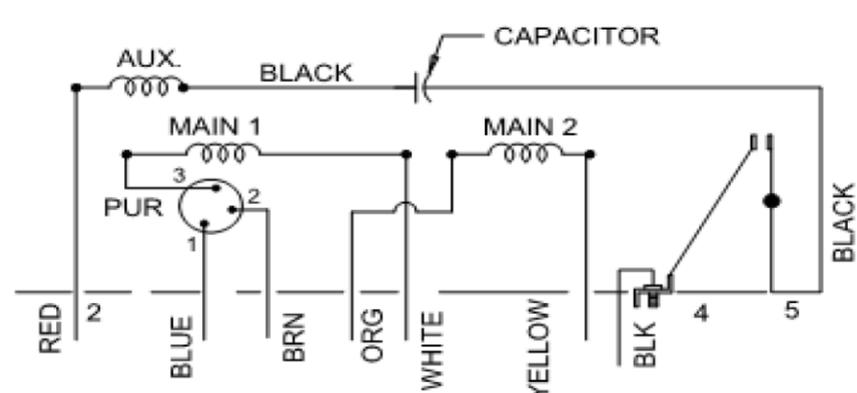


5K410BE REV. -



VIEWING LEAD END

NOTE: SECURE ALL LEADS TO PREVENTS INTERFERENCE WITH MOVING PARTS



CONNECTIONS

LOW VOLTAGE		HIGH VOLTAGE	
BLU	L1	BLU	L1
BRN	INS	BRN	INS
BLK		BLK	INS
ORG	INS	ORG	INS
WHT		WHT	INS
YEL	L2	YEL	L2
RED		RED	L2

ROTATION: CCW LE REVERSIBLE TO REVERSE INTERCHANGE RED WITH BLACK

DRAWING NO. PAGE 1 of 1 REV. 5K410BE -

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

DaytonPart
No**5K410BE****INDUSTRIAL
MOTOR****HP:** 1/4**PH:** 1**VOLTS:** 115/230**HZ:** 60**AMPS:** 5.34/2.67**FR:** 56**RPM:** 1725**INS CL:** B**DUTY:** CONT**AMB:** 40 °C**SF:** 1.0**SFA:** 5.34/2.67**KVA CODE :** P**ENCL:** TEFC**MTR REF:** C55JXKNL-2032**THERMALLY PROTECTED:** AUTOPROT. CODE 04010 MFG. NO. **Disconnect Power Before Making
Any Electrical Connections or Changes****CONNECTIONS**

LOW VOLTAGE

HIGH VOLTAGE

BLU _____ L1

BLU _____ L1

BRN _____

BRN _____ INS

BLK _____ INS

BLK _____

ORG _____

ORG _____ INS

WHT _____

WHT _____

YEL _____ L2

YEL _____ L2

RED _____

RED _____ L2

TO REVERSE ROTATION
INTERCHANGE RED & BLK LEADS

258501



E37403

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

Made in Mexico