

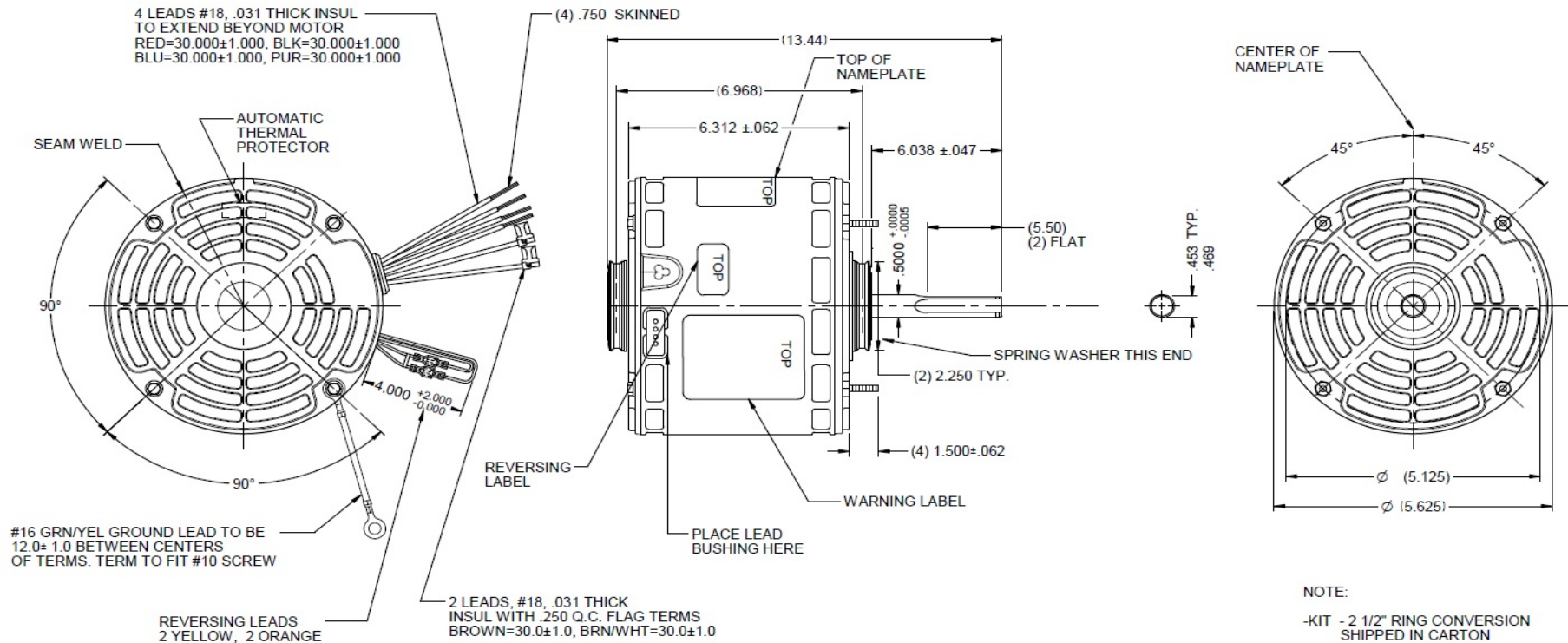
# Dimensional Drawing



**3LU90BG**

REV.  
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MODEL	REF	CUSTOMER	HP	VOLTS	AMPS	HZ	RPM	ROTATION	CUSTOMER PN	DESCRIPTION / REMARKS
K55HXLNU-2513		GRAINGER	1	208 - 230	6.8	60	1625 / 3 SPD	CCW. LEAD END REV	3LU90BG	DIRECT DRIVE BLOWER MOTOR, 48YZ, OPAO, BB.



DRAWING NO.	PAGE 1 of 1	REV.
3LU90BG		-

# Performance Data



**3LU90BG**

REV.  
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## MOTOR PERFORMANCE

<b>HP:</b>	1HP						
<b>Poles:</b>	4P						
<b>No. of Speeds:</b>	3	<b>1sr SPD</b>		<b>2nd SPD</b>		<b>3rd SPD</b>	
<b>Volts:</b>	208/230	<b>208</b>	<b>230</b>	<b>208</b>	<b>230</b>	<b>208</b>	<b>230</b>
<b>HZ:</b>	60HZ	60	60	60	60	60	60
<b>Service Factor:</b>	1						
<b>Efficiency:</b>	@ Rated Load	74.3	74.5	72.3	72.5	71.4	72.5
<b>Power Factor:</b>	@ Rated Load	98.4	98.1	98.3	98.4	98.2	98.4
<b>Amps:</b>	@ No Load						
	@ Rated Load	5.442	6.203	2.863	3.2	2.147	2.383
	@ Service Factor						
	@ Locked Rotor	12.912	14.982	6.865	7.668	5.191	5.846
<b>RPM:</b>	@ Rated Load	1626	1629	1629	1625	1630	1630
<b>Ambient (°C):</b>							
<b>Altitude (FASL):</b>							
<b>Torques:</b>	Breakdown	68.4	86.01	35.19	43.27	26.54	32.93
	Locked Rotor	16.18	19.26	3.2	5.32	1.21	2.15
	Pull-Up	13.02	15.12	3.2	5.32	1.21	2.15
	Rated Load	57.301	72.098	29.276	36.379	21.653	26.987
	Service Factor						
<b>Watts:</b>	Rated Load	1113	1400	585.6	724.1	438.6	539.1
<b>KVA Code:</b>							
<b>Temperature Rise:</b>	@ Rated Load						
	@ Service Factor						
<b>Thermal Protector:</b>	Trip Temp (°C)						
<b>Winding Material:</b>	Start (Auxiliary)						
	Run (Main)						
<b>Capacitor(s):</b>	Start (MFD / Volts)						
	No. of Start Capacitors						
	Run (MFD / Volts)						
	No. of Run Capacitors						

### PERFORMANCE DATA:

<b>HP:</b>							
<b>Poles:</b>							
<b>Volts:</b>							
<b>HZ:</b>							
<b>Efficiency:</b>	@ Rated Load						
<b>Power Factor:</b>	@ Rated Load						
<b>Amps:</b>	@ No Load						
	@ Rated Load						
	@ Service Factor						
	@ Locked Rotor						
<b>Torques:</b>	@ Rated Load						
	Locked Rotor						
	Pull-Up						
	Rated Load						
	Service Factor						
<b>Watts:</b>	@ Rated Load						
<b>Temperature Rise:</b>	@ Rated Load						
	@ Service Factor						

DRAWING NO. PAGE 1 of 1 REV.  
3LU90BG -

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

# Performance Data



**3LU90BG**

REV.

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## Dayton Manufacturing Company

### Motor Description

Model: K055HXLNU251301  
 Motor ID: 1  
 Poles: 4  
 Volts: 208-230  
 Frequency: 60  
 HP: 1  
 Speed: 1625  
 Phase: 1  
 Protector: 7AM031-A5

### Test Conditions

Test Type: Start  
 Test Number: 13  
 Poles: 4  
 Volts: 208  
 Hz: 60  
 Rotation:  
 Special Cond: M1  
 Speed Conn: M1  
 TestBoard: CMD InLine Three Phase #2 Fixture #1  
 Run Cap: 20  
 Start Cap: 0µfd  
 Environment: 24.5 Deg C 53 % RH 966 hPa  
 Tested: 8/18/2016 11:29:08 AM  
 Tested By: Navarro, Susana  
 Gear Ratio: 1:1  
 Bearing Friction: -0.29 Oz-Ft  
 Windage Torque: -20.17 Oz-Ft

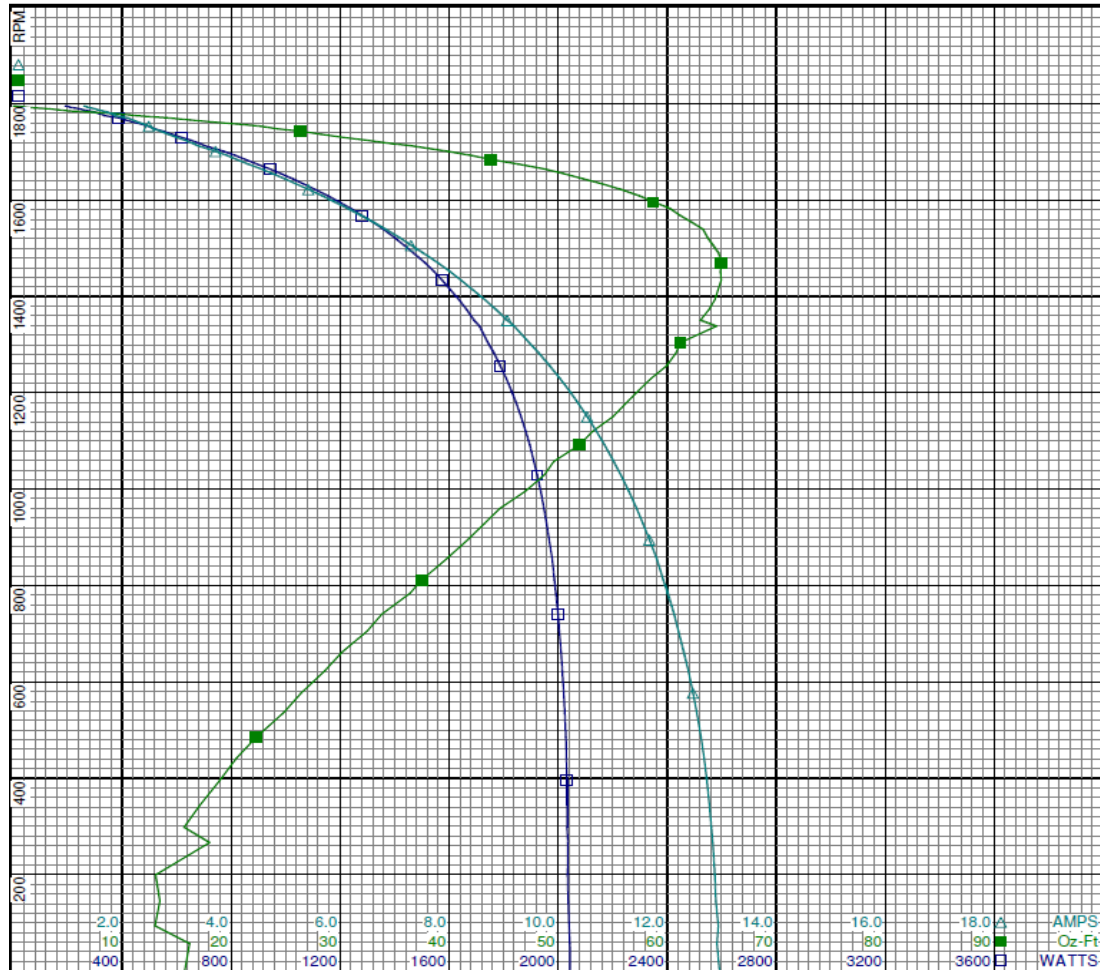
Special Points	Vline (V)	Vaux (V)	Vcap (V)	Iline (A)	Watts	RPM	Tq (Oz-ft)	HP	Eff (%)	PF (%)
PUT OZ-FT	208.0	41.0	225.7	12.912	2043	56	16.18	0.011	0.4	76.1
	208.0	41.3	224.7	12.938	2040	93	13.02	0.014	0.5	75.8
	208.0	42.9	221.7	12.875	2035	199	13.06	0.031	1.1	76.0
	208.0	46.6	217.9	12.775	2032	343	17.12	0.070	2.6	76.5
	208.0	51.8	215.0	12.620	2028	485	22.31	0.129	4.7	77.3
	208.0	58.0	212.0	12.388	2015	622	28.58	0.212	7.8	78.2
	208.0	64.5	209.6	12.128	2000	740	33.82	0.298	11.1	79.3
	208.0	71.8	207.4	11.811	1978	854	39.75	0.404	15.2	80.5
	208.0	79.9	205.9	11.438	1948	960	44.66	0.510	19.5	81.9
	208.0	88.7	205.1	11.019	1911	1057	49.60	0.624	24.4	83.4
	208.0	98.8	205.4	10.534	1864	1150	55.03	0.753	30.2	85.1
	208.0	108.6	206.8	10.036	1810	1229	58.49	0.856	35.3	86.7
	208.0	119.5	209.7	9.469	1742	1304	61.21	0.950	40.7	88.5
	208.0	131.1	214.0	8.865	1665	1372	63.81	1.042	46.7	90.3
	208.0	143.0	219.9	8.221	1575	1433	64.96	1.108	52.5	92.1
	208.0	155.7	227.7	7.523	1469	1490	64.72	1.148	58.3	93.9
	208.0	168.0	236.5	6.837	1359	1539	63.29	1.160	63.7	95.6
	208.0	180.3	246.6	6.141	1239	1582	60.26	1.135	68.3	97.0
	208.0	192.7	258.1	5.418	1108	1622	55.76	1.077	72.5	98.3
	208.0	204.3	269.5	4.752	981	1655	50.46	0.994	75.6	99.3
	208.0	215.3	281.6	4.104	852	1684	43.85	0.879	76.9	99.8
	208.0	228.3	296.1	3.378	701	1713	36.35	0.741	78.9	99.8
	208.0	235.2	304.6	3.000	620	1729	30.36	0.625	75.2	99.3
	208.0	247.5	318.5	2.574	519	1748	24.25	0.504	72.5	97.0
	208.0	259.9	334.5	2.288	437	1762	18.25	0.383	65.3	91.9
	208.0	265.5	345.7	1.871	334	1775	11.23	0.237	53.1	85.7
	208.0	267.1	349.0	1.726	298	1783	6.96	0.148	37.0	82.9
	208.0	268.2	352.4	1.501	244	1789	3.34	0.071	21.7	78.3
	208.0	269.5	355.2	1.337	201	1794	0.72	0.015	5.7	72.4
	208.0	269.9	355.9	1.298	191	1795	0.00	0.000	0.0	70.7

DRAWING NO. PAGE 1 of 24 REV.  
 3LU90BG -

**3LU90BG**

REV.

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**Curve Descriptions:**

Motor(1) Test 13 Start 208V 60 Hz 4P  
M1 M1 20ufd Run

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

**Motor Ratings:**

(1) K055HXLNU251301 ID: 1

DRAWING NO.	PAGE 2 of 24	REV.
3LU90BG		-

**3LU90BG**

REV.

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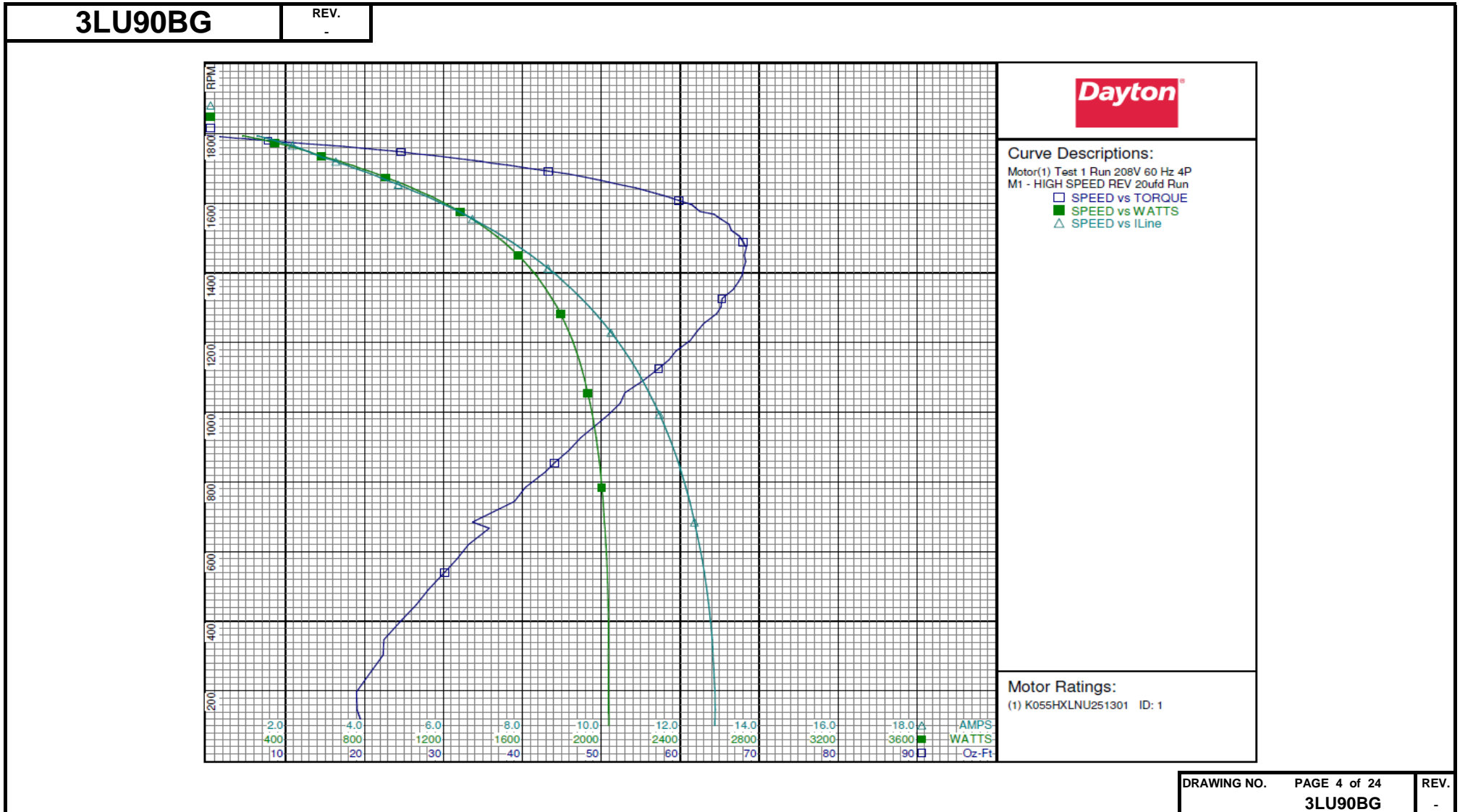
## Dayton Manufacturing Company

**Motor Description**

**Test Conditions**

Model:	K055HXLNU251301	Test Type:	Run	Run Cap:	20
Motor ID:	1	Test Number:	1	Start Cap:	0µfd
Poles:	4	Poles:	4	Environment:	24.5 Deg C 53 % RH 966 hPa
Volts:	208-230	Volts:	208	Tested:	8/18/2016 11:25:07 AM
Frequency:	60	Hz:	60	Tested By:	Navarro, Susana
HP:	1	Rotation:	REV	Gear Ratio:	1:1
Speed:	1625	Special Cond:	M1 - HIGH SPEED	Bearing Friction:	-0.29 Oz-Ft
Phase:	1	Speed Conn:		Windage Torque:	-19.95 Oz-Ft
Protector:	7AM031-A5	TestBoard:	CMD InLine Three Phase #2 Fixture #1		

Special Points	Vline (V)	Vaux (V)	Vcap (V)	Iline (A)	Watts	RPM	Tq (Oz-ft)	HP	Eff (%)	PF (%)
	208.0	269.3	356.0	1.276	183	1794	0.00	0.000	0.0	69.0
	208.0	268.6	354.2	1.382	211	1791	1.75	0.037	13.2	73.5
	208.0	267.0	350.7	1.588	266	1785	5.29	0.112	31.6	80.4
	208.0	265.4	346.7	1.804	319	1777	9.16	0.194	45.4	84.9
	208.0	261.7	338.3	2.177	407	1766	15.61	0.328	60.1	90.0
	208.0	253.5	325.4	2.464	484	1753	21.89	0.457	70.4	94.5
	208.0	239.5	309.1	2.840	582	1736	29.01	0.600	76.9	98.5
	208.0	228.7	296.8	3.348	695	1716	35.89	0.733	78.7	99.8
	208.0	218.2	284.4	3.968	825	1692	43.34	0.873	79.0	99.9
	208.0	207.9	272.7	4.591	950	1665	50.09	0.993	78.0	99.5
<b>52.156 OZ-FT</b>	<b>208.0</b>	<b>203.7</b>	<b>268.3</b>	<b>4.840</b>	<b>999</b>	<b>1654</b>	<b>52.16</b>	<b>1.027</b>	<b>76.7</b>	<b>99.2</b>
	208.0	197.2	261.8	5.210	1070	1636	55.63	1.084	75.6	98.7
<b>57.301 OZ-FT</b>	<b>208.0</b>	<b>193.6</b>	<b>258.1</b>	<b>5.442</b>	<b>1113</b>	<b>1626</b>	<b>57.30</b>	<b>1.109</b>	<b>74.3</b>	<b>98.4</b>
<b>1625 RPM</b>	<b>208.0</b>	<b>193.4</b>	<b>257.9</b>	<b>5.456</b>	<b>1116</b>	<b>1625</b>	<b>57.40</b>	<b>1.110</b>	<b>74.3</b>	<b>98.3</b>
<b>1600 RPM</b>	<b>208.0</b>	<b>185.3</b>	<b>250.1</b>	<b>5.942</b>	<b>1205</b>	<b>1600</b>	<b>60.91</b>	<b>1.160</b>	<b>71.8</b>	<b>97.5</b>
	208.0	184.1	248.9	6.012	1218	1596	61.44	1.167	71.5	97.4
<b>61.478 OZ-FT</b>	<b>208.0</b>	<b>183.9</b>	<b>248.7</b>	<b>6.026</b>	<b>1220</b>	<b>1595</b>	<b>61.48</b>	<b>1.168</b>	<b>71.4</b>	<b>97.4</b>
	208.0	171.7	238.4	6.740	1344	1555	65.12	1.205	66.9	95.9
	208.0	158.7	228.4	7.492	1468	1506	67.51	1.210	61.5	94.2
<b>BDT OZ-FT</b>	<b>208.0</b>	<b>150.9</b>	<b>223.2</b>	<b>7.938</b>	<b>1537</b>	<b>1473</b>	<b>68.40</b>	<b>1.199</b>	<b>58.2</b>	<b>93.1</b>
	208.0	145.8	220.2	8.224	1579	1450	68.13	1.176	55.6	92.3
	208.0	134.0	214.0	8.876	1671	1393	67.83	1.125	50.2	90.5
	208.0	122.1	209.4	9.498	1749	1326	65.32	1.031	44.0	88.6
	208.0	111.1	206.3	10.071	1817	1254	62.96	0.940	38.6	86.8
	208.0	100.8	204.7	10.592	1873	1175	59.45	0.832	33.1	85.0
	208.0	91.4	204.3	11.044	1916	1091	55.38	0.720	28.0	83.4
	208.0	82.2	204.8	11.480	1955	994	50.94	0.603	23.0	81.9
	208.0	73.9	206.3	11.844	1983	891	45.91	0.487	18.3	80.5
	208.0	66.7	208.4	12.145	2003	784	40.36	0.377	14.0	79.3
	208.0	60.3	211.0	12.396	2019	667	35.81	0.284	10.5	78.3
	208.0	54.0	213.7	12.613	2030	540	30.14	0.194	7.1	77.4
	208.0	48.8	216.7	12.765	2036	405	24.82	0.120	4.4	76.7
	208.0	44.3	219.8	12.851	2037	259	20.98	0.065	2.4	76.2
	208.0	41.3	224.1	12.873	2039	100	19.76	0.024	0.9	76.1



# Performance Data



**3LU90BG**

REV.

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## Dayton Manufacturing Company

### Motor Description

Model: K055HXLNU251301  
 Motor ID: 1  
 Poles: 4  
 Volts: 208-230  
 Frequency: 60  
 HP: 1  
 Speed: 1625  
 Phase: 1  
 Protector: 7AM031-A5

### Test Conditions

Test Type: Start  
 Test Number: 14  
 Poles: 4  
 Volts: 208  
 Hz: 60  
 Rotation:  
 Special Cond: M2  
 Speed Conn: M2  
 TestBoard: CMD InLine Three Phase #2 Fixture #1  
 Run Cap: 20  
 Start Cap: 0µfd  
 Environment: 24.9 Deg C 51 % RH 965 hPa  
 Tested: 8/18/2016 11:46:48 AM  
 Tested By: Navarro, Susana  
 Gear Ratio: 1:1  
 Bearing Friction: -0.28 Oz-Ft  
 Windage Torque: -21.01 Oz-Ft

Special Points PUT OZ-FT	Vline (V)	Vaux (V)	Vcap (V)	Iline (A)	Watts	RPM	Tq (Oz-ft)	HP	Eff (%)	PF (%)
208.0	32.4	161.4	6.865	1089.5	29	3.20	0.001	0.1	76.3	
208.0	32.4	156.9	6.808	1080.9	192	4.20	0.010	0.7	76.3	
208.0	35.0	154.0	6.748	1077.6	346	6.14	0.025	1.8	76.8	
208.0	37.7	150.7	6.652	1070.3	485	10.18	0.059	4.1	77.4	
208.0	41.8	148.2	6.543	1062.4	637	14.95	0.113	8.0	78.1	
208.0	46.4	147.3	6.432	1058.8	744	14.90	0.132	9.3	79.1	
208.0	51.6	146.0	6.274	1049.4	855	17.61	0.179	12.7	80.4	
208.0	57.2	144.8	6.082	1034.1	958	20.51	0.234	16.9	81.7	
208.0	63.6	144.0	5.858	1014.1	1058	23.25	0.293	21.5	83.2	
208.0	69.8	144.0	5.626	990.9	1141	26.05	0.354	26.6	84.7	
208.0	77.6	145.0	5.339	959.5	1228	28.41	0.415	32.3	86.4	
208.0	85.5	147.0	5.049	925.7	1303	29.98	0.465	37.5	88.1	
208.0	93.5	150.2	4.741	885.8	1369	31.37	0.511	43.1	89.8	
208.0	102.4	154.8	4.391	837.0	1432	32.06	0.547	48.7	91.6	
208.0	111.4	160.7	4.033	783.3	1488	32.08	0.568	54.1	93.4	
208.0	121.1	168.1	3.650	721.9	1539	31.48	0.577	59.6	95.1	
208.0	129.9	175.8	3.299	662.8	1582	30.26	0.570	64.1	96.6	
208.0	139.3	184.8	2.919	594.8	1621	28.16	0.543	68.2	98.0	
208.0	148.0	193.7	2.576	530.8	1654	25.88	0.510	71.6	99.1	
208.0	156.5	203.2	2.238	464.4	1682	22.31	0.447	71.8	99.8	
208.0	165.2	213.5	1.893	393.3	1709	19.26	0.392	74.3	99.9	
208.0	173.0	222.7	1.638	338.6	1730	15.27	0.314	69.3	99.4	
208.0	183.1	233.9	1.431	289.1	1747	11.79	0.245	63.3	97.1	
208.0	193.5	247.0	1.297	248.3	1762	9.14	0.192	57.6	92.0	
208.0	198.9	256.9	1.148	206.7	1774	7.55	0.159	57.5	86.6	
208.0	201.0	262.2	0.989	167.2	1783	4.05	0.086	38.4	81.3	
208.0	202.4	265.3	0.887	139.0	1789	1.78	0.038	20.3	75.4	
208.0	203.0	267.3	0.810	118.5	1794	0.21	0.005	2.9	70.4	
208.0	203.1	267.7	0.796	114.9	1795	0.00	0.000	0.0	69.3	

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**3LU90BG** -

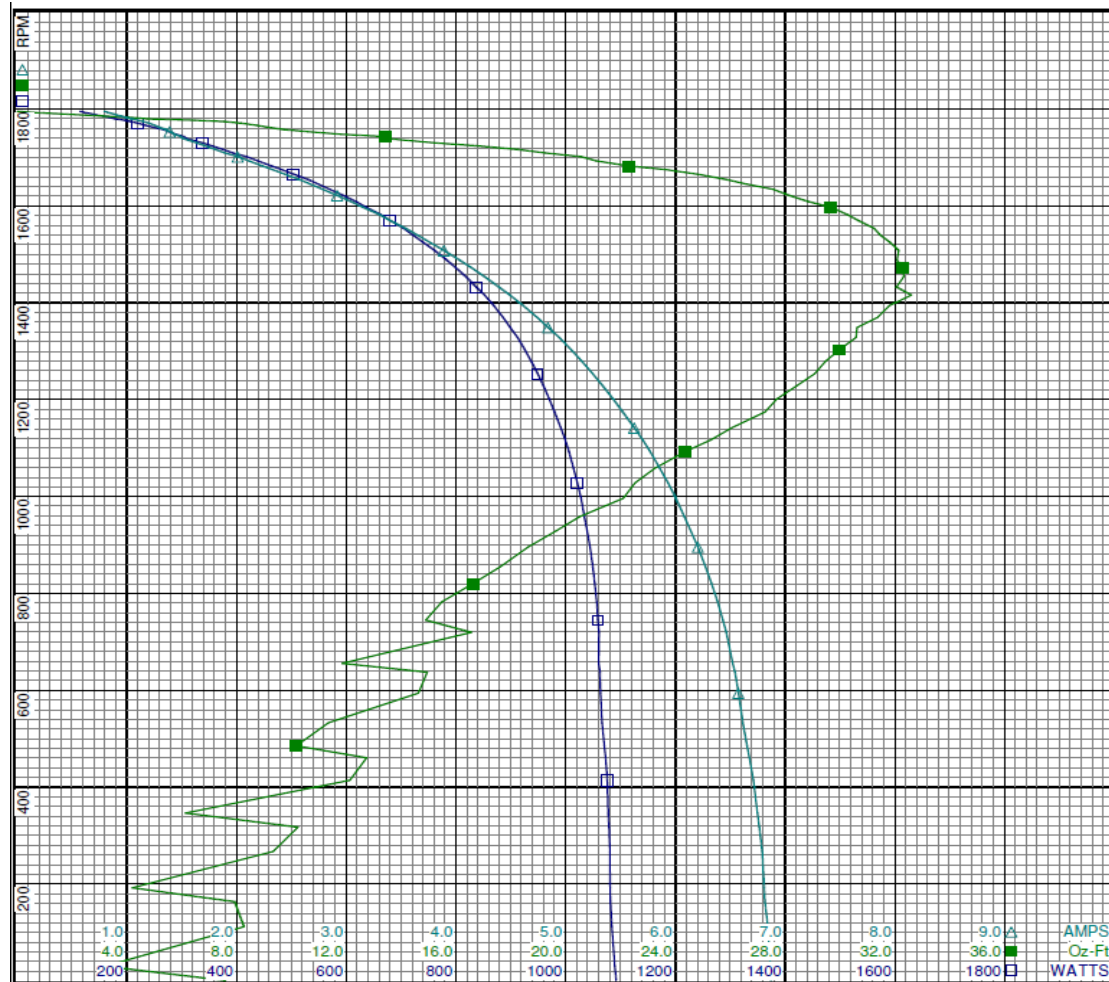
# Performance Data



**3LU90BG**

REV.

-



**Curve Descriptions:**

Motor(1) Test 14 Start 208V 60 Hz 4P  
M2 M2 20ufd Run

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

**Motor Ratings:**

(1) K055HXLNU251301 ID: 1

DRAWING NO.	PAGE 6 of 24	REV.
	<b>3LU90BG</b>	-

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



**3LU90BG**

REV.

-

## Dayton Manufacturing Company

### Motor Description

Model: K055HXLNU251301  
 Motor ID: 1  
 Poles: 4  
 Volts: 208-230  
 Frequency: 60  
 HP: 1  
 Speed: 1625  
 Phase: 1  
 Protector: 7AM031-A5

### Test Conditions

Test Type: Run  
 Test Number: 2  
 Poles: 4  
 Volts: 208  
 Hz: 60  
 Rotation: REV  
 Special Cond: M2 - MEDIUM-SPEED  
 Speed Conn:  
 TestBoard: CMD InLine Three Phase #2 Fixture #1  
 Run Cap: 20  
 Start Cap: 0µfd  
 Environment: 24.9 Deg C 51 % RH 965 hPa  
 Tested: 8/18/2016 11:43:07 AM  
 Tested By: Navarro, Susana  
 Gear Ratio: 1:1  
 Bearing Friction: -0.28 Oz-Ft  
 Windage Torque: -0.80 Oz-Ft

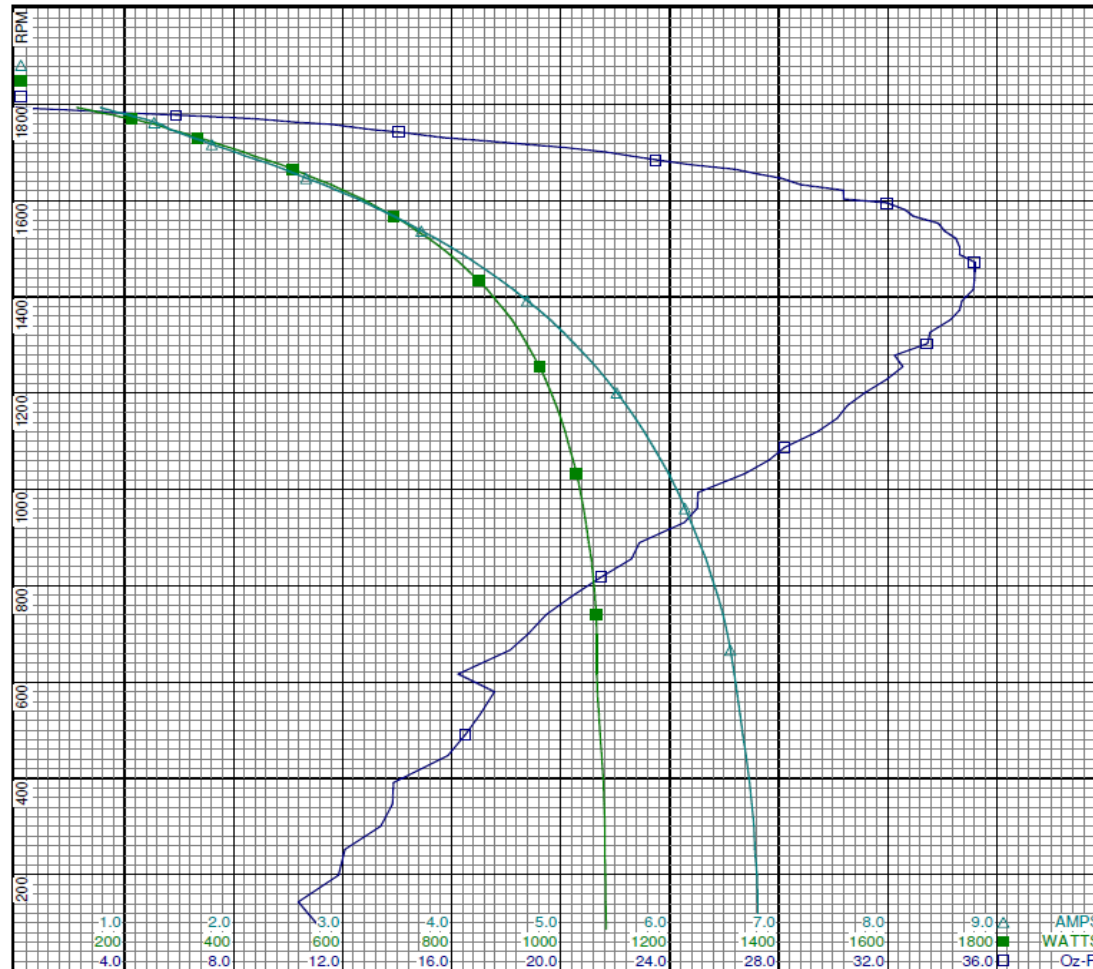
Special Points	Vline (V)	Vaux (V)	Vcap (V)	Iline (A)	Watts	RPM	Tq (Oz-ft)	HP	Eff (%)	PF (%)
	208.0	202.6	267.8	0.778	112.1	1793	0.00	0.000	0.0	69.3
	208.0	201.8	265.9	0.842	130.5	1789	1.52	0.032	18.5	74.5
	208.0	201.1	263.5	0.932	152.4	1783	3.57	0.076	37.1	78.6
	208.0	199.4	259.1	1.083	190.2	1774	7.14	0.151	59.1	84.4
	208.0	195.8	250.4	1.273	238.1	1762	10.29	0.216	67.6	89.9
	208.0	184.8	235.7	1.420	284.2	1747	13.09	0.272	71.5	96.2
	208.0	174.3	223.9	1.622	334.3	1730	15.69	0.323	72.1	99.1
	208.0	165.6	214.1	1.885	391.8	1710	20.11	0.409	78.0	99.9
	208.0	157.5	204.3	2.216	459.9	1684	23.50	0.471	76.5	99.8
<b>1665 RPM</b>	<b>208.0</b>	<b>151.6</b>	<b>197.5</b>	<b>2.458</b>	<b>508.1</b>	<b>1665</b>	<b>26.33</b>	<b>0.522</b>	<b>76.6</b>	<b>99.4</b>
<b>26.585 OZ-FT</b>	<b>208.0</b>	<b>150.9</b>	<b>196.7</b>	<b>2.486</b>	<b>513.6</b>	<b>1663</b>	<b>26.59</b>	<b>0.526</b>	<b>76.4</b>	<b>99.3</b>
	208.0	148.7	194.3	2.575	530.9	1655	27.29	0.538	75.5	99.1
<b>29.276 OZ-FT</b>	<b>208.0</b>	<b>141.7</b>	<b>186.9</b>	<b>2.863</b>	<b>585.6</b>	<b>1629</b>	<b>29.28</b>	<b>0.568</b>	<b>72.3</b>	<b>98.3</b>
<b>1625 RPM</b>	<b>208.0</b>	<b>140.7</b>	<b>185.8</b>	<b>2.906</b>	<b>593.6</b>	<b>1625</b>	<b>29.85</b>	<b>0.577</b>	<b>72.6</b>	<b>98.2</b>
	208.0	139.7	184.8	2.946	601.0	1621	30.37	0.586	72.8	98.1
<b>31.648 OZ-FT</b>	<b>208.0</b>	<b>133.6</b>	<b>178.8</b>	<b>3.195</b>	<b>646.1</b>	<b>1597</b>	<b>31.65</b>	<b>0.602</b>	<b>69.5</b>	<b>97.2</b>
<b>1585 RPM</b>	<b>208.0</b>	<b>131.0</b>	<b>176.3</b>	<b>3.302</b>	<b>665.1</b>	<b>1585</b>	<b>32.44</b>	<b>0.612</b>	<b>68.7</b>	<b>96.8</b>
	208.0	130.1	175.5	3.339	671.4	1581	32.62	0.614	68.2	96.7
	208.0	120.8	167.3	3.723	736.3	1537	34.08	0.624	63.2	95.1
	208.0	111.4	160.2	4.103	796.8	1488	34.63	0.613	57.4	93.4
<b>BDT OZ-FT</b>	<b>208.0</b>	<b>105.5</b>	<b>156.2</b>	<b>4.339</b>	<b>832.4</b>	<b>1452</b>	<b>35.19</b>	<b>0.608</b>	<b>54.5</b>	<b>92.2</b>
	208.0	102.6	154.4	4.458	849.7	1433	35.18	0.600	52.7	91.6
	208.0	93.9	149.9	4.802	897.0	1372	34.64	0.566	47.0	89.8
	208.0	85.3	146.7	5.124	937.5	1303	33.46	0.519	41.3	88.0
	208.0	77.5	144.7	5.417	971.8	1229	31.99	0.468	35.9	86.3
	208.0	70.3	143.9	5.685	1000.4	1147	30.14	0.412	30.7	84.6
	208.0	63.6	143.9	5.921	1022.8	1060	27.64	0.349	25.4	83.0
	208.0	57.3	144.7	6.142	1041.9	960	25.01	0.286	20.5	81.6
	208.0	51.5	145.9	6.332	1056.3	856	22.60	0.230	16.3	80.2
	208.0	46.1	147.4	6.490	1065.2	739	19.47	0.171	12.0	78.9
	208.0	41.0	148.5	6.593	1066.4	616	16.24	0.119	8.3	77.8
	208.0	37.9	150.5	6.671	1072.5	490	16.50	0.096	6.7	77.3
	208.0	35.2	153.8	6.754	1079.6	346	13.83	0.057	3.9	76.8
	208.0	32.9	156.6	6.801	1082.2	198	11.85	0.028	1.9	76.5

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**3LU90BG** -

**3LU90BG**

REV.

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**Curve Descriptions:**

Motor(1) Test 2 Run 208V 60 Hz 4P  
M2 - MEDIUM-SPEED REV 20ufd Run

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

**Motor Ratings:**

(1) K055HXLNU251301 ID: 1

DRAWING NO.	PAGE 8 of 24	REV.
	<b>3LU90BG</b>	-



**3LU90BG**

REV.

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## Dayton Manufacturing Company

### Motor Description

### Test Conditions

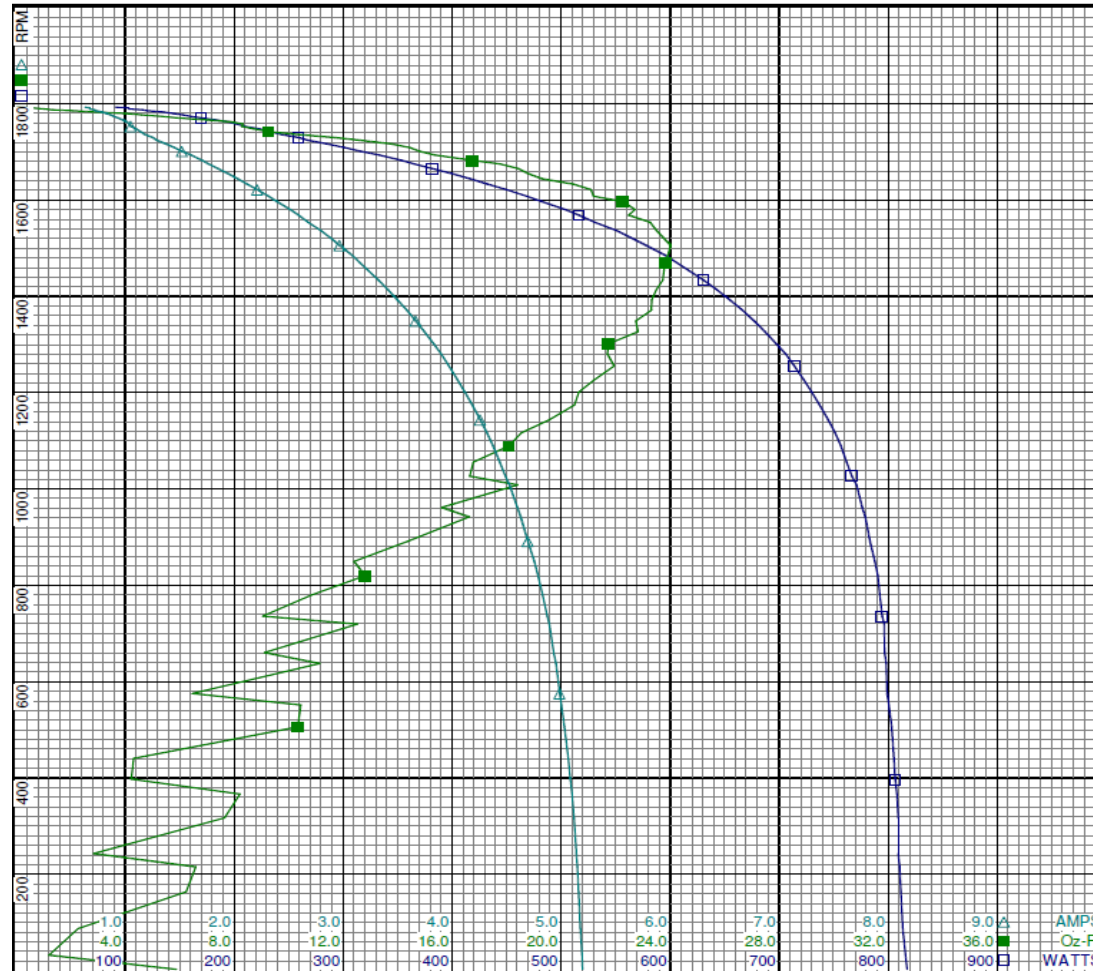
Model:	K055HXLNU251301	Test Type:	Start	Run Cap:	20
Motor ID:	1	Test Number:	15	Start Cap:	0µfd
Poles:	4	Poles:	4	Environment:	24.9 Deg C 51 % RH 965 hPa
Volts:	208-230	Volts:	208	Tested:	8/18/2016 12:03:31 PM
Frequency:	60	Hz:	60	Tested By:	Navarro, Susana
HP:	1	Rotation:		Gear Ratio:	1:1
Speed:	1625	Special Cond:	M3	Bearing Friction:	-0.23 Oz-Ft
Phase:	1	Speed Conn:	M3	Windage Torque:	-21.99 Oz-Ft
Protector:	7AM031-A5	TestBoard:	CMD InLine Three Phase #2 Fixture #1		

Special Points	Vline (V)	Vaux (V)	Vcap (V)	Iline (A)	Watts	RPM	Tq (Oz-ft)	HP	Eff (%)	PF (%)
PUT OZ-FT	208.0	29.2	140.6	5.191	816.0	32	1.21	0.000	0.0	75.6
	208.0	29.2	140.6	5.191	816.0	32	1.21	0.000	0.0	75.6
	208.0	29.7	136.2	5.150	810.5	215	6.59	0.017	1.6	75.7
	208.0	31.8	133.8	5.100	808.0	366	8.21	0.036	3.3	76.2
	208.0	34.0	131.0	5.030	803.1	506	10.34	0.062	5.8	76.8
	208.0	37.0	129.1	4.953	798.2	637	11.13	0.084	7.9	77.5
	208.0	40.5	128.3	4.873	794.5	736	9.05	0.079	7.4	78.4
	208.0	45.1	126.9	4.753	787.8	849	12.40	0.125	11.9	79.7
	208.0	50.3	125.5	4.598	776.3	961	15.61	0.179	17.2	81.2
	208.0	55.3	124.8	4.436	761.9	1055	16.77	0.211	20.6	82.6
	208.0	61.2	124.6	4.257	744.9	1144	19.57	0.266	26.7	84.1
	208.0	67.4	125.3	4.050	722.6	1226	21.21	0.310	32.0	85.8
	208.0	74.1	127.0	3.831	697.5	1301	21.73	0.337	36.0	87.5
	208.0	81.6	129.9	3.584	666.3	1371	23.31	0.380	42.6	89.4
	208.0	89.3	133.9	3.323	630.5	1433	23.73	0.405	47.9	91.2
	208.0	96.5	138.6	3.080	595.2	1485	23.91	0.423	53.0	92.9
	208.0	104.7	144.8	2.796	550.9	1536	23.51	0.430	58.2	94.7
	208.0	112.7	151.8	2.515	503.8	1580	22.70	0.427	63.2	96.3
	208.0	121.2	160.3	2.212	449.6	1621	21.09	0.407	67.6	97.7
	208.0	128.9	168.4	1.946	400.2	1654	18.80	0.370	69.0	98.9
	208.0	136.1	176.5	1.707	353.7	1682	16.75	0.335	70.8	99.6
	208.0	143.5	185.3	1.450	301.4	1708	14.44	0.294	72.7	99.9
	208.0	150.9	193.7	1.253	259.3	1729	11.70	0.241	69.3	99.4
	208.0	159.1	203.2	1.099	222.8	1747	8.70	0.181	60.6	97.4
	208.0	170.0	216.1	1.015	194.3	1762	7.89	0.165	63.5	92.0
	208.0	176.0	226.5	0.898	160.5	1773	5.39	0.114	52.9	85.9
	208.0	177.1	230.7	0.790	135.3	1782	2.91	0.062	34.0	82.3
	208.0	178.5	234.5	0.675	103.9	1789	1.04	0.022	16.0	74.0
	208.0	179.2	236.1	0.633	91.1	1793	0.03	0.001	0.6	69.3

**3LU90BG**

REV.

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**Curve Descriptions:**

Motor(1) Test 15 Start 208V 60 Hz 4P  
M3 M3 20ufd Run

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

**Motor Ratings:**

(1) K055HXLNU251301 ID: 1

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	<b>3LU90BG</b>	-

**3LU90BG**

REV.

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## Dayton Manufacturing Company

### Motor Description

Model: K055HXLNU251301  
 Motor ID: 1  
 Poles: 4  
 Volts: 208-230  
 Frequency: 60  
 HP: 1  
 Speed: 1625  
 Phase: 1  
 Protector: 7AM031-A5

### Test Conditions

Test Type: Run  
 Test Number: 3  
 Poles: 4  
 Volts: 208  
 Hz: 60  
 Rotation: REV  
 Special Cond: M3 - LOW SPEED  
 Speed Conn:  
 TestBoard: CMD InLine Three Phase #2 Fixture #1  
 Run Cap: 20  
 Start Cap: 0µfd  
 Environment: 24.9 Deg C 51 % RH 965 hPa  
 Tested: 8/18/2016 11:59:09 AM  
 Tested By: Navarro, Susana  
 Gear Ratio: 1:1  
 Bearing Friction: -0.25 Oz-Ft  
 Windage Torque: -21.05 Oz-Ft

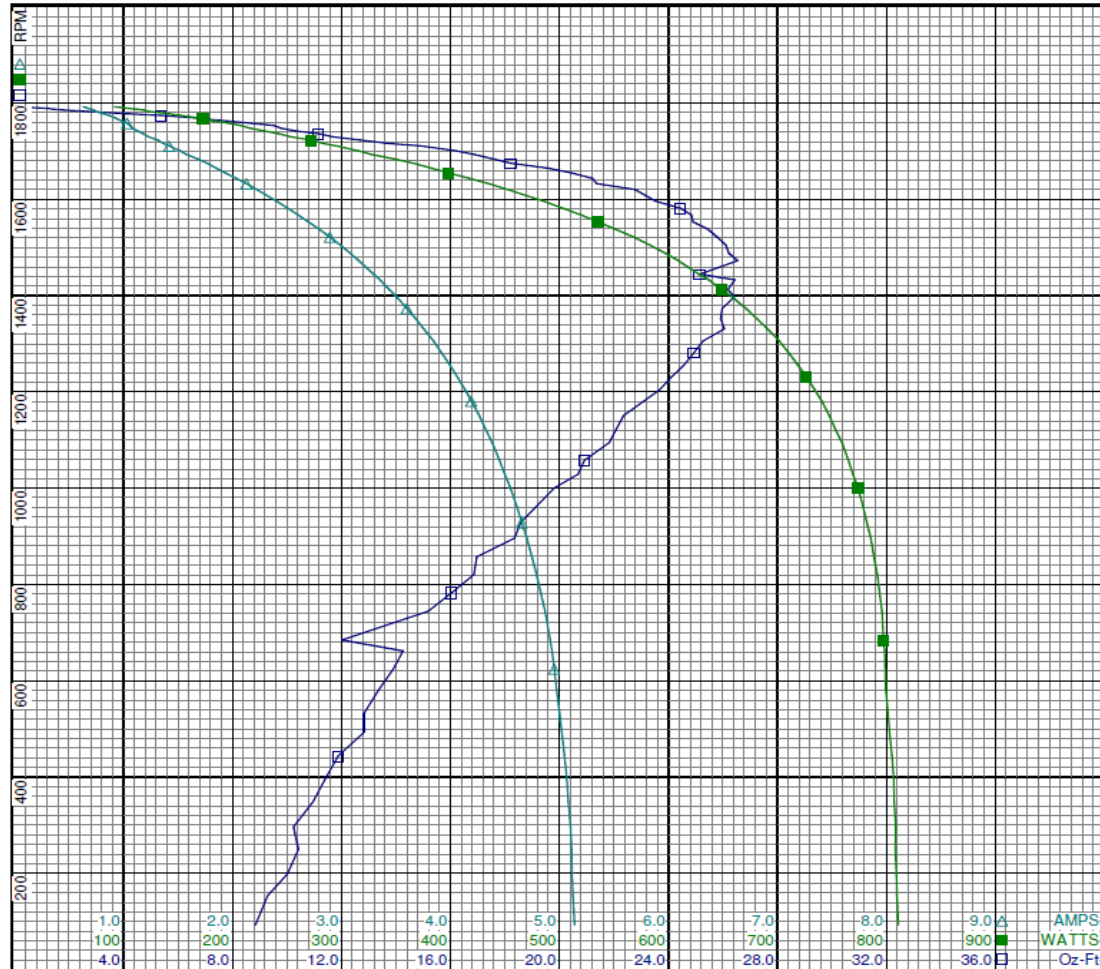
Special Points	Vline (V)	Vaux (V)	Vcap (V)	Iline (A)	Watts	RPM	Tq (Oz-ft)	HP	Eff (%)	PF (%)
	208.0	179.2	236.1	0.632	91.7	1792	0.00	0.000	0.0	69.8
	208.0	178.2	233.7	0.702	112.1	1787	1.44	0.031	20.4	76.8
	208.0	177.4	230.9	0.785	132.5	1780	3.35	0.071	40.0	81.1
	208.0	175.2	225.4	0.915	165.5	1770	6.43	0.135	61.1	87.0
	208.0	169.9	215.3	1.033	197.1	1758	8.68	0.182	68.8	91.7
	208.0	158.2	201.6	1.129	229.3	1742	10.32	0.214	69.6	97.6
	208.0	149.0	191.3	1.314	272.1	1723	12.68	0.260	71.3	99.6
	208.0	142.2	183.2	1.518	315.3	1700	16.19	0.328	77.6	99.9
	208.0	134.9	174.6	1.769	366.2	1674	18.22	0.363	74.0	99.5
<b>19.352 OZ-FT</b>	<b>208.0</b>	<b>132.8</b>	<b>172.2</b>	<b>1.837</b>	<b>379.7</b>	<b>1666</b>	<b>19.35</b>	<b>0.384</b>	<b>75.4</b>	<b>99.4</b>
	208.0	127.2	166.1	2.032	417.0	1643	21.21	0.415	74.2	98.7
<b>21.653 OZ-FT</b>	<b>208.0</b>	<b>123.9</b>	<b>162.6</b>	<b>2.147</b>	<b>438.6</b>	<b>1630</b>	<b>21.65</b>	<b>0.420</b>	<b>71.4</b>	<b>98.2</b>
	208.0	119.1	157.7	2.314	469.1	1608	23.15	0.443	70.5	97.5
<b>23.317 OZ-FT</b>	<b>208.0</b>	<b>118.0</b>	<b>156.6</b>	<b>2.354</b>	<b>476.4</b>	<b>1603</b>	<b>23.32</b>	<b>0.445</b>	<b>69.7</b>	<b>97.3</b>
	208.0	111.0	149.9	2.603	519.8	1567	24.84	0.464	66.5	96.0
<b>BDT OZ-FT</b>	<b>208.0</b>	<b>102.9</b>	<b>142.9</b>	<b>2.895</b>	<b>568.2</b>	<b>1521</b>	<b>25.80</b>	<b>0.467</b>	<b>61.3</b>	<b>94.4</b>
	208.0	95.2	137.2	3.159	609.0	1472	26.54	0.465	57.0	92.7
	208.0	87.0	132.2	3.439	649.0	1412	26.18	0.440	50.6	90.7
	208.0	79.9	128.8	3.679	681.3	1352	25.92	0.417	45.7	89.0
	208.0	72.6	126.3	3.918	710.2	1281	24.94	0.380	39.9	87.1
	208.0	66.0	124.9	4.134	734.2	1204	23.68	0.339	34.5	85.4
	208.0	59.7	124.5	4.328	753.7	1120	22.06	0.294	29.1	83.7
	208.0	54.1	124.9	4.500	769.4	1028	20.68	0.253	24.5	82.2
	208.0	48.9	125.7	4.655	782.0	928	18.58	0.205	19.6	80.8
	208.0	44.1	127.1	4.790	791.6	820	16.86	0.165	15.5	79.5
	208.0	38.8	128.8	4.915	797.5	684	12.01	0.098	9.2	78.0
	208.0	35.8	129.6	4.975	799.5	581	13.37	0.093	8.6	77.3
	208.0	33.0	132.0	5.046	805.2	443	11.88	0.063	5.8	76.7
	208.0	30.7	134.5	5.102	808.7	296	10.24	0.036	3.3	76.2
	208.0	29.3	137.0	5.124	809.8	153	9.28	0.017	1.6	76.0

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**3LU90BG** -

**3LU90BG**

REV.

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**Curve Descriptions:**

Motor(1) Test 3 Run 208V 60 Hz 4P  
M3 - LOW SPEED REV 20ufd Run

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

**Motor Ratings:**

(1) K055HXLNU251301 ID: 1

-1.0
-2.0
-3.0
-4.0
-5.0
-6.0
-7.0
-8.0
-9.0
-10.0
-11.0
-12.0
-13.0
-14.0
-15.0
-16.0
-17.0
-18.0
-19.0
-20.0
-21.0
-22.0
-23.0
-24.0
-25.0
-26.0
-27.0
-28.0
-29.0
-30.0
-31.0
-32.0
-33.0
-34.0
-35.0
-36.0
-37.0
-38.0
-39.0
-40.0

100
200
300
400
500
600
700
800
900
1000
1100
1200
1300
1400
1500
1600
1700
1800

4.0
8.0
12.0
16.0
20.0
24.0
28.0
32.0
36.0

AMPS
WATTS
Oz-Ft



**3LU90BG**

REV.

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## Dayton Manufacturing Company

### Motor Description

Model: K055HXLNU251301  
 Motor ID: 1  
 Poles: 4  
 Volts: 208-230  
 Frequency: 60  
 HP: 1  
 Speed: 1625  
 Phase: 1  
 Protector: 7AM031-A5

### Test Conditions

Test Type: Start  
 Test Number: 16  
 Poles: 4  
 Volts: 230  
 Hz: 60  
 Rotation:  
 Special Cond: M1  
 Speed Conn: M1  
 TestBoard: CMD InLine Three Phase #2 Fixture #1  
 Run Cap: 20  
 Start Cap: 0µfd  
 Environment: 24.5 Deg C 53 % RH 966 hPa  
 Tested: 8/18/2016 11:18:13 AM  
 Tested By: Navarro, Susana  
 Gear Ratio: 1:1  
 Bearing Friction: -0.27 Oz-Ft  
 Windage Torque: -20.01 Oz-Ft

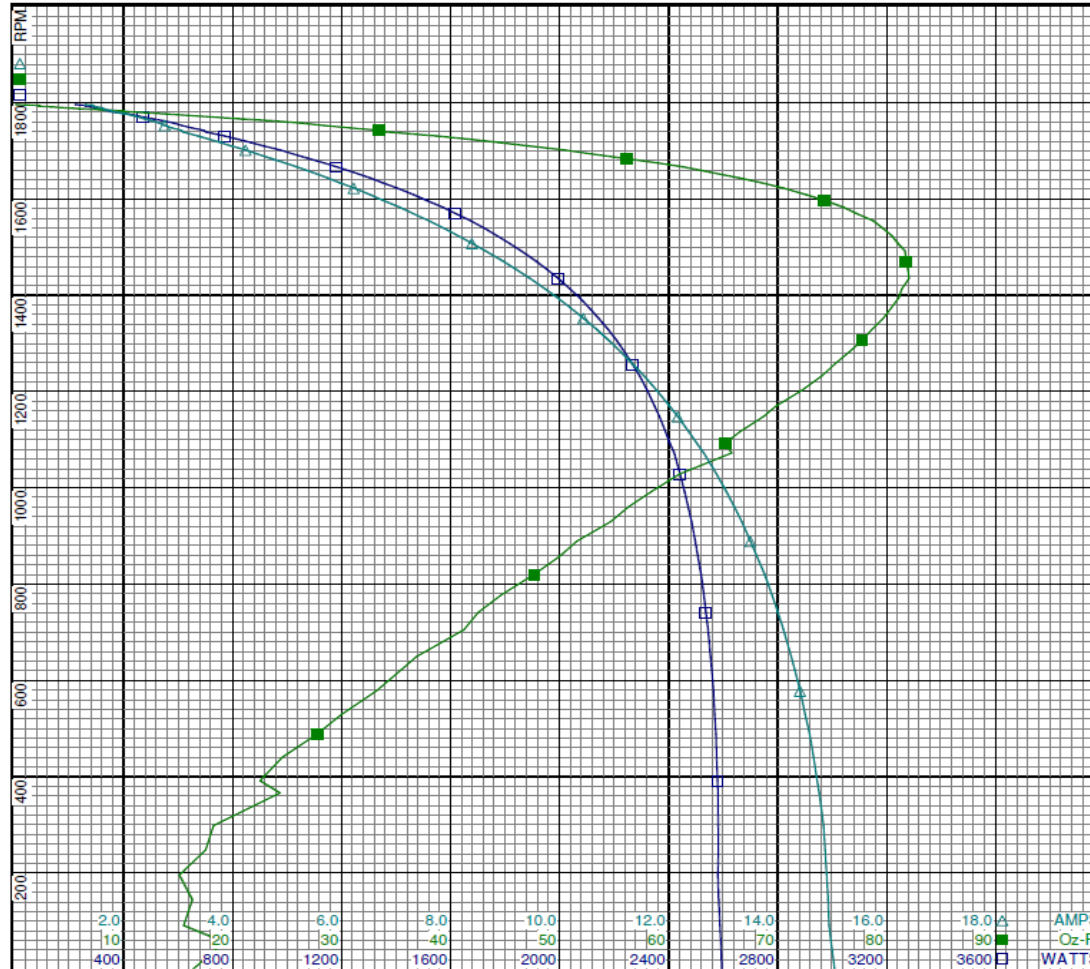
Special Points	Vline (V)	Vaux (V)	Vcap (V)	Iline (A)	Watts	RPM	Tq(Oz-ft)	HP	Eff (%)	PF (%)
PUT OZ-FT	230.0	43.6	249.0	14.982	2592	56	19.26	0.013	0.4	75.2
	<b>230.0</b>	<b>45.0</b>	<b>244.3</b>	<b>14.901</b>	<b>2581</b>	<b>195</b>	<b>15.12</b>	<b>0.035</b>	<b>1.0</b>	<b>75.3</b>
	230.0	45.0	244.3	14.901	2581	195	15.12	0.035	1.0	75.3
	230.0	50.3	239.7	14.764	2581	366	24.35	0.106	3.1	76.0
	230.0	55.4	236.8	14.588	2574	489	27.78	0.162	4.7	76.7
	230.0	62.2	233.6	14.318	2559	621	35.42	0.262	7.6	77.7
	230.0	69.5	230.8	14.005	2537	741	42.53	0.375	11.0	78.8
	230.0	77.8	228.4	13.622	2508	857	49.99	0.510	15.2	80.0
	230.0	86.4	226.6	13.206	2472	960	56.33	0.644	19.4	81.4
	230.0	97.8	225.6	12.645	2421	1072	65.79	0.840	25.9	83.2
	230.0	106.7	226.0	12.169	2367	1147	68.70	0.938	29.6	84.6
	230.0	118.5	227.6	11.555	2294	1231	74.01	1.085	35.3	86.3
	230.0	130.5	230.8	10.903	2209	1306	77.76	1.209	40.8	88.1
	230.0	143.1	235.6	10.200	2109	1374	80.43	1.315	46.5	89.9
	230.0	156.3	242.0	9.456	1995	1435	82.05	1.401	52.4	91.7
	230.0	170.1	250.4	8.648	1860	1491	81.69	1.450	58.2	93.5
	230.0	183.1	259.8	7.888	1726	1538	79.69	1.459	63.1	95.1
	230.0	196.7	270.9	7.065	1571	1583	76.03	1.432	68.0	96.7
	230.0	210.4	283.4	6.228	1404	1622	70.54	1.362	72.4	98.0
	230.0	223.1	296.0	5.454	1243	1655	63.79	1.257	75.5	99.1
	230.0	235.1	309.0	4.708	1080	1683	56.12	1.125	77.7	99.7
	230.0	247.0	322.7	3.967	912	1710	47.06	0.958	78.4	99.9
	230.0	257.1	335.0	3.362	770	1730	38.69	0.797	77.3	99.5
	230.0	268.1	347.9	2.886	651	1747	30.80	0.641	73.4	98.1
	230.0	281.1	364.5	2.523	546	1762	23.56	0.494	67.6	94.0
	230.0	287.1	375.1	2.148	443	1773	15.92	0.336	56.6	89.6
	230.0	289.6	381.5	1.770	346	1783	9.81	0.208	44.8	85.1
	230.0	291.2	384.8	1.601	299	1789	4.67	0.099	24.8	81.2
	230.0	291.8	386.8	1.448	260	1794	2.29	0.049	14.0	78.2
	230.0	292.6	388.9	1.297	222	1796	0.09	0.002	0.6	74.3

DRAWING NO. PAGE 13 of 24 REV.  
**3LU90BG** -

**3LU90BG**

REV.

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**Curve Descriptions:**  
 Motor(1) Test 16 Start 230V 60 Hz 4P  
 M1 M1 20ufd Run  
 □ SPEED vs WATTS  
 ■ SPEED vs TORQUE  
 △ SPEED vs ILine

**Motor Ratings:**  
 (1) K055HXLNU251301 ID: 1



# Performance Data



**3LU90BG**

REV.

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## Dayton Manufacturing Company

### Motor Description

Model: K055HXLNU251301  
 Motor ID: 1  
 Poles: 4  
 Volts: 208-230  
 Frequency: 60  
 HP: 1  
 Speed: 1625  
 Phase: 1  
 Protector: 7AM031-A5

### Test Conditions

Test Type: Run  
 Test Number: 4  
 Poles: 4  
 Volts: 230  
 Hz: 60  
 Rotation: REV  
 Special Cond: M1 - HIGH SPEED  
 Speed Conn:  
 TestBoard: CMD InLine Three Phase #2 Fixture #1  
 Run Cap: 20  
 Start Cap: 0µfd  
 Environment: 24.5 Deg C 53 % RH 966 hPa  
 Tested: 8/18/2016 11:16:23 AM  
 Tested By: Navarro, Susana  
 Gear Ratio: 1:1  
 Bearing Friction: -0.35 Oz-Ft  
 Windage Torque: -19.55 Oz-Ft

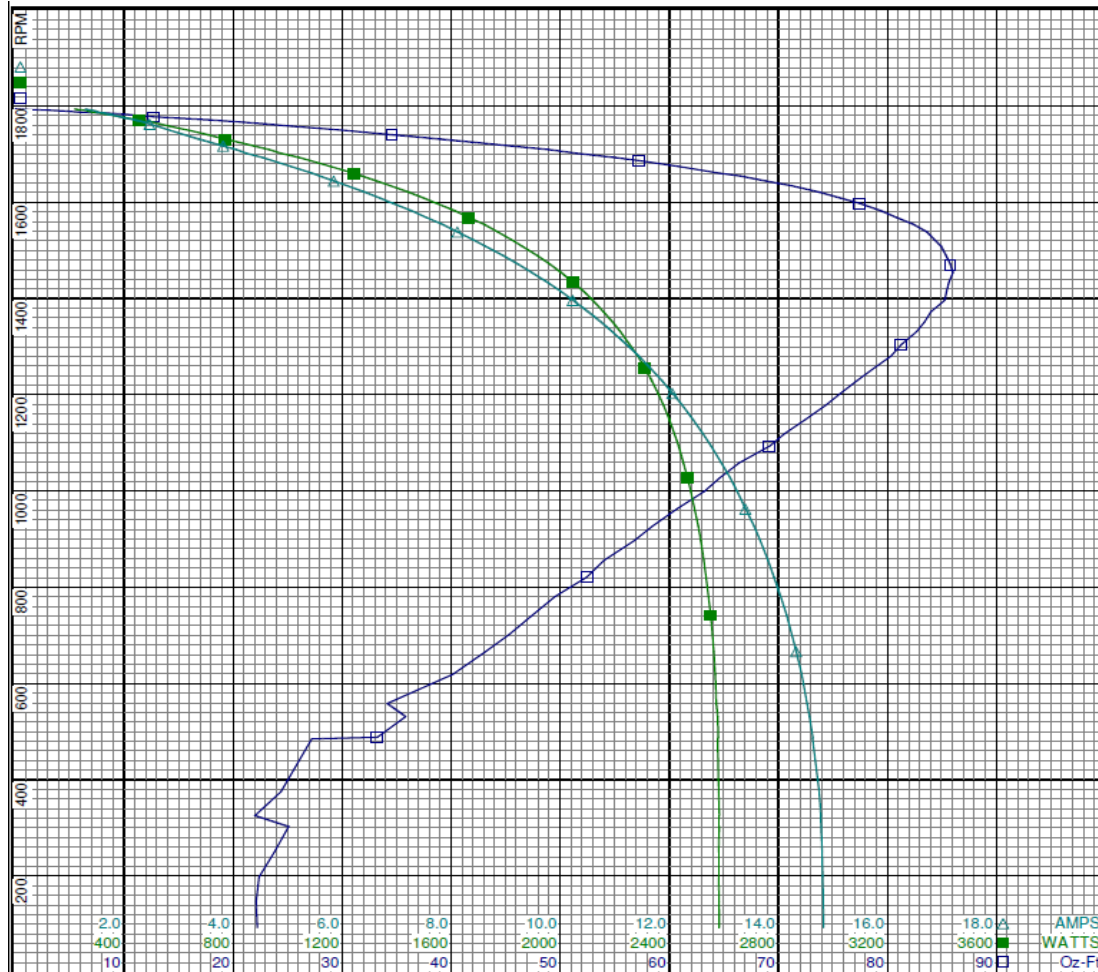
Special Points	Vline (V)	Vaux (V)	Vcap (V)	Iline (A)	Watts	RPM	Tq(Oz-ft)	HP	Eff (%)	PF (%)
	230.0	291.7	388.4	1.288	219	1793	0.00	0.000	0.0	73.8
	230.0	290.2	385.2	1.488	273	1789	4.81	0.102	28.0	79.7
	230.0	288.5	381.5	1.705	330	1783	9.83	0.209	47.2	84.1
	230.0	286.7	376.3	2.025	413	1774	14.87	0.314	56.8	88.6
	230.0	281.9	366.1	2.471	530	1762	22.91	0.481	67.6	93.3
	230.0	269.6	349.5	2.851	641	1749	30.35	0.632	73.6	97.7
	230.0	257.1	334.7	3.373	772	1731	39.01	0.804	77.7	99.5
	230.0	246.3	321.3	4.054	932	1709	48.92	0.995	79.7	99.9
	230.0	235.8	309.1	4.713	1081	1686	57.18	1.148	79.2	99.8
<b>65.844 OZ-FT</b>	<b>230.0</b>	<b>222.9</b>	<b>295.0</b>	<b>5.539</b>	<b>1261</b>	<b>1656</b>	<b>65.84</b>	<b>1.298</b>	<b>76.8</b>	<b>99.0</b>
	230.0	222.3	294.2	5.587	1272	1654	66.52	1.310	76.9	99.0
<b>72.098 OZ-FT</b>	<b>230.0</b>	<b>212.5</b>	<b>284.3</b>	<b>6.203</b>	<b>1400</b>	<b>1629</b>	<b>72.10</b>	<b>1.398</b>	<b>74.5</b>	<b>98.1</b>
	230.0	209.3	281.1	6.414	1444	1621	73.75	1.423	73.5	97.8
<b>76.582 OZ-FT</b>	<b>230.0</b>	<b>203.0</b>	<b>275.2</b>	<b>6.810</b>	<b>1523</b>	<b>1603</b>	<b>76.58</b>	<b>1.461</b>	<b>71.6</b>	<b>97.2</b>
	230.0	195.8	268.6	7.270	1613	1582	79.40	1.495	69.2	96.5
	230.0	182.1	257.4	8.117	1771	1538	83.63	1.531	64.5	94.9
	230.0	168.2	247.6	8.956	1917	1489	85.39	1.513	58.9	93.0
<b>BDT OZ-FT</b>	<b>230.0</b>	<b>159.4</b>	<b>242.1</b>	<b>9.482</b>	<b>2004</b>	<b>1454</b>	<b>86.01</b>	<b>1.488</b>	<b>55.4</b>	<b>91.9</b>
	230.0	154.6	239.4	9.763	2048	1433	85.64	1.461	53.2	91.2
	230.0	141.3	233.2	10.513	2159	1372	84.00	1.372	47.4	89.3
	230.0	128.8	228.8	11.213	2254	1304	81.29	1.262	41.8	87.4
	230.0	116.8	226.1	11.861	2336	1229	77.24	1.130	36.1	85.6
	230.0	105.7	224.8	12.440	2401	1147	72.44	0.990	30.8	83.9
	230.0	95.2	224.8	12.954	2452	1058	66.42	0.837	25.5	82.3
	230.0	85.9	225.9	13.400	2492	962	60.71	0.696	20.8	80.9
	230.0	76.9	227.9	13.812	2526	855	54.00	0.550	16.2	79.5
	230.0	69.1	230.4	14.152	2552	742	47.45	0.419	12.2	78.4
	230.0	61.8	233.3	14.427	2569	619	40.15	0.296	8.6	77.4
	230.0	55.5	236.7	14.633	2580	488	33.22	0.193	5.6	76.7
	230.0	48.9	241.0	14.781	2584	325	22.00	0.085	2.5	76.0
	230.0	45.6	244.2	14.814	2581	197	22.37	0.053	1.5	75.8

DRAWING NO. PAGE 15 of 24 REV.  
**3LU90BG** -

**3LU90BG**

REV.

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**Curve Descriptions:**

Motor(1) Test 4 Run 230V 60 Hz 4P  
 M1 - HIGH SPEED REV 20µfd Run  
 □ SPEED vs TORQUE  
 ■ SPEED vs WATTS  
 △ SPEED vs ILine

**Motor Ratings:**

(1) K055HXLNU251301 ID: 1

DRAWING NO.	PAGE 16 of 24	REV.
	<b>3LU90BG</b>	-

**3LU90BG**

REV.

-

## Dayton Manufacturing Company

### Motor Description

### Test Conditions

Model:	K055HXLNU251301	Test Type:	Start	Run Cap:	20
Motor ID:	1	Test Number:	17	Start Cap:	0ufd
Poles:	4	Poles:	4	Environment:	24.9 Deg C 51 % RH 965 hPa
Volts:	208-230	Volts:	230	Tested:	8/18/2016 11:50:52 AM
Frequency:	60	Hz:	60	Tested By:	Navarro, Susana
HP:	1	Rotation:		Gear Ratio:	1:1
Speed:	1625	Special Cond:	M2	Bearing Friction:	-0.23 Oz-Ft
Phase:	1	Speed Conn:	M2	Windage Torque:	-22.13 Oz-Ft
Protector:	7AM031-A5	TestBoard:	CMD InLine Three Phase #2 Fixture #1		

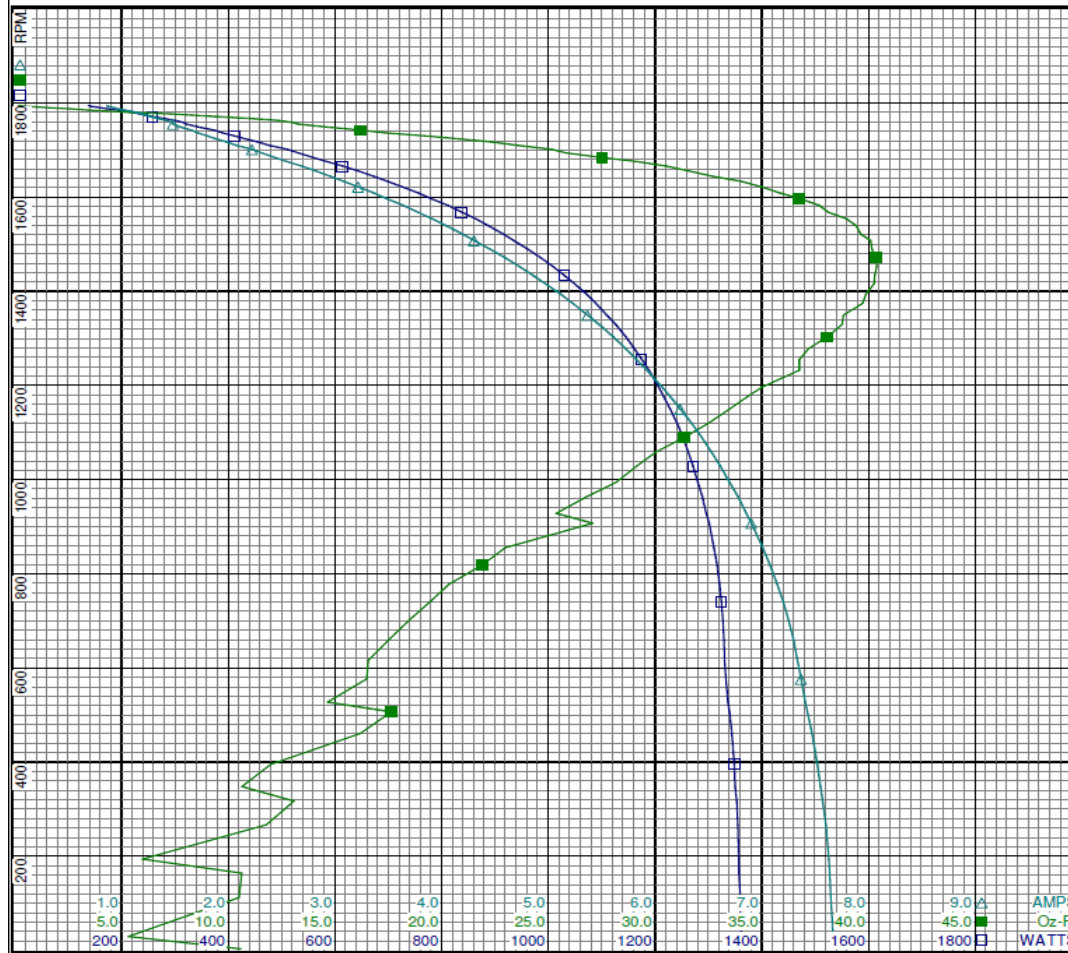
Special Points	Vline (V)	Vaux (V)	Vcap (V)	Iline (A)	Watts	RPM	Tq (Oz-ft)	HP	Eff (%)	PF (%)
PUT OZ-FT	230.0	33.5	176.7	7.668	1361.6	29	5.32	0.002	0.1	77.2
	230.0	33.5	176.7	7.668	1361.6	29	5.32	0.002	0.1	77.2
	230.0	35.4	172.7	7.629	1356.6	193	5.98	0.014	0.8	77.3
	230.0	38.3	168.9	7.550	1350.2	348	10.64	0.044	2.4	77.8
	230.0	42.2	164.8	7.429	1339.6	506	17.65	0.106	5.9	78.4
	230.0	45.4	162.9	7.335	1330.3	616	16.57	0.121	6.8	78.8
	230.0	51.3	161.8	7.199	1324.3	741	19.48	0.172	9.7	80.0
	230.0	57.4	160.3	7.010	1310.2	855	22.98	0.234	13.3	81.3
	230.0	64.0	159.0	6.778	1288.7	963	26.78	0.307	17.8	82.7
	230.0	71.0	158.4	6.528	1262.0	1058	30.05	0.379	22.4	84.1
	230.0	78.8	158.7	6.239	1228.5	1150	33.48	0.458	27.8	85.6
	230.0	87.3	160.0	5.923	1188.5	1232	36.77	0.539	33.9	87.2
	230.0	95.5	162.4	5.607	1145.2	1303	38.09	0.591	38.5	88.8
	230.0	105.2	166.5	5.230	1089.1	1374	39.72	0.650	44.5	90.5
	230.0	114.5	171.6	4.856	1029.7	1434	40.29	0.688	49.8	92.2
	230.0	124.5	178.3	4.453	961.3	1489	40.17	0.712	55.3	93.9
	230.0	134.6	186.2	4.047	888.5	1539	39.44	0.722	60.7	95.5
	230.0	144.6	194.9	3.642	811.8	1582	37.70	0.710	65.3	96.9
	230.0	154.9	205.0	3.218	726.7	1621	35.01	0.676	69.4	98.2
	230.0	164.7	215.2	2.821	643.6	1655	31.59	0.622	72.1	99.2
	230.0	174.1	225.8	2.437	559.4	1684	27.52	0.552	73.6	99.8
	230.0	183.1	236.5	2.077	477.0	1710	23.57	0.480	75.0	99.9
	230.0	191.5	246.5	1.799	410.9	1730	19.19	0.395	71.8	99.3
	230.0	202.6	258.9	1.562	348.0	1748	14.81	0.308	66.1	96.8
	230.0	212.5	271.7	1.417	300.6	1762	12.37	0.259	64.4	92.2
	230.0	218.5	282.4	1.229	244.3	1774	8.27	0.175	53.4	86.4
	230.0	220.0	286.7	1.093	208.8	1782	4.47	0.095	33.9	83.1
	230.0	221.8	291.1	0.935	163.1	1789	1.80	0.038	17.5	75.8
	230.0	222.9	293.3	0.860	137.8	1794	0.17	0.004	2.0	69.6

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**3LU90BG** -

**3LU90BG**

REV.

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**Curve Descriptions:**

Motor(1) Test 17 Start 230V 60 Hz 4P  
M2 M2 20ufd Run

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

**Motor Ratings:**

(1) K055HXLNU251301 ID: 1

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<b>3LU90BG</b>		-

**3LU90BG**

REV.

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## Dayton Manufacturing Company

### Motor Description

Model: K055HXLNU251301  
 Motor ID: 1  
 Poles: 4  
 Volts: 208-230  
 Frequency: 60  
 HP: 1  
 Speed: 1625  
 Phase: 1  
 Protector: 7AM031-A5

### Test Conditions

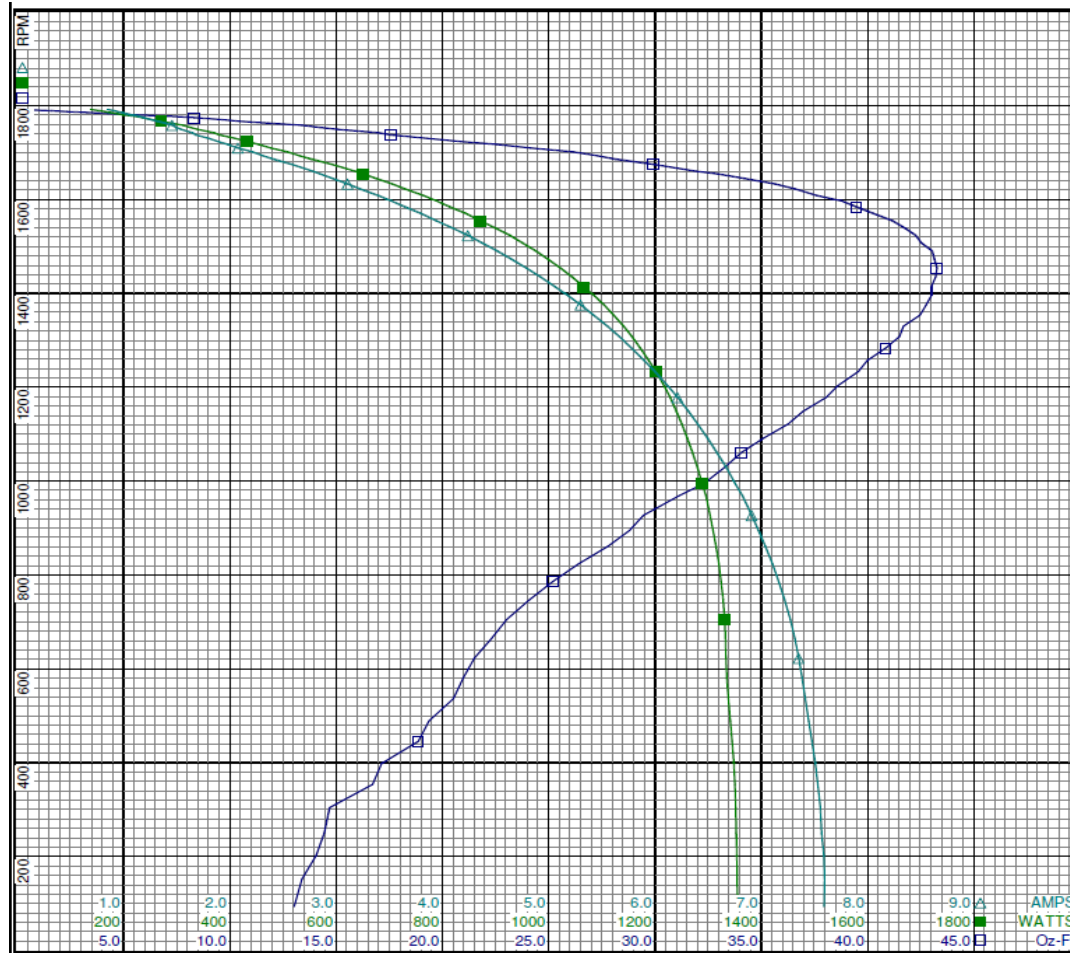
Test Type: Run  
 Test Number: 5  
 Poles: 4  
 Volts: 230  
 Hz: 60  
 Rotation: REV  
 Special Cond: M2 - MEDIUM-SPEED  
 Speed Conn:  
 TestBoard: CMD InLine Three Phase #2 Fixture #1  
 Run Cap: 20  
 Start Cap: 0µfd  
 Environment: 24.9 Deg C 51 % RH 965 hPa  
 Tested: 8/18/2016 11:49:17 AM  
 Tested By: Navarro, Susana  
 Gear Ratio: 1:1  
 Bearing Friction: -0.20 Oz-Ft  
 Windage Torque: -20.27 Oz-Ft

Special Points	Vline (V)	Vaux (V)	Vcap (V)	Iline (A)	Watts	RPM	Tq(Oz-ft)	HP	Eff (%)	PF (%)
	230.0	222.5	293.2	0.850	137.3	1792	0.00	0.000	0.0	70.3
	230.0	221.5	290.6	0.944	164.9	1787	2.33	0.050	22.4	76.0
	230.0	220.2	287.3	1.067	199.3	1780	5.46	0.116	43.3	81.2
	230.0	217.2	280.7	1.257	254.0	1770	9.67	0.204	59.8	87.9
	230.0	211.4	269.6	1.458	311.6	1758	13.38	0.280	67.0	92.9
	230.0	199.6	255.0	1.648	370.1	1742	17.00	0.352	71.0	97.6
	230.0	188.9	243.2	1.891	433.0	1723	20.85	0.428	73.7	99.5
	230.0	180.5	232.9	2.213	508.4	1701	26.15	0.530	77.7	99.9
	230.0	171.5	222.5	2.579	591.4	1675	29.91	0.596	75.2	99.7
<b>32.91 OZ-FT</b>	<b>230.0</b>	<b>165.2</b>	<b>215.2</b>	<b>2.847</b>	<b>649.9</b>	<b>1654</b>	<b>32.91</b>	<b>0.648</b>	<b>74.4</b>	<b>99.3</b>
	230.0	162.2	212.0	2.966	675.3	1645	34.20	0.670	74.0	99.0
<b>36.379 OZ-FT</b>	<b>230.0</b>	<b>156.5</b>	<b>206.1</b>	<b>3.200</b>	<b>724.1</b>	<b>1625</b>	<b>36.38</b>	<b>0.704</b>	<b>72.5</b>	<b>98.4</b>
	230.0	151.8	201.4	3.396	764.5	1608	37.62	0.720	70.3	97.9
<b>38.999 OZ-FT</b>	<b>230.0</b>	<b>147.9</b>	<b>197.5</b>	<b>3.559</b>	<b>796.9</b>	<b>1593</b>	<b>39.00</b>	<b>0.739</b>	<b>69.2</b>	<b>97.4</b>
	230.0	142.2	192.2	3.799	844.2	1570	40.27	0.753	66.5	96.6
	230.0	131.7	183.1	4.240	926.8	1523	42.26	0.766	61.7	95.0
	230.0	121.6	175.6	4.652	999.0	1472	43.15	0.756	56.5	93.4
<b>BDT OZ-FT</b>	<b>230.0</b>	<b>118.3</b>	<b>173.4</b>	<b>4.790</b>	<b>1022.3</b>	<b>1454</b>	<b>43.27</b>	<b>0.749</b>	<b>54.6</b>	<b>92.8</b>
	230.0	111.5	169.3	5.060	1065.9	1414	42.99	0.724	50.6	91.6
	230.0	102.4	164.8	5.421	1121.8	1354	42.48	0.684	45.5	90.0
	230.0	93.1	161.4	5.777	1172.1	1283	40.86	0.624	39.7	88.2
	230.0	84.2	159.3	6.119	1216.9	1203	38.60	0.553	33.9	86.5
	230.0	76.3	158.4	6.403	1250.6	1121	36.26	0.484	28.9	84.9
	230.0	68.9	158.6	6.669	1279.7	1029	33.29	0.408	23.8	83.4
	230.0	61.8	159.4	6.911	1303.7	927	29.45	0.325	18.6	82.0
	230.0	55.8	160.7	7.104	1320.1	823	26.41	0.259	14.6	80.8
	230.0	49.6	162.2	7.273	1331.0	704	23.02	0.193	10.8	79.6
	230.0	44.3	163.3	7.383	1335.0	580	20.98	0.145	8.1	78.6
	230.0	40.9	166.3	7.476	1345.1	445	18.86	0.100	5.5	78.2
	230.0	37.7	169.8	7.555	1351.9	304	14.69	0.053	2.9	77.8
	230.0	35.4	172.9	7.596	1354.6	151	13.39	0.024	1.3	77.5

**3LU90BG**

REV.

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**Curve Descriptions:**

- Motor(1) Test 5 Run 230V 60 Hz 4P
- M2 - MEDIUM-SPEED REV 20ufd Run
- SPEED vs TORQUE
- SPEED vs WATTS
- △ SPEED vs ILine

**Motor Ratings:**

(1) K055HXLNU251301 ID: 1

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3LU90BG		-

# Performance Data



**3LU90BG**

REV.

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## Dayton Manufacturing Company

### Motor Description

Model: K055HXLNU251301  
 Motor ID: 1  
 Poles: 4  
 Volts: 208-230  
 Frequency: 60  
 HP: 1  
 Speed: 1625  
 Phase: 1  
 Protector: 7AM031-A5

### Test Conditions

Test Type: Start  
 Test Number: 18  
 Poles: 4  
 Volts: 230  
 Hz: 60  
 Rotation:  
 Special Cond: M3  
 Speed Conn: M3  
 TestBoard: CMD InLine Three Phase #2 Fixture #1  
 Run Cap: 20  
 Start Cap: 0µfd  
 Environment: 24.9 Deg C 51 % RH 965 hPa  
 Tested: 8/18/2016 11:57:04 AM  
 Tested By: Navarro, Susana  
 Gear Ratio: 1:1  
 Bearing Friction: -0.24 Oz-Ft  
 Windage Torque: -20.33 Oz-Ft

Special Points PUT OZ-FT	Vline (V)	Vaux (V)	Vcap (V)	Iline (A)	Watts	RPM	Tq (Oz-ft)	HP	Eff (%)	PF (%)
230.0	31.1	154.3	5.846	1025.7	27	2.15	0.001	0.0	76.3	
230.0	31.1	154.3	5.846	1025.7	27	2.15	0.001	0.0	76.3	
230.0	31.4	150.1	5.790	1016.9	194	3.55	0.008	0.6	76.4	
230.0	34.1	147.0	5.739	1014.5	348	5.80	0.024	1.8	76.9	
230.0	37.2	143.8	5.649	1007.6	506	12.47	0.075	5.6	77.5	
230.0	40.2	141.8	5.568	1000.5	619	12.32	0.091	6.8	78.1	
230.0	44.8	140.6	5.470	996.3	739	14.37	0.126	9.5	79.2	
230.0	50.1	139.0	5.325	986.0	856	17.08	0.174	13.2	80.5	
230.0	55.6	137.7	5.156	970.5	961	19.86	0.227	17.5	81.8	
230.0	61.5	137.0	4.970	951.6	1057	21.98	0.277	21.7	83.2	
230.0	69.3	137.0	4.723	924.9	1160	26.52	0.366	29.5	85.1	
230.0	75.4	138.1	4.514	897.7	1230	25.98	0.380	31.6	86.5	
230.0	82.9	140.2	4.264	864.3	1304	28.12	0.436	37.7	88.1	
230.0	90.8	143.4	3.994	825.7	1372	29.07	0.475	42.9	89.9	
230.0	99.2	148.0	3.705	780.8	1433	29.74	0.507	48.5	91.6	
230.0	107.4	153.3	3.424	734.6	1486	29.81	0.527	53.6	93.3	
230.0	116.5	160.4	3.103	678.2	1537	29.36	0.537	59.1	95.0	
230.0	125.9	168.8	2.764	614.1	1583	27.86	0.525	63.8	96.6	
230.0	134.4	177.3	2.460	554.0	1621	25.88	0.499	67.2	97.9	
230.0	142.7	186.2	2.167	493.2	1653	23.72	0.467	70.6	99.0	
230.0	151.4	196.0	1.865	427.6	1684	20.61	0.413	72.1	99.7	
230.0	159.0	205.1	1.605	368.8	1709	17.29	0.352	71.1	99.9	
230.0	168.7	216.2	1.338	304.9	1733	14.09	0.291	71.2	99.1	
230.0	176.4	225.3	1.202	268.7	1748	12.05	0.251	69.6	97.2	
230.0	187.3	238.2	1.113	235.5	1762	7.85	0.165	52.2	92.0	
230.0	192.9	248.8	0.965	191.1	1774	4.97	0.105	41.0	86.1	
230.0	193.9	252.6	0.857	162.7	1783	3.22	0.068	31.3	82.6	
230.0	195.5	256.8	0.732	126.8	1789	1.05	0.022	13.2	75.3	
230.0	196.3	258.4	0.688	111.5	1793	0.03	0.001	0.4	70.5	

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**3LU90BG** -

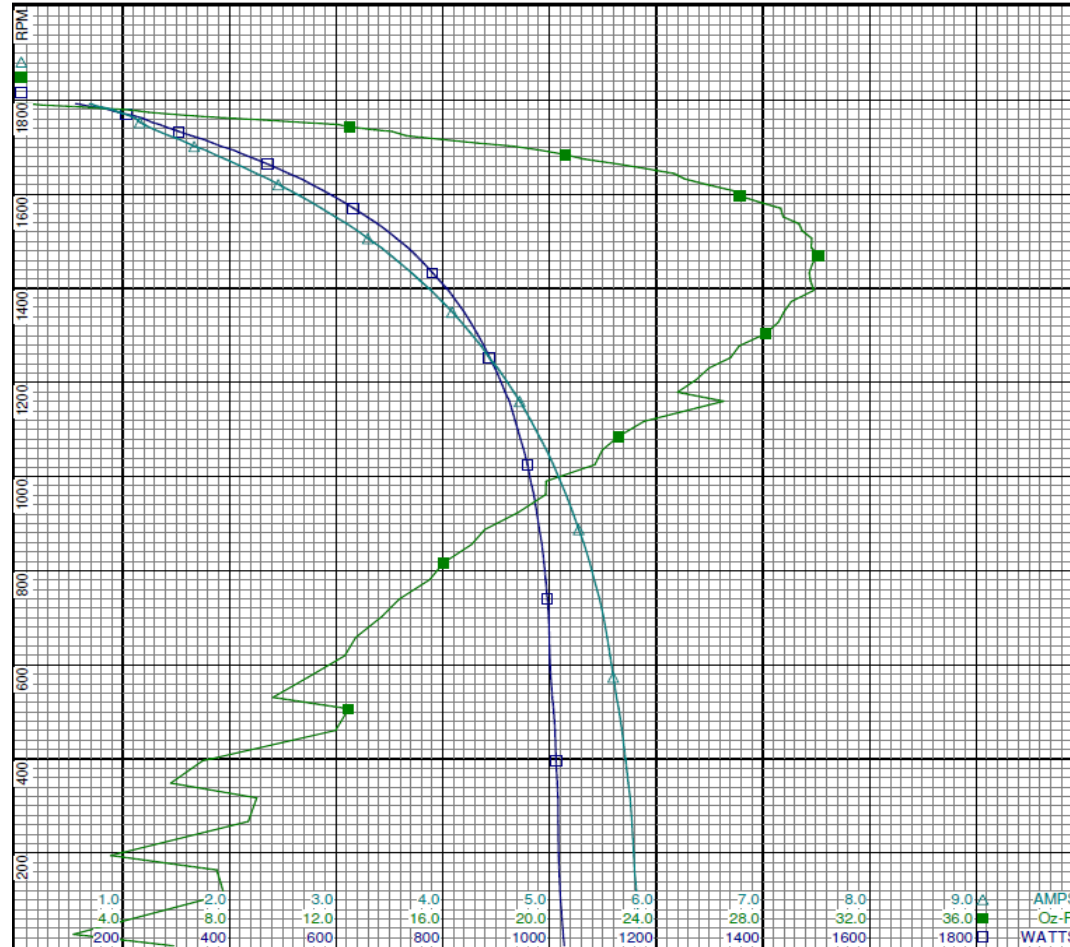
# Performance Data



**3LU90BG**

REV.

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**Curve Descriptions:**  
 Motor(1) Test 18 Start 230V 60 Hz 4P  
 M3 M3 20ufd Run  
 □ SPEED vs WATTS  
 ■ SPEED vs TORQUE  
 △ SPEED vs iLine

**Motor Ratings:**  
 (1) K055HXLNU251301 ID: 1

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<b>3LU90BG</b>		-

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



# Performance Data



**3LU90BG**

REV.

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## Dayton Manufacturing Company

### Motor Description

Model: K055HXLNU251301  
 Motor ID: 1  
 Poles: 4  
 Volts: 208-230  
 Frequency: 60  
 HP: 1  
 Speed: 1625  
 Phase: 1  
 Protector: 7AM031-A5

### Test Conditions

Test Type: Run  
 Test Number: 6  
 Poles: 4  
 Volts: 230  
 Hz: 60  
 Rotation: REV  
 Special Cond: M3 - LOW SPEED  
 Speed Conn:  
 TestBoard: CMD InLine Three Phase #2 Fixture #1  
 Run Cap: 20  
 Start Cap: 0ufd  
 Environment: 24.9 Deg C 51 % RH 965 hPa  
 Tested: 8/18/2016 11:54:22 AM  
 Tested By: Navarro, Susana  
 Gear Ratio: 1:1  
 Bearing Friction: -0.31 Oz-Ft  
 Windage Torque: -19.59 Oz-Ft

Special Points	Vline (V)	Vaux (V)	Vcap(V)	Iline (A)	Watts	RPM	Tq(Oz-ft)	HP	Eff (%)	PF (%)
	230.0	196.3	258.2	0.701	112.8	1792	0.00	0.000	0.0	70.0
	230.0	197.4	261.0	0.621	86.6	1800	-1.86	-0.040	0.0	60.6
	230.0	197.8	261.6	0.609	81.6	1800	-2.13	-0.046	0.0	58.3
	230.0	197.8	261.6	0.609	81.7	1800	-2.11	-0.045	0.0	58.3
	230.0	197.7	261.4	0.612	82.4	1800	-1.96	-0.042	0.0	58.6
	230.0	197.4	260.8	0.628	89.0	1798	-1.30	-0.028	0.0	61.6
	230.0	196.8	259.7	0.657	100.0	1795	-0.58	-0.012	0.0	66.1
	230.0	196.1	258.1	0.701	115.1	1791	0.58	0.012	8.1	71.4
	230.0	194.5	254.9	0.789	143.8	1785	2.64	0.056	29.1	79.2
	230.0	193.8	252.1	0.874	166.2	1777	4.70	0.099	44.6	82.7
	230.0	190.3	244.1	1.042	213.9	1767	8.79	0.185	64.5	89.2
	230.0	183.1	232.4	1.160	250.7	1754	11.51	0.240	71.5	94.0
	230.0	171.3	219.1	1.299	294.3	1737	13.87	0.287	72.7	98.5
	230.0	162.2	208.7	1.513	347.3	1716	16.84	0.344	73.9	99.8
	230.0	154.6	199.7	1.763	405.0	1693	20.90	0.421	77.6	99.9
	230.0	146.6	190.1	2.055	469.6	1665	23.95	0.475	75.4	99.4
<b>24.391 OZ-FT</b>	<b>230.0</b>	<b>145.6</b>	<b>189.0</b>	<b>2.088</b>	<b>476.7</b>	<b>1661</b>	<b>24.39</b>	<b>0.482</b>	<b>75.5</b>	<b>99.3</b>
	230.0	138.1	180.8	2.358	533.9	1633	26.67	0.519	72.4	98.4
<b>26.987 OZ-FT</b>	<b>230.0</b>	<b>137.4</b>	<b>180.1</b>	<b>2.383</b>	<b>539.1</b>	<b>1630</b>	<b>26.99</b>	<b>0.524</b>	<b>72.5</b>	<b>98.4</b>
<b>29.111 OZ-FT</b>	<b>230.0</b>	<b>129.4</b>	<b>171.8</b>	<b>2.675</b>	<b>598.2</b>	<b>1596</b>	<b>29.11</b>	<b>0.553</b>	<b>69.0</b>	<b>97.2</b>
	230.0	129.4	171.8	2.675	598.2	1596	29.11	0.553	69.0	97.2
	230.0	120.1	163.0	3.015	664.1	1553	31.51	0.582	65.4	95.8
	230.0	111.3	155.8	3.329	719.9	1506	32.37	0.580	60.1	94.0
<b>BDT OZ-FT</b>	<b>230.0</b>	<b>102.6</b>	<b>149.6</b>	<b>3.636</b>	<b>772.5</b>	<b>1453</b>	<b>32.93</b>	<b>0.570</b>	<b>55.0</b>	<b>92.4</b>
	230.0	102.6	149.6	3.636	772.5	1453	32.93	0.570	55.0	92.4
	230.0	92.5	144.0	3.977	824.9	1384	30.96	0.510	46.1	90.2
	230.0	85.9	140.9	4.214	860.8	1329	31.90	0.505	43.7	88.8
	230.0	78.0	138.5	4.471	894.7	1255	30.31	0.453	37.8	87.0
	230.0	70.7	137.2	4.706	923.7	1176	28.94	0.405	32.7	85.3
	230.0	64.1	136.9	4.920	948.1	1092	26.72	0.347	27.3	83.8
	230.0	57.9	137.3	5.112	967.7	997	24.53	0.291	22.4	82.3
	230.0	52.1	138.5	5.284	983.4	893	22.38	0.238	18.0	80.9
	230.0	46.9	140.1	5.430	995.0	781	19.55	0.182	13.6	79.7
	230.0	42.0	141.5	5.544	1001.7	665	17.68	0.140	10.4	78.6
	230.0	37.9	143.0	5.627	1006.0	533	15.86	0.101	7.5	77.7
	230.0	35.1	145.9	5.698	1012.5	399	13.62	0.065	4.8	77.3
	230.0	32.6	148.5	5.743	1014.7	253	11.80	0.035	2.6	76.8
	230.0	31.0	151.7	5.765	1017.7	95	10.93	0.012	0.9	76.8

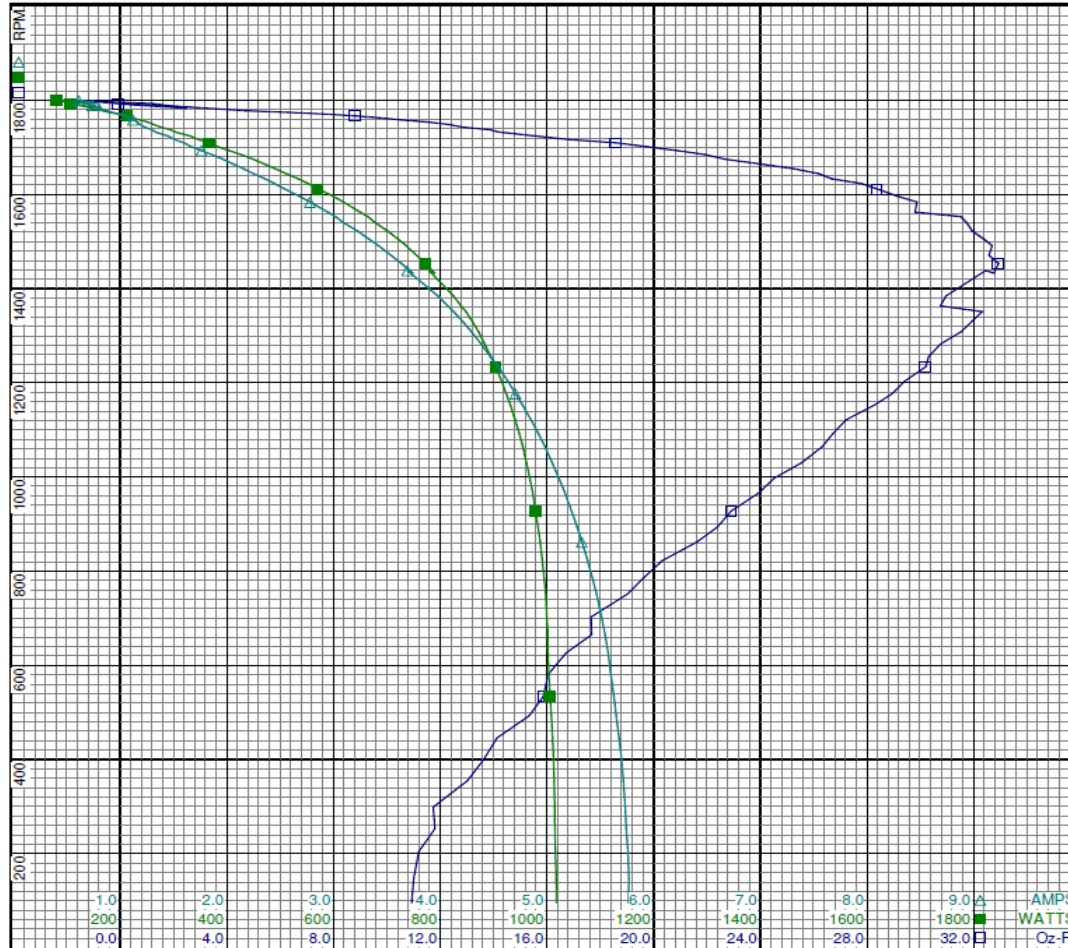
DRAWING NO. PAGE 23 of 24 REV.  
**3LU90BG** -



**3LU90BG**

REV.

-



**Curve Descriptions:**

Motor(1) Test 6 Run 230V 60 Hz 4P  
M3 - LOW SPEED REV 20ufd Run

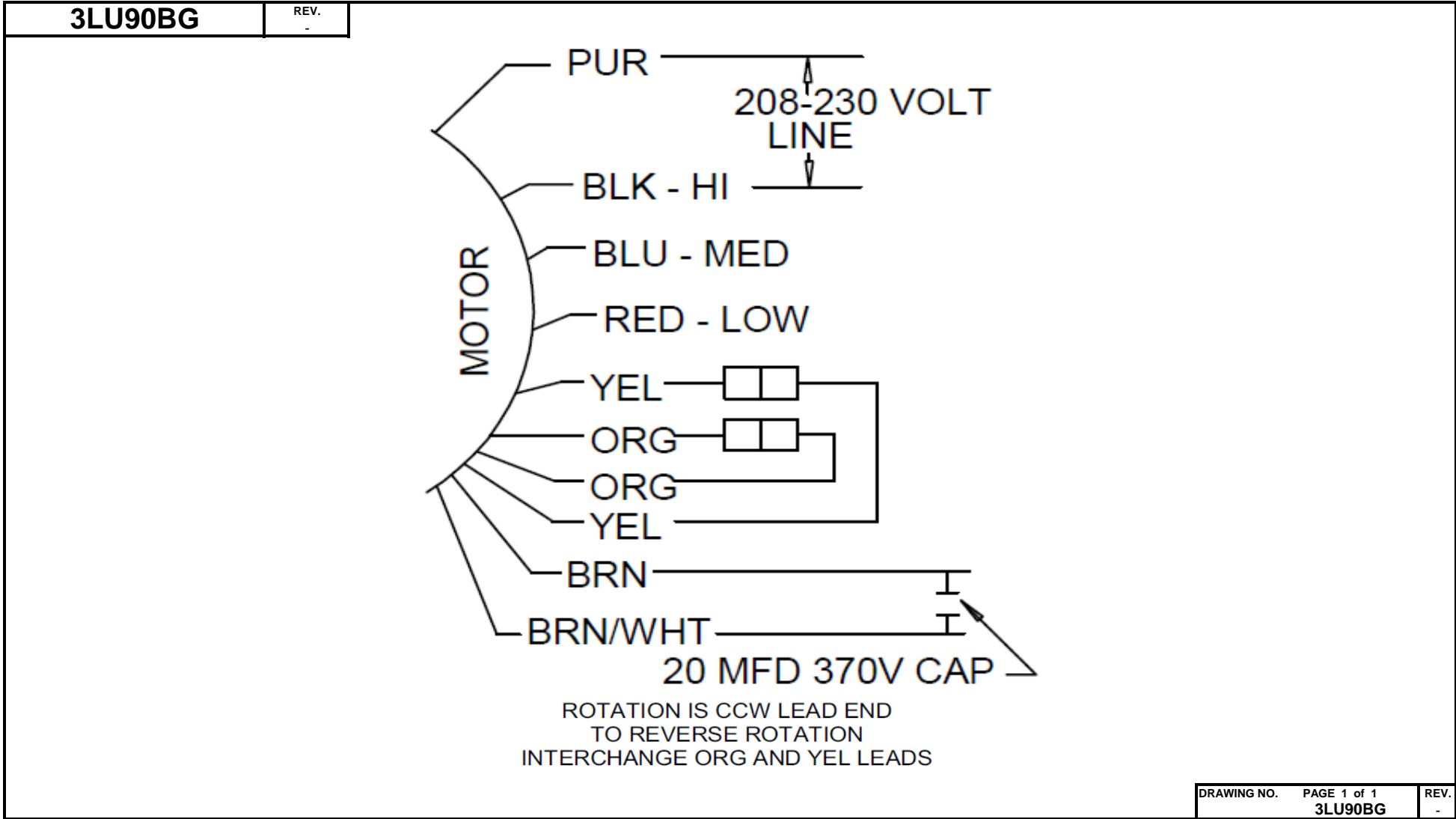
- SPEED vs TORQUE
- SPEED vs WATTS
- △ SPEED vs ILine

**Motor Ratings:**

(1) K055HXLNU251301 ID: 1

DRAWING NO.	PAGE 24 of 24	REV.
3LU90BG		-

# Wiring Diagram



**Dayton**<sup>®</sup>**DIRECT DRIVE  
BLOWER MOTOR****HP:** 1  
**VOLTS:** 208-230[ BAR CODE ]Part No **3LU90BG****AMPS:** 6 - 6.8  
**RPM:** 1625/3SPD  
**DUTY:** CONT  
**SF:** 1.0  
**KVA CODE:**  
**ENCL:** OAO**PH:** 1  
**HZ:** 60  
**FR:** 48YZ  
**INS CL:** B  
**AMB:** 40 °C  
**SFA:** 6 - 6.8**Disconnect Power Before Making Any  
Electrical Connections or Changes****THERMALLY PROTECTED:** AUTO

MFG. NO. [ ] [ ] PROT. CODE: [ 7A070 ]

AVG. F.L. 74.5  
EFF.**MTR REF:** K55HXLNU-2513**CONNECTIONS**

COM	PURPLE
HI	BLACK
MED	BLUE
LO	RED
CAP	BROWN
CAP	BROWN/WHITE

**20 MFD 370 VAC  
CAP. REQD.**ROTATION IS CCW LEAD END  
TO REVERSE ROTATION  
INTERCHANGE ORG AND YEL LEADS

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