

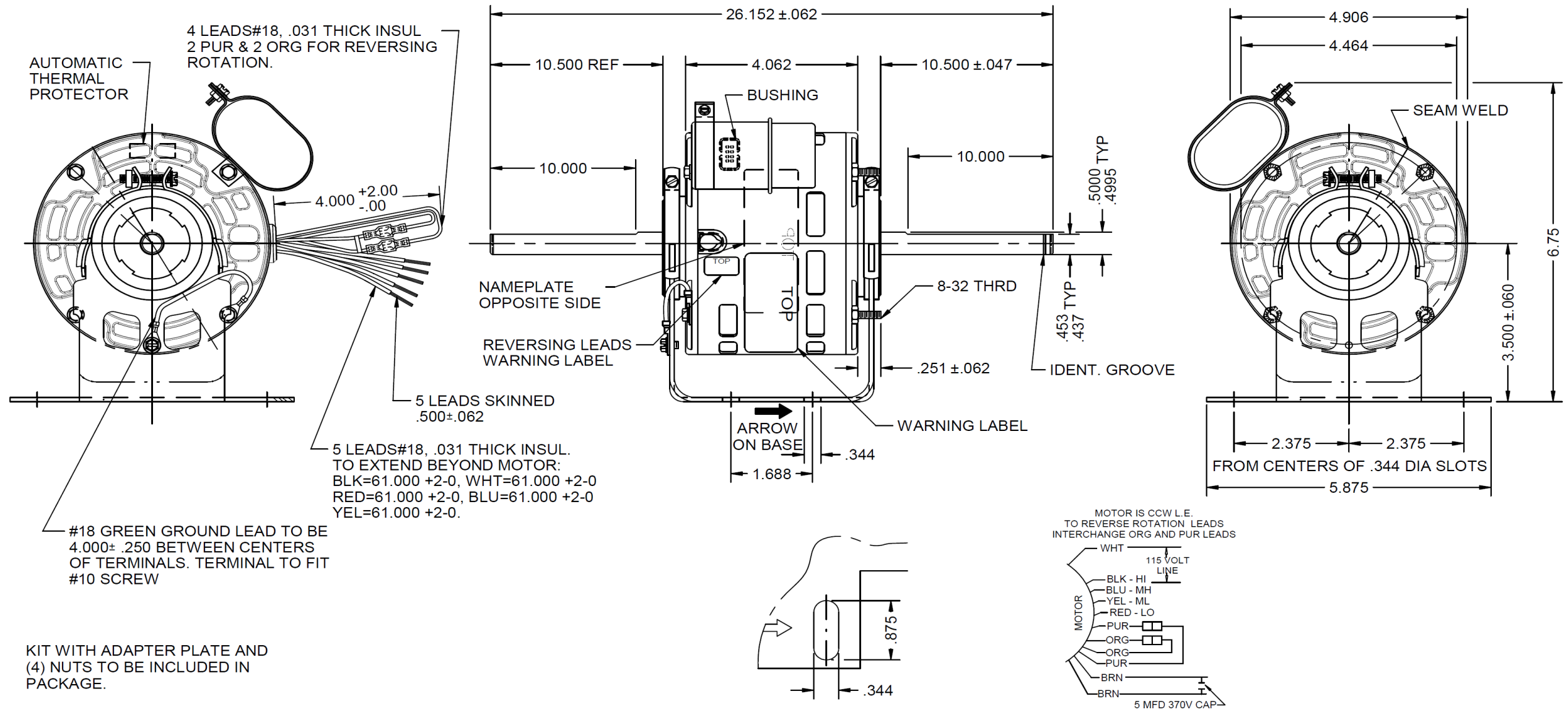
# Dimensional Drawing



**5WJA8BG**

REV.  
-

MODEL	REF	CUSTOMER	HP	VOLTS	AMPS	HZ	RPM	ROTATION	CUSTOMER PN	DESCRIPTION / REMARKS
K48HXMRE-1181	E42602	GRAINGER	1/15	115	1.4	60	1050 / 4 SPD	C.CW. LEAD END REV	5WJA8BG	42Y, SAB, OAO.



DRAWING NO.	PAGE 1 of 1	REV.
5WJA8BG		-

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

**5WJA8BG**

REV.  
-

## MOTOR PERFORMANCE

<b>HP:</b>	1/15 HP								
<b>Poles:</b>	6P								
<b>No. of Speeds:</b>	1speed	<b>Hi</b>	<b>Hi-Med</b>	<b>Med-low</b>	<b>Low</b>				
<b>Volts:</b>	115 V	115 V	115 V	115 V	115 V				
<b>HZ:</b>	60	60	60	60	60				
<b>Service Factor:</b>	1								
<b>Efficiency:</b>	@ Rated Load								
<b>Power Factor:</b>	@ Rated Load								
<b>Amps:</b>	@ No Load								
	@ Rated Load	1.414	1.083	0.877	0.698				
	@ Service Factor	1.414	1.083	0.877	0.698				
	@ Locked Rotor	2.941	2.494	2.139	1.863				
<b>RPM:</b>	@ Rated Load	1077	1095	1113	1142				
<b>Ambient (°C):</b>	60								
<b>Altitude (FASL):</b>									
<b>Torques:</b>	Breakdown	9.402	7.903	6.66	5.733				
	Locked Rotor	5.174	4.763	3.766	2.968				
	Pull-Up	5.174	4.763	3.766	2.968				
	Rated Load	5.224	3.855	2.528	1.232				
	Service Factor	5.224	3.855	2.528	1.232				
<b>Watts:</b>	Rated Load	115.1	86.3	66.4	47.74				
<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)	Cu							
	Run (Main)	Cu							
<b>Capacitor(s):</b>	Start (MFD / Volts)	N/A							
	No. of Start Capacitors								
	Run (MFD / Volts)	5 mFd, 370v							
	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.  
5WJA8BG -

# Performance Data



**5WJA8BG**

REV.

-

## Dayton Manufacturing Company

### Motor Description

Model: K048MRE1181 5WJA8BG  
 Motor ID:  
 Poles: 6  
 Volts: 115  
 Frequency: 60  
 HP: 1/15  
 Speed: 1075  
 Phase: 1  
 Protector: 7AM036-A5

### Test Conditions

Test Type: Start Run Cap: 5  
 Test Number: 3 Start Cap: 0µfd  
 Poles: 6 Environment: 22.8 Deg C 52 % RH 967 hPa  
 Volts: 115 Tested: 11/7/2016 12:19:26 PM  
 Hz: 60 Tested By: Navarro, Susana  
 Rotation: CCW Gear Ratio: 1:1  
 Special Cond: Bearing Friction: -0.41 Oz-Ft  
 Speed Conn: M1 Windage Torque: -0.91 Oz-Ft  
 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 (%)
	115.0	86.6	148.1	2.941	295.8	20	5.174	0.001	0.3	87.5
	115.0	94.1	147.1	2.930	294.9	96	6.376	0.007	1.8	87.5
	115.0	100.8	146.6	2.913	293.1	160	7.320	0.014	3.6	87.5
	115.0	109.2	147.1	2.889	291.0	232	8.003	0.022	5.7	87.6
	115.0	116.1	148.2	2.864	288.7	287	8.608	0.029	7.6	87.7
	115.0	125.2	150.2	2.827	285.4	354	9.047	0.038	10.0	87.8
	115.0	134.0	153.1	2.787	281.8	414	9.468	0.047	12.3	87.9
	115.0	143.9	157.6	2.744	278.2	468	9.862	0.055	14.7	88.2
	115.0	152.9	162.5	2.698	274.3	520	10.222	0.063	17.2	88.4
	115.0	162.7	168.5	2.647	269.9	570	10.547	0.072	19.8	88.7
	115.0	172.9	175.1	2.592	265.1	616	10.826	0.079	22.3	89.0
	115.0	182.9	182.2	2.531	259.7	661	11.054	0.087	25.0	89.2
	115.0	194.2	190.7	2.463	253.5	707	11.219	0.094	27.8	89.5
	115.0	204.3	198.5	2.399	247.6	746	11.341	0.101	30.3	89.7
	115.0	215.3	207.6	2.329	240.9	785	11.354	0.106	32.9	90.0
	115.0	226.2	216.8	2.258	234.0	821	11.316	0.111	35.3	90.1
	115.0	236.5	225.9	2.191	227.4	853	11.199	0.114	37.3	90.2
	115.0	246.7	235.3	2.120	220.3	884	10.979	0.116	39.1	90.4
	115.0	258.0	245.9	2.044	212.4	916	10.703	0.117	41.0	90.4
	115.0	268.2	255.9	1.973	204.9	944	10.329	0.116	42.2	90.3
	115.0	278.3	265.8	1.903	197.3	969	9.895	0.114	43.2	90.1
	115.0	288.0	275.8	1.835	189.7	992	9.395	0.111	43.7	89.9
	115.0	297.9	286.2	1.765	181.9	1016	8.835	0.107	43.8	89.6
	115.0	306.1	294.9	1.707	175.1	1035	8.249	0.102	43.3	89.2
	115.0	315.1	304.8	1.642	167.1	1055	7.567	0.095	42.4	88.5
	115.0	322.8	313.3	1.589	160.5	1072	6.892	0.088	40.9	87.8
	115.0	330.7	322.5	1.532	152.9	1089	6.146	0.080	38.9	86.8
	115.0	338.4	331.2	1.485	146.1	1104	5.413	0.071	36.3	85.5
	115.0	343.8	337.7	1.447	140.6	1117	4.701	0.062	33.2	84.4
	115.0	349.1	344.8	1.408	134.1	1129	3.950	0.053	29.5	82.8
	115.0	354.6	351.7	1.371	127.7	1140	3.234	0.044	25.6	81.0
	115.0	359.1	357.1	1.346	122.8	1149	2.552	0.035	21.2	79.3
	115.0	362.1	361.5	1.325	118.4	1158	1.918	0.026	16.7	77.7
	115.0	365.1	366.0	1.305	114.0	1166	1.305	0.018	11.8	76.0
	115.0	367.4	369.4	1.291	110.6	1172	0.794	0.011	7.5	74.5
	115.0	369.4	372.6	1.274	106.8	1178	0.267	0.004	2.6	72.9
	115.0	370.4	374.2	1.268	105.1	1181	0.000	0.000	0.0	72.1

DRAWING NO. PAGE 1 of 8 REV.  
 5WJA8BG -

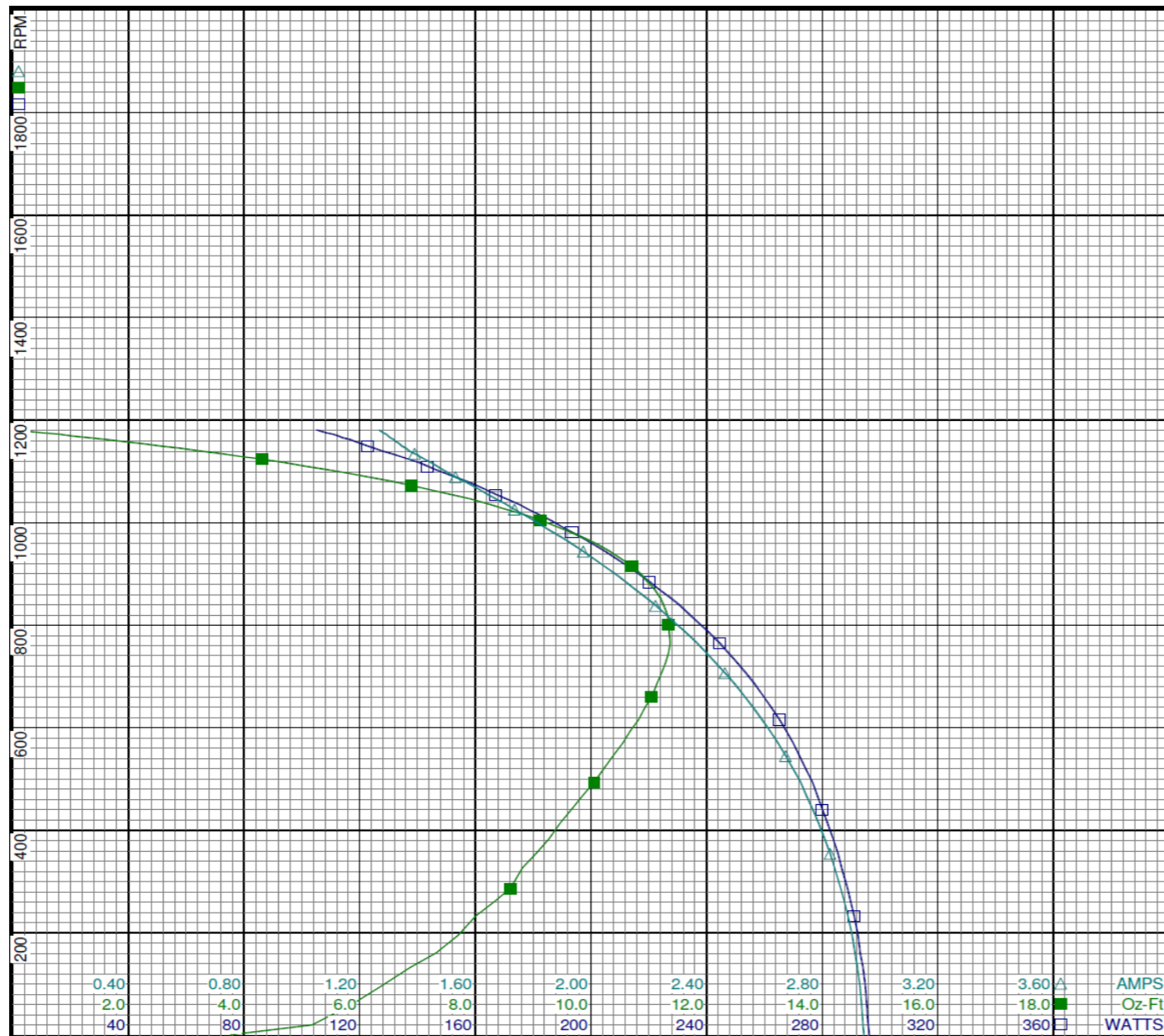
# Performance Data



5WJA8BG

REV.

-



Curve Descriptions:

Motor(1) Test 3 Start 115V 60 Hz 6P  
M1 CCW

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

Motor Ratings:

(1) K048MRE1181 5WJA8BG

DRAWING NO.	PAGE 2 of 8	REV.
5WJA8BG		-

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



# Performance Data



**5WJA8BG**

REV.

-

## Dayton Manufacturing Company

### Motor Description

Model: K048MRE1181 5WJA8BG  
 Motor ID:  
 Poles: 6  
 Volts: 115  
 Frequency: 60  
 HP: 1/15  
 Speed: 1075  
 Phase: 1  
 Protector: 7AM036-A5

### Test Conditions

Test Type: Run  
 Test Number: 1  
 Poles: 6  
 Volts: 115  
 Hz: 60  
 Rotation:  
 Special Cond:  
 Speed Conn: M1  
 TestBoard: Amtps Performance Fixture #4  
 Run Cap: 5  
 Start Cap: 0µfd  
 Environment: 22.2 Deg C 22 % RH 989 hPa  
 Tested: 3/22/2016 10:32:48 AM  
 Tested By: Sharp, Gerald  
 Gear Ratio: 1:1  
 Bearing Friction: -0.65 Oz-Ft  
 Windage Torque: -1.09 Oz-Ft

Special Points	Vline(V)	Vaux(V)	Vcap(V)	Iline(A)	Imain(A)	Iaux(A)	Watts	RPM	Tq(Oz-ft)	HP	Eff(%)	PF(%)	Cap
	115.0	288.5	327.1	1.150	1.268	0.368	58.5	1177	0.000	0.000	0.0	44.3	3.0
	115.0	284.7	320.9	1.156	1.246	0.361	65.5	1164	0.852	0.012	13.4	49.3	3.0
	115.0	281.1	314.9	1.235	1.243	0.355	76.3	1152	1.734	0.024	23.2	53.7	3.0
	115.0	277.9	309.5	1.268	1.251	0.349	84.6	1135	2.498	0.034	29.8	58.0	3.0
	115.0	274.1	303.6	1.303	1.261	0.342	93.5	1121	3.362	0.045	35.8	62.4	3.0
	115.0	269.7	297.9	1.337	1.277	0.335	101.1	1104	4.047	0.053	39.2	65.8	3.0
	115.0	263.9	291.0	1.383	1.306	0.328	109.6	1088	4.767	0.062	42.0	68.9	3.0
<b>0.067 HP</b>	<b>115.0</b>	<b>259.8</b>	<b>286.0</b>	<b>1.414</b>	<b>1.326</b>	<b>0.322</b>	<b>115.1</b>	<b>1077</b>	<b>5.224</b>	<b>0.067</b>	<b>43.4</b>	<b>70.8</b>	<b>3.0</b>
<b>1075 RPM</b>	<b>115.0</b>	<b>259.1</b>	<b>285.1</b>	<b>1.421</b>	<b>1.331</b>	<b>0.321</b>	<b>116.3</b>	<b>1075</b>	<b>5.309</b>	<b>0.068</b>	<b>43.6</b>	<b>71.2</b>	<b>3.0</b>
	115.0	257.6	283.1	1.434	1.341	0.319	118.6	1069	5.483	0.070	43.9	71.9	3.0
	115.0	249.9	274.6	1.493	1.387	0.309	127.8	1049	6.193	0.077	45.1	74.5	3.0
	115.0	242.2	265.7	1.557	1.442	0.299	137.5	1027	6.846	0.084	45.4	76.8	3.0
	115.0	234.0	256.7	1.627	1.506	0.289	147.1	1004	7.413	0.089	44.9	78.6	3.0
	115.0	225.3	247.3	1.703	1.578	0.278	157.1	979	7.948	0.093	44.0	80.2	3.0
	115.0	216.2	237.9	1.780	1.654	0.267	166.8	951	8.418	0.095	42.6	81.5	3.0
	115.0	207.0	228.4	1.862	1.737	0.257	176.6	922	8.774	0.096	40.7	82.5	3.0
	115.0	197.5	219.2	1.944	1.821	0.246	186.1	891	9.028	0.096	38.4	83.3	3.0
	115.0	188.0	210.0	2.027	1.909	0.236	195.6	858	9.223	0.094	35.9	83.9	3.0
	115.0	178.4	201.2	2.110	1.997	0.226	204.8	824	9.348	0.092	33.4	84.4	3.0
	115.0	168.5	192.6	2.192	2.086	0.216	213.4	786	9.377	0.088	30.7	84.6	3.0
<b>BDT OZ-FT</b>	<b>115.0</b>	<b>167.4</b>	<b>191.5</b>	<b>2.202</b>	<b>2.097</b>	<b>0.215</b>	<b>214.7</b>	<b>781</b>	<b>9.402</b>	<b>0.087</b>	<b>30.4</b>	<b>84.8</b>	<b>3.0</b>
	115.0	158.7	184.2	2.271	2.172	0.207	221.8	747	9.319	0.083	27.9	84.9	3.0
	115.0	149.1	176.7	2.336	2.259	0.199	229.3	704	9.146	0.077	24.9	85.3	3.0
	115.0	139.6	169.4	2.408	2.341	0.190	236.7	659	8.878	0.070	22.0	85.5	3.0
	115.0	130.0	162.4	2.478	2.422	0.183	243.8	611	8.443	0.061	18.8	85.6	3.0
	115.0	120.2	156.3	2.544	2.498	0.176	249.8	560	7.968	0.053	15.9	85.4	3.0
	115.0	110.7	150.8	2.602	2.567	0.170	255.2	507	7.676	0.046	13.5	85.3	3.0
	115.0	101.9	146.4	2.655	2.629	0.165	260.2	452	7.274	0.039	11.2	85.2	3.0
	115.0	92.8	142.8	2.698	2.683	0.161	264.0	393	6.569	0.031	8.7	85.1	3.0
	115.0	84.5	140.7	2.737	2.731	0.158	267.8	332	6.416	0.025	7.1	85.1	3.0
	115.0	76.5	139.8	2.770	2.774	0.157	271.1	266	5.660	0.018	4.9	85.1	3.0
	115.0	69.7	139.2	2.795	2.808	0.157	273.9	202	5.053	0.012	3.3	85.2	3.0
	115.0	61.5	139.8	2.819	2.843	0.158	276.1	124	4.577	0.007	1.8	85.2	3.0

DRAWING NO. PAGE 3 of 8 REV.  
**5WJA8BG** -

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

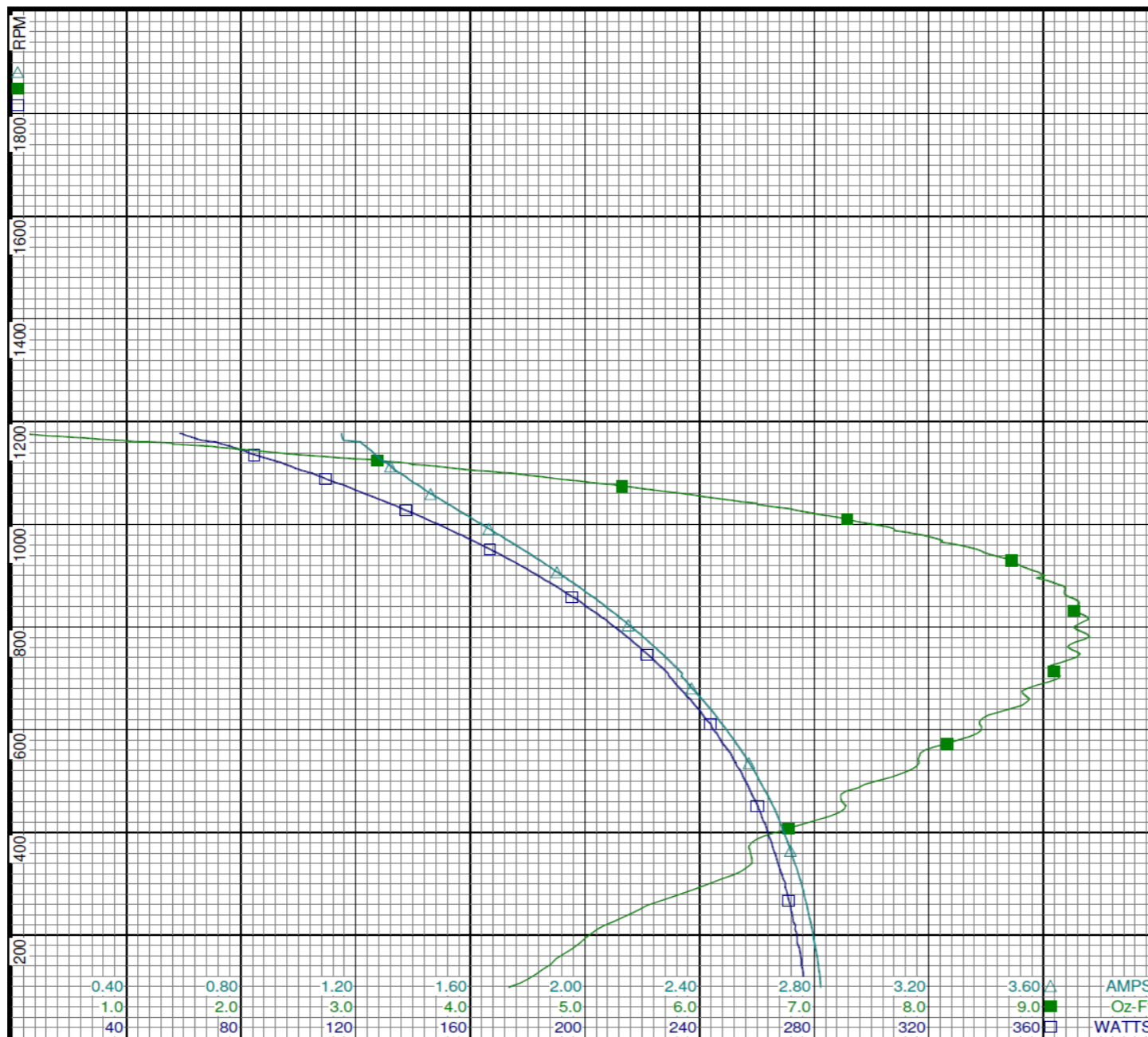
# Performance Data



5WJA8BG

REV.

-



Curve Descriptions:

Motor(1) Test 1 Run 115V 60 Hz 6P M1

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

Motor Ratings:

(1) K048MRE1181 5WJA8BG

DRAWING NO.	PAGE 4 of 8	REV.
5WJA8BG		-

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

# Performance Data



**5WJA8BG**

REV.

-

## Dayton Manufacturing Company

### Motor Description

Model: K048MRE1181 5WJA8BG  
 Motor ID:  
 Poles: 6  
 Volts: 115  
 Frequency: 60  
 HP: 1/15  
 Speed: 1075  
 Phase: 1  
 Protector: 7AM036-A5

### Test Conditions

Test Type: Start Run Cap: 5  
 Test Number: 4 Start Cap: 0ufd  
 Poles: 6 Environment: 24.7 Deg C 55 % RH 966 hPa  
 Volts: 115 Tested: 11/7/2016 12:22:57 PM  
 Hz: 60 Tested By: Navarro, Susana  
 Rotation: CCW Gear Ratio: 1:1  
 Special Cond: Bearing Friction: -0.32 Oz-Ft  
 Speed Conn: M2 Windage Torque: -0.80 Oz-Ft  
 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 (%)
	115.0	77.9	135.4	2.494	249.9	0	4.763	0.000	0.0	87.1
	115.0	86.2	133.7	2.484	248.9	94	5.534	0.006	1.8	87.1
	115.0	92.8	133.5	2.469	247.4	161	6.141	0.012	3.5	87.1
	115.0	99.2	133.2	2.450	245.6	224	6.717	0.018	5.4	87.2
	115.0	107.0	134.1	2.424	243.2	292	7.179	0.025	7.7	87.2
	115.0	114.4	135.7	2.396	240.6	353	7.552	0.032	9.8	87.3
	115.0	121.9	138.4	2.366	238.1	409	7.915	0.039	12.1	87.5
	115.0	130.9	142.4	2.328	235.0	466	8.229	0.046	14.5	87.8
	115.0	138.7	146.4	2.291	231.8	514	8.543	0.052	16.8	88.0
	115.0	148.4	152.3	2.244	228.0	567	8.788	0.059	19.4	88.3
	115.0	158.5	158.5	2.193	223.4	617	9.026	0.066	22.1	88.6
	115.0	167.9	165.3	2.142	219.1	662	9.216	0.073	24.7	88.9
	115.0	177.3	172.3	2.090	214.3	703	9.366	0.078	27.3	89.2
	115.0	187.2	180.0	2.032	209.1	745	9.436	0.084	29.9	89.5
	115.0	197.4	188.1	1.972	203.4	783	9.451	0.088	32.3	89.7
	115.0	203.4	192.8	1.939	200.5	804	9.486	0.091	33.8	89.9
	115.0	217.1	204.7	1.855	192.1	852	9.286	0.094	36.6	90.1
	115.0	227.2	213.6	1.793	186.1	885	9.124	0.096	38.5	90.2
	115.0	236.3	221.9	1.737	180.4	912	8.896	0.097	40.0	90.3
	115.0	246.8	231.9	1.671	173.5	942	8.572	0.096	41.3	90.3
	115.0	256.7	241.5	1.606	166.8	968	8.216	0.095	42.3	90.3
	115.0	265.8	250.5	1.549	160.8	991	7.804	0.092	42.7	90.2
	115.0	274.6	259.5	1.491	154.5	1015	7.337	0.089	42.8	90.1
	115.0	283.9	269.1	1.433	148.1	1035	6.840	0.084	42.5	89.8
	115.0	291.7	277.5	1.381	142.3	1054	6.290	0.079	41.4	89.6
	115.0	300.7	287.1	1.327	135.9	1072	5.702	0.073	40.0	89.1
	115.0	307.9	295.0	1.279	130.4	1089	5.112	0.066	37.9	88.6
	115.0	315.4	303.5	1.231	124.5	1103	4.473	0.059	35.2	87.9
	115.0	322.4	311.4	1.192	119.2	1117	3.832	0.051	31.9	87.0
	115.0	327.6	317.4	1.157	114.8	1128	3.215	0.043	28.1	86.3
	115.0	333.1	324.3	1.118	109.4	1140	2.607	0.035	24.1	85.1
	115.0	338.3	330.9	1.084	104.3	1149	2.005	0.027	19.6	83.7
	115.0	343.6	336.9	1.057	99.9	1158	1.437	0.020	14.8	82.1
	115.0	346.3	340.3	1.038	96.9	1165	0.919	0.013	9.8	81.2
	115.0	348.4	343.6	1.016	93.5	1172	0.441	0.006	4.9	80.0
	115.0	350.6	346.8	1.002	90.7	1177	0.026	0.000	0.3	78.7

DRAWING NO. PAGE 5 of 8 REV.  
**5WJA8BG** -

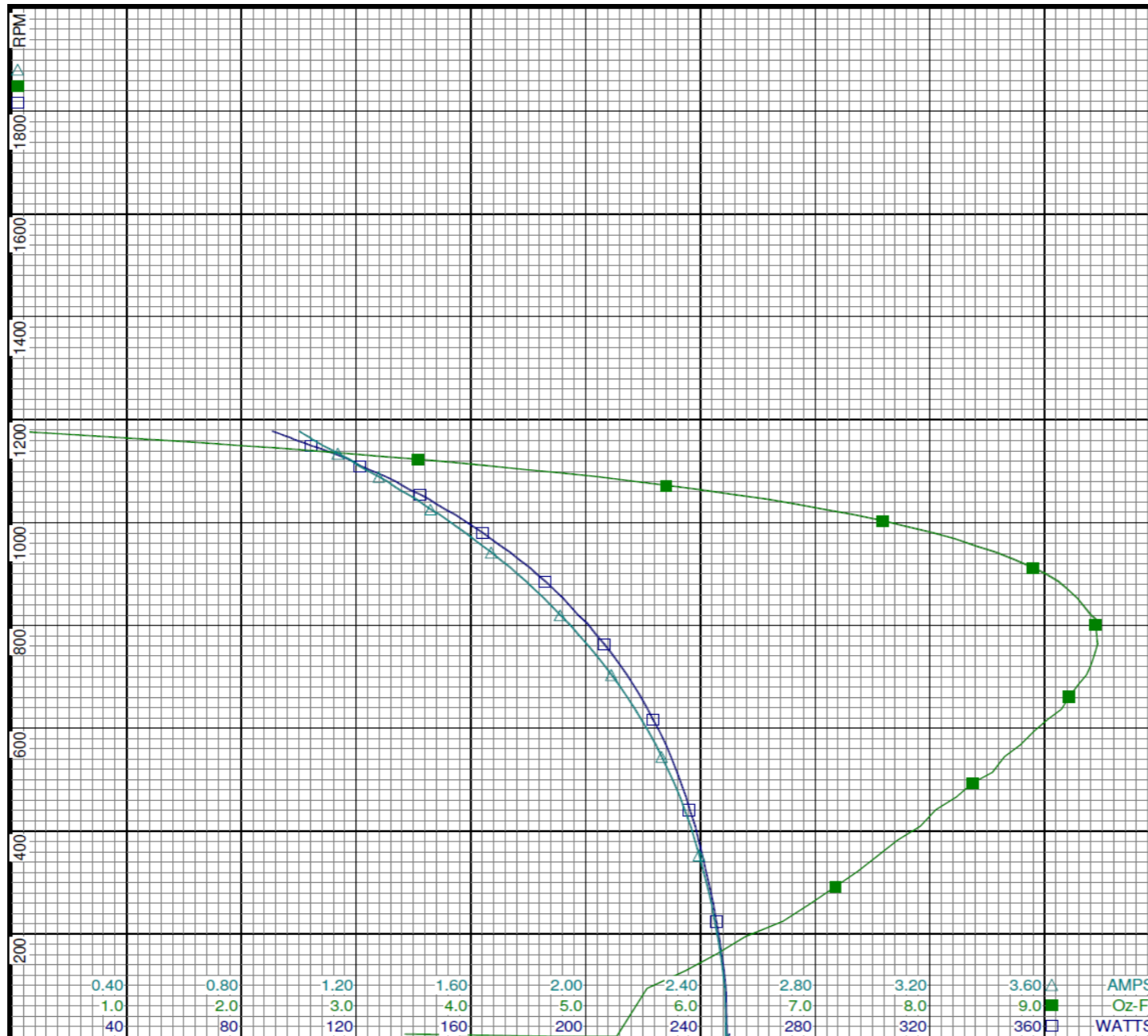
# Performance Data



**5WJA8BG**

REV.

-



**Curve Descriptions:**

Motor(1) Test 4 Start 115V 60 Hz 6P  
M2 CCW

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

**Motor Ratings:**

(1) K048MRE1181 5WJA8BG

DRAWING NO.	PAGE 6 of 8	REV.
5WJA8BG		-

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



# Performance Data



5WJA8BG		REV.
<b>Dayton Manufacturing Company</b>		
<b>Motor Description</b>		<b>Test Conditions</b>
Model:	K048MRE1181 5WJA8BG	Test Type: Run
Motor ID:		Run Cap: 5
Poles:	6	Test Number: 4
Volts:	115	Start Cap: 0µfd
Frequency:	60	Poles: 6
HP:	1/15	Volts: 115
Speed:	1075	Hz: 60
Phase:	1	Rotation:
Protector:	7AM036-A5	Special Cond:
		Speed Conn: M4
		TestBoard: Amtps Performance Fixture #4
		Environment: 21.9 Deg C 24 % RH 987 hPa
		Tested: 3/22/2016 12:20:17 PM
		Tested By: Sharp, Gerald
		Gear Ratio: 1:1
		Bearing Friction: -0.64 Oz-Ft
		Windage Torque: -0.99 Oz-Ft
<b>Special Points</b>	<b>Vline (V)</b>	<b>Vaux (V)</b>
	<b>Vcap (V)</b>	<b>Iline (A)</b>
		<b>Imain (A)</b>
		<b>Iaux (A)</b>
		<b>Watts</b>
		<b>RPM</b>
		<b>Tq (Oz-ft)</b>
		<b>HP</b>
		<b>Eff (%)</b>
		<b>PF (%)</b>
		<b>Cap</b>
0.017 HP	115.0	234.9
	115.0	232.0
	115.0	229.3
	<b>115.0</b>	<b>227.9</b>
	115.0	225.2
	115.0	220.9
	115.0	216.2
	115.0	211.1
1075 RPM	<b>115.0</b>	<b>208.9</b>
	115.0	205.4
	115.0	199.8
	115.0	193.5
	115.0	186.8
	115.0	180.0
	115.0	173.0
	115.0	166.1
BDT OZ-FT	<b>115.0</b>	<b>147.7</b>
	115.0	144.0
	115.0	136.5
	115.0	128.8
	115.0	121.5
	115.0	113.9
	115.0	106.2
	115.0	98.9
	115.0	91.3
	115.0	83.9
	115.0	76.5
	115.0	69.8
	115.0	62.8
	115.0	55.8
	115.0	49.1

DRAWING NO.	PAGE 7 of 8	REV.
5WJA8BG		-

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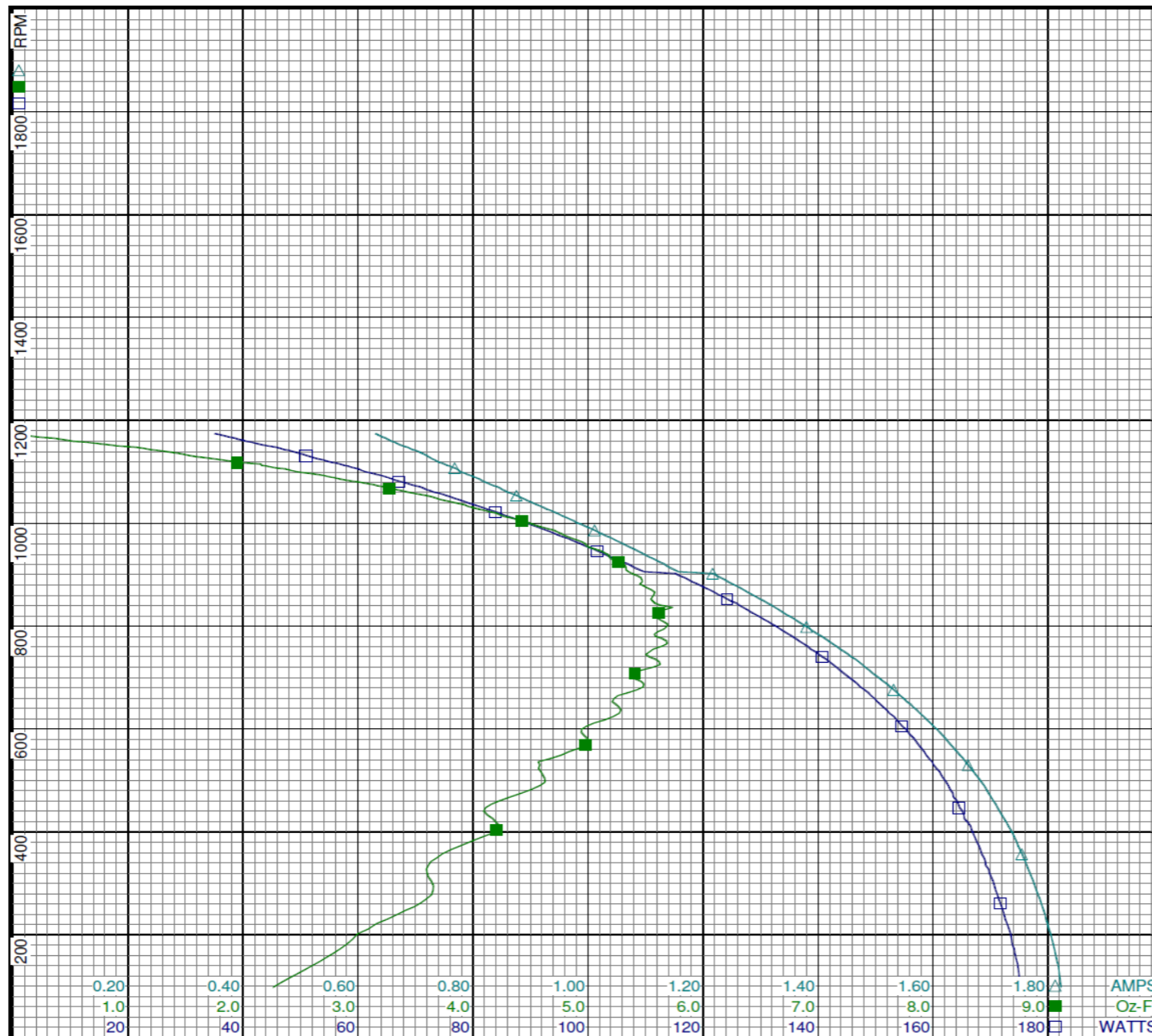
# Performance Data



**5WJA8BG**

REV.

-



**Curve Descriptions:**

Motor(1) Test 4 Run 115V 60 Hz 6P M4

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

**Motor Ratings:**

(1) K048MRE1181 5WJA8BG

DRAWING NO.	PAGE 8 of 8	REV.
	<b>5WJA8BG</b>	-

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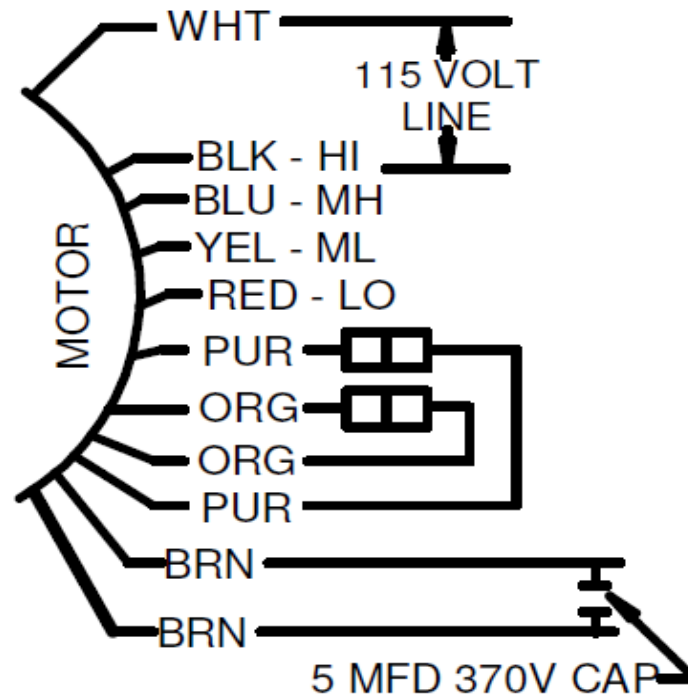
# Wiring Diagram



5WJA8BG

REV.  
-

MOTOR IS CCW L.E.  
TO REVERSE ROTATION LEADS  
INTERCHANGE ORG AND PUR LEADS



DRAWING NO.	PAGE 1 of 1	REV.
5WJA8BG		-

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# Dayton<sup>®</sup>

<sup>®</sup>

## ROOM AIR CONDITIONER MOTOR

Part No  
5WJA8BG



**HP:** 1/15

**VOLTS:** 115

**AMPS:** 1.4

**RPM:** 1050/4 SPD

**DUTY:** CONT

**ENCL:** OAO

**THERMALLY PROTECTED:** AUTO

MFG. NO.   PROT. CODE : 7A010 AVG.F.L

**MTR REF:** K48HXMRE-1181

**PH:** 1

**HZ:** 60

**FR:** 42Y

**INS CL:** B

**AMB:** 60°C

EFF.

**Disconnect Power Before Making Any  
Electrical Connections or Changes**

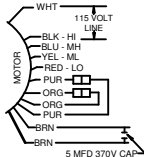


E37403



258501

MOTOR IS CCW L.E.  
TO REVERSE ROTATION LEADS  
INTERCHANGE ORG AND PUR LEADS



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

MADE IN MEXICO