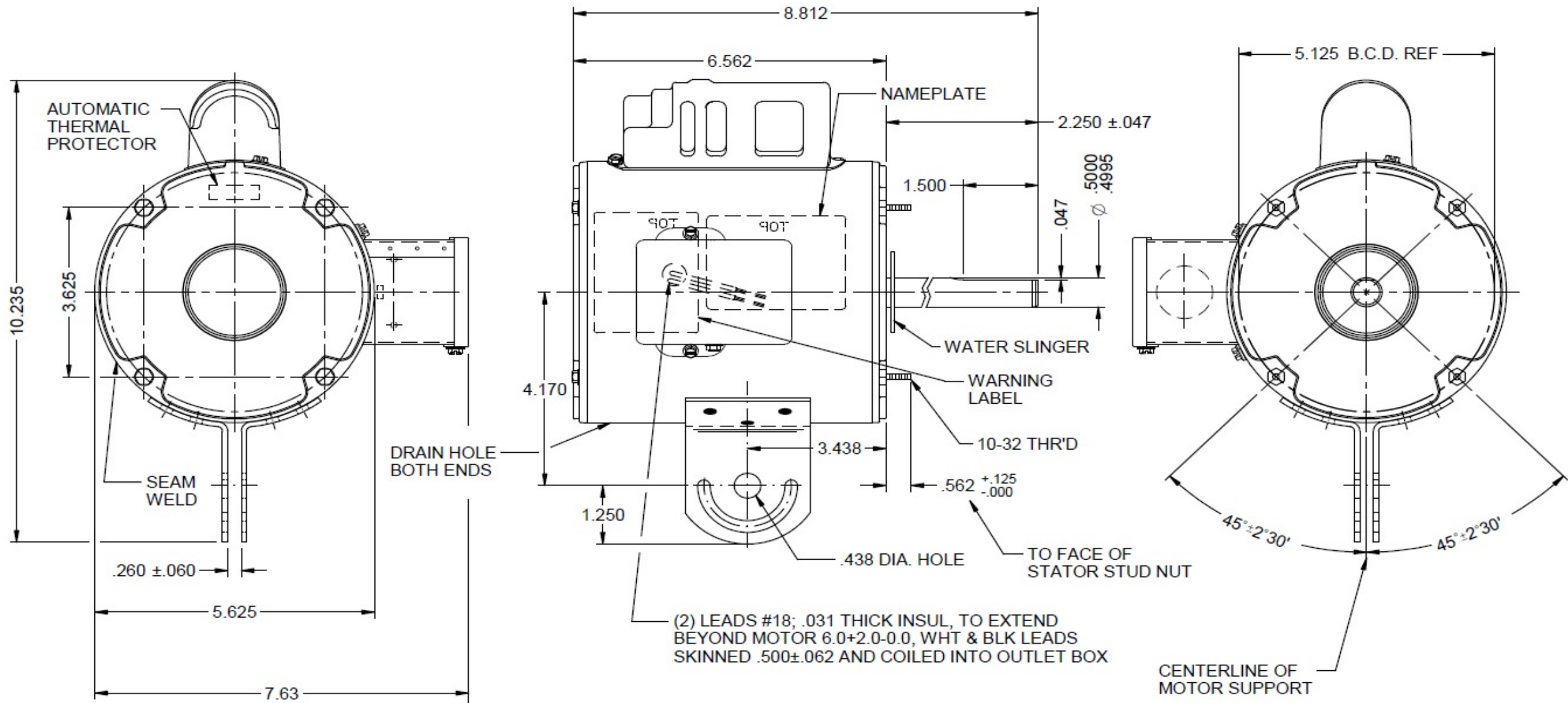


# Dimensional Drawing

**22YH23A**      REV. -

MODEL	REF	CUSTOMER	HP	VOLTS	AMPS	HZ	RPM	ROTATION	CUSTOMER PT. NO.	DESCRIPTION / REMARKS
K55HXMNZ-628		GRAINGER	1/4	115	5.0	60	1100	CCW LE	22YH23A	48YZ, TEAO, SELF-ALIGN BEARING

GASKETS UNDER CAPACITOR COVER AND OUTLET BOX



DRAWING NO.      PAGE 1 of 1      REV. -  
 22YH23A

# Performance Data



**22YH23A**

REV.  
-

## MOTOR PERFORMANCE

<b>HP:</b>	1/4HP								
<b>Poles:</b>	6								
<b>No. of Speeds:</b>	1								
<b>Volts:</b>	115	<b>115</b>							
<b>HZ:</b>	60	<b>60</b>							
<b>Service Factor:</b>	1								
<b>Efficiency:</b>	@ Rated Load	62.6							
<b>Power Factor:</b>	@ Rated Load	83.9							
<b>Amps:</b>	@ No Load								
	@ Rated Load	3.2							
	@ Service Factor								
	@ Locked Rotor	11.6							
<b>RPM:</b>	@ Rated Load	1153							
<b>Ambient (°C):</b>	40								
<b>Altitude (FASL):</b>									
<b>Torques:</b>	Breakdown	38							
	Locked Rotor	7.2							
	Pull-Up	6.5							
	Rated Load	19.1							
	Service Factor								
<b>Watts:</b>	Rated Load	313							
<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)	7.5mfd / 440VAC							
	No. of Run Capacitors								
<b>LOW SPEED PERFORMANCE DATA:</b>									
<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.  
22YH23A -

# Performance Data



**22YH23A**      REV.  
-

## Dayton Manufacturing Company

### Motor Description

Model: K055MNZ062802 22HY23  
 Motor ID: 1  
 Poles: 6  
 Volts: 115  
 Frequency: 60  
 HP: .25  
 Speed: 1100  
 Phase: 1  
 Protector: AUTO

### Test Conditions

Test Type: Start      Run Cap: 0  
 Test Number: 1      Start Cap: 7.5µfd/440VAC  
 Poles: 6      Environment: 21.2 Deg C 52 % RH 995 hPa  
 Volts: 115      Tested: 9/7/2016 2:28:54 PM  
 Hz: 60      Tested By: Sharp, Gerald  
 Rotation:      Gear Ratio: 1:1  
 Special Cond:      Bearing Friction: -0.93 Oz-Ft  
 Speed Conn:      Windage Torque: -1.30 Oz-Ft  
 TestBoard: Amps Performance Fixture #4

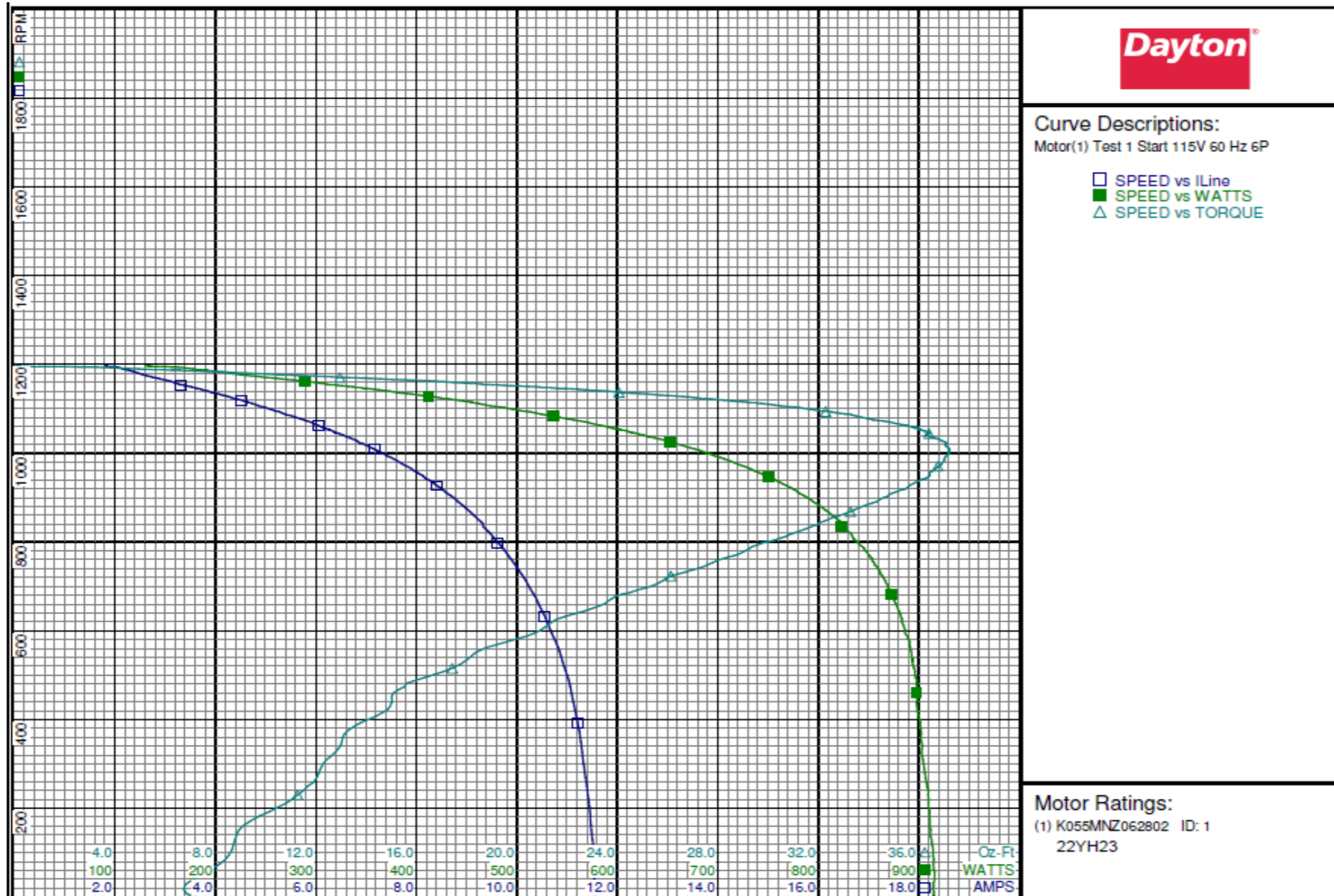
Special Points	Vline (V)	Vaux (V)	Vcap (V)	Iline (A)	Watts	RPM	Tq(Oz-ft)	HP	Eff (%)	PF (%)
	115.0	45.5	145.8	11.552	916.1	0	7.24	0.000	0.0	69.0
	115.0	46.5	145.1	11.534	914.2	17	6.74	0.001	0.1	68.9
	115.0	46.5	145.1	11.534	914.2	17	6.74	0.001	0.1	68.9
	115.0	50.3	140.6	11.504	912.7	128	8.77	0.013	1.1	69.0
	115.0	57.5	138.4	11.390	908.1	249	11.67	0.035	2.8	69.3
	115.0	64.2	136.6	11.262	902.2	359	13.06	0.056	4.6	69.7
	115.0	72.4	135.6	11.098	898.0	453	15.02	0.081	6.7	70.4
	115.0	82.4	136.0	10.892	893.6	536	18.06	0.115	9.6	71.3
	115.0	94.1	137.6	10.627	884.4	614	21.26	0.155	13.1	72.4
	115.0	106.0	140.9	10.335	872.9	681	24.17	0.196	16.8	73.4
	115.0	119.3	146.0	9.996	859.0	742	27.36	0.242	21.0	74.7
	115.0	130.3	151.5	9.697	843.7	789	29.36	0.276	24.4	75.7
	115.0	145.1	159.9	9.331	824.9	839	31.97	0.319	28.9	76.9
	115.0	161.7	171.2	8.863	797.0	887	34.15	0.361	33.8	78.2
	115.0	176.3	182.2	8.448	771.1	923	35.56	0.391	37.8	79.4
	115.0	188.2	192.0	8.096	746.7	951	36.44	0.412	41.2	80.2
	115.0	206.8	208.2	7.533	705.6	987	37.04	0.435	46.0	81.4
	115.0	219.1	219.4	7.164	677.9	1008	37.23	0.447	49.2	82.3
	115.0	233.1	232.8	6.726	641.3	1032	36.75	0.451	52.5	82.9
	115.0	247.8	247.1	6.276	604.8	1051	36.11	0.452	55.7	83.8
	115.0	255.2	254.5	6.031	582.7	1062	35.52	0.449	57.5	84.0
	115.0	276.3	275.9	5.370	523.5	1088	33.10	0.429	61.1	84.8
	115.0	292.0	292.4	4.865	474.2	1106	30.52	0.402	63.2	84.8
	115.0	306.2	307.6	4.437	433.3	1121	27.75	0.370	63.8	84.9
	115.0	318.9	321.4	4.023	390.7	1134	24.87	0.336	64.1	84.4
	115.0	332.2	335.7	3.615	347.7	1145	21.63	0.295	63.3	83.6
	115.0	344.3	348.6	3.266	310.2	1155	18.59	0.256	61.5	82.6
	115.0	361.6	367.6	2.819	256.3	1169	13.74	0.191	55.6	79.1
	115.0	383.3	390.4	2.465	214.0	1180	9.20	0.129	45.0	75.5
	115.0	410.6	422.2	2.092	168.7	1192	3.88	0.055	24.4	70.1
	115.0	419.5	435.7	1.805	129.9	1197	0.00	0.000	0.0	62.6

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# Performance Data



22YH23A      REV. -



DRAWING NO.      PAGE 2 of 4      REV.  
22YH23A      -

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



# Performance Data



22YH23A		REV.								
<b>Dayton Manufacturing Company</b>										
<b>Motor Description</b>		<b>Test Conditions</b>								
Model:	K055MNZ062802 22YH23	Test Type: Run								
Motor ID:	1	Test Number: 2								
Poles:	6	Poles: 6								
Volts:	115	Volts: 115								
Frequency:	60	Hz: 60								
HP:	.25	Rotation:								
Speed:	1100	Special Cond:								
Phase:	1	Speed Conn:								
Protector:	AUTO	TestBoard: Amtps Performance Fixture #4								
Run Cap:	0	Start Cap: 7.5µfd/440VAC								
Environment:	21.2 Deg C 52 % RH 995 hPa	Tested: 9/7/2016 2:27:38 PM								
Tested By:	Sharp, Gerald	Gear Ratio: 1:1								
Bearing Friction:	-0.76 Oz-Ft	Windage Torque: -1.29 Oz-Ft								
<b>Special Points</b>	<b>Vline (V)</b>	<b>Vaux (V)</b>	<b>Vcap (V)</b>	<b>Iline (A)</b>	<b>Watts</b>	<b>RPM</b>	<b>Tq (Oz-ft)</b>	<b>HP</b>	<b>Eff (%)</b>	<b>PF (%)</b>
	115.0	419.0	435.3	1.776	127.0	1194	0.00	0.000	0.0	62.2
	115.0	413.4	426.3	1.976	159.3	1188	3.38	0.048	22.4	70.1
	115.0	395.2	403.0	2.328	202.7	1181	8.14	0.114	42.1	75.7
	115.0	383.3	390.4	2.470	216.2	1178	9.66	0.135	46.8	76.1
	115.0	365.1	370.4	2.781	259.0	1167	14.14	0.196	56.6	81.0
<b>0.25 HP</b>	<b>115.0</b>	<b>349.9</b>	<b>354.0</b>	<b>3.144</b>	<b>302.4</b>	<b>1155</b>	<b>18.18</b>	<b>0.250</b>	<b>61.7</b>	<b>83.6</b>
<b>19.1 OZ-FT</b>	<b>115.0</b>	<b>346.4</b>	<b>350.1</b>	<b>3.241</b>	<b>312.8</b>	<b>1153</b>	<b>19.10</b>	<b>0.262</b>	<b>62.6</b>	<b>83.9</b>
	115.0	342.8	346.2	3.341	322.8	1152	19.89	0.273	63.0	84.0
	115.0	338.7	342.1	3.447	333.0	1149	20.70	0.283	63.4	84.0
	115.0	327.3	330.2	3.777	368.7	1138	23.62	0.320	64.8	84.9
	115.0	313.8	315.4	4.214	413.6	1127	26.79	0.359	64.8	85.3
	115.0	299.0	299.4	4.670	458.9	1111	30.06	0.398	64.7	85.4
<b>1100 RPM</b>	<b>115.0</b>	<b>289.1</b>	<b>288.9</b>	<b>4.982</b>	<b>489.0</b>	<b>1100</b>	<b>31.72</b>	<b>0.415</b>	<b>63.4</b>	<b>85.3</b>
	115.0	281.5	280.9	5.232	513.7	1092	33.05	0.430	62.4	85.4
	115.0	261.1	259.7	5.891	574.3	1066	35.62	0.452	58.7	84.8
	115.0	241.7	240.7	6.497	626.3	1041	37.15	0.460	54.8	83.8
	115.0	218.1	217.8	7.247	688.1	1005	38.01	0.455	49.3	82.6
<b>BDT OZ-FT</b>	<b>115.0</b>	<b>215.9</b>	<b>215.6</b>	<b>7.317</b>	<b>693.6</b>	<b>1000</b>	<b>38.02</b>	<b>0.453</b>	<b>48.7</b>	<b>82.4</b>
	115.0	195.6	197.8	7.925	738.4	963	37.42	0.429	43.3	81.0
	115.0	180.7	185.3	8.356	767.0	932	36.49	0.405	39.4	79.8
	115.0	163.9	172.4	8.858	799.9	891	34.82	0.369	34.4	78.5
	115.0	148.3	161.5	9.289	825.3	848	32.82	0.331	30.0	77.3
	115.0	137.1	154.8	9.553	838.4	812	31.12	0.301	26.8	76.3
	115.0	125.8	148.8	9.862	854.0	769	28.98	0.265	23.2	75.3
	115.0	116.3	144.7	10.105	865.5	730	26.93	0.234	20.2	74.5
	115.0	106.1	141.0	10.373	876.7	680	24.50	0.198	16.9	73.5
	115.0	97.4	138.5	10.580	884.1	632	22.36	0.168	14.2	72.7
	115.0	89.4	136.9	10.768	891.7	581	20.17	0.140	11.7	72.0
	115.0	81.0	135.9	10.952	896.9	523	17.70	0.110	9.2	71.2
	115.0	73.4	135.4	11.104	900.9	461	15.26	0.084	6.9	70.5
	115.0	67.2	135.9	11.215	901.7	395	13.91	0.065	5.4	69.9
	115.0	62.2	137.2	11.303	904.4	327	13.08	0.051	4.2	69.6
	115.0	57.5	138.6	11.393	908.2	253	11.32	0.034	2.8	69.3
	115.0	53.3	139.5	11.457	912.4	173	10.78	0.022	1.8	69.2
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22YH23A				-						

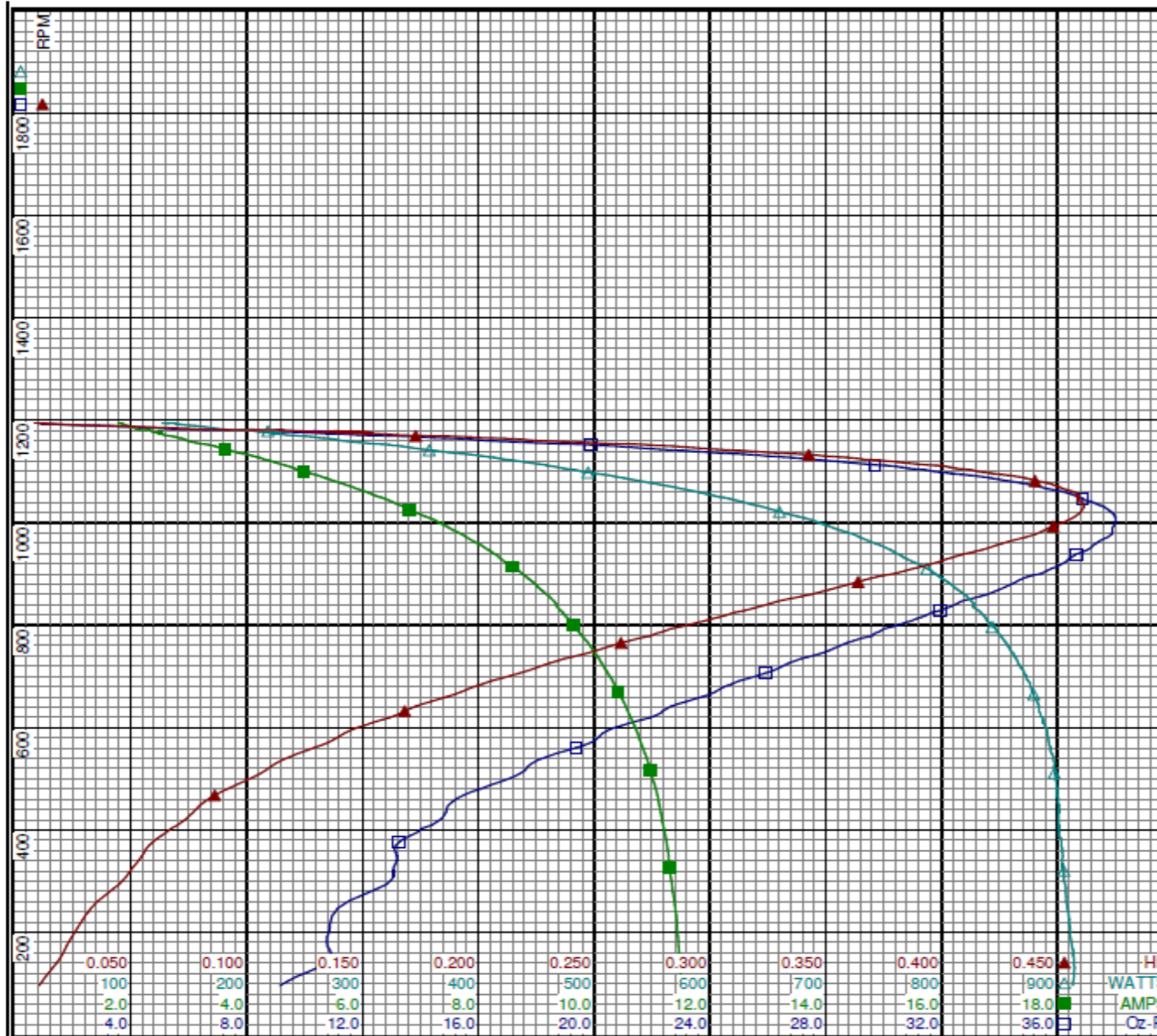
# Performance Data



22YH23A

REV.

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**Curve Descriptions:**

Motor(1) Test 2 Run 115V 60 Hz 6P

- SPEED vs TORQUE
- SPEED vs ILine
- △ SPEED vs WATTS
- ▲ SPEED vs HP

**Motor Ratings:**

(1) K055MNZ062802 ID: 1  
22YH23

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	22YH23A	-

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

22YH23A	REV. -
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## CONNECTIONS

COM - WHITE

HIGH - BLACK

ROTATION IS CCW LEAD END  
NON-REVERSIBLE  
7.5 MFD, 440 VAC, CAP

DRAWING NO.	PAGE 1 of 1	REV.
22YH23A		-

**Dayton**<sup>®</sup>**DIRECT DRIVE  
FAN MOTOR**

HP: 1/4

VOLTS: 115

AMPS: 5.0

RPM: 1100

DUTY: CONT

SF: 1.0

KVA CODE:

ENCL: TEAO

THERMALLY PROTECTED: AUTO

MFG. NO. 

PROT. CODE:

7A010

MTR REF: K55HXMNZ-628

Part  
No 22YH23A

PH: 1

HZ: 60

FR: 48YZ

INS CL: B

AMB: 40 °C

SFA:

AVG. F.L.  
EFF.Disconnect Power Before Making Any  
Electrical Connections or Changes**CONNECTIONS**

COM - WHITE

HIGH - BLACK

ROTATION IS CCW LEAD END  
NON-REVERSIBLE  
7.5 MFD, 440 VAC, CAP

E37403



258501

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

Made in Mexico