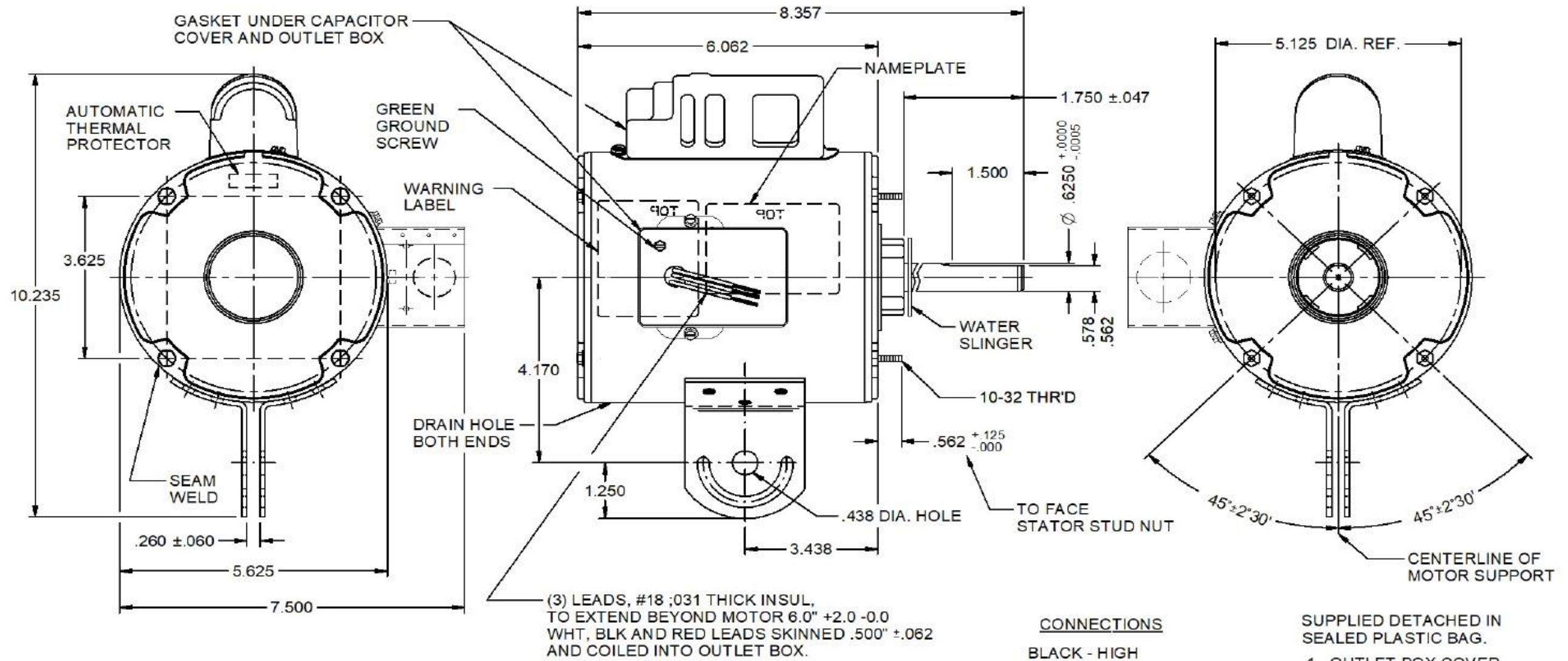


Dimensional Drawing

22YH24A REV. -

MODEL	REF	CUSTOMER	HP	VOLTS	AMPS	HZ	RPM	ROTATION	CUSTOMER PT. NO.	DESCRIPTION / REMARKS
K55HXMD-411		GRAINGER	1/3	115	5.3	60	1075/2 SPD	CCW LE	22YH24A	48YZ, TEAO, SELF-ALIGN BEARING



CONNECTIONS
 BLACK - HIGH
 RED - LOW
 WHITE - COMMON

SUPPLIED DETACHED IN SEALED PLASTIC BAG.
 1 - OUTLET BOX COVER
 1 - GASKET
 1 - MTG SCREW

DRAWING NO.	PAGE 1 of 1	REV.
22YH24A		-

Performance Data



22YH24A

REV.
-

MOTOR PERFORMANCE

HP:	1/3HP								
Poles:	6								
No. of Speeds:	2								
Volts:	115	115							
HZ:	60	60							
Service Factor:	1								
Efficiency:	@ Rated Load								
Power Factor:	@ Rated Load								
Amps:	@ No Load								
	@ Rated Load	5.3							
	@ Service Factor	N/A							
	@ Locked Rotor	11.3							
RPM:	@ Rated Load	1075							
Ambient (°C):	40								
Altitude (FASL):									
Torques:	Breakdown	37.2							
	Locked Rotor	8.1							
	Pull-Up	7.3							
	Rated Load	30.2							
	Service Factor	N/A							
Watts:	Rated Load	467							
KVA Code:									
Temperature Rise:	@ Rated Load								
	@ Service Factor								
Thermal Protector:	Trip Temp (°C)								
Winding Material:	Start (Auxiliary)	Cu							
	Run (Main)	Cu							
Capacitor(s):	Start (MFD / Volts)								
	No. of Start Capacitors							N/A	
	Run (MFD / Volts)								
	No. of Run Capacitors							6.0mfd/370VAC	

LOW SPEED PERFORMANCE DATA:

HP:	1/3HP								
Poles:	6								
Volts:		115							
HZ:		60							
Efficiency:	@ Rated Load								
Power Factor:	@ Rated Load								
Amps:	@ No Load								
	@ Rated Load	3.2							
	@ Service Factor	N/A							
	@ Locked Rotor	7							
Torques:	Breakdown	22.9							
	Locked Rotor	5.4							
	Pull-Up	4.9							
	Rated Load	18.3							
	Service Factor	N/A							
Watts:	@ Rated Load	281							
Temperature Rise:	@ Rated Load								
	@ Service Factor								

DRAWING NO. PAGE 1 of 1 REV.
22YH24A -

Performance Data



22YH24A	REV. -
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Dayton Manufacturing Company

Motor Description

Model: K055MDC041102 22YH24
 Motor ID: 1
 Poles: 6
 Volts: 115
 Frequency: 60
 HP: 1/3
 Speed: 1075/2 spd
 Phase: 1
 Protector: AUTO

Test Conditions

Test Type: Start
 Test Number: 1
 Poles: 6
 Volts: 115
 Hz: 60
 Rotation: CCW
 Special Cond:
 Speed Conn: High Spd
 TestBoard: CMD InLine Three Phase #2 Fixture #1
 Run Cap: 6µfd 370VAC
 Start Cap: 0µfd
 Environment: 24.1 Deg C 48 % RH 967 hPa
 Tested: 9/30/2016 5:06:28 PM
 Tested By: Navarro, Susana
 Gear Ratio: 1:1
 Bearing Friction: -0.55 Oz-Ft
 Windage Torque: -0.88 Oz-Ft

Special Points	Vline (V)	Vaux (V)	Vcap (V)	Iline (A)	Watts	RPM	Tq (Oz-ft)	HP	Eff (%)	PF (%)
	115.0	51.1	146.4	11.428	869.7	24	4.75	0.001	0.1	66.2
	115.0	51.1	146.4	11.428	869.7	24	4.75	0.001	0.1	66.2
	115.0	54.3	139.9	11.364	866.5	125	8.72	0.013	1.1	66.3
	115.0	58.9	135.0	11.265	862.8	226	11.10	0.030	2.6	66.6
	115.0	66.0	132.3	11.123	859.2	321	13.85	0.053	4.6	67.2
	115.0	76.6	129.6	10.934	853.4	409	16.77	0.082	7.1	67.9
	115.0	89.1	130.5	10.698	846.2	491	20.05	0.117	10.3	68.8
	115.0	102.3	133.5	10.421	835.7	565	23.21	0.156	13.9	69.7
	115.0	116.4	138.1	10.094	822.2	638	26.35	0.200	18.2	70.8
	115.0	132.0	145.5	9.721	804.3	704	29.19	0.245	22.7	71.9
	115.0	147.6	154.7	9.326	783.2	763	31.16	0.283	27.0	73.0
	115.0	165.4	167.0	8.872	757.2	819	33.23	0.324	31.9	74.2
	115.0	182.9	181.0	8.403	727.3	868	34.64	0.358	36.7	75.3
	115.0	201.9	197.6	7.886	691.7	913	35.58	0.387	41.7	76.3
	115.0	220.9	215.3	7.345	650.9	955	35.52	0.404	46.3	77.1
	115.0	240.2	234.3	6.785	605.9	992	34.93	0.413	50.8	77.7
	115.0	258.6	253.3	6.234	558.7	1024	33.50	0.409	54.6	77.9
	115.0	276.9	272.8	5.670	506.8	1053	31.30	0.392	57.8	77.7
	115.0	294.4	292.3	5.108	451.5	1080	28.45	0.366	60.4	76.9
	115.0	310.1	310.0	4.601	398.7	1103	25.01	0.328	61.5	75.4
	115.0	324.1	326.3	4.143	346.7	1122	21.50	0.287	61.8	72.8
	115.0	336.8	341.1	3.744	297.6	1140	17.38	0.236	59.1	69.1
	115.0	346.6	353.4	3.434	256.1	1153	14.29	0.196	57.2	64.8
	115.0	355.5	364.7	3.163	214.7	1165	10.44	0.145	50.3	59.0
	115.0	361.6	373.2	2.957	180.1	1175	7.37	0.103	42.7	53.0
	115.0	365.8	379.7	2.825	155.6	1182	4.73	0.067	31.9	47.9
	115.0	370.0	386.9	2.722	133.0	1188	2.41	0.034	19.1	42.5
	115.0	373.2	392.2	2.672	118.6	1193	0.76	0.011	6.8	38.6
	115.0	374.7	394.5	2.656	112.4	1195	0.06	0.001	0.5	36.8

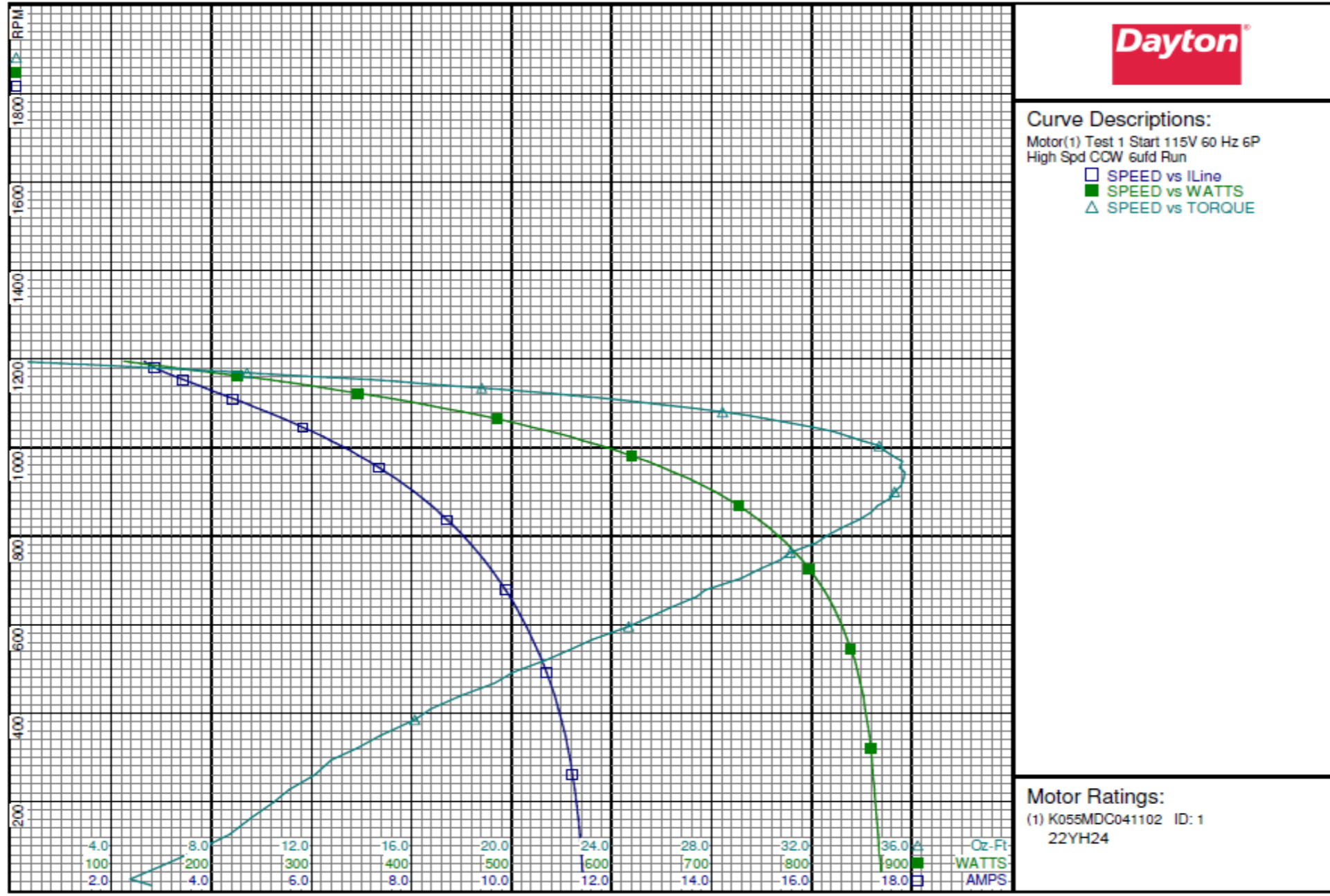
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Dayton Electric Mfg. Co. Lake Forest, IL 60045 USA

Performance Data



22YH24A REV. -



DRAWING NO. PAGE 2 of 8 REV.
 22YH24A -

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

Performance Data



22YH24A REV.
-

Dayton Manufacturing Company

Motor Description

Model: K055MDC041102 22YH24
 Motor ID: 1
 Poles: 6
 Volts: 115
 Frequency: 60
 HP: 1/3
 Speed: 1075/2 spd
 Phase: 1
 Protector: AUTO

Test Conditions

Test Type: Run Run Cap: 6µfd 370VAC
 Test Number: 2 Start Cap: 0µfd
 Poles: 6 Environment: 24.1 Deg C 48 % RH 967 hPa
 Volts: 115 Tested: 9/30/2016 5:05:12 PM
 Hz: 60 Tested By: Navarro, Susana
 Rotation: CCW Gear Ratio: 1:1
 Special Cond: Bearing Friction: -0.53 Oz-Ft
 Speed Conn: High Spd Windage Torque: -0.63 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	375.9	396.7	2.653	107.1	1195	0.00	0.000	0.0	35.1
	115.0	372.6	391.6	2.679	119.8	1191	1.37	0.020	12.1	38.9
	115.0	369.6	386.4	2.741	135.7	1187	3.13	0.044	24.3	43.1
	115.0	365.6	379.5	2.847	158.6	1181	5.57	0.078	36.8	48.4
	115.0	360.6	371.8	3.008	188.0	1173	8.37	0.117	46.4	54.3
	115.0	353.7	362.5	3.219	222.6	1162	11.72	0.162	54.3	60.1
	115.0	345.5	352.0	3.474	260.0	1151	15.07	0.206	59.2	65.1
	115.0	333.3	337.0	3.864	312.5	1134	19.23	0.260	62.0	70.3
	115.0	320.2	321.7	4.284	363.1	1117	23.36	0.311	63.8	73.7
	115.0	310.8	310.9	4.586	396.9	1104	25.80	0.339	63.7	75.3
0.33 HP	115.0	313.7	314.3	4.491	386.5	1108	25.03	0.330	63.7	74.8
	115.0	305.9	305.3	4.750	414.2	1096	27.03	0.353	63.5	75.8
1075 RPM	115.0	290.4	287.7	5.254	467.0	1075	30.22	0.387	61.8	77.3
	115.0	289.4	286.6	5.284	470.1	1074	30.43	0.389	61.7	77.4
	115.0	271.8	267.2	5.853	524.1	1046	33.08	0.412	58.6	77.9
	115.0	253.8	248.0	6.414	574.6	1016	35.31	0.427	55.5	77.9
	115.0	234.3	228.1	7.000	624.1	982	36.65	0.428	51.2	77.5
	115.0	214.5	208.7	7.581	669.7	943	37.01	0.416	46.3	76.8
BDT OZ-FT	115.0	208.6	203.1	7.749	682.8	931	37.22	0.413	45.1	76.6
	115.0	195.7	191.4	8.113	708.5	902	36.82	0.395	41.6	75.9
	115.0	177.0	175.5	8.618	742.0	855	35.78	0.364	36.6	74.9
	115.0	159.4	162.1	9.082	770.1	805	34.10	0.327	31.6	73.7
	115.0	142.6	151.0	9.512	794.1	748	32.02	0.285	26.8	72.6
	115.0	126.9	142.4	9.895	813.5	688	29.66	0.243	22.3	71.5
	115.0	112.3	136.1	10.227	828.4	623	26.95	0.200	18.0	70.4
	115.0	98.7	132.2	10.525	840.6	551	23.95	0.157	13.9	69.5
	115.0	86.0	129.9	10.785	849.7	474	20.70	0.117	10.2	68.5
	115.0	73.6	129.8	10.997	856.1	388	17.57	0.081	7.1	67.7
	115.0	63.8	131.7	11.159	860.7	299	14.52	0.052	4.5	67.1
	115.0	57.6	135.7	11.260	863.3	206	12.20	0.030	2.6	66.7
	115.0	53.1	140.7	11.331	866.8	103	9.76	0.012	1.0	66.5

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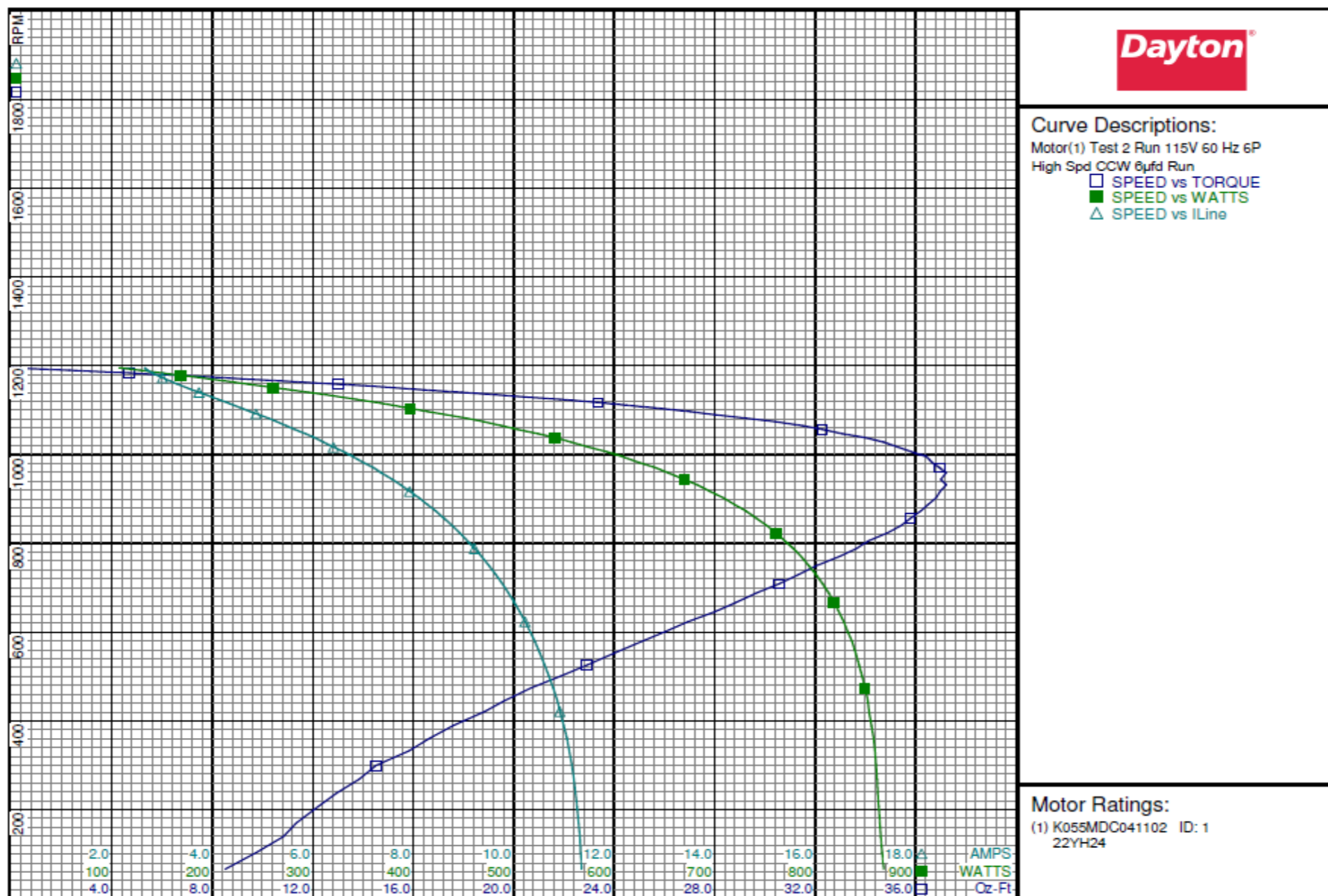
Performance Data



22YH24A

REV.

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

Performance Data



22YH24A REV.
-

Dayton Manufacturing Company

Motor Description

Model: K055MDC041102 22YH24
 Motor ID: 1
 Poles: 6
 Volts: 115
 Frequency: 60
 HP: 1/3
 Speed: 1075/2 spd
 Phase: 1
 Protector: AUTO

Test Conditions

Test Type: Start Run Cap: 6µfd 370VAC
 Test Number: 3 Start Cap: 0µfd
 Poles: 6 Environment: 24.1 Deg C 48 % RH 967 hPa
 Volts: 115 Tested: 9/30/2016 5:09:34 PM
 Hz: 60 Tested By: Navarro, Susana
 Rotation: CCW Gear Ratio: 1:1
 Special Cond: Bearing Friction: -0.60 Oz-Ft
 Speed Conn: Low Spd Windage Torque: -1.25 Oz-Ft
 TestBoard: CMD InLine Three Phase #2 Fixture #1

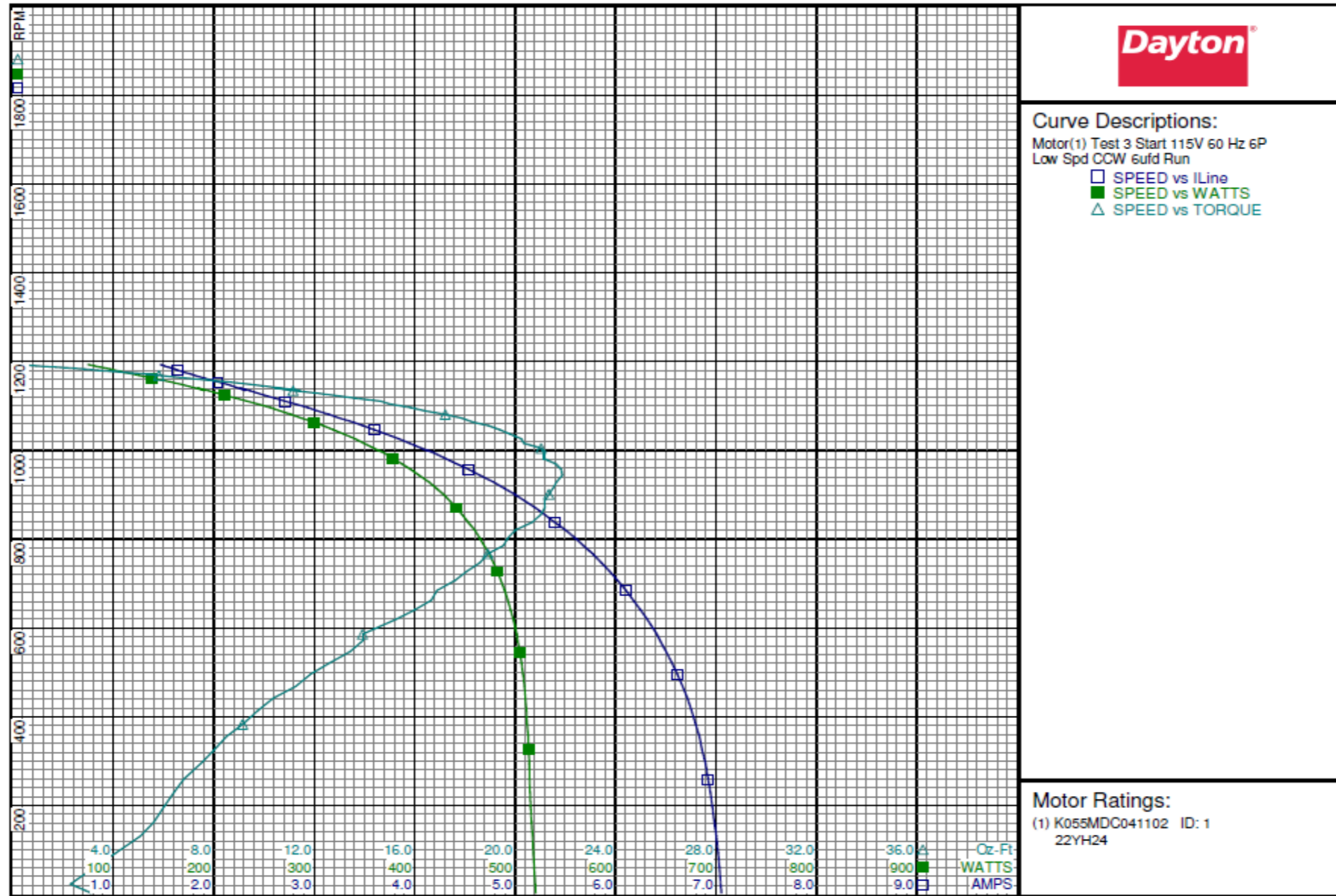
Special Points	Vline (V)	Vaux (V)	Vcap (V)	Iline (A)	Watts	RPM	Tq (Oz-ft)	HP	Eff (%)	PF (%)
	115.0	42.6	117.2	7.046	519.9	23	2.29	0.001	0.1	64.2
	115.0	42.6	117.2	7.046	519.9	23	2.29	0.001	0.1	64.2
	115.0	44.2	109.9	7.003	517.3	131	5.08	0.008	1.1	64.2
	115.0	47.3	106.3	6.945	514.8	229	6.41	0.017	2.5	64.5
	115.0	53.2	102.3	6.861	513.4	326	8.03	0.031	4.5	65.1
	115.0	60.6	100.4	6.757	511.3	413	9.75	0.048	7.0	65.8
	115.0	70.4	100.4	6.615	507.9	496	11.85	0.070	10.3	66.8
	115.0	80.9	102.3	6.444	502.6	571	13.93	0.095	14.0	67.8
	115.0	92.1	105.9	6.249	495.5	640	15.98	0.122	18.3	68.9
	115.0	104.5	111.4	6.020	485.9	707	17.60	0.148	22.7	70.2
	115.0	117.5	118.9	5.769	474.1	767	18.92	0.173	27.2	71.5
	115.0	130.4	127.8	5.504	459.8	820	20.00	0.195	31.7	72.6
	115.0	145.2	139.3	5.201	441.7	870	21.18	0.219	37.1	73.8
	115.0	159.9	152.1	4.889	421.3	914	21.51	0.234	41.5	74.9
	115.0	175.9	167.3	4.536	396.0	957	21.84	0.249	46.9	75.9
	115.0	190.9	182.0	4.198	370.1	993	21.14	0.250	50.4	76.7
	115.0	206.2	198.0	3.841	340.6	1026	20.24	0.247	54.1	77.1
	115.0	221.3	214.2	3.484	308.7	1055	18.94	0.238	57.5	77.1
	115.0	235.2	229.6	3.147	277.0	1080	17.23	0.222	59.7	76.5
	115.0	249.0	245.3	2.807	243.5	1104	14.99	0.197	60.4	75.4
	115.0	261.5	259.5	2.508	211.1	1124	12.81	0.171	60.5	73.2
	115.0	271.6	271.5	2.262	183.8	1140	10.43	0.142	57.5	70.7
	115.0	281.1	283.1	2.038	156.1	1154	8.52	0.117	56.0	66.6
	115.0	289.8	293.8	1.848	130.9	1166	6.26	0.087	49.5	61.6
	115.0	296.9	302.7	1.709	111.0	1175	4.49	0.063	42.2	56.5
	115.0	302.4	310.0	1.611	96.7	1183	2.81	0.040	30.5	52.2
	115.0	309.8	320.1	1.522	83.3	1189	1.28	0.018	16.3	47.6
	115.0	314.8	327.3	1.469	74.7	1193	0.09	0.001	1.3	44.2

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Performance Data



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 22YH24A -

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

Performance Data



22YH24A

REV.

-

Dayton Manufacturing Company

Motor Description

Model: K055MDC041102 22YH24
 Motor ID: 1
 Poles: 6
 Volts: 115
 Frequency: 60
 HP: 1/3
 Speed: 1075/2 spd
 Phase: 1
 Protector: AUTO

Test Conditions

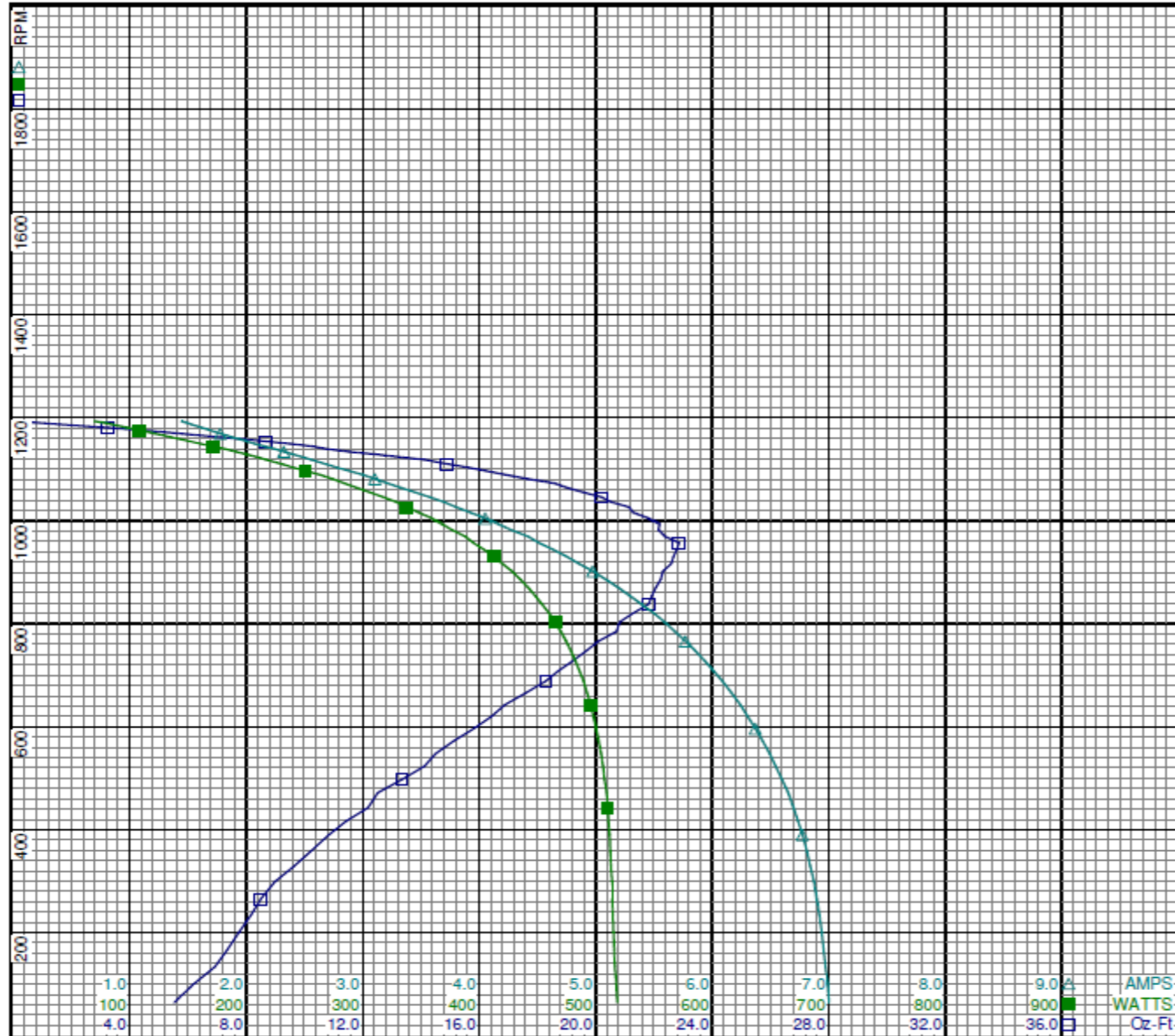
Test Type: Run
 Test Number: 4
 Poles: 6
 Volts: 115
 Hz: 60
 Rotation: CCW
 Special Cond:
 Speed Conn: Low Spd
 TestBoard: CMD InLine Three Phase #2 Fixture #1
 Run Cap: 6µfd 370VAC
 Start Cap: 0µfd
 Environment: 24.1 Deg C 48 % RH 967 hPa
 Tested: 9/30/2016 5:11:01 PM
 Tested By: Navarro, Susana
 Gear Ratio: 1:1
 Bearing Friction: -0.61 Oz-Ft
 Windage Torque: -0.36 Oz-Ft

Special Points	Vline (V)	Vaux (V)	Vcap (V)	Iline (A)	Watts	RPM	Tq (Oz-ft)	HP	Eff (%)	PF (%)
	115.0	317.7	331.8	1.445	69.7	1193	0.00	0.000	0.0	41.9
	115.0	313.5	325.7	1.482	76.9	1190	0.72	0.010	9.9	45.1
	115.0	307.1	316.6	1.557	88.8	1185	2.10	0.030	24.9	49.6
	115.0	300.3	307.2	1.658	104.2	1178	3.87	0.054	38.9	54.7
	115.0	293.4	298.4	1.778	121.7	1169	5.80	0.081	49.5	59.5
	115.0	285.6	288.7	1.940	143.6	1158	7.91	0.109	56.7	64.4
	115.0	276.3	276.9	2.160	171.4	1144	10.27	0.140	60.8	69.0
	115.0	265.8	264.8	2.400	200.0	1129	12.42	0.167	62.3	72.5
	115.0	254.2	251.3	2.679	230.3	1110	14.90	0.197	63.8	74.7
	115.0	241.2	236.1	3.006	263.9	1089	16.94	0.220	62.1	76.3
1075 RPM	115.0	233.7	227.9	3.180	281.1	1075	18.32	0.234	62.2	76.9
	115.0	227.8	221.3	3.326	294.7	1064	19.01	0.241	60.9	77.1
	115.0	212.7	204.8	3.693	328.4	1036	20.51	0.253	57.5	77.3
	115.0	197.5	188.7	4.055	359.0	1004	21.80	0.261	54.1	77.0
	115.0	181.7	172.6	4.420	388.2	969	22.38	0.258	49.6	76.4
BDT OZ-FT	115.0	177.6	168.7	4.508	394.7	957	22.86	0.260	49.2	76.1
	115.0	166.6	158.2	4.750	412.5	930	22.67	0.251	45.4	75.5
	115.0	151.1	144.1	5.087	435.3	885	22.23	0.234	40.1	74.4
	115.0	136.6	132.2	5.391	453.7	838	21.82	0.218	35.8	73.2
	115.0	122.6	121.9	5.678	469.9	785	20.71	0.193	30.7	72.0
	115.0	109.4	113.8	5.938	482.6	727	19.20	0.166	25.7	70.7
	115.0	97.2	107.7	6.165	492.5	665	17.60	0.139	21.1	69.5
	115.0	85.5	103.6	6.371	500.4	596	15.81	0.112	16.7	68.3
	115.0	74.9	101.1	6.544	506.1	523	14.12	0.088	13.0	67.3
	115.0	64.5	100.1	6.698	510.3	442	12.18	0.064	9.4	66.2
	115.0	55.6	101.3	6.813	512.5	357	10.20	0.043	6.3	65.4
	115.0	49.3	104.8	6.897	514.1	265	8.50	0.027	3.9	64.8
	115.0	45.9	108.7	6.956	515.8	166	7.35	0.015	2.1	64.5
	115.0	43.4	113.6	7.003	518.4	64	5.52	0.004	0.6	64.4

Performance Data



22YH24A REV. -



Dayton

Curve Descriptions:
 Motor(1) Test 4 Run 115V 60 Hz 6P
 Low Spd CCW 6µfd Run

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

Motor Ratings:
 (1) K055MDC041102 ID: 1
 22YH24

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

22YH24A	REV. -
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CONNECTIONS:

COM - WHITE
LOW - RED
HIGH - BLACK

CCW LEAD END
NON-REVERSIBLE
6.0 MFD, 370 VAC. CAP

DRAWING NO.	PAGE 1 of 1	REV.
	22YH24A	-

Dayton[®]**DIRECT DRIVE
FAN MOTOR****HP:** 1/3
VOLTS: 115Part
No **22YH24A****AMPS:** 5.3
RPM: 1075/2 SPD
DUTY: CONT
SF: 1.0
KVA CODE:
ENCL: TEAO**PH:** 1
HZ: 60
FR: 48YZ
INS CL: B
AMB: 40 °C
SFA:**THERMALLY PROTECTED:** AUTOMFG. NO. PROT. CODE: 7A010 AVG. F.L.
EFF.**MTR REF:** K55HXMD-411**Disconnect Power Before Making Any
Electrical Connections or Changes****CONNECTIONS:**COM - WHITE
LOW - RED
HIGH - BLACKCCW LEAD END
NON-REVERSIBLE
6.0 MFD, 370 VAC. CAP

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

Made in Mexico