

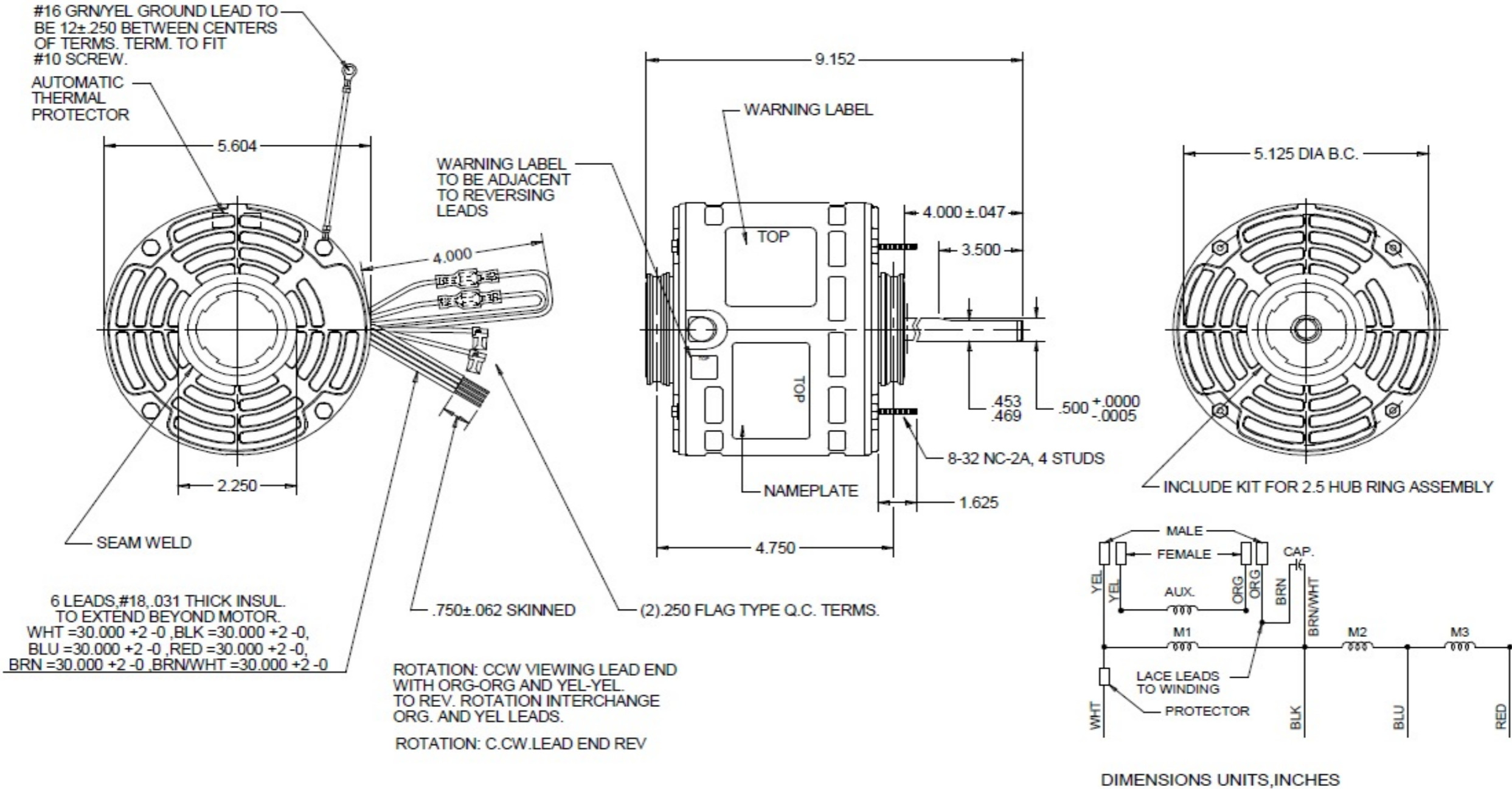
Dimensional Drawing



4M096BH

REV.

MODEL	REF	CUSTOMER	HP	VOLTS	AMPS	HZ	RPM	ROTATION	CUSTOMER PN	DESCRIPTION / REMARKS
K55HXREF-2288		DAYTON	1/4	115	4.2	60	1075	C.CW. LEAD END REV	4M096BH	SAB



DRAWING NO.	PAGE 1 of 1	REV.
4M096BH		-

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

4M096BH

REV.

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SHADED-POLE & PSC MOTOR PERFORMANCE

HP:	1/4							
Poles:	6							
Ambient (°C):	40							
Altitude (FASL):	1000							
No. of Speeds:	4							
HIGH SPEED								
Volts:	115	115	208	230	277	460	100	200
HZ:	60	60	60	60	60	60	50	50
Service Factor:	1.0							
Efficiency:	@ Rated Load	59.1						
Power Factor:	@ Rated Load	80.4						
Amps:	@ No Load							
	@ Rated Load	4.1						
	@ Locked Rotor	8.9						
RPM:	@ Rated Load	1075						
Torques: Oz.Ft.	Breakdown	29.1						
	Locked Rotor	4.5						
	Pull-Up							
	Rated Load	23.5						
	Service Factor	1.0						
Watts:	Rated Load	379						
Temperature Rise:	@ Rated Load							
Thermal Protector:	Trip Temp (°C)	140~150						
Winding Material:	Start (Auxiliary)	Copper						
	Run (Main)	Copper						
Capacitor:	Run (MFD / Volts)	5.0 MFD 370V						
	No. of Run Capacitors	1						
MEDIUM-HIGH SPEED								
HP:	1/4							
Volts:	115	115	208	230	277	460	100	200
HZ:	60	60	60	60	60	60	50	50
Efficiency:	@ Rated Load							
Power Factor:	@ Rated Load							
Amps:	@ No Load							
	@ Rated Load							
	@ Locked Rotor							
Torques: Oz.Ft.	Breakdown	17.3						
	Locked Rotor							
	Pull-Up							
	Rated Load							
Watts:	Rated Load							
Temperature Rise:	@ Rated Load							

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4M096BH -

4M096BH

REV.

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SHADED-POLE & PSC MOTOR PERFORMANCE

MEDIUM-LOW SPEED

HP:	1/4							
Volts:	115	115	208	230	277	460	100	200
HZ:	60	60	60	60	60	60	50	50
Efficiency:	@ Rated Load							
Power Factor:	@ Rated Load							
Amps:	@ No Load							
	@ Rated Load							
Torques: Oz.Ft.	Breakdown							
	Locked Rotor							
	Pull-Up							
	Rated Load							
Watts:	Rated Load							
Temperature Rise:	@ Rated Load							
Watts:	Rated Load							
Temperature Rise:	@ Rated Load							
Thermal Protector:	Trip Temp (°C)							
Winding Material:	Start (Auxiliary)							
	Run (Main)							

LOW SPEED

HP:	1/4							
Volts:	115	120	208	230	277	460	100	200
HZ:	60	60	60	60	60	60	50	50
Efficiency:	@ Rated Load							
Power Factor:	@ Rated Load							
Amps:	@ No Load							
	@ Rated Load							
Torques: Oz.Ft.	Breakdown	14.3						
	Locked Rotor							
	Pull-Up							
	Rated Load							
Watts:	Rated Load							
Temperature Rise:	@ Rated Load							

Notes:

DRAWING NO. PAGE 1 REV.
4M096BH -

Performance Data



4M096BH

REV.

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Dayton Manufacturing Company

Motor Description

Model: 4M096BH
 Motor ID:
 Poles: 6
 Volts: 115
 Frequency: 60
 HP: 1/4
 Speed: 1075/3SPEED
 Phase: 1
 Protector:

Test Conditions

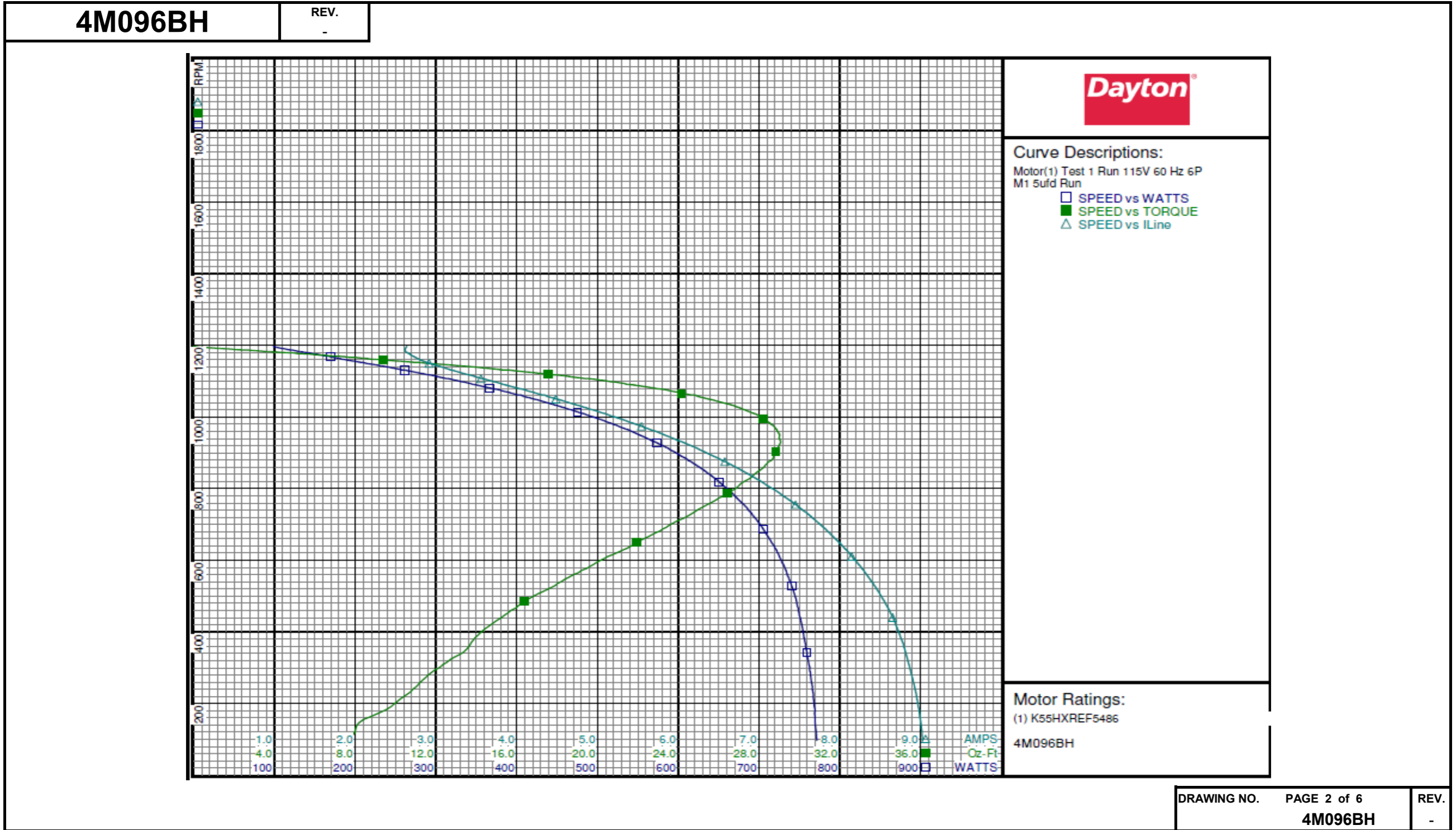
Test Type: Run
 Test Number: 1
 Poles: 6
 Volts: 115
 Hz: 60
 Rotation:
 Special Cond: M1
 Speed Conn:
 TestBoard: Amtps Performance Fixture #4
 Run Cap: 5
 Start Cap: 0µfd
 Environment:
 Tested: 6/9/2001 12:34:59 PM
 Tested By: Crocker, Jason
 Gear Ratio: 1:1
 Bearing Friction: -1.02 Oz-Ft
 Windage Torque: -0.60 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	315.6	340.4	2.637	2.749	0.661	98.6	1197	0.00	0.000	0.0	32.5	5.2
	115.0	312.5	335.1	2.616	2.668	0.651	119.3	1187	2.36	0.033	20.9	39.6	5.2
	115.0	308.1	328.4	2.655	2.640	0.638	144.2	1178	4.96	0.070	36.0	47.2	5.2
	115.0	304.3	322.5	2.719	2.647	0.626	166.5	1169	7.20	0.100	44.9	53.3	5.2
	115.0	299.5	315.3	2.820	2.690	0.612	192.5	1158	9.66	0.133	51.6	59.4	5.2
	115.0	293.3	306.2	2.972	2.784	0.595	223.4	1146	12.46	0.170	56.8	65.4	5.2
	115.0	286.7	297.2	3.157	2.926	0.578	254.3	1133	14.96	0.202	59.2	70.1	5.2
	115.0	279.0	287.2	3.375	3.112	0.559	286.8	1119	17.55	0.234	60.8	73.9	5.2
0.25 HP	115.0	274.1	281.3	3.514	3.238	0.548	305.7	1111	18.91	0.250	61.0	75.7	5.2
	115.0	270.6	277.0	3.616	3.334	0.539	319.5	1105	19.88	0.261	61.1	76.8	5.2
	115.0	261.0	265.9	3.891	3.597	0.518	353.5	1088	22.00	0.285	60.1	79.0	5.2
1075 RPM	115.0	253.5	257.4	4.110	3.816	0.503	378.9	1075	23.45	0.300	59.1	80.2	5.2
	115.0	250.4	254.0	4.201	3.908	0.496	389.1	1070	23.97	0.305	58.5	80.5	5.2
	115.0	239.4	241.6	4.524	4.235	0.472	424.5	1048	25.64	0.320	56.2	81.6	5.2
	115.0	228.1	229.5	4.857	4.579	0.449	459.0	1026	27.03	0.330	53.7	82.2	5.2
	115.0	216.0	216.8	5.203	4.944	0.425	493.8	1000	28.08	0.334	50.5	82.5	5.2
	115.0	203.9	204.7	5.546	5.323	0.401	526.0	974	28.73	0.333	47.3	82.5	5.2
	115.0	191.6	192.7	5.888	5.686	0.378	557.2	945	29.00	0.326	43.7	82.3	5.2
BDT OZ-FT	115.0	186.1	187.5	6.040	5.847	0.368	570.5	931	29.07	0.322	42.1	82.1	5.2
	115.0	179.4	181.1	6.229	6.044	0.356	587.3	913	29.00	0.315	40.0	82.0	5.2
	115.0	167.3	170.7	6.543	6.386	0.335	612.5	878	28.59	0.299	36.4	81.4	5.2
	115.0	155.7	161.0	6.845	6.708	0.316	636.2	843	27.84	0.279	32.8	80.8	5.2
	115.0	144.3	152.3	7.129	7.014	0.300	657.8	805	26.93	0.258	29.3	80.2	5.2
	115.0	133.3	144.9	7.397	7.303	0.285	676.4	764	25.76	0.234	25.9	79.5	5.2
	115.0	123.0	138.4	7.643	7.569	0.272	693.5	722	24.43	0.210	22.6	78.9	5.2
	115.0	113.0	133.0	7.869	7.815	0.262	707.8	677	22.90	0.185	19.5	78.2	5.2
	115.0	103.4	128.5	8.081	8.048	0.253	721.5	629	21.27	0.159	16.5	77.6	5.2
	115.0	94.0	125.0	8.272	8.259	0.246	732.0	577	19.47	0.134	13.6	76.9	5.2
	115.0	85.5	122.4	8.448	8.450	0.240	741.0	523	17.70	0.110	11.1	76.3	5.2
	115.0	77.5	121.0	8.597	8.616	0.237	748.4	466	15.95	0.088	8.8	75.7	5.2
	115.0	69.9	121.3	8.717	8.752	0.238	754.1	406	14.38	0.069	6.9	75.2	5.2
	115.0	64.4	122.4	8.814	8.861	0.240	759.2	343	13.37	0.055	5.4	74.9	5.2
	115.0	57.6	124.8	8.892	8.956	0.244	763.8	276	11.56	0.038	3.7	74.7	5.2
	115.0	53.3	126.9	8.959	9.034	0.249	767.6	209	10.15	0.025	2.5	74.5	5.2
	115.0	47.2	129.6	9.013	9.104	0.256	770.2	129	8.02	0.012	1.2	74.3	5.2

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

Performance Data



DRAWING NO.	PAGE 2 of 6	REV.
	4M096BH	-

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

Performance Data



4M096BH	REV. -
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Dayton Manufacturing Company

Motor Description

Model: 4M096BH
 Motor ID: 1
 Poles: 6
 Volts: 115
 Frequency: 60
 HP: 1/4
 Speed: 1075/3SPEED
 Phase: 1
 Protector:

Test Conditions

Test Type: Run
 Test Number: 4
 Poles: 6
 Volts: 115
 Hz: 60
 Rotation:
 Special Cond: M2
 Speed Conn:
 TestBoard: Amtps Performance Fixture #4
 Run Cap: 5
 Start Cap: 0µfd
 Environment:
 Tested: 6/9/2001 12:51:42 PM
 Tested By: Crocker, Jason
 Gear Ratio: 1:1
 Bearing Friction: -0.88 Oz-Ft
 Windage Torque: -0.65 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	268.5	283.0	1.171	1.253	0.550	53.8	1195	0.000	0.000	0.0	39.9	5.2
	115.0	263.9	273.6	1.240	1.228	0.531	72.5	1185	1.877	0.026	27.3	50.8	5.1
	115.0	257.9	263.1	1.367	1.263	0.510	95.8	1172	4.123	0.058	44.8	61.0	5.1
	115.0	252.4	255.0	1.483	1.327	0.496	114.0	1160	5.783	0.080	52.3	66.8	5.2
	115.0	245.5	245.7	1.622	1.425	0.478	133.7	1148	7.500	0.102	57.2	71.7	5.2
	115.0	237.3	235.1	1.786	1.560	0.457	155.4	1133	9.247	0.125	59.9	75.6	5.2
	115.0	229.1	224.4	1.972	1.729	0.437	177.9	1116	10.902	0.145	60.8	78.4	5.2
	115.0	220.4	213.2	2.172	1.922	0.415	200.7	1099	12.430	0.163	60.4	80.4	5.2
	115.0	211.3	202.4	2.374	2.126	0.394	222.8	1081	13.720	0.177	59.1	81.6	5.2
1075 RPM	115.0	208.6	199.2	2.437	2.190	0.388	229.5	1075	14.087	0.180	58.6	81.9	5.2
	115.0	202.0	191.4	2.591	2.349	0.373	245.4	1060	14.886	0.188	57.1	82.4	5.2
	115.0	192.6	180.8	2.803	2.571	0.353	266.8	1038	15.769	0.195	54.5	82.8	5.2
	115.0	183.1	170.0	3.024	2.805	0.332	288.4	1014	16.479	0.199	51.4	82.9	5.2
	115.0	173.3	159.6	3.242	3.039	0.312	308.9	987	16.954	0.199	48.1	82.8	5.2
	115.0	163.3	149.2	3.461	3.277	0.292	328.4	957	17.232	0.196	44.6	82.5	5.2
BDT OZ-FT	115.0	158.2	144.2	3.570	3.395	0.283	338.0	942	17.303	0.194	42.8	82.3	5.2
	115.0	153.5	139.5	3.672	3.506	0.274	346.7	926	17.251	0.190	40.9	82.1	5.2
	115.0	143.6	130.3	3.881	3.734	0.256	363.9	891	17.046	0.181	37.1	81.5	5.2
	115.0	133.9	121.8	4.077	3.951	0.240	379.5	854	16.726	0.170	33.4	80.9	5.2
	115.0	124.4	114.2	4.265	4.157	0.225	393.5	814	16.108	0.156	29.6	80.2	5.2
	115.0	115.3	107.4	4.439	4.352	0.211	406.0	771	15.350	0.141	25.9	79.5	5.2
	115.0	106.3	101.7	4.604	4.535	0.201	417.2	725	14.522	0.125	22.4	78.8	5.2
	115.0	97.6	97.1	4.756	4.707	0.192	427.1	675	13.470	0.108	18.9	78.1	5.3
	115.0	89.0	93.5	4.895	4.864	0.185	435.2	622	12.291	0.091	15.6	77.3	5.3
	115.0	80.9	91.1	5.022	5.009	0.180	442.2	565	11.087	0.075	12.6	76.6	5.2
	115.0	73.3	89.5	5.129	5.135	0.177	447.3	505	9.874	0.059	9.9	75.8	5.2
	115.0	66.9	89.0	5.215	5.235	0.176	451.3	440	8.891	0.047	7.7	75.3	5.2
	115.0	59.8	90.2	5.281	5.313	0.177	454.2	372	8.165	0.036	5.9	74.8	5.2
	115.0	52.9	91.9	5.334	5.379	0.180	457.6	299	7.199	0.026	4.2	74.6	5.2
	115.0	46.8	94.3	5.388	5.446	0.186	462.0	223	6.346	0.017	2.7	74.6	5.2
	115.0	39.3	97.1	5.424	5.496	0.192	464.3	135	5.061	0.008	1.3	74.4	5.2

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	4M096BH	-

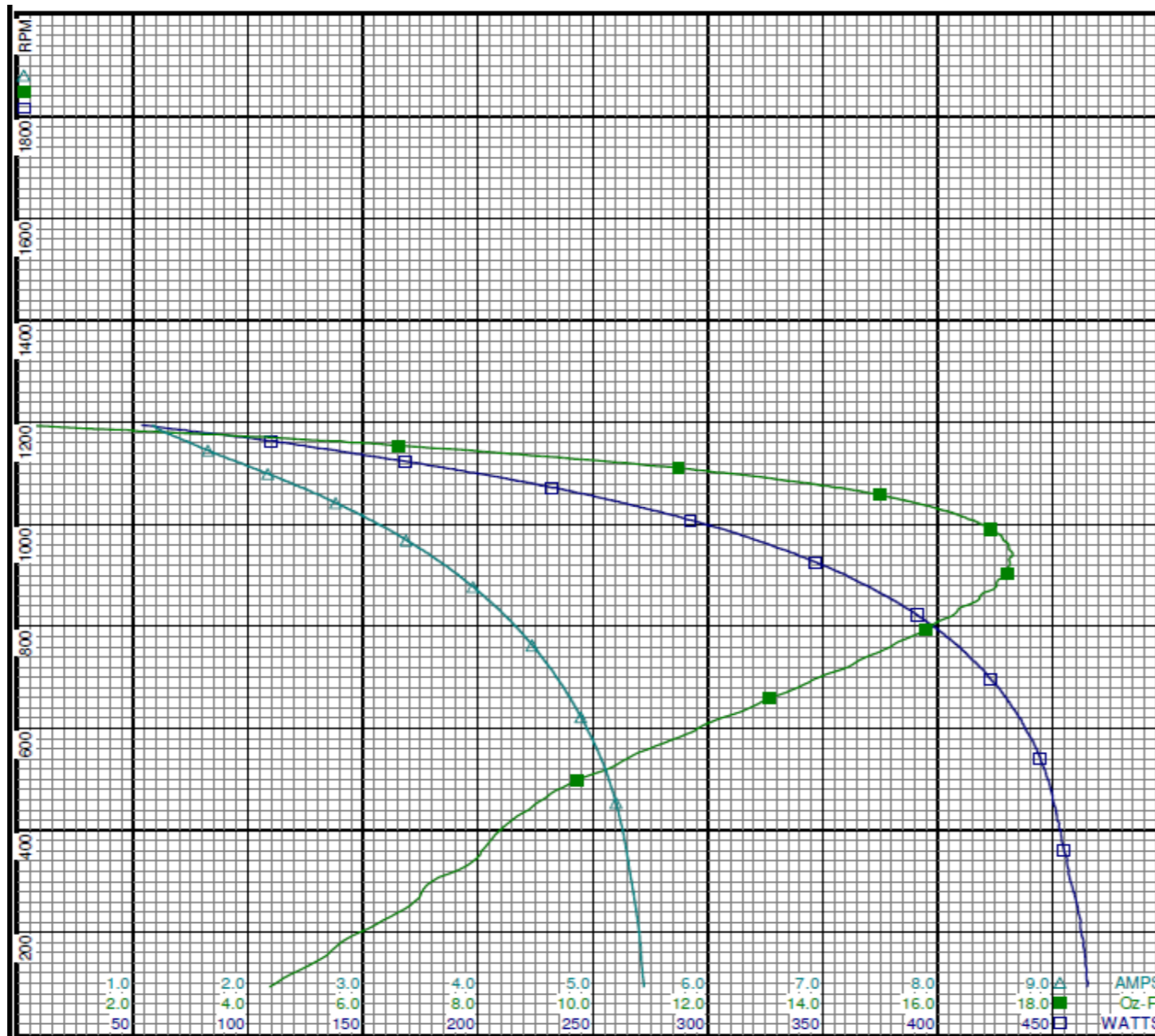
Performance Data



4M096BH

REV.

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Curve Descriptions:

Motor(1) Test 4 Run 115V 60 Hz 6P
M2 5ufd Run

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

Motor Ratings:

(1) K55HXREF5486

4M096BH

AMPS

TORQUE

WATTS

DRAWING NO.	PAGE 4 of 6	REV.
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Dayton Electric Mfg. Co. Lake Forest, IL 60045 USA

Performance Data



4M096BH REV.
-

Dayton Manufacturing Company

Motor Description

Model: 4M096BH
 Motor ID:
 Poles: 6
 Volts: 115
 Frequency: 60
 HP: 1/4
 Speed: 1075/3SPEED
 Phase: 1
 Protector:

Test Conditions

Test Type: Run
 Test Number: 5
 Poles: 6
 Volts: 115
 Hz: 60
 Rotation:
 Special Cond: M3
 Speed Conn:
 TestBoard: Amtps Performance Fixture #4
 Run Cap: 5
 Start Cap: 0µfd
 Environment:
 Tested: 6/9/2001 1:11:20 PM
 Tested By: Crocker, Jason
 Gear Ratio: 1:1
 Bearing Friction: -0.86 Oz-Ft
 Windage Torque: -0.56 Oz-Ft

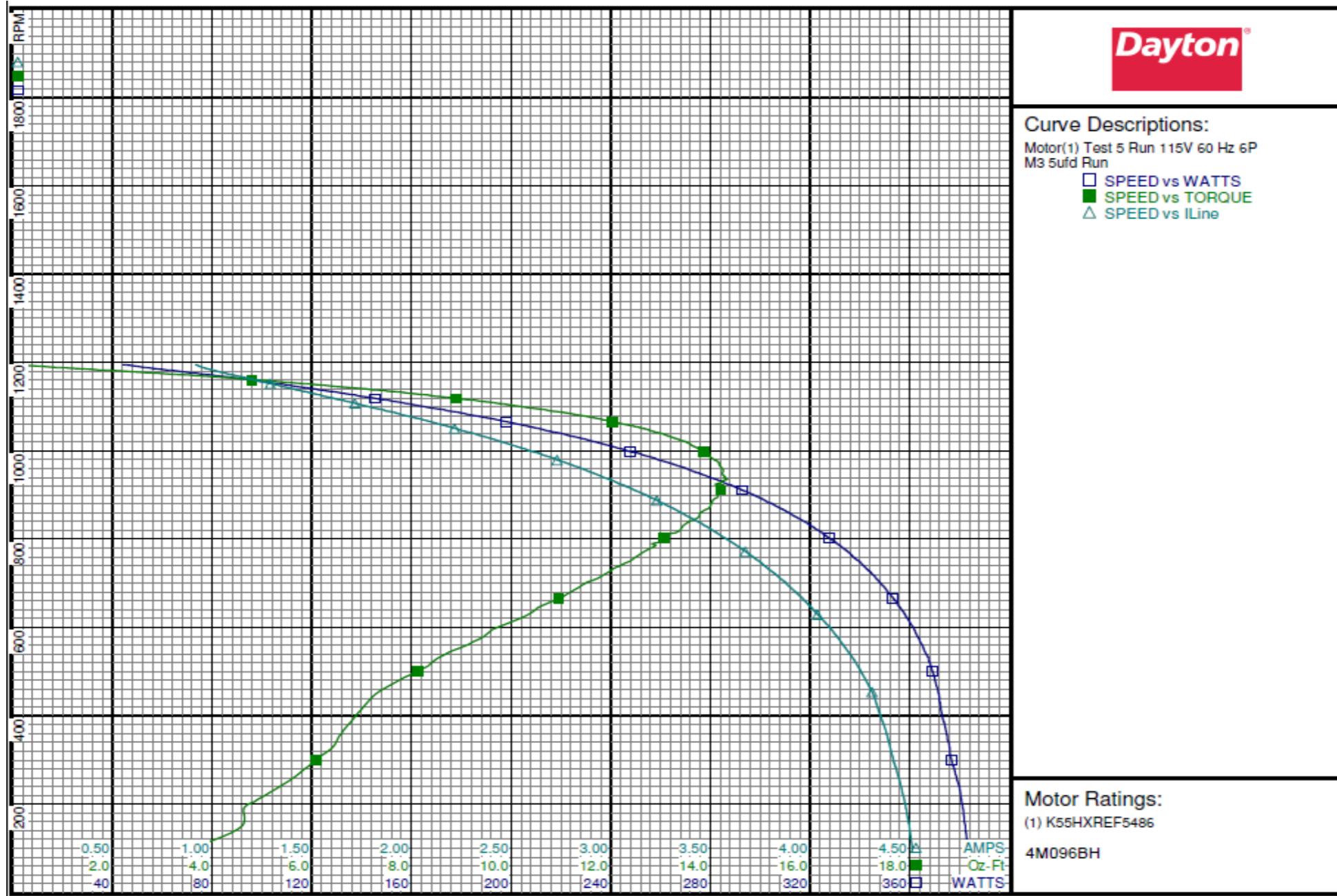
Special Points	Vline (V)	Vaux (V)	Vcap (V)	Iline (A)	Imain (A)	Iaux (A)	Watts	RPM	Tq(Oz-ft)	HP	Eff(%)	PF(%)	Cap
	115.0	249.6	260.9	0.917	0.997	0.507	44.2	1195	0.000	0.000	0.0	41.9	5.2
	115.0	244.4	250.4	0.987	0.975	0.486	59.9	1184	1.594	0.022	28.0	52.7	5.2
	115.0	237.9	239.2	1.106	1.006	0.465	79.8	1172	3.522	0.049	45.9	62.7	5.2
	115.0	232.2	230.6	1.218	1.068	0.448	96.0	1160	4.947	0.068	53.1	68.5	5.2
	115.0	225.9	221.7	1.342	1.156	0.431	112.6	1147	6.369	0.087	57.6	72.9	5.2
	115.0	218.7	211.9	1.481	1.270	0.412	130.2	1132	7.806	0.105	60.3	76.4	5.2
	115.0	211.0	201.8	1.640	1.416	0.393	148.9	1115	9.154	0.122	60.9	79.0	5.2
	115.0	203.5	192.0	1.800	1.572	0.374	167.0	1098	10.329	0.135	60.3	80.6	5.2
	115.0	195.7	182.1	1.969	1.743	0.355	185.1	1080	11.408	0.147	59.1	81.8	5.2
1075 RPM	115.0	193.6	179.7	2.012	1.787	0.350	189.6	1075	11.638	0.149	58.6	81.9	5.2
	115.0	187.2	172.0	2.150	1.931	0.336	203.7	1059	12.305	0.155	56.8	82.4	5.2
	115.0	179.3	162.6	2.320	2.112	0.318	221.0	1038	13.050	0.161	54.4	82.8	5.2
	115.0	170.9	152.9	2.499	2.304	0.299	238.0	1013	13.607	0.164	51.5	82.8	5.2
	115.0	162.4	143.5	2.679	2.496	0.281	254.6	988	13.983	0.164	48.2	82.6	5.2
	115.0	153.8	134.2	2.857	2.689	0.263	270.6	959	14.240	0.163	44.8	82.4	5.2
BDT OZ-FT	115.0	147.0	127.2	2.994	2.840	0.250	282.3	935	14.344	0.160	42.2	82.0	5.2
	115.0	145.3	125.3	3.029	2.879	0.246	285.3	928	14.225	0.157	41.1	81.9	5.2
	115.0	136.7	117.2	3.197	3.064	0.230	299.3	894	14.147	0.151	37.5	81.4	5.2
	115.0	128.2	109.3	3.359	3.245	0.215	311.9	859	13.783	0.141	33.7	80.7	5.2
	115.0	119.8	102.4	3.514	3.417	0.202	323.6	819	13.376	0.130	30.1	80.1	5.2
	115.0	111.5	96.3	3.661	3.581	0.190	334.0	776	12.744	0.118	26.3	79.3	5.2
	115.0	103.6	90.9	3.798	3.736	0.180	343.1	730	12.008	0.104	22.7	78.6	5.2
	115.0	95.9	86.7	3.923	3.878	0.172	351.0	682	11.220	0.091	19.4	77.8	5.3
	115.0	88.4	83.4	4.038	4.010	0.166	358.0	629	10.347	0.078	16.2	77.1	5.3
	115.0	81.3	81.1	4.145	4.132	0.161	363.8	573	9.359	0.064	13.1	76.3	5.3
	115.0	74.6	79.9	4.239	4.240	0.158	368.5	512	8.327	0.051	10.3	75.6	5.3
	115.0	67.8	80.0	4.317	4.333	0.158	371.7	448	7.268	0.039	7.8	74.9	5.2
	115.0	61.3	80.5	4.370	4.399	0.158	374.1	379	6.725	0.030	6.0	74.4	5.2
	115.0	55.7	81.9	4.412	4.452	0.161	376.3	309	6.179	0.023	4.5	74.2	5.2
	115.0	49.4	84.5	4.462	4.515	0.167	380.2	227	5.172	0.014	2.7	74.1	5.2
	115.0	44.2	86.7	4.496	4.560	0.171	382.2	152	4.617	0.008	1.6	73.9	5.2

DRAWING NO. PAGE 5 of 6 REV.
4M096BH -

Performance Data



4M096BH REV. -



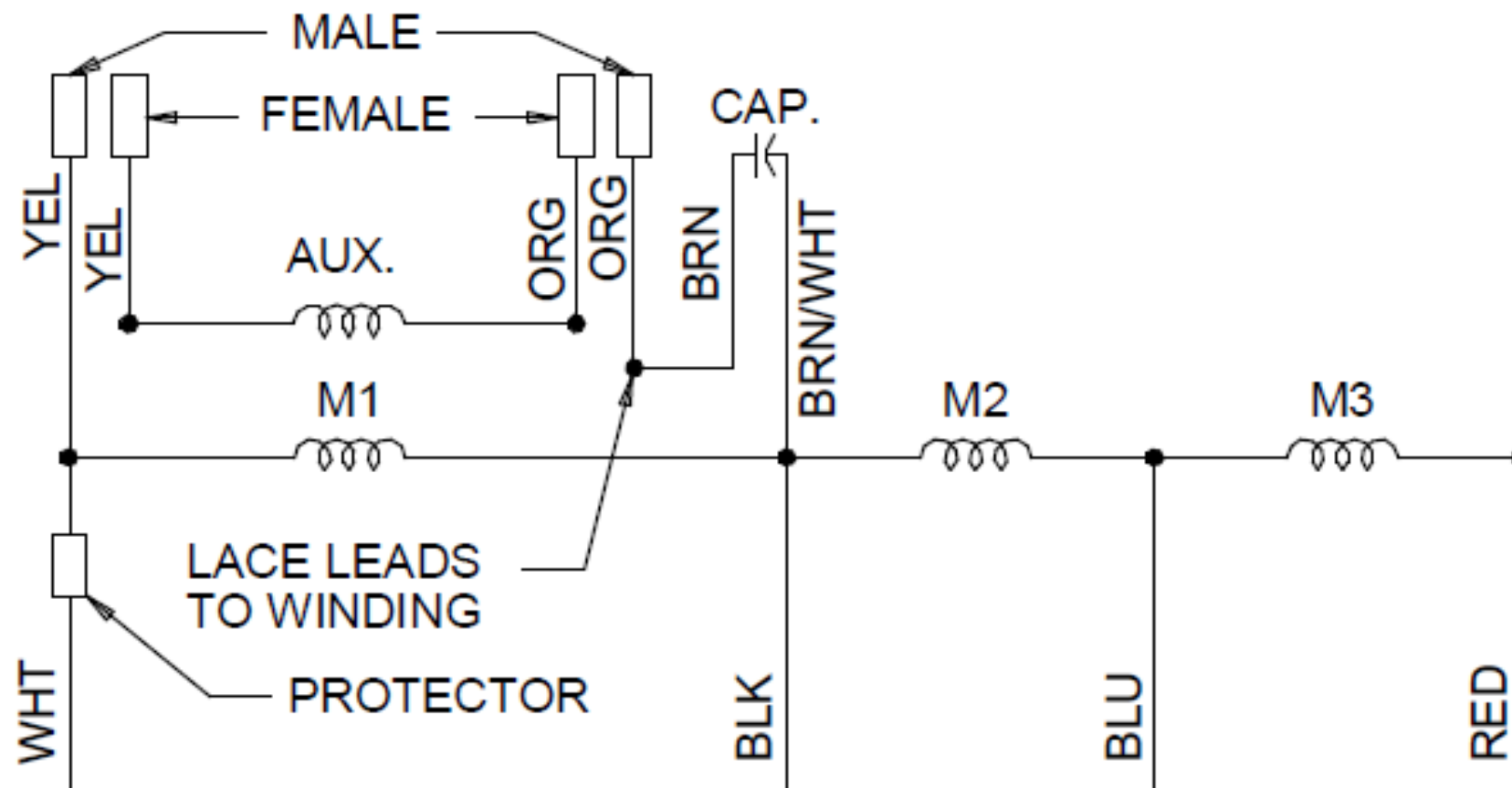
DRAWING NO. PAGE 6 of 6 REV.
 4M096BH -

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

Wiring Diagram



4M096BH	REV. -
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ROTATION: CCW VIEWING LEAD END WITH ORG-ORG AND YEL-YEL.
TO REV. ROTATION INTERCHANGE ORG. AND YEL LEADS.

DRAWING NO.	PAGE 1 of 1	REV.
4M096BH		-

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

Dayton®

DIRECT DRIVE BLOWER MOTOR

Part No
4M096BH

BAR CODE

Disconnect Power Before Making Any
Electrical Connections or Changes

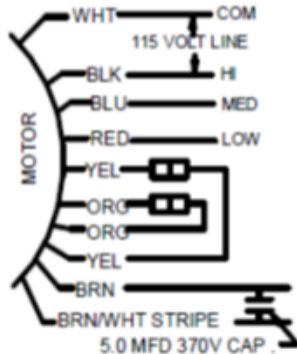


E37403



258501

TO REVERSE ROTATION
INTERCHANGE ORG AND YEL LEADS



HP: 1/4	PH: 1
VOLTS: 115	HZ: 60
AMPS: 4.2	FR: 48YZ
RPM: 1075 / 3SPD	INS CL: B
DUTY: CONT	AMB: 40 °C
ENCL: OAO	SF: 1.0
THERMALLY PROTECTED: AUTO	
MFG. NO.	PROT. CODE: 7A010
MTR REF: K55HXREF-2288	AVG.F.L EFF.

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

Made in China