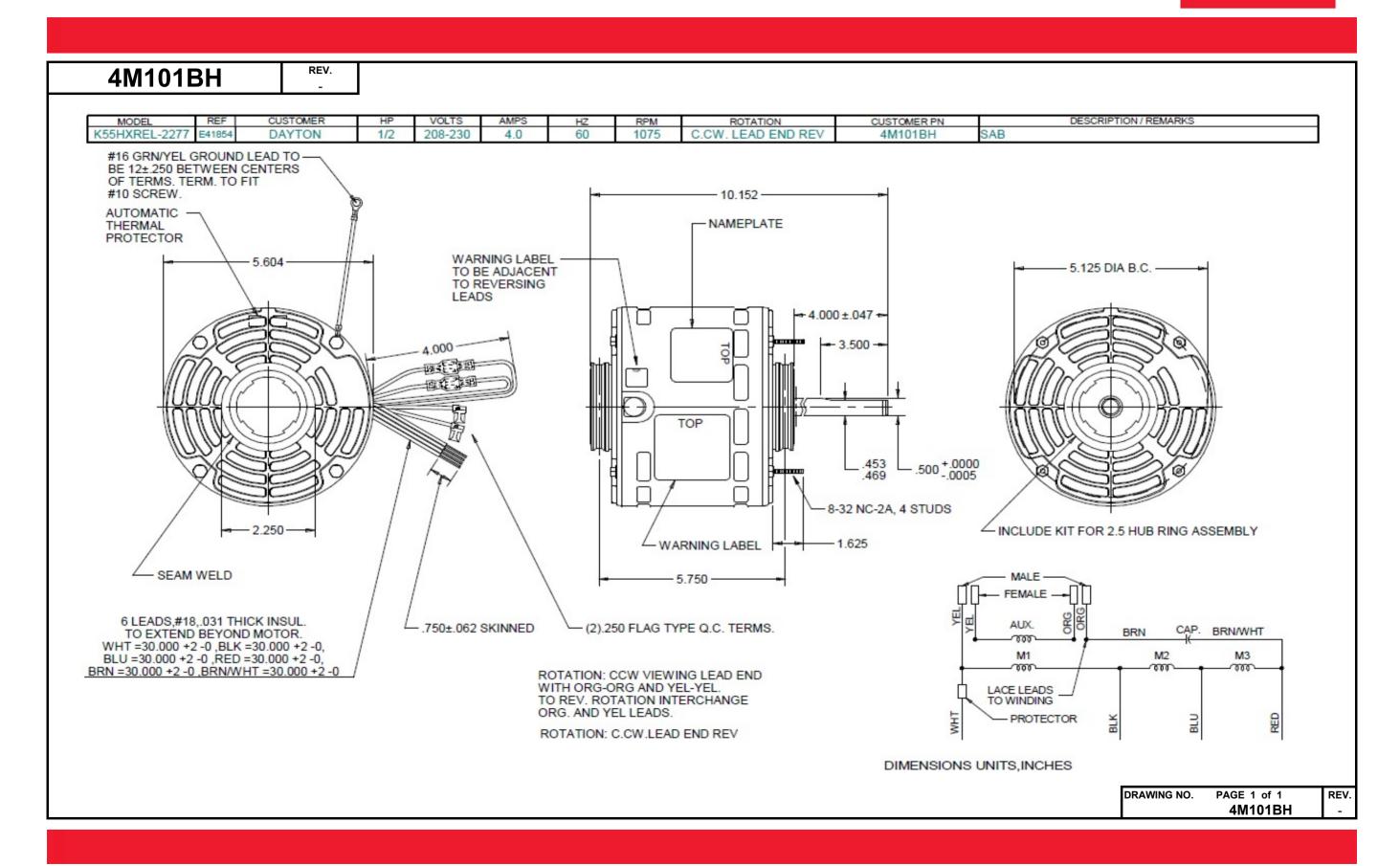
Dimensional Drawing







4M101BI	-							
	SHADED-POLE &	& PSC MO	OTOR I	PERFO	RMAN	NCE		
HP:	1/2							
Poles:	6							
Ambient (°C):	40							
Altitude (FASL):	1000							
No. of Speeds:	3							
		HIGH SF	PEED					
Volts:	208~230	115	208	230	277	460	100	200
HZ:	60	60	60	60	60	60	50	50
Service Factor:	1.0							
Efficiency:	@ Rated Load		55.8	54.2				
Power Factor:	@ Rated Load		78.2	76.8				
Amps:	@ No Load							
	@ Rated Load		4.4	5.3				
	@ Locked Rotor			10.2				
RPM:	@ Rated Load		1075	1075				
Torques:	Breakdown		48.5	60.1				
Oz.Ft.	Locked Rotor			5				
	Pull-Up							
	Rated Load		41.9	53.2				
	Service Factor		1.0	1.0				
Watts:	Rated Load		716	936				
Temperature Rise:	@ Rated Load							
Thermal Protector:	Trip Temp (°C)		140~150	140~150				
Winding Material:	Start (Auxiliary)		Copper	Copper				
J 111 1	Run (Main)		Copper	Copper				
Capacitor:	Run (MFD / Volts)	5.0 MFD	370V	<u> </u>		! -		
	No. of Run Capacitors	1						
	·	DIUM-HIG	L CDE	- n				
HP:	1/2		ON SPEE	בט				
Volts:	208~230	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							
7 tilipo:	@ Rated Load							
	@ Locked Rotor							
Torques:	Breakdown		28.5	35.5				
Oz.Ft.	Locked Rotor			30.0				
V 2.1 t.	Pull-Up							
	Rated Load							
Watts:	Rated Load							
Temperature Rise:	@ Rated Load							
remperature Mise.	I W TAICU LUAU		<u> </u>	ļļ		<u> </u>		J

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

4M101BH



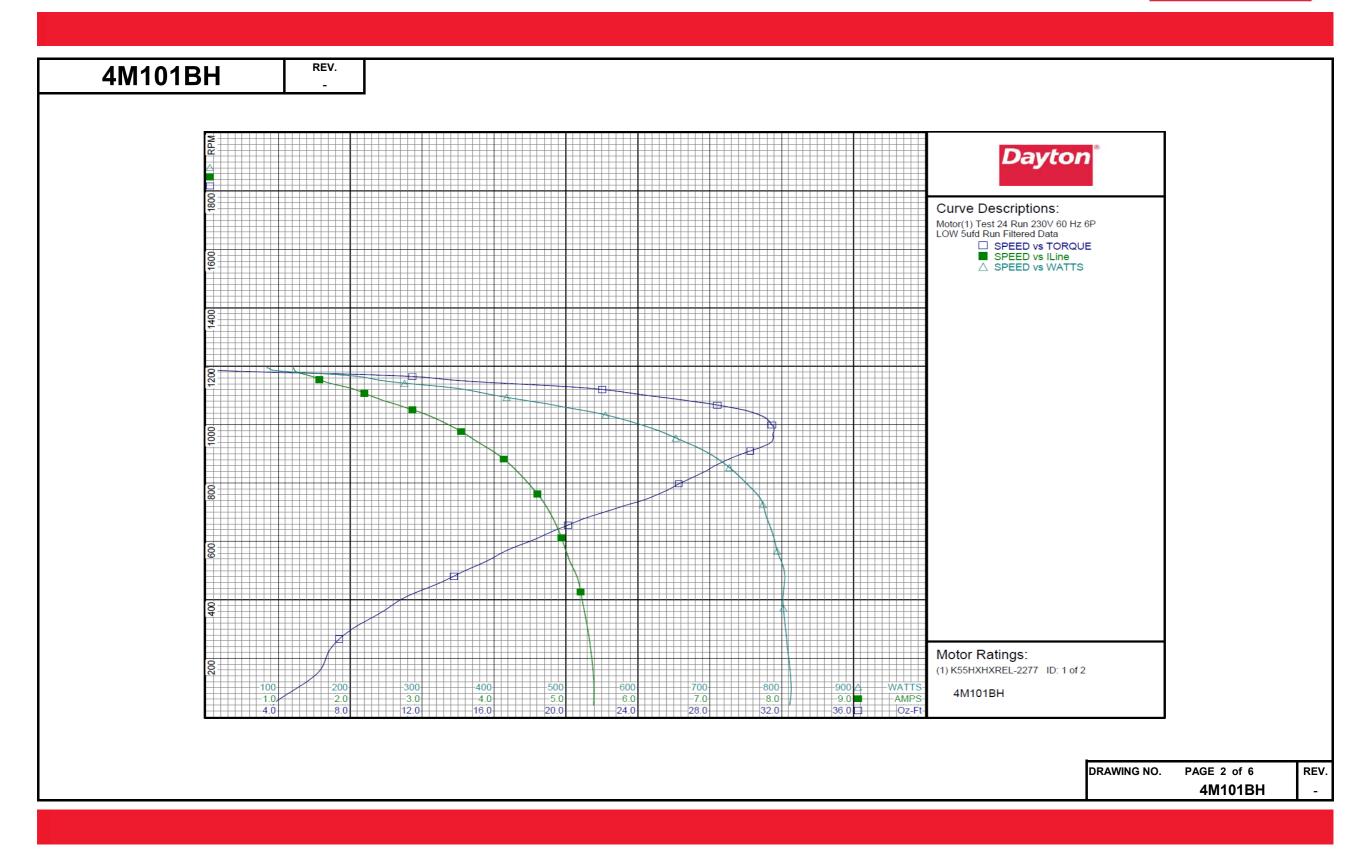
REV. 4M101BH **SHADED-POLE & PSC MOTOR PERFORMANCE MEDIUM-LOW SPEED** 1/2 HP: 230 277 100 Volts: 208~230 115 208 460 200 HZ: 60 60 60 60 60 60 50 50 Efficiency: @ Rated Load **Power Factor:** @ Rated Load Amps: @ No Load @ Rated Load Breakdown **Torques:** Locked Rotor Oz.Ft. Pull-Up Rated Load Watts: 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: 1/2 208~230 Volts: 120 208 230 277 460 100 200 HZ: 60 60 60 60 60 60 50 50 Efficiency: @ Rated Load **Power Factor:** @ Rated Load @ No Load Amps: @ Rated Load 25.1 31.6 **Torques:** Breakdown Locked Rotor Oz.Ft. Pull-Up Rated Load Watts: Rated Load **Temperature Rise:** @ Rated Load Notes:

> DRAWING NO. PAGE 1 REV. 4M101BH -



					Dovto	n Manufa	eturina	Comp	on y				
					Dayto	II Manuia	icturing	Сошр	Any Filtered				
Motor Des	cription					Test Con	ditions		1111111				
Model:	4M101BH			Test Type:	Run		Run Ca	ıp:	5				
Motor ID:	1 of 2			Test Numbe	er: 24		Start Ca	ap:	0μ f d				
Poles:	6			Poles:	6		Enviror	nment:					
Volts:	208-230			Volts:	230		Tested:		11/5/2015 4:1				
Frequency:	60			Hz:	60		Tested	•	Liu, Bingmin				
HP:	1/2			Rotation:			Gear R		1:1				
Speed:	1075			Special Con					-0.89 Oz-Ft				
Phase:	1			Speed Conn				ge Torque	:-1.16 Oz-Ft				
Protector:	7AM 036-A5			TestBoard:	NMQC	Plotter Fixt	ure #1						
Special Points	Vline(V)	Vaux (V)	Vcap (V)		Imain(A)	Iaux (A)	Watts	RPM		HP	Eff(%)	PF(%)	Cap
	230.0 230.0	154.6 153.8	297.9 297.1	1.206 1.219	1.637 1.640	0.545 0.545	83.6 88.4	1195 1190	0.00 0.19	0.000	0.0 2.5	0.0	4.9 4.9
	230.0	149.9	289.1	1.287	1.633	0.531	139.7	1177	5.05	0.071	33.7	0.0	4.9
	230.0	144.2	278.2	1.472	1.720	0.512	211.7	1165	11.47	0.159	57.8	0.0	4.9
	230.0	141.7	274.1	1.599	1.817	0.502	243.5	1151	13.99	0.192	59.2	0.0	4.9
	230.0	137.6	267.1 260.6	1.819 2.064	1.989	0.490 0.479	302.7 358.9	1136	18.40	0.249	61.2	0.0	4.9 4.9
	230.0 230.0	133.1 129.5	257.0	2.230	2.204	0.479	393.4	1120 1104	22.02 24.03	0.234	61.1 59.9	0.0	4.8
	230.0	124.9	252.6	2.419	2.537	0.460	435.4	1086	26.28	0.340	58.2	0.0	4.8
1075 RPM	230.0	121.7	249.7	2.558	2.672	0.454	463.6	1075	27.58	0.353	56.8	0.0	4.8
	230.0	119.3	247.8	2.668	2.772	0.452	482.7	1067	28.43	0.361	55.8	0.0	4.8
	230.0	113.2	243.1	2.924	3.021	0.445	529.1	1046	30.12	0.375	52.9	0.0	4.9
	230.0 230.0	106.7 100.7	238.9 235.6	3.162 3.374	3.267 3.489	0.439 0.434	570.7 605.5	1024 999	31.08 31.46	0.379 0.374	49.5 46.1	0.0	4.9 4.9
BDT OZ-FT	230.0	97.6	234.1	3.480	3.601	0.434	622.0	985	31.58	0.374	44.4	0.0	4.9
	230.0	94.7	233.0	3.581	3.707	0.428	637.0	971	31.53	0.365	42.7	0.0	4.9
	230.0	89.6	231.1	3.764	3.900	0.423	664.5	942	31.45	0.353	39.6	0.0	4.9
	230.0	82.7	229.0	3.976	4.128	0.422	692.5	910	30.26	0.328	35.3	0.0	4.9
	230.0	76.4	228.0	4.170	4.339	0.422	715.4	875	28.82	0.300	31.3	0.0	4.9
	230.0 230.0	71.5 66.9	227.7 227.8	4.330 4.482	4.513 4.678	0.421 0.420	734.5 751.5	838 797	27.68 26.29	0.276 0.250	28.0 24.8	0.0	4.9 4.9
	230.0	62.3	228.2	4.631	4.833	0.421	768.2	754	24.85	0.223	21.6	0.0	4.9
	230.0	57.1	229.0	4.758	4.962	0.422	776.2	707	22.48	0.189	18.2	0.0	4.9
	230.0	52.7	229.9	4.865	5.068	0.425	783.1	656	20.13	0.157	15.0	0.0	4.9
	230.0	49.0	231.0	4.953	5.209	0.427	790.2	601	18.05	0.129	12.2	0.0	4.9
	230.0 230.0	45.4 42.3	232.3 233.7	5.036 5.150	5.330 5.434	0.430 0.433	797.5 804.3	543 481	15.92 13.76	0.103 0.079	9.6 7.3	0.0	4.9 4.9
	230.0	39.2	235.2	5.216	5.499	0.436	801.9	414	11.23	0.075	5.1	0.0	4.9
	230.0	36.4	236.8	5.271	5.566	0.438	803.5	342	9.31	0.038	3.5	0.0	4.9
	230.0	34.0	238.2	5.325	5.627	0.437	806.8	266	7.40	0.023	2.2	0.0	4.9
	230.0	32.1	239.8	5.366	5.671	0.436	810.5	185	6.57	0.014	1.3	0.0	4.8
	230.0	31.0	241.7	5.389	5.702	0.442	813.2	100	5.11	0.006	0.6	0.0	4.8

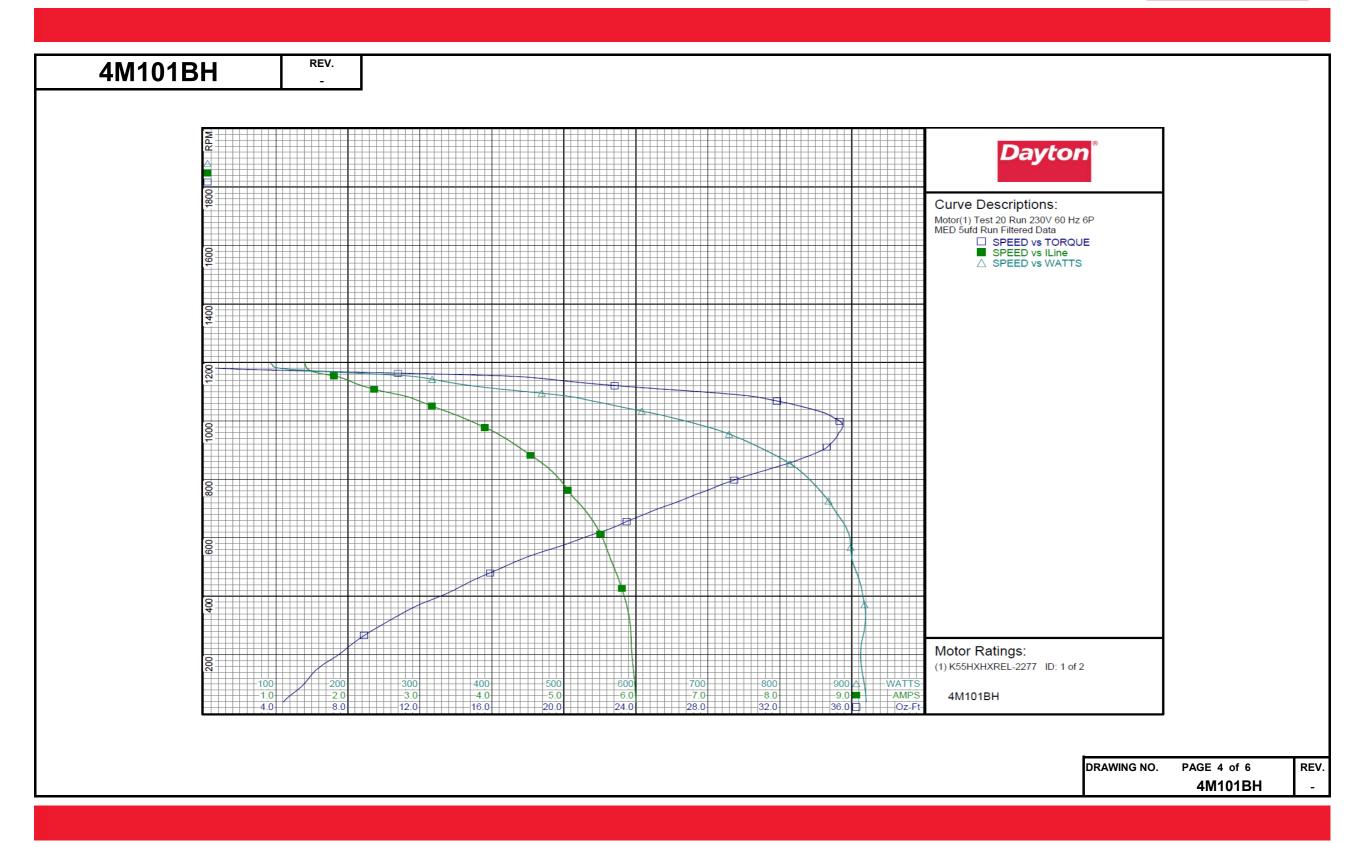






4M101BH	REV.												
					Dayto	n Manufa	acturing	Comp	any				
					·			-	Filtered				
Motor Des	cription					Test Con	ditions						
Model:	4M101BH			Test Type:	Run		Run Ca	p:	5				
Motor ID:	1 of 2			Test Numbe	r: 20		Start Ca	ap:	0μ f d				
Poles:	6			Poles:	6		Environ		•				
Volts:	208-230			Volts:	230		Tested:		11/5/2015 4:3	6:17 PM			
Frequency:	60			Hz:	60		Tested 1	By:	Liu, Bingmin				
HP:	1/2			Rotation:			Gear Ra	•	1:1				
Speed:	1075			Special Con	d:				: -0.89 Oz-Ft				
Phase:	1073			Speed Conn			_		e: -0.94 Oz-Ft				
Protector:	7AM 036-A5			TestBoard:		Plotter Fixt		, 1					
Special Points	Vline(V)	Vaux (V)	Vcap (V)	Iline(A)	Imain(A)	Iaux (A)	Watts	RPM	Tq(Oz-ft)	HP	Eff(%)	PF(%)	Cap
	230.0	167.4	316.4	1.406	1.865	0.581	92.4	1196		0.000	0.0	0.0	4.9
	230.0 230.0	167.3 164.7	316.2 312.5	1.408 1.445	1.859 1.862	0.581 0.570	95.1 120.5	1191 1176		0.000 0.031	1.1 16.4	0.0	4.9 4.8
	230.0	157.3	299.3	1.594	1.890	0.548	211.4	1163		0.149	53.2	0.0	4.9
	230.0	151.2	288.9	1.855	2.063	0.534	293.2	1151		0.240	62.2	0.0	4.9
	230.0	147.7	284.7	2.024	2.210	0.524	330.5	1136		0.272	61.5	0.0	4.9
	230.0 230.0	144.2 139.3	280.5 274.6	2.187 2.418	2.352 2.559	0.512 0.502	369.6 428.3	1121 1105	22.84 26.42	0.305 0.347	61.4 60.5	0.0	4.8 4.8
	230.0	132.5	267.5	2.745	2.852	0.492	495.1	1087		0.388	58.4	0.0	4.9
1075 RPM	230.0	128.4	264.0	2.916	3.013	0.485	526.5	1075		0.400	56.7	0.0	4.9
	230.0	126.6	262.6	2.986	3.082	0.483	539.6	1068		0.405	55.9	0.0	4.9
	230.0 230.0	121.1 114.2	258.3 253.9	3.209 3.462	3.306 3.565	0.476 0.467	581.6 627.6	1046 1024		0.416	53.3 50.1	0.0	4.9 4.9
	230.0	107.6	250.4	3.705	3.818	0.460	669.1	999		0.420	46.8	0.0	4.9
BDT OZ-FT	230.0	103.5	248.1	3.851	3.972	0.456	693.6	983		0.416	44.7	0.0	4.9
	230.0	100.6	246.7	3.951	4.076	0.455	709.2	972		0.410	43.1	0.0	4.9
	230.0 230.0	94.1 88.4	244.2	4.172 4.373	4.312 4.525	0.450 0.446	742.0 771.0	942 910		0.394 0.375	39.6 36.3	0.0	4.9 4.9
	230.0	82.0	240.9	4.582	4.748	0.443	798.9	875		0.348	32.5	0.0	4.9
	230.0	75.6	240.0	4.786	4.960	0.444	823.6	838	31.57	0.315	28.5	0.0	4.9
	230.0	69.7	239.7	4.950	5.133	0.445	842.0	797	29.48	0.280	24.8	0.0	4.9
	230.0 230.0	64.7 60.1	239.9 240.4	5.082 5.253	5.330 5.496	0.446 0.446	858.5 873.1	754 706		0.247 0.215	21.5 18.4	0.0	4.9 4.9
	230.0	56.1	241.1	5.407	5.648	0.446	887.0	656		0.184	15.4	0.0	4.9
	230.0	52.3	242.3	5.532	5.789	0.448	897.0	602	21.16	0.152	12.6	0.0	4.9
	230.0	48.7	243.5	5.626	5.895	0.451	899.4	543		0.118	9.8	0.0	4.9
	230.0 230.0	45.6 42.7	244.8 246.2	5.726 5.822	6.007 6.116	0.453 0.455	906.7 914.5	480 413		0.091 0.067	7.5 5.5	0.0	4.9 4.9
	230.0	40.4	247.9	5.822	6.202	0.455	914.5	342		0.067	3.6	0.0	4.9
	230.0	38.7	249.7	5.933	6.248	0.462	915.8	266	8.91	0.028	2.3	0.0	4.9
	230.0	37.5	251.7	5.950	6.273	0.464	912.4	185		0.016	1.3	0.0	4.9
	230.0	37.0	253.5	5.985	6.311	0.465	917.4	99	5.55	0.006	0.5	0.0	4.9
											DRA	AWING NO.	PAGE 3 of 6
													4M101B

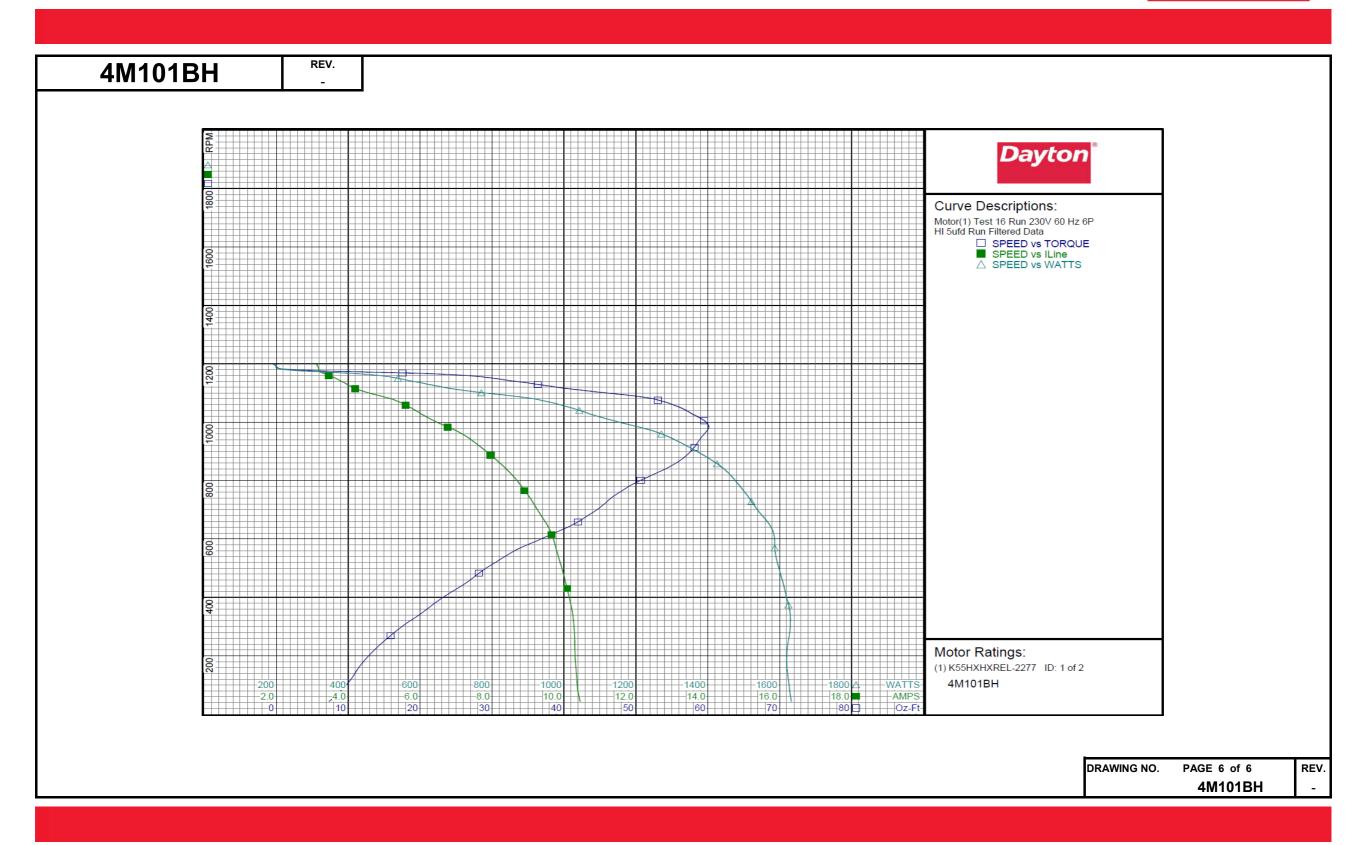






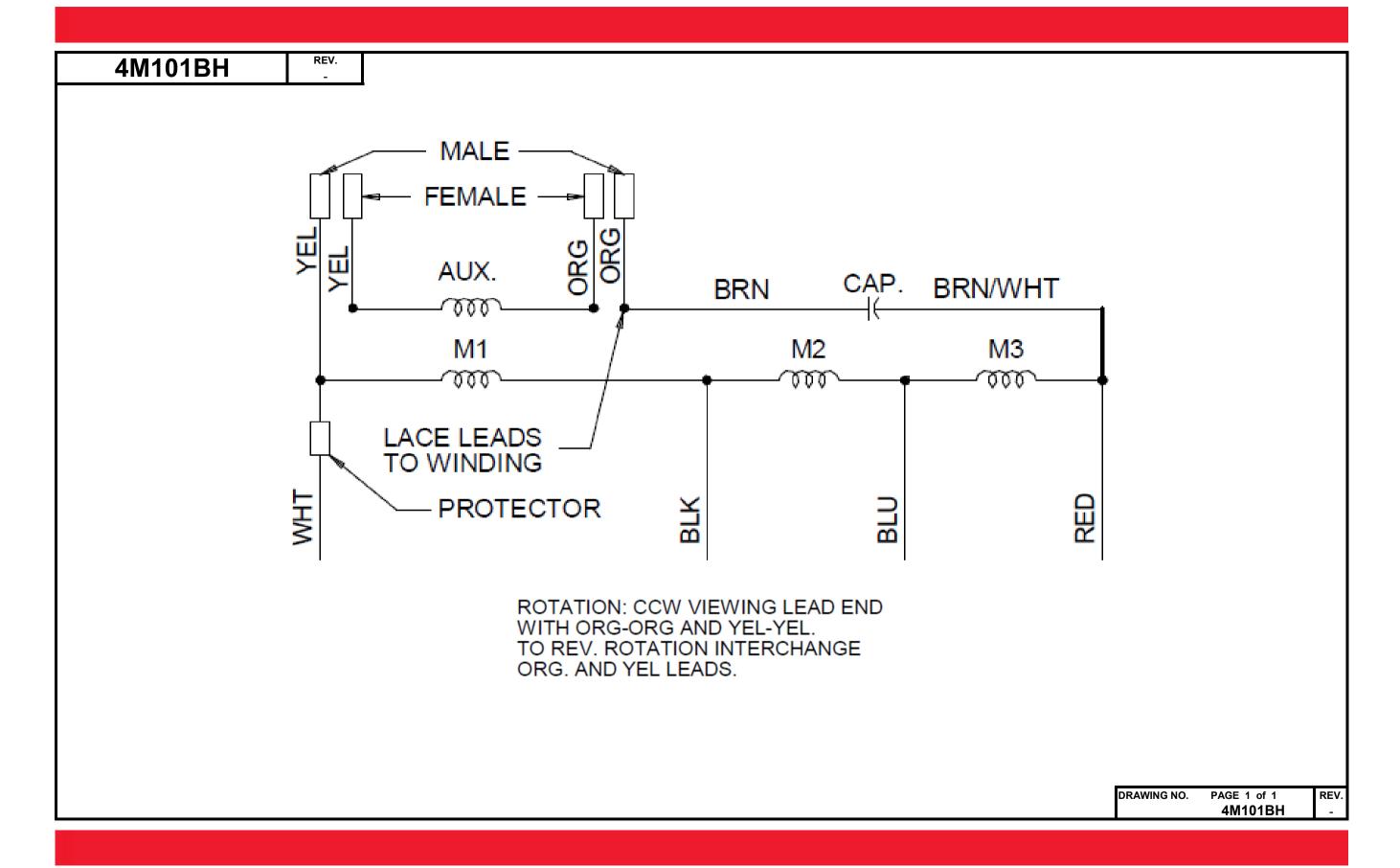
4M101BH	REV.												
					Davto	n Manuf	acturing	Comp	anv				
					•		8		Filtered				
Motor Desc	cription					Test Con	ditions						
Model:	4M101BH			Test Type:	Run		Run Ca	p:	5				
Motor ID:	1 of 2			Test Numbe	er: 16		Start Ca	ap:	0µfd				
Poles:	6			Poles:	6		Enviror						
Volts:	208-230			Volts:	230		Tested:		11/5/2015 4:4	11:52 PM			
Frequency:	60			Hz:	60		Tested:	Ву:	Liu, Bingmin				
HP:	1/2			Rotation:			Gear Ra		1:1				
Speed:	1075			Special Con					-0.98 Oz-Ft				
Phase:	1			Speed Com				ge Torque	:-1.01 Oz-Ft				
Protector:	7AM 036-A5			TestBoard:	NMQC	Plotter Fix	ture #1						
Special Points	Vline(V)	Vaux (V)	Vcap(V)		Imain(A)	Iaux (A)	Watts	RPM	•	HP	Eff(%)	PF(%)	Cap
	230.0 230.0	240.2 239.6	407.6 407.1	3.119 3.149	3.695 3.716	0.763 0.762	191.4 199.2	1197 1193	0.00 -0.07	0.000 -0.001	0.0 0.5	0.0	5.0 5.0
	230.0	237.4	404.3	3.185	3.726	0.757	230.3	1179	2.48	0.035	9.8	0.0	5.0
	230.0 230.0	226.0 217.1	388.6 376.7	3.281 3.517	3.688 3.828	0.726 0.706	384.3 502.4	1168 1157	17.57 27.71	0.245 0.382	47.4 57.9	0.0	5.0 5.0
	230.0	211.5	371.5	3.736	4.015	0.692	559.0	1145	31.75	0.433	57.8	0.0	4.9
	230.0	205.6	365.3	3.973	4.219	0.677	624.3	1129	36.41	0.489	58.4	0.0	4.9
0.5 HP	230.0 230.0	204.3 198.2	364.0 357.8	4.020 4.274	4.260 4.485	0.674 0.660	637.5 703.7	1126 1112	37.31 41.62	0.500 0.551	58.5 58.4	0.0	4.9 4.9
	230.0	187.4	347.0	4.762	4.879	0.643	826.2	1094	48.32	0.629	56.9	0.0	4.9
	230.0	175.9	337.1	5.293	5.404	0.629	934.0	1076	53.09	0.680	54.3	0.0	4.9
1075 RPM	230.0 230.0	175.7 168.1	337.0 331.2	5.304 5.669	5.415 5.785	0.629 0.616	935.9 1005.2	1075 1054	53.16 55.77	0.681 0.700	54.2 51.9	0.0	4.9 4.9
	230.0	161.5	326.8	6.000	6.118	0.604	1066.4	1030	57.66	0.707	49.5	0.0	4.9
	230.0	153.9	321.7	6.376	6.500	0.593	1136.9	1005	59.51	0.712	46.7	0.0	4.9
BDT OZ-FT	230.0 230.0	144.6 142.0	315.4 313.7	6.772 6.880	6.907 7.017	0.585 0.584	1208.1 1226.1	9 83 978	60.14 60.09	0.704 0.699	43.5 42.6	0.0	4.9 4.9
	230.0	131.3	307.8	7.333	7.488	0.578	1295.6	947	59.07	0.666	38.3	0.0	5.0
	230.0 230.0	123.7 116.9	304.4 301.7	7.687 8.033	7.859 8.222	0.570 0.565	1347.7 1397.9	914 879	58.17 56.73	0.633 0.594	35.0 31.7	0.0	5.0 5.0
	230.0	109.7	299.2	8.376	8.585	0.563	1442.8	842	54.31	0.544	28.1	0.0	5.0
	230.0	102.2	297.0	8.686	8.916	0.560	1475.7	801	50.70	0.483	24.4	0.0	5.0
	230.0 230.0	96.2 91.6	295.5 294.5	8.968 9.216	9.216 9.475	0.557 0.552	1505.5 1532.7	756 709	47.49 45.08	0.427 0.380	21.2 18.5	0.0	5.0 5.0
	230.0	88.6	295.2	9.480	9.739	0.552	1566.1	658	41.96	0.329	15.7	0.0	5.0
	230.0	86.2	296.4	9.694	9.933	0.561	1585.5	604	37.26	0.268	12.6	0.0	5.0
	230.0 230.0	83.9 82.1	297.9 298.9	9.831 9.981	10.075 10.347	0.570 0.569	1588.7 1601.5	546 483	32.18 28.21	0.209 0.162	9.8 7.5	0.0	5.1 5.1
	230.0	80.7	300.1	10.116	10.538	0.569	1615.9	416	24.23	0.120	5.5	0.0	5.0
	230.0	79.9	301.7	10.239	10.693	0.567	1629.0	345	20.18	0.083	3.8	0.0	5.0
	230.0 230.0	80.0 81.1	303.5 306.0	10.295 10.314	10.780 10.819	0.569 0.576	1626.7 1619.5	269 189	15.92 12.43	0.051 0.028	2.3 1.3	0.0	5.0 5.0
	230.0	82.6	308.3	10.367	10.881	0.581	1625.7	104	9.89	0.012	0.6	0.0	5.0
											<u> </u>		
											DRA	AWING NO.	PAGE 5 of 6





Wiring Diagram





Dayton®

DIRECT DRIVE BLOWER MOTOR

HP: 1/2

VOLTS: 208-230

4M101BH

AMPS: 4.0

RPM: 1075 / 3SPD **HZ**: 60

FR: 48Y7 **DUTY:** CONT SF: 1.0 INS CL: B

KVA CODE: AMB: 40 ℃

ENCL: OAO SFA: THERMALLY PROTECTED: AUTO

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

FFF.

MTR REF: K55HXREL-2277





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

TO REVERSE ROTATION INTERCHANGE ORG AND YELL FADS **VOLTALINE**



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

