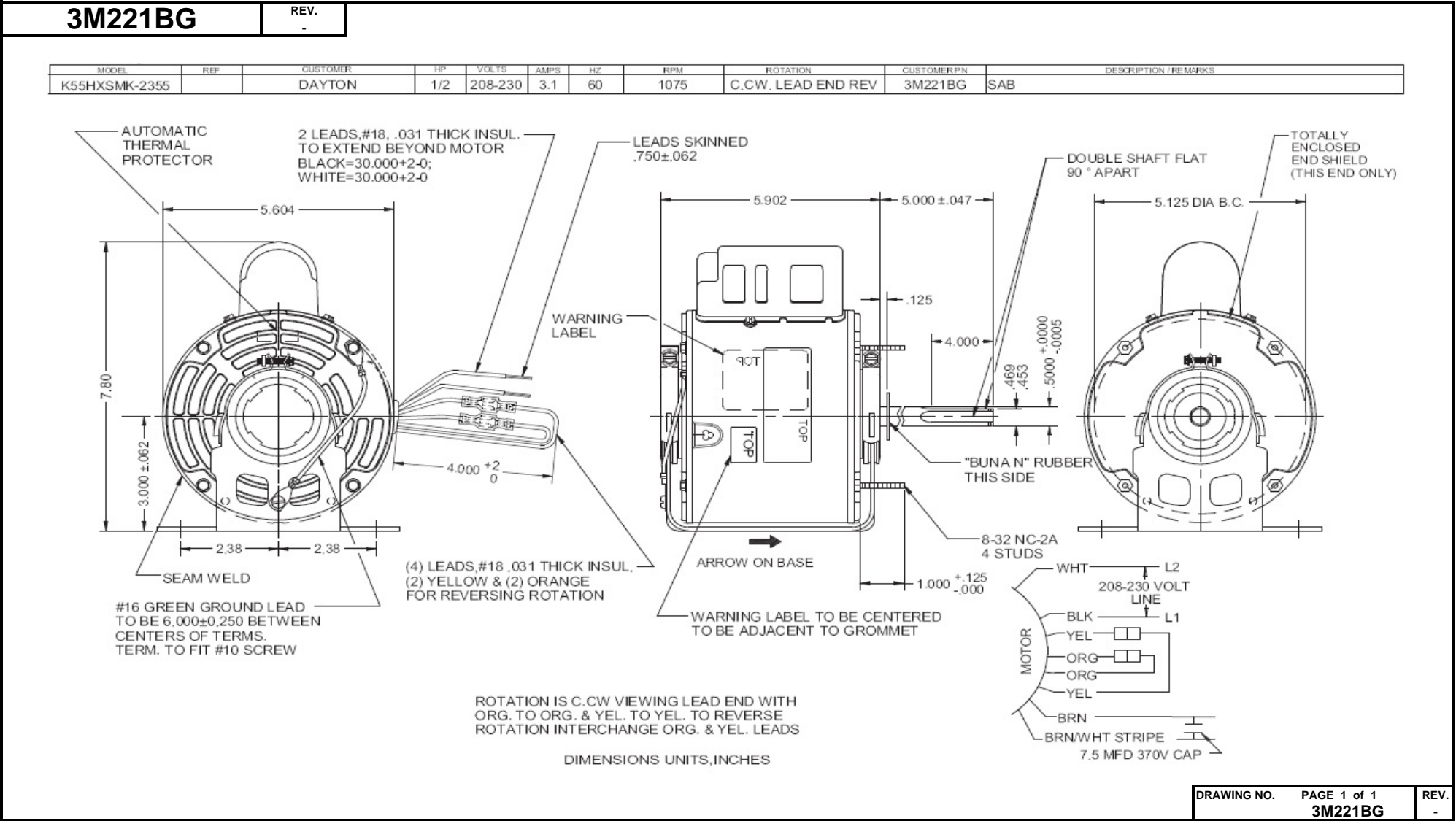


Dimensional Drawing



Performance Data



3M221BG

REV.
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MOTOR PERFORMANCE

HP:	1/2							
Poles:	6							
Ambient (°C)	60							
Altitude (FASL):								
No. of Speeds:	1							
Volts:	208/230	208	230					
HZ:	60	60	60					
Service Factor:	1							
Efficiency:	@ Rated Load							
Power Factor:	@ Rated Load							
Amps:	@ No Load							
	@ Rated Load	3.1	3.6					
	@ Service Factor	N/A	N/A					
	@ Locked Rotor	6.7	7.7					
RPM:	@ Rated Load	1075						
Torques:	Breakdown	43.5	54.5					
Oz.Ft. / Lb.In.	Locked Rotor	7.4	9.4					
(Circle One)	Pull-Up	7.4	9.4					
	Rated Load	39	48.6					
	Service Factor	N/A	N/A					
Watts:	@ Rated Load	571	529					
KVA Code:								
Temperature Rise:	@ Rated Load	N/A	N/A					
	@ Service Factor	N/A	N/A					
Thermal Protector:	Trip Temp (°C)	N/A	N/A					
Winding Material:	Start (Auxiliary)	CU						
	Run (Main)	CU						
Capacitor(s):	Start (MFD / Volts)		N/A					
	No. of Start Capacitors							
	Run (MFD / Volts)		7.5 / 37					
	No. of Run Capacitors							

LOW SPEED PERFORMANCE DATA:

HP:								
Poles:								
Volts:								
HZ:								
Efficiency:	@ Rated Load							
Power Factor:	@ Rated Load							
Amps:	@ No Load							
	@ Rated Load							
	@ Service Factor							
	@ Locked Rotor							
Torques:	Breakdown							
Oz.Ft. / Lb.In.	Locked Rotor							
(Circle One)	Pull-Up							
	Rated Load							
	Service Factor							
Watts:	@ Rated Load							
Temperature Rise:	@ Rated Load							
	@ Service Factor							

DRAWING NO. PAGE 1 of 1
3M221BG

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

Performance Data



3M221BG

REV.
-

Dayton Manufacturing Company

Motor Description

Model: K055SMK2355 3M221BG
Motor ID:
Poles: 6
Volts: 208-230
Frequency: 60
HP: 1/2
Speed: 1075
Phase: 1
Protector:

Test Conditions

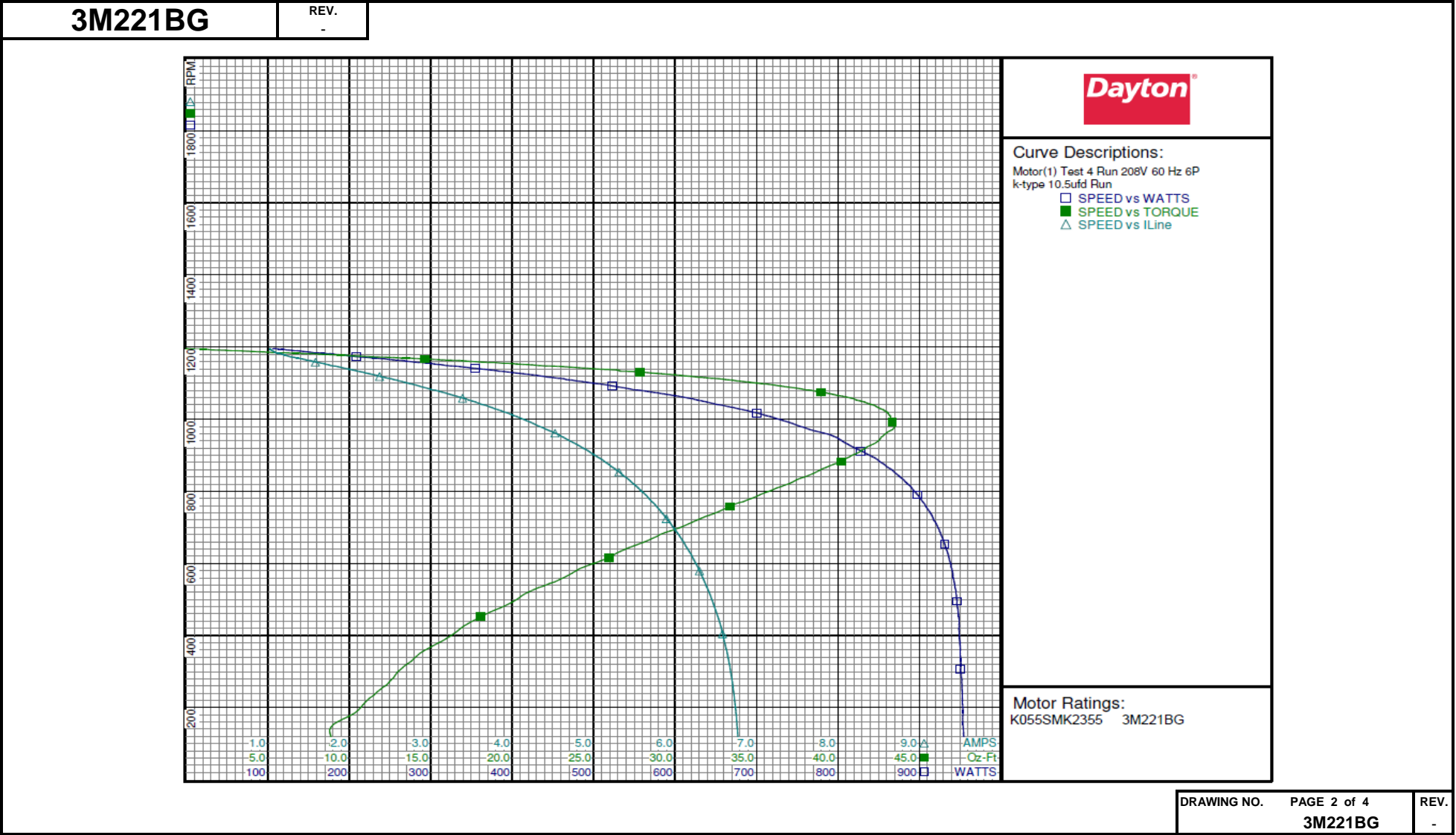
Test Type: Run Run Cap: 10.5
Test Number: 4 Start Cap: 0µfd
Poles: 6 Environment:
Volts: 208 Tested: 3/22/2001 9:06:07 PM
Hz: 60 Tested By: Wilcox, Mark
Rotation: Gear Ratio: 1:1
Special Cond: k-type Bearing Friction: -0.51 Oz-Ft
Speed Conn: Windage Torque: -0.98 Oz-Ft
TestBoard: Amtps Performance Fixture #4

Special Points	Vline (V)	Vaux (V)	Vcap (V)	Iline (A)	Imain (A)	Iaux (A)	Watts	RPM	Tq (Oz-ft)	HP	Eff (%)	PF (%)	Cap
	208.0	273.5	372.0	1.022	1.614	1.065	106.9	1196	0.00	0.000	0.0	50.3	7.6
	208.0	270.5	367.0	1.058	1.536	1.050	135.7	1190	3.13	0.044	24.4	61.7	7.6
	208.0	265.3	358.9	1.142	1.476	1.026	172.2	1182	7.30	0.103	44.5	72.5	7.6
	208.0	260.1	350.9	1.251	1.474	1.001	203.4	1175	10.67	0.149	54.7	78.2	7.6
	208.0	253.4	340.1	1.446	1.533	0.970	249.1	1165	15.18	0.211	63.0	82.8	7.6
	208.0	245.9	329.5	1.657	1.644	0.941	294.8	1155	19.45	0.267	67.7	85.6	7.6
	208.0	237.9	318.7	1.886	1.805	0.910	342.3	1144	23.63	0.322	70.2	87.2	7.6
	208.0	228.4	307.2	2.158	2.030	0.877	395.9	1130	27.88	0.375	70.7	88.2	7.6
	208.0	218.7	296.0	2.441	2.291	0.845	450.3	1115	31.81	0.422	70.0	88.7	7.6
	208.0	208.5	284.9	2.746	2.593	0.814	504.7	1098	35.35	0.462	68.3	88.4	7.6
	208.0	196.2	272.7	3.098	2.958	0.780	563.9	1077	38.63	0.495	65.5	87.5	7.6
	208.0	194.8	271.4	3.137	2.998	0.777	570.8	1075	38.96	0.499	65.2	87.5	7.6
1075 RPM	208.0	194.1	270.8	3.155	3.019	0.775	574.3	1074	39.11	0.500	64.9	87.5	7.6
0.5 HP	208.0	184.5	262.1	3.432	3.316	0.752	621.8	1056	41.00	0.515	61.8	87.1	7.6
	208.0	171.4	251.4	3.787	3.707	0.723	677.7	1029	42.63	0.522	57.5	86.0	7.6
	208.0	158.2	241.8	4.137	4.097	0.698	727.6	1000	43.25	0.515	52.8	84.5	7.7
BDT OZ-FT	208.0	151.5	237.2	4.320	4.301	0.686	752.2	981	43.50	0.508	50.4	83.7	7.7
	208.0	143.3	232.7	4.528	4.540	0.673	782.8	961	42.98	0.492	46.9	83.1	7.7
	208.0	133.2	227.8	4.784	4.831	0.660	811.8	931	42.20	0.468	43.0	81.6	7.7
	208.0	122.6	223.3	5.044	5.144	0.649	842.5	896	40.74	0.434	38.5	80.3	7.7
	208.0	112.7	220.4	5.289	5.423	0.642	867.4	857	38.86	0.397	34.1	78.8	7.7
	208.0	103.8	218.4	5.507	5.675	0.637	887.4	817	36.79	0.358	30.1	77.5	7.7
	208.0	95.6	217.5	5.697	5.896	0.634	902.7	776	34.45	0.318	26.3	76.2	7.7
	208.0	88.6	217.3	5.864	6.091	0.634	915.3	733	32.13	0.281	22.9	75.0	7.7
	208.0	81.9	217.6	6.013	6.266	0.635	924.9	689	29.68	0.244	19.6	73.9	7.7
	208.0	76.0	218.3	6.147	6.424	0.637	932.8	643	27.17	0.208	16.6	73.0	7.7
	208.0	70.4	219.2	6.266	6.566	0.640	939.2	596	24.76	0.176	13.9	72.1	7.7
	208.0	65.5	220.5	6.373	6.695	0.643	943.5	543	22.27	0.144	11.4	71.2	7.7
	208.0	60.8	221.9	6.470	6.813	0.646	946.2	488	19.87	0.116	9.1	70.3	7.7
	208.0	56.2	223.5	6.555	6.916	0.647	948.9	432	17.27	0.089	7.0	69.6	7.7
	208.0	52.8	225.4	6.620	6.999	0.653	950.1	371	15.13	0.067	5.2	69.0	7.7
	208.0	50.0	227.4	6.678	7.073	0.659	950.9	306	13.16	0.048	3.8	68.4	7.7
	208.0	48.6	229.9	6.721	7.127	0.665	952.8	242	11.69	0.034	2.6	68.2	7.7
	208.0	47.6	232.7	6.756	7.176	0.674	953.3	169	9.67	0.019	1.5	67.8	7.7
	208.0	47.9	236.0	6.781	7.214	0.686	956.5	95	8.81	0.010	0.8	67.8	7.7

DRAWING NO. PAGE 1 of 4 REV.
3M221BG -

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

Performance Data



Performance Data



3M221BG

REV.
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Dayton Manufacturing Company

Motor Description

Model: K055SMK2355 3M221BG
Motor ID:
Poles: 6
Volts: 208-230
Frequency: 60
HP: 1/2
Speed: 1075
Phase: 1
Protector:

Test Conditions

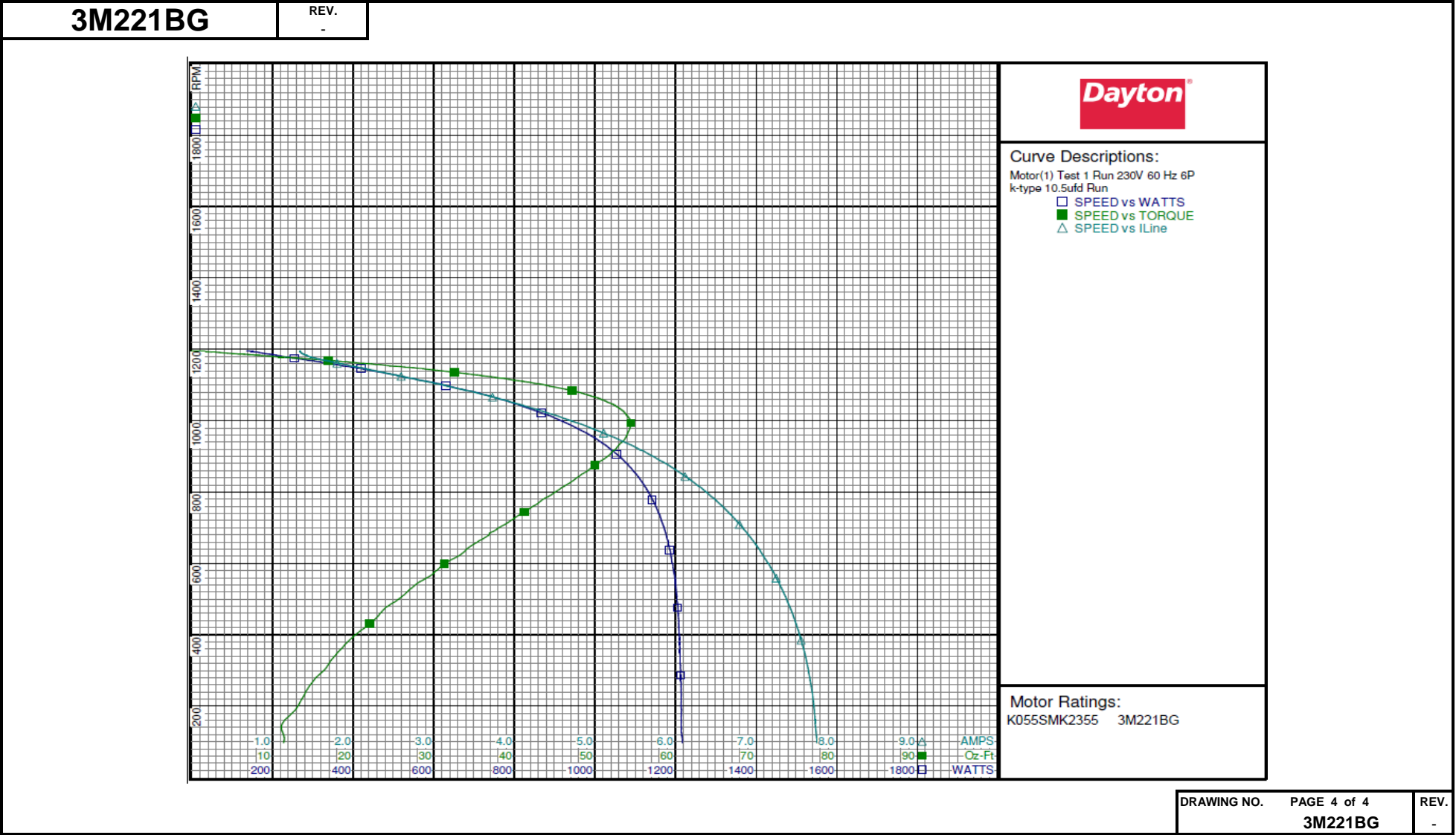
Test Type: Run Run Cap: 10.5
Test Number: 1 Start Cap: 0µfd
Poles: 6 Environment:
Volts: 230 Tested: 3/22/2001 8:59:09 PM
Hz: 60 Tested By: Wilcox, Mark
Rotation: Gear Ratio: 1:1
Special Cond: k-type Bearing Friction: -0.69 Oz-Ft
Speed Conn: Windage Torque: -1.10 Oz-Ft
TestBoard: Amtps Performance Fixture #4

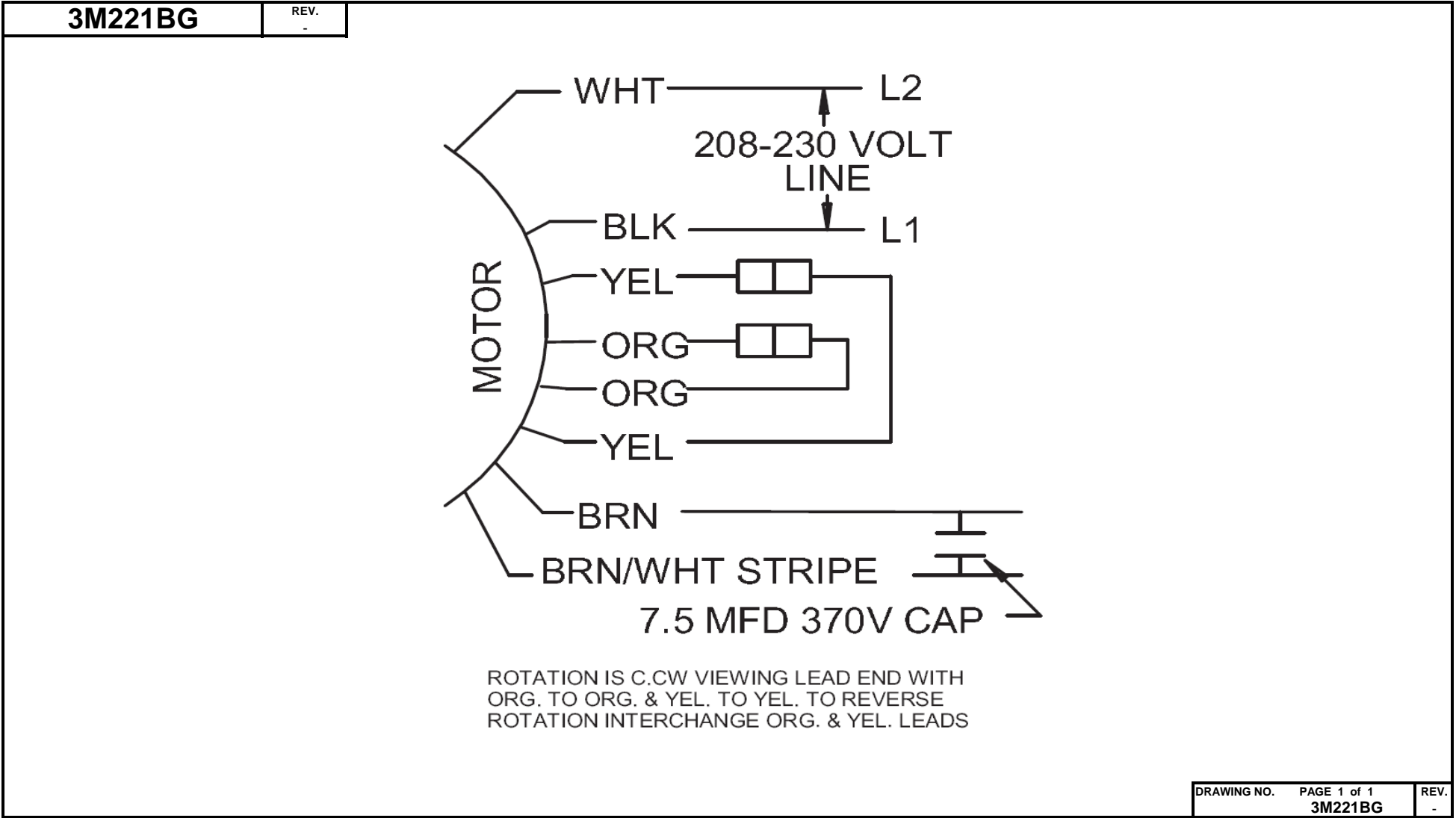
Special Points	Vline (V)	Vaux (V)	Vcap (V)	Iline (A)	Imain (A)	Iaux (A)	Watts	RPM	Tq (Oz-ft)	HP	Eff (%)	PF (%)	Cap
	230.0	292.1	401.1	1.340	1.990	1.147	135.9	1195	0.00	0.000	0.0	44.1	7.6
	230.0	289.1	396.0	1.357	1.902	1.132	170.5	1190	3.90	0.055	24.2	54.6	7.6
	230.0	285.5	390.0	1.412	1.844	1.114	206.6	1183	7.93	0.112	40.3	63.6	7.6
	230.0	280.9	382.2	1.513	1.817	1.090	249.0	1175	12.53	0.175	52.5	71.6	7.6
	230.0	275.7	373.4	1.678	1.852	1.066	298.3	1167	17.52	0.243	60.9	77.3	7.6
	230.0	270.3	364.8	1.867	1.934	1.043	348.9	1158	22.27	0.307	65.7	81.2	7.6
	230.0	262.8	354.5	2.101	2.072	1.014	407.4	1148	27.43	0.375	68.7	84.3	7.6
	230.0	253.9	343.2	2.369	2.274	0.983	469.7	1135	32.61	0.441	70.0	86.2	7.6
0.5 HP	230.0	244.7	332.1	2.653	2.520	0.951	528.5	1122	37.45	0.500	70.6	86.6	7.6
	230.0	244.1	331.5	2.669	2.534	0.949	531.8	1121	37.70	0.503	70.6	86.6	7.6
	230.0	232.9	319.4	3.014	2.860	0.913	606.7	1104	42.53	0.559	68.7	87.5	7.6
	230.0	220.6	306.7	3.386	3.234	0.877	678.8	1085	46.85	0.605	66.5	87.2	7.6
1075 RPM	230.0	214.5	300.8	3.571	3.427	0.862	717.7	1075	48.60	0.622	64.7	87.4	7.6
	230.0	207.4	294.3	3.781	3.650	0.843	755.4	1064	50.38	0.638	63.0	86.9	7.6
	230.0	192.8	282.0	4.206	4.109	0.810	831.2	1035	52.95	0.653	58.6	85.9	7.6
	230.0	176.4	269.6	4.668	4.620	0.778	910.3	1003	54.36	0.649	53.2	84.8	7.7
BDT OZ-FT	230.0	174.5	268.3	4.723	4.681	0.775	919.7	997	54.49	0.647	52.5	84.7	7.7
	230.0	160.4	259.5	5.112	5.139	0.752	979.9	965	54.07	0.621	47.3	83.3	7.7
	230.0	146.3	252.2	5.488	5.562	0.734	1031.2	927	52.81	0.583	42.2	81.7	7.7
	230.0	134.1	247.2	5.807	5.924	0.720	1071.6	888	50.85	0.538	37.4	80.2	7.7
	230.0	122.9	243.8	6.090	6.248	0.712	1103.6	849	48.34	0.489	33.0	78.8	7.8
	230.0	112.9	241.6	6.340	6.535	0.708	1128.7	807	45.61	0.438	29.0	77.4	7.8
	230.0	103.9	240.7	6.563	6.791	0.705	1149.6	764	42.65	0.388	25.2	76.2	7.8
	230.0	95.9	240.4	6.755	7.015	0.705	1165.1	720	39.56	0.339	21.7	75.0	7.8
	230.0	88.8	240.8	6.927	7.214	0.706	1178.0	674	36.48	0.293	18.5	73.9	7.8
	230.0	82.4	241.4	7.076	7.391	0.709	1188.5	626	33.44	0.249	15.6	73.0	7.8
	230.0	76.5	242.5	7.212	7.549	0.712	1195.5	577	30.17	0.207	12.9	72.1	7.8
	230.0	71.0	243.9	7.329	7.691	0.715	1201.7	525	26.94	0.168	10.5	71.3	7.8
	230.0	65.9	245.4	7.434	7.817	0.718	1206.3	469	23.75	0.133	8.2	70.5	7.8
	230.0	61.3	247.0	7.525	7.927	0.721	1208.8	412	20.95	0.103	6.3	69.8	7.7
	230.0	57.1	249.1	7.600	8.023	0.725	1210.6	351	18.14	0.076	4.7	69.3	7.7
	230.0	54.4	251.4	7.659	8.095	0.730	1212.8	287	15.74	0.054	3.3	68.8	7.7
	230.0	52.6	253.7	7.708	8.159	0.738	1214.0	220	13.63	0.036	2.2	68.5	7.7
	230.0	52.3	256.2	7.738	8.205	0.751	1214.4	143	11.09	0.019	1.2	68.2	7.8

DRAWING NO. PAGE 3 of 4 REV.
3M221BG -

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

Performance Data





Dayton[®]

CONDENSER FAN MOTOR

HP: 1/2
VOLTS: 208-230

AMPS: 3.1
RPM: 1075
DUTY: CONT

SF: 1.0
KVA CODE:
ENCL: OAO

THERMALLY PROTECTED: AUTO

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

MTR REF: K55HXSMK-2355

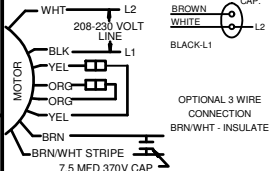
PH: 1
HZ: 60
FR: 48YZ
INS CL: B
AMB: 60 °C
SFA:



Part
No 3M221BG

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

TO REVERSE ROTATION
INTERCHANGE ORG
AND YEL LEADS



E37403



258501

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

Made in Mexico