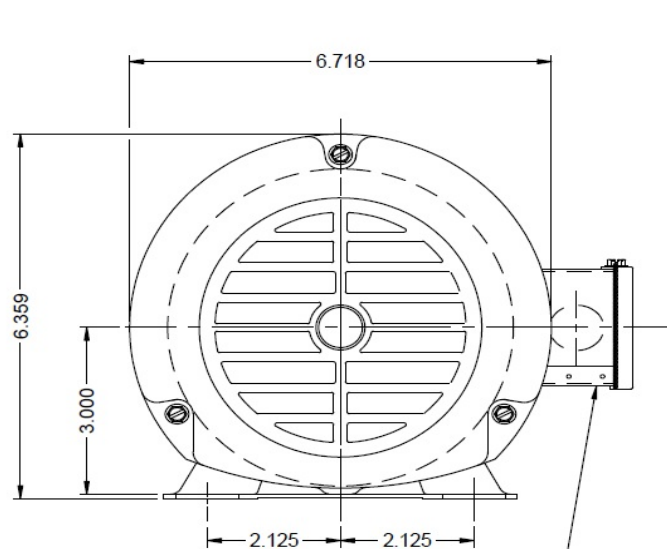


Dimensional Drawing

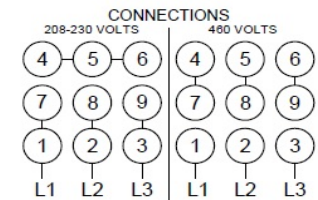
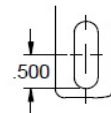
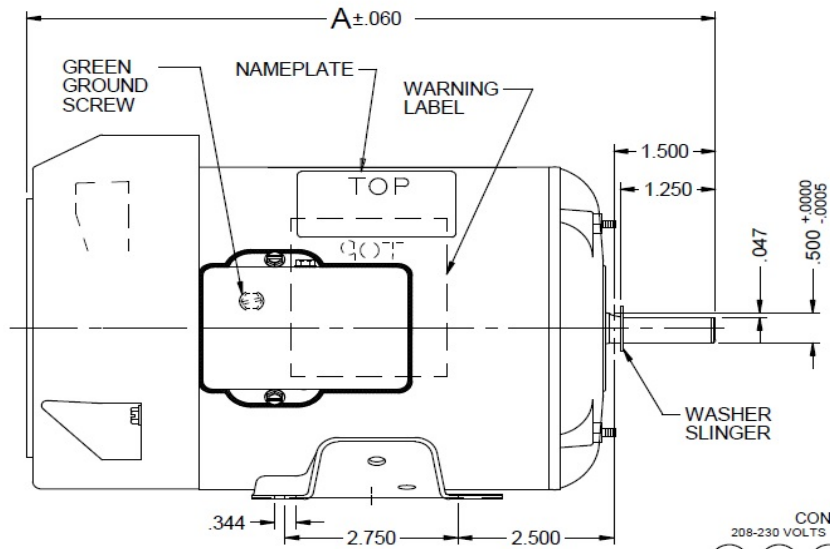
10C901A

REV.
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VAR	MODEL	CUST. PT. NO.	A	B	C	D	HP	VOLTS	SF	AMPS	HZ	RPM	CONN VOLTS	PROT.	DESCRIPTION / REMARKS
001	P55BZM-1609	10C901A	10.159	-----	-----	-----	1/2	208-230/460	1.15	2.0-2.0-1.0	60&50	3450&2850	460	NONE	48, TEFC



(9) LEADS, #18, .031 THICK INSUL., TO EXTEND BEYOND MOTOR INTO CONDUIT BOX 6.000+2-0. LEADS TO BE SKINNED .750±.125 LEADS TO BE NUMBERED 1 THRU 9.



ROTATION IS CCW LEAD END
TO REVERSE ROTATION INTERCHANGE
ANY TWO LINE LEADS

DRAWING NO. PAGE 1 of 1 REV.
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10C901A

REV.

-

THREE PHASE MOTOR PERFORMANCE

HP:	1/2					
Poles:	2					
Volts:	208-230/460	208	230	460	190	380
HZ:	60/50	60	60	60	50	50
Service Factor:	1.15					
Efficiency (%):	Full Load					
	Service Factor					
	3/4					
	1/2					
	1/4					
Power Factor (%):	Full Load					
	Service Factor					
	3/4					
	1/2					
	1/4					
Amps:	Full Load	1.9	1.9	0.9	2.1	1
	Service Factor	2.2	2.1	1		
	3/4					
	1/2					
	1/4					
	No Load					
	Locked Rotor	10.5	12	5.9	10.8	5.5
NEMA Code Letter:						
NEMA Design Letter:						
Full Load RPM:		3408	3441	3436	2801	2820
NEMA Nominal Efficiency (%):						
Guaranteed Efficiency (%):						
Max KVAR:						
Ambient (°C):	40					
Altitude (FASL):						
Full Load Torque	Lb.Ft. / Oz.Ft. (Circle One)	12.2	12.2	12.2	15	14.9
Torques: % Full-Load	Breakdown	46.8	56.4	54.9	49.5	50.5
	Locked Rotor	35.9	45.6	45.7	43.7	43.4
	Pull-Up	35.8	45.6	45.4	42.7	43.2
	Service Factor	14.3	14.2	14.2		
Temperature Rise:	Full Load	52.9	56.8	54.2	63	62.6
	Service Factor	64.8	66.7	62.5	N/A	N/A
Winding Material:	Cu					

Notes:

DRAWING NO. PAGE 1 of 1 REV.
10C901A -

Performance Data



10C901A

REV.

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Dayton Manufacturing Company

Motor Description

Model: P055BZM1609 10C901A
 Motor ID: 1 of 2
 Poles: 2
 Volts: 208-230/460
 Frequency: 60
 HP: 1/2
 Speed: 3450
 Phase: 3
 Protector: -

Test Conditions

Test Type: Start Run Cap: 0
 Test Number: 13 Start Cap: 0µfd
 Poles: 2 Environment: 23.3 Deg C 49 % RH 965 hPa
 Volts: 230 Tested: 12/21/2015 7:09:26 AM
 Hz: 60 Tested By: Bribiesca, Griselda
 Rotation: Gear Ratio: 1:1
 Special Cond: Bearing Friction: -0.39 Oz-Ft
 Speed Conn: Windage Torque: -2.63 Oz-Ft
 TestBoard: CMD InLine Three Phase #1 Fixture #1

Special Points	Vab (V)	Vbc (V)	Vca (V)	Ia (A)	Ib (A)	Ic (A)	Watts	RPM	Tq (Oz-ft)	HP	Eff (%)	PF (%)
PUT OZ-FT	230.5	228.9	230.7	11.993	11.349	11.744	3498	42	45.62	0.023	0.5	75.1
	230.5	228.9	230.7	11.993	11.349	11.744	3498	42	45.62	0.023	0.5	75.1
	230.4	228.9	230.7	11.602	10.955	11.353	3439	397	45.84	0.217	4.7	76.4
	230.5	228.9	230.7	11.203	10.569	10.952	3374	698	46.98	0.390	8.6	77.7
	230.4	228.9	230.6	10.763	10.152	10.518	3295	966	48.54	0.558	12.6	78.9
	230.5	228.9	230.6	10.312	9.722	10.070	3208	1245	50.49	0.748	17.4	80.3
	230.5	228.9	230.6	9.822	9.257	9.576	3104	1489	49.37	0.875	21.0	81.6
	230.5	228.9	230.6	9.303	8.766	9.063	2985	1704	49.99	1.014	25.3	82.9
	230.5	229.0	230.6	8.764	8.268	8.545	2856	1912	50.48	1.149	30.0	84.1
	230.5	229.0	230.6	8.218	7.760	8.006	2716	2103	50.61	1.267	34.8	85.3
	230.5	229.0	230.5	7.646	7.229	7.448	2560	2281	49.16	1.335	38.9	86.4
	230.5	229.0	230.5	7.065	6.686	6.876	2396	2443	48.13	1.400	43.6	87.5
	230.5	229.1	230.5	6.460	6.123	6.282	2213	2594	46.49	1.436	48.4	88.3
	230.5	229.0	230.6	5.841	5.551	5.695	2024	2732	44.59	1.450	53.5	89.2
	230.5	228.9	230.6	5.216	4.972	5.078	1820	2862	40.94	1.395	57.2	89.8
	230.5	229.0	230.5	4.668	4.460	4.535	1635	2968	37.24	1.316	60.0	90.1
	230.7	229.0	230.3	4.115	3.938	4.001	1441	3068	32.96	1.204	62.3	90.1
	229.9	229.1	231.0	3.531	3.401	3.432	1231	3164	29.60	1.115	67.6	89.5
	230.8	228.9	230.3	3.022	2.906	2.923	1038	3248	24.01	0.929	66.7	88.3
	230.8	228.8	230.4	2.627	2.547	2.541	884	3303	20.63	0.811	68.5	86.3
	230.8	228.9	230.3	2.263	2.192	2.176	731	3361	17.08	0.683	69.8	83.0
	230.8	229.0	230.3	1.945	1.894	1.866	597	3417	13.35	0.543	67.9	78.8
	230.7	229.0	230.3	1.694	1.648	1.606	474	3458	9.82	0.404	63.6	72.2
	230.7	229.0	230.3	1.508	1.466	1.425	373	3497	6.36	0.265	52.9	63.9
	230.7	229.1	230.2	1.374	1.332	1.293	283	3526	3.81	0.160	42.2	53.2
	229.8	229.4	230.8	1.285	1.257	1.197	207	3547	1.87	0.079	28.5	41.7
	230.7	229.1	230.2	1.245	1.201	1.153	164	3565	0.34	0.014	6.5	34.2
	230.7	229.1	230.2	1.234	1.195	1.150	156	3568	0.00	0.000	0.0	32.9

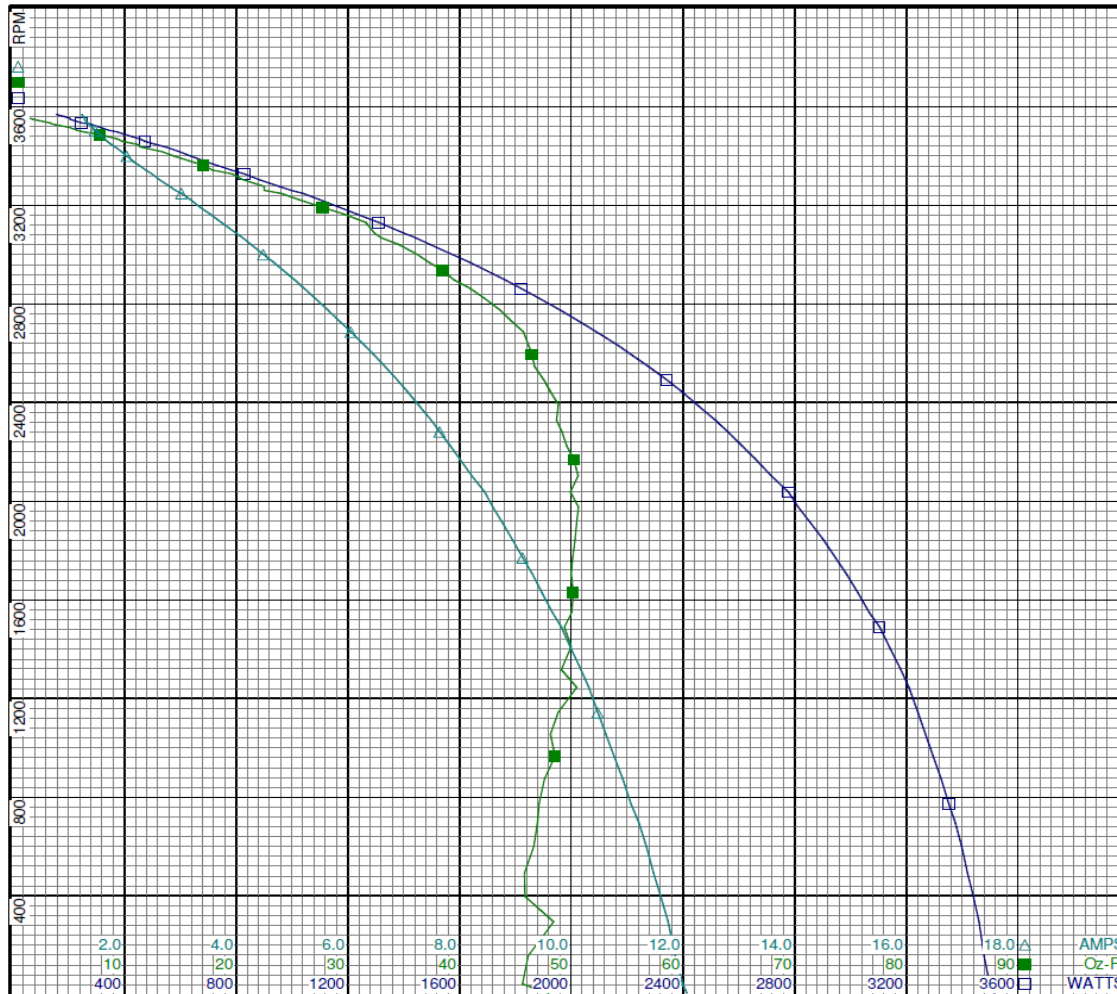
DRAWING NO. PAGE 1 of 2 REV.
10C901A -

Performance Data



10C901A

REV.
-



Curve Descriptions:
 Motor(1) Test 13 Start 230V 60 Hz 2P

- SPEED vs WATTS
- SPEED vs TORQUE
- △ SPEED vs Ia

Motor Ratings:
 (1) P055BZM1609 10C901A

DRAWING NO. PAGE 2 of 2 REV.
10C901A -

Performance Data



10C901A

REV.

-

Dayton Manufacturing Company

Motor Description

Model: P055BZM1609 10C901A
 Motor ID: 1 of 2
 Poles: 2
 Volts: 208-230/460
 Frequency: 60
 HP: 1/2
 Speed: 3450
 Phase: 3
 Protector: -

Test Conditions

Test Type: Run Run Cap: 0
 Test Number: 12 Start Cap: 0µfd
 Poles: 2 Environment: 23.3 Deg C 49 % RH 965 hPa
 Volts: 230 Tested: 12/21/2015 7:08:22 AM
 Hz: 60 Tested By: Bribiesca, Griselda
 Rotation: Gear Ratio: 1:1
 Special Cond: Bearing Friction: -0.41 Oz-Ft
 Speed Conn: Windage Torque: -2.92 Oz-Ft
 TestBoard: CMD InLine Three Phase #1 Fixture #1

Special Points	Vab (V)	Vbc (V)	Vca (V)	Ia (A)	Ib (A)	Ic (A)	Watts	RPM	Tq (Oz-ft)	HP	Eff (%)	PF (%)
	230.5	229.2	230.3	1.238	1.195	1.143	147	3570	0.00	0.000	0.0	31.0
	230.3	229.4	230.3	1.276	1.227	1.178	190	3562	1.23	0.052	20.4	38.9
	230.3	229.4	230.4	1.340	1.301	1.248	247	3540	2.96	0.125	37.5	47.9
	230.2	229.3	230.5	1.477	1.428	1.390	352	3510	5.94	0.248	52.6	61.7
	226.0	233.6	230.3	1.668	1.652	1.636	481	3481	9.16	0.380	58.9	73.1
	230.3	229.1	230.6	1.819	1.768	1.743	533	3450	11.16	0.459	64.1	75.4
12.17 OZ-FT	230.1	229.1	230.8	1.876	1.817	1.793	560	3441	12.17	0.498	66.3	76.9
0.5 HP	230.1	229.1	230.8	1.878	1.819	1.795	562	3441	12.21	0.500	66.4	77.0
14 OZ-FT	230.4	229.1	230.6	2.048	1.994	1.978	640	3414	14.00	0.569	66.3	80.1
0.575 HP	230.4	229.1	230.5	2.074	2.020	2.005	652	3410	14.16	0.575	65.8	80.4
	230.4	229.1	230.5	2.083	2.030	2.014	656	3409	14.22	0.577	65.7	80.6
	230.4	228.8	230.8	2.444	2.370	2.369	810	3354	19.00	0.758	69.8	85.0
	230.5	228.8	230.7	2.829	2.736	2.743	960	3297	23.69	0.930	72.2	87.0
	230.5	228.9	230.6	3.288	3.155	3.191	1132	3233	27.05	1.041	68.6	88.5
	230.4	229.1	230.4	3.925	3.749	3.813	1366	3137	31.54	1.178	64.3	89.6
	230.5	229.0	230.5	4.441	4.247	4.328	1553	3049	36.51	1.325	63.6	89.9
	230.6	228.9	230.6	4.991	4.762	4.858	1742	2952	41.24	1.449	62.0	89.8
	230.5	228.9	230.6	5.622	5.349	5.470	1950	2834	44.66	1.507	57.7	89.3
	230.5	229.0	230.5	6.209	5.901	6.051	2139	2711	48.56	1.567	54.7	88.7
	230.5	229.0	230.6	6.825	6.468	6.647	2327	2572	51.36	1.573	50.4	87.9
	230.5	228.9	230.6	7.468	7.070	7.274	2512	2409	53.74	1.541	45.8	86.7
	230.4	229.0	230.6	8.093	7.648	7.882	2686	2230	55.35	1.469	40.8	85.6
BDT OZ-FT	230.4	229.0	230.6	8.264	7.808	8.045	2732	2176	56.41	1.461	39.9	85.3
	230.4	229.0	230.6	8.643	8.157	8.421	2830	2048	56.25	1.371	36.2	84.5
	230.4	229.0	230.6	9.180	8.665	8.954	2962	1846	56.37	1.238	31.2	83.2
	230.4	229.0	230.6	9.676	9.131	9.438	3076	1629	56.72	1.100	26.7	82.0
	230.4	229.0	230.6	10.124	9.553	9.879	3173	1402	56.45	0.942	22.2	80.9
	230.4	229.0	230.6	10.561	9.962	10.318	3262	1146	55.16	0.752	17.2	79.7
	230.4	229.0	230.6	10.954	10.334	10.709	3335	876	54.33	0.567	12.7	78.5
	230.4	229.0	230.6	11.298	10.673	11.061	3394	594	53.69	0.380	8.3	77.4
	230.4	229.0	230.6	11.614	10.986	11.399	3447	278	53.55	0.177	3.8	76.4

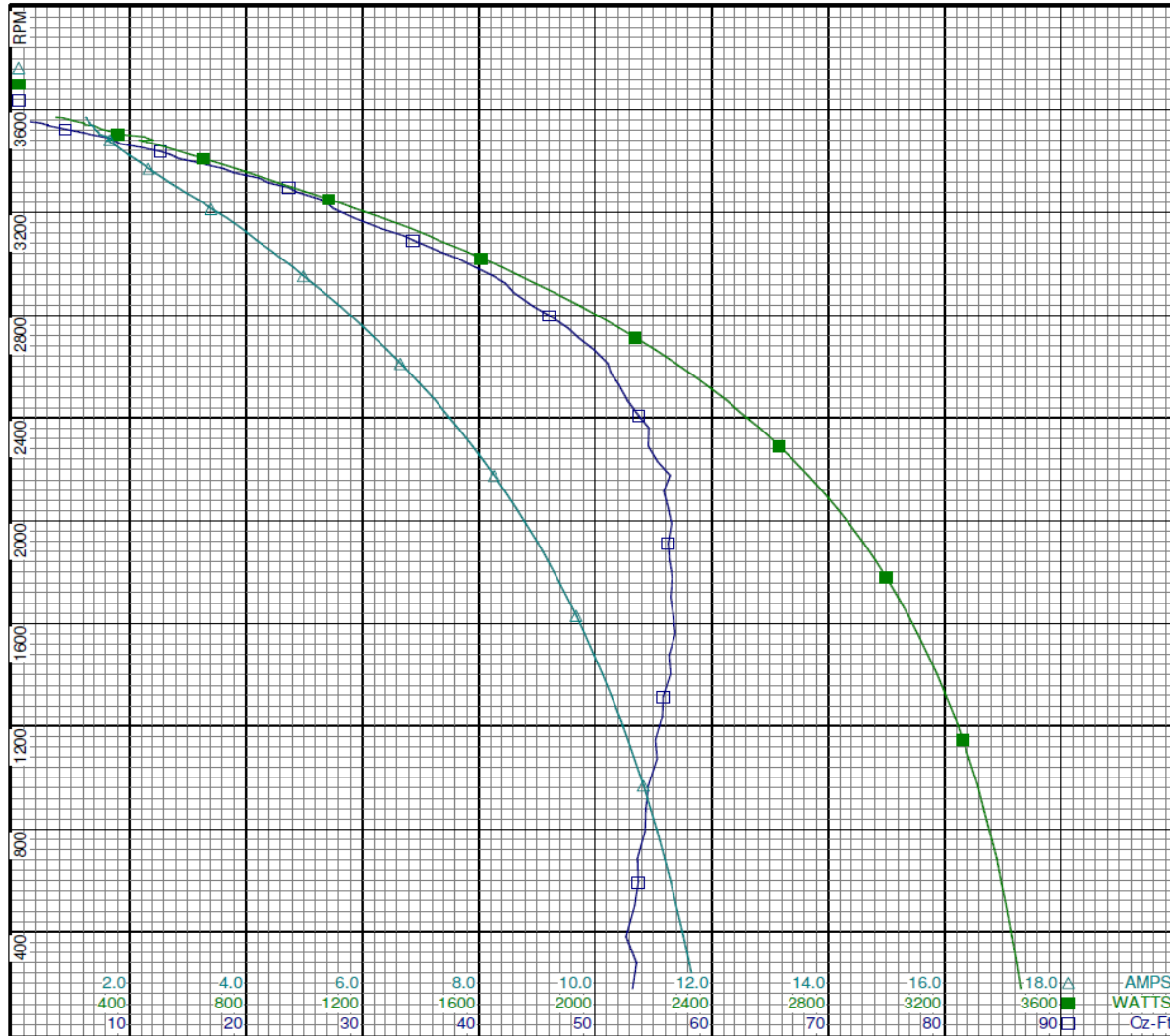
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10C901A -

Performance Data



10C901A

REV.
-



Curve Descriptions:

Motor(1) Test 12 Run 230V 60 Hz 2P

- SPEED vs TORQUE
- SPEED vs WATTS
- △ SPEED vs Ia

Motor Ratings:

(1) P055BZM1609 10C901A

2
A REV.
-

Performance Data



10C901A

REV.

-

Dayton Manufacturing Company

Motor Description

Test Conditions

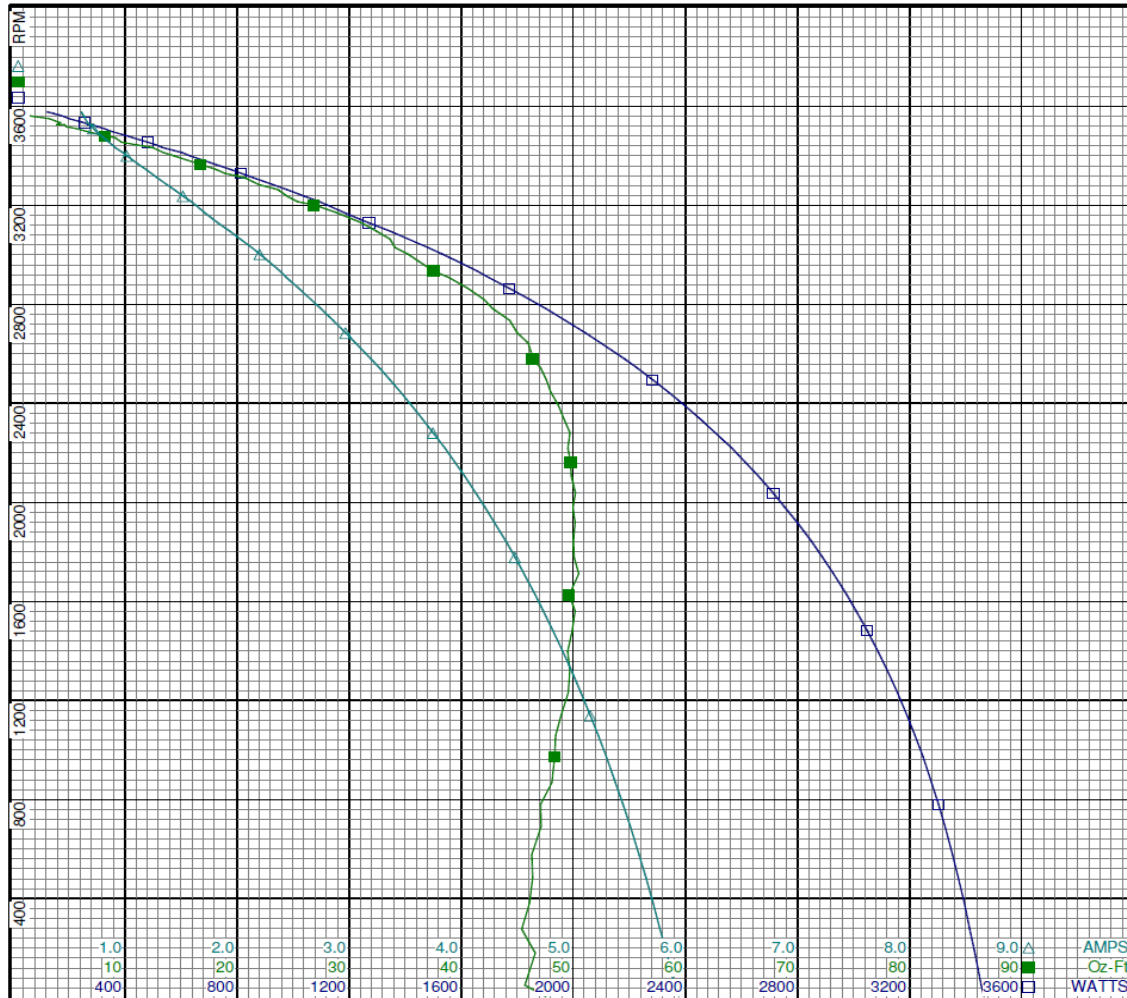
Model:	P055BZM1609	10C901A	Test Type:	Start	Run Cap:	0
Motor ID:	1 of 2		Test Number:	19	Start Cap:	0µfd
Poles:	2		Poles:	2	Environment:	24.5 Deg C 28 % RH 974 hPa
Volts:	208-230/460		Volts:	460	Tested:	12/18/2015 2:50:24 PM
Frequency:	60		Hz:	60	Tested By:	Navarro, Susana
HP:	1/2		Rotation:		Gear Ratio:	1:1
Speed:	3450		Special Cond:		Bearing Friction:	-0.27 Oz-Ft
Phase:	3		Speed Conn:		Windage Torque:	-2.23 Oz-Ft
Protector:	-		TestBoard:	CMD InLine Three Phase #1 Fixture #1		

Special Points	Vab (V)	Vbc (V)	Vca (V)	Ia (A)	Ib (A)	Ic (A)	Watts	RPM	Tq (Oz-ft)	HP	Eff (%)	PF (%)
PUT OZ-FT	461.5	457.9	460.6	5.902	5.571	5.753	3455	49	45.67	0.027	0.6	75.5
	461.5	458.0	460.6	5.773	5.442	5.623	3414	276	45.39	0.149	3.3	76.3
	461.5	458.0	460.6	5.711	5.381	5.561	3395	381	46.09	0.209	4.6	76.8
	461.4	457.9	460.6	5.508	5.187	5.357	3326	690	47.12	0.387	8.7	78.0
	461.5	457.9	460.6	5.293	4.981	5.142	3247	973	48.34	0.560	12.9	79.3
	461.5	457.9	460.6	5.067	4.766	4.918	3156	1231	49.54	0.726	17.2	80.6
	461.5	457.9	460.6	4.817	4.531	4.672	3047	1483	49.90	0.881	21.6	81.8
	461.5	458.0	460.6	4.559	4.290	4.418	2928	1711	50.47	1.028	26.2	83.1
	461.4	458.0	460.6	4.296	4.043	4.163	2799	1918	50.15	1.145	30.5	84.3
	461.4	458.0	460.5	4.028	3.794	3.901	2660	2106	49.81	1.249	35.0	85.4
	461.4	458.0	460.5	3.748	3.535	3.627	2506	2280	49.69	1.349	40.2	86.5
	461.4	458.1	460.5	3.458	3.265	3.344	2339	2445	47.98	1.397	44.5	87.5
	461.4	458.1	460.5	3.192	3.019	3.084	2181	2580	46.39	1.425	48.7	88.4
	461.5	458.1	460.5	2.856	2.708	2.758	1971	2734	44.33	1.443	54.6	89.2
	461.5	458.1	460.5	2.551	2.423	2.461	1772	2864	40.60	1.384	58.3	89.7
	461.5	458.2	460.4	2.280	2.167	2.195	1585	2973	36.19	1.281	60.3	89.9
	461.5	458.1	460.4	2.028	1.937	1.952	1411	3063	33.65	1.227	64.8	89.8
	461.6	458.0	460.4	1.714	1.644	1.645	1185	3168	28.96	1.092	68.8	89.2
	461.4	458.3	460.3	1.519	1.458	1.456	1040	3236	24.47	0.943	67.6	88.3
	461.5	458.2	460.3	1.286	1.239	1.227	858	3311	20.68	0.815	70.9	86.1
	461.5	458.2	460.4	1.118	1.081	1.061	721	3365	16.73	0.670	69.3	83.3
	461.5	458.2	460.3	0.983	0.952	0.927	604	3412	13.45	0.546	67.5	79.4
	461.6	458.4	460.0	0.858	0.830	0.801	483	3454	9.71	0.399	61.7	73.1
	461.3	458.1	460.6	0.740	0.715	0.682	351	3498	6.55	0.273	58.0	61.8
	461.8	458.3	459.9	0.692	0.663	0.632	283	3525	4.61	0.193	51.0	53.6
	459.4	458.6	462.0	0.645	0.617	0.586	201	3549	3.23	0.137	50.7	40.9
	460.9	458.6	460.5	0.625	0.597	0.566	162	3565	1.27	0.054	24.9	34.2
	460.9	458.6	460.4	0.609	0.581	0.550	121	3576	0.00	0.000	0.0	26.3

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10C901A -

10C901A

REV.
-



Curve Descriptions:
 Motor(1) Test 19 Start 460V 60 Hz 2P

- SPEED vs WATTS
- SPEED vs TORQUE
- △ SPEED vs Ia

Motor Ratings:
 (1) P055BZM1609 10C901A

Performance Data



10C901A

REV.

-

Dayton Manufacturing Company

Motor Description

Model: P055BZM1609 10C901A
 Motor ID: 1 of 2
 Poles: 2
 Volts: 208-230/460
 Frequency: 60
 HP: 1/2
 Speed: 3450
 Phase: 3
 Protector: -

Test Conditions

Test Type: Run Run Cap: 0
 Test Number: 18 Start Cap: 0µfd
 Poles: 2 Environment: 24.5 Deg C 28 % RH 974 hPa
 Volts: 460 Tested: 12/18/2015 2:49:02 PM
 Hz: 60 Tested By: Navarro, Susana
 Rotation: Gear Ratio: 1:1
 Special Cond: Bearing Friction: -0.35 Oz-Ft
 Speed Conn: Windage Torque: -2.32 Oz-Ft
 TestBoard: CMD InLine Three Phase #1 Fixture #1

Special Points	Vab (V)	Vbc (V)	Vca (V)	Ia (A)	Ib (A)	Ic (A)	Watts	RPM	Tq (Oz-ft)	HP	Eff (%)	PF (%)
	460.3	459.0	460.7	0.614	0.587	0.555	123	3575	0.00	0.000	0.0	26.4
	460.9	458.4	460.7	0.617	0.585	0.556	91	3586	-0.52	-0.022	0.0	19.4
	461.4	458.3	460.3	0.632	0.606	0.572	177	3563	1.35	0.057	24.2	36.7
	461.1	458.2	460.8	0.654	0.626	0.592	215	3546	2.81	0.119	41.2	43.3
	462.9	459.0	458.1	0.699	0.670	0.638	279	3532	3.53	0.148	39.6	52.3
	461.5	458.2	460.2	0.768	0.742	0.709	384	3494	7.46	0.310	60.2	65.2
	461.5	457.6	460.8	0.839	0.813	0.782	455	3468	10.10	0.417	68.3	70.4
12.17 OZ-FT	461.6	457.9	460.6	0.937	0.907	0.879	551	3437	12.17	0.498	67.4	76.2
0.5 HP	461.6	457.9	460.6	0.939	0.908	0.881	552	3436	12.22	0.500	67.5	76.2
	461.5	458.2	460.3	0.973	0.940	0.916	582	3426	13.31	0.543	69.6	77.5
14 OZ-FT	461.4	458.3	460.2	1.004	0.970	0.947	611	3417	14.00	0.569	69.6	78.7
0.575 HP	461.4	458.4	460.2	1.011	0.976	0.953	617	3415	14.15	0.575	69.6	78.9
	461.6	458.0	460.4	1.128	1.090	1.070	722	3376	17.15	0.689	71.2	82.7
	461.6	457.9	460.4	1.311	1.264	1.251	873	3317	21.57	0.852	72.8	85.9
	461.6	458.0	460.4	1.540	1.478	1.474	1047	3249	25.54	0.988	70.4	87.7
	461.5	458.1	460.4	1.770	1.689	1.697	1214	3181	28.63	1.084	66.6	88.7
	461.6	458.0	460.4	2.036	1.941	1.958	1411	3091	33.75	1.242	65.6	89.5
	461.6	458.0	460.4	2.314	2.202	2.228	1606	2992	38.64	1.376	63.9	89.7
	461.6	458.0	460.5	2.586	2.455	2.492	1790	2891	42.16	1.451	60.5	89.5
	461.5	458.0	460.5	2.913	2.763	2.811	2005	2756	46.67	1.531	57.0	88.9
	461.5	458.1	460.5	3.213	3.042	3.101	2192	2621	49.89	1.557	53.0	88.2
	461.4	458.1	460.5	3.514	3.322	3.394	2373	2472	52.12	1.534	48.2	87.3
	461.4	458.1	460.5	3.804	3.592	3.677	2540	2310	54.78	1.507	44.3	86.4
BDT OZ-FT	461.4	458.1	460.5	3.920	3.698	3.789	2603	2241	54.85	1.463	41.9	85.9
	461.4	458.1	460.5	4.104	3.868	3.970	2701	2123	55.24	1.396	38.6	85.2
	461.3	458.2	460.5	4.385	4.129	4.245	2846	1920	55.82	1.276	33.4	84.0
	461.4	458.1	460.5	4.634	4.360	4.487	2966	1714	56.30	1.149	28.9	82.8
	461.3	458.1	460.5	4.867	4.583	4.719	3073	1488	56.18	0.995	24.2	81.7
	461.4	458.1	460.5	5.087	4.790	4.937	3167	1245	55.49	0.822	19.4	80.5
	461.4	458.1	460.5	5.291	4.983	5.139	3249	981	54.49	0.637	14.6	79.4
	461.4	458.1	460.5	5.483	5.167	5.333	3320	692	53.14	0.438	9.8	78.2
	461.4	458.1	460.5	5.643	5.321	5.497	3376	397	53.32	0.252	5.6	77.2

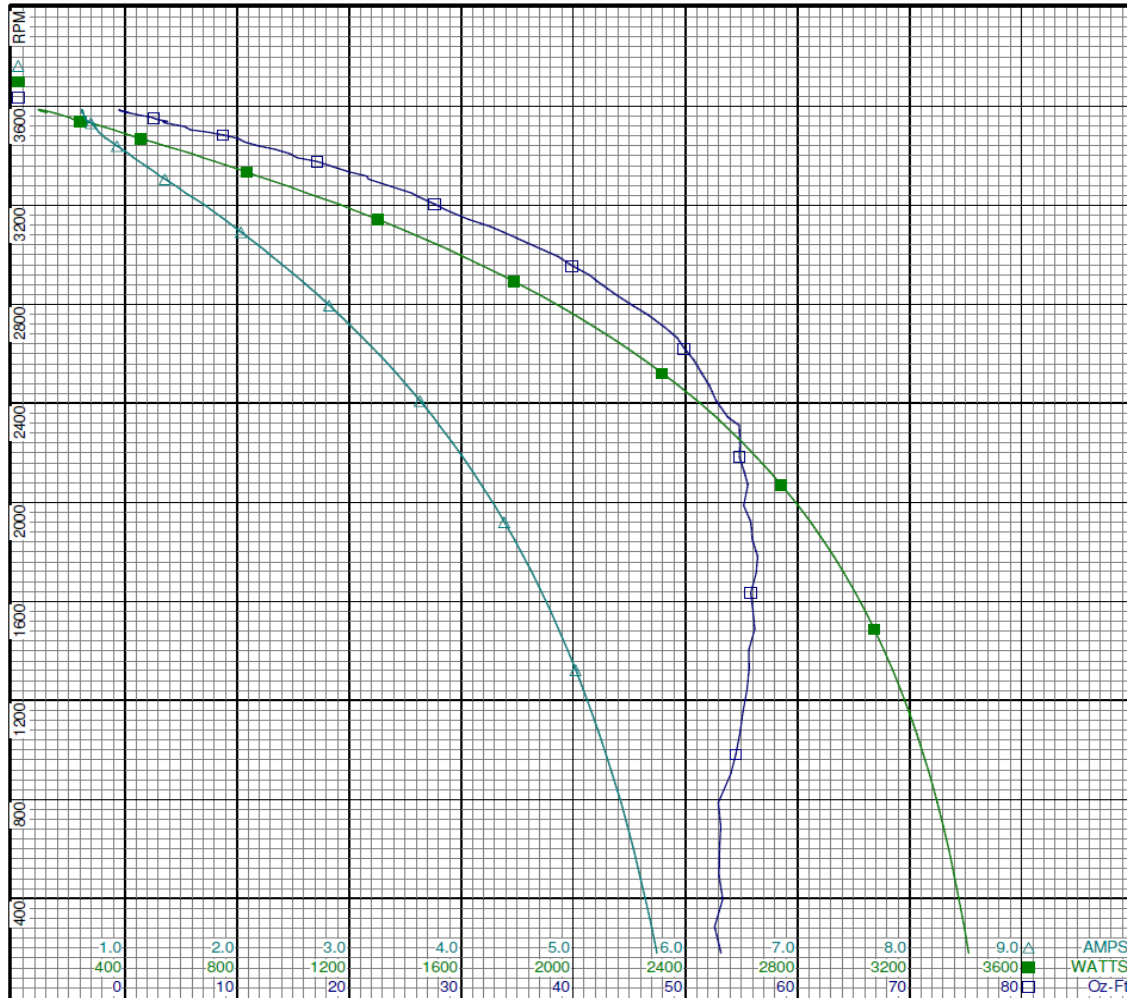
DRAWING NO. PAGE 2 of 2 REV.
10C901A -

Performance Data



10C901A

REV.
-



Curve Descriptions:
Motor(1) Test 18 Run 460V 60 Hz 2P

- SPEED vs TORQUE
- SPEED vs WATTS
- △ SPEED vs Ia

Motor Ratings:
(1) P055BZM1609 10C901A

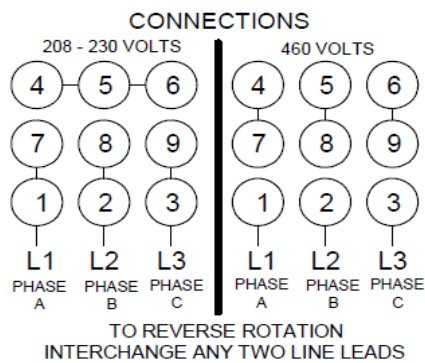
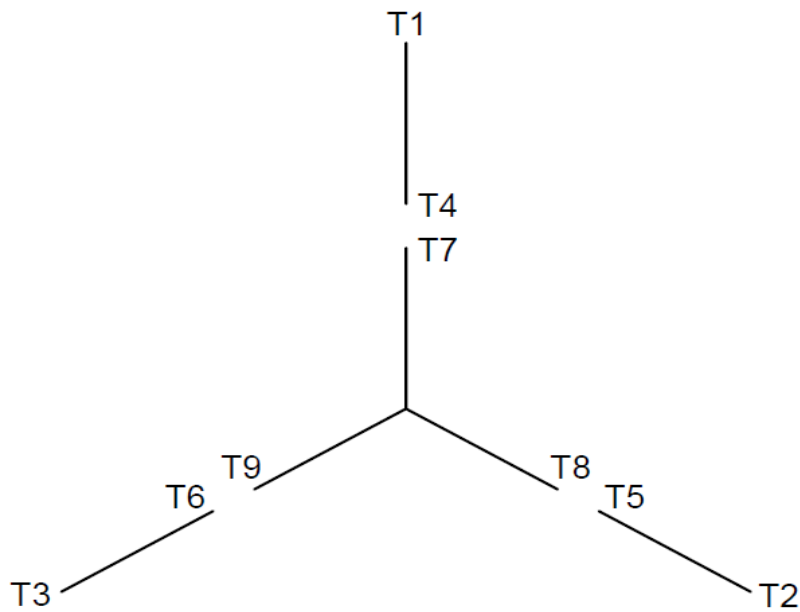
1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0	9.0	AMPS
400	800	1200	1600	2000	2400	2800	3200	3600	WATTS
0	10	20	30	40	50	60	70	80	Oz-Ft

DRAWING NO. PAGE 2 of 2 REV.
10C901A -

10C901A

REV.
0

Motor Wiring Diagram
9 Lead, Dual Voltage (WYE Conn.)



DRAWING NO.	PAGE 1 of 1	REV.
10C901A		0

Dayton[®]**INDUSTRIAL MOTOR**HP: 1/2
VOLTS: 208-230/460[BAR CODE]

Part No 10C901A

AMPS: 2.0-2.0/1.0

PH: 3

Disconnect Power Before Making Any
Electrical Connections or Changes

RPM: 3450&2850

HZ: 60&50

DUTY: CONT

FR: 48

SF: 1.15

INS CL: B

KVA CODE: L

AMB: 40 °C

ENCL: TEFC

SFA: 2.3-2.0/1.1

THERMALLY PROTECTED: NONE

MFG. NO. [] [] PROT. CODE: [] []

AVG. F.L. 76.0
EFF.

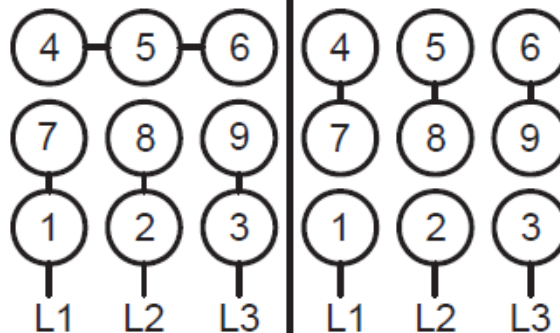
MTR REF: P55BZM-1609

SF AT 208 IS 1.0, FLA AT 190/380 IS 2.0/1.1

CONNECTIONS

208-230 VOLTS

460 VOLTS

ROTATION IS CCW LEAD END
TO REVERSE ROTATION INTERCHANGE
ANY TWO LINE LEADS

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

[Made in Mexico]