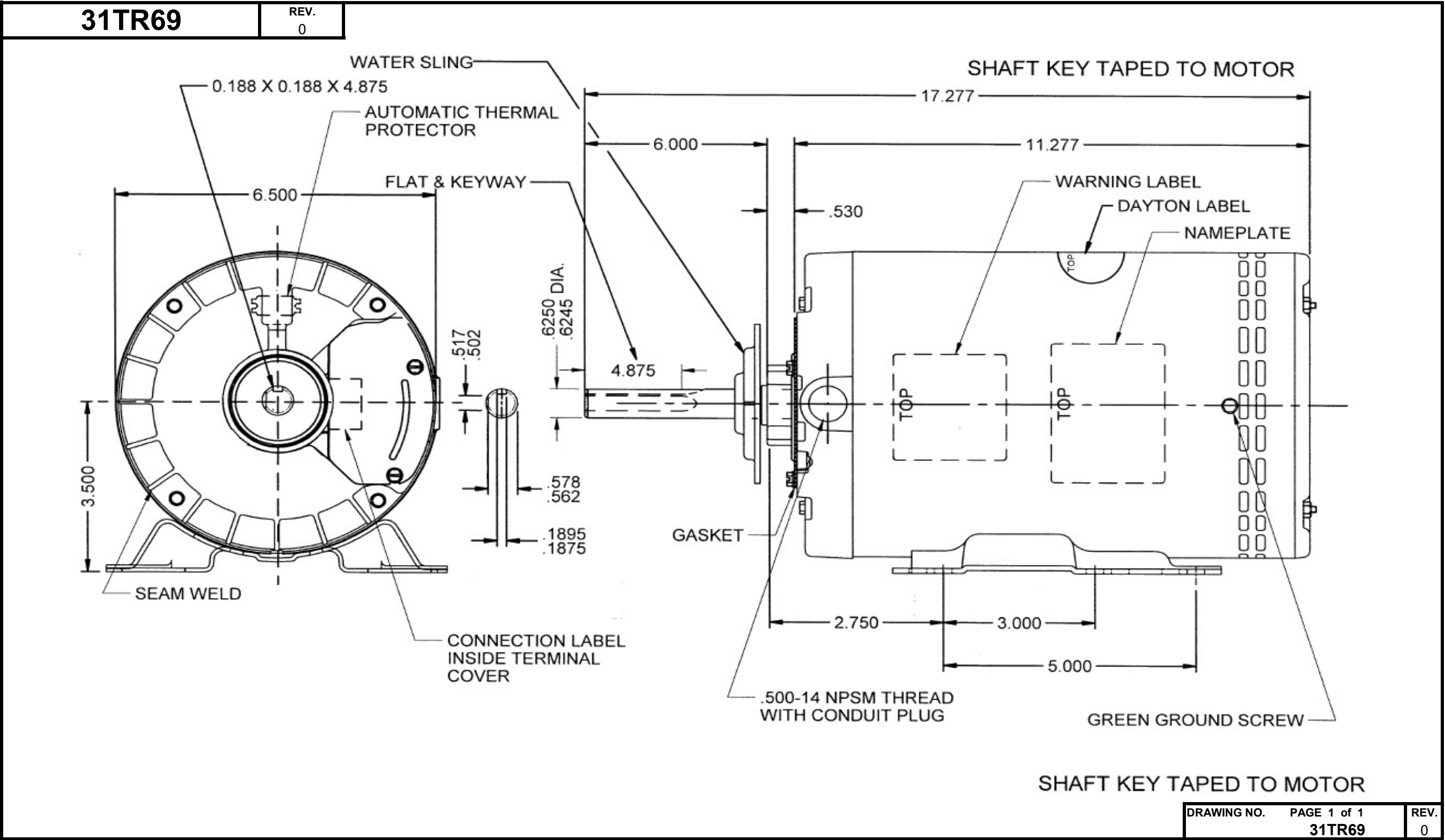


Dimensional Drawing



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

Performance Data



31TR69

REV.

-

THREE PHASE MOTOR PERFORMANCE

HP:	2					
Poles:	6					
Volts:	208-230/460 & 190/380	208	230	460		
HZ:	60	60	60	60		
Service Factor:	1.00					
Efficiency (%):	Full Load	83.0	79.5	83.1		
	Service Factor	83.0	79.5	83.1		
	3/4	83.5	79.4	82.5		
	1/2	81.7	76.9	79.4		
	1/4	74.2	66.3	68.5		
Power Factor (%):	Full Load	71.7	66.8	65.2		
	Service Factor	71.7	66.8	65.2		
	3/4	64.1	58.7	56.6		
	1/2	52.0	46.8	44.4		
	1/4	33.1	30.3	28.2		
Amps:	Full Load	7.0	7.1	3.5		
	Service Factor	7.0	7.1	3.5		
	3/4	5.8	6.0	3.0		
	1/2	4.9	5.2	2.7		
	1/4	4.2	4.7	2.4		
	No Load					
	Locked Rotor	28.8	32.0	19.2		
KVA Per HP		0.00	0.00	0.00	0.00	0.00
KVA Codes						
NEMA Code Letter:						
NEMA Design Letter:						
Full Load RPM:		1139	1146	1152		
NEMA Nominal Efficiency (%):						
Guaranteed Efficiency (%):						
Max KVAR:						
Ambient (°C):						
Altitude (FASL):						
Full Load Torque	Lb.Ft. / Oz.Ft.					
	(Circle One)	147.50	146.60	145.80		
Torques: % Full-Load	Breakdown	409.00	367.20	522.00		
	Locked Rotor	206.60	236.90	387.40		
	Pull-Up	206.60	236.90	387.40		
	Service Factor	147.50	146.60	145.80		
Temperature Rise:	Full Load					
	Service Factor					
Winding Material:						
Notes:						

DRAWING NO. PAGE 1 of 1
31TR69

REV.

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

Performance Data



31TR69

REV.

-

Dayton Manufacturing Company

Motor Description

Model: P063ACA1279
Motor ID: 1
Poles: 6
Volts: 208-230/460
Frequency: 60/50
HP: 2
Speed: 1140/950
Phase: 3
Protector:

Test Conditions

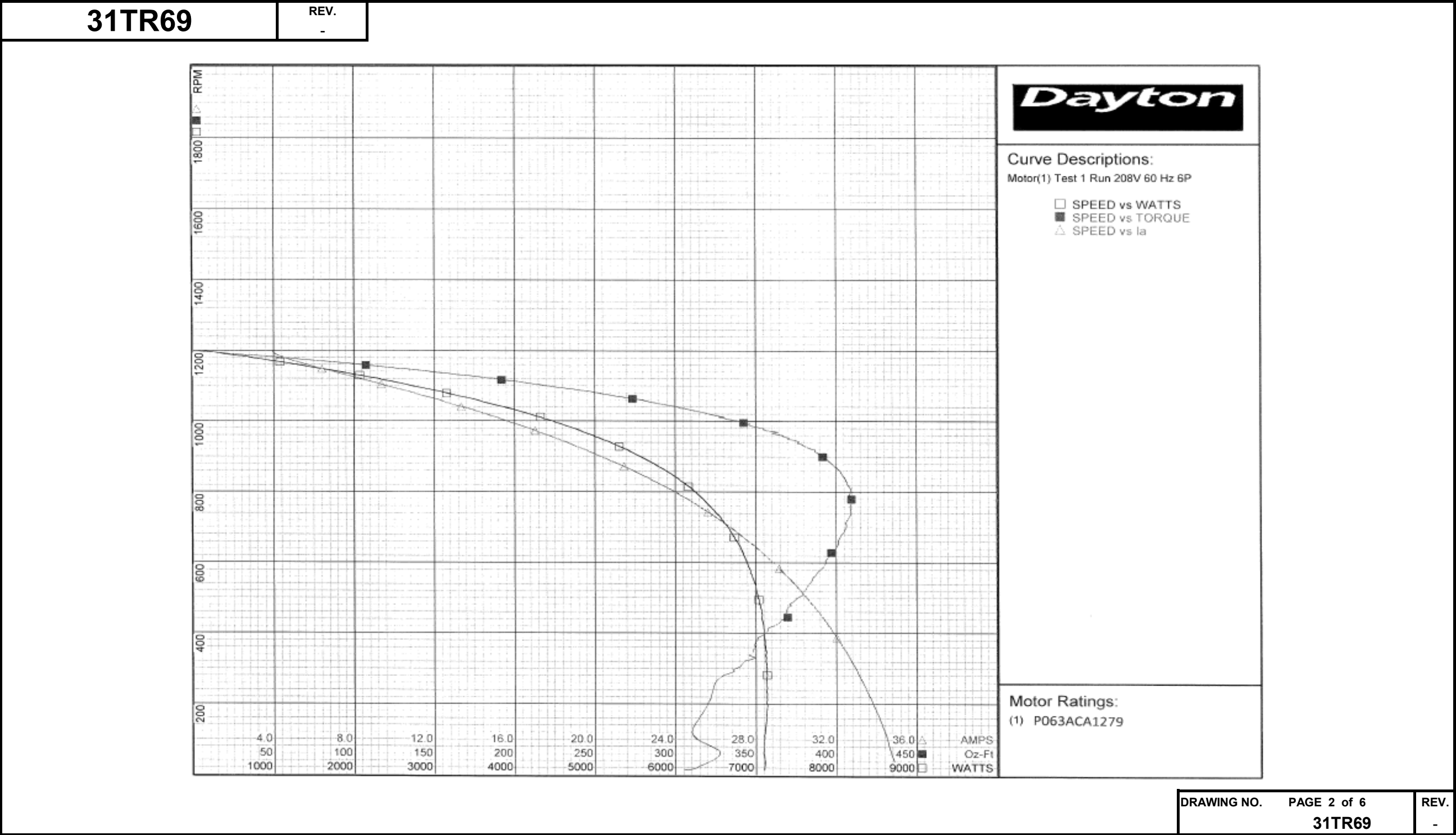
Test Type: Run
Test Number: 1
Poles: 6
Volts: 208
Hz: 60
Rotation:
Special Cond:
Speed Conn:
TestBoard: Amtps Performance Fixture #2
Run Cap: 0
Start Cap: 0µfd
Environment: 20.0 Deg C 57 % RH 990 hPa
Tested: 6/10/2013 2:51:19 PM
Tested By: Sharp, Gerald
Gear Ratio: 1:1
Bearing Friction: -0.64 Oz-Ft
Windage Torque: -2.40 Oz-Ft

Special Points	Vab (V)	Vbc (V)	Vca (V)	Ia (A)	Ib (A)	Ic (A)	Watts	RPM	Tq (Oz - ft)	HP	Eff (%)	PF (%)
	208.2	208.0	207.8	3.95	4.01	3.91	121	1199	0.0	0.000	0.0	8.5
	208.2	208.0	207.8	4.12	4.19	4.08	427	1189	27.5	0.389	68.0	28.7
	208.2	208.0	207.8	4.58	4.65	4.53	760	1178	57.6	0.808	79.4	46.0
	208.2	208.0	207.8	5.19	5.27	5.16	1082	1167	86.2	1.198	82.6	57.7
	208.2	208.0	207.8	5.90	5.98	5.87	1393	1155	112.9	1.553	83.2	65.3
	208.2	208.0	207.8	6.75	6.82	6.72	1729	1143	140.9	1.917	82.7	71.0
1140 RPM	208.2	208.0	207.8	6.88	6.95	6.86	1784	1140	145.4	1.973	82.5	71.8
147.4 OZ-FT	208.2	208.0	207.8	6.95	7.02	6.92	1807	1139	147.4	1.999	82.5	72.0
2 HP	208.2	208.0	207.8	6.95	7.02	6.93	1808	1139	147.5	2.000	82.5	72.1
	208.2	208.0	207.8	7.70	7.75	7.67	2074	1128	169.4	2.276	81.9	74.7
	208.2	208.0	207.9	8.71	8.76	8.68	2426	1113	197.6	2.619	80.5	77.2
	208.2	208.0	207.8	9.81	9.85	9.78	2787	1096	224.8	2.933	78.5	78.8
	208.2	208.0	207.9	11.00	11.02	10.96	3157	1078	252.7	3.243	76.6	79.7
	208.2	207.9	207.9	12.25	12.25	12.19	3530	1059	279.9	3.527	74.5	80.1
	208.2	207.9	207.9	13.90	13.87	13.82	3999	1032	309.4	3.800	70.9	80.1
	208.2	207.9	207.9	15.11	15.07	15.02	4321	1011	330.4	3.975	68.6	79.6
	208.2	207.9	207.9	16.20	16.14	16.10	4615	989	345.6	4.067	65.7	79.3
	208.2	208.1	207.7	17.68	17.55	17.52	4975	959	366.5	4.185	62.8	78.5
	208.2	207.9	207.9	19.08	18.98	18.95	5306	928	380.9	4.210	59.2	77.5
	208.3	207.9	207.8	20.60	20.46	20.41	5628	893	394.2	4.192	55.6	76.2
	208.6	207.9	207.5	22.05	21.83	21.73	5911	856	402.7	4.104	51.8	75.0
	208.6	207.9	207.5	23.48	23.20	23.10	6165	815	408.0	3.959	47.9	73.6
BDT OZ-FT	208.6	207.9	207.5	24.84	24.50	24.44	6382	771	409.6	3.761	44.0	72.0
	208.6	207.9	207.5	24.84	24.50	24.44	6382	771	409.6	3.761	44.0	72.0
	208.6	207.8	207.6	26.16	25.79	25.73	6573	723	407.1	3.503	39.8	70.5
	208.6	207.9	207.5	27.37	26.98	26.92	6733	672	402.4	3.219	35.7	69.0
	208.6	207.9	207.6	28.54	28.13	28.07	6859	616	395.1	2.899	31.5	67.4
	208.6	207.8	207.6	29.59	29.15	29.11	6956	559	385.6	2.565	27.5	65.9
	208.5	207.9	207.5	30.59	30.13	30.11	7037	495	374.5	2.207	23.4	64.5
	208.6	207.8	207.5	31.51	31.04	31.01	7086	429	364.6	1.863	19.6	63.1
	208.6	207.8	207.5	32.33	31.83	31.83	7117	360	349.6	1.500	15.7	61.7
	208.6	207.8	207.6	33.11	32.61	32.61	7137	282	330.0	1.108	11.6	60.4
	208.6	207.8	207.6	33.79	33.28	33.28	7130	203	320.2	0.775	8.1	59.2
	208.6	207.8	207.6	34.41	33.88	33.90	7113	119	310.2	0.441	4.6	58.0
	208.6	207.8	207.6	34.89	34.36	34.41	7110	34	320.1	0.131	1.4	57.1

DRAWING NO. PAGE 1 of 6 REV.
31TR69 -

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

Performance Data



DRAWING NO.	PAGE 2 of 6	REV.
	31TR69	-

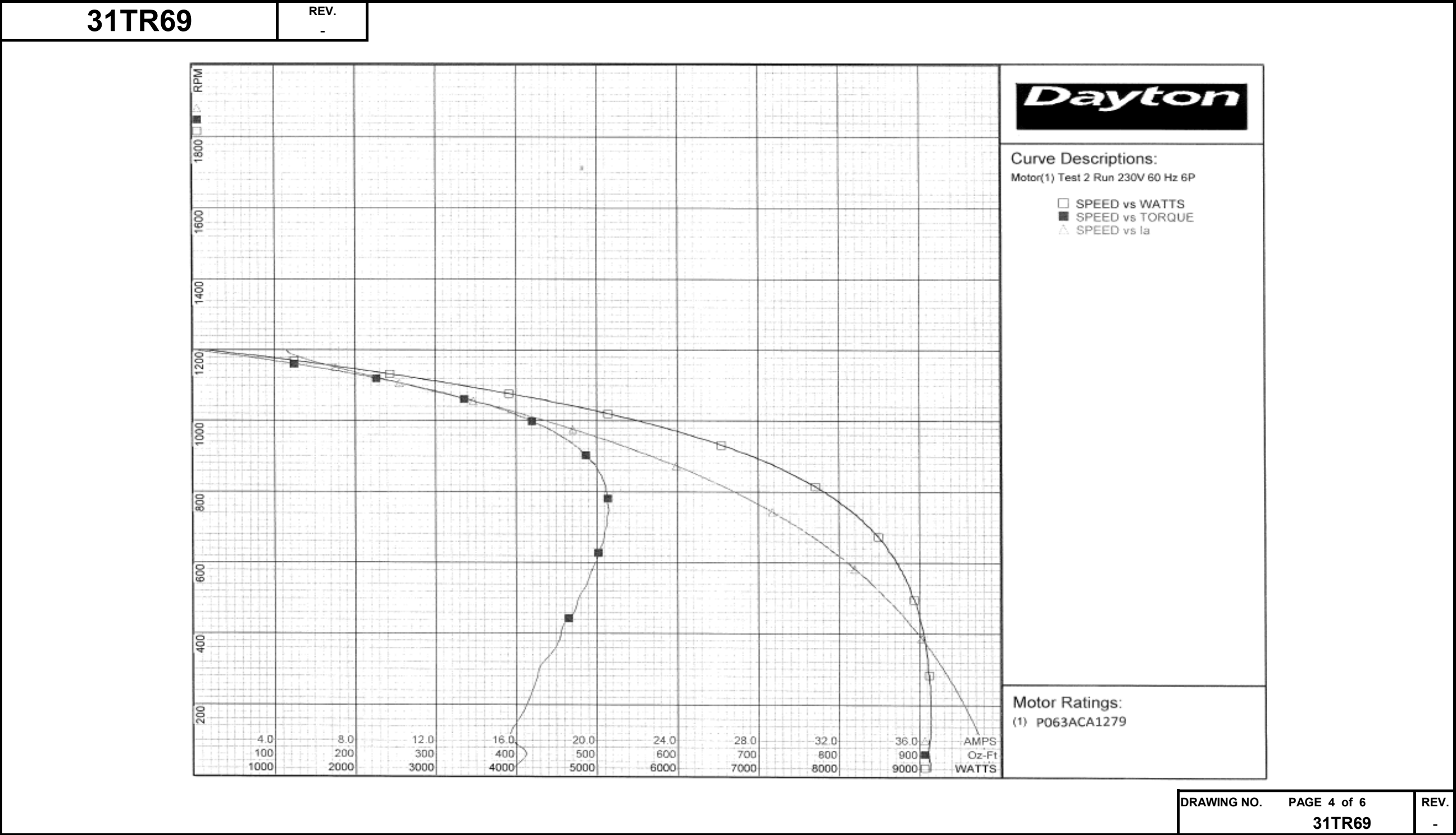
Performance Data



31TR69		REV.											
		-											
Dayton Manufacturing Company													
Motor Description				Test Conditions									
Model: P063ACA1279		Test Type: Run		Run Cap: 0									
Motor ID: 1		Test Number: 2		Start Cap: 0µfd									
Poles: 6		Poles: 6		Environment: 20.0 Deg C 57 % RH 990 hPa									
Volts: 208-230/460		Volts: 230		Tested: 6/10/2013 2:52:19 PM									
Frequency: 60/50		Hz: 60		Tested By: Sharp, Gerald									
HP: 2		Rotation:		Gear Ratio: 1:1									
Speed: 1140/950		Special Cond:		Bearing Friction: -0.48 Oz-Ft									
Phase: 3		Speed Conn:		Windage Torque: -2.40 Oz-Ft									
Protector:		TestBoard:		Amps Performance Fixture #2									
Special Points	Vab (V)	Vbc (V)	Vca (V)	Ia (A)	Ib (A)	Ic (A)	Watts	RPM	Tq (Oz - ft)	HP	Eff (%)	PF (%)	
	230.2	230.2	229.6	4.62	4.63	4.55	146	1199	0.0	0.000	0.0	8.0	
	230.2	230.2	229.6	4.76	4.77	4.69	497	1190	31.9	0.452	67.8	26.3	
	230.2	230.2	229.6	5.19	5.20	5.11	877	1180	65.9	0.925	78.7	42.6	
	230.2	230.2	229.6	5.78	5.79	5.71	1244	1169	98.4	1.370	82.1	54.2	
	230.2	230.2	229.6	6.52	6.53	6.45	1622	1158	131.2	1.808	83.1	62.7	
147.4 OZ-FT	230.2	230.2	229.6	6.92	6.93	6.85	1815	1151	147.4	2.020	83.0	66.0	
2 HP	230.2	230.2	229.6	6.88	6.89	6.81	1796	1152	145.8	2.000	83.1	65.7	
	230.2	230.2	229.6	7.40	7.40	7.33	2026	1145	165.0	2.250	82.9	68.9	
1140 RPM	230.1	230.2	229.7	7.77	7.76	7.70	2180	1140	178.1	2.417	82.7	70.7	
	230.1	230.2	229.6	8.37	8.36	8.30	2433	1132	199.0	2.681	82.2	73.2	
	230.1	230.2	229.7	9.48	9.45	9.40	2863	1116	233.5	3.103	80.8	76.1	
	230.1	230.2	229.7	10.72	10.67	10.63	3318	1100	268.8	3.520	79.1	78.1	
	230.1	230.2	229.7	12.39	12.32	12.30	3913	1077	313.1	4.013	76.5	79.6	
	230.2	230.1	229.7	13.72	13.63	13.61	4347	1059	341.7	4.308	73.9	79.9	
	230.1	230.1	229.7	14.67	14.57	14.56	4670	1043	368.2	4.572	73.0	80.3	
	230.2	230.1	229.7	16.21	16.07	16.08	5141	1020	395.8	4.804	69.7	80.0	
	230.1	230.2	229.7	17.84	17.67	17.70	5633	993	424.9	5.021	66.5	79.7	
	230.1	230.2	229.7	19.48	19.29	19.33	6096	963	450.3	5.165	63.2	79.0	
	230.1	230.2	229.7	21.16	20.93	20.99	6543	931	472.0	5.234	59.7	78.1	
	230.1	230.2	229.7	22.88	22.61	22.68	6969	896	489.8	5.225	55.9	77.0	
	230.1	230.2	229.7	24.64	24.26	24.37	7354	857	502.4	5.124	52.0	75.6	
	230.1	230.2	229.7	26.25	25.85	25.98	7708	816	511.5	4.966	48.1	74.3	
	230.1	230.2	229.7	27.78	27.35	27.49	8007	772	513.6	4.719	44.0	73.0	
BDT OZ-FT	230.1	230.2	229.7	28.55	28.09	28.23	8140	749	515.0	4.590	42.1	72.2	
	230.1	230.2	229.7	29.26	28.79	28.94	8263	724	512.7	4.419	39.9	71.5	
	230.1	230.2	229.8	30.69	30.20	30.36	8491	673	509.1	4.078	35.8	70.1	
	230.1	230.2	229.7	32.03	31.51	31.67	8670	618	501.4	3.688	31.7	68.6	
	230.1	230.1	229.8	33.30	32.75	32.92	8824	558	490.7	3.262	27.6	67.1	
	230.1	230.2	229.7	34.42	33.85	34.04	8936	497	476.8	2.819	23.5	65.8	
	230.1	230.2	229.7	35.48	34.90	35.09	9017	429	459.9	2.351	19.5	64.4	
	230.1	230.2	229.7	36.47	35.88	36.07	9077	359	448.3	1.915	15.7	63.0	
	230.1	230.2	229.8	37.37	36.75	36.96	9119	283	426.5	1.438	11.8	61.8	
	230.1	230.2	229.7	38.19	37.57	37.80	9136	202	413.3	0.996	8.1	60.6	
	230.1	230.2	229.7	38.94	38.32	38.53	9133	116	392.2	0.543	4.4	59.4	
	230.1	230.2	229.7	39.46	38.82	39.06	9130	34	403.0	0.165	1.3	58.6	
DRAWING NO.										PAGE 3 of 6		REV.	
										31TR69		-	

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

Performance Data



Performance Data



31TR69

REV.

-

Dayton Manufacturing Company

Motor Description

Model: P063ACA1279
Motor ID: 1
Poles: 6
Volts: 208-230/460
Frequency: 60/50
HP: 2
Speed: 1140/950
Phase: 3
Protector:

Test Conditions

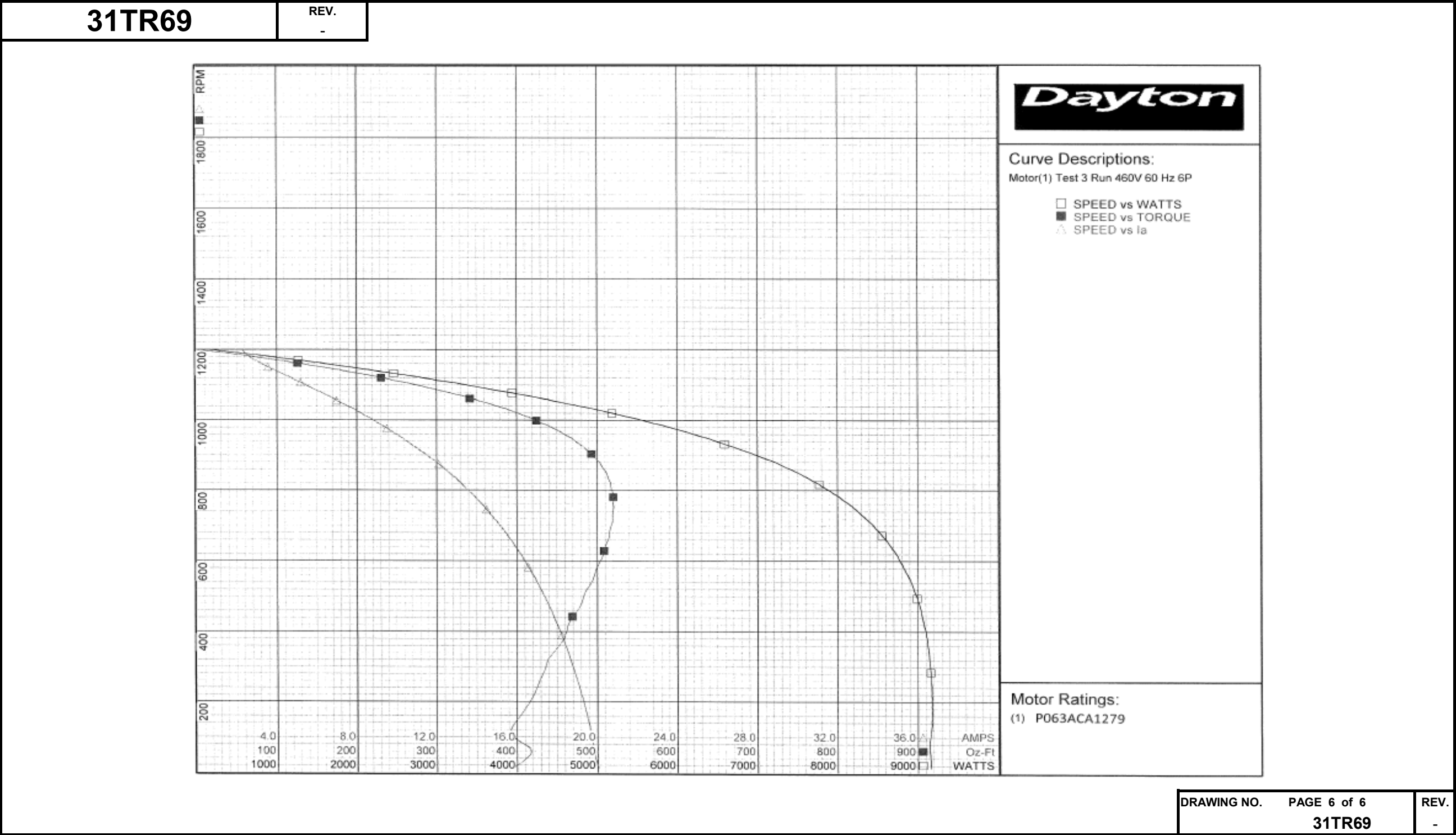
Test Type: Run
Test Number: 3
Poles: 6
Volts: 460
Hz: 60
Rotation:
Special Cond:
Speed Conn:
TestBoard: Amtps Performance Fixture #2
Run Cap: 0
Start Cap: 0µfd
Environment: 20.0 Deg C 57 % RH 990 hPa
Tested: 6/10/2013 2:31:27 PM
Tested By: Sharp, Gerald
Gear Ratio: 1:1
Bearing Friction: -0.64 Oz-Ft
Windage Torque: -2.56 Oz-Ft

Special Points	Vab (V)	Vbc (V)	Vca (V)	Ia (A)	Ib (A)	Ic (A)	Watts	RPM	Tq (Oz-ft)	HP	Eff (%)	PF (%)
	459.7	460.7	459.6	2.31	2.321	2.300	152	1200	0.0	0.000	0.0	8.3
	459.6	460.7	459.7	2.39	2.397	2.379	516	1190	34.6	0.491	70.9	27.1
	459.7	460.6	459.7	2.61	2.613	2.601	895	1180	67.8	0.953	79.4	43.1
	459.6	460.7	459.7	2.92	2.914	2.912	1271	1169	101.2	1.408	82.7	54.7
	459.6	460.8	459.5	3.29	3.272	3.278	1646	1158	133.7	1.843	83.5	63.0
147.4 OZ-FT	459.6	460.8	459.5	3.47	3.443	3.449	1807	1153	147.4	2.023	83.5	65.7
2 HP	459.6	460.8	459.5	3.45	3.421	3.427	1787	1154	145.6	2.000	83.5	65.3
	459.7	460.7	459.6	3.75	3.725	3.734	2057	1145	168.5	2.297	83.3	69.1
1140 RPM	459.7	460.7	459.6	3.93	3.906	3.913	2208	1140	181.2	2.459	83.1	70.7
	459.8	460.5	459.6	4.25	4.220	4.223	2467	1132	203.5	2.742	82.9	73.2
	459.9	460.4	459.7	4.81	4.781	4.781	2903	1117	237.7	3.161	81.2	76.1
	459.9	460.4	459.7	5.42	5.383	5.387	3350	1101	272.6	3.571	79.5	77.9
	459.9	460.4	459.7	6.27	6.220	6.229	3945	1077	316.9	4.065	76.9	79.3
	460.1	460.1	459.8	6.94	6.896	6.895	4388	1059	350.2	4.414	75.0	79.7
	459.6	460.3	460.0	7.42	7.354	7.390	4712	1043	370.5	4.603	72.9	80.1
	459.6	460.5	459.9	8.20	8.110	8.158	5188	1020	401.3	4.874	70.1	79.8
	459.5	460.4	460.0	9.01	8.913	8.967	5666	994	429.5	5.080	66.9	79.4
	459.6	460.3	460.1	9.85	9.749	9.806	6143	964	456.1	5.236	63.6	78.7
	459.6	460.2	460.2	10.69	10.583	10.646	6591	932	478.1	5.305	60.0	77.7
	459.5	460.3	460.2	11.57	11.444	11.519	7027	896	496.1	5.293	56.2	76.6
	459.6	460.3	460.1	12.43	12.263	12.335	7423	859	508.8	5.201	52.3	75.5
	459.5	460.3	460.2	13.26	13.080	13.156	7771	817	516.9	5.029	48.3	74.1
	459.5	460.2	460.3	14.07	13.892	13.970	8086	770	519.6	4.764	43.9	72.6
BDT OZ-FT	459.5	460.2	460.3	14.36	14.169	14.247	8187	754	520.7	4.674	42.6	72.1
	459.5	460.2	460.3	14.79	14.595	14.676	8336	725	519.2	4.478	40.1	71.2
	459.5	460.2	460.3	15.52	15.307	15.388	8556	673	515.1	4.128	36.0	69.7
	459.5	460.2	460.3	16.19	15.973	16.057	8738	619	507.5	3.737	31.9	68.2
	459.5	460.2	460.3	16.82	16.591	16.676	8881	559	496.3	3.305	27.8	66.8
	459.5	460.2	460.3	17.41	17.170	17.261	8993	496	482.3	2.846	23.6	65.3
	459.4	460.3	460.3	17.94	17.695	17.792	9074	428	465.4	2.370	19.5	63.9
	459.5	460.2	460.3	18.44	18.177	18.273	9126	358	451.9	1.926	15.7	62.6
	459.5	460.1	460.4	18.87	18.624	18.714	9162	284	433.3	1.467	11.9	61.4
	459.5	460.1	460.4	19.29	19.038	19.133	9175	202	417.0	1.005	8.2	60.1
	459.5	460.2	460.4	19.67	19.409	19.514	9168	116	391.9	0.540	4.4	58.9
	459.5	460.1	460.4	19.93	19.668	19.786	9161	33	408.4	0.159	1.3	58.1

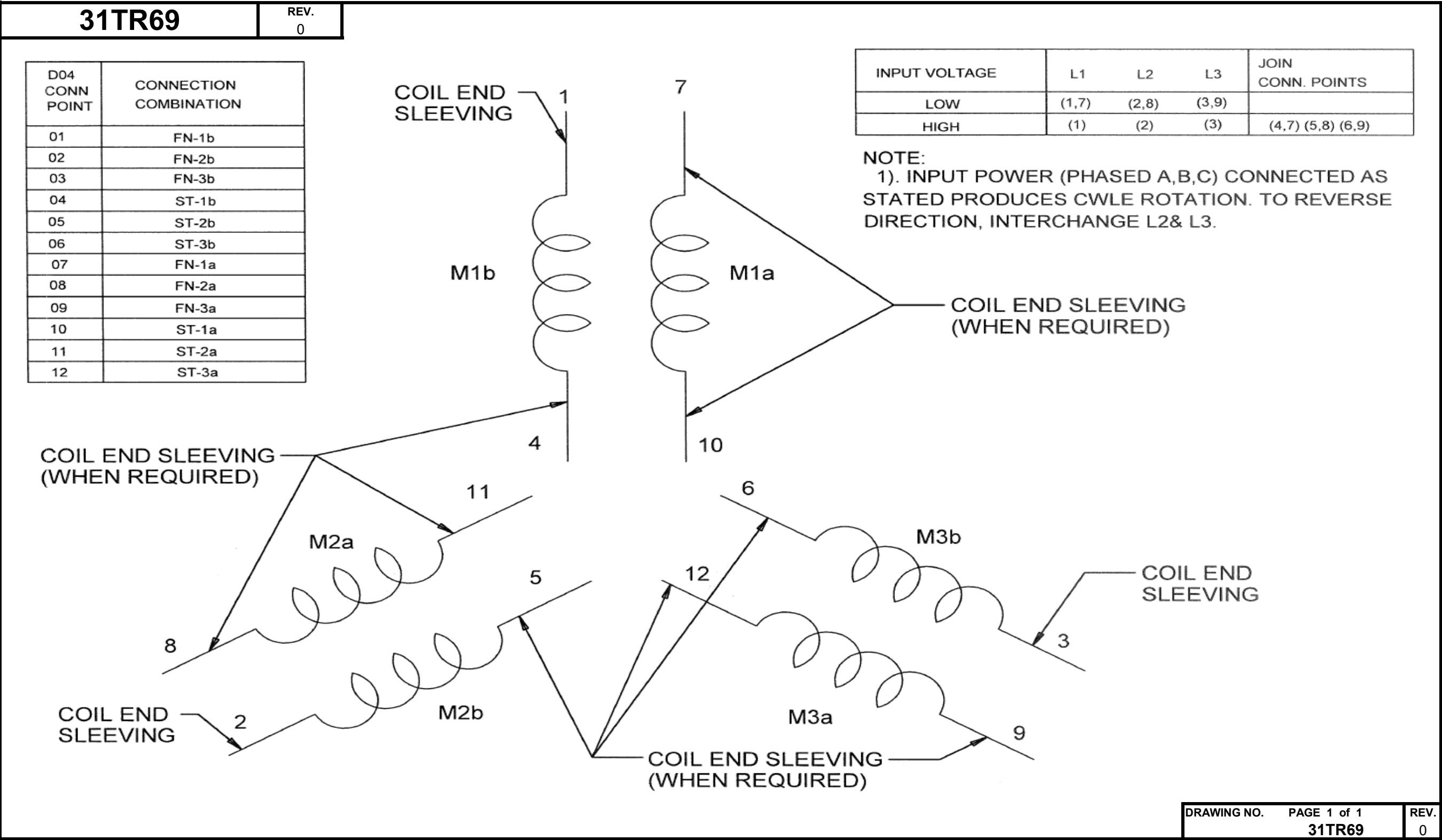
DRAWING NO. PAGE 5 of 6 REV.
31TR69 -

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

Performance Data



Wiring Diagram



Dayton®**CONDENSER FAN MOTOR**Part
No

31TR69

[BAR CODE]**HP:** 2.0**PH:** 3**VOLTS:** 208-230/460**HZ:** 60**AMPS:** 7.6-7.4/3.7**FR:** 56Z**RPM:** 1140**INS CL:** F**DUTY:** CONT**AMB:** 70 °C**SF:** 1.0**SFA:****KVA CODE:** J**ENCL:** OAO**THERMALLY PROTECTED:** AUTO

MFG. NO. [] []

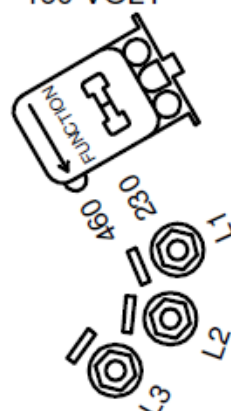
PROT. CODE : [06180]

AVG. F.L.
EFF.**MTR REF:** P63SYACA-1279**USABLE FOR 208 V AT 1.0 SF**

E37403



258501

**Disconnect Power Before Making Any
Electrical Connections or Changes****CONNECTIONS****230 VOLT****460 VOLT****TO REVERSE ROTATION INTERCHANGE
ANY TWO LINE LEADS.****Mfd for Dayton Electric Mfg. Co., Lake Forest, IL 60045 USA**[Made in Mexico]