



the standard in safety

Underwriters
Laboratories

Performance Test Results Sheet.

Date: 04/11/10 - 05/11/10
Model AET-TE² S-100A-3Phase
Serial no. AET-3ph-281010-1

3-phase balanced inductive load performance test

Reference	Voltage readings	Readings without TE ² S			Voltage readings	Readings with TE ² S			Amps saving	PF Improvement
		Current	Power factor	Total (Apparent) Power		Current	Power factor	Total (Apparent) Power		
	Volts	Amps	PF	VA	Volts	Amps	PF	VA	%	%
1-R	230.4	29.6	0.745	6820	231.8	18.97	0.97	4397	35.91	30.20
1-Y	230.9	28.8	0.766	6650	232	23.19	0.97	5380	19.48	26.63
1-B	233.4	25.62	0.755	5980	234.5	19.88	0.982	4662	22.40	30.07
2-R	230.6	47.3	0.73	10907	233.3	35.6	0.991	8305	24.74	35.75
2-Y	231.1	46	0.74	10631	234.1	35.3	0.988	8264	23.26	33.51
2-B	232.6	46.6	0.743	10819	235.6	35.9	0.988	8458	22.96	32.97
3-R	232.3	77	0.729	17887	236.1	46.7	0.989	11026	39.35	35.67
3-Y	233.9	76.6	0.73	17917	237.6	43	0.991	10217	43.86	35.75
3-B	235.8	77	0.744	18157	239.5	58.8	0.988	14083	23.64	32.80
4-R	231.6	110	0.74	25476	238.4	88	0.976	20979	20.00	31.89
4-Y	233.3	110.4	0.74	25756	236.6	85.7	0.972	20277	22.37	31.35
4-B	235	111.8	0.764	26273	235.5	84.2	0.974	19829	24.69	27.49
5-R	230.8	23.78	0.678	5488	231.8	13.23	0.983	3067	44.37	44.99
5-Y	230.9	26.91	0.678	6214	234.1	19.35	0.967	4506	28.47	42.63
5-B	233.3	23.07	0.667	5382	234.9	15.85	0.985	3723	31.30	47.68
6-R	232.3	45.4	0.66	10546	237.4	33.74	0.987	8010	25.68	49.55
6-Y	233.3	45.1	0.656	10522	235.7	30.87	0.984	7276	31.55	50.00
6-B	234.6	47.6	0.686	11167	234.9	31.3	0.986	7352	34.24	43.73
7-R	230.4	75.6	0.572	17418	237.2	48.8	0.962	11575	35.45	68.18
7-Y	231.6	76.3	0.589	17671	234.5	48.1	0.968	11279	36.96	64.35
7-B	233.4	76.4	0.597	17832	234.5	47.4	0.961	11115	37.96	60.97
8-R	231	104.6	0.645	24163	235.5	71.5	0.973	16838	31.64	50.85
8-Y	232.4	106.1	0.645	24658	236.8	73.1	0.969	17310	31.10	50.23
8-B	234.7	104.4	0.648	24503	239.2	71.8	0.968	17175	31.23	49.38

3-phase balanced inductive load performance test

9-R	236.5	28.79	0.612	6809	238.5	19.19	0.957	4577	33.34	56.37
9-Y	235.5	45.9	0.532	10809	237.2	26.13	0.967	6196	43.07	81.77
9-B	233.1	75.4	0.6	17576	237.1	48.3	0.966	11452	35.94	61.00
10-R	234.9	44.5	0.725	10453	237.6	33.38	0.985	7931	24.99	35.86
10-Y	234.1	67.3	0.735	15755	235.7	51.6	0.971	12209	23.03	32.11
10-B	231.2	107.7	0.531	24900	236.5	64.9	0.947	15349	39.74	78.34

3-phase balanced inductive load, high current test

11-R	230.1	109.8	0.521	25265	235.9	64.4	0.973	15192	41.35	86.76
11-Y	231.4	107.6	0.546	24899	236.3	66.2	0.943	15643	38.48	72.71
11-B	233.9	107.7	0.554	25191	238.2	66.9	0.928	15936	37.88	67.51

3-phase unbalanced inductive load, high current test

12-R	230.1	109.8	0.521	25265	235.9	64.4	0.973	15192	41.35	86.76
12-Y	231.7	101.9	0.681	23610	235.1	74	0.958	17397	27.38	40.68
12-B	233	110.8	0.775	25816	236.5	87.4	0.979	20670	21.12	26.32

3-phase unbalanced inductive load, low voltage test

12a-R	222.7	100.9	0.798	22337	226.4	63.5	0.942	14376	36.69	18.05
12a-Y	220.9	93.1	0.709	20566	225.8	71.1	0.958	16054	23.63	35.12
12a-B	220.8	100.5	0.572	22190	227	82.9	0.979	18818	17.51	71.15

3-phase unbalanced inductive load, high voltage test

12b-R	250.9	114.6	0.577	28753	255.5	71.6	0.953	18294	37.52	65.16
12b-Y	251.2	105.5	0.715	26502	255	79.7	0.966	20324	24.45	35.10
12b-B	254.3	112.9	0.804	28710	257.4	92.6	0.988	23835	17.98	22.89

Yours faithfully,



John Fisher
Associate Engineer Senior.

ACCREDITED UL LABORATORY TESTING

	Voltage	Amps	Power Factor	Total Power	Voltage	Amps	Power Factor	Total Power	Amps Savings %	Power Factor Improvement %
6-R	232.3	45.4	0.66	10546	237.4	33.74	0.987	8010	25.68	49.55
6-Y	233.3	45.1	0.656	10522	235.7	30.87	0.984	7276	31.55	50.00
6-B	234.6	47.6	0.686	11167	234.9	31.3	0.986	7352	34.24	43.73
7-R	230.4	75.6	0.572	17418	237.2	48.8	0.962	11575	35.45	68.18
7-Y	231.6	76.3	0.589	17671	234.5	48.1	0.968	11279	36.96	64.35
7-B	233.4	76.4	0.597	17832	234.5	47.4	0.961	11115	37.96	60.97
8-R	231	104.6	0.645	24163	235.5	71.5	0.973	16838	31.64	50.85
8-Y	232.4	106.1	0.645	24658	236.8	73.1	0.969	17310	31.10	50.23
8-B	234.7	104.4	0.648	24503	239.2	71.8	0.968	17175	31.23	49.38
3-phase unbalanced inductive load performance test										
9-R	236.5	28.79	0.612	6809	238.5	19.19	0.957	4577	33.34	56.37
9-Y	235.5	45.9	0.532	10809	237.2	26.13	0.967	6198	43.07	81.77
9-B	233.1	75.4	0.6	17576	237.1	48.3	0.966	11452	35.94	61.00
10-R	234.9	44.5	0.725	10453	237.6	33.38	0.985	7931	24.99	35.86
10-Y	234.1	67.3	0.735	15755	235.7	51.8	0.971	12209	23.03	32.11
10-B	231.2	107.7	0.531	24900	236.5	64.9	0.947	15349	39.74	78.34

Without MPTS

With MPTS

Percent
Amps Savings and
PF Improvement


the standard in safety
**Underwriters
Laboratories**

Performance Test Results Sheet.

Date: 28/09/10 - 30/09/10

 Model AET-TE² S-63A-3Ph

Serial no. AET-T-100809-PR01

3-phase balanced inductive load Performance Test

Reference	Readings without TE ² S				Readings with TE ² S				Amps saving	PF Improvement
	Voltage readings	Current	Power factor	Total (Apparent) Power	Voltage readings	Current	Power factor	Total (Apparent) Power		
	Volts	Amps	PF	VA	Volts	Amps	PF	VA		
1-R	230.6	14.56	0.636	3357.54	232.1	9.79	0.988	2272.26	32.76	55.35
1-Y	232.4	13.73	0.698	3190.85	233.6	9.98	0.985	2331.33	27.31	41.12
1-B	233.3	13.93	0.686	3249.87	234.2	9.97	0.988	2334.97	28.43	44.02
2-R	229.3	27.97	0.7	6413.52	231.9	20.31	0.989	4709.89	27.39	41.29
2-Y	230.8	27.44	0.704	6333.15	232.9	19.96	0.986	4648.68	27.26	40.06
2-B	231.5	27.01	0.704	6252.82	233.5	19.54	0.994	4562.59	27.66	41.19
3-R	230.8	40.5	0.679	9347.40	233.4	28.51	0.99	6654.23	29.60	45.80
3-Y	232.6	40.8	0.683	9490.08	235.3	28.94	0.986	6809.58	29.07	44.36
3-B	233.4	40.8	0.689	9522.72	236	29.02	0.993	6848.72	28.87	44.12
4-R	231.3	53.4	0.679	12351.42	234.5	37.2	0.99	8723.40	30.34	45.80
4-Y	232.9	53.3	0.69	12413.57	236.3	37.8	0.989	8932.14	29.08	43.33
4-B	233.8	53.9	0.69	12601.82	236.7	38.1	0.991	9018.27	29.31	43.62
4A-R	229	60.9	0.543	13946.30	232.7	35.6	0.964	8284.12	41.54	77.53
4A-Y	231.1	61.7	0.55	14258.87	235.3	36.8	0.963	8659.04	40.36	75.09
4A-B	231.8	62.2	0.55	14417.96	235.5	37.3	0.964	8784.35	40.03	75.27
5-R	230.8	14.85	0.753	3427.38	231.9	11.11	0.996	2576.41	25.39	32.27
5-Y	232.5	14.85	0.818	3452.63	233.4	11.06	0.987	2581.40	25.52	20.66
5-B	233	14.77	0.753	3441.41	234.1	11.43	0.996	2675.76	22.61	32.27
6-R	229.2	27.16	0.777	6225.07	230.9	21.48	0.993	4959.73	20.91	27.80
6-Y	230.8	27.08	0.784	6250.06	232.7	21.92	0.987	5100.78	19.05	25.89
6-B	231.8	25.99	0.774	6024.48	233.4	20.6	0.996	4808.04	20.74	28.68
7-R	230.8	42	0.755	9693.60	233.1	32.17	0.995	7498.83	23.40	31.79
7-Y	233.1	42.97	0.752	10016.31	235.5	32.15	0.992	7571.33	25.38	31.91
7-B	234.1	42	0.761	9832.20	236.1	32.41	0.994	7652.00	22.83	30.62
8-R	230.9	58	0.738	13392.20	233.6	43.7	0.994	10208.32	24.66	34.69
8-Y	233.4	57.3	0.743	13373.82	236.3	43.9	0.993	10373.57	23.39	33.65
8-B	234.1	57.5	0.738	13460.75	236.6	43.5	0.99	10292.10	24.35	34.15

3-phase unbalanced inductive load Performance Test

9-R	231.1	18.44	0.614	4261.48	232.4	11.71	0.989	2721.40	36.50	61.07
9-Y	232	27.81	0.667	6451.92	233.7	19.28	0.985	4505.74	30.67	47.68
9-B	230.9	38.65	0.573	8924.29	233.8	23.27	0.985	5440.53	39.79	71.90
10-R	232.2	13.44	0.773	3120.77	233	10.76	0.987	2507.08	19.94	27.68
10-Y	232.3	26.87	0.777	6241.90	233.8	21.73	0.987	5080.47	19.13	27.03
10-B	230.6	40.4	0.749	9316.24	232.9	31.03	0.994	7226.89	23.39	32.71
10A-R	250.8	15.54	0.726	3897.43	251.5	11.59	0.99	2914.89	25.42	36.36
10A-Y	250.6	32.93	0.67	8252.26	251.5	22.93	0.985	5766.90	30.37	47.01
10A-B	249.7	49.9	0.528	12460.03	252.2	27.47	0.986	6927.93	44.95	86.74
10B-R	220.6	13.64	0.727	3008.98	222.2	10.3	0.987	2288.66	24.49	35.76
10B-Y	220.4	28.58	0.672	6299.03	223.1	20.24	0.984	4515.54	29.18	46.43
10B-B	217.7	43.5	0.525	9469.95	222.4	25.17	0.949	5597.81	42.14	80.76

Yours faithfully,



John Fisher
Associate Engineer Senior.