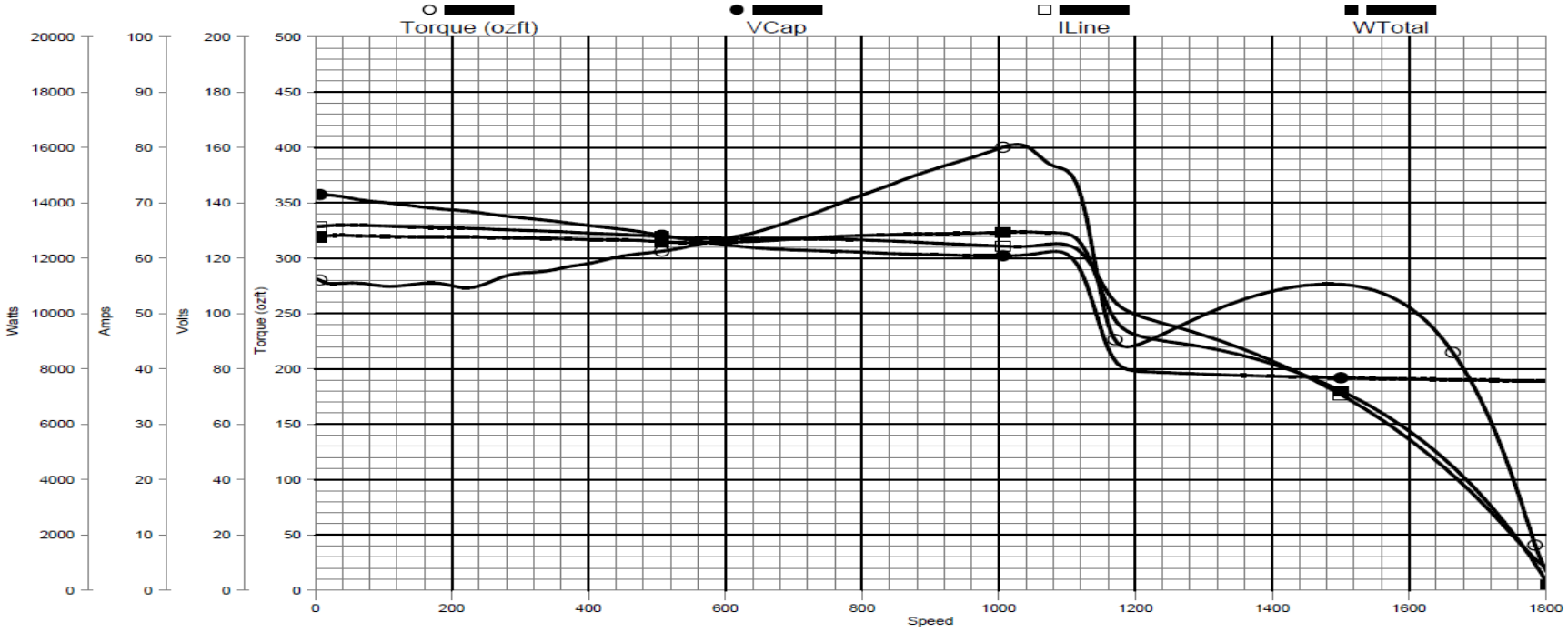
Performance Curve

31TR84	REV. 0

DAYTON ELECTRIC

Performance Test Project: **31TR84** Tuesday, April 08, 2014 02:58 AM



TRACKING #: 10112899	CUSTOMER: GRAINGER	DESCRIPTION: 0-SYNC
SBU: C&I	MODEL: X-0007474	BDT: 276.59
ENGINEER: STEVE WALLACE	FRAME: 56	MT: 402.76
TECHNICIAN: TOM	PHASES: 1	SF: 110.40
BENCH: 3	HP: 2.00	LRT: 281.81
TORQUE CELL: 2000-2 inlb	VOLTS: 230.0	LRA: 65.66
NP RPM: 1760	HERTZ: 60	PUT: 273.22
# SPEEDS: 1	START CAP: 540.00	COMMENT1:
MOTOR #: 1	RUN CAP: 65.00	COMMENT2:
TYPE: CSCR	COMMENT3:	COMMENT4:

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Performance Curve

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Performance Test Results For **31TR84**

04-08-2014
02:42 am

TRACKING #:	10112899	CUSTOMER:	GRAINGER	DESCRIPTION:	OFFSET
SBU:	C&I	MODEL:	X-0007474	BDT:	287.08
ENGINEER:	STEVE WALLACE	FRAME:	56	MT:	287.14
TECHNICIAN:	TOM	PHASES:	1	SF:	110.40
BENCH:	3	HP:	2.00	LRT:	0.00
TORQUE CELL:	2000-2 inlb	VOLTS:	230.0	LRA:	0.00
NP RPM:	1760	HERTZ:	60	PUT:	0.00
# SPEEDS:	1	START CAP:	540.00	COMMENT1:	
MOTOR #:	1	RUN CAP:	65.00	COMMENT2:	
TYPE:	CSCR	COMMENT3:		COMMENT4:	

Resistance:

	Main1	
	01-02	
Spec	20.00	
Before	0.892	@24.8 °C
After	0.936	@24.8 °C

Friction: -6.0030 ozft @ 200 RPM
Friction + Wind: -7.7589 ozft @ 1620 RPM
Inertia: 0.1335 ozft

Down Results (Torque In ozft):

% Load	Torque	RPM	VLine	VCap	VStart	ILine	IMain	IStart	WLine	WOut	% Eff	% PF	HP
NL	0.00	1798.0	230.1	230.8	230.5	3.35	3.34	0.08	242.8	0.0	0.0	31.5	0.00
25%	24.00	1789.1	229.9	224.8	224.6	4.06	4.07	0.08	612.7	381.0	62.2	65.6	0.51
50%	48.00	1779.8	229.9	219.1	219.0	5.38	5.37	0.08	996.8	758.1	76.1	80.6	1.02
70%	67.20	1772.0	229.9	214.9	214.7	6.64	6.63	0.08	1316.0	1056.7	80.3	86.2	1.42
75%	72.00	1770.0	229.9	213.8	213.6	6.98	6.97	0.08	1397.7	1130.9	80.9	87.1	1.52
94%*	91.00	1761.2	230.0	209.5	209.3	8.38	8.37	0.08	1729.4	1422.2	82.2	89.7	1.91
96%*	93.00	1760.3	230.0	209.0	208.8	8.54	8.53	0.08	1766.4	1452.7	82.2	89.9	1.95
NP	93.52	1760.0	230.0	208.9	208.7	8.58	8.57	0.08	1776.0	1460.6	82.2	90.0	1.96
FL	96.00	1758.8	230.0	208.3	208.1	8.78	8.76	0.08	1822.2	1498.3	82.2	90.2	2.01
103%*	99.00	1757.2	229.9	207.5	207.3	9.02	9.00	0.08	1878.0	1543.7	82.2	90.6	2.07
105%	100.80	1756.3	229.9	207.1	206.9	9.17	9.15	0.08	1911.3	1571.0	82.2	90.7	2.11
105%*	101.00	1756.2	229.9	207.0	206.8	9.19	9.16	0.08	1915.0	1574.0	82.2	90.6	2.11
110%	105.60	1753.9	229.9	205.9	205.7	9.55	9.53	0.08	1999.0	1643.6	82.2	91.0	2.20
SF	110.40	1751.5	229.9	204.8	204.5	9.93	9.90	0.08	2084.7	1715.9	82.3	91.3	2.30
115%	110.40	1751.5	229.9	204.8	204.5	9.93	9.90	0.08	2084.7	1715.9	82.3	91.3	2.30
120%	115.20	1749.1	229.9	203.6	203.4	10.30	10.28	0.08	2169.1	1788.1	82.4	91.6	2.40
125%	120.00	1746.7	229.9	202.5	202.2	10.68	10.66	0.08	2254.0	1860.0	82.5	91.8	2.49
135%	129.60	1741.5	229.9	200.1	199.8	11.48	11.48	0.08	2432.8	2002.8	82.3	92.2	2.69
150%	144.00	1733.5	229.8	196.4	196.2	12.70	12.71	0.08	2703.1	2215.2	81.9	92.6	2.97
BDT	287.08	1510.0	230.0	128.5	128.4	37.15	37.15	0.08	7416.1	3846.8	51.9	86.8	5.16
MT	287.14	1486.9	230.2	125.0	124.9	38.74	38.74	0.08	7677.4	3788.7	49.3	86.1	5.08

LRA=LOCKED ROTOR AMPS BDT =BREAKDOWN TORQUE MT=MAX TORQUE
LRT=LOCKED ROTOR TORQUE NP RPM=NAMEPLATE RPM

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