

OEM:	ENERFLEX
OEM Ref:	0849395/6
PROJECT:	CHRISTINA LAKE
END USER:	ENCANA CORPORATION
TWMI Ref:	000772/ 773

TECO Westinghouse

TEST REPORT FOR INDUCTION MOTOR

Test Method According To: **API 541**

Serial No : **D093227-1**
Test of Date: **Apr-09-2009**

Nameplate Rating

Rated HP(kW)	Service Factor	Pole	Rated Speed r/Min.	Phase	Frequency Hz	Volts	Amps	Type	Frame
1500HP	1.00	6	1185	3	60	4000	195	ANCK-S2	500C

** Test Characteristics

No Load					Locked Rotor				Wound Rotor Open Circuit Voltage	Shaft Voltage
Line Volts	HZ	Line Amps	Kilo watts	Speed (rpm)	Volts	HZ	Amps	Kilo watts		
4000	60	45.0	17.28	1200	700.0	60	156.0	28.80	E2 : ----- I2 : -----	0.0477
Power Factor					Power Factor					
5.54%					15.23%					

Resistance at 20.0 °C (between lines) Ω	Bearing Insulation by 24VDC (MΩ)	Insulation Resistance				High Potential Test Volts AC for 60 Sec.	
S: 0.1738	----	Stator	15.79K MΩ	5000 VDC		Stator	9000
R: -----		Rotor	----- MΩ	----- VDC		Rotor	----

Temperature Rise (Condition of 60 HZ 4000 V 45.0 A Amb.Temp. 20.0 °C)
No-Loading Method Run Hours : 1.5

Method	Stator Wdg. °C	Rotor Wdg. °C	Stator Core °C	Frame °C	Bearings °C	
by Thermometer	-----	-----	-----	-----	DE:	34.9
by Resistance	-----	-----	-----	-----	NDE :	38.7

Surge Test :

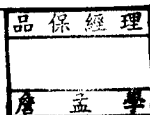
Test Volts	Result
9000	OK

DC High Potential Test :

Test Volts	Result
11.8 KV	OK

Air Gap: 1.82 mm

Approved by



Tested by

Shih Yi Wang

Date: Apr-11-2009

TECO ELECTRIC & MACHINERY CO., LTD

156-2 SUNG CHIANG ROAD, TAIPEI, TAIWAN, R.O.C.

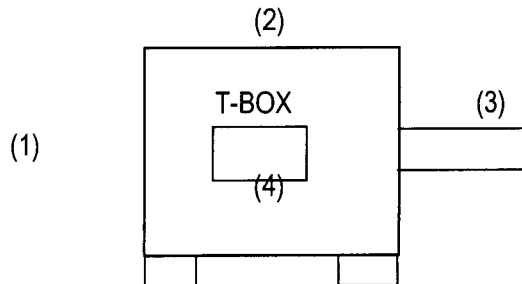
API 541 VIBRATION AND NOISE TEST REPORT

TYPE: ANCK-S2	POLE: 6	OUTPUT: 1500HP	ORDER NO: D093227-1
VOLTS: 4000	HZ: 60	FRAME: 500C	Date of Test: Apr-09-2009

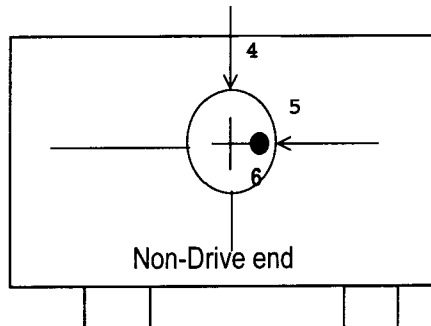
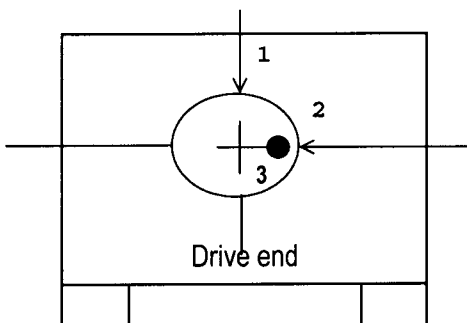
1. NOISE :

(**) HORIZONTAL MACHINE

Noise dB-A/1.0 M Under No Load			
Environment Noise		74	dB-A
1	2	3	4
76.4	76.0	76.5	77.0



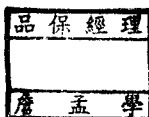
2. VIBRATION MEASURING POINT: (Micron)



VIBRATION TEST READING:

Measuring Point mm/s(0-Peak)
Vibration

	Housing								Shaft
	spec. 2.0mm/s	spec 2.5 mm /s							spec. 38.1 μ m
	0.5X	1X	2X	60HZ	120HZ	180HZ	240HZ	Overall	Overall
DE.V	0.0105	0.2049	0.0323	0.0288	0.0638	0.0008	0.0041	0.1785	----
DE.H	0.0093	0.0218	0.0504	0.0383	0.1840	0.0036	0.0185	0.2482	----
DE.A	0.0098	0.0180	0.0291	0.0308	0.0842	0.0021	0.0079	0.1756	----
NDE.V	0.0113	0.0154	0.0467	0.0236	0.0041	0.0007	0.0020	0.1668	----
NDE.H	0.0101	0.0145	0.0420	0.0361	0.1110	0.0011	0.0099	0.1803	----
NDE.A	0.0111	0.0154	0.0459	0.0272	0.3310	0.0016	0.0120	0.4075	----



Approved by

Tested by

SKIR W Wang

Date:

Apr-11-2009

POLARIZATION INDEX DATA

Form #T-312

Sub :04

Shop Order No:	D093227-1	Customer :	TWMI	Date :	Apr/09/2009
Applied Volts :	5000VDC	Equipment Model No. :	METREL-MI3200		
Temperature :	Dry Bulb :	22 °C	Wet Bulb :	--- °C	Relative Humidity : 75 %RH
Winding Temp. :	23 °C By : √ R.T.D, T.C. Bulb				

Item	Time	Phase: 3 Term : U1-V1-W1 Microamps/Megohms			Remarks
01	15 Seconds	5.03 K			
02	30 Seconds	8.66 K			
03	45 Seconds	12.70 K			
04	1.0 Minute	15.79 K			
05	1.5 Minutes	21.90 K			
06	2.0 Minutes	29.70 K			
07	3.0 Minutes	40.60 K			
08	4.0 Minutes	52.00 K			
09	5.0 Minutes	56.10 K			
10	6.0 Minutes	60.30 K			
11	7.0 Minutes	64.10 K			
12	8.0 Minutes	65.20 K			
13	9.0 Minutes	67.40 K			
14	10.0 Minutes	69.50 K			
15	1.0 Minute (Conver the Winding Temp. to 40 °C)	4.5 K			
16	P.I.	4.4			

Note : Test and Calculate According to DWG # 8655A16 , Also Refer to IEEE 43

Approved by :



Test by :

Shih Yw ring

TECO ELECTRIC & MACHINERY CO., LTD

TITLE : P.I. TEST RECORD

REV.01

DWG No. 4W8655A16

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