

SPECIFICATION TABLE OF 3-PHASE SQUIRREL CAGE INDUCTION MOTOR	CUSTOMER	TWMI	USER	TWMI-I
	INQ. NO.		EQUIPMENT	
	JOB NO.	FD093226T1	MACHINE	
	TOTAL SETS	1	ITEM NO.	

Item	Terms	Description							
1	Model	ANCK-S2							
2	Code or Standard	Dimensions	Frame Assignment		Performance	Test			
		IEC	TWMC		NEMA	NEMA			
3	Rating	1500	HP	6	Pole	4000	Volt 3 Phase	60	Hz
4	Service Duty	Continuous Rating							
5	Starting Method	V.V.V.F.							
6	Rotation	Facing The Drive End : CCW, Available for Bi-Direction							
7	Drive Method	Direct Coupling							
8	Environment	Amb. Temp. : 5 ~ 40 °C							
		Humidity : Less Than 90 %RH							
		Altitude : Up to 3300 FT							
9	Enclosure & Protection	WP11 : NEMA Weather Protected Type II						Indoor	
10	Cooling	IC01 : Self Ventilated Interior Cooling							
11	Mounting	IM1001 : HS, Foot							
12	Dimensions	Dr# 3A040K874 (REV.00)				Frame No : 500C			
13	Frame & Bracket	Frame : Steel Plate				Bracket : Steel Plate			
14	Fan & Fan Cover	Fan :--				Fan Cover :--			
15	Terminal Box	Steel Plate							
16	Lead Terminals	TLK(50-10)X6							
17	Lubrication	Oil Viscosity : ISO VG68							
18	Painting	Color : MUNSELL 7.5B 3.5/0.5							
19	Stator Winding	Ins. Class F							
20	Rotor Conductor	Cu-Alloy							
21	Starting Performance	LRC ≤ 1200 Amp				LRT/FLT	80	%	
22	Operating Performance	Hz/V	60/4000				Break Down Torque 200 %FLT		
		%Load	100	75	50				
		Amp.	195	150	106				
		Eff.%	96.0	95.8	95.4	Temp. Rise Limit. (RTD) Stator 75 °C			
		P.F.%	86.5	84.5	80.0				
		R.P.M.	1185	1188	1192				
23	Note	1. With Space Heater : 1φ 120V 500W 2. With Winding RTD : PT 100Ω/0°C 6pcs (DIN) 130°C Alarm , 150°C Trip 3. With Bearing RTD : PT 100Ω/0°C ,Dual Elements, 2pcs (DIN) 4. With Correction Capacitors 300KVAR to Achieve 95.0% Power factor ( Recommended ) 5. Class I, Zone II, Group IIA , T2C 6. Corrosion Proof 7. Motor Approx weight : 5800Kgs 8. No-load Amp = 49.9Amp , No-load PF% = 4.0% 9. Pull-up Torque = 80% 10.Safe Stall Time (cold/hot) : 35/30sec							

CERTIFIED

ORDER NO. FD093226T1

**CERTIFIED**  
ORDER NO. FD093226T1

APPD.	Ming	NOV. 21 2008		DWG NO.
CHKD.	Sandy	NOV. 21 2008		3A057H186-37283
DWN.	S.HUANG	NOV. 06 2008		REV.00 1/2

Item	Terms	Description
23	Note	<p>11.Acceleration Time : 3 sec</p> <p>12.Noise : Below 85dBA at 3 Feet Distance No Load</p> <p>13.Vibration :</p> <p>Below 2.5mm/s(O-P) On Bearing Housing No Load</p> <p>Below 38μm(P-P) On Shaft No Load</p>

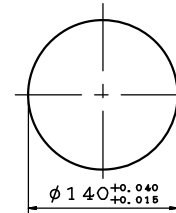
MINIMUM SPACE REQUIRED  
FOR REMOVING ROTOR  
(BRACKET BEEN REMOVED)

TYPE	OUTPUT		POLE	TIME RATING	VOLTAGE V	Hz	SYN. SPEED R. P. M.
	HP.	kW.					
ANCK-S2	1500		6	CONT	4000	60	1200

WEATHER PROTECTED TYPE II, SQUIRREL-CAGE ROTOR

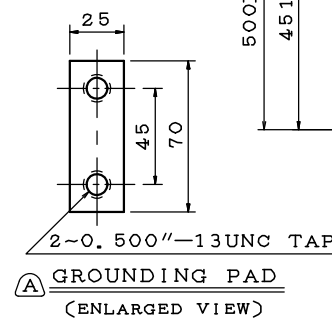
GRIP EXTENSION OF  
AIR FILTER (BOTH SIDES)  
1700

DIFFERENTIAL  
PRESSURE SWITCH  
(DWYER 1950-00)

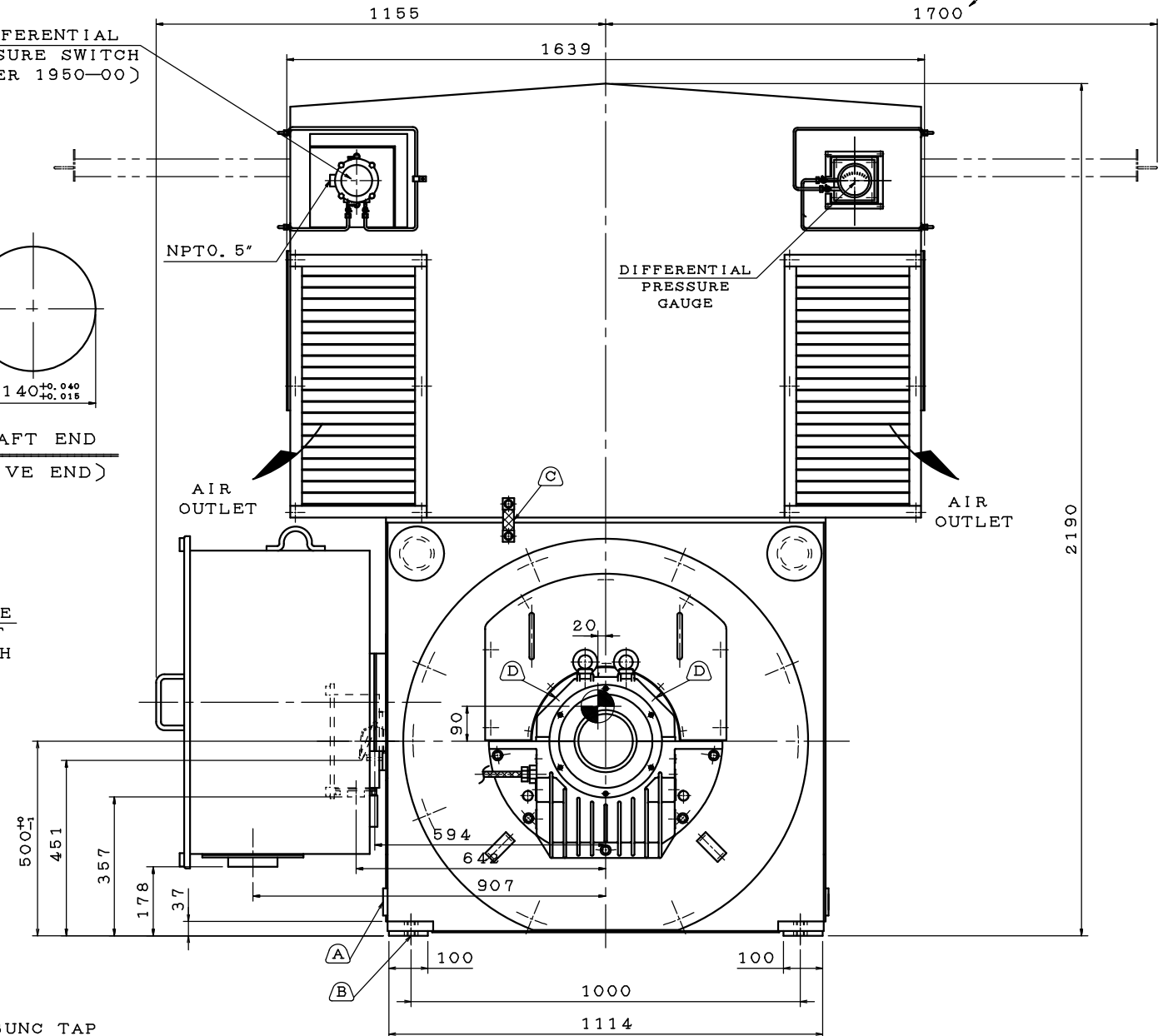


SHAFT END  
(DRIVE END)

USABLE  
SHAFT  
LENGTH



(A) GROUNDING PAD  
(ENLARGED VIEW)

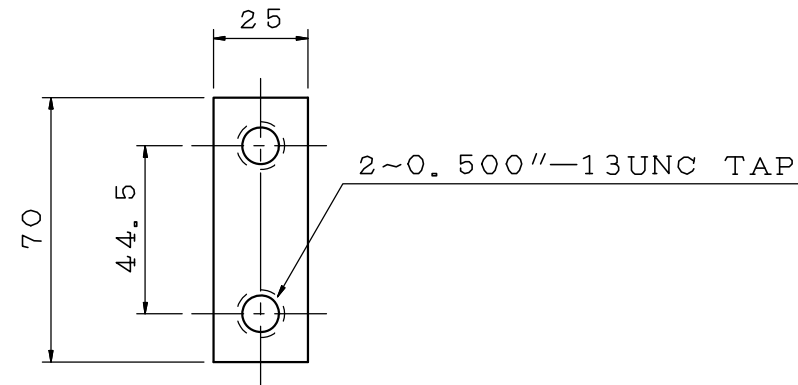
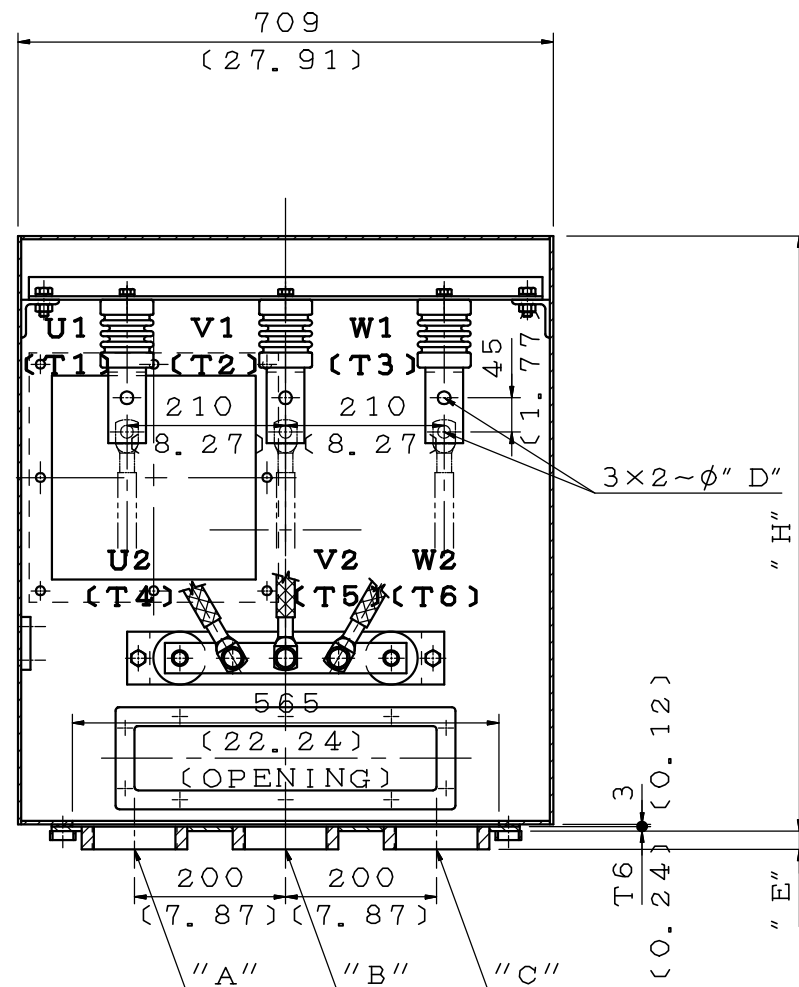


- NOTE:
1. DIMENSIONS IN MM.
  2. FRAME NO. 500C.
  3. F CLASS INSULATION.
  4. FOR DIRECT FLEXIBLE COUPLING.
  5. SLEEVE TYPE BEARING, AXIAL THRUST LOAD NOT ALLOWED.
  6. THE MOTOR ENDPLAY IS  $\pm 7$ MM. A LIMITED END FLOAT TYPE COUPLING IS REQUIRED TO LIMIT ENDPLAY TO  $\pm 2.4$ MM.
  7. BEARING SIZE: DRIVE END: 14-140 (INSULATED)  
NON-DRIVE END: 14-140 (INSULATED)
  8. BOTH END BEARING LINER (SHELL) IS INSULATED FROM THE HOUSING. METAL CONNECTIONS MADE TO THE BEARING SHELL MUST BE INSULATED TO PREVENT AN INSULATION SHORT CIRCUIT. METAL CONNECTIONS MADE TO THE HOUSING DO NOT NEED TO BE INSULATED. A GROUND STRAP IS PROVIDED AT THE DRIVE END. BEARING INSULATION SHOULD BE CHECKED WITH AN OHMMETER OR MEGGER BEFORE OPERATING MOTOR. DRIVE END BEARING MUST BE GROUNDED BY MEANS OF THE GROUND STRAP WHILE THE MOTOR IS OPERATING.
  9. BEARING LUBRICATION: SELF-LUBRICATION  
A. OIL VISCOSITY: ISO VG68 (275-325 SSU AT 100°F)  
B. OIL QUANTITY: 6.3L FOR DRIVE END  
6.3L FOR NON-DRIVE END.
  10. WITH SPACE HEATER: 1 $\phi$  120V, 500W.
  11. WITH WINDING RTD: PT100 $\Omega$ /0°C (DIN), 6PCS.  
SETTING: ALARM 130°C, TRIP 150°C.

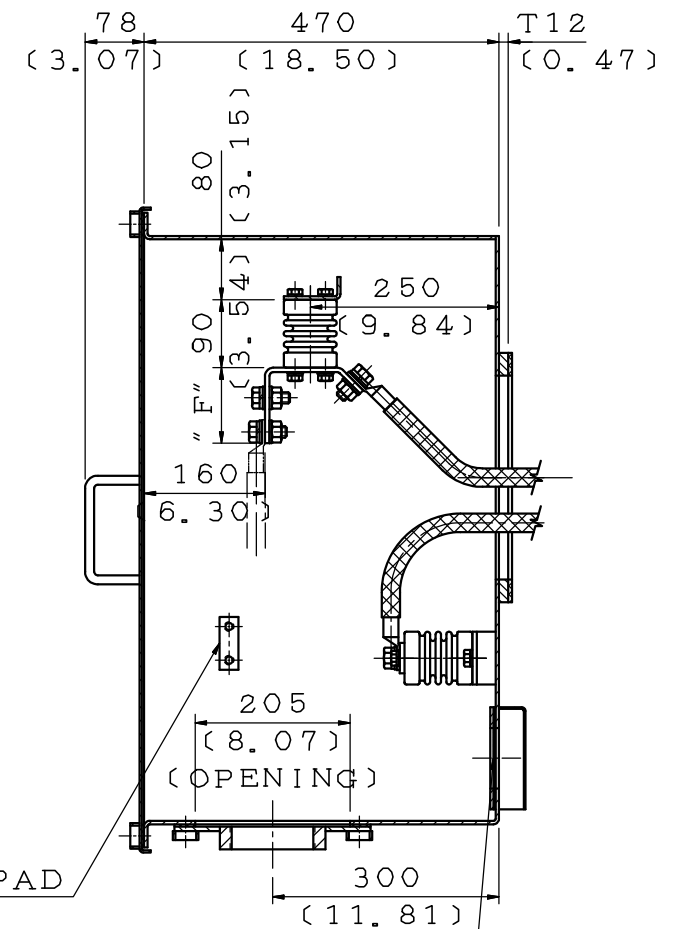
12. WITH BEARING RTD: PT100 $\Omega$ /0°C (DIN), DUAL ELEMENTS, 2PCS.  
SETTING: ALARM 95°C, TRIP 100°C.
13. WITH DIFFERENTIAL PRESSURE SWITCH:  
DWYER MODEL NO. 1950-00, 1PCS.  
SETTING: ALARM 0.1" W.C., TRIP 0.12" W.C.
14. WITH DIFFERENTIAL PRESSURE GAUGE: DWYER 2000-00, 1PCS.
15. NOISE: BELOW 85dBA AT 3 FEET DISTANCE NO LOAD.
16. VIBRATION:  
BELOW 2.5mm/s (0-P) ON BEARING HOUSING NO LOAD.  
BELOW 38  $\mu$ m (P-P) ON SHAFT NO LOAD.
17. SUITABLE FOR CLASS I, ZONE 2, GROUPS II A, T2C.
18. CORROSION PROOF.
19. MOTOR APPROX. WEIGHT: 5800kgs.  
ROTOR APPROX. WEIGHT: 1800kgs
20. TWMC IS NOT RESPONSIBLE FOR FOUNDATION DESIGN. THE SUPPORT REACTION NECESSARY FOR FOUNDATION DESIGN ARE AS FOLLOWS  
-KGS PER BOLT AT CENTERLINE OF HOLD DOWN BOLT HOLES:  
STATIC  $X = \text{MOTOR WEIGHT} / 4$   
RATED MOTOR TORQUE  $X = \text{MOTOR WEIGHT} / 4 \pm 454 \text{ kgs.}$   
MAXIMUM MOTOR TORQUE  $X = \text{MOTOR WEIGHT} / 4 \pm 2997 \text{ kgs.}$

- (A) 2-0.500 inch-13 UNC TAPPED GROUNDING PADS ON FRAME, DIAGONALLY OPPOSITE.
- (B) M20 VERTICAL JACKING HOLE, ONE HOLE PER FOOT. WITH VERTICAL JACKING BOLTS: 4PCS, MOUNTED ON MOTOR.
- (C) BONDING STRAP.
- (D) 2-1/4" NPT TAPPED HOLES FOR EACH BEARING, PROVISION FOR CUSTOMER'S METRIX VIBRATION TRANSMITTER.

DATE			OUTLINE DIMENSIONS	
			3-PHASE INDUCTION MOTOR	
DWN.	S. WANG	NOV.08.2008	TECO® Westinghouse	DWG NO. REV:00 3A040K874
CHKD.	S. WANG	NOV.08.2008		
APPD.	C. WANG	NOV.10.2008		



GROUNDING PAD  
(ENLARGED VIEW)



GROUNDING PAD

PRESSURE RELIEF  
DIAPHRAGM

ITEM	A	B	C	D	E	F	H
01	0	0	0	11 (0.43)	0	90 (3.54)	938 (36.93)
02	0	0	0	13 (0.51)	0	90 (3.54)	938 (36.93)
03	0	0	0	17 (0.67)	0	100 (3.94)	938 (36.93)
04	0	0	0	11 (0.43)	0	90 (3.54)	788 (31.02)
05	0	0	0	13 (0.51)	0	90 (3.54)	788 (31.02)
06	0	0	0	17 (0.67)	0	100 (3.94)	788 (31.02)

ITEM	A	B	C	D	E	F	H
07	0	NPT 4"	0	11 (0.43)	30 (1.18)	90 (3.54)	788 (31.02)
08							
09							
10							
11							
12							

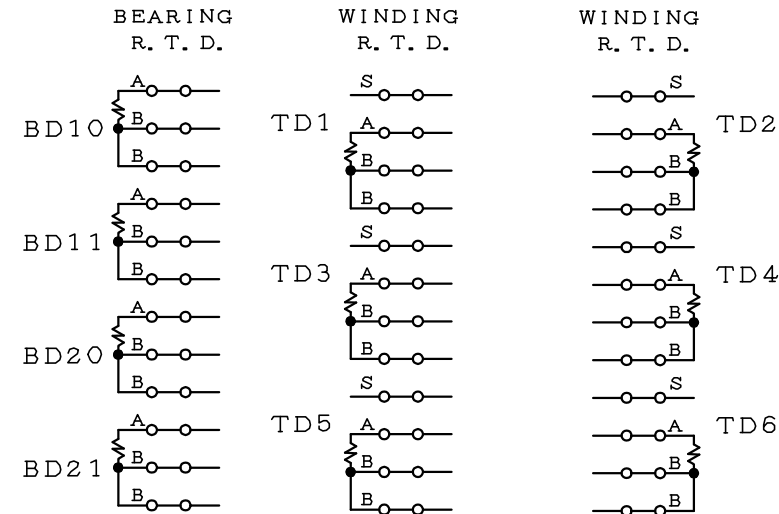
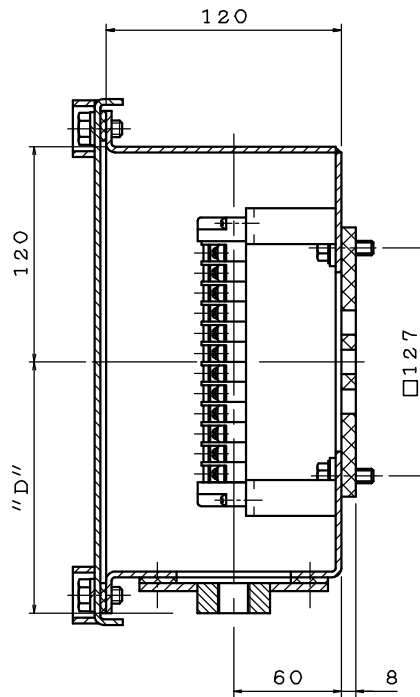
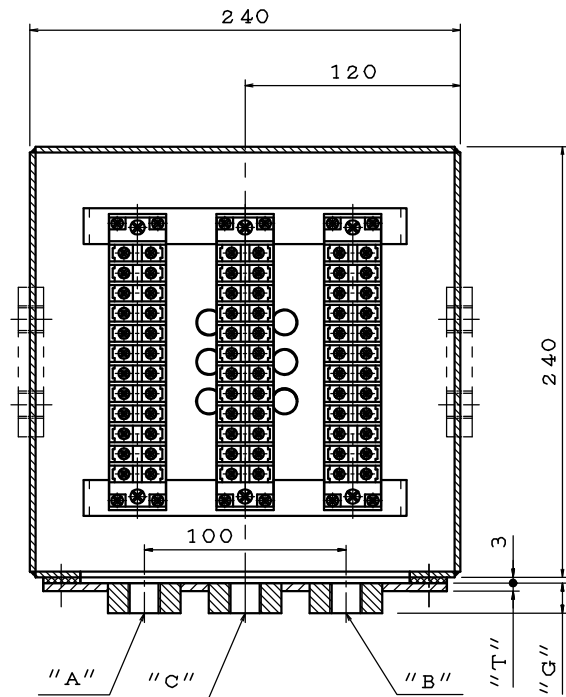
NOTE:  
1. DIMENSIONS IN MM (INCHES).  
2. PRIMARY T-BOX.  
3. ORDER NO. FD093226T1, FD093227T1.

**CERTIFIED**

ORDER NO.

DWN.	C. LEONG	MAY.18.2007
CHKD.	S. WANG	JUN.16.2007
APPD.	C. WANG	JUN.16.2007

DATE	NOV.21.2008	SCHEMATIC DRAWING
		TERMINAL BOX
TECO Westinghouse		DWG NO. REV:02
		3B040L383



**CERTIFIED**  
ORDER NO.

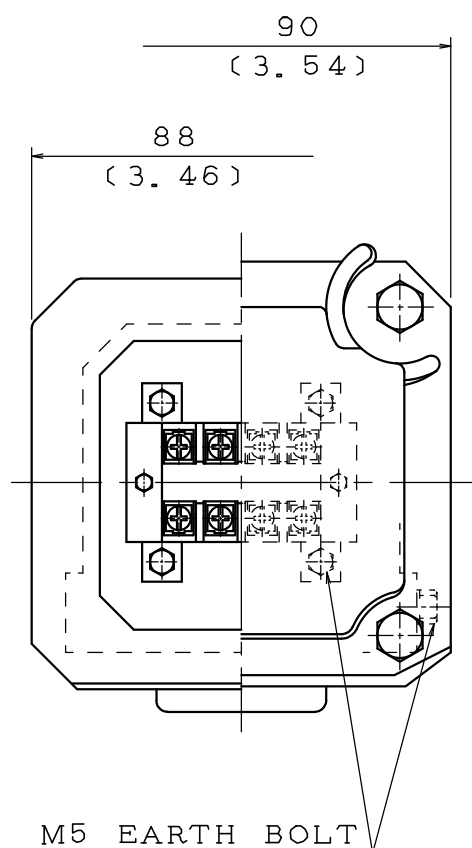
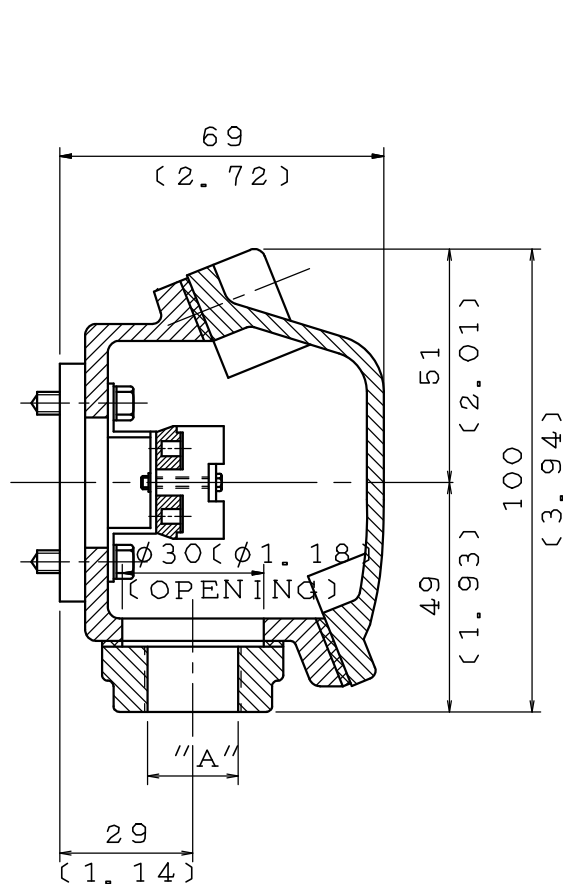
ITEM	A	B	C	D	G	T
01	0	0	0	127.5 (5.02)	4.5 (0.18)	4.5 (0.18)
02	NPT0.75"	0	NPT2"	143 (5.63)	20 (0.79)	4.5 (0.18)
03	NPT1"	NPT2"	0	143 (5.63)	20 (0.79)	4.5 (0.18)
04	0	0	NPT1"	143 (5.63)	20 (0.79)	4.5 (0.18)
05						
06						
07						
08						
09						
10						

NOTE:  
 1. DIMENSIONS IN MM.  
 2. WINDING R.T.D., BEARING R.T.D. T-BOX.  
 3. TD1 & TD2 FOR U PHASE  
     TD3 & TD4 FOR V PHASE  
     TD5 & TD6 FOR W PHASE  
     BD10 & BD11 FOR DRIVE END BEARING  
     BD20 & BD21 FOR NON-DRIVE END BEARING.  
 4. ORDER NO. FD093226T1, FD093227T1.

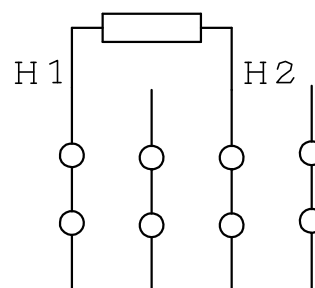
DWN.	S. WANG	AUG. 15. 2005
CHKD.	S. WANG	AUG. 15. 2005
APPD.	C. WANG	AUG. 16. 2005

DATE	NOV.21.2008	SCHEMATIC DRAWING	
		TERMINAL BOX	
<b>TECO®Westinghouse</b>		DWG NO.	REV:03
		3B040H187	

DATE NOV.21.2008	SCHEMATIC DRAWING	MODEL
	TERMINAL BOX	



ITEM	A
01	M20×1.5
02	M25×1.5
03	PF-0.5"
04	PF-0.75"
05	PT-0.5"
06	PT-0.75"
07	NPT-0.5"
08	NPT-0.75"
09	NPT-1"
10	0

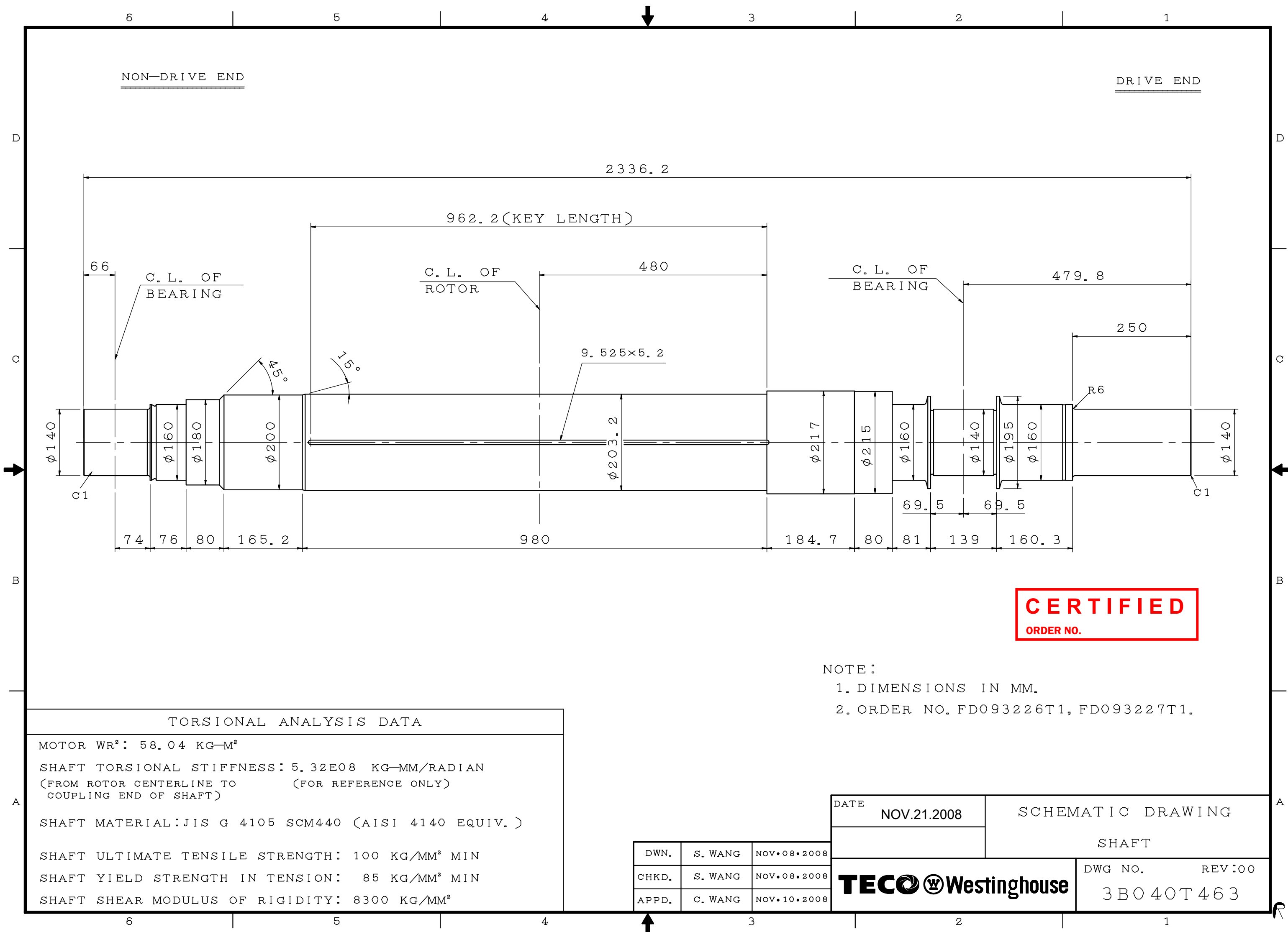


**CERTIFIED**  
ORDER NO.

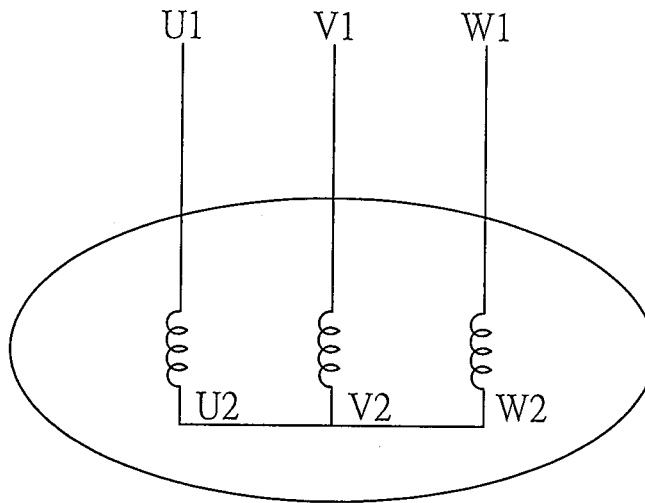
NOTE:

1. DIMENSIONS IN MM (INCHES).
2. TX-05A
3. SPACE HEATER T-BOX.
4. ORDER NO. FD093226T1  
FD093227T1.

DWN.	C. LEONG	JUL•06•2000	<b>TECO®Westinghouse</b>	DWG NO.	REV:03
CHKD.	B. YANG	JUL•10•2000		3A040D602	
APPD.	T. CHEN	JUL•10•2000			




DATE NOV.21.2008	SCHEMATIC WYE CONN 6 LEADS	MODEL



SCHEMATIC - WYE CONN - 6 LEADS

CONNECTION	ROTATION ( VIEWED FROM DRIVE END )


DWN.	S.HUANG	MAR • 03 • 2003	<b>TECO</b>  <b>Westinghouse</b>	DWG NO.	REV: 00
CHKD.	T.HSIAO	MAR • 03 • 2003		3 A 0 6 1 H 4 6 9	
APPD.	T.HSIAO	MAR • 03 • 2003			



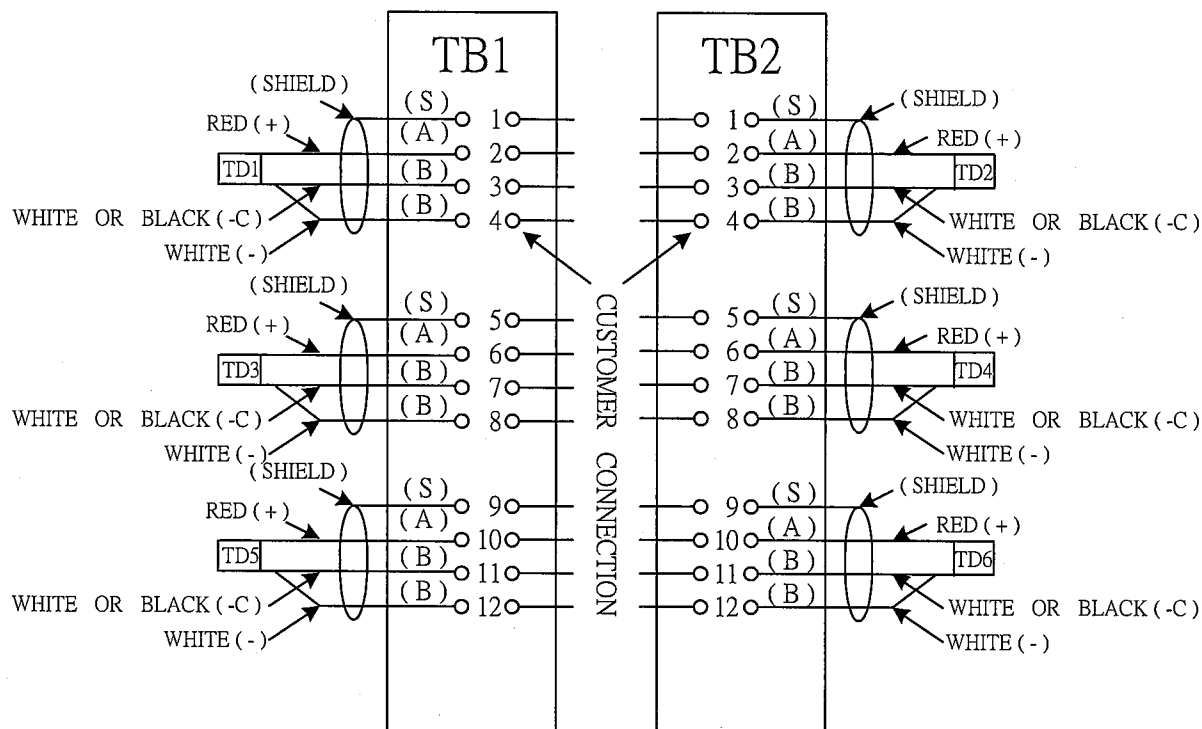
DATE NOV.21.2008		SCHEMATIC SPACE HEATER		MODEL	

The diagram shows a central vertical stack of four identical rectangular heating elements. To the left of this stack is a vertical line ending in a terminal labeled 'H1'. To the right is a similar vertical line ending in a terminal labeled 'H2'. Each heating element is connected to the 'H1' line on its left side and to the 'H2' line on its right side, forming four parallel electrical paths. Small black dots indicate the connection points between the horizontal lines of the elements and the vertical lines leading to H1 and H2.

120V 1PH 500W

DWN.	S.HUANG	MAR • 03 • 2003	<b>TECO</b>  <b>Westinghouse</b>	DWG NO.	REV: 00
CHKD.	T.HSIAO	MAR • 03 • 2003		3 A 0 6 1 H 2 3 9	
APPD.	T.HSIAO	MAR • 03 • 2003			

DATE NOV.21.2008	WIRING DIAGRAM	MODEL



DWN.	S.HUANG	MAR • 03 • 2003	<b>TECO</b>  <b>Westinghouse</b>	DWG NO.	REV: 00
CHKD.	T.HSIAO	MAR • 03 • 2003		3 A 0 6 1 H 5 1 2	
APPD.	C.Y.HUANG	MAR • 03 • 2003			

**INDUCTION MOTOR STARTING CHARACTERISTICS**

I-N/T-N CURVE

D093227

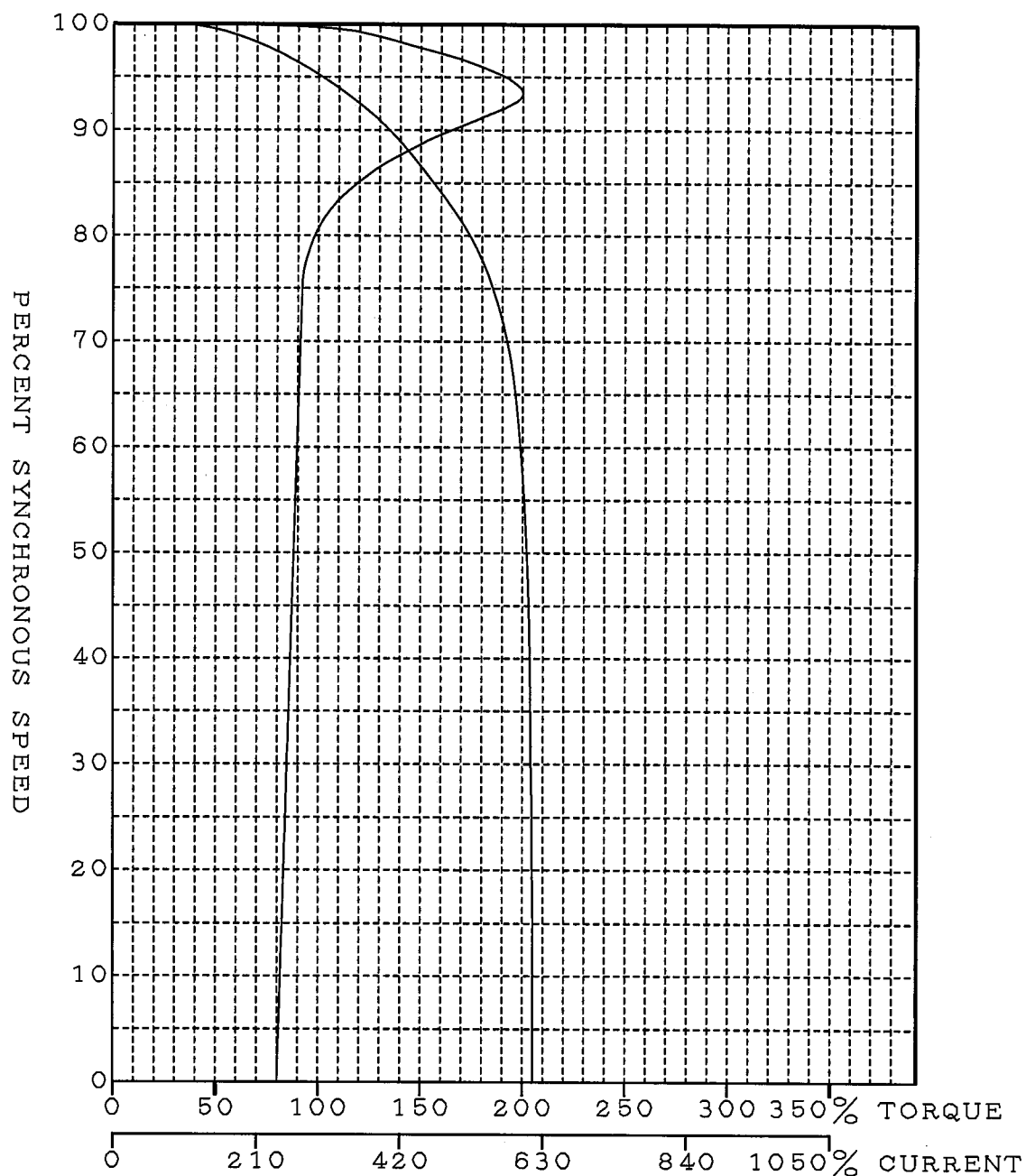
ORDER NO: D093226

TYPE: ANCK

HP: 1500 VOLTS: 4000

HZ: 60 POLES: 6

RPM(FLS): 1185

**TECO® Westinghouse**CURVE NO.  
D093226/00 I  
-T

SIGNATURE: S. HUANG

DATE: 11/06/2008

# TIME — CURRENT AND THERMAL LIMIT CURVES

LOAD WK<sup>2</sup> (LB-FT<sup>2</sup>):132 MOTOR WK<sup>2</sup> (LB-FT<sup>2</sup>):1376

D093227

NO. : D093226

TYPE: ANCK

POLE: 6

HP: 1500

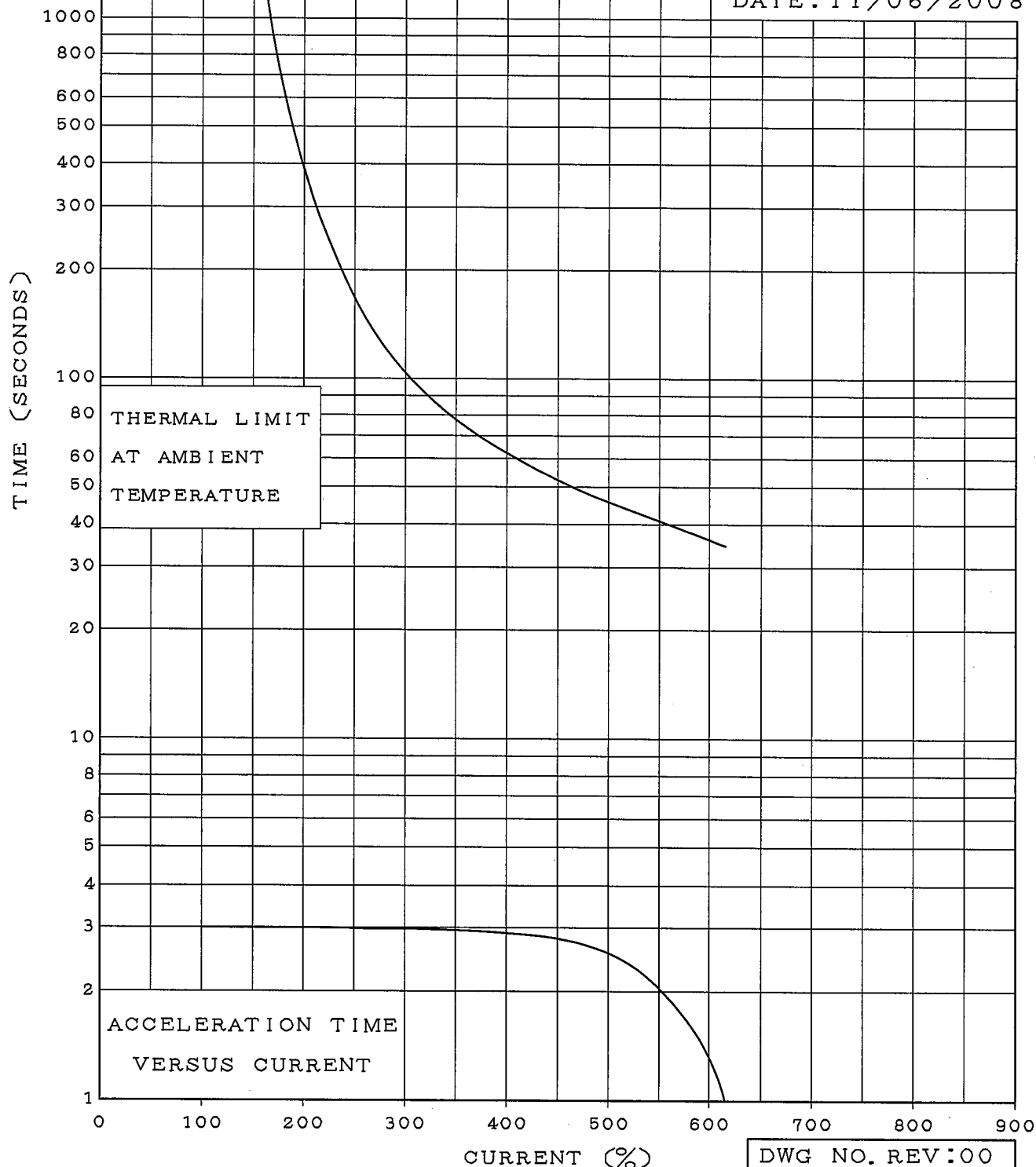
VOLTS: (A) 100%

(B) %

SIGNATURE:

S. HUANG

DATE: 11/06/2008



TECO  Westinghouse

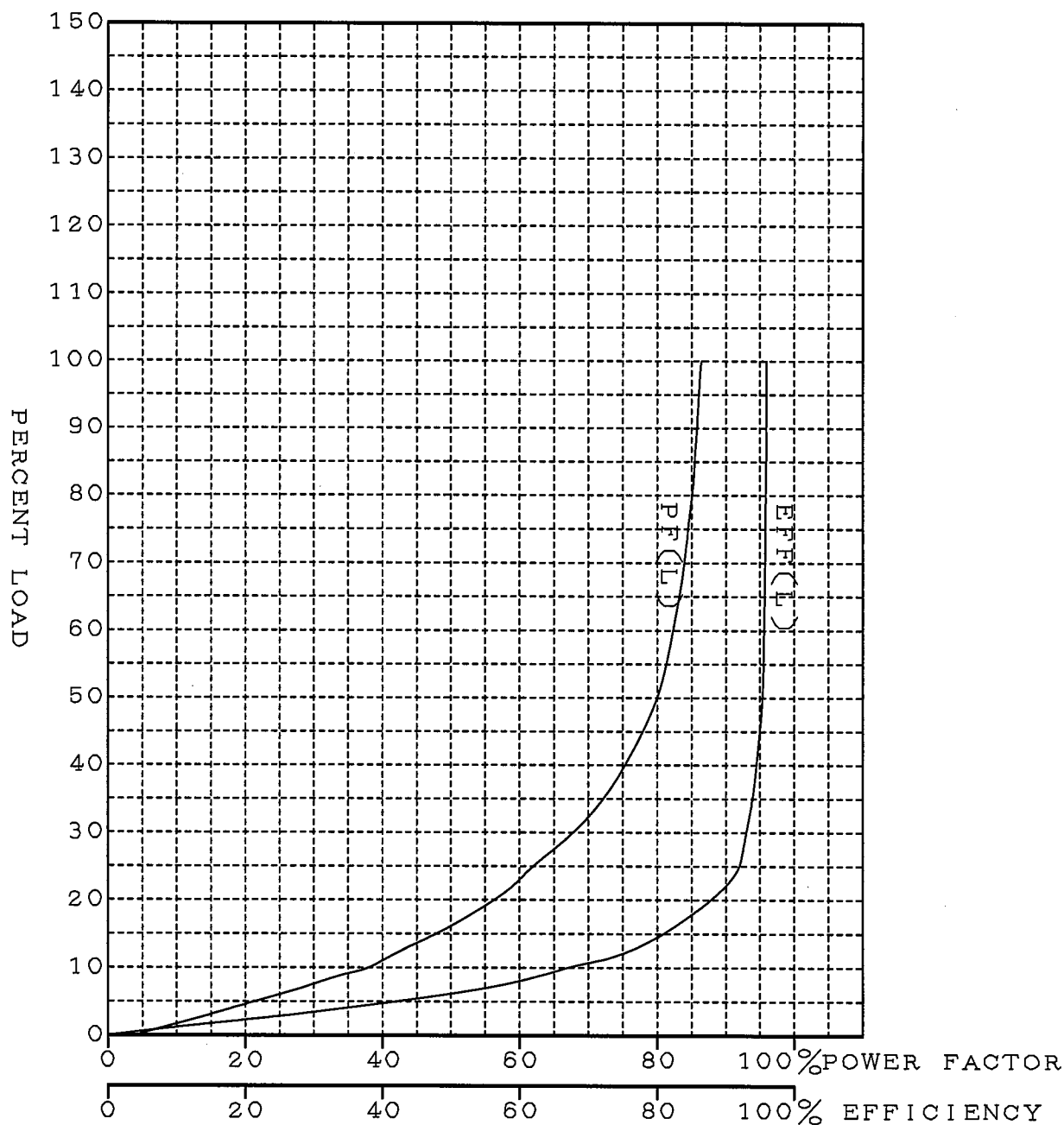
DWG NO. REV:00  
D093226/01 T  
IME

**INDUCTION MOTOR STARTING CHARACTERISTICS**

Efficiency &amp; Power Factor Vs Load Curve

ORDER NO.: D093226D093227 TYPE:ANCK

HP:1500 VOLTS:4000 HZ:60 POLES:6 RPM(FLS):1185

**TECO® Westinghouse**CURVE NO.  
D093226/01 P

SIGNATURE: S. HUANG

DATE: 11/06/2008