

**TECHNICAL INFORMATION**

1. BEARING LUBRICATION DE: TURBINE OIL ISO VG32  
ODE: TURBINE OIL ISO VG32
2. BEARING TYPE DE: M9-90-INS  
ODE: M9-90-INS
3. WINDING TEMP. DETECTORS  
NUMBER AND TYPE: 6xRTD(PtO°C-100ohm)  
LOCATION: IN STATOR SLOT
4. BEARING TEMP. DETECTORS  
NUMBER AND TYPE: \_\_\_\_\_
5. SPACE HEATER 1 PHASE  
VOLTS: 120 WATTS: 400
6. ROTATION: CCW VIEWED FROM NON DRIVE END  
THIS MOTOR IS UNI DIRECTIONAL
7. MOTOR PAINT COLOR: \_\_\_\_\_
8. APPROX. WEIGHT: 5100 Lbs
9. ACCESORIES: \_\_\_\_\_

DRAWING LIST					
MAIN TERMINAL BOX					
AUX TERMINAL BOX FOR					
SPACE HEATER					
R.T.D.					
THERMISTOR					
		0	FIRST ISSUE	TZ	3/4/05
PRODUCTION #		NO.	REVISION	BY	DATE

MOTOR OUTLINE FOR THREE PHASE INDUCTION MOTOR						
CUSTOMER NAME			P.O. NO.		MOTOR TAG NO.	
OUTPUT HP	POLE	VOLTAGE	FREQUENCY	FULL LOAD SPEED	TOSHIBA MODEL NO.	
	2	2300/4000 V	60 Hz	(min <sup>-1</sup> )		
TYPE	FORM	INS. CLASS	RATING	FRAME	S.F.	ENCLOSURE
		F	CONT.	5011/12	1.15	WP-I
TOSHIBA INTERNATIONAL CORPORATION						
HOUSTON, TEXAS U.S.A.						
3rd ANGLE PROJ.	PREPARED BY:	DATE:	CHECKED BY:	DATE:	DRAWING NO.:	REV.
	T. ZIEBRO	3/8/05	<i>M.H.</i>	7/15/05	MDSL0086-07	0

**TYPICAL MOTOR PERFORMANCE DATA**

Model: 4503WPQK11F-C

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
450	336	2	3578	5012USS	4000	60	3	60
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
WP-I	23	F	1.15	CONT	93.9	B	F	40 C

Load	HP	kW	Amperes	Efficiency (%)	Power Factor (%)
Full Load	450	335.6	59.4	93.9	86.8
¾ Load	337.50	251.7	46.3	93.5	83.9
½ Load	225.00	167.8	34.3	92.3	76.4
¼ Load	112.50	83.9	24.6	88.1	55.9
No Load			15.5		6.9
Locked Rotor			355.20		25.3

Torque				Rotor wk <sup>2</sup> Inertia (lb-ft <sup>2</sup> )
Full Load (lb-ft)	Locked Rotor (% FLT)	Pull Up (% FLT)	Break Down (% FLT)	
661	135	75	260	92.35

Safe Stall Time(s)		Sound Pressure dB(A) @ 1M	Bearings*		Approx. Motor Weight (lbs)
Cold	Hot		DE	NDE	
13.4	9.1	-	M9-90 INS	M9-90 INS	

\*Bearings are the only recommended spare part(s).

**Motor Options:**  
Product Family:ODP & WP-I  
Mounting:Footed,Shaft:USS Shaft

Customer	
Customer PO	
Sales Order	
Project #	

Tag:

All characteristics are average expected values.

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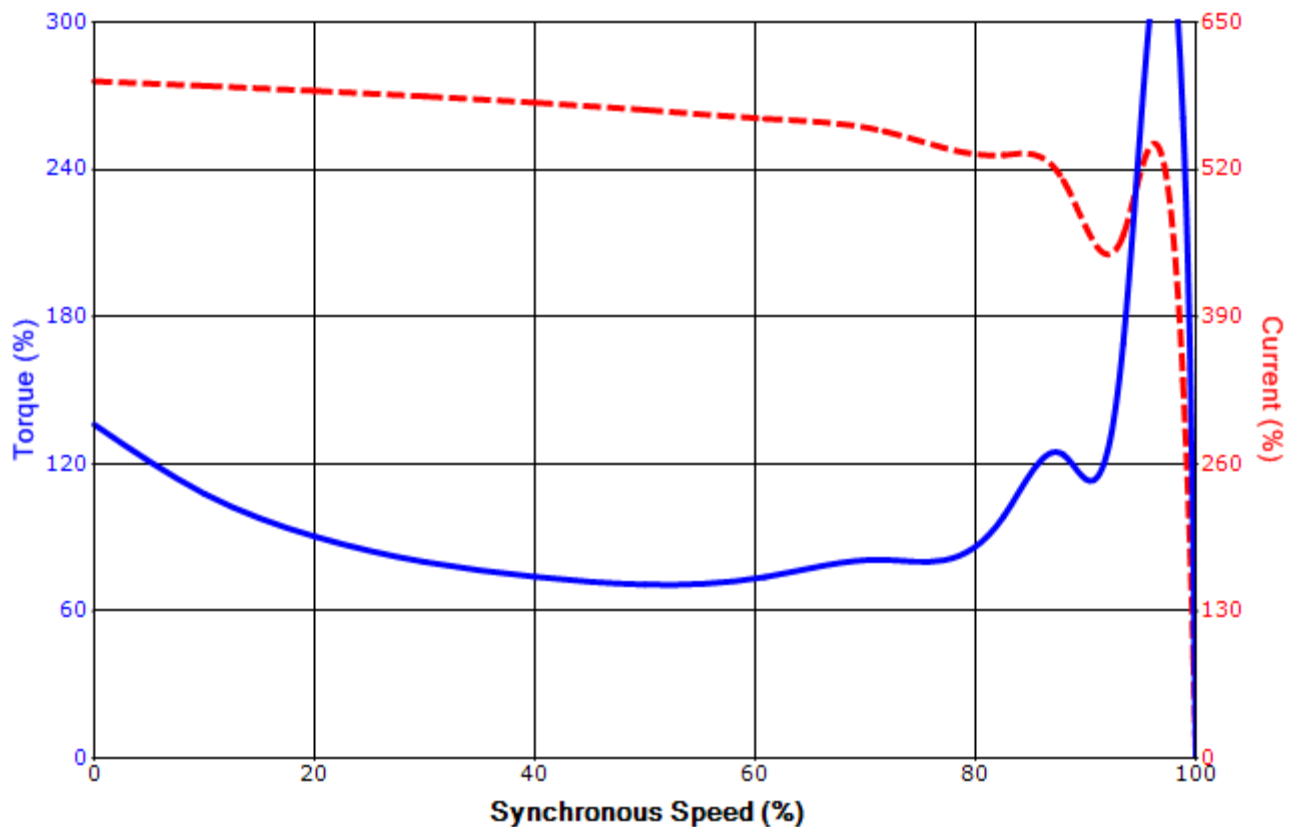
Engineering	bmammen	Doc. Written By	D. Suarez	Doc.# / Rev	MPCF-1119 / 0
Engr. Date	7/10/2014	Doc. Approved By	M. Campbell	Doc. Issued	6/8/2011

**SPEED TORQUE/CURRENT CURVE**

Model: 4503WPQK11F-C

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
450	336	2	3578	5012USS	4000	60	3	60
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
WP-I	23	F	1.15	CONT	93.9	B	F	40 C
Locked Rotor Amps	Rotor wk <sup>2</sup> Inertia (lb-ft <sup>2</sup> )	Torque						Break Down (%)
		Full Load (lb-ft)	Locked Rotor (%)	Pull Up (%)				
355.20	92.35	661	135	75			260	

**Design Values**



Customer		wk <sup>2</sup> Load Inertia (lb-ft <sup>2</sup> )	-
Customer PO		Load Type	-
Sales Order		Voltage (%)	100
Project #		Accel. Time	-

Tag:

All characteristics are average expected values.

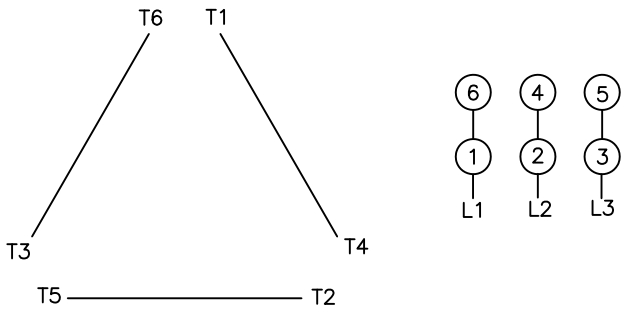
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Engineering	bmammen	Doc. Written By	D. Suarez	Doc.# / Rev	MPCF-1121 / 0
Engr. Date	7/10/2014	Doc. Approved By	M. Campbell	Doc. Issued	6/8/2011

**Motor Connection Diagrams**  
6 Leads

Across-the-Line Starting / Running Connections

Low Voltage – Delta



High Voltage – Wye



Switch L1 and L2 to reverse rotation