

**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(Pt0°C-100ohm)  
LOCATION: IN STATOR SLOT
4. BEARING TEMP. DETECTORS  
NUMBER AND TYPE: \_\_\_\_\_
5. SPACE HEATER 1 PHASE  
VOLTS: 120 WATTS: 300
6. ROTATION: CCW VIEWED FROM NON DRIVE END  
THIS MOTOR IS UNI DIRECTIONAL
7. MOTOR PAINT COLOR: GRAY
8. APPROX. WEIGHT: 7000 Lbs
9. ACCESORIES:

UNITS: INCHES

DRAWING LIST					
MAIN TERMINAL BOX 130-7622-55					
AUX TERMINAL BOX FOR					
SPACE HEATER	130-7520-50	1	JACKING TO INLINE ADD DOWELS	RWS	1/6/14
R.T.D.	130-7522-51				
THERMISTOR	N/A	0	FIRST ISSUE	BCS	7/7/08
PRODUCTION #	N/A	NO.	REVISION	BY	DATE

MOTOR OUTLINE FOR THREE PHASE INDUCTION MOTOR						
CUSTOMER NAME			P.O. NO.		MOTOR TAG NO.	
OUTPUT HP	POLE	VOLTAGE V	FREQUENCY Hz	FULL LOAD SPEED (min <sup>-1</sup> )	TOSHIBA MODEL NO.	
TYPE	FORM	INS. CLASS F	RATING CONT.	FRAME 5811USS	S.F.	ENCLOSURE TEFC
TOSHIBA INTERNATIONAL CORPORATION HOUSTON, TEXAS U.S.A.						
3rd ANGLE PROJ.	PREPARED BY: B SIDLE	DATE: 7/7/08	CHECKED BY: S JOHNSON	DATE: 2/10/09	DRAWING NO.:	REV.
					MDSL0071-22	1

**TYPICAL MOTOR PERFORMANCE DATA**

Model: 4503FTQL11F-A

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
450	336	2	3570	5811USS	4000	60	3	56
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEFC	44	F	1.15	CONT	94.5	B	F	40 C

Load	HP	kW	Amperes	Efficiency (%)	Power Factor (%)
Full Load	450	335.6	55.1	94.5	92.9
¾ Load	337.50	251.7	42.1	93.9	91.8
½ Load	225.00	167.8	29.8	92.2	88.1
¼ Load	112.50	83.9	18.9	86.9	73.8
No Load			11.0		11.2
Locked Rotor			352.00		26.8

Torque				Rotor wk <sup>2</sup>
Full Load (lb-ft)	Locked Rotor (% FLT)	Pull Up (% FLT)	Break Down (% FLT)	Inertia (lb-ft <sup>2</sup> )
662	155	160	250	129.17

Safe Stall Time(s)		Sound Pressure dB(A) @ 1M	Bearings*		Approx. Motor Weight (lbs)
Cold	Hot		DE	NDE	
31.2	12	-	M9-90 INS	M9-90 INS	

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

**Motor Options:**  
Product Family:TEFC  
Mounting:Footed,Shaft:USS Shaft

Customer	
Customer PO	
Sales Order	
Project #	

Tag:

All characteristics are average expected values.

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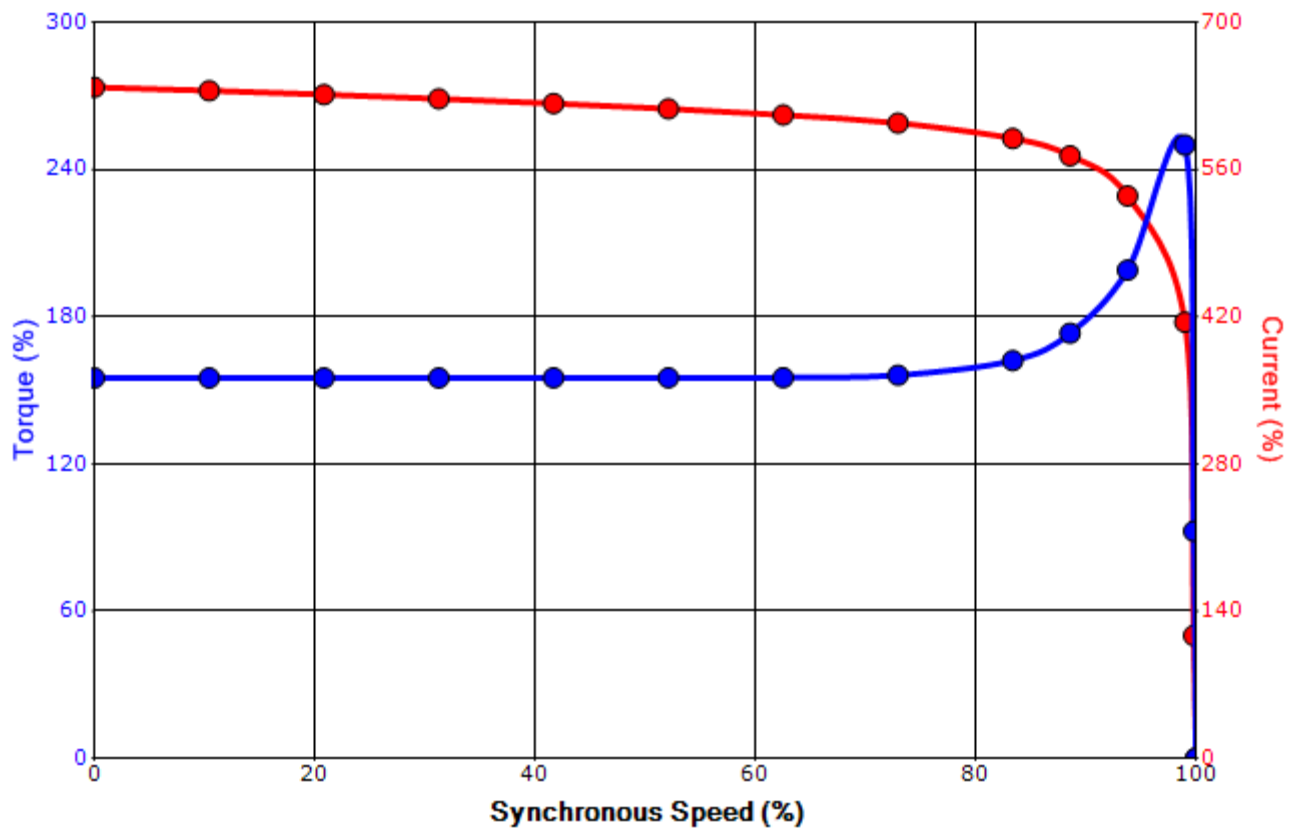
Engineering	bmammen	Doc. Written By	D. Suarez	Doc.# / Rev	MPCF-1119 / 0
Engr. Date	5/28/2014	Doc. Approved By	M. Campbell	Doc. Issued	6/8/2011

**SPEED TORQUE/CURRENT CURVE**

Model: 4503FTQL11F-A

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
450	336	2	3570	5811USS	4000	60	3	56
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEFC	44	F	1.15	CONT	94.5	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 (%)				
352.00	129.17	662	155	160			250	

**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	5/28/2014	Doc. Approved By	M. Campbell	Doc. Issued	6/8/2011

**Motor Connection Diagrams**  
6 Leads

Across the Line Starting / Run - Delta:



Alternate Starting Connection - Wye:



Switch L1 and L2 to reverse rotation