

UNITS: INCHES

FRAME SIZE	MOTOR DIMENSIONS										CONDUIT BOX							
	A	B	C	D	G	J	K	M	O	P	T	MA(MPT)	AB	AC	AE	AF	XL	XN
5810USS	28.0	42.2	72.5	14.50	1.6	6.3	9.3	27.6	30.5	31.6	5.1	4.00	31.1	23.8	14.5	9.3	23.4	14.2
5810US	28.0	42.2	72.3	14.50	1.6	6.3	9.3	27.6	30.5	31.6	5.1	4.00	31.1	23.8	14.5	9.3	23.4	14.2
5810UZ	28.0	42.2	77.6	14.50	1.6	6.3	9.3	27.6	30.5	31.6	5.1	4.00	31.1	23.8	14.5	9.3	23.4	14.2
FRAME SIZE	MOUNTING				SHAFT EXTENSION			KEY SEAT				BEARINGS			MAXIMUM WEIGHT			
	E	ZF	H	BA	N-W	V	U	R	S	ES	LS	OS						
5810USS	11.50	36.00/32.00	1.2	10.00	6.75	6.50	2.375	2.021	0.625	5.00	6313C3	NU313C3	7800	lbs.				
5810US	11.50	36.00/32.00	1.2	10.00	6.25	6.19	3.625	3.134	0.875	5.00	6320C3	6320C3	7800	lbs.				
5810UZ	11.50	36.00/32.00	1.2	10.00	11.62	11.38	5.250	4.550	1.250	10.00	NU328C3	6320C3	7800	lbs.				

CUSTOMER: \_\_\_\_\_ MOTOR MODEL NO.: \_\_\_\_\_ TAG NO's: \_\_\_\_\_

P.O. NO.: \_\_\_\_\_ HP: \_\_\_\_\_ VOLTAGE: \_\_\_\_\_ RPM(SYN.): \_\_\_\_\_ Hz: \_\_\_\_\_  
 FRAME SIZE: \_\_\_\_\_ PRODUCT TYPE: IEFEC EOP III, EPACT, & HIGH EFFICIENCY  
 COMMENTS: \_\_\_\_\_

PER: \_\_\_\_\_ DATE: \_\_\_\_\_

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- NOTES:
1. DIMENSION V REPRESENTS LENGTH OF STRAIGHT PART OF SHAFT
  2. MAIN CONDUIT BOX MAY BE ROTATED IN 90° INCREMENTS
  3. KEY DIMENSIONS EQUAL S x S x 10.00 FOR US AND S x S x 5.00 FOR US (MOTOR SUPPLIED WITH KEY)
  4. MOTOR WEIGHT SHOWN IS MAXIMUM HORSEPOWER IN FRAME
  5. THIS DIMENSION EQUALS 2F FOR 5809US/UZ MOUNTING
  6. STANDARD PRODUCT USE BI-DIRECTIONAL FAN, OPPOSITE ROTATION AVAILABLE ONLY BY CONNECTION CHANGE

STANDARD (NO AUX. BOXES)  
 RTD AUX. BOX  
 SPACE HEATER AUX. BOX  
 BEARING RTD's

**TOSHIBA**  
 TOSHIBA INTERNATIONAL CORPORATION  
 TOTALLY-ENCLOSED FAN-COOLED  
 HORIZONTAL FOOT-MOUNTED  
 3 PHASE INDUCTION MOTOR  
 F1 ASSEMBLY

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**TYPICAL MOTOR PERFORMANCE DATA**

Model: F4506FLF4BM

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
450	336	6	1190	5810UZ	460	60	3	534
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEFC	56	F	1.15	CONT	95.7	-	G	40 C

Load	HP	kW	Amperes	Efficiency (%)	Power Factor (%)
Full Load	450	335.6	533.1	95.7	82.6
¾ Load	337.50	251.7	412.3	95.3	80.4
½ Load	225.00	167.8	302.6	94.4	73.8
¼ Load	112.50	83.9	212.7	91.0	54.4
No Load			177.0		3.4
Locked Rotor			3312.00		25.9

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> )
1986	165	125	215	386.77

Safe Stall Time(s)		Sound Pressure dB(A) @ 1M	Bearings*		Approx. Motor Weight (lbs)
Cold	Hot		DE	NDE	
34	12	-	NU328C3	6320C3	

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

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

Customer	
Customer PO	
Sales Order	
Project #	

Tag:

All characteristics are average expected values.

**TOSHIBA INTERNATIONAL CORPORATION · HOUSTON, TEXAS U.S.A.**

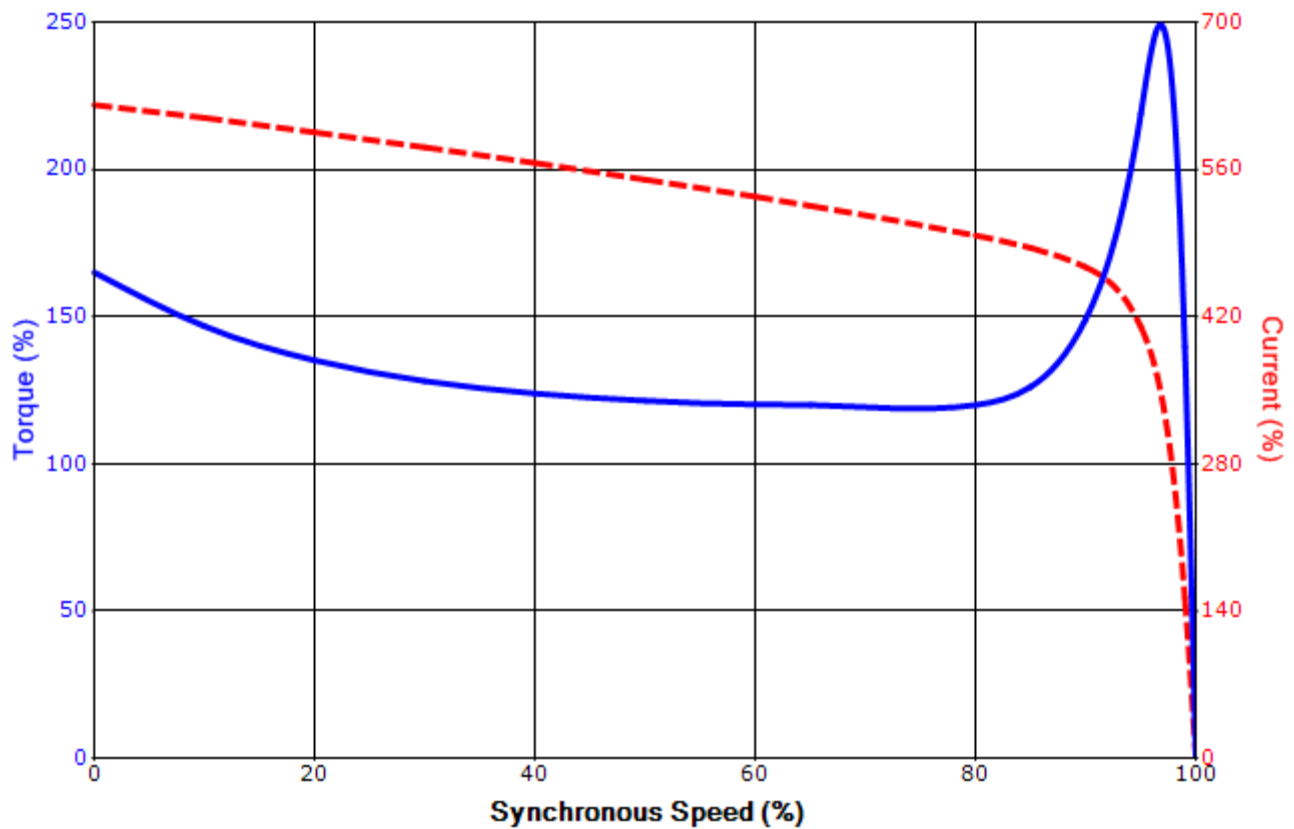
Engineering	aacosta	Doc. Written By	D. Suarez	Doc.# / Rev	MPCF-1119 / 0
Engr. Date	4/30/2012	Doc. Approved By	M. Campbell	Doc. Issued	6/8/2011

**SPEED TORQUE/CURRENT CURVE**

Model: F4506FLF4BM

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
450	336	6	1190	5810UZ	460	60	3	534
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEFC	56	F	1.15	CONT	95.7	-	G	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 (%)				
3312.00	386.77	1986	165	125			215	

**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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### Motor Connection Diagram 3 Leads - Delta Connection



Switch L1 and L2 to reverse rotation

Each lead may consist of more than one cable.  
If multiple cables represent a single lead, each one  
of them will be labeled with the appropriate lead number.