

- 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 UZ AND S x S x 5.00 FOR US & USS (MOTOR SUPPLIED WITH KEY)
  4. MOTOR WEIGHT SHOWN IS MAXIMUM HORSEPOWER IN FRAME
  5. THIS DIMENSION EQUALS 2F FOR 5809US/UZ MOUNTING
  6. STANDARD 4-8 POLE PRODUCT USES BI-DIRECTIONAL FAN. OPPOSITE ROTATION AVAILABLE ONLY BY CONNECTION CHANGE
  7. STANDARD 2 POLE PRODUCT USES UNI-DIRECTIONAL FAN. OPPOSITE ROTATION AVAILABLE ONLY BY FAN AND CONNECTION CHANGE

UNITS: INCHES

FRAME SIZE	MOTOR DIMENSIONS											CONDUIT BOX						
	A	B	C	D	G	J	K	M	O	P	T	AA[NPT]	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	2F	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	
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	

CUSTOMER: \_\_\_\_\_ MOTOR MODEL NO.: \_\_\_\_\_

P.O. NO.: \_\_\_\_\_ HP: \_\_\_\_\_ VOLTAGE: \_\_\_\_\_ RPM(SYN.): \_\_\_\_\_ Hz: \_\_\_\_\_

FRAME SIZE: \_\_\_\_\_ PRODUCT TYPE: TEFC EQP III 840 & 841

COMMENTS: \_\_\_\_\_

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

TAG NO's: \_\_\_\_\_

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

TOSHIBA RESERVES THE RIGHT TO MAKE CHANGES OF TECHNICAL IMPROVEMENT AND THE DATA MAY CHANGE WITHOUT NOTICE  PRELIMINARY

DO NOT USE FOR CONSTRUCTION, INSTALLATION, OR APPLICATION PURPOSES UNLESS THE DRAWING IS MARKED AS CERTIFIED  CERTIFIED

# TOSHIBA

TOSHIBA INTERNATIONAL CORPORATION

TOTALLY-ENCLOSED FAN-COOLED  
HORIZONTAL FOOT-MOUNTED  
3 PHASE INDUCTION MOTOR  
F1 ASSEMBLY

## XT SERIES

VISIT OUR WEBSITE AT:  
[www.toshiba.com/ind](http://www.toshiba.com/ind)

**TYPICAL MOTOR PERFORMANCE DATA**

Model: F4008FLG3BMHD

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
400	298	8	890	5810US	460	60	3	503
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEFC	55	F	1.15	CONT	95.4	-		40 C

Load	HP	kW	Amperes	Efficiency (%)	Power Factor (%)
Full Load	400.00	298.3	503	95.4	77.9
¾ Load	300.00	223.7	392	94.9	75.3
½ Load	200.00	149.1	294	93.6	67.9
¼ Load	100.00	74.6	218	89.3	48.0
No Load			186.8		2.6
Locked Rotor			2970		21.9

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)	
2360	125	95	200	424.61

Safe Stall Time(s)		Sound Pressure dB(A) @ 1M	Bearings*		Approx. Motor Weight (lbs)
Cold	Hot		DE	NDE	
22	12	-	6320C3	6320C3	

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

**Motor Options:**  
Product Family:EQPIII 840  
Mounting:Footed,Shaft:US Shaft

Customer	
Customer PO	
Sales Order	
Project #	

Tag:

All characteristics are average expected values.

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

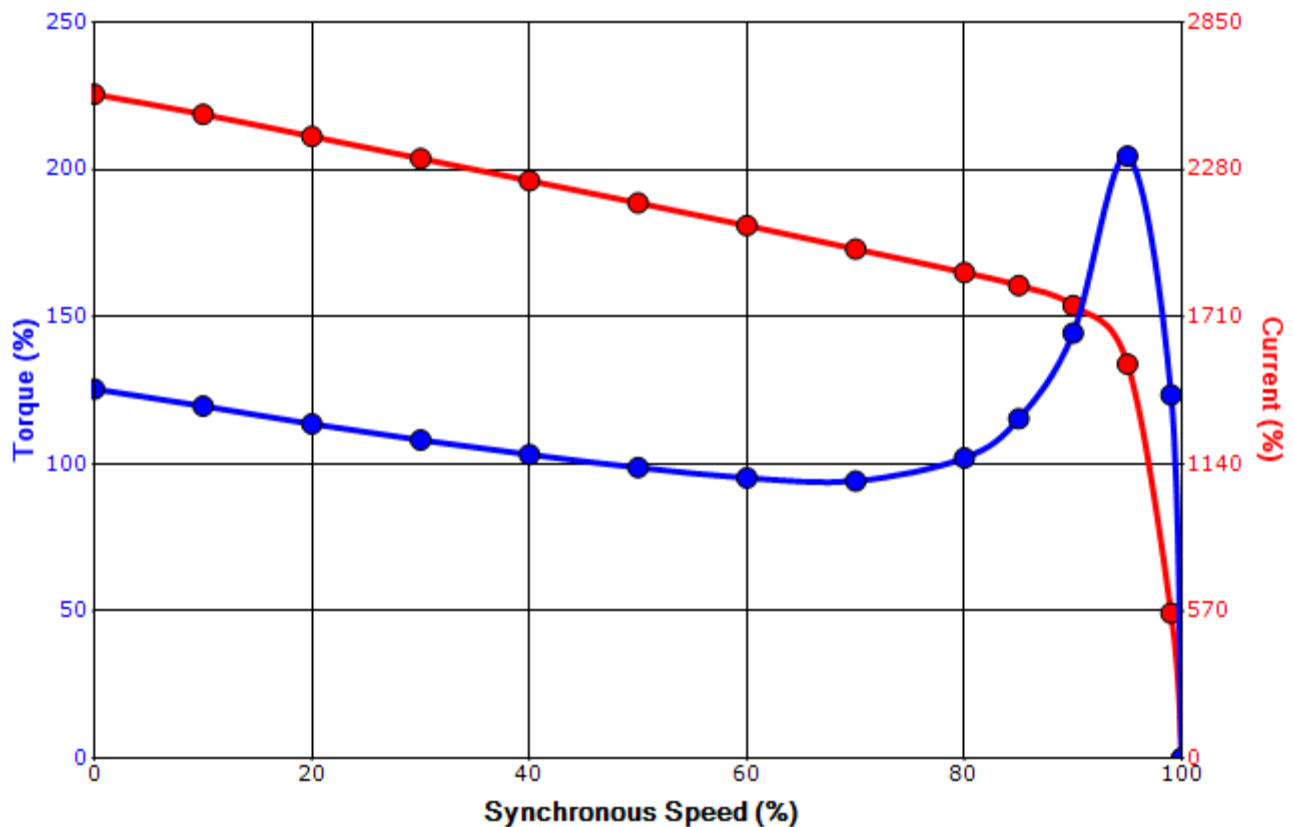
Engineering	aacosta	Doc. Written By	D. Suarez	Doc.# / Rev	MPCF-1119 / 0
Engr. Date	7/9/2012	Doc. Approved By	M. Campbell	Doc. Issued	6/8/2011

**SPEED TORQUE/CURRENT CURVE**

Model: F4008FLG3BMHD

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
400	298	8	890	5810US	460	60	3	503
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEFC	55	F	1.15	CONT	95.4	-		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 (%)				
2970	424.61	2360	125	95			200	

**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.

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

Engineering	aacosta	Doc. Written By	D. Suarez	Doc.# / Rev	MPCF-1121 / 0
Engr. Date	7/9/2012	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