

UNITS: INCHES

FRAME SIZE	MOTOR DIMENSIONS											CONDUIT BOX						
	A	B	C	D	G	J	K	M	O	P	T	MAXIMUM	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	63J3C3	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	63Z0C3	63Z0C3	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	63Z0C3	7800 lbs.					

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

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

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

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- NOTES:
- DIMENSION V REPRESENTS LENGTH OF STRAIGHT PART OF SHAFT
  - MAIN CONDUIT BOX MAY BE ROTATED IN 90° INCREMENTS
  - KEY DIMENSIONS EQUAL S x S x 10.00 FOR UZ AND S x S x 5.00 FOR USS & US (MOTOR SUPPLIED WITH KEY)
  - MOTOR WEIGHT SHOWN IS MAXIMUM HORSEPOWER IN FRAME
  - THIS DIMENSION EQUALS 2F FOR 5809USS/US/UZ MOUNTING
  - 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

**XT SERIES**  
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**TYPICAL MOTOR PERFORMANCE DATA**

Model: F6004FLF4BMQ

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
600	447	4	1785	5810UZ	460	60	3	679
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEFC	54	F	1.15	CONT	94.5	-	G	40 C

Load	HP	kW	Amperes	Efficiency (%)	Power Factor (%)
Full Load	600	447.4	678.1	94.7	87.5
¾ Load	450.00	335.6	524.5	94.2	85.3
½ Load	300.00	223.7	383.3	92.8	78.9
¼ Load	150.00	111.9	265.8	88.5	59.7
No Load			171.9		9.1
Locked Rotor			4428.00		30.6

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> )
1765	180	135	265	306.11

Safe Stall Time(s)		Sound Pressure dB(A) @ 1M	Bearings*		Approx. Motor Weight (lbs)
Cold	Hot		DE	NDE	
10	3	-	NU328C3	6320C3	

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

**Motor Options:**  
Product Family:Quarry  
Mounting:Footed,Shaft:UZ Shaft,Motor Specification:Quarry Duty

Customer	
Customer PO	
Sales Order	
Project #	

Tag:

All characteristics are average expected values.

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

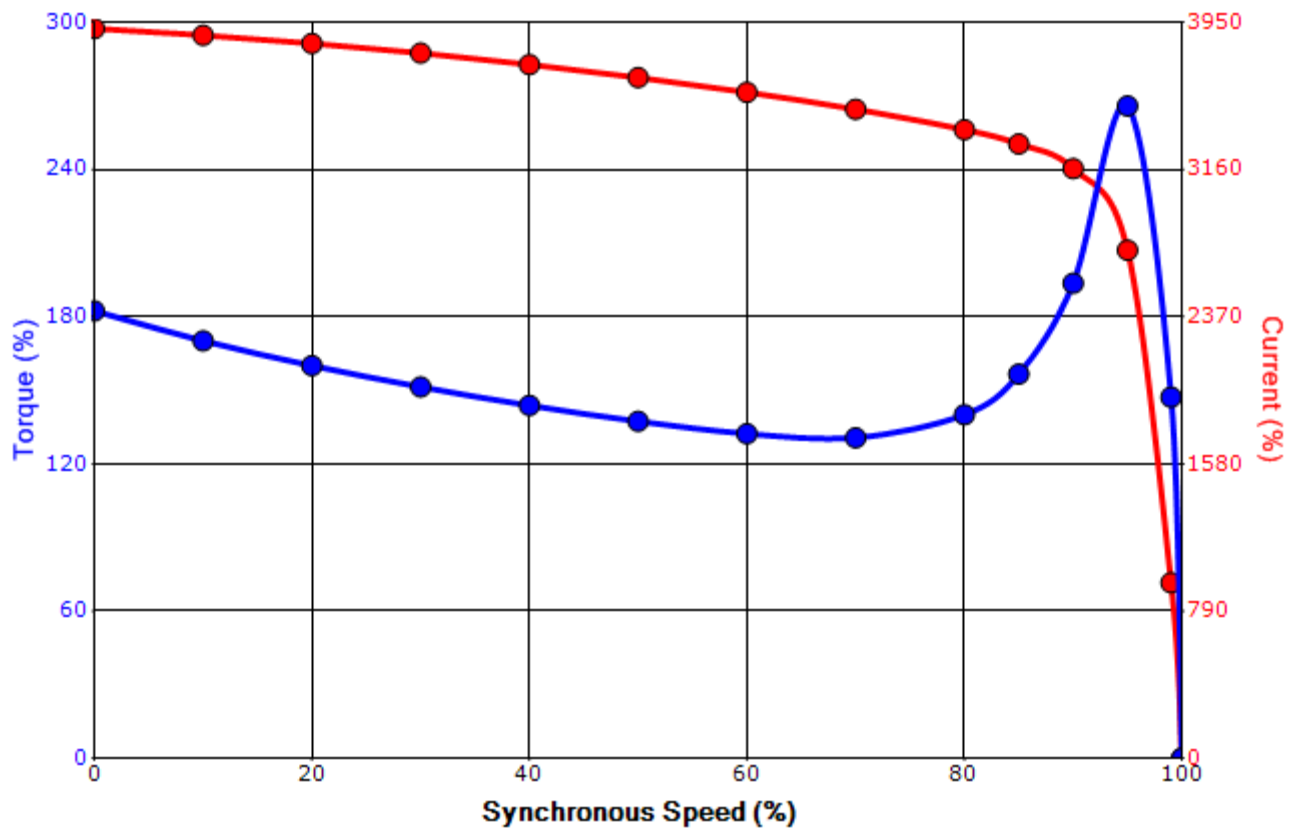
Engineering	jhock	Doc. Written By	D. Suarez	Doc.# / Rev	MPCF-1119 / 0
Engr. Date	4/25/2013	Doc. Approved By	M. Campbell	Doc. Issued	6/8/2011

**SPEED TORQUE/CURRENT CURVE**

Model: F6004FLF4BMQ

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
600	447	4	1785	5810UZ	460	60	3	679
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEFC	54	F	1.15	CONT	94.5	-	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 (%)				
4428.00	306.11	1765	180	135			265	

**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	jhock	Doc. Written By	D. Suarez	Doc.# / Rev	MPCF-1121 / 0
Engr. Date	4/25/2013	Doc. Approved By	M. Campbell	Doc. Issued	6/8/2011

**Motor Connection Diagrams**  
12 Leads

Across-the-Line Starting / Running Connections

Low Voltage Delta



High Voltage Delta



Switch L1 and L2 to reverse rotation

Suitable for Wye-Delta Starting and Limited Part-Winding-Starting.  
Please Contact Toshiba International for specific connections.