

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	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 EGP III, EPACK, & 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
 VISIT OUR WEBSITE AT:
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TYPICAL MOTOR PERFORMANCE DATA

Model: F4506FLF4BMQ

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
450	336	6	1188	5810UZ	460	60	3	557
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEFC	54	F	1.15	CONT	95.2	-	G	40 C

Load	HP	kW	Amperes	Efficiency (%)	Power Factor (%)
Full Load	450	335.6	556.8	95.2	79.5
¾ Load	337.50	251.7	430.6	94.9	77.3
½ Load	225.00	167.8	316.0	93.9	71.0
¼ Load	112.50	83.9	222.1	90.5	52.4
No Load			184.2		3.6
Locked Rotor			3263.50		26.1

Torque				Rotor wk ²
Full Load (lb-ft)	Locked Rotor (% FLT)	Pull Up (% FLT)	Break Down (% FLT)	Inertia (lb-ft ²)
1989	165	125	255	386.77

Safe Stall Time(s)		Sound Pressure dB(A) @ 1M	Bearings*		Approx. Motor Weight (lbs)
Cold	Hot		DE	NDE	
19	9.4	-	NU328C3	6320C3	

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

Motor Options:
Product Family:Quarry
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	jaustin	Doc. Written By	D. Suarez	Doc.# / Rev	MPCF-1119 / 0
Engr. Date	7/23/2014	Doc. Approved By	M. Campbell	Doc. Issued	6/8/2011

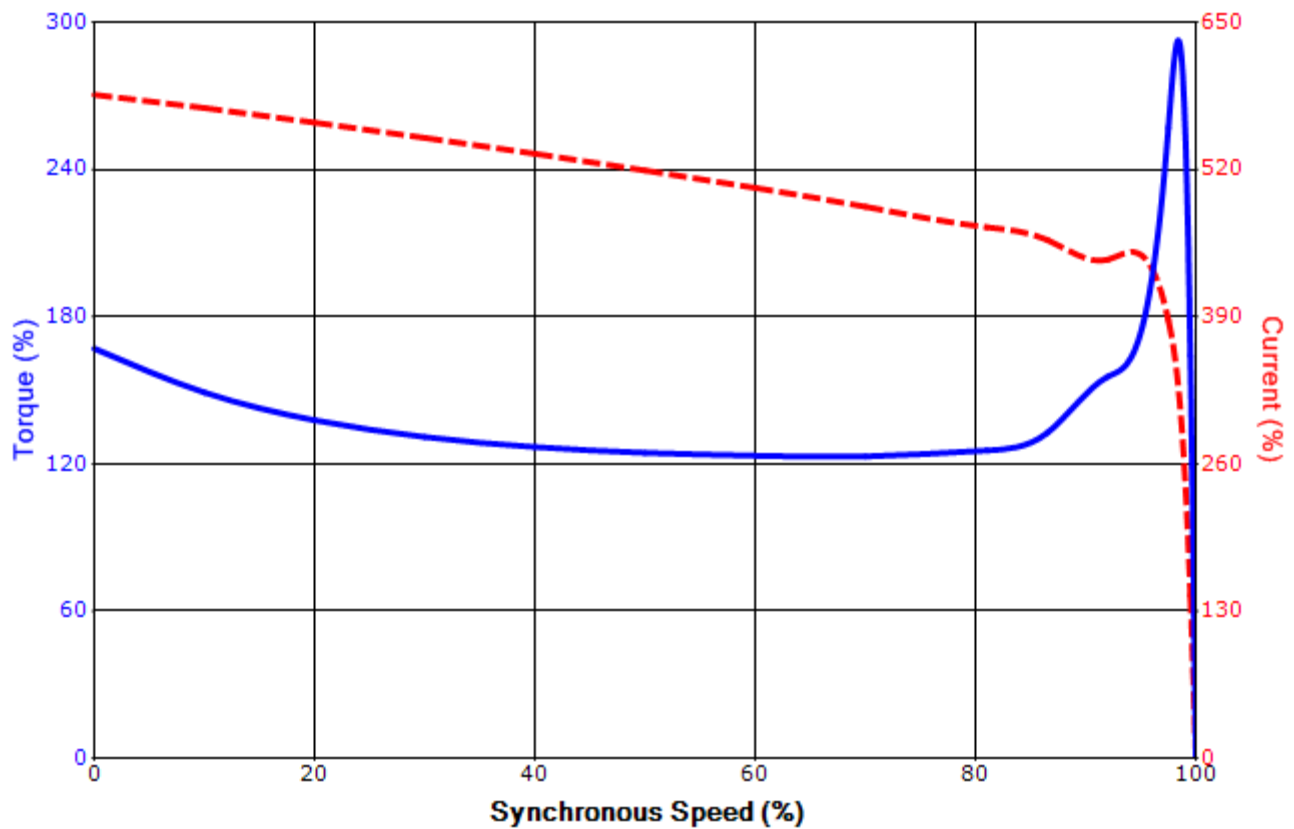
Issued Date	4/23/2015	Transmit #	
Issued By	dschoeck	Issued Rev	

SPEED TORQUE/CURRENT CURVE

Model: F4506FLF4BMQ

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
450	336	6	1188	5810UZ	460	60	3	557
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEFC	54	F	1.15	CONT	95.2	-	G	40 C
Locked Rotor Amps	Rotor wk ² Inertia (lb-ft ²)	Torque						Break Down (%)
		Full Load (lb-ft)	Locked Rotor (%)	Pull Up (%)				
3263.50	386.77	1989	165	125			255	

Design Values



Customer		wk ² Load Inertia (lb-ft ²)	-
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	jaustin	Doc. Written By	D. Suarez	Doc.# / Rev	MPCF-1121 / 0
Engr. Date	7/23/2014	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.