

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		
505US	24.9	20.9	49.7	12.50	1.5	5.6	4.8	17.3	24.7	28.0	5.2	4.00	22.8	18.6	12.5	9.2	15.2	10.3		
505UZ	24.9	20.9	56.5	12.50	1.5	5.6	4.8	17.3	24.7	28.0	5.2	4.00	22.8	18.6	12.5	9.2	15.2	10.3		
FRAME SIZE	MOUNTING										SHAFT EXTENSION			KEY SEAT			BEARINGS			MAXIMUM WEIGHT
505US	E	2F	H	BA	N-W	V	U	R	S	ES	LS	OS				4089 lbs.				
505UZ	10.00	18.00	0.94	8.5	4.75	4.50	2.875	2.450	0.750	3.00	6318C3	6318C3				4089 lbs.				
505UZ	10.00	18.00	0.94	8.5	11.62	11.38	3.875	3.309	1.000	10.00	NU322C3	6318C3				4089 lbs.				

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

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

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

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

- 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 3.00 FOR US (MOTOR SUPPLIED WITH KEY)
  4. MOTOR WEIGHT SHOWN IS MAXIMUM HORSEPOWER IN FRAME
  5. STANDARD PRODUCTS 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: A2504FLF4BMQ

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
250	186	4	1780	505UZ	460	60	3	288
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEFC	54	F	1.15	CONT	94.1	A	G	40 C

Load	HP	kW	Amperes	Efficiency (%)	Power Factor (%)
Full Load	250	186.4	288.0	94.1	87.5
¾ Load	187.50	139.8	218.2	93.9	86.3
½ Load	125.00	93.2	156.5	92.9	81.7
¼ Load	62.50	46.6	103.7	86.6	65.1
No Load			72.0		8.4
Locked Rotor			1955.50		42.0

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)	
738	300	215	230	91.97

Safe Stall Time(s)		Sound Pressure dB(A) @ 1M	Bearings*		Approx. Motor Weight (lbs)
Cold	Hot		DE	NDE	
11	5	-	NU322C3	6318C3	

\*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	jhock	Doc. Written By	D. Suarez	Doc.# / Rev	MPCF-1119 / 0
Engr. Date	3/27/2014	Doc. Approved By	M. Campbell	Doc. Issued	6/8/2011

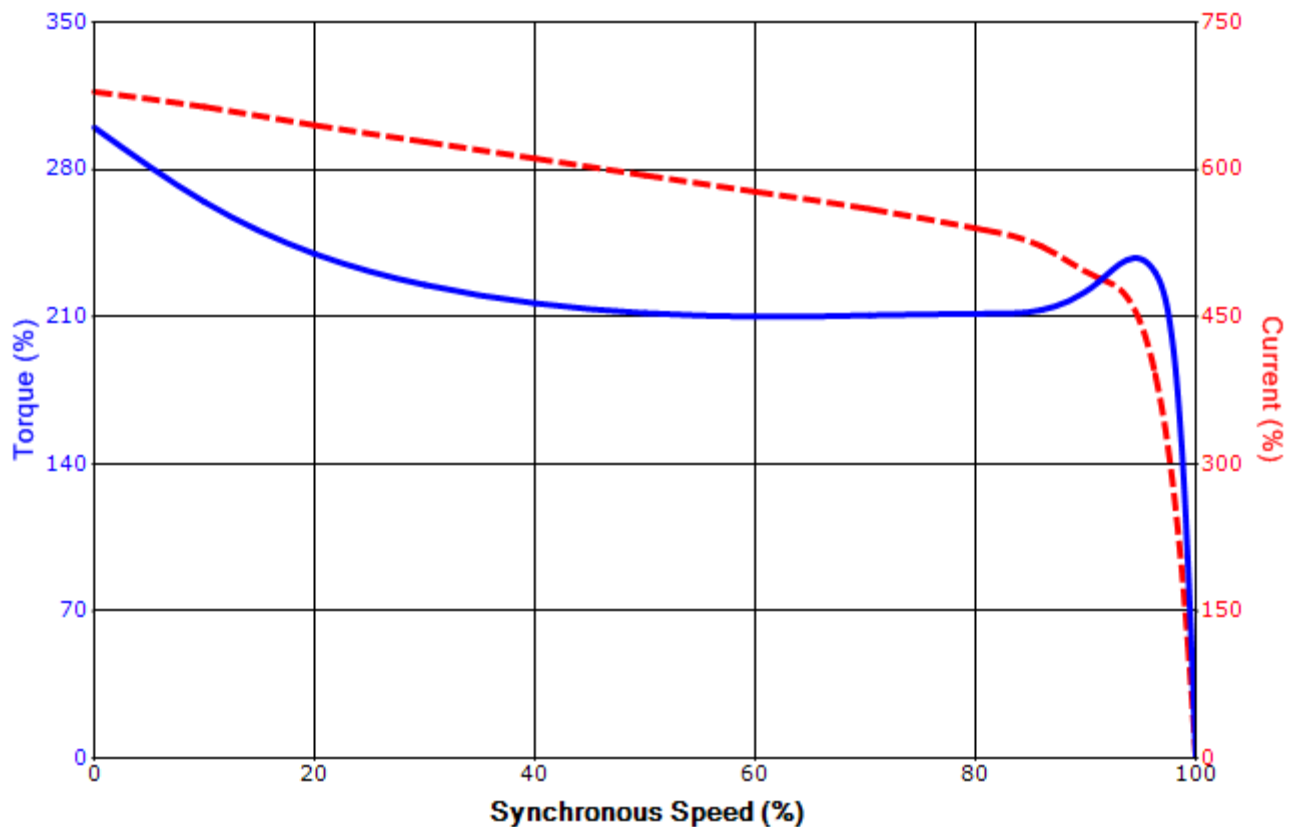
Issued Date	4/23/2015	Transmit #	
Issued By	dschoeck	Issued Rev	

**SPEED TORQUE/CURRENT CURVE**

Model: A2504FLF4BMQ

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
250	186	4	1780	505UZ	460	60	3	288
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEFC	54	F	1.15	CONT	94.1	A	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 (%)				
1955.50	91.97	738	300	215			230	

**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.

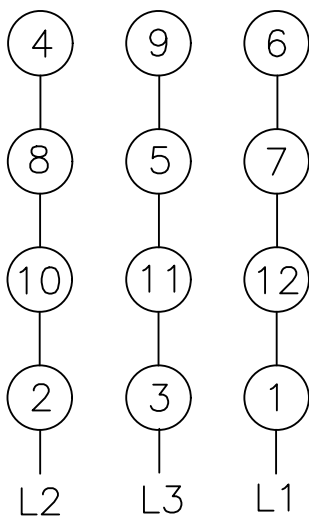
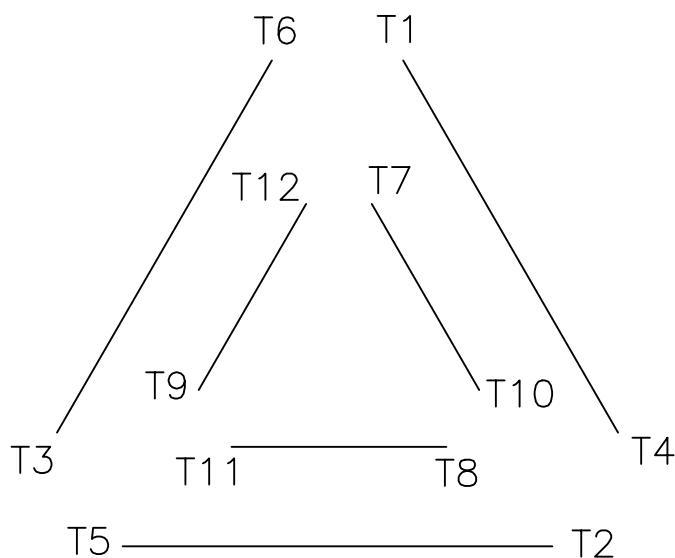
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Engineering	jhock	Doc. Written By	D. Suarez	Doc.# / Rev	MPCF-1121 / 0
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# Motor Connection Diagram

## 12 Leads

### Single Voltage



Switch L1 and L2 to reverse rotation