

UNITS: INCHES

FRAME SIZE	MOTOR DIMENSIONS										CONDUIT BOX							
	A	B	C	D	G	J	K	M	O	P	T	AA	AB	AC	AE	AF	XL	XN
5009/10/11USS	24.8	42.6	64.2	12.50	1.4	6.3	14.4/7.1	26.8	26.4	32.5	5.0	4.00	31.3	24.0	20.2	8.7	23.4	18.9
5009/10/11US	24.8	42.6	69.8	12.50	1.4	6.3	14.4/7.1	26.8	26.4	32.5	5.0	4.00	31.3	24.0	20.2	8.7	23.4	18.9
5009/10/11UZ	24.8	42.6	75.1	12.50	1.4	6.3	14.4/7.1	26.8	26.4	32.5	5.0	4.00	31.3	24.0	20.2	8.7	23.4	18.9

FRAME SIZE	MOUNTING					SHAFT EXTENSION					KEY SEAT			BEARINGS			MAXIMUM WEIGHT
	E	2F	H	BA	N-W	V	U	R	S	ES	LS	OS					
5009/10/11USS	10.00	28.00/32.00/36.00	1.125	8.50	4.75	4.50	2.375	2.021	0.625	3.03	6313C3	6313C3	5000 lbs.				
5009/10/11US	10.00	28.00/32.00/36.00	1.125	8.50	6.25	6.19	3.625	3.134	0.875	5.03	6320C3	6320C3					
5009/10/11UZ	10.00	28.00/32.00/36.00	1.125	8.50	11.62	11.38	4.375	3.817	1.000	10.03	NU324C3	6320C3					

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

P.O. NO.: \_\_\_\_\_ HP: \_\_\_\_\_ VOLTAGE: \_\_\_\_\_ RPM(SYN.): \_\_\_\_\_ HZ: \_\_\_\_\_  
 FRAME SIZE: 5009/5010/5011 PRODUCT TYPE: IEFC EFP III, EPACK, & HIGH EFFICIENCY  
 COMMENTS: \_\_\_\_\_

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

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

- 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, S x S x 5.00 FOR US, AND S x S x 3.00 FOR USS (MOTOR SUPPLIED WITH KEY)
  - MOTOR WEIGHT SHOWN IS MAXIMUM HORSEPOWER IN FRAME
  - THIS DIMENSION EQUALS 2F FOR 5010USS/US/UZ MOUNTING
  - THIS DIMENSION EQUALS 2F FOR 5009USS/US/UZ MOUNTING
  - STANDARD 4~8 POLE PRODUCT USE BI-DIRECTIONAL FAN. OPPOSITE ROTATION AVAILABLE ONLY BY CONNECTION CHANGE
  - STANDARD 2 POLE PRODUCT USE UNI-DIRECTIONAL FAN. OPPOSITE ROTATION AVAILABLE ONLY BY FAN AND CONNECTION CHANGE

**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: 450FTAB41E-A

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
450	336	4	1785	5011US	460	60	3	505
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEFC	54	F	1.15	CONT	96.2	B	G	40 C

Load	HP	kW	Amperes	Efficiency (%)	Power Factor (%)
Full Load	450	335.6	504.2	96.2	86.9
¾ Load	337.50	251.7	389.5	95.6	84.8
½ Load	225.00	167.8	283.7	94.1	78.9
¼ Load	112.50	83.9	194.8	89.6	60.4
No Load			126.7		4.8
Locked Rotor			3250.00		32.4

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> )
1324	220	195	250	232.77

Safe Stall Time(s)		Sound Pressure dB(A) @ 1M	Bearings*		Approx. Motor Weight (lbs)
Cold	Hot		DE	NDE	
12	25	-	6320C3	6320C3	

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

**Motor Options:**  
Product Family:EQP Global SD  
Mounting:Footed,Shaft:US Shaft

Customer	
Customer PO	
Sales Order	
Project #	

Tag:

All characteristics are average expected values.

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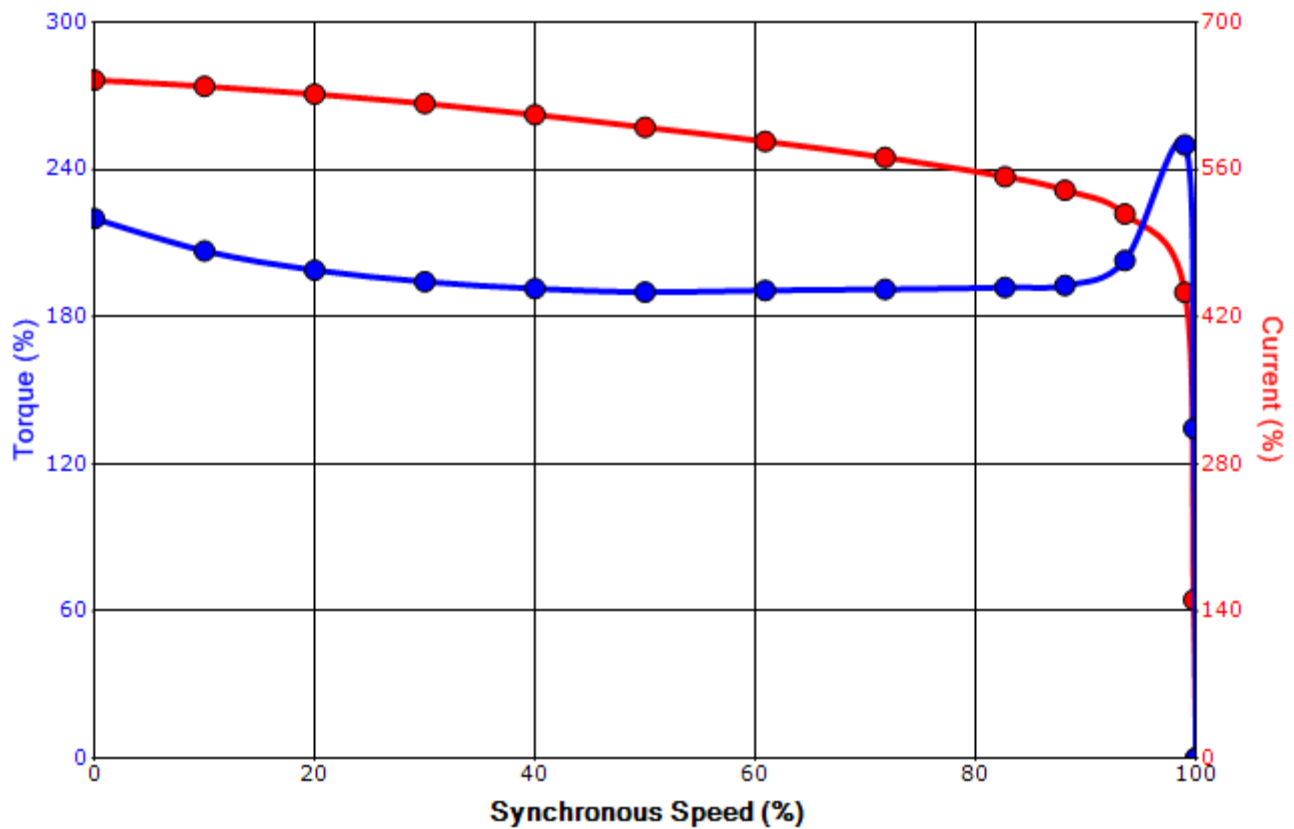
Engineering	mccampbell	Doc. Written By	D. Suarez	Doc.# / Rev	MPCF-1119 / 0
Engr. Date	2/9/2012	Doc. Approved By	M. Campbell	Doc. Issued	6/8/2011

**SPEED TORQUE/CURRENT CURVE**

Model: 4504FTAB41E-A

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
450	336	4	1785	5011US	460	60	3	505
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEFC	54	F	1.15	CONT	96.2	B	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 (%)				
3250.00	232.77	1324	220	195			250	

**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.

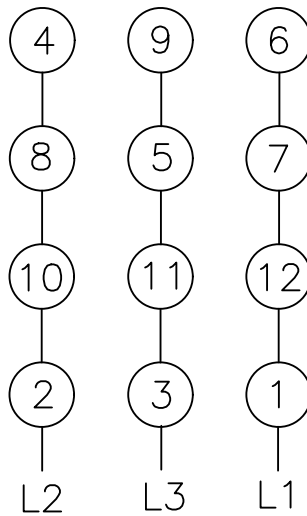
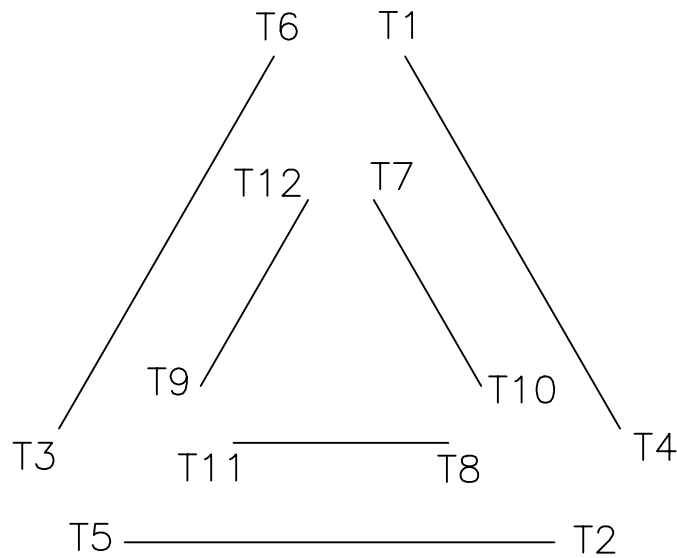
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Engineering	mcampbell	Doc. Written By	D. Suarez	Doc.# / Rev	MPCF-1121 / 0
Engr. Date	2/9/2012	Doc. Approved By	M. Campbell	Doc. Issued	6/8/2011

# Motor Connection Diagram

## 12 Leads

### Single Voltage



Switch L1 and L2 to reverse rotation