

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
509USS	24.9	30.9	49.6	12.50	1.4	5.6	4.8	22.3	25.6	24.9	4.4	4.00	23.8	18.7	15.7	8.7	15.7	11.5
509US	24.9	30.9	54.9	12.50	1.4	5.6	4.8	22.3	25.6	24.9	4.4	4.00	23.8	18.7	15.7	8.7	15.7	11.5
FRAME SIZE	MOUNTING					SHAFT EXTENSION					KEY SEAT			BEARINGS			MAXIMUM WEIGHT	
509USS	E	2F	H	BA	8.5	N-W	V	U	R	S	ES	LS	OS					
509US	10.00	28.00	0.94	8.5	8.5	4.75	4.50	2.375	2.021	0.625	3.00	6313C3	6313C3	3200	lbs.			
	10.00	28.00	0.94	8.5	8.5	10.13	9.88	3.375	2.880	0.875	8.50	6320C3	6320C3	3200	lbs.			

TAG NO's: _____

CUSTOMER: _____ MOTOR MODEL NO.: _____

P.O. NO.: _____ HP: _____ VOLTAGE: _____ RPM(SYN.): _____ HZ: _____

FRAME SIZE: _____ PRODUCT TYPE: ODP EQP III, EPACT, & HIGH EFFICIENCY

COMMENTS: _____

PER: _____ DATE: _____

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

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

- 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 8.50 FOR US AND S x S x 3.00 FOR USS (MOTOR SUPPLIED WITH KEY)
 4. MOTOR WEIGHT SHOWN IS MAXIMUM HORSEPOWER IN FRAME
 5. OPPOSITE ROTATION AVAILABLE ONLY BY CONNECTION CHANGE

TOSHIBA

TOSHIBA INTERNATIONAL CORPORATION

OPEN DRIP-PROOF
HORIZONTAL FOOT-MOUNTED
3 PHASE INDUCTION MOTOR
F1 ASSEMBLY

XT SERIES

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TYPICAL MOTOR PERFORMANCE DATA

Model: F4506VLG3BM

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
450	336	6	1180	509US	460	60	3	523
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
ODP	22	F	1.15	CONT	95.5	-	G	40 C

Load	HP	kW	Amperes	Efficiency (%)	Power Factor (%)
Full Load	450	335.6	523.0	95.5	84.7
¾ Load	337.50	251.7	403.9	95.5	81.9
½ Load	225.00	167.8	298.7	95.0	74.2
¼ Load	112.50	83.9	215.4	92.0	53.1
No Load			168.0		2.8
Locked Rotor			3405.00		36.2

Torque				Rotor wk ²
Full Load (lb-ft)	Locked Rotor (% FLT)	Pull Up (% FLT)	Break Down (% FLT)	Inertia (lb-ft ²)
2003	225	175	280	181.29

Safe Stall Time(s)		Sound Pressure dB(A) @ 1M	Bearings*		Approx. Motor Weight (lbs)
Cold	Hot		DE	NDE	
9.2	4.5	-	6320C3	6320C3	

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

Motor Options:
Product Family:ODP
Mounting:Footed,Shaft:US Shaft

Customer	
Customer PO	
Sales Order	
Project #	

Tag:

All characteristics are average expected values.

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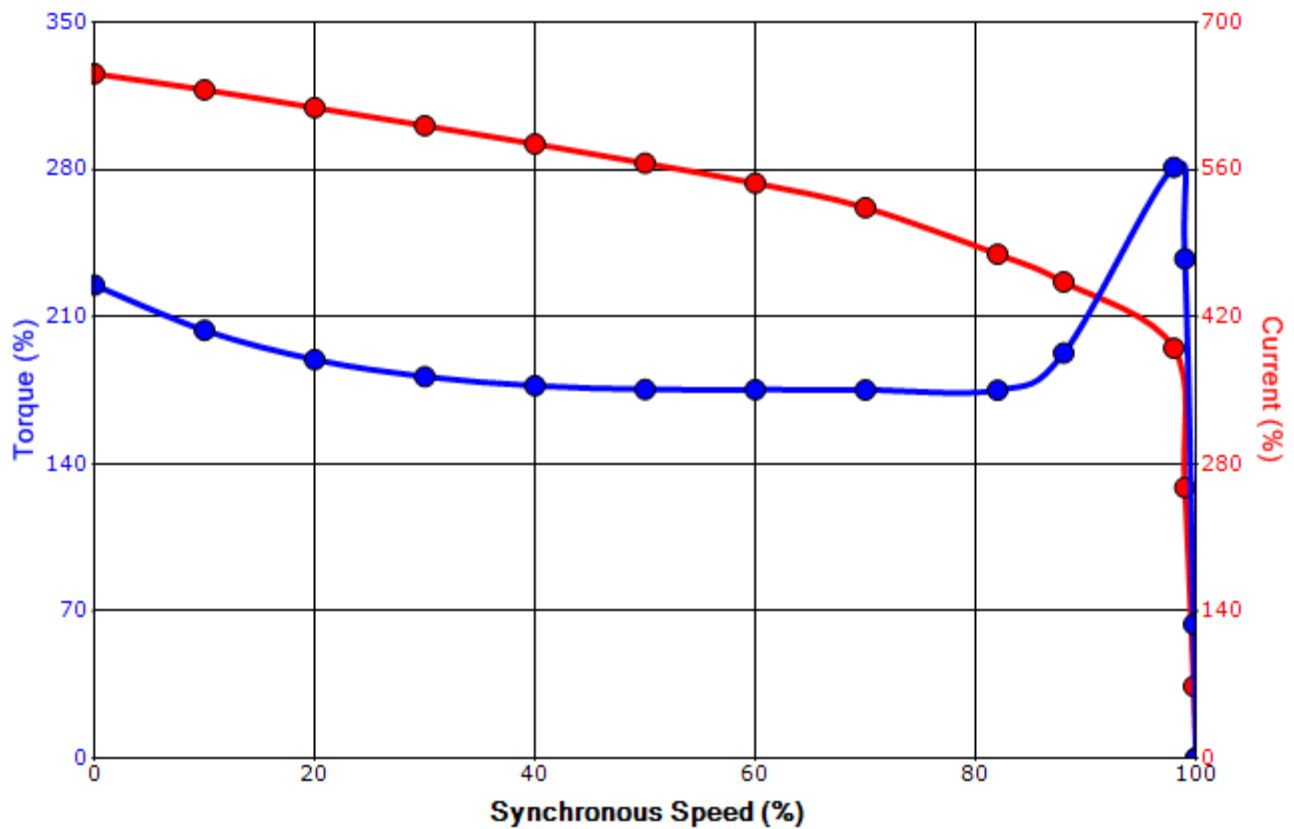
Engineering	bmmamen	Doc. Written By	D. Suarez	Doc.# / Rev	MPCF-1119 / 0
Engr. Date	5/12/2014	Doc. Approved By	M. Campbell	Doc. Issued	6/8/2011

SPEED TORQUE/CURRENT CURVE

Model: F4506VLG3BM

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
450	336	6	1180	509US	460	60	3	523
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
ODP	22	F	1.15	CONT	95.5	-	G	40 C
Locked Rotor Amps	Rotor wk ² Inertia (lb-ft ²)	Torque						Break Down (%)
		Full Load (lb-ft)	Locked Rotor (%)	Pull Up (%)				
3405.00	181.29	2003	225	175			280	

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.

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Engineering	bmammen	Doc. Written By	D. Suarez	Doc.# / Rev	MPCF-1121 / 0
Engr. Date	5/12/2014	Doc. Approved By	M. Campbell	Doc. Issued	6/8/2011

Motor Connection Diagram 3 Leads - Delta Connection



Switch L1 and L2 to reverse rotation

Each lead may consist of more than one cable.
If multiple cables represent a single lead, each one
of them will be labeled with the appropriate lead number.