

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	N-W	V	U	R	S	ES	LS	OS						
509US	10.00	28.00	0.94	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	10.13	9.88	3.375	2.880	0.875	8.50	6320C3	6320C3	3200 lbs.					

- 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

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

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

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

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

STANDARD (NO AUX. BOXES)

RTD AUX. BOX

SPACE HEATER AUX. BOX

BEARING RTD's

**TOSHIBA**

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

TOSHIBA INTERNATIONAL CORPORATION

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Issued Date	9/24/2019	Transmit #	
Issued By	dschoeck	Issued Rev	

### TYPICAL MOTOR PERFORMANCE DATA

Model: F8003VLG3BM

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
800	597	2	3570	509USS	460	60	3	880
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
ODP	12	F	1.15	CONT	96.2	-	H	40 C

Load	HP	kW	Amperes	Efficiency (%)	Power Factor (%)
Full Load	800	596.6	880.4	96.4	88.2
¾ Load	600.00	447.4	682.0	96.3	85.6
½ Load	400.00	298.3	498.1	95.6	78.7
¼ Load	200.00	149.1	304.1	93.0	66.2
No Load			256.3		2.2
Locked Rotor			6484.7		26.0

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> )
1177	220	190	380	108.14

Safe Stall Time(s)		Sound Pressure dB(A) @ 1M	Bearings*		Approx. Motor Weight (lbs)
Cold	Hot		DE	NDE	
11.4	2.5	-	6313C3	6313C3	3373

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

**Motor Options:**  
 Product Family:ODP  
 Mounting:Footed,Shaft:USS Shaft

Customer	
Customer PO	
Sales Order	
Project #	

Tag:

All characteristics are average expected values.

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

Engineering	bmmamen	Doc. Written By	D. Suarez	Doc.# / Rev	MPCF-1119 / 1
Engr. Date	4/1/2015	Doc. Approved By	M. Campbell	Doc. Issued	9/20/2019



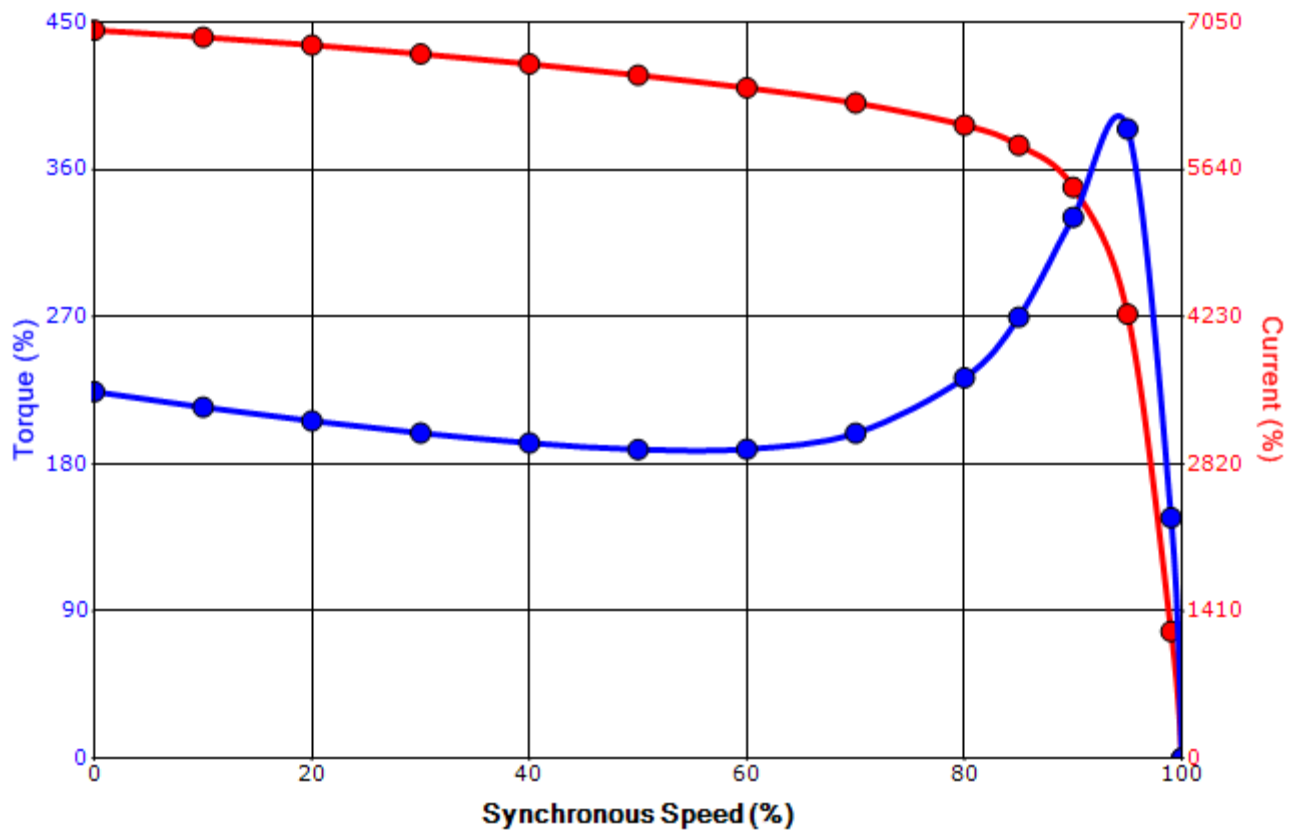
Issued Date	9/24/2019	Transmit #	
Issued By	dschoeck	Issued Rev	

### SPEED TORQUE/CURRENT CURVE

Model: F8003VLG3BM

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
800	597	2	3570	509USS	460	60	3	880
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
ODP	12	F	1.15	CONT	96.2	-	H	40 C
Locked Rotor Amps	Rotor wk <sup>2</sup> Inertia (lb-ft <sup>2</sup> )	Torque				Pull Up (%)	Break Down (%)	
		Full Load (lb-ft)	Locked Rotor (%)					
6484.7	108.14	1177	220		190	380		

### 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	bmammen	Doc. Written By	D. Suarez	Doc.# / Rev	MPCF-1121/1
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# Motor Connection Diagram

## 12 Leads

### Single Voltage



Switch L1 and L2 to reverse rotation