

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 <td>2F <td>H <td>BA <td>N-W <td>V <td>U <td>R <td>S <td>ES <td>LS <td>OS <td colspan="4"></td> </td></td></td></td></td></td></td></td></td></td></td>	2F <td>H <td>BA <td>N-W <td>V <td>U <td>R <td>S <td>ES <td>LS <td>OS <td colspan="4"></td> </td></td></td></td></td></td></td></td></td></td>	H <td>BA <td>N-W <td>V <td>U <td>R <td>S <td>ES <td>LS <td>OS <td colspan="4"></td> </td></td></td></td></td></td></td></td></td>	BA <td>N-W <td>V <td>U <td>R <td>S <td>ES <td>LS <td>OS <td colspan="4"></td> </td></td></td></td></td></td></td></td>	N-W <td>V <td>U <td>R <td>S <td>ES <td>LS <td>OS <td colspan="4"></td> </td></td></td></td></td></td></td>	V <td>U <td>R <td>S <td>ES <td>LS <td>OS <td colspan="4"></td> </td></td></td></td></td></td>	U <td>R <td>S <td>ES <td>LS <td>OS <td colspan="4"></td> </td></td></td></td></td>	R <td>S <td>ES <td>LS <td>OS <td colspan="4"></td> </td></td></td></td>	S <td>ES <td>LS <td>OS <td colspan="4"></td> </td></td></td>	ES <td>LS <td>OS <td colspan="4"></td> </td></td>	LS <td>OS <td colspan="4"></td> </td>	OS <td colspan="4"></td>						
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.					

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: \_\_\_\_\_

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 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 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

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

**TOSHIBA**  
 TOSHIBA INTERNATIONAL CORPORATION

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

**XT SERIES**  
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Issued Date	9/24/2019	Transmit #	
Issued By	dschoeck	Issued Rev	

### TYPICAL MOTOR PERFORMANCE DATA

Model: F7001VLG3BM

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
700	522	2	3570	509USS	460	60	3	756
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
ODP	12	F	1.15	CONT	96.2	-	G	40 C

Load	HP	kW	Amperes	Efficiency (%)	Power Factor (%)
Full Load	700	522.0	756.3	96.4	89.8
¾ Load	525.00	391.5	578.2	96.6	88.0
½ Load	350.00	261.0	410.7	96.4	82.8
¼ Load	175.00	130.5	266.0	95.0	64.8
No Load			178.1		3.1
Locked Rotor			5281.5		26.2

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)	
1030	215	185	360	98.93

Safe Stall Time(s)		Sound Pressure dB(A) @ 1M	Bearings*		Approx. Motor Weight (lbs)
Cold	Hot		DE	NDE	
24	12	-	6313C3	6313C3	3230

\*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	7/17/2019	Doc. Approved By	M. Campbell	Doc. Issued	9/20/2019



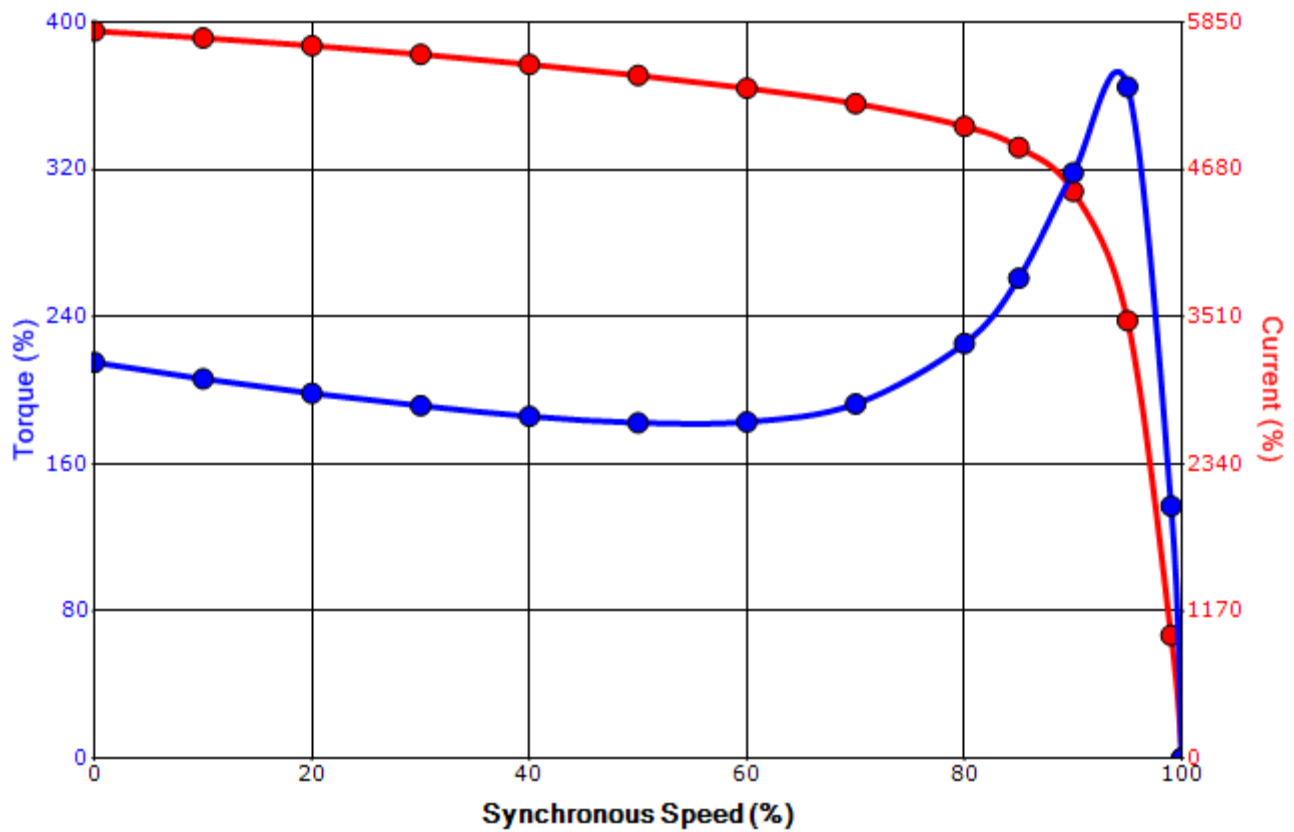
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### SPEED TORQUE/CURRENT CURVE

Model: F7001VLG3BM

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
700	522	2	3570	509USS	460	60	3	756
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
ODP	12	F	1.15	CONT	96.2	-	G	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 (%)					
5281.5	98.93	1030	215		185	360		

### 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
Engr. Date	7/17/2019	Doc. Approved By	M. Campbell	Doc. Issued	9/20/2019

# Motor Connection Diagram

## 12 Leads

### Single Voltage



Switch L1 and L2 to reverse rotation