

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
	E	2F	H	BA	EA	N-W	V	U	R	S	ES	LS	OS							
509USS	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.						
509US	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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Issued Date	9/24/2019	Transmit #	
Issued By	dschoeck	Issued Rev	

TYPICAL MOTOR PERFORMANCE DATA

Model: F7001VLG30M

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
700	522	2	3570	509USS	575	60	3	611
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
ODP	12	F	1.15	CONT	95.4	-	G	40 C

Load	HP	kW	Amperes	Efficiency (%)	Power Factor (%)
Full Load	700	522.0	610.6	96.6	88.9
¾ Load	525.00	391.5	469.9	96.7	86.6
½ Load	350.00	261.0	338.6	96.4	80.3
¼ Load	175.00	130.5	227.5	95.0	60.7
No Load			160.6		2.9
Locked Rotor			4401.6		25.7

Torque				Rotor wk ² Inertia (lb-ft ²)
Full Load (lb-ft)	Locked Rotor (% FLT)	Pull Up (% FLT)	Break Down (% FLT)	
1030	155	115	275	98.93

Safe Stall Time(s)		Sound Pressure dB(A) @ 1M	Bearings*		Approx. Motor Weight (lbs)
Cold	Hot		DE	NDE	
7.3	3.3	-	6313C3	6313C3	

*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	12/29/2017	Doc. Approved By	M. Campbell	Doc. Issued	9/20/2019



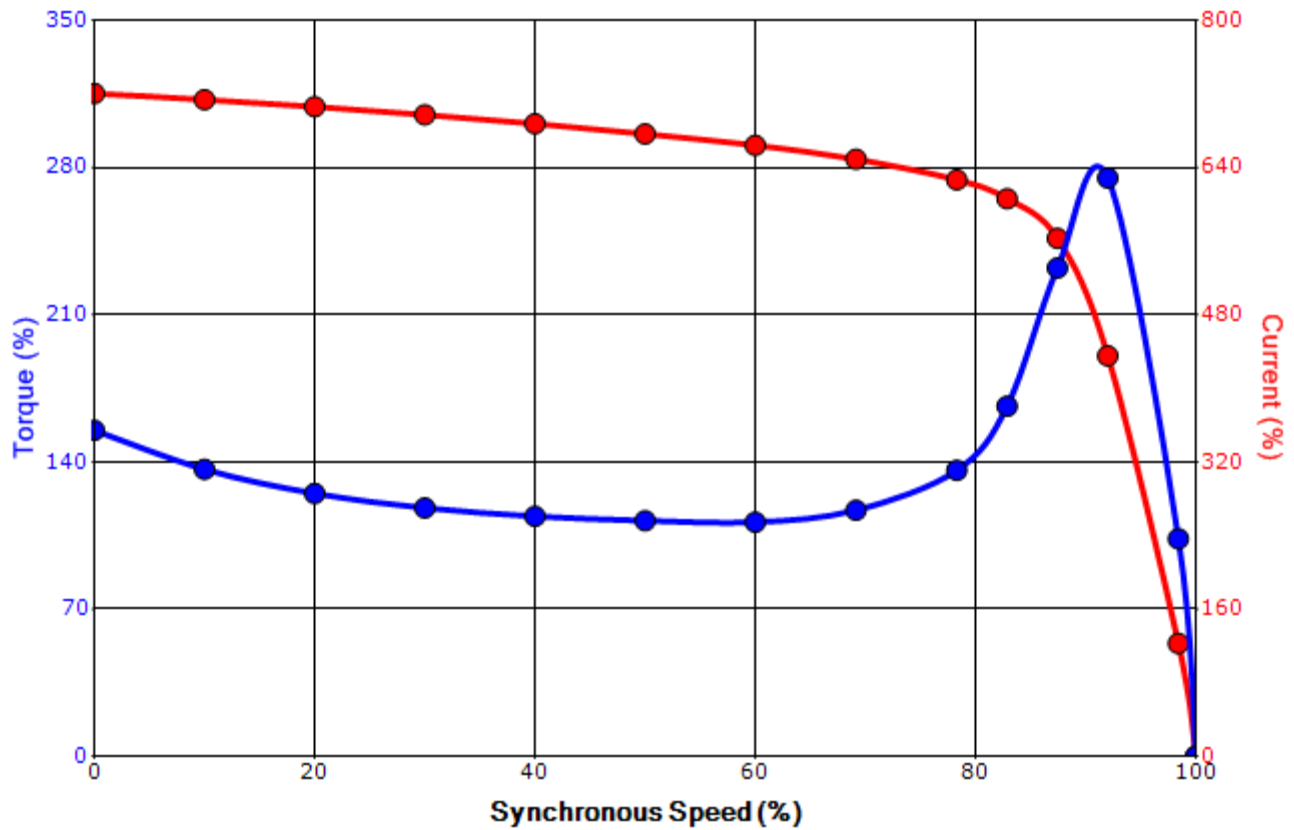
Issued Date	9/24/2019	Transmit #	
Issued By	dschoeck	Issued Rev	

SPEED TORQUE/CURRENT CURVE

Model: F7001VLG3OM

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
700	522	2	3570	509USS	575	60	3	611
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
ODP	12	F	1.15	CONT	95.4	-	G	40 C
Locked Rotor Amps	Rotor wk ² Inertia (lb-ft ²)	Torque				Pull Up (%)	Break Down (%)	
		Full Load (lb-ft)	Locked Rotor (%)					
4401.6	98.93	1030	155		115	275		

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.

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

Engineering	bmammen	Doc. Written By	D. Suarez	Doc.# / Rev	MPCF-1121/1
Engr. Date	12/29/2017	Doc. Approved By	M. Campbell	Doc. Issued	9/20/2019

Motor Connection Diagram

12 Leads

Single Voltage



Switch L1 and L2 to reverse rotation