

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	ZF	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: _____

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

- 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
 VISIT OUR WEBSITE AT:
 www.toshiba.com/ind



Issued Date	1/5/2021	Transmit #	
Issued By	dschoeck	Issued Rev	

TYPICAL MOTOR PERFORMANCE DATA

Model: F8001VLG3BM

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
800	597	2	3570	509USS	460	60	3	880.48
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		
Locked Rotor			6484.7		26.0

Torque				Rotor wk ² Inertia (lb-ft ²)
Full Load (lb-ft)	Locked Rotor (% FLT)	Pull Up (% FLT)	Break Down (% FLT)	
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	3385

*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



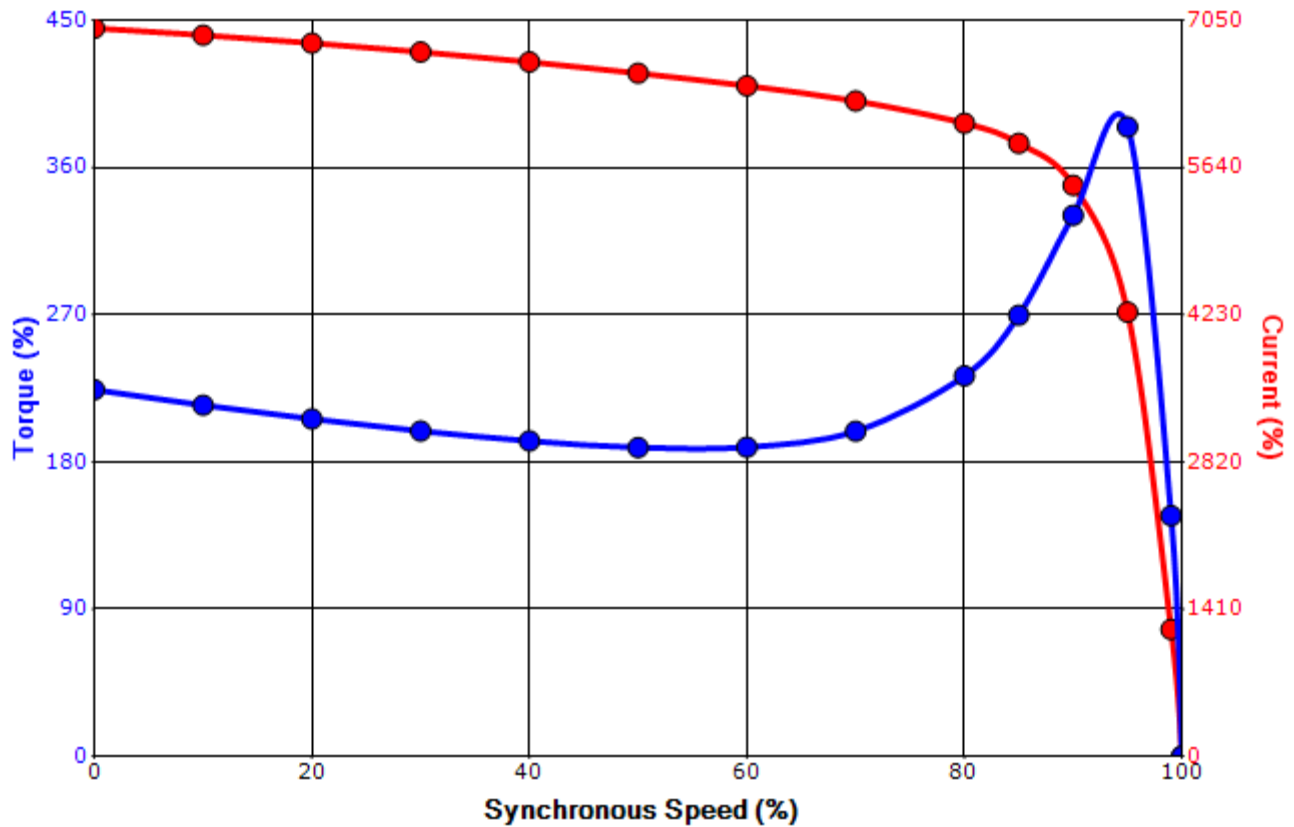
Issued Date	1/5/2021	Transmit #	
Issued By	dschoeck	Issued Rev	

SPEED TORQUE/CURRENT CURVE

Model: F8001VLG3BM

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
800	597	2	3570	509USS	460	60	3	880.48
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 ² Inertia (lb-ft ²)	Torque				Pull Up (%)	Break Down (%)	
		Full Load (lb-ft)	Locked Rotor (%)					
6484.7	108.14	1177	220		190	380		

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	4/1/2015	Doc. Approved By	M. Campbell	Doc. Issued	9/20/2019

Motor Connection Diagram

12 Leads

Single Voltage



Switch L1 and L2 to reverse rotation



Issued Date	1/5/2021	Transmit #	
Issued By	dschoeck	Issued Rev	

SPARE PARTS LIST*

Model: F8001VLG3BM

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
800	597	2	3570	509USS	460	60	3	880.48
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

Bearings DE	6313C3 / 65BC03J3OX
Bearings NDE	6313C3 / 65BC03J3OX

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

Other than the grease used for regreasable bearings and the oil used for oil-lubricated bearings, Toshiba advises that there are no "use" parts. The only insurance spares that Toshiba suggests for these squirrel-cage induction motors are industry-standard and commercially available off-the-shelf bearings as noted above.

Motor components such as terminal boxes, fan covers and other machined parts are available on special request. In these cases, please advise our order entry department of the model and serial numbers found on the motor nameplate and a description of the needed components. With this information they will be able to furnish the current part number, price and availability.

Note: Our internal part numbers are subject to change without notice and are not published.

Customer	
Customer PO	
Sales Order	
Project #	

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-1125 / 1
Engr. Date	4/1/2015	Doc. Approved By	M. Campbell	Doc. Issued	9/20/2019