

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

- NOTES:
- DIMENSION V REPRESENTS LENGTH OF STRAIGHT PART OF SHAFT
 - MAIN CONDUIT BOX MAY BE ROTATED IN 90° INCREMENTS
 - KEY DIMENSIONS EQUAL S x S x 8.50 FOR US AND S x S x 3.00 FOR USS (MOTOR SUPPLIED WITH KEY)
 - MOTOR WEIGHT SHOWN IS MAXIMUM HORSEPOWER IN FRAME
 - 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 EDP ILL. EPACK. & 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

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

TOSHIBA INTERNATIONAL CORPORATION

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TYPICAL MOTOR PERFORMANCE DATA

Model: B5004VLG3OMH

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
500	373	4	1780	509US	575	60	3	446
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
ODP	12	F	1.15	CONT	96.2	B		40 C

Load	HP	kW	Amperes	Efficiency (%)	Power Factor (%)
Full Load	500.00	372.9	445	97.0	86.6
¾ Load	375.00	279.6	341	96.9	84.8
½ Load	250.00	186.4	245	96.1	79.3
¼ Load	125.00	93.2	164	93.0	61.1
No Load			124.0		
Locked Rotor			3077		

Torque				Rotor wk² Inertia (lb-ft²)
Full Load (lb-ft)	Locked Rotor (% FLT)	Pull Up (% FLT)	Break Down (% FLT)	
1475	235	145	220	155.18

Safe Stall Time(s)		Sound Pressure dB(A) @ 1M	Bearings*		Approx. Motor Weight (lbs)
Cold	Hot		DE	NDE	
25	12	-	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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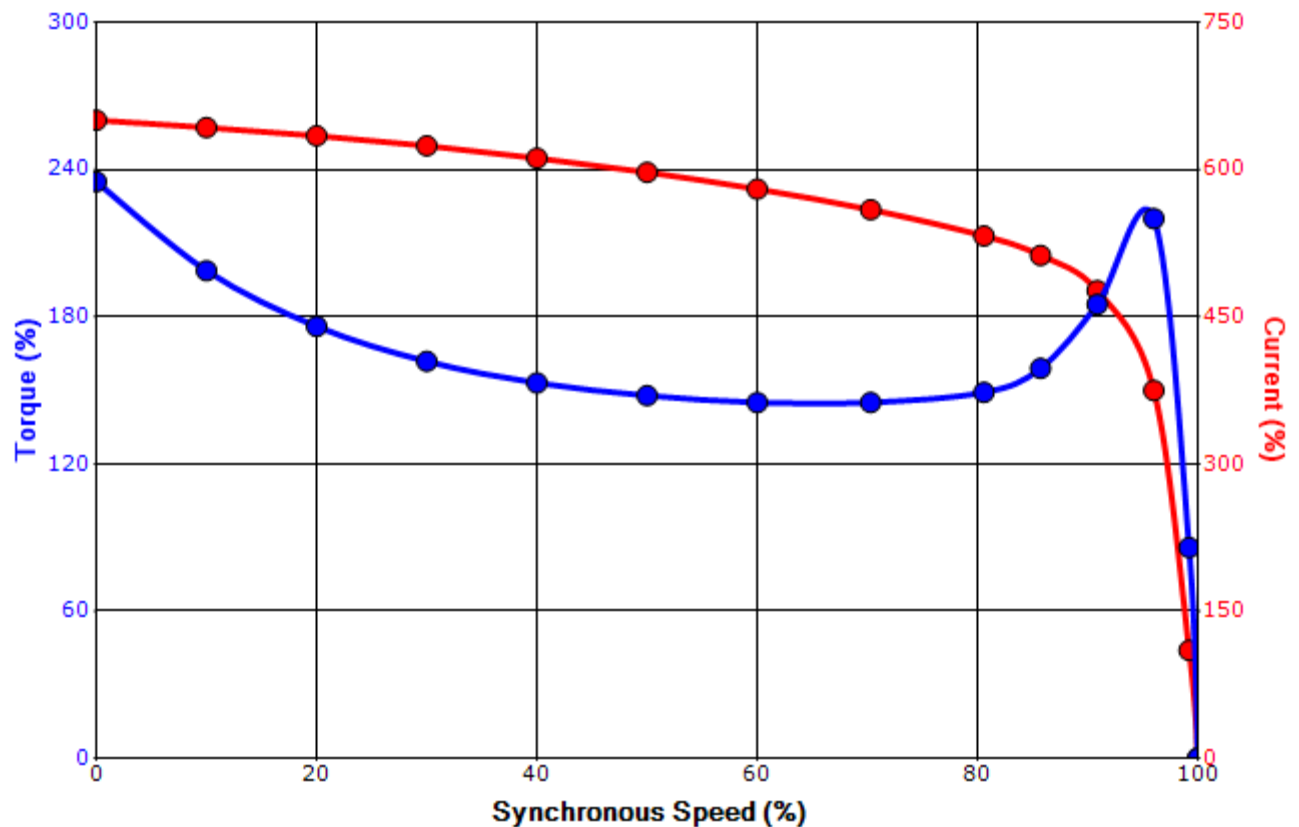
Engineering	spinzon	Doc. Written By	D. Suarez	Doc.# / Rev	MPCF-1119 / 0
Engr. Date	5/29/2025	Doc. Approved By	M. Campbell	Doc. Issued	6/8/2011

SPEED TORQUE/CURRENT CURVE

Model: B5004VLG3OMH

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
500	373	4	1780	509US	575	60	3	446
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
ODP	12	F	1.15	CONT	96.2	B		40 C
Locked Rotor Amps	Rotor wk ² Inertia (lb-ft ²)	Torque						
		Full Load (lb-ft)	Locked Rotor (%)	Pull Up (%)		Break Down (%)		
3077	155.18	1475	235	145		220		

Design Values



Customer		wk ² Load Inertia (lb-ft ²)	-
Customer PO		Load Type	-
Sales Order		Voltage (%)	100
Project #		Accel. Time	-

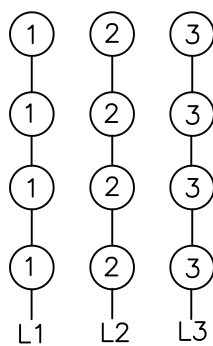
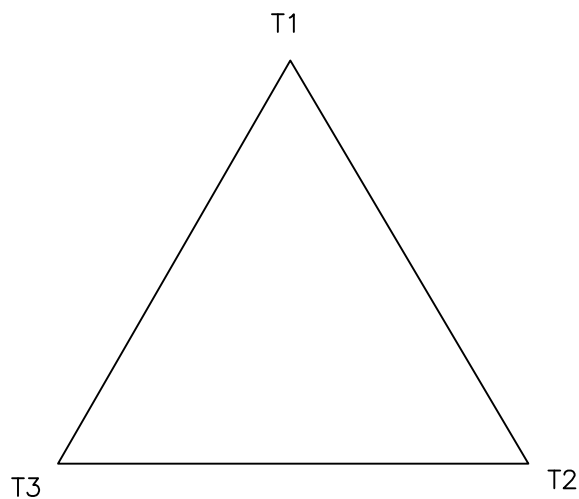
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Motor Connection Diagrams
12 Leads - CLOSED DELTA Connection
Single Voltage



Switch L1 and L2 to reverse rotation

SPARE PARTS LIST*

Model: B5004VLG3OMH

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
500	373	4	1780	509US	575	60	3	446
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
ODP	12	F	1.15	CONT	96.2	B		40 C

Bearings DE 6320C3 / 100BC03J3OX

Bearings NDE 6320C3 / 100BC03J3OX

*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.

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