

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
444T/445T	22.0	19.3	48.4	11.00	1.2	4.4	5.2	15.9	22.5	23.6	3.6	3.00	22.4	16.8	11.00	7.9	15.2	12.3

FRAME SIZE	MOUNTING				SHAFT EXTENSION			KEY SEAT			BEARINGS		MAXIMUM WEIGHT
	E	2F	H	BA	N-W	V	U	R	S	ES	LS	OS	
444T/445T	9.00	14.50/16.50	0.81	7.50	8.50	8.25	3.375	2.875	0.875	6.91	NU318C3	6318C3	2200 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 6.91 (MOTOR SUPPLIED WITH KEY)
4. MOTOR WEIGHT SHOWN IS MAXIMUM HORSEPOWER IN FRAME
5. THIS DIMENSION EQUALS 2F FOR 444T MOUNTING
6. STANDARD PRODUCT USE BI-DIRECTIONAL FAN. OPPOSITE ROTATION AVAILABLE ONLY BY CONNECTION CHANGE

CUSTOMER: \_\_\_\_\_ MOTOR MODEL NO.: \_\_\_\_\_  
P.O. NO.: \_\_\_\_\_ HP: \_\_\_\_\_ VOLTAGE: \_\_\_\_\_ RPM(SYN.): \_\_\_\_\_ Hz: \_\_\_\_\_  
FRAME SIZE: \_\_\_\_\_ PRODUCT TYPE: TEFC EXPLOSION PROOF; CLASS I GROUP D; CLASS II GROUPS E, F, G  
COMMENTS: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
PER: \_\_\_\_\_ DATE: \_\_\_\_\_

TAG NO's.:  
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- ☒ STANDARD (NO AUX. BOXES)  
☐ RTD AUX. BOX  
☐ SPACE HEATER AUX. BOX  
☐ BEARING RTD's

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**

TOSHIBA INTERNATIONAL CORPORATION

TOTALLY-ENCLOSED FAN-COOLED  
HORIZONTAL FOOT-MOUNTED  
3 PHASE INDUCTION MOTOR  
F1 ASSEMBLY

**XT SERIES**

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## TYPICAL MOTOR PERFORMANCE DATA

Model: B1254YLF40SH

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
125	90	4	1785	444T	230/460	60	3	288/144
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEFC	55	F	1.15	CONT	95.8	B	G	40 C

Load	HP	kW	Amperes	Efficiency (%)	Power Factor (%)
Full Load	125	93.2	144.0	95.7	84.1
¾ Load	93.75	69.9	115.1	95.7	81.1
½ Load	62.50	46.6	87.1	95.0	73.3
¼ Load	31.25	23.3	64.9	87.3	51.6
No Load			47.7		4.2
Locked Rotor			907.00		34.4

Torque				Rotor wk² Inertia (lb-ft²)
Full Load (lb-ft)	Locked Rotor (% FLT)	Pull Up (% FLT)	Break Down (% FLT)	
368	215	125	255	42.96

Safe Stall Time(s)		Sound Pressure dB(A) @ 1M	Bearings*		Approx. Motor Weight (lbs)
Cold	Hot		DE	NDE	
17	7	-	NU318C3	6313C3	

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

### Motor Options:

Product Family: TEXP

Mounting: Footed, Shaft: T Shaft

Customer	
Customer PO	
Sales Order	
Project #	

Tag:

All characteristics are average expected values. The declared locked rotor current has a tolerance of 20%.

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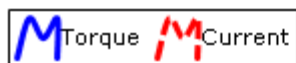
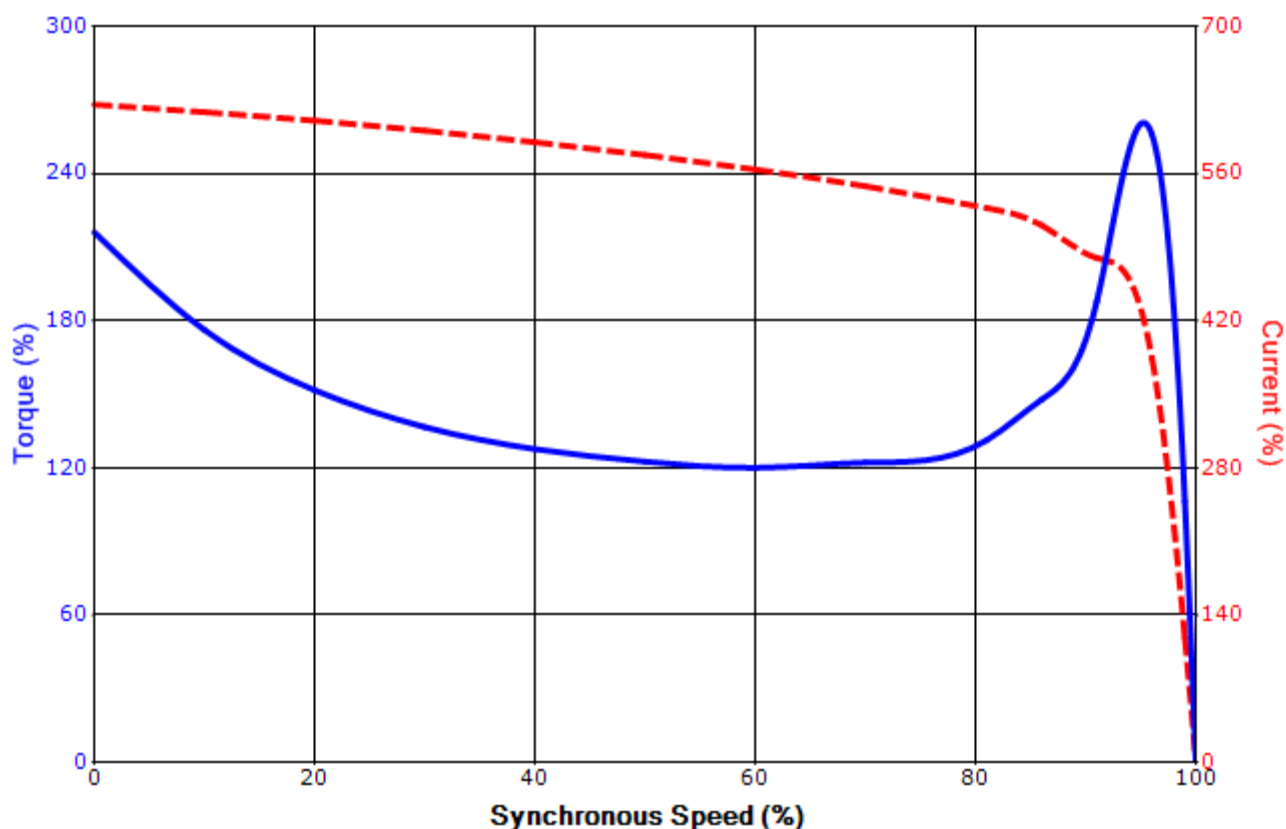
Engineering	mcampbell	Doc. Written By	D. Suarez	Doc.# / Rev	MPCF-1119 / 1
Engr. Date	1/17/2012	Doc. Approved By	M. Campbell	Doc. Issued	7/31/2013

## SPEED TORQUE/CURRENT CURVE

Model: B1254YLF40SH

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
125	90	4	1785	444T	230/460	60	3	288/144
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEFC	55	F	1.15	CONT	95.8	B	G	40 C
Locked Rotor Amps	Rotor wk <sup>2</sup> Inertia (lb-ft <sup>2</sup> )	Torque						
		Full Load (lb-ft)	Locked Rotor (%)	Pull Up (%)	Break Down (%)			
907.00	42.96	368	215	125	255			

### 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.

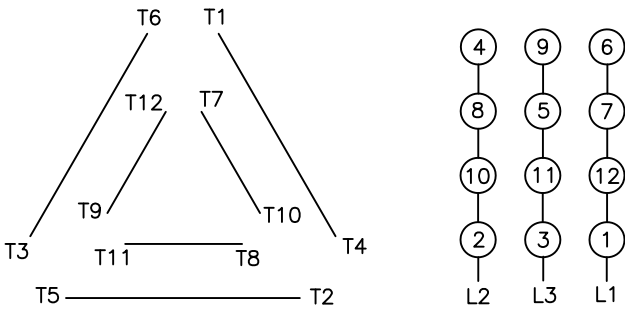
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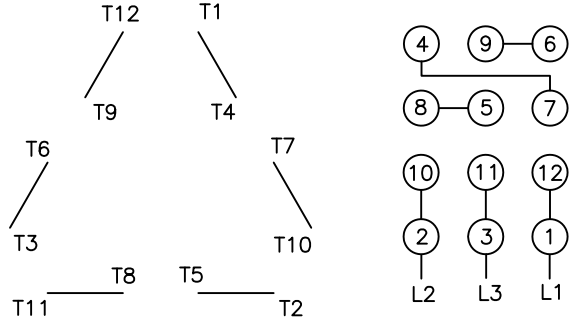
**Motor Connection Diagrams**  
12 Leads

Across-the-Line Starting / Running Connections

Low Voltage Delta



High Voltage Delta



Switch L1 and L2 to reverse rotation

Suitable for Wye-Delta Starting and Limited Part-Winding-Starting.  
Please Contact Toshiba International for specific connections.

## SPARE PARTS LIST\*

Model: B1254YLF40SH

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
125	90	4	1785	444T	230/460	60	3	288/144
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEFC	55	F	1.15	CONT	95.8	B	G	40 C

**Bearings DE** NU318C3 / 90RU03M3OX

**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.

<b>Customer</b>	
<b>Customer PO</b>	
<b>Sales Order</b>	
<b>Project #</b>	

Tag:

All characteristics are average expected values.

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