

UNITS: INCHES

FRAME SIZE	MOTOR DIMENSIONS											CONDUIT BOX						
	A	B	C	D	G	J	K	M	O	P	T	AA(NPT)	AB	AC	AE	AF	XL	XN
445T/447T	21.9	22.9	52.6	11.00	1.1	4.3	4.8	19.3	22.0	22.4	3.6	3.00	20.1	15.9	11.00	9.2	15.3	10.3
445TZ/447TZ	21.9	22.9	54.2	11.00	1.1	4.3	4.8	19.3	22.0	22.4	3.6	3.00	20.1	15.9	11.00	9.2	15.3	10.3

FRAME SIZE	MOUNTING				SHAFT EXTENSION				KEY SEAT			BEARINGS		MAXIMUM WEIGHT
	E	2F	H	BA	N-W	V	U	R	S	ES	LS	OS		
445T/447T	9.00	16.5/20.00	0.86	7.50	8.50	8.25	3.375	2.880	0.875	6.91	NU318C3	6318C3	2320 lbs.	
445TZ/447TZ	9.00	16.5/20.00	0.86	7.50	10.125	9.875	3.375	2.880	0.875	8.50	NU318C3	6318C3	2320 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 6.91 FOR 'T' AND S x S x 8.50 FOR 'TZ' (MOTOR SUPPLIED WITH KEY)
 - MOTOR WEIGHT SHOWN IS MAXIMUM HORSEPOWER IN FRAME
 - STANDARD PRODUCT USE BI-DIRECTIONAL FAN. OPPOSITE ROTATION AVAILABLE ONLY BY CONNECTION CHANGE.
 - DIMENSIONS FOR 445T MOUNTING EQUALS 2F LOCATED IN 445T/447T

CUSTOMER: _____ MOTOR MODEL NO.: _____

P.O. NO.: _____ HP: _____ VOLTAGE: _____ RPM(SYN.): _____ Hz: _____

FRAME SIZE: _____ PRODUCT TYPE: TEFC EQP III, EPACT, & HIGH EFFICIENCY

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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Issued Date	4/27/2020	Transmit #	
Issued By	dschoeck	Issued Rev	

TYPICAL MOTOR PERFORMANCE DATA

Model: B2004FLF4BSH01

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
200	150	4	1780	447TZ	460	60	3	232.00
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEFC	54	F	1.15	CONT	96.2	B	G	40 C

Load	HP	kW	Amperes	Efficiency (%)	Power Factor (%)
Full Load	200	149.1	232.0	96.1	84.5
¾ Load	150.00	111.9	183.6	96.1	81.9
½ Load	100.00	74.6	138.5	95.7	74.6
¼ Load	50.00	37.3	103.1	89.9	50.5
No Load			76.5		3.8
Locked Rotor			1450		35.9

Torque				Rotor wk ² Inertia (lb-ft ²)
Full Load (lb-ft)	Locked Rotor (% FLT)	Pull Up (% FLT)	Break Down (% FLT)	
590	240	155	260	63.10

Safe Stall Time(s)		Sound Pressure dB(A) @ 1M	Bearings*		Approx. Motor Weight (lbs)
Cold	Hot		DE	NDE	
14	7	-	NU318C3	6318C3	2356

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

Motor Options:
 Product Family:EQP Global SD
 Mounting:Footed,Shaft:T Shaft

Customer	
Customer PO	
Sales Order	
Project #	

Tag:

All characteristics are average expected values.

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Engineering	mcampbell	Doc. Written By	D. Suarez	Doc.# / Rev	MPCF-1119 / 1
Engr. Date	4/11/2012	Doc. Approved By	M. Campbell	Doc. Issued	9/20/2019



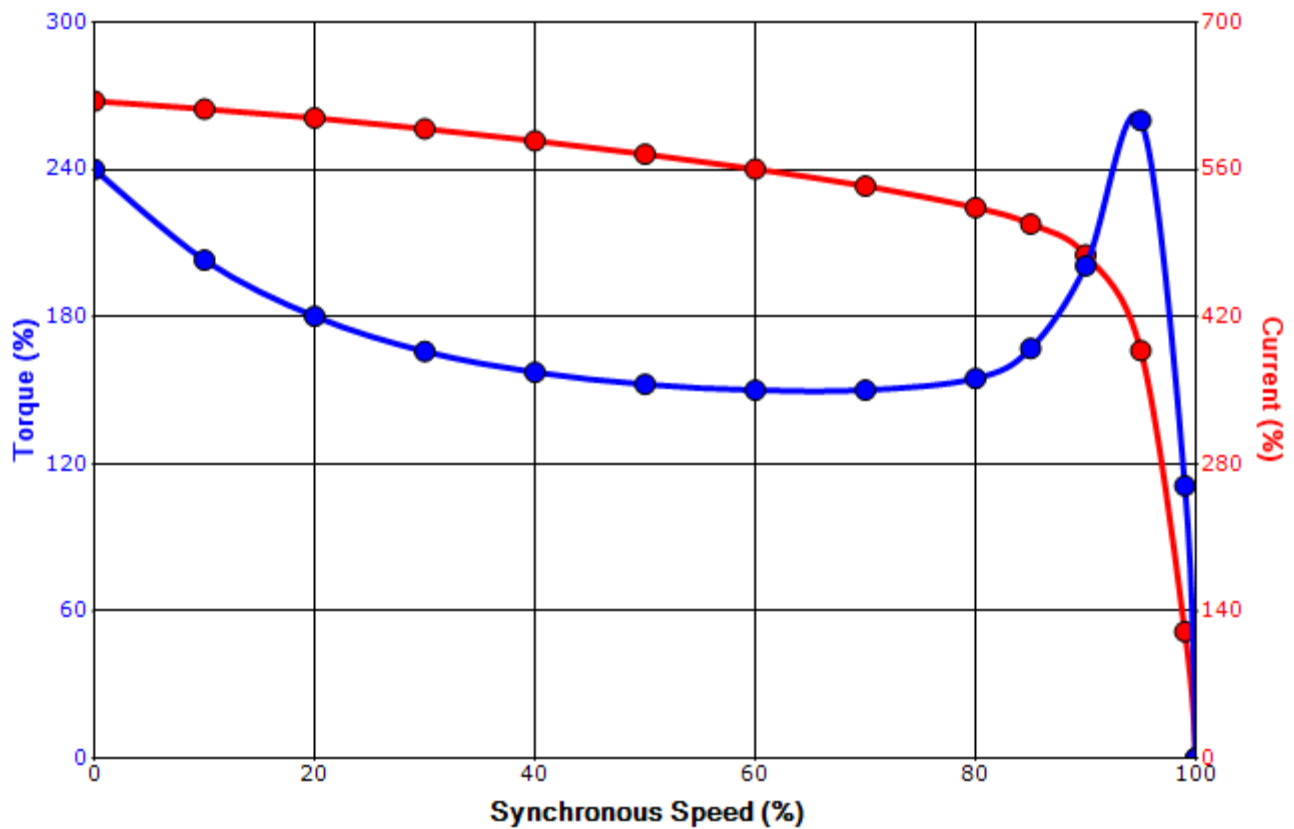
Issued Date	4/27/2020	Transmit #	
Issued By	dschoeck	Issued Rev	

SPEED TORQUE/CURRENT CURVE

Model: B2004FLF4BSH01

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
200	150	4	1780	447TZ	460	60	3	232.00
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEFC	54	F	1.15	CONT	96.2	B	G	40 C
Locked Rotor Amps	Rotor wk ² Inertia (lb-ft ²)	Torque				Pull Up (%)	Break Down (%)	
		Full Load (lb-ft)	Locked Rotor (%)					
1450	63.10	590	240		155	260		

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.

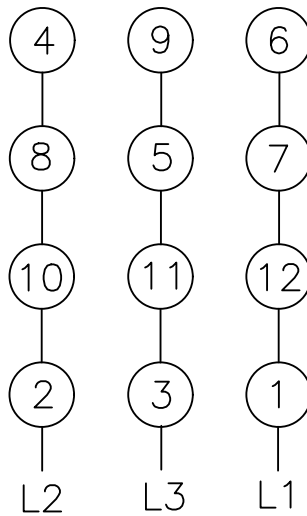
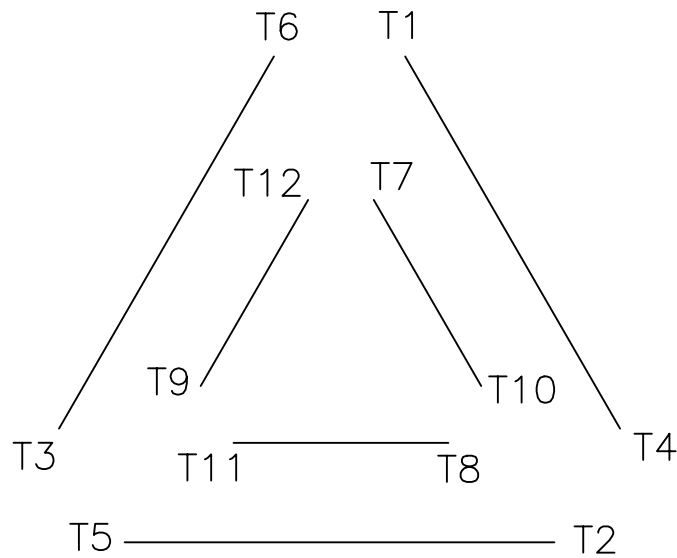
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Motor Connection Diagram

12 Leads

Single Voltage



Switch L1 and L2 to reverse rotation



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SPARE PARTS LIST*

Model: B2004FLF4BSH01

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
200	150	4	1780	447TZ	460	60	3	232.00
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEFC	54	F	1.15	CONT	96.2	B	G	40 C

Bearings DE	NU318C3 / 90RU03M3OX
Bearings NDE	6318C3 / 90BC03J3OX

*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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