



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
N447T/N449T	22.0	34.7	66.7	11.00	1.4	4.6	13.8	20.9	25.0	27.0	3.0	4.00	25.4	20.2	11.00	8.7	15.7	11.5
N447TS/N449TS	22.0	34.7	63.0	11.00	1.4	4.6	13.8	20.9	25.0	27.0	3.0	4.00	25.4	20.2	11.00	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	
N447T/N449T	9.00	20.00/25.00	0.82	7.50	8.50	8.25	3.375	2.880	0.875	6.91	6318C3	6318C3	3800 lbs.
N447TS/N449TS	9.00	20.00/25.00	0.82	7.50	4.75	4.50	2.375	2.021	0.625	3.03	6318C3	6318C3	

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 FOR T AND S x S x 3.03 FOR TS (MOTOR SUPPLIED WITH KEY)
4. MOTOR WEIGHT SHOWN IS MAXIMUM HORSEPOWER IN FRAME
5. THIS DIMENSION EQUALS 2F FOR N447T/TS MOUNTING
6. STANDARD PRODUCT USE BI-DIRECTIONAL FAN. OPPOSITE ROTATION AVAILABLE ONLY BY CONNECTION CHANGE

CUSTOMER: \_\_\_\_\_ MOTOR MODEL NO.: 3504BCFB31A  
 P.O. NO.: \_\_\_\_\_ HP: 350 VOLTAGE: 460 RPM(SYN.): 1800 Hz: 60  
 FRAME SIZE: N449T PRODUCT TYPE: TEBC VECTOR READY EQP III  
 COMMENTS: \_\_\_\_\_

TAG NO's.: \_\_\_\_\_

- STANDARD (NO AUX. BOXES)
- RTD AUX. BOX
- SPACE HEATER AUX. BOX
- BEARING RTD's

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**

TOSHIBA INTERNATIONAL CORPORATION

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

**XT SERIES**

VISIT OUR WEBSITE AT:  
[www.toshiba.com/ind](http://www.toshiba.com/ind)

**TOSHIBA INTERNATIONAL CORPORATION**  
**Industrial Division / Houston Motor Plant**

**SQUIRREL CAGE INDUCTION MOTOR  
 PERFORMANCE SPECIFICATIONS**

INDEX	MPCF-1033
SHEET NO.	1 of 1
ISSUED	11/08/96
SUPERSEDES	10/06/95
REVISION	1
WRITTEN BY	R. EVANS
APPROVED BY	<i>Jay Bugbee</i>

Customer Tag:

CUSTOMER:  
 TIC SR No.:  
 Customer PO:

**MOTOR NAMEPLATE DATA**

H.P.: 350	VOLTS: 460	3 Ø / 60	Hz	S. RPM: 1800
FRAME: N449T	ENCL: TEBC	FLAMPS: 380		FLRPM: 1780
FORM: ECKM1	S.F.: 1.0	NEMA DESIGN: B		INSUL CLASS: F
TYPE: TIKK	AMB.: 40	CODE: G		DUTY: CONT.
MODEL No.: 3504BCFB31A		kW:		Serial No.:
NOM. EFF.:	MIN. EFF.:	P.F.:		

<b>AMPERAGE</b> Locked Rotor:	<b>TORQUES</b> FULL LOAD (lb-ft.): 89.8 LOCKED ROTOR (%): 1033 BREAK DOWN (%): 195	<b>** BEARINGS:</b> Drive End: 6318C3 Opposite Drive End: 6318C3
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<b>EFFICIENCY (%)</b> FULL LOAD: 3/4 LOAD: 96.4 1/2 LOAD: 95.2	<b>POWER FACTOR (%)</b> FULL LOAD: 3/4 LOAD: 89.5 1/2 LOAD: 87
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ALL CHARACTERISTICS ARE AVERAGE EXPECTED VALUES BASED UPON RATED VOLTAGE, FREQUENCY AND SINEWAVE POWER INPUT.

\* TEMPERATURE RISE WILL BE CONSISTENT WITH INSULATION, AMBIENT AND SERVICE FACTOR AS DEFINED BY NEMA-MG-12.43 OR -20.40.

\*\* BEARINGS ARE THE ONLY RECOMMENDED SPARE PART(S).

**CERTIFIED BY:**  
**DATE:**

**TOSHIBA**

Reliability in Motion

**TOSHIBA INTERNATIONAL CORPORATION**

INDUSTRIAL DIVISION

PO BOX 40906

HOUSTON TX 77240

(713) 466-0277

(800) 231-1412

FAX (713) 466-8773

**SPARE PARTS (RECOMMENDED)**

OTHER THAN THE GREASE USED FOR RE-GREASABLE 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 COMMERCIALY AVAILABLE ANTI-FRICTION BEARINGS, AS NOTED BELOW.

MOTOR COMPONENTS (SUCH AS TERMINAL BOXES, FAN COVERS, MACHINED PARTS) ARE AVAILABLE UPON SPECIAL REQUEST. IN THIS CASE, PLEASE ADVISE OUR ORDER ENTRY DEPARTMENT THE MODEL AND SERIAL NUMBERS (FOUND ON THE MOTOR NAMEPLATE) , AND A DESCRIPTION OF THE COMPONENT REQUIRED. THEY WILL THEN FURNISH THE CURRENT PART NUMBER, PRICE AND AVAILABILITY.

(NOTE: OUR INTERNAL PART NUMBERS ARE SUBJECT TO CHANGE WITHOUT NOTICE, AND ARE NOT PUBLISHED).

PLEASE ADVISE IF YOU HAVE ANY QUESTIONS.

CUSTOMER:  
PURCHASE ORDER #  
Customer Tag:

TOSHIBA FILE #  
MODEL # 3504BCFB31A  
HP / RPM / ENCL / FRAME: 350 / 1800 / TEBC / N449T  
DRIVE END BEARING: 6318C3  
OPPOSITE DRIVE END BEARING: 6318C3

**Prepared By:**  
**Date:**

Three Phase Motor Wiring Diagram
"Across the line" (Full Voltage) Starting



Customer Name:	
PO No.:	
Customer Tag:	
TIC File No.:	
Motor Model No.	3504BCFB31A

For Further Information Regarding Toshiba motor starting, maintenance or wiring,  
Please refer to the "Toshiba - A Quality Product for World Energy" Installation and  
Maintenance Manual, or contact the Toshiba Low Voltage Motor Marketing Department.  
(800) 231-1412

Prepared By:   
Date: