

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					
N447S/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.										
N447S/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.: \_\_\_\_\_ TAG NO's.: \_\_\_\_\_

P.O. NO.: \_\_\_\_\_ HP: \_\_\_\_\_ VOLTAGE: \_\_\_\_\_ RPM(SYN.): \_\_\_\_\_ HZ: \_\_\_\_\_

FRAME SIZE: \_\_\_\_\_ PRODUCT TYPE: IEBC VECTOR READY EQP III

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

**TOSHIBA**

TOSHIBA INTERNATIONAL CORPORATION

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

**XT SERIES**

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**TYPICAL MOTOR PERFORMANCE DATA**

Model: 2504BCFB31A

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
250	186	4	1780	N449T	460	60	3	270
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEBC	54	F	1.15	CONT	96.5	A	G	40 C

Load	HP	kW	Amperes	Efficiency (%)	Power Factor (%)
Full Load	250	186.4	269.6	96.8	89.6
¾ Load	187.50	139.8	204.6	96.2	89.2
½ Load	125.00	93.2	143.0	94.7	86.4
¼ Load	62.50	46.6	87.4	89.8	74.5
No Load			55.0		4.2
Locked Rotor			1950.20		28.6

Torque				Rotor wk <sup>2</sup> Inertia (lb-ft <sup>2</sup> )
Full Load (lb-ft)	Locked Rotor (% FLT)	Pull Up (% FLT)	Break Down (% FLT)	
738	195	145	270	149.34

Safe Stall Time(s)		Sound Pressure dB(A) @ 1M	Bearings*		Approx. Motor Weight (lbs)
Cold	Hot		DE	NDE	
22.3	14.6	-	6318C3	6318C3	

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

**Motor Options:**  
Product Family:Vector Ready Series  
Mounting:Footed,Shaft:T Shaft

Customer	
Customer PO	
Sales Order	
Project #	

Tag:

All characteristics are average expected values.

**TOSHIBA INTERNATIONAL CORPORATION · HOUSTON, TEXAS U.S.A.**

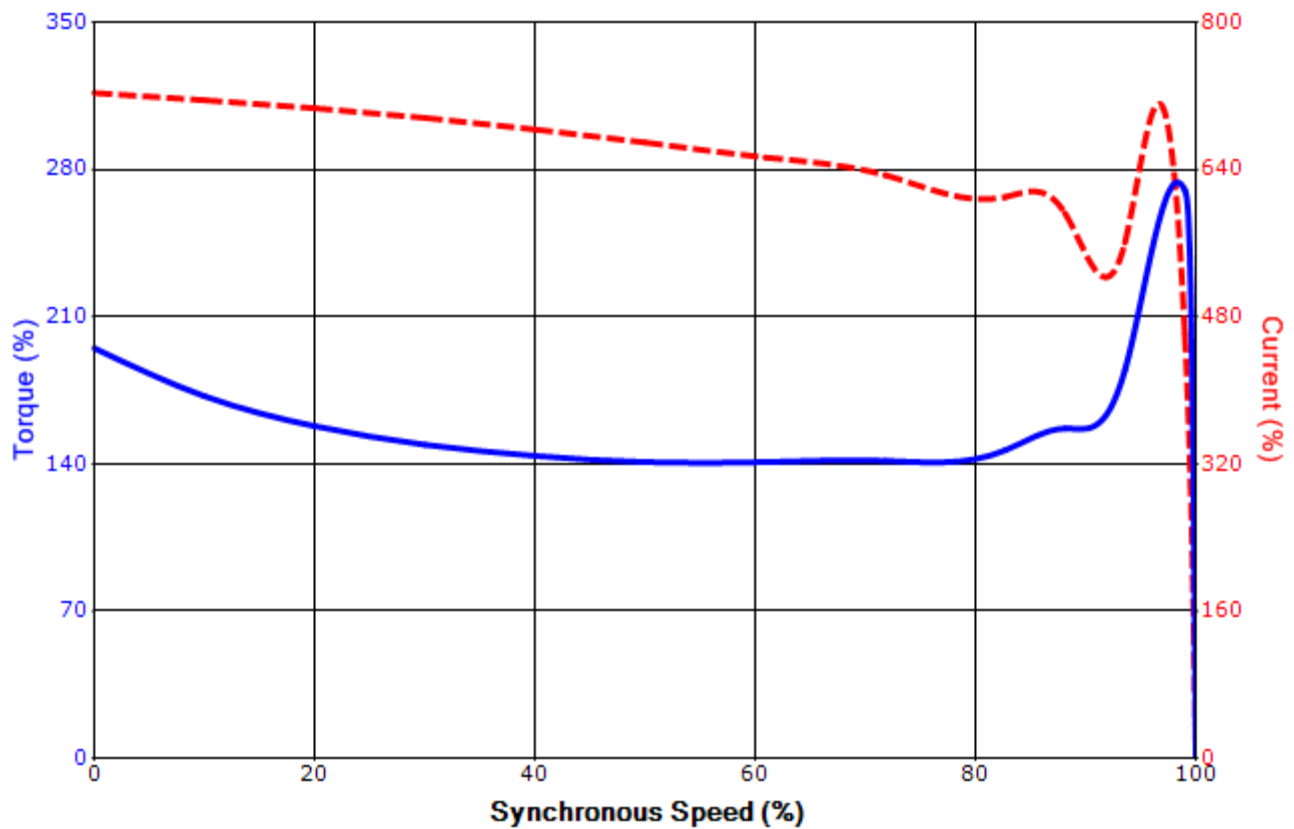
Engineering	garce	Doc. Written By	D. Suarez	Doc.# / Rev	MPCF-1119 / 0
Engr. Date	1/8/2015	Doc. Approved By	M. Campbell	Doc. Issued	6/8/2011

**SPEED TORQUE/CURRENT CURVE**

Model: 2504BCFB31A

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
250	186	4	1780	N449T	460	60	3	270
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEBC	54	F	1.15	CONT	96.5	A	G	40 C
Locked Rotor Amps	Rotor wk <sup>2</sup> Inertia (lb-ft <sup>2</sup> )	Torque						Break Down (%)
		Full Load (lb-ft)	Locked Rotor (%)	Pull Up (%)				
1950.20	149.34	738	195	145			270	

**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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Engineering	garce	Doc. Written By	D. Suarez	Doc.# / Rev	MPCF-1121 / 0
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**Motor Connection Diagram**  
3 Leads - Delta Connection



Switch L1 and L2 to reverse rotation

Each lead may consist of more than one cable.  
If multiple cables represent a single lead, each one  
of them will be labeled with the appropriate lead number.