

NOTES:
1/2"-13 UNC GND BOLT
SEE NOTE 7

UNITS: INCHES

FRAME SIZE	MOTOR DIMENSIONS													CONDUIT BOX				
	A	B	C	D	G	J	K	M	O	P	T	A[NET]	AB	AC	AE	AF	XL	XN
S447T/S449T	22.0	34.0	55.5	11.00	1.4	4.5	15.3	20.8	25.0	27.9	1.3	4.00	26.5	21.8	11.00	7.6	18.5	17.1

FRAME SIZE	MOUNTING				SHAFT EXTENSION				KEY SEAT			BEARINGS			MAXIMUM WEIGHT
	E	2F	H	BA	N-W	V	U	R	S	ES	LS ROLLER	OS	4~6P		
S447T/S449T	9.00	20.00/25.00	0.82	7.50	8.50	8.25	3.375	2.880	0.875	6.91	NU322C3	6318C3	2330 lb		

CUSTOMER: _____ MOTOR MODEL NO.: _____ TAG NO's.: _____

P.O. NO.: _____ HP: _____ VOLTAGE: _____ RPM(SYN.): _____ Hz: _____
 FRAME SIZE: S447/9 _____ PRODUCT TYPE: IEFC EGP PREMIUM EFFICIENCY QUARRY DUTY
 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

1. DIMENSION V REPRESENTS LENGTH OF STRAIGHT PART OF SHAFT
2. MAIN CONDUIT BOX MAY BE ROTATED IN 90° INCREMENTS
3. "T" KEY DIMENSIONS EQUAL S x S x 6.88 (MOTOR SUPPLIED WITH KEY)
4. MOTOR WEIGHT SHOWN IS MAXIMUM HORSEPOWER IN FRAME
5. THIS DIMENSION EQUALS 2F FOR S447T MOUNTING
6. STANDARD PRODUCT USE BI-DIRECTIONAL FAN, OPPOSITE ROTATION AVAILABLE ONLY BY CONNECTION CHANGE
7. FRAME GROUND BOLT STANDARD

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

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TYPICAL MOTOR PERFORMANCE DATA

Model: 2504QDSB41A-R

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
250	186	4	1785	S449T	460	60	3	295
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEFC	55	F	1.15	CONT	96.2	A	H	40 C

Load	HP	kW	Amperes	Efficiency (%)	Power Factor (%)
Full Load	250.00	186.4	295	95.4	83.1
¾ Load	187.50	139.8	229	94.6	81.0
½ Load	125.00	93.2	168	92.7	75.1
¼ Load	62.50	46.6	117	87.2	57.2
No Load			105.7		5.5
Locked Rotor			2071		28.3

Torque				Rotor wk² Inertia (lb-ft²)
Full Load (lb-ft)	Locked Rotor (% FLT)	Pull Up (% FLT)	Break Down (% FLT)	
736	220	185	270	128.84

Safe Stall Time(s)		Sound Pressure dB(A) @ 1M	Bearings*		Approx. Motor Weight (lbs)
Cold	Hot		DE	NDE	
28	13	79.6	NU322C3	6318C3	

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

Motor Options:
Product Family:Quarry
Mounting:Footed,Shaft:T Shaft

Customer	
Customer PO	
Sales Order	
Project #	

Tag:

All characteristics are average expected values.

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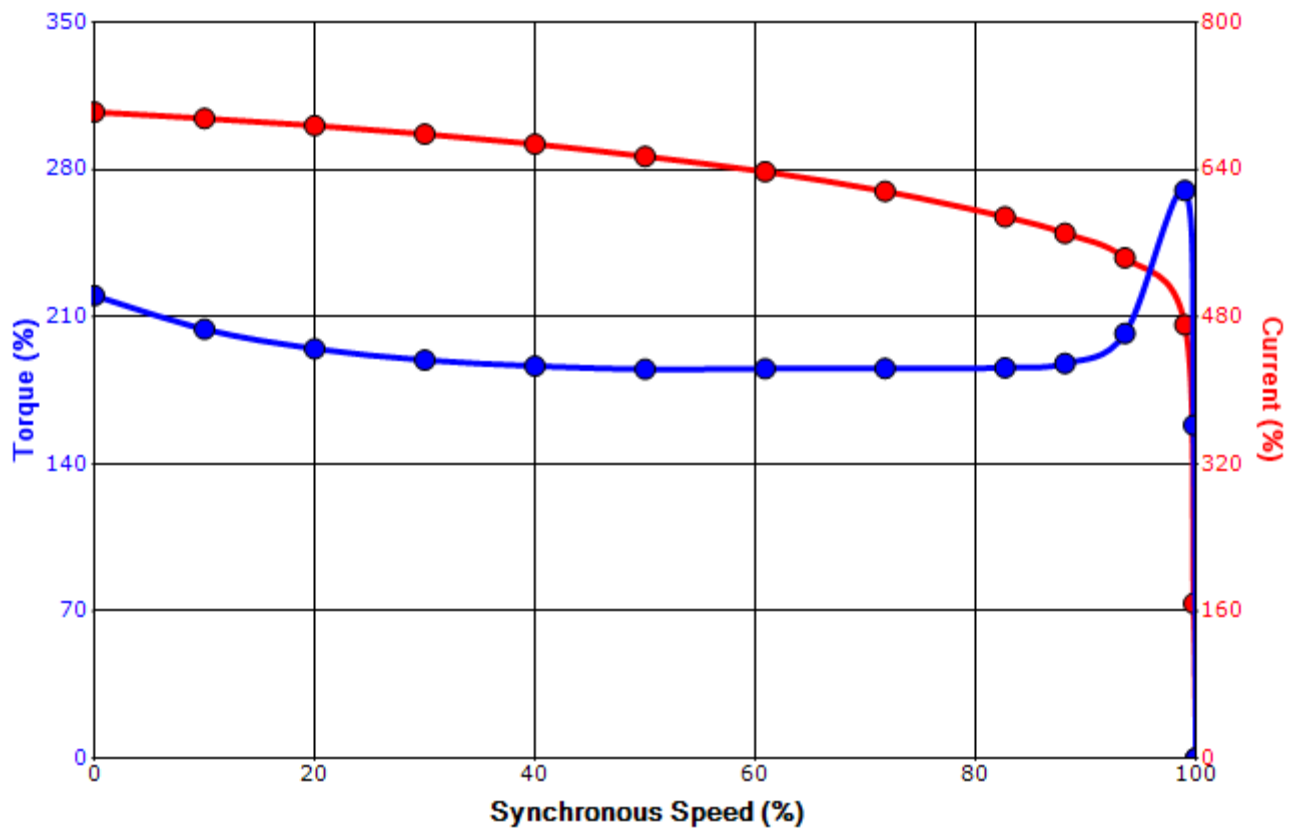
Engineering	SSuryani	Doc. Written By	D. Suarez	Doc.# / Rev	MPCF-1119 / 0
Engr. Date	7/22/2021	Doc. Approved By	M. Campbell	Doc. Issued	6/8/2011

SPEED TORQUE/CURRENT CURVE

Model: 2504QDSB41A-R

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
250	186	4	1785	S449T	460	60	3	295
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEFC	55	F	1.15	CONT	96.2	A	H	40 C
Locked Rotor Amps	Rotor wk ² Inertia (lb-ft ²)	Torque						Break Down (%)
		Full Load (lb-ft)	Locked Rotor (%)	Pull Up (%)				
2071	128.84	736	220	185			270	

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 Diagrams
6 Leads

Across the Line Starting / Run - Delta:



Alternate Starting Connection - Wye:



Switch L1 and L2 to reverse rotation

Issued Date:	7/23/2021	Transmit #:	
Issued By:	dschoeck	Issued Rev:	

SPARE PARTS LIST*

Model: 2504QDSB41A-R

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
250	186	4	1785	S449T	460	60	3	295
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEFC	55	F	1.15	CONT	96.2	A	H	40 C

Bearings DE	NU322C3 / 110RU03M3OX
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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