

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
505US	24.9	20.9	49.7	12.50	1.5	5.6	4.8	17.3	24.7	28.0	5.2	3.00	27.7	20.5	12.5	9.5	23.3	14.2
505UZ	24.9	20.9	56.5	12.50	1.5	5.6	4.8	17.3	24.7	28.0	5.2	3.00	27.7	20.5	12.5	9.5	23.3	14.2

FRAME SIZE	MOUNTING				SHAFT EXTENSION			KEY SEAT			BEARINGS		MAXIMUM WEIGHT
	E	2F	H	BA	N-W	V	U	R	S	ES	LS	OS	
505US	10.00	18.00	0.94	8.5	4.75	4.50	2.875	2.450	0.750	3.00	6318C3	6318C3	4089 lbs.
505UZ	10.00	18.00	0.94	8.5	11.62	11.38	3.875	3.309	1.000	10.00	NU322C3	6318C3	4089 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 10.00 FOR UZ AND S x S x 3.00 FOR US (MOTOR SUPPLIED WITH KEY)
4. MOTOR WEIGHT SHOWN IS MAXIMUM HORSEPOWER IN FRAME
5. STANDARD PRODUCTS 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 EQP III, EPACT, & HIGH EFFICIENCY QUARRY DUTY

COMMENTS: \_\_\_\_\_

PER: \_\_\_\_\_ DATE: \_\_\_\_\_

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

- 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: 2504QDAC41-R

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
250	186	4	1790	505UZ	575	60	3	226
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEFC	56	F	1.15	CONT	96.2	A		40 C

Load	HP	kW	Amperes	Efficiency (%)	Power Factor (%)
Full Load	250.00	186.4	226	96.0	86.1
¾ Load	187.50	139.8	176	95.2	83.5
½ Load	125.00	93.2	131	93.3	76.4
¼ Load	62.50	46.6	94	87.5	56.7
No Load			64.3		5.3
Locked Rotor			1543		35.7

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)	
734	265	165	270	110.37

Safe Stall Time(s)		Sound Pressure dB(A) @ 1M	Bearings*		Approx. Motor Weight (lbs)
Cold	Hot		DE	NDE	
21	7		NU322C3	6318C3	

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

**Motor Options:**  
Product Family:Quarry  
Mounting:Footed,Shaft:UZ Shaft  
Motor Specification:Quarry Duty

Customer	
Customer PO	
Sales Order	
Project #	

Tag:

All characteristics are average expected values.

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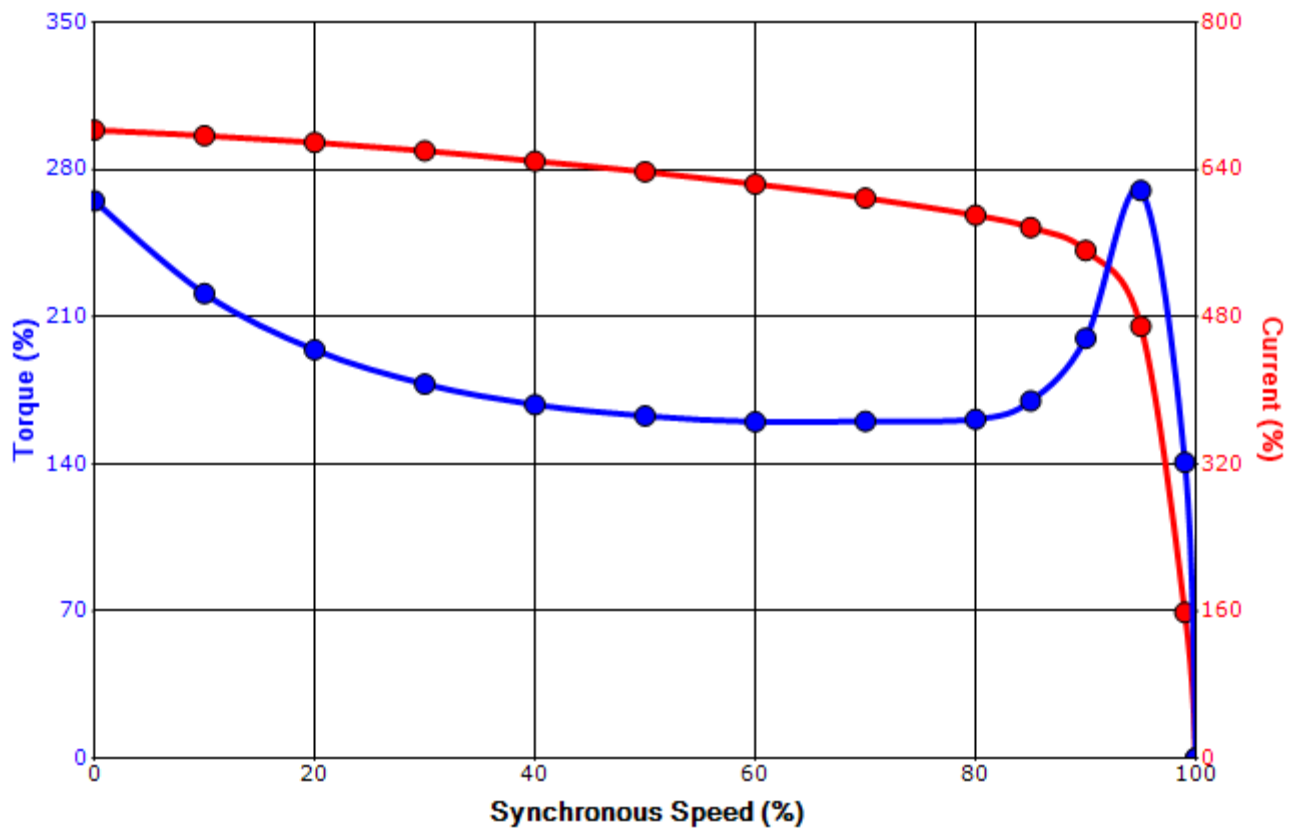
Engineering	zxie	Doc. Written By	D. Suarez	Doc.# / Rev	MPCF-1119 / 0
Engr. Date	1/13/2022	Doc. Approved By	M. Campbell	Doc. Issued	6/8/2011

**SPEED TORQUE/CURRENT CURVE**

Model: 2504QDAC41-R

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
250	186	4	1790	505UZ	575	60	3	226
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEFC	56	F	1.15	CONT	96.2	A		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 (%)				
1543	110.37	734	265	165			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	zxie	Doc. Written By	D. Suarez	Doc.# / Rev	MPCF-1121 / 0
Engr. Date	1/13/2022	Doc. Approved By	M. Campbell	Doc. Issued	6/8/2011

**Motor Connection Diagrams**  
6 Leads

Across the Line Starting / Run - Delta:



Alternate Starting Connection - Wye:



Switch L1 and L2 to reverse rotation