

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

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TOSHIBA INTERNATIONAL CORPORATION

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

XT SERIES

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Issued Date	9/24/2019	Transmit #	
Issued By	dschoeck	Issued Rev	

TYPICAL MOTOR PERFORMANCE DATA

Model: 2504QDAB41-R

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
250	186	4	1790	505UZ	460	60	3	288
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEFC	54	F	1.15	CONT	96.2	A	H	40 C

Load	HP	kW	Amperes	Efficiency (%)	Power Factor (%)
Full Load	250	186.4	287.6	96.1	84.7
¾ Load	187.50	139.8	226.6	95.2	81.4
½ Load	125.00	93.2	171.7	93.2	73.1
¼ Load	62.50	46.6	128.5	87.3	52.2
No Load			91.5		4.8
Locked Rotor			2056.5		37.2

Torque				Rotor wk ² Inertia (lb-ft ²)
Full Load (lb-ft)	Locked Rotor (% FLT)	Pull Up (% FLT)	Break Down (% FLT)	
734	285	215	285	110.37

Safe Stall Time(s)		Sound Pressure dB(A) @ 1M	Bearings*		Approx. Motor Weight (lbs)
Cold	Hot		DE	NDE	
20	8		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.

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

Engineering	zxie	Doc. Written By	D. Suarez	Doc.# / Rev	MPCF-1119 / 1
Engr. Date	8/6/2019	Doc. Approved By	M. Campbell	Doc. Issued	9/20/2019



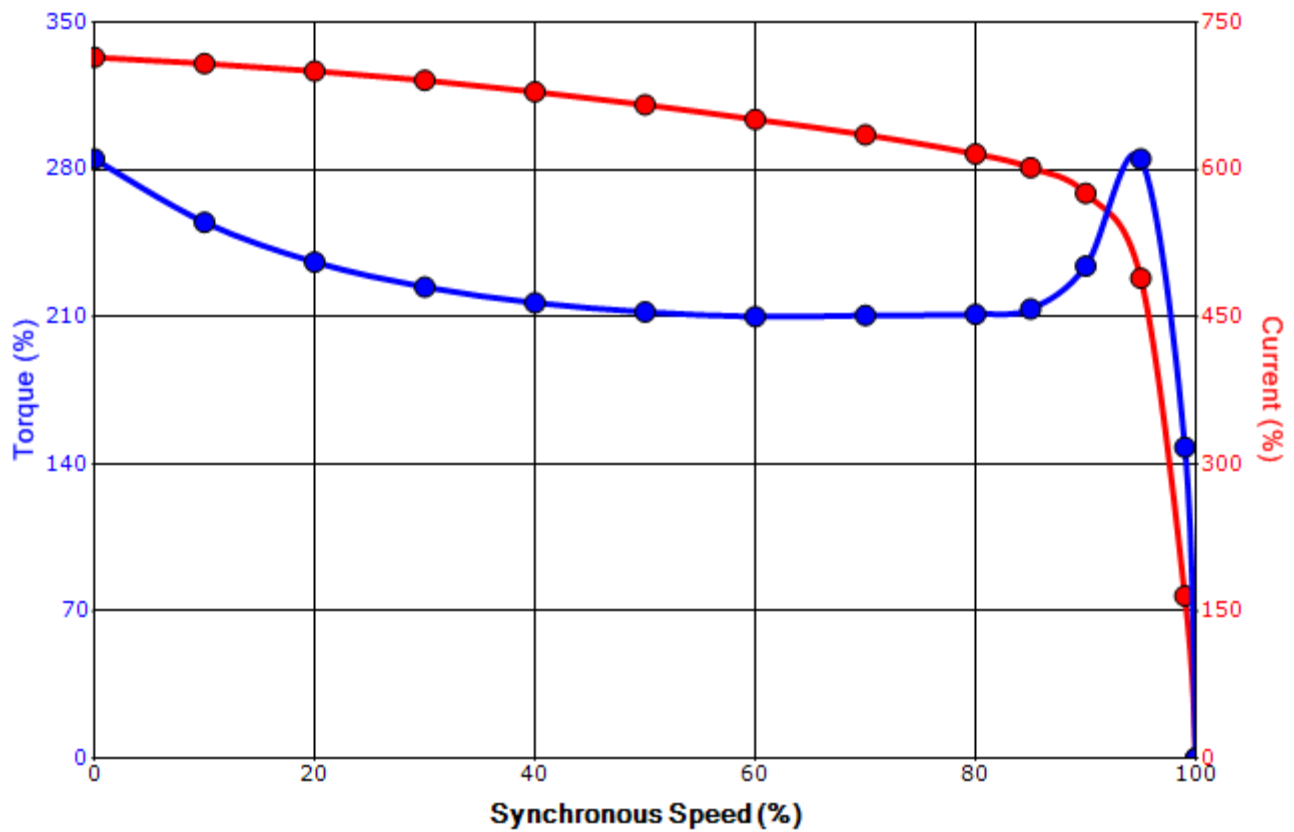
Issued Date	9/24/2019	Transmit #	
Issued By	dschoeck	Issued Rev	

SPEED TORQUE/CURRENT CURVE

Model: 2504QDAB41-R

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
250	186	4	1790	505UZ	460	60	3	288
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEFC	54	F	1.15	CONT	96.2	A	H	40 C
Locked Rotor Amps	Rotor wk ² Inertia (lb-ft ²)	Torque				Pull Up (%)	Break Down (%)	
		Full Load (lb-ft)	Locked Rotor (%)					
2056.5	110.37	734	285		215	285		

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.

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

Engineering	zxie	Doc. Written By	D. Suarez	Doc.# / Rev	MPCF-1121/1
Engr. Date	8/6/2019	Doc. Approved By	M. Campbell	Doc. Issued	9/20/2019

Motor Connection Diagram

12 Leads

Single Voltage



Switch L1 and L2 to reverse rotation