

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
5010US	24.8	39.8	66.3	12.50	2.6	6.3	6.7	24.8	26.2	29.5	5.1	4.00	29.2	22.0	12.5	9.3	23.4	14.2
5010UZ	24.8	39.8	71.7	12.50	2.6	6.3	6.7	24.8	26.2	29.5	5.1	4.00	29.2	22.0	12.5	9.3	23.4	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						
5010US	10.00	32.00	1.2	8.50	6.25	6.19	3.625	3.134	0.875	5.00	6320C3	6320C3			4600 lbs.			
5010UZ	10.00	32.00	1.2	8.50	11.62	11.38	4.375	3.817	1.000	10.00	NU324C3	6320C3			4650 lbs.			

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

P.O. NO.: _____ HP: _____ VOLTAGE: _____ RPM(SYN.): _____ Hz: _____
 FRAME SIZE: _____ PRODUCT TYPE: IEFEC EGP III, EPACT, & HIGH EFFICIENCY QUARRY DUTY
 COMMENTS: _____

PER: _____ DATE: _____

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 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

- NOTES:
- DIMENSION V REPRESENTS LENGTH OF STRAIGHT PART OF SHAFT
 - MAIN CONDUIT BOX MAY BE ROTATED IN 90° INCREMENTS
 - KEY DIMENSIONS EQUAL S x S x 10.00 FOR UZ AND S x S x 5.00 FOR US (MOTOR SUPPLIED WITH KEY)
 - MOTOR WEIGHT SHOWN IS MAXIMUM HORSEPOWER IN FRAME
 - STANDARD PRODUCT USE BI-DIRECTIONAL FAN, OPPOSITE ROTATION AVAILABLE ONLY BY CONNECTION CHANGE

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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: 4504QDAB41-R

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
450	336	4	1785	5010UZ	460	60	3	573
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	J	40 C

Load	HP	kW	Amperes	Efficiency (%)	Power Factor (%)
Full Load	450	335.6	572.7	96.3	76.4
¾ Load	337.50	251.7	458.8	95.5	72.1
½ Load	225.00	167.8	357.6	93.8	62.8
¼ Load	112.50	83.9	242.5	88.7	49.0
No Load			268.2		3.2
Locked Rotor			4159.1		32.7

Torque				Rotor wk ² Inertia (lb-ft ²)
Full Load (lb-ft)	Locked Rotor (% FLT)	Pull Up (% FLT)	Break Down (% FLT)	
1324	245	170	345	219.19

Safe Stall Time(s)		Sound Pressure dB(A) @ 1M	Bearings*		Approx. Motor Weight (lbs)
Cold	Hot		DE	NDE	
9.3	4.5	-	NU324C3	6320C3	

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

Motor Options:
 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	bmmamen	Doc. Written By	D. Suarez	Doc.# / Rev	MPCF-1119 / 1
Engr. Date	8/21/2017	Doc. Approved By	M. Campbell	Doc. Issued	9/20/2019



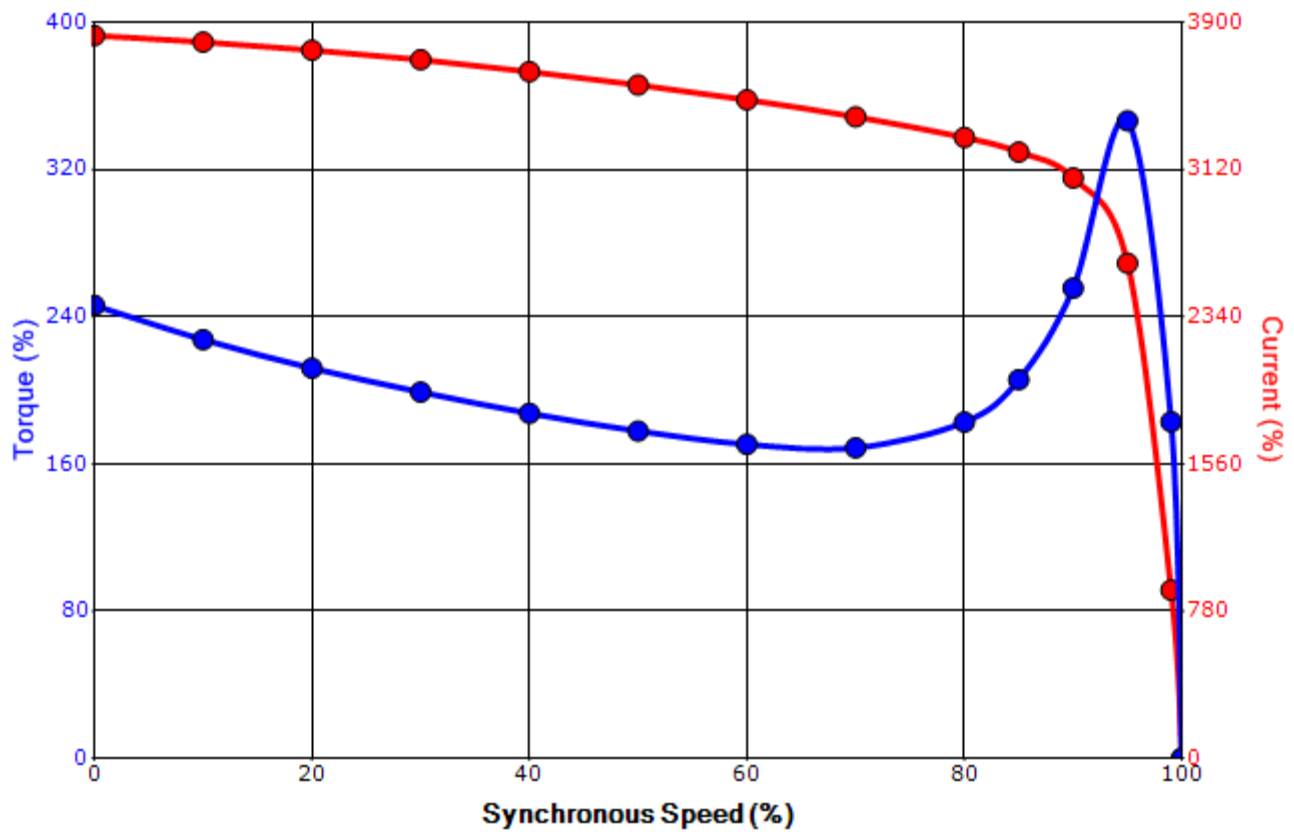
Issued Date	9/24/2019	Transmit #	
Issued By	dschoeck	Issued Rev	

SPEED TORQUE/CURRENT CURVE

Model: 4504QDAB41-R

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
450	336	4	1785	5010UZ	460	60	3	573
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	J	40 C
Locked Rotor Amps	Rotor wk ² Inertia (lb-ft ²)	Torque				Pull Up (%)	Break Down (%)	
		Full Load (lb-ft)	Locked Rotor (%)					
4159.1	219.19	1324	245		170	345		

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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Engineering	bmammen	Doc. Written By	D. Suarez	Doc.# / Rev	MPCF-1121/1
Engr. Date	8/21/2017	Doc. Approved By	M. Campbell	Doc. Issued	9/20/2019

Motor Connection Diagram

12 Leads

Single Voltage



Switch L1 and L2 to reverse rotation