

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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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: 2504QDAC41-R

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
250	186	4	1785	505UZ	575	60	3	228
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEFC	56	F	1.15	CONT	95.8	B	G	40 C

Load	HP	kW	Amperes	Efficiency (%)	Power Factor (%)
Full Load	250	186.4	227.7	95.9	85.8
¾ Load	187.50	139.8	177.6	95.0	83.2
½ Load	125.00	93.2	132.0	93.2	76.1
¼ Load	62.50	46.6	94.9	87.4	56.5
No Load			65.6		6.0
Locked Rotor			1460		37.4

Torque				Rotor wk ² Inertia (lb-ft ²)
Full Load (lb-ft)	Locked Rotor (% FLT)	Pull Up (% FLT)	Break Down (% FLT)	
736	230	135	240	110.37

Safe Stall Time(s)		Sound Pressure dB(A) @ 1M	Bearings*		Approx. Motor Weight (lbs)
Cold	Hot		DE	NDE	
16.9	5.5		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	bmmamen	Doc. Written By	D. Suarez	Doc.# / Rev	MPCF-1119 / 1
Engr. Date	11/6/2017	Doc. Approved By	M. Campbell	Doc. Issued	9/20/2019



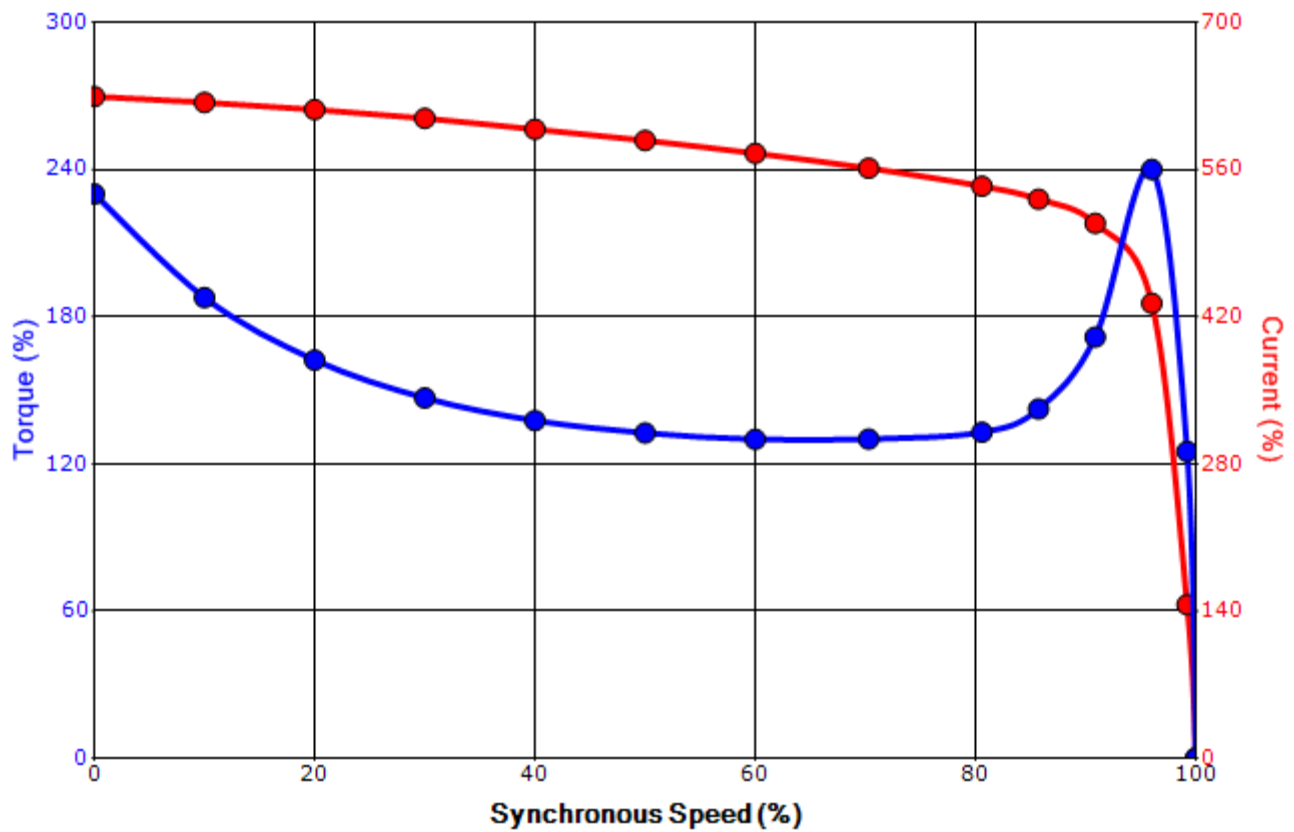
Issued Date	9/24/2019	Transmit #	
Issued By	dschoeck	Issued Rev	

SPEED TORQUE/CURRENT CURVE

Model: 2504QDAC41-R

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
250	186	4	1785	505UZ	575	60	3	228
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEFC	56	F	1.15	CONT	95.8	B	G	40 C
Locked Rotor Amps	Rotor wk ² Inertia (lb-ft ²)	Torque				Pull Up (%)	Break Down (%)	
		Full Load (lb-ft)	Locked Rotor (%)					
1460	110.37	736	230		135	240		

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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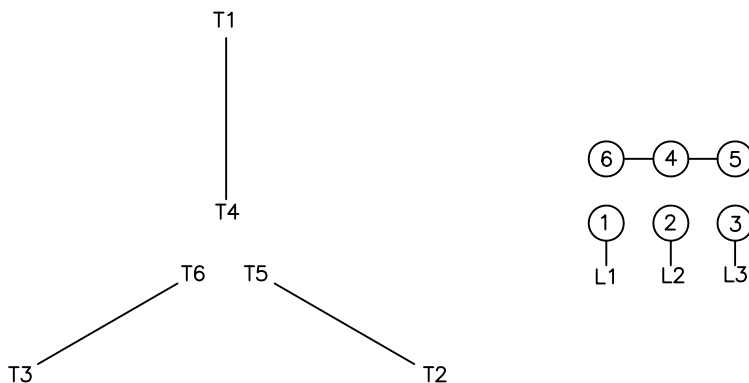
Engineering	bmammen	Doc. Written By	D. Suarez	Doc.# / Rev	MPCF-1121/1
Engr. Date	11/6/2017	Doc. Approved By	M. Campbell	Doc. Issued	9/20/2019

Motor Connection Diagrams
6 Leads

Across the Line Starting / Run - Delta:



Alternate Starting Connection - Wye:



Switch L1 and L2 to reverse rotation