

UNITS: INCHES

FRAME SIZE	MOTOR DIMENSIONS												
	A	B	C	D	G	J	K	M	O	P	T	Z	
S586/7LQ	29.0	34.5	63.4	14.5	1.58	5.7	11.3	22.9	30.6	32.7	9.3	39.2	
S586/7L	29.0	34.5	63.4	14.5	1.58	5.7	11.3	22.9	30.6	32.7	9.3	39.2	
S586/7LS	29.0	34.5	60.0	14.5	1.58	5.7	11.3	22.9	30.6	32.7	9.3	39.2	

FRAME SIZE	CONDUIT BOX						
	AA[NPT]	AB	AC	AE	AF	XL	XN
S586/7LQ/L/LS	3.00	36.2	27.5	26.1	1.97	23.5	18.9

FRAME SIZE	MOUNTING				SHAFT EXTENSION			KEY SEAT			BEARINGS			MAXIMUM WEIGHT
	E	2F	H	BA	N-W	V	U	R	S	ES	LS ROLLER	LS BALL	OS BALL	
S586/7LQ	11.5	22.00/25.00	1.19	10.0	11.625	11.56	4.375	3.817	1.00	10.00	NU324C3	6324C3	6320C3	6000 lbs.
S586/7L	11.5	22.00/25.00	1.19	10.0	11.625	11.56	3.875	3.309	1.00	10.00	NU322C3	6322C3	6320C3	6000 lbs.
S586/7LS	11.5	22.00/25.00	1.19	10.0	8.25	8.19	3.875	3.309	1.00	6.30	NU322C3	6322C3	6320C3	6000 lbs.

- NOTES:
- DIMENSION V REPRESENTS LENGTH OF STRAIGHT PART OF SHAFT.
  - MAIN CONDUIT BOX MAY BE ROTATED IN 90° INCREMENTS.
  - "LQ" KEY DIMENSIONS EQUAL S x S x 10.00  
"L" KEY DIMENSIONS EQUAL S x S x 10.00  
"LS" KEY DIMENSIONS EQUAL S x S x 6.30  
(MOTOR SUPPLIED WITH KEY)
  - MOTOR WEIGHT SHOWN IS MAXIMUM HORSEPOWER IN FRAME.
  - THIS DIMENSION EQUALS 2F FOR 587 MOUNTING.
  - STANDARD PRODUCT USE BI-DIRECTIONAL FAN. OPPOSITE ROTATION AVAILABLE ONLY BY CONNECTION CHANGE.
  - FRAME GROUND BOLT STANDARD.

CUSTOMER: \_\_\_\_\_ MOTOR MODEL NO.: \_\_\_\_\_

P.O. NO.: \_\_\_\_\_ HP: \_\_\_\_\_ VOLTAGE: \_\_\_\_\_ RPM(SYN.): \_\_\_\_\_ Hz: \_\_\_\_\_

FRAME SIZE: \_\_\_\_\_ PRODUCT TYPE: TEFC PREMIUM EFFICIENCY QUARRY DUTY

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

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

TAG NO's.:  
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<input checked="" type="checkbox"/>	STANDARD (NO AUX. BOXES)
<input type="checkbox"/>	RTD AUX. BOX
<input type="checkbox"/>	SPACE HEATER AUX. BOX
<input type="checkbox"/>	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: 4504QDSC41A-R

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
450	336	4	1790	S587LQ	575	60	3	412
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		40 C

Load	HP	kW	Amperes	Efficiency (%)	Power Factor (%)
Full Load	450.00	335.6	412	96.1	85.1
¾ Load	337.50	251.7	322	95.4	82.2
½ Load	225.00	167.8	240	93.7	74.9
¼ Load	112.50	83.9	173	88.6	54.8
No Load			139.1		3.5
Locked Rotor			2865		27.8

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)	
1320	205	175	280	235.59

Safe Stall Time(s)		Sound Pressure dB(A) @ 1M	Bearings*		Approx. Motor Weight (lbs)
Cold	Hot		DE	NDE	
16	8	85	NU324C3	6320C3	

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

**Motor Options:**  
Product Family:Quarry  
Mounting:Footed,Shaft:"LQ" 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.**

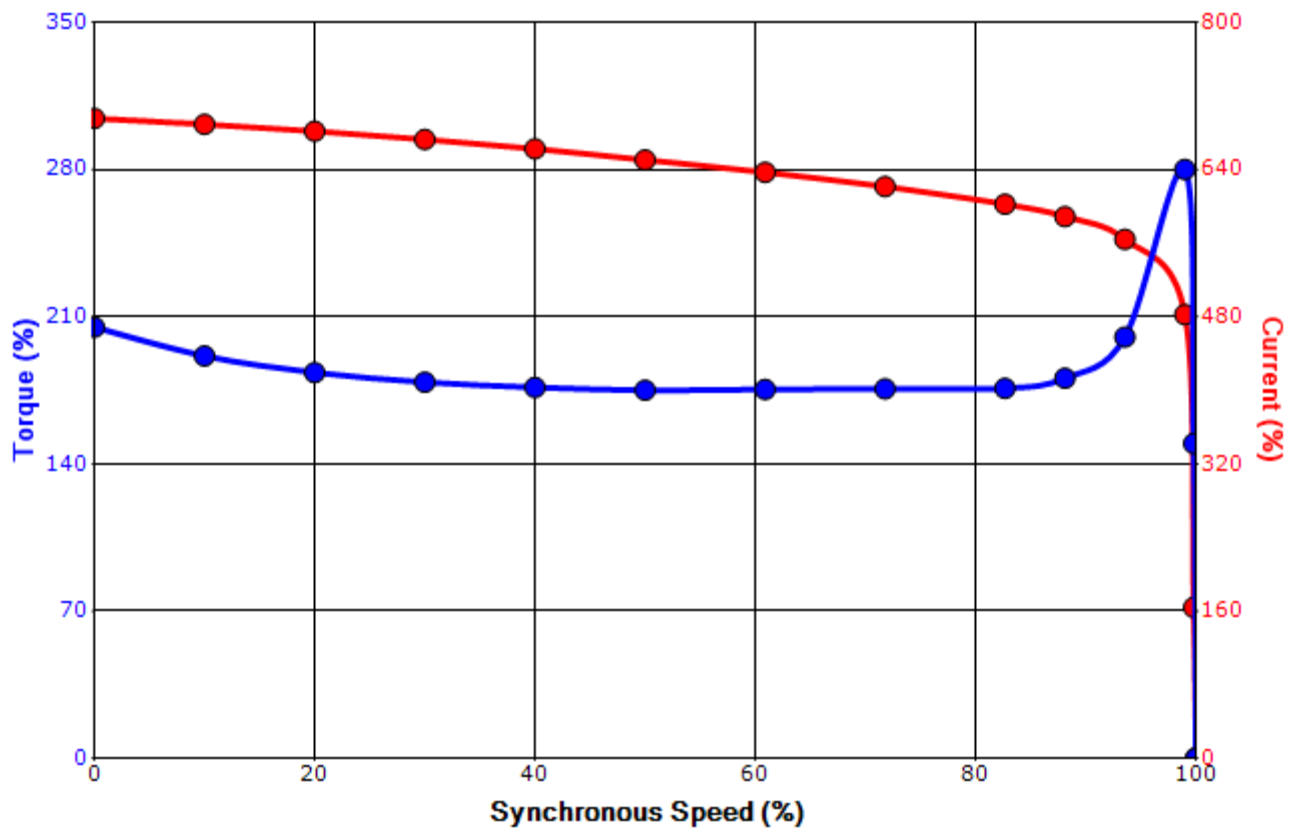
Engineering	SSuryani	Doc. Written By	D. Suarez	Doc.# / Rev	MPCF-1119 / 0
Engr. Date	12/17/2019	Doc. Approved By	M. Campbell	Doc. Issued	6/8/2011

**SPEED TORQUE/CURRENT CURVE**

Model: 4504QDSC41A-R

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
450	336	4	1790	S587LQ	575	60	3	412
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		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 (%)				
2865	235.59	1320	205	175			280	

**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.

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

Engineering	SSuryani	Doc. Written By	D. Suarez	Doc.# / Rev	MPCF-1121 / 0
Engr. Date	12/17/2019	Doc. Approved By	M. Campbell	Doc. Issued	6/8/2011

# Motor Connection Diagram

## 12 Leads

### Single Voltage



Switch L1 and L2 to reverse rotation