

UNITS: INCHES

FRAME SIZE	MOTOR DIMENSIONS												
	A	B	C	D	G	J	K	M	O	P	T	Z	
B587/8/9/10LL	29.0	45.0	75.2	14.5	1.78	5.7	20.4	28.8	30.6	32.7	9.3	39.2	
B587/8/9/10LQ	29.0	45.0	75.2	14.5	1.78	5.7	20.4	28.8	30.6	32.7	9.3	39.2	
B587/8/9/10LS	29.0	45.0	71.8	14.5	1.78	5.7	20.4	28.8	30.6	32.7	9.3	39.2	

FRAME SIZE	CONDUIT BOX							
	AA[NPT]	AB	AC	AE	AF	XL	XN	
B587/8/9/10LL/LQ/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	
B587/8/9/10LL	11.5	25.0/28.0/32.0/36.0	1.19	10.0	11.625	11.56	5.25	4.550	1.00	10.00	NU328C3	6328C3	6320C3	8000 lbs.
B587/8/9/10LQ	11.5	25.0/28.0/32.0/36.0	1.19	10.0	11.625	11.56	4.375	3.817	1.00	10.00	NU324C3	6324C3	6320C3	8000 lbs.
B587/8/9/10LS	11.5	25.0/28.0/32.0/36.0	1.19	10.0	8.25	8.19	3.875	3.309	1.00	6.30	NU322C3	6322C3	6320C3	8000 lbs.

- NOTES:
- DIMENSION V REPRESENTS LENGTH OF STRAIGHT PART OF SHAFT.
  - MAIN CONDUIT BOX MAY BE ROTATED IN 90° INCREMENTS.
  - "LL" KEY DIMENSIONS EQUAL S x S x 10.00  
"LQ" 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 587/8/9/10 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: \_\_\_\_\_

- STANDARD (NO AUX. BOXES)
- RTD AUX. BOX
- SPACE HEATER AUX. BOX
- BEARING RTD's

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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

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**TYPICAL MOTOR PERFORMANCE DATA**

Model: 4506QDSC41A-R

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
450	336	6	1190	B587LL	575	60	3	450
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEFC	54	F	1.15	CONT	96.2	-		40 C

Load	HP	kW	Amperes	Efficiency (%)	Power Factor (%)
Full Load	450.00	335.6	449	96.4	77.7
¾ Load	337.50	251.7	356	96.0	73.9
½ Load	225.00	167.8	272	94.9	65.1
¼ Load	112.50	83.9	208	91.3	44.2
No Load			199.7		2.3
Locked Rotor			3041		26.5

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)	
1986	205	175	305	424.25

Safe Stall Time(s)		Sound Pressure dB(A) @ 1M	Bearings*		Approx. Motor Weight (lbs)
Cold	Hot		DE	NDE	
24	13	85	NU328C3	6320C3	

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

**Motor Options:**  
Mounting:Footed,Shaft:LL IEC Frame  
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.**

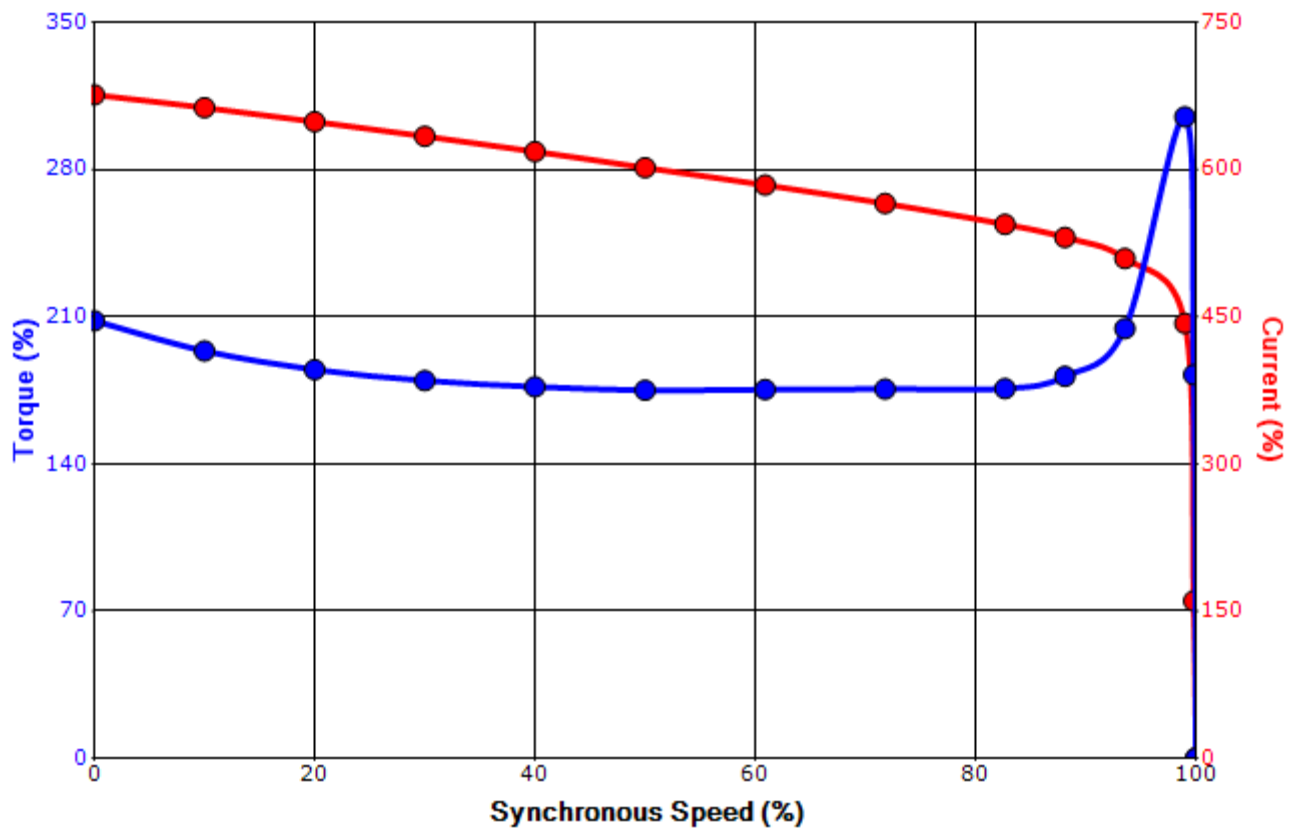
Engineering	SSuryani	Doc. Written By	D. Suarez	Doc.# / Rev	MPCF-1119 / 0
Engr. Date	6/25/2021	Doc. Approved By	M. Campbell	Doc. Issued	6/8/2011

**SPEED TORQUE/CURRENT CURVE**

Model: 4506QDSC41A-R

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
450	336	6	1190	B587LL	575	60	3	450
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEFC	54	F	1.15	CONT	96.2	-		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 (%)				
3041	424.25	1986	205	175			305	

**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	SSuryani	Doc. Written By	D. Suarez	Doc.# / Rev	MPCF-1121 / 0
Engr. Date	6/25/2021	Doc. Approved By	M. Campbell	Doc. Issued	6/8/2011

### Motor Connection Diagram 3 Leads - Delta Connection



Switch L1 and L2 to reverse rotation

Each lead may consist of more than one cable.  
If multiple cables represent a single lead, each one  
of them will be labeled with the appropriate lead number.