

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
5810USS	28.0	42.2	72.5	14.50	1.6	6.3	9.3	27.6	30.5	31.6	5.1	3.00	31.1	23.8	14.5	9.5	23.4	14.2
5810US	28.0	42.2	72.3	14.50	1.6	6.3	9.3	27.6	30.5	31.6	5.1	3.00	31.1	23.8	14.5	9.5	23.4	14.2
5810UZ	28.0	42.2	77.6	14.50	1.6	6.3	9.3	27.6	30.5	31.6	5.1	3.00	31.1	23.8	14.5	9.5	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	
5810USS	11.50	36.00/32.00	1.2	10.00	6.75	6.50	2.375	2.021	0.625	5.00	6313C3	NU313C3	7800 lbs.
5810US	11.50	36.00/32.00	1.2	10.00	6.25	6.19	3.625	3.134	0.875	5.00	6320C3	6320C3	7800 lbs.
5810UZ	11.50	36.00/32.00	1.2	10.00	11.62	11.38	5.250	4.550	1.250	10.00	NU328C3	6320C3	7800 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 5.00 FOR USS & US (MOTOR SUPPLIED WITH KEY)
4. MOTOR WEIGHT SHOWN IS MAXIMUM HORSEPOWER IN FRAME
5. THIS DIMENSION EQUALS 2F FOR 5809USS/US/UZ MOUNTING
6. STANDARD PRODUCT USE BI-DIRECTIONAL FAN. OPPOSITE ROTATION AVAILABLE ONLY BY CONNECTION CHANGE

CUSTOMER: _____ MOTOR MODEL NO.: _____ TAG NO's.: _____
 P.O. NO.: _____ HP: _____ VOLTAGE: _____ RPM(SYN.): _____ Hz: _____
 FRAME SIZE: _____ PRODUCT TYPE: TEFC EQP III, EPACT, & HIGH EFFICIENCY QUARRY DUTY
 COMMENTS: _____

 PER: _____ DATE: _____

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

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TYPICAL MOTOR PERFORMANCE DATA

Model: F4508FLF4BMQ

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
450	336	8	895	5810UZ	460	60	3	617
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEFC	54	F	1.15	CONT	95.4	-		40 C

Load	HP	kW	Amperes	Efficiency (%)	Power Factor (%)
Full Load	450.00	335.6	616	95.5	71.5
¾ Load	337.50	251.7	496	94.9	67.1
½ Load	225.00	167.8	391	93.4	57.6
¼ Load	112.50	83.9	316	88.5	37.6
No Load			296.0		2.8
Locked Rotor			4004		22.5

Torque				Rotor wk ² Inertia (lb-ft ²)
Full Load (lb-ft)	Locked Rotor (% FLT)	Pull Up (% FLT)	Break Down (% FLT)	
2644	180	135	260	477.68

Safe Stall Time(s)		Sound Pressure dB(A) @ 1M	Bearings*		Approx. Motor Weight (lbs)
Cold	Hot		DE	NDE	
28	8	-	NU328C3	6320C3	6083

*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 / 0
Engr. Date	6/18/2021	Doc. Approved By	M. Campbell	Doc. Issued	6/8/2011

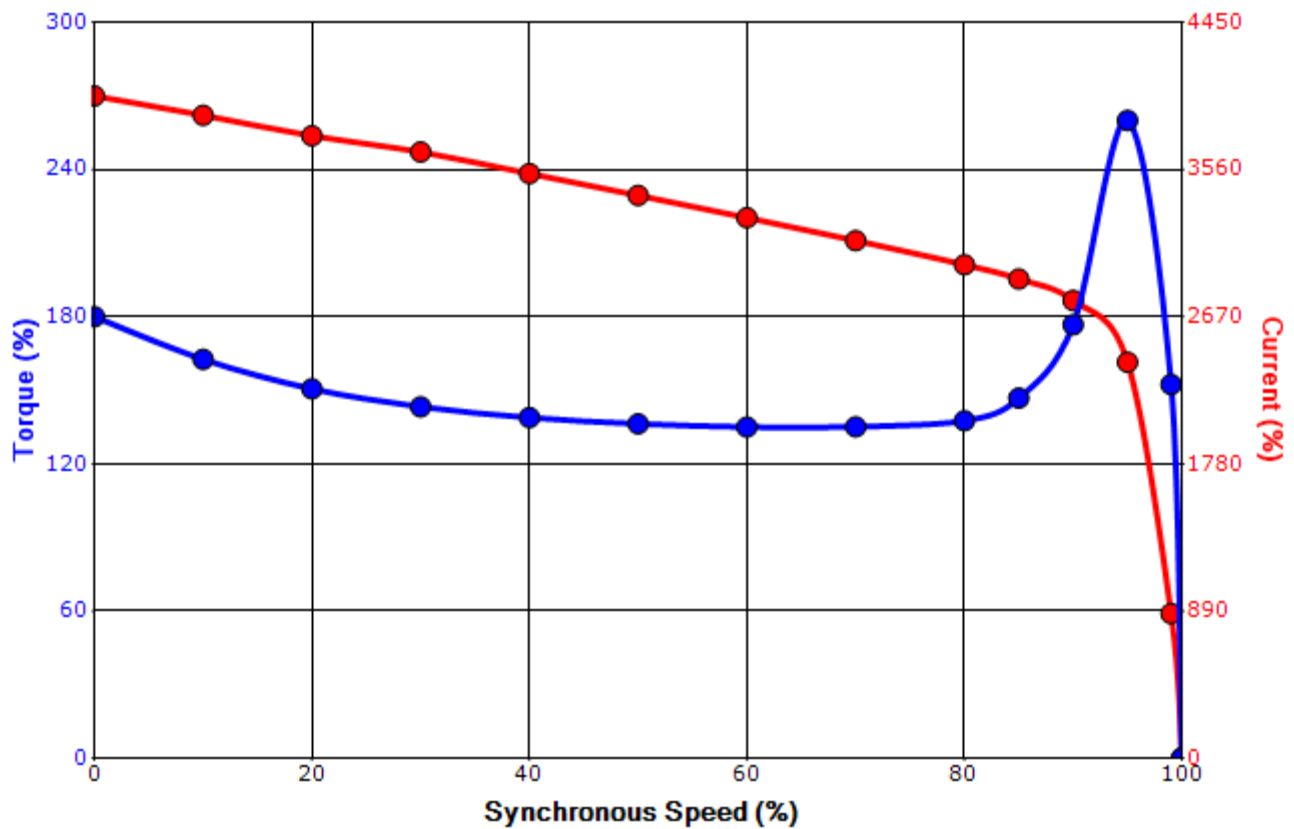
Issued Date	7/19/2021	Transmit #	
Issued By	dschoeck	Issued Rev	

SPEED TORQUE/CURRENT CURVE

Model: F4508FLF4BMQ

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
450	336	8	895	5810UZ	460	60	3	617
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEFC	54	F	1.15	CONT	95.4	-		40 C
Locked Rotor Amps	Rotor wk ² Inertia (lb-ft ²)	Torque						Break Down (%)
		Full Load (lb-ft)	Locked Rotor (%)	Pull Up (%)				
4004	477.68	2644	180	135			260	

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 / 0
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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.