

UNITS: INCHES

FRAME SIZE	MOTOR DIMENSIONS												CONDUIT BOX					
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
5810USS	28.0	42.2	72.5	14.50	1.6	6.3	9.3	27.6	30.5	31.6	5.1	4.00	31.1	23.8	14.5	9.3	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	4.00	31.1	23.8	14.5	9.3	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	4.00	31.1	23.8	14.5	9.3	23.4	14.2

FRAME SIZE	MOUNTING						SHAFT EXTENSION						KEY SEAT						BEARINGS	MAXIMUM WEIGHT
	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V		
5810USS	11.50	36.00/32.00	1.2	10.00	6.75	6.50	2.375	2.021	0.625	5.00	6.313C3	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	6.320C3	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:
- 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
 - THIS DIMENSION EQUALS 2F FOR 5809US/UZ MOUNTING
 - 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: IEFC EGP III, EPACT, & HIGH EFFICIENCY

COMMENTS: _____

PER: _____ DATE: _____

☒ 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

TOSHIBA

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

TOSHIBA INTERNATIONAL CORPORATION

XT SERIES

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TYPICAL MOTOR PERFORMANCE DATA

Model: F4506FLF4BMH

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
450	336	6	1190	5810UZ	460	60	3	533
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	533	95.7	82.6
¾ Load	337.50	251.7	412	95.3	80.4
½ Load	225.00	167.8	302	94.4	73.8
¼ Load	112.50	83.9	212	91.0	54.4
No Load			177.0		
Locked Rotor			3312		

Torque				Rotor wk² Inertia (lb-ft²)
Full Load (lb-ft)	Locked Rotor (% FLT)	Pull Up (% FLT)	Break Down (% FLT)	
1986	165	125	215	386.77

Safe Stall Time(s)		Sound Pressure dB(A) @ 1M	Bearings*		Approx. Motor Weight (lbs)
Cold	Hot		DE	NDE	
27	10	-	NU328C3	6320C3	6120

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

Motor Options:
Product Family:EQP Global SD
Mounting:Footed,Shaft:UZ Shaft

Customer	
Customer PO	
Sales Order	
Project #	

Tag:

All characteristics are average expected values.

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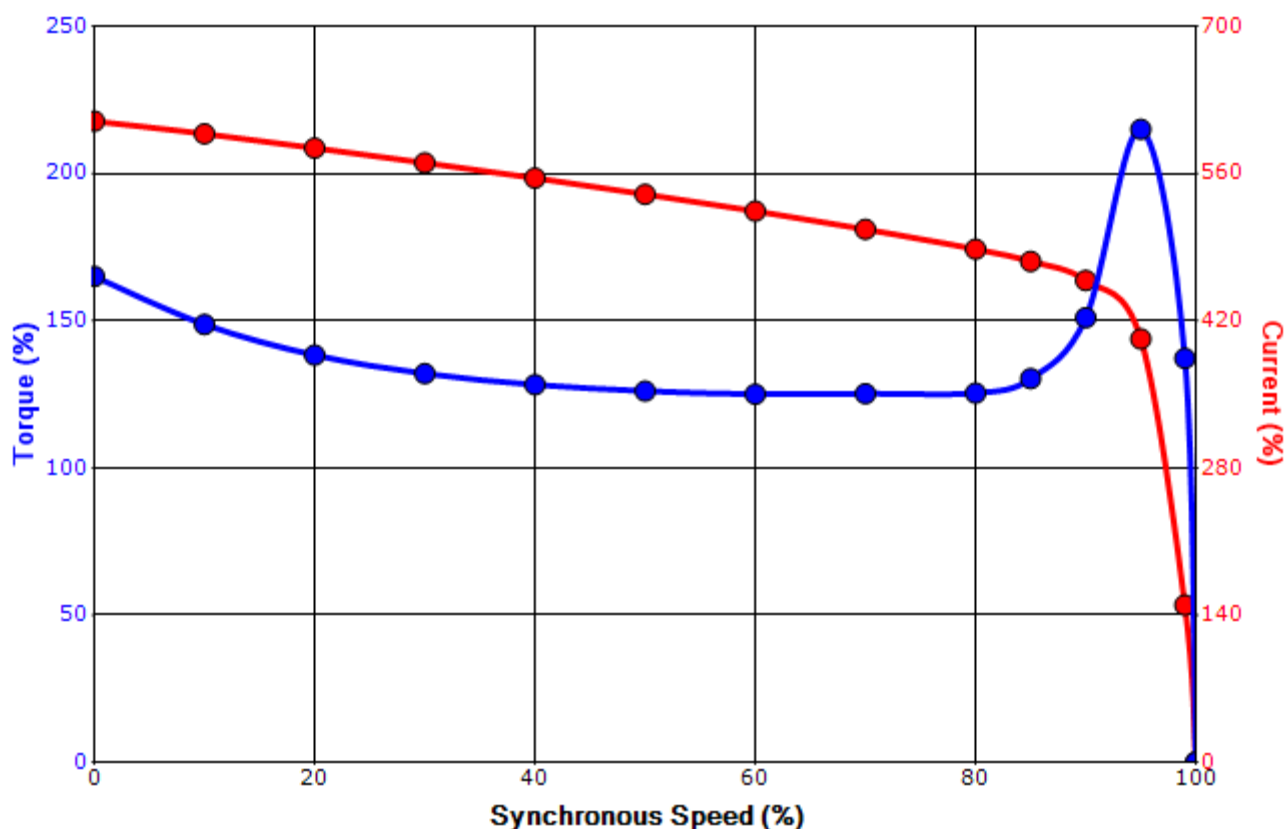
Engineering	zxie	Doc. Written By	D. Suarez	Doc.# / Rev	MPCF-1119 / 0
Engr. Date	6/18/2021	Doc. Approved By	M. Campbell	Doc. Issued	6/8/2011

SPEED TORQUE/CURRENT CURVE

Model: F4506FLF4BMH

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
450	336	6	1190	5810UZ	460	60	3	533
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						
		Full Load (lb-ft)	Locked Rotor (%)	Pull Up (%)		Break Down (%)		
3312	386.77	1986	165	125		215		

Design Values



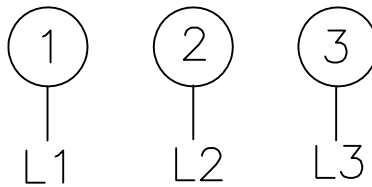
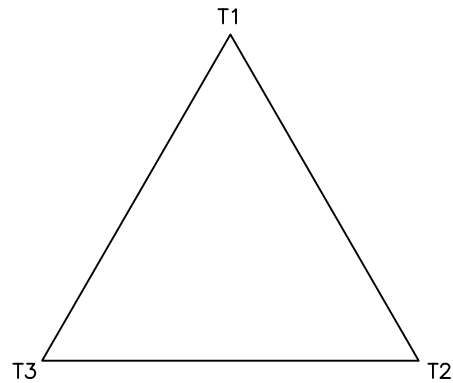
Customer			wk ² Load Inertia (lb-ft ²)	-
Customer PO			Load Type	-
Sales Order			Voltage (%)	100
Project #			Accel. Time	-

Tag:

All characteristics are average expected values.

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Engineering	zxie	Doc. Written By	D. Suarez	Doc.# / Rev	MPCF-1121 / 0
Engr. Date	6/18/2021	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.

SPARE PARTS LIST*

Model: F4506FLF4BMH

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
450	336	6	1190	5810UZ	460	60	3	533
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

Bearings DE	NU328C3 / 140RU03M3OX
Bearings NDE	6320C3 / 100BC03J3OX

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

Other than the grease used for regreasable bearings and the oil used for oil-lubricated bearings, Toshiba advises that there are no "use" parts. The only insurance spares that Toshiba suggests for these squirrel-cage induction motors are industry-standard and commercially available off-the-shelf bearings as noted above.

Motor components such as terminal boxes, fan covers and other machined parts are available on special request. In these cases, please advise our order entry department of the model and serial numbers found on the motor nameplate and a description of the needed components. With this information they will be able to furnish the current part number, price and availability.

Note: Our internal part numbers are subject to change without notice and are not published.

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-1125 / 0
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