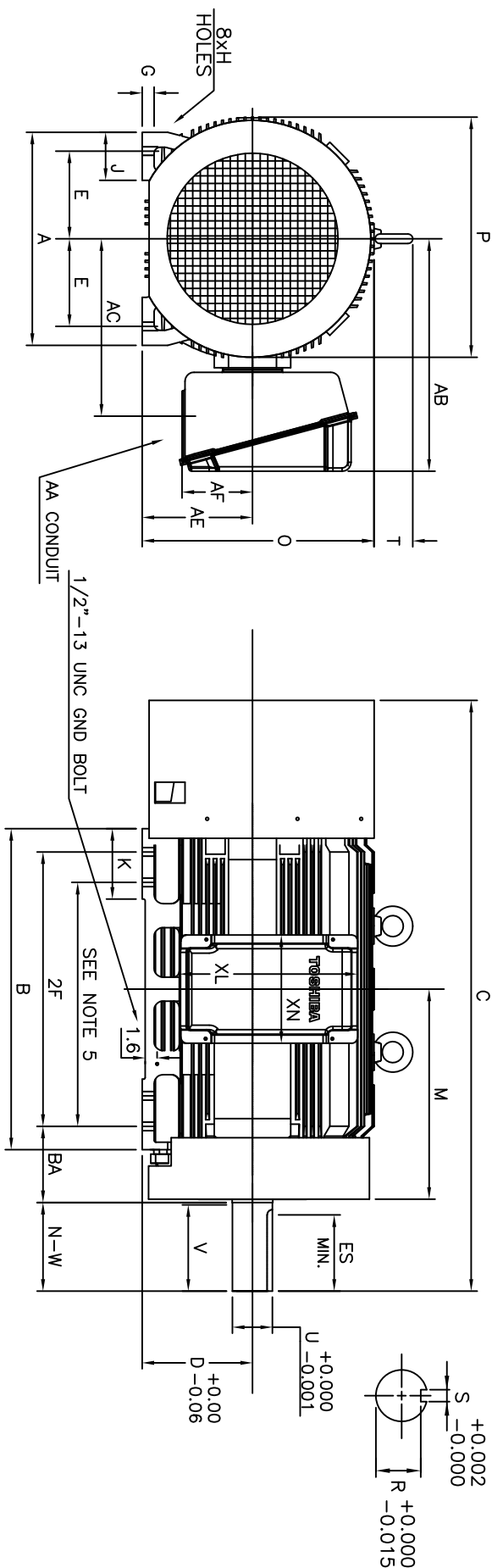
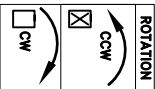




UNITS: INCHES

FRAME SIZE	MOTOR DIMENSIONS											CONDUIT BOX						
	A	B	C	D	G	J	K	M	O	P	T	MA[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	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	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:
- 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 USS & US (MOTOR SUPPLIED WITH KEY)
 - MOTOR WEIGHT SHOWN IS MAXIMUM HORSEPOWER IN FRAME
 - THIS DIMENSION EQUALS 2F FOR 5809USS/US/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: IIEFC EGP III, EPACT, & HIGH EFFICIENCY QUARRY DUTY

COMMENTS: _____

PER: _____ DATE: _____

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TOSHIBA

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

TOSHIBA INTERNATIONAL CORPORATION

☒ STANDARD (NO AUX. BOXES)

☐ RTD AUX. BOX

☐ SPACE HEATER AUX. BOX

☐ BEARING RTD's

XT SERIES

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www.toshiba.com/ind

TYPICAL MOTOR PERFORMANCE DATA

Model: F4506FLF4BMQ

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
450	336	6	1190	5810UZ	460	60	3	557
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEFC	54	F	1.15	CONT	95	-	G	40 C

Load	HP	kW	Amperes	Efficiency (%)	Power Factor (%)
Full Load	450	335.6	556.8	95.2	79.5
¾ Load	337.50	251.7	430.6	94.9	77.3
½ Load	225.00	167.8	316.0	93.9	71.0
¼ Load	112.50	83.9	222.1	90.5	52.4
No Load			184.2		3.6
Locked Rotor			3264.00		26.1

Torque				Rotor wk² Inertia (lb-ft²)
Full Load (lb-ft)	Locked Rotor (% FLT)	Pull Up (% FLT)	Break Down (% FLT)	
1989	165	125	255	386.77

Safe Stall Time(s)		Sound Pressure dB(A) @ 1M	Bearings*		Approx. Motor Weight (lbs)
Cold	Hot		DE	NDE	
19	9.4	-	NU328C3	6320C3	

*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.

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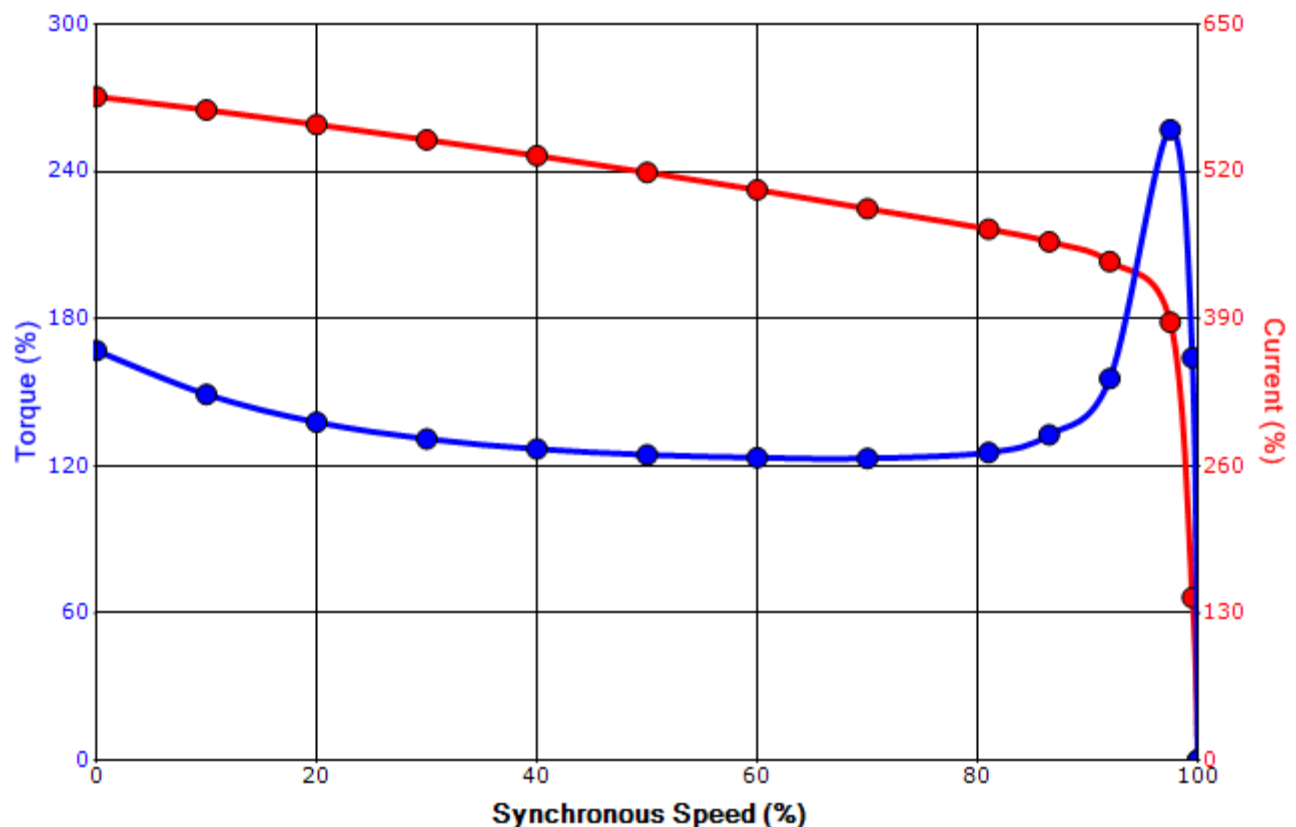
Engineering	jaustin	Doc. Written By	D. Suarez	Doc.# / Rev	MPCF-1119 / 0
Engr. Date	7/23/2014	Doc. Approved By	M. Campbell	Doc. Issued	6/8/2011

SPEED TORQUE/CURRENT CURVE

Model: F4506FLF4BMQ

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
450	336	6	1190	5810UZ	460	60	3	557
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEFC	54	F	1.15	CONT	95	-	G	40 C
Locked Rotor Amps	Rotor wk ² Inertia (lb-ft ²)	Torque						
		Full Load (lb-ft)	Locked Rotor (%)	Pull Up (%)		Break Down (%)		
3264.00	386.77	1989	165	125		255		

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.

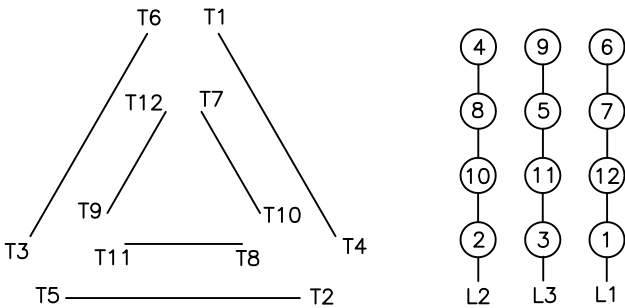
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Engineering	jaustin	Doc. Written By	D. Suarez	Doc.# / Rev	MPCF-1121 / 0
Engr. Date	7/23/2014	Doc. Approved By	M. Campbell	Doc. Issued	6/8/2011

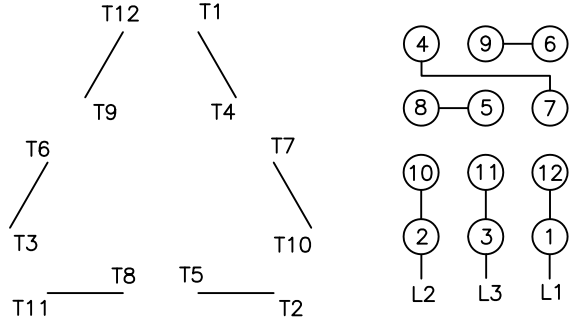
Motor Connection Diagrams
12 Leads

Across-the-Line Starting / Running Connections

Low Voltage Delta



High Voltage Delta



Switch L1 and L2 to reverse rotation

Suitable for Wye-Delta Starting and Limited Part-Winding-Starting.
Please Contact Toshiba International for specific connections.