



UNITS: INCHES

FRAME SIZE	MOTOR DIMENSIONS										CONDUIT BOX								
	A	B	C	D	G	J	K	M	O	P	T	MAXIMUM	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	ZF	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	7800	7800	7800	7800	7800	7800	7800	7800
5810US	11.50	36.00/32.00	1.2	10.00	6.25	6.19	3.625	3.134	0.875	5.00	6320C3	7800	7800	7800	7800	7800	7800	7800	7800
5810UZ	11.50	36.00/32.00	1.2	10.00	11.62	11.38	5.250	4.550	1.250	10.00	NU328C3	7800	7800	7800	7800	7800	7800	7800	7800

CUSTOMER: _____ MOTOR MODEL NO.: _____ TAG NO's.: _____

P.O. NO.: _____ HP: _____ VOLTAGE: _____ RPM(SYN.): _____ Hz: _____
 FRAME SIZE: _____ PRODUCT TYPE: IEF3 EFP III, EFACT, & HIGH EFFICIENCY
 COMMENTS: _____

PER: _____ DATE: _____

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- 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 US 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

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

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: F6003FLG8BM

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
600	447	2	3575	5810USS	460	60	3	655
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEFC	56	F	1.15	CONT	94.1	-		40 C

Load	HP	kW	Amperes	Efficiency (%)	Power Factor (%)
Full Load	600.00	447.4	655	94.4	90.8
¾ Load	450.00	335.6	505	93.6	89.0
½ Load	300.00	223.7	364	91.9	84.0
¼ Load	150.00	111.9	240	86.6	67.3
No Load			125.2		13.4
Locked Rotor			5229		20.9

Torque				Rotor wk ² Inertia (lb-ft ²)
Full Load (lb-ft)	Locked Rotor (% FLT)	Pull Up (% FLT)	Break Down (% FLT)	
881	165	145	270	196.65

Safe Stall Time(s)		Sound Pressure dB(A) @ 1M	Bearings*		Approx. Motor Weight (lbs)
Cold	Hot		DE	NDE	
25	12	-	6313C3	NU313C3	5898

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

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

Customer	
Customer PO	
Sales Order	
Project #	

Tag:

All characteristics are average expected values.

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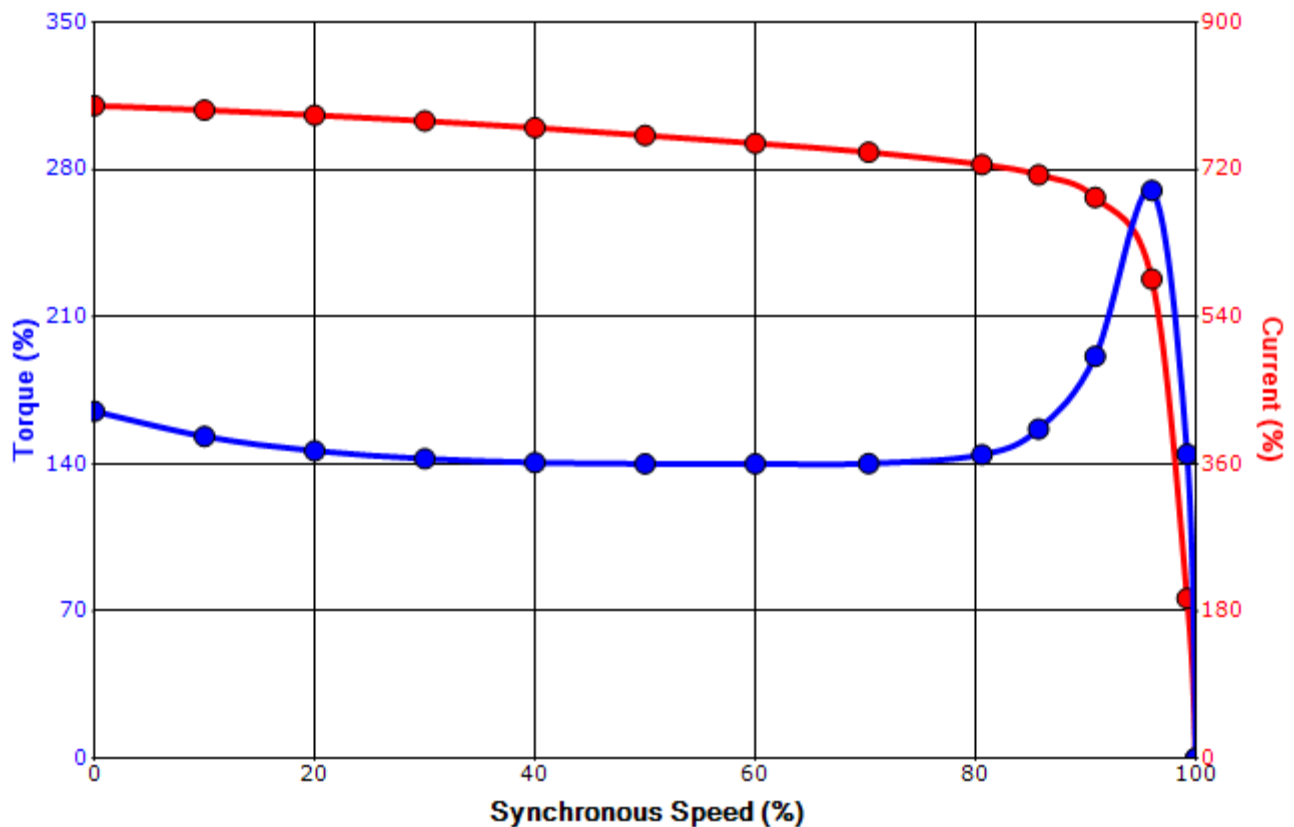
Engineering	zxie	Doc. Written By	D. Suarez	Doc.# / Rev	MPCF-1119 / 0
Engr. Date	5/3/2021	Doc. Approved By	M. Campbell	Doc. Issued	6/8/2011

SPEED TORQUE/CURRENT CURVE

Model: F6003FLG8BM

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
600	447	2	3575	5810USS	460	60	3	655
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEFC	56	F	1.15	CONT	94.1	-		40 C
Locked Rotor Amps	Rotor wk ² Inertia (lb-ft ²)	Torque						Break Down (%)
		Full Load (lb-ft)	Locked Rotor (%)	Pull Up (%)				
5229	196.65	881	165	145			270	

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	5/3/2021	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.