

CLEARANCE REQUIRED TO REMOVE HOUSING 2.94

UNITS: INCHES

FRAME SIZE	MOTOR DIMENSIONS										CONDUIT BOX							
	A	B	C	D	G	J	K	M	O	P	T	AA	AB	AC	AE	AF	XL	XN
143T/145T	6.9	5.9	18.4	3.50	0.35	1.6	0	4.5	7.7	8.4	0	0.75	7.1	5.7	3.5	2.3	5.3	4.6
145T/145T	2.75	4.00/5.00	0.34	2.25	2.25	2.00	0.875	0.771	0.188	1.41	6205ZZ	6205ZZ	80 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 1.38 (MOTOR SUPPLIED WITH KEY)
  4. MOTOR WEIGHT SHOWN IS MAXIMUM HORSEPOWER IN FRAME
  5. THIS DIMENSION EQUALS 2F FOR 143T 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: IEF3 EGP III, EPACK, & HIGH EFFICIENCY BRAKE SERIES  
 COMMENTS: 56,000 SERIES STEARNS BRAKE  
 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**  
 TOSHIBA INTERNATIONAL CORPORATION  
 TOTALLY-ENCLOSED FAN-COOLED  
 HORIZONTAL FOOT-MOUNTED  
 3 PHASE INDUCTION MOTOR  
 F1 ASSEMBLY

**XT SERIES**  
 VISIT OUR WEBSITE AT:  
 www.toshiba.com/ind

**TYPICAL MOTOR PERFORMANCE DATA**

Model: BY1543LF2OMH

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
1	1.1	4	1740	145T	575	60	3	1.60
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEFC	54	F	1.15	CONT	86.5	B	M	40 C

Load	HP	kW	Amperes	Efficiency (%)	Power Factor (%)
Full Load	1	1.1	1.6	86.9	78.7
¾ Load	1.12	0.8	1.3	87.1	71.1
½ Load	0.75	0.6	1.1	85.7	59.2
¼ Load	0.37	0.3	1.0	73.0	37.6
No Load			0.9		7.9
Locked Rotor			16.00		73.6

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)	
4.53	385	355	370	0.14

Safe Stall Time(s)		Sound Pressure dB(A) @ 1M	Bearings*		Approx. Motor Weight (lbs)
Cold	Hot		DE	NDE	
17	12	-	6205ZZ	6205ZZ	

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

**Motor Options:**  
Product Family:EQPIII Brake Motor  
Mounting:Footed,Shaft:T Shaft

Customer	
Customer PO	
Sales Order	
Project #	

Tag:

All characteristics are average expected values.

**TOSHIBA INTERNATIONAL CORPORATION · HOUSTON, TEXAS U.S.A.**

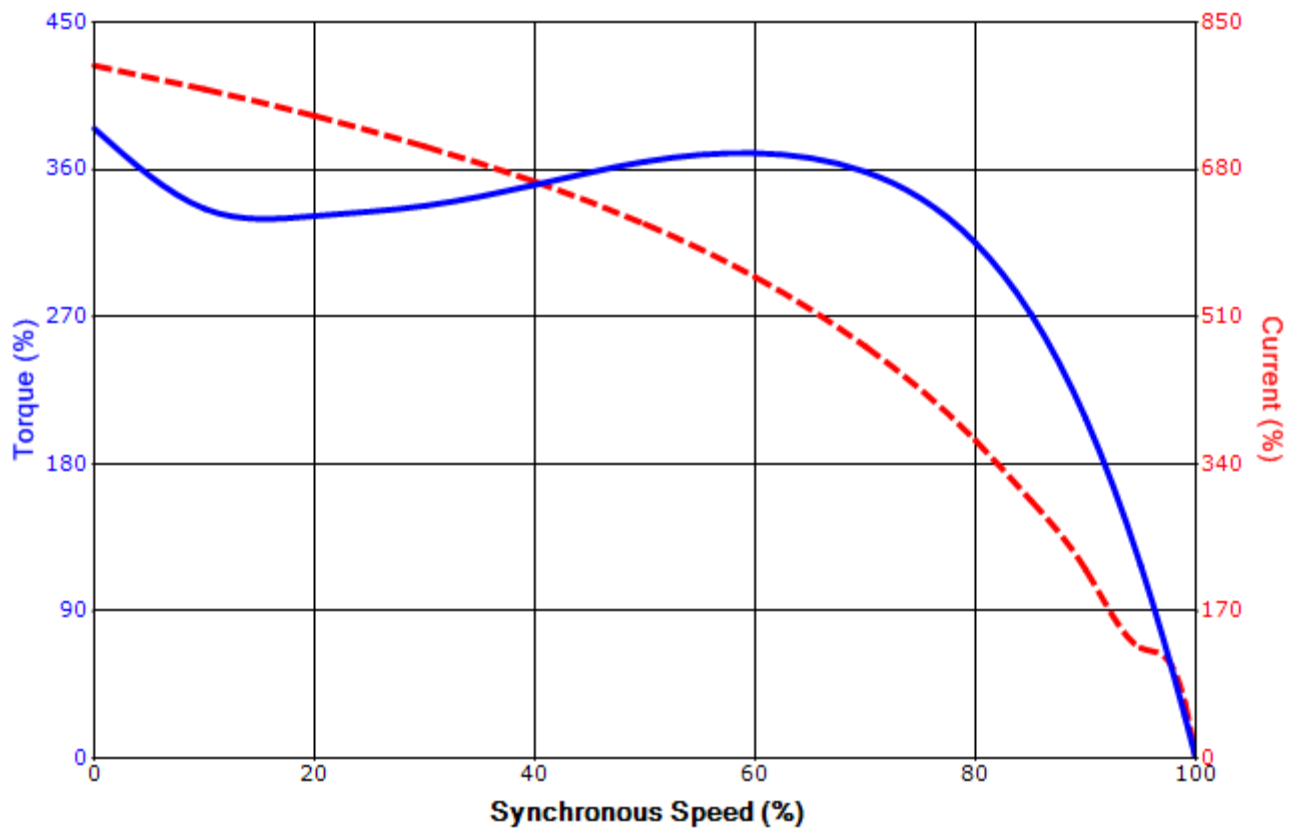
Engineering	gminetos	Doc. Written By	D. Suarez	Doc.# / Rev	MPCF-1119 / 0
Engr. Date	6/25/2013	Doc. Approved By	M. Campbell	Doc. Issued	6/8/2011

**SPEED TORQUE/CURRENT CURVE**

Model: BY1543LF2OMH

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
1	1.1	4	1740	145T	575	60	3	1.60
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEFC	54	F	1.15	CONT	86.5	B	M	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 (%)				
16.00	0.14	4.53	385	355			370	

**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	gminetos	Doc. Written By	D. Suarez	Doc.# / Rev	MPCF-1121 / 0
Engr. Date	6/25/2013	Doc. Approved By	M. Campbell	Doc. Issued	6/8/2011

**Motor Connection Diagrams**  
9 Leads

Across-the-Line Starting / Running Connections

Low Voltage Wye



High Voltage Wye



Switch L1 and L2 to reverse rotation