

UNITS: INCHES

FRAME SIZE	MOTOR DIMENSIONS										P-FLANGE DIMENSIONS										SHAFT EXTENSION DIMENSIONS											
	AG	C	P	OX	BU	BB	BE	BF	BD	BV	AK	AU	AH	EU	U	V	R	S	ES	EW	EX	AL	WT	AB	AC	AF	XL	XN	MAXIMUM WEIGHT	FRAME SIZE	LS	BEARINGS
250HP10	36.5	39.3	15.7	17.1	45°	0.25	1.0	0.44	10.0	15.7	8.25	9.125	2.75	0.875	1.125	2.75	0.986	0.25	1.28	0.375	0.75	1.50	10.7	8.3	4.0	7.4	5.3	500	250HP	6309C3	6310C3	
250HP12	36.5	39.3	15.7	17.1	45°	0.25	1.0	0.44	12.0	15.7	8.25	9.125	2.75	0.875	1.125	2.75	0.986	0.25	1.28	0.375	0.75								250P	6309C3	7309BEGAM x 2	
250LP10	36.5	39.3	15.7	17.1	45°	0.25	1.0	0.44	10.0	15.7	8.25	9.125	2.75	1.250	1.625	2.75	1.416	0.375	1.28	0.375	0.75								280HP	6309C3	6310C3	
250LP12	36.5	39.3	15.7	17.1	45°	0.25	1.0	0.44	12.0	15.7	8.25	9.125	2.75	1.250	1.625	2.75	1.416	0.375	1.28	0.375	0.75								280P	6312C3	7309BEGAM x 2	
280HP10	36.5	39.3	15.7	17.1	45°	0.25	1.0	0.44	10.0	15.7	8.25	9.125	2.75	0.875	1.125	2.75	0.986	0.25	1.28	0.375	0.75											
280HP12	36.5	39.3	15.7	17.1	45°	0.25	1.0	0.44	12.0	15.7	8.25	9.125	2.75	0.875	1.125	2.75	0.986	0.25	1.28	0.375	0.75											
280LP10	36.5	41.0	15.7	17.1	45°	0.25	1.0	0.44	10.0	15.7	8.25	9.125	4.50	1.750	2.125	4.50	1.845	0.50	3.03	0.375	0.75											
280LP12	36.5	41.0	15.7	17.1	45°	0.25	1.0	0.44	12.0	15.7	8.25	9.125	4.50	1.750	2.125	4.50	1.845	0.50	3.03	0.375	0.75											
280PA10	36.5	41.0	15.7	17.1	45°	0.25	1.0	0.44	10.0	15.7	8.25	9.125	4.50	1.250	1.625	4.50	1.416	0.375	1.28	0.375	0.75											
280PA12	36.5	41.0	15.7	17.1	45°	0.25	1.0	0.44	12.0	15.7	8.25	9.125	4.50	1.250	1.625	4.50	1.416	0.375	1.28	0.375	0.75											
280PA16	36.5	41.0	15.7	17.1	45°	0.25	1.0	0.69	16.5	15.7	13.50	14.75	4.50	1.750	2.125	4.50	1.845	0.50	3.03	0.375	0.75											
280PH16	36.5	41.0	15.7	17.1	45°	0.25	1.0	0.69	16.5	15.7	13.50	14.75	4.50	1.250	1.625	4.50	1.416	0.375	1.28	0.375	0.75											
280PA16	36.5	41.0	15.7	17.1	45°	0.25	1.0	0.69	16.5	15.7	13.50	14.75	4.50	1.250	1.625	4.50	1.416	0.375	1.28	0.375	0.75											

CONDUIT BOX DIMENSIONS						
AL	WT	AB	AC	AF	XL	XN
1.50	10.7	8.3	4.0	7.4	5.3	500

FRAME SIZE	LS	BEARINGS
250HP	6309C3	6310C3
250P	6309C3	7309BEGAM x 2
280HP	6309C3	6310C3
280P	6312C3	7309BEGAM x 2

- 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 ES (MOTOR SUPPLIED WITH KEY)
  - MOTOR WEIGHT SHOWN IS MAXIMUM HORSEPOWER IN FRAME
  - 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: VERTICAL SOLID SHAFT ROUND BODY P-FLANGE

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

TOTALLY-ENCLOSED FAN-COOLED  
VERTICAL SOLID SHAFT ROUND BODY P-FLANGE  
3 PHASE INDUCTION MOTOR  
F1 ASSEMBLY

**TOSHIBA**  
TOSHIBA INTERNATIONAL CORPORATION

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**TYPICAL MOTOR PERFORMANCE DATA**

Model: 0156FTVB3PW-A

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
15	11	6	1175	280HP10	460	60	3	19
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEFC	54	F	1.15	CONT	92.4	B	G	40 C

Load	HP	kW	Amperes	Efficiency (%)	Power Factor (%)
Full Load	15	11.2	18.6	92.3	82.0
¾ Load	11.25	8.4	15.2	92.5	77.7
½ Load	7.50	5.6	12.1	92.0	68.3
¼ Load	3.75	2.8	9.9	83.1	42.4
No Load			7.1		4.6
Locked Rotor			116.00		39.0

Torque				Rotor wk <sup>2</sup>
Full Load (lb-ft)	Locked Rotor (% FLT)	Pull Up (% FLT)	Break Down (% FLT)	Inertia (lb-ft <sup>2</sup> )
67	205	210	275	4.32

Safe Stall Time(s)		Sound Pressure dB(A) @ 1M	Bearings*		Approx. Motor Weight (lbs)
Cold	Hot		DE	NDE	
39	23	-	6309C3	6310C3	

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

**Motor Options:**  
Product Family:EQPIII Vertical Normal Thrust  
Mounting:10 P-Base (180-280 Frame),Shaft:HP Solid Shaft Normal Thrust

Customer	
Customer PO	
Sales Order	
Project #	

Tag:

All characteristics are average expected values.

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

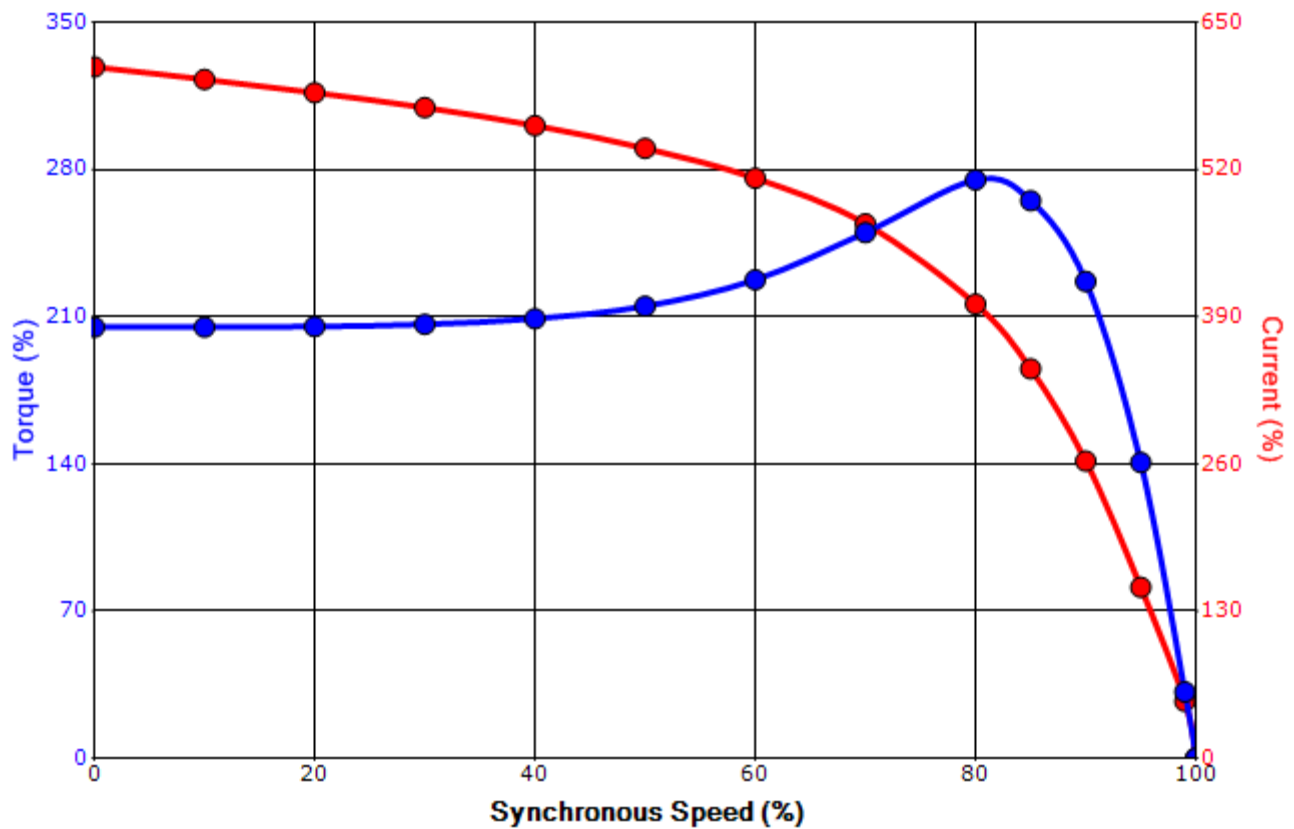
Engineering	gminetos	Doc. Written By	D. Suarez	Doc.# / Rev	MPCF-1119 / 0
Engr. Date	7/23/2013	Doc. Approved By	M. Campbell	Doc. Issued	6/8/2011

**SPEED TORQUE/CURRENT CURVE**

Model: 0156FTVB3PW-A

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
15	11	6	1175	280HP10	460	60	3	19
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEFC	54	F	1.15	CONT	92.4	B	G	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 (%)				
116.00	4.32	67	205	210			275	

**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.

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

Engineering	gminetos	Doc. Written By	D. Suarez	Doc.# / Rev	MPCF-1121 / 0
Engr. Date	7/23/2013	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.