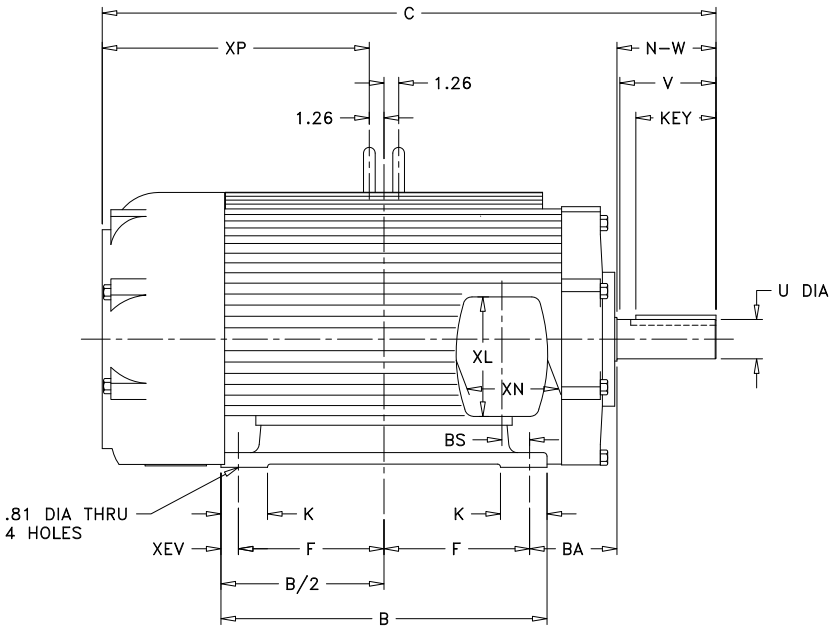
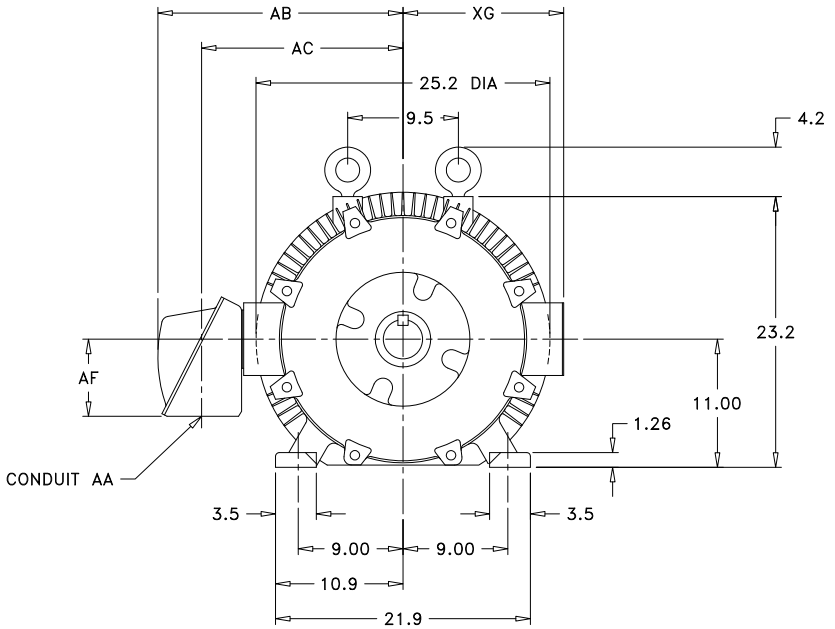




	REAR SHAFT EXTENSION													
FRAME SIZE	U	N–W	V	KEY SIZE	B	C	F	K	XEV	XG	XP	F1 ASSY BS	BA	APPROX WEIGHT
444TS	2.375	4.75	4.50	.625 X .625 X 3.00	17.5	38.5	7.25	4.0	1.50	12.8	17.7	4.13	7.50	2000
444T	3.375	8.50	8.25	.875 X .875 X 6.88	17.5	42.2	7.25	4.0	1.50	12.8	17.7	4.13	7.50	2000
445TS	2.375	4.75	4.50	.625 X .625 X 3.00	18.5	40.5	8.25	4.5	1.00	12.8	18.7	5.13	7.50	2300
445T	3.375	8.50	8.25	.875 X .875 X 6.88	18.5	44.2	8.25	4.5	1.00	12.8	18.7	5.13	7.50	2300
447TS	2.375	4.75	4.50	.625 X .625 X 3.00	23.0	44.0	10.00	4.0	1.50	14.4	20.4	2.38	7.50	2600
447T	3.375	8.50	8.25	.875 X .875 X 6.88	23.0	47.7	10.00	4.0	1.50	14.4	20.4	2.38	7.50	2600
449TS	2.375	4.75	4.50	.625 X .625 X 3.00	28.0	49.0	12.50	4.0	1.50	14.4	22.9	2.38	7.50	3200
449T	3.375	8.50	8.25	.875 X .875 X 6.88	28.0	52.7	12.50	4.0	1.50	14.4	22.9	2.38	7.50	3200
449TU	4.125	12.38	12.12	1.00 X 1.00 X 10.62	28.0	56.6	12.50	4.0	1.50	14.4	22.9	2.38	7.50	3200

STANDARD CAST IRON CONDUIT BOXES											
TEFC						EXPLOSION PROOF					
AA	AB	AC	AF	XL	XN	AA	AB	AC	AF	XL	XN
3.00	21.10	17.30	6.62	10.62	7.76	3.00	21.50	17.00	7.00	12.26	11.00
4.00	25.30	19.44	9.38	13.68	11.50	4.00	24.50	18.62	10.38	16.50	13.00

NOTES:
A. THIS OUTLINE IS NOT TO BE REGARDED AS INDICATING THE EXACT DETAILS OF CONSTRUCTION. IT IS PROPERLY DIMENSIONED FOR ERECTION PURPOSES ONLY.
B. EACH FOOT MUST BE MOUNTED ON A BASE EQUAL TO OR LARGER THAN THE PAD AREA.
C. MOUNTING BOLTS, DOWELS & SHIMS ARE NOT SUPPLIED BY TOSHIBA
D. ANTI–FRICTION BEARINGS MUST BE REGREASED WHILE MOTOR IS RUNNING.

ISSUE 1 STANDARD REVISIONS

PRELIMINARY SHAFT AND MOUNTING ONLY

G.O. _____ S.O. _____ CUST. ORDER _____

CUST. _____

RATING _____

PER: _____ DATE _____

TOSHIBA INDUSTRIAL PRODUCTS CANADA, STONEY CREEK

THIRD ANGLE PROJECTION

TOSHIBA INDUSTRIAL PRODUCTS CANADA TOSHIBA

TITLE TYPE HSBN MOTOR FRAME 440

OUTLINE – TEFC/TEXP ENCLOSURE

DIMENSIONS IN INCHES UNLESS OTHERWISE SPECIFIED | SCALE: N.T.S. | SHEET: OF

DRAWN	DATE	APP.BY	DATE
N.WEST			
CHECKED		APP.BY	
CHECKED		APP.BY	

E10C076

Issued Date		Transmit #	
Issued By		Issued Rev	

TOSHIBA

TYPICAL MOTOR PERFORMANCE DATA

Model: 2003XPAK11B-C

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
200 hp	149 kW	2	3562 rpm	N449TS	4000 V	60	3	25.3 A
Enclosure	**IP**	**Ins. Class**	**S.F.**	**Duty**	**NEMA Nom. Eff.**	**NEMA Design**	**kVA Code**	**Ambient (°C)**
TEXP	55	F	1.15	Cont.	92.4	B	G	40

Load	HP	kW	Amperes	Efficiency (%)	Power Factor (%)
Full Load	200	149	25.3	92.4	92.5
¾ Load	150	112	19.2	91.5	91.8
½ Load	100	75	13.7	90.1	87.6
¼ Load	50	37			
No Load			5.8		13.7
Locked Rotor			167.4		19.5

Torque				Rotor wk² Inertia
Full Load (lb-ft)	**Locked Rotor (% FLT)**	**Pull Up (% FLT)**	**Break Down (% FLT)**	**(lb-ft²)**
296	100	100	251	41

Safe Stall Time(s)		Sound Pressure dB(A) @ 1M	Bearings*		Approx. Motor Weight
Cold	**Hot**		**DE**	**NDE**	**(lbs)**
20	20	-	6319C3	6319C3	3200

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

Motor Options:

Customer	
Customer PO	
Sales Order	
Project #	

Tag:

All characteristics are average expected values.

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

Engineering		Doc. Written By		Doc.# / Rev	
Engr. Date		Doc. Approved By		Doc. Issued	

Issued Date		Transmit #	
Issued By		Issued Rev	

TOSHIBA

NAMEPLATE DATA

Model: 2003XPAK11B-C

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
200	149.138	2	3562	N449TS	4000	60	3	25.26
Enclosure	**IP**	**Ins. Class**	**S.F.**	**Duty**	**NEMA Nom. Eff.**	**NEMA Design**	**kVA Code**	**Ambient (°C)**
TEXP	55	F	1.15	Cont.	92.4	B	G	40

Type: HSB

Form:

Drive End Bearing: 6319C3

Non-Drive End Bearing: 6319C3

Power Factor: 92.5

Max Safe RPM:

Comments 1:

Comments 2:

Comments 3:

Comments 4:

Customer	
Customer PO	
Sales Order	
Project #	

Tag:

All characteristics are average expected values.

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

Engineering		**Doc. Written By**	D. Suarez	**Doc.# / Rev**	MPCF-1120 / 0
Engr. Date		**Doc. Approved By**	M. Campbell	**Doc. Issued**	6/8/2011

Issued Date		Transmit #	
Issued By		Issued Rev	

TOSHIBA

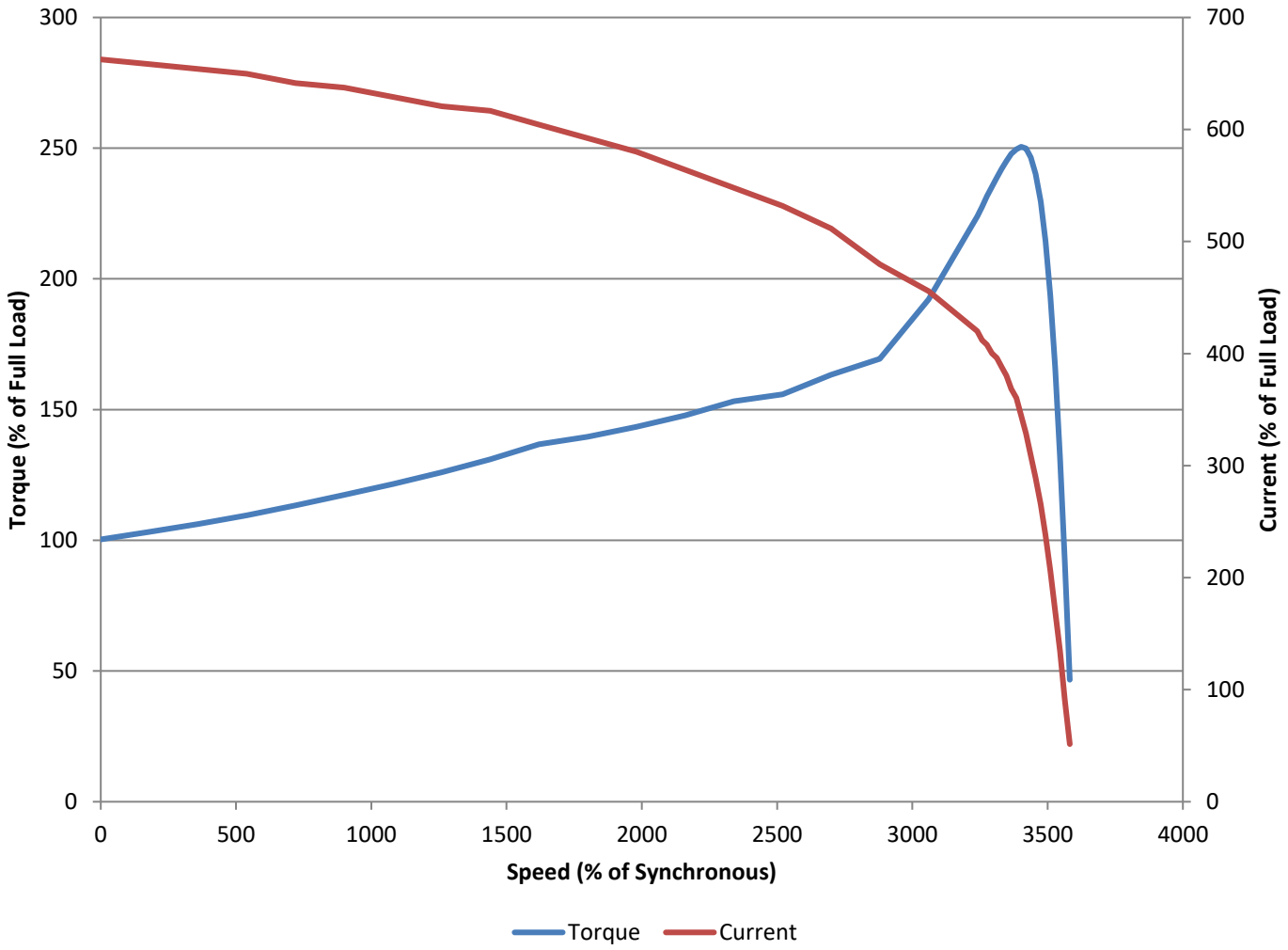
SPEED TORQUE/CURRENT CURVE

Model: 2003XPAK11B-C

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
200	149.138	2	3562	N449TS	4000	60	3	25.26
Enclosure	**IP**	**Ins. Class**	**S.F.**	**Duty**	**NEMA Nom. Eff.**	**NEMA Design**	**kVA Code**	**Ambient (°C)**
TEXP	55	F	1.15	Cont.	92.4	B	G	40

Locked Rotor Amps	Rotor wk² Inertia (lb-ft²)	Torque			
		Full Load (lb-ft)	Locked Rotor (%)	Pull Up (%)	Break Down (%)
167.36	41	295.71	100.3144973	100.3144973	250.5359981

Design Values



Customer			**wk² Load Inertia (lb-ft²)**		
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		**Doc. Written By**	D. Suarez	**Doc.# / Rev**	MPCF-1121/0
Engr. Date		**Doc. Approved By**	M. Campbell	**Doc. Issued**	6/8/2011

Issued Date		Transmit #	
Issued By		Issued Rev	

TOSHIBA

SPARE PARTS LIST*

Model: 2003XPAK11B-C

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
200	149.138	2	3562	N449TS	4000	60	3	25.26
Enclosure	**IP**	**Ins. Class**	**S.F.**	**Duty**	**NEMA Nom. Eff.**	**NEMA Design**	**kVA Code**	**Ambient (°C)**
TEXP	55	F	1.15	Cont.	92.4	B	G	40

Bearings DE	6319C3
Bearings NDE	6319C3

*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		**Doc. Written By**	D. Suarez	**Doc.# / Rev**	MPCF-1125 / 0
Engr. Date		**Doc. Approved By**	M. Campbell	**Doc. Issued**	6/8/2011