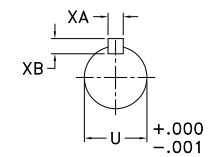
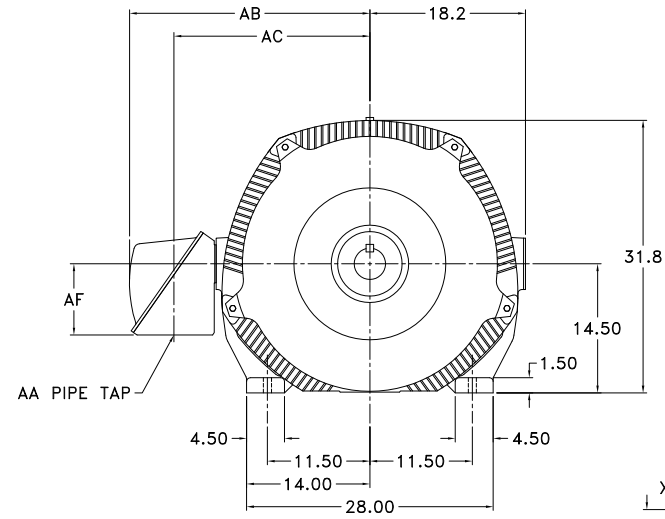
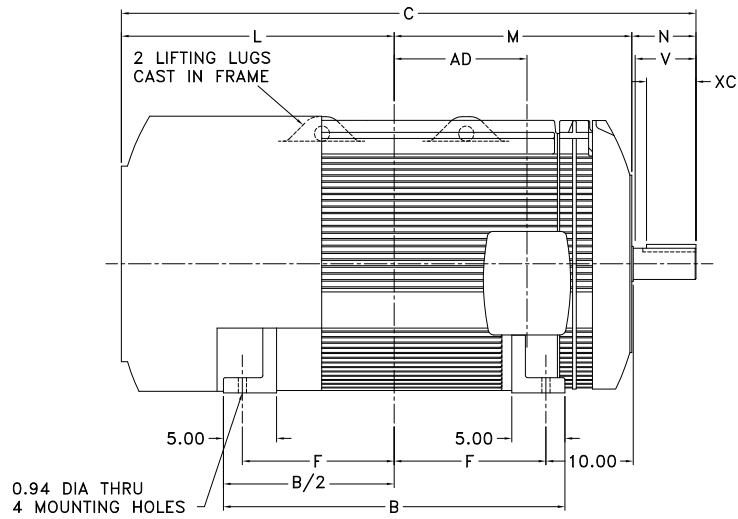


TYPE HS SQUIRREL CAGE INDUCTION MOTOR ENCLOSURE - TOTALLY ENCLOSED FAN COOLED AND EXPLOSION PROOF BEARING - ANTI-FRICTION AND SOLID SLEEVE

- NOTES
- A- THIS DRAWING IS NOT TO BE REGARDED AS INDICATING EXACT DETAILS OF CONSTRUCTION. IT IS PROPERLY DIMENSIONED FOR ERECTION PURPOSES ONLY.
 - B- AIR INLET OPENING ON END OF MOTOR. WHEN INSTALLING MOTOR AVOID LOCATING MOTOR SO THAT ADJACENT STRUCTURES ARE CLOSER THAN 12 INCHES TO MOTOR ENDS. ALSO THAT NO ADJACENT STRUCTURE CAUSES EXHAUST AIR TO BE DIRECTED INTO INLET OPENINGS.
 - C- MOUNTING BOLTS, DOWELS AND COUPLING NOT SUPPLIED BY E.T.I. UNLESS SPECIFICALLY ORDERED.
 - D- EACH FOOT MUST BE MOUNTED ON A BASE EQUAL TO OR LARGER THAN THE PAD AREA.
 - E- SLEEVE BEARINGS HAVE 0.50 MINIMUM ENDFLOAT. COUPLING ENDFLOAT SHOULD BE 0.19 MAXIMUM WITH ROTOR LOCATED ON MECHANICAL CENTERLINE.
 - F- FOR MOUNTING OF MOTOR USE .875-9 THD/INCH HOLD DOWN BOLTS.
 - G- NON DRIVE END BEARING INSULATED.
- DEVICES



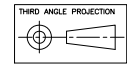
END VIEW OF SHAFT

FRAME SIZE	REAR SHAFT EXTENSION										RECOMMENDED COUPLING BORE		APPROX WEIGHT		
	U	KEY SIZE			N	V	B	C	F	L	M	AD		MIN.	MAX.
		XA	XB	XC											
5809H	2.875	.750	.750	4.00	5.76	5.50	35.5	61.56	16.00	29.80	26.00	14.50	2.8730	2.8740	5400
5809S	3.375	.875	.875	5.00	6.76	6.50	35.5	62.56	16.00	29.80	26.00	14.50	3.3720	3.3735	5400
5809L	3.875	1.000	1.000	6.00	7.76	7.50	35.5	63.56	16.00	29.80	26.00	14.50	3.8720	3.8735	5400
5809U	4.125	1.000	1.000	10.62	12.38	12.12	35.5	68.18	16.00	29.80	26.00	14.50	4.1215	4.1230	5450
5810H	2.875	.750	.750	4.00	5.76	5.50	39.5	65.56	18.00	31.80	28.00	16.50	2.8730	2.8740	6150
5810S	3.375	.875	.875	5.00	6.76	6.50	39.5	66.56	18.00	31.80	28.00	16.50	3.3720	3.3735	6150
5810L	3.875	1.000	1.000	6.00	7.76	7.50	39.5	67.56	18.00	31.80	28.00	16.50	3.8720	3.8735	6150
5810U	4.125	1.000	1.000	10.62	12.38	12.12	39.5	72.18	18.00	31.80	28.00	16.50	4.1215	4.1230	6200
5811H	2.875	.750	.750	4.00	5.76	5.50	43.5	69.56	20.00	33.80	30.00	18.50	2.8730	2.8740	6900
5811S	3.375	.875	.875	5.00	6.76	6.50	43.5	70.56	20.00	33.80	30.00	18.50	3.3720	3.3735	6900
5811L	3.875	1.000	1.000	6.00	7.76	7.50	43.5	71.56	20.00	33.80	30.00	18.50	3.8720	3.8735	6900
5811U	4.125	1.000	1.000	10.62	12.38	12.12	43.5	76.18	20.00	33.80	30.00	18.50	4.1215	4.1230	6950

CONDUIT BOX							
FAN COOLED - STANDARD				EXPLOSION PROOF			
AA	AB	AC	AF	AA	AB	AC	AF
3.00	28.94	23.09	9.38	3.00	32.31	24.00	13.00

THESE DRAWINGS ARE PREPARED IN ACCORDANCE WITH THE NORMAL AND ACCEPTED STANDARDS WITHIN THE ELECTRICAL INDUSTRY FOR THE PURPOSE OF OBTAINING CUSTOMER APPROVAL AS PART OF THE MANUFACTURING OR PRODUCTION PROCESS. ANY USE OR COMMUNICATION OF THE DRAWINGS BY THE CUSTOMER (OTHER THAN FOR GRANTING APPROVAL) SHALL BE THE SOLE RESPONSIBILITY OF THE CUSTOMER.

PRELIMINARY SHAFT AND MOUNTING ONLY
 G.O. _____ S.O. _____ CUST. ORDER _____
 CUST. _____
 RATING _____
 PER: _____ DATE _____
 TOSHIBA INDUSTRIAL PRODUCTS CANADA, STONEY CREEK



THE INFORMATION CONTAINED HEREIN WHICH IS THE PROPERTY OF TOSHIBA INDUSTRIAL PRODUCTS CANADA - THIS MUST BE RETURNED IN CONFIDENTIAL AND NO PORTION OF THIS DRAWING MAY BE REPRODUCED OR USED WITHOUT THE EXPRESS PERMISSION OF THE COMPANY.

TOSHIBA INDUSTRIAL PRODUCTS CANADA **TOSHIBA**

TITLE TYPE HS MOTOR FRAME 5800
 OUTLINE - TEFC/TEXP ENCLOSURE

UNLESS OTHERWISE SPECIFIED SCALE: N.T.S. SHEET: OF

DRAWN BY: N.WEST DATE: 10/9/98
 CHECKED BY: _____

REVISIONS
 1



Issued Date

Transmit #

Issued By

Issued Rev

TYPICAL MOTOR PERFORMANCE DATA

Model: 4008XPAL11E-C

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
400 hp	298 kW	8	895 rpm	5811L	4000 V	60	3	55.3 A
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEXP	55	F	1.15	Cont.	94.1	B	G	40

Load	HP	kW	Amperes	Efficiency (%)	Power Factor (%)
Full Load	400	298	55.3	94.1	82.4
¾ Load	300	224	43.2	93.7	80.0
½ Load	200	149	32.4	92.3	72.4
¼ Load	100	75			
No Load			19.7		6.0
Locked Rotor			317.8		19.7

Torque				Rotor wk ² Inertia (lb-ft ²)
Full Load (lb-ft)	Locked Rotor (% FLT)	Pull Up (% FLT)	Break Down (% FLT)	
2340	102	102	200	837

Safe Stall Time(s)		Sound Pressure dB(A) @ 1M	Bearings*		Approx. Motor Weight (lbs)
Cold	Hot		DE	NDE	
67	43	-	6222-C3	6222-C3	6500

*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	



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NAMEPLATE DATA

Model: 4008XPAL11E-C

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
400	298.276	8	895	5811L	4000	60	3	55.33
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEXP	55	F	1.15	Cont.	94.1	B	G	40

Type: HSB

Form:

Drive End Bearing: 6222-C3

Non-Drive End Bearing: 6222-C3

Power Factor: 82.4

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



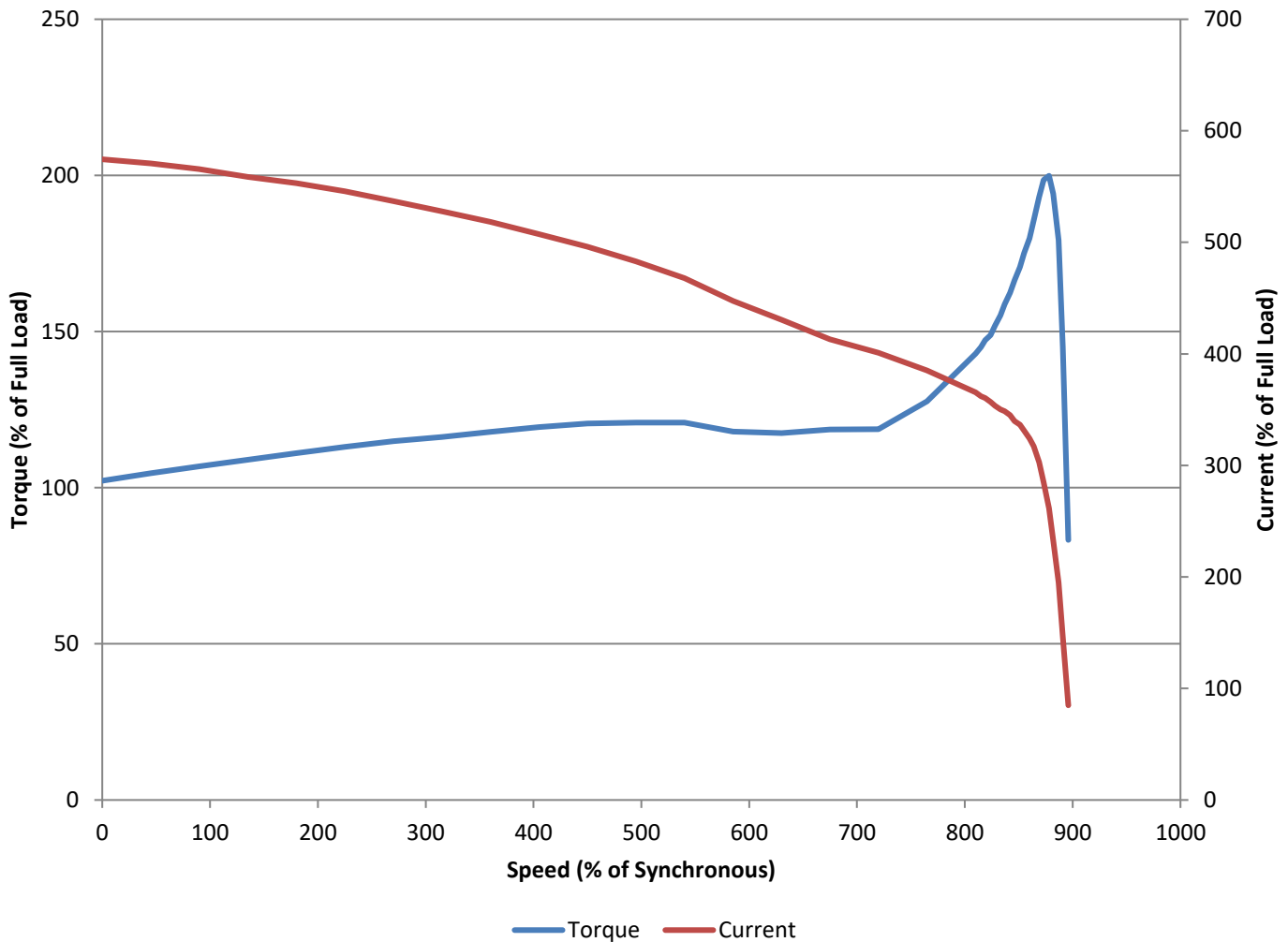
Issued Date		Transmit #	
Issued By		Issued Rev	

SPEED TORQUE/CURRENT CURVE

Model: 4008XPAL11E-C

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
400	298.276	8	895	5811L	4000	60	3	55.33
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEXP	55	F	1.15	Cont.	94.1	B	G	40
Locked Rotor Amps	Rotor wk ² Inertia (lb-ft ²)	Torque						Break Down (%)
		Full Load (lb-ft)	Locked Rotor (%)	Pull Up (%)				
353.16	837	2340.25	102.2493323		102.2493323		199.8750903	

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.

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

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Issued By

Issued Rev

SPARE PARTS LIST*

Model: 4008XPAL11E-C

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
400	298.276	8	895	5811L	4000	60	3	55.33
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEXP	55	F	1.15	Cont.	94.1	B	G	40

Bearings DE 6222-C3

Bearings NDE 6222-C3

*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.

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Engr. Date		Doc. Approved By	M. Campbell	Doc. Issued	6/8/2011