

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 OPENINGS ARE ON BOTH ENDS OF MOTOR. WHEN INSTALLING MOTOR, AVIOID 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 TOSHIBA 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 ENDPLAY. 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

		REAR SHAFT EXTENSION											RECOMM		<u></u>
FRAME SIZE	U	XA	KEY SIZE	xc	N	٧	В	С	F	L	М	AD	MIN.	MAX.	APPROX WEIGHT
6809H	2.875	.750	.750	4.00	5.94	5.50	45.0	73.20	20.00	35.94	31.32	17.50	2.8730	2.8740	9400
6809L	4.125	1.000	1.000	6.50	8.44	8.00	45.0	75.70	20.00	35.94	31.32	17.50	4.1215	4.1230	10090
6810H	2.875	.750	.750	4.00	5.94	5.50	50.0	78.20	22.50	38.44	33.82	20.00	2.8730	2.8740	10430
6810L	4.125	1.000	1.000	6.50	8.44	8.00	50.0	80.70	22.50	38.44	33.82	20.00	4.1215	4.1230	11230
6811H	2.875	.750	.750	4.00	5.94	5.50	55.0	83.20	25.00	40.94	36.32	22.50	2.8730	2.8740	11610

55.0

85.70

25.00

40.94

36.32 | 22.50 | 4.1215 | 4.1230 | 12350

	CONDUIT BOX								
FAN COOLED - STANDARD EXPLOSION PROOF						F			
AA	AB	AC	AF	AA	AB	AC	AF		
3.00	31.68	25.81	9.38	3.00	35.00	26.50	13.00		

1.000

6.50

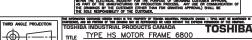
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8.00



END VIEW OF SHAFT

PREL	IMINARY	SHAFT	AND	MOUNT	ING OI	NLY
G.O	s.o.		CUS1	ORDER _		
CUST						
RATING						
PER:		D/	ATE			
TOSHIBA	INDUSTRI	AL PROD	OUCTS	CANADA,	STONE	Y CREEK



OUTLINE - TEFC/TEXP ENCLOSURE PRED SCALE: N.T.S. SHEET:

DATE APPLEY DATE

APPLEY DATE

E10D120

6811L

4.125 | 1.000



Issued Date	Transmit #	
Issued By	Issued Rev	

TYPICAL MOTOR PERFORMANCE DATA

Model: 7003XPQL11F-C

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
700 hp	522 kW	2	3580 rpm	6810H	4000 V	60	3	86.0 A
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEXP	55	F	1.15	Cont.	94.9	В	F	40

Load	HP	kW	Amperes	Efficiency (%)	Power Factor (%)
Full Load	700	522	86.0	94.9	92.9
¾ Load	525	391	66.3	94.2	92.5
½ Load	350	261	45.6	92.5	89.4
√₄ Load	175	130			
No Load			17.4		12.2
Locked Rotor			541.6		12.3

	Torque							
Full Load	Locked Rotor	Pull Up	Break Down	Inertia				
(lb-ft)	(% FLT)	(% FLT)	(% FLT)	(lb-ft²)				
1032	78	75	246	310				

	Cold Hot Pre		Sound	Bearin	ine*	Approx. Motor Weight	
			Pressure	Bealin	Approx. Motor Weight		
	Oolu	1101	dB(A) @ 1M	DE	NDE	(lbs)	
	62	54	-	Sleeve	Sleeve	11000	

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

Motor Options:

Customer	
Customer PO	
Sales Order	
Project #	

Tag:

All characteristics are average expected values

7 III Gridi deteriotice die di	Situation block and a rotage experience ratiose.								
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NAMEPLATE DATA

Model: 7003XPQL11F-C

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
700	521.983	2	3580	6810H	4000	60	3	85.95
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEXP	55	F	1.15	Cont.	94.9	В	F	40

Type:	HSB	
Form:		
Drive End Bearing:	Sleeve	
Non-Drive End Bearing:	Sleeve	
Power Factor:	92.9	
Max Safe RPM:		
Comments 1:		
Comments 2:		
Comments 3:		
Comments 4:		

Customer		
Customer PO		
Sales Order		
Project #		
_		

Tag:

All characteristics are average expected values.

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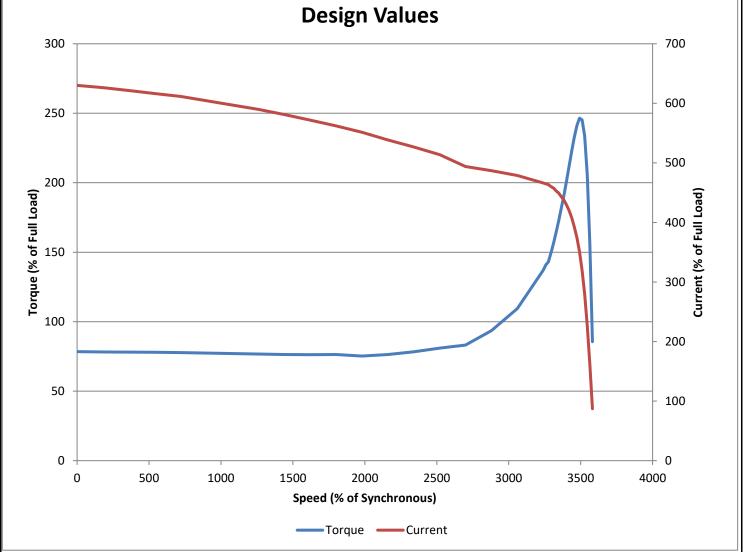
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SPEED TORQUE/CURRENT CURVE

Model: 7003XPQL11F-C

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
700	521.983	2	3580	6810H	4000	60	3	85.95
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEXP	55	F	1.15	Cont.	94.9	В	F	40
Locked Rotor	Rotor wk ²				Torque			
Amps	Inertia	Full Load	Locked Rotor		Pull Up		Break Down	
Amps	(lb-ft²)	(lb-ft)	(%	(%)			(%	6)
520.77	310	1032.17	78.492	88392	75.29450288		246.4787777	



Customer	wk² Load Inertia (Ib-	t²)
Customer PO	Load Ty	ре
Sales Order	Voltage	%) 100
Project #	Accel. Ti	ne

Tag:

All characteristics are average expected values.

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Issued By	Issued Rev	

SPARE PARTS LIST*

Model: 7003XPQL11F-C

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
700	521.983	2	3580	6810H	4000	60	3	85.95
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEXP	55	F	1.15	Cont.	94.9	В	F	40

Bearings DE	Sleeve
Bearings NDE	Sleeve

*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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