



No.:

Date: 27-DEC-2012

Customer :

TECHNICAL PROPOSAL

Three-phase induction motor - Squirrel cage rotor

Product line : Three-Phase : Explosion Proof - NEMA Premium

Catalog Number : 02009XT3E324T

List Price : \$8,390

Notes:

Performed by:

Checked:



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## DATA SHEET

### Three-phase induction motor - Squirrel cage rotor

Customer :  
Product line : Three-Phase : Explosion Proof - NEMA Premium

Frame : 324T  
Output : 20 HP  
Frequency : 60 Hz  
Poles : 8  
Full load speed : 880  
Slip : 2.22 %  
Voltage : 208-230/460 V  
Rated current : 60.8-55.0/27.5 A  
Locked rotor current : 292/146 A  
Locked rotor current (I<sub>L</sub>/I<sub>n</sub>) : 5.3  
No-load current : 28.8/14.4 A  
Full load torque : 118 lb.ft  
Locked rotor torque : 230 %  
Breakdown torque : 230 %  
Design : B  
Insulation class : F  
Temperature rise : 80 K  
Locked rotor time : 25 s (hot)  
Service factor : 1.15  
Duty cycle : S1  
Ambient temperature : -20°C - +40°C  
Altitude : 1000  
Degree of Protection : IP54  
Approximate weight : 606 lb  
Moment of inertia : 9.3650 sq.ft.lb  
Noise level : 56 dB(A)

	D.E.	N.D.E.	Load	Power factor	Efficiency (%)
Bearings	6312 C3	6212 Z-C3	100%	0.74	92.4
Regreasing interval	20000 h	20000 h	75%	0.67	92.4
Grease amount	21 g	13 g	50%	0.56	91.7

Notes:

Performed by

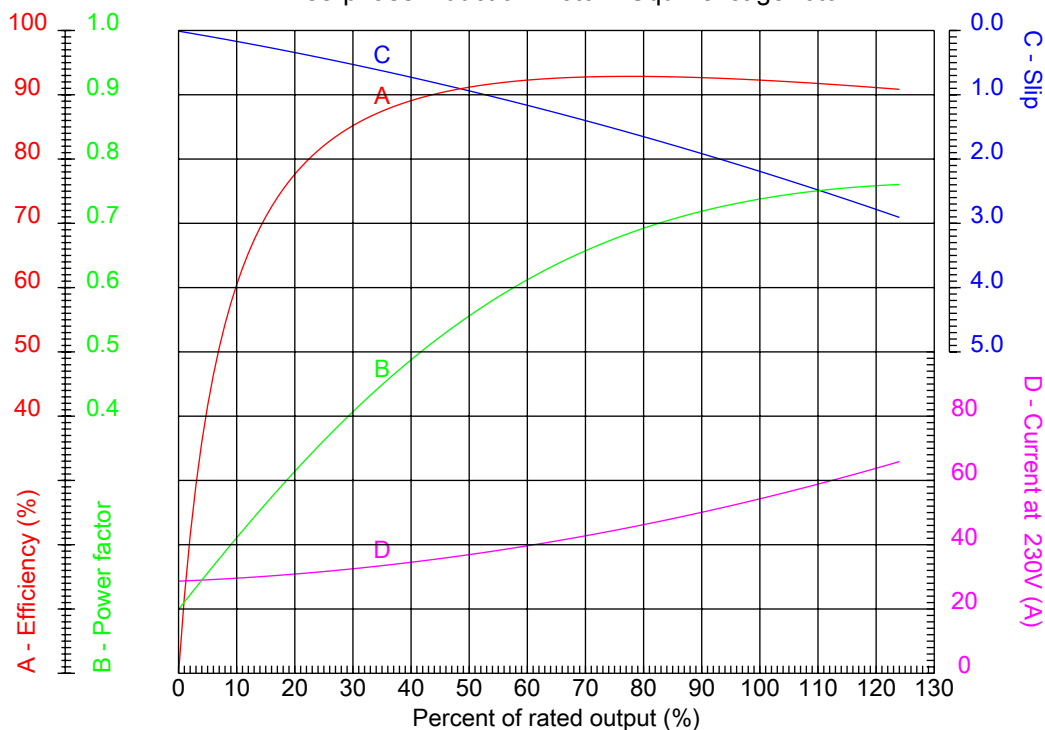
Checked



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PERFORMANCE CURVES RELATED TO RATED OUTPUT  
Three-phase induction motor - Squirrel cage rotor



Customer :  
Product line : Three-Phase : Explosion Proof - NEMA Premium

Frame	: 324T	Locked rotor current (I <sub>L</sub> /I <sub>n</sub> )	: 5.3
Output	: 20 HP	Duty cycle	: S1
Frequency	: 60 Hz	Service factor	: 1.15
Full load speed	: 880	Design	: B
Voltage	: 208-230/460 V	Locked rotor torque	: 230 %
Rated current	: 60.8-55.0/27.5 A	Breakdown torque	: 230 %
Insulation class	: F		

Notes:

Performed by

Checked

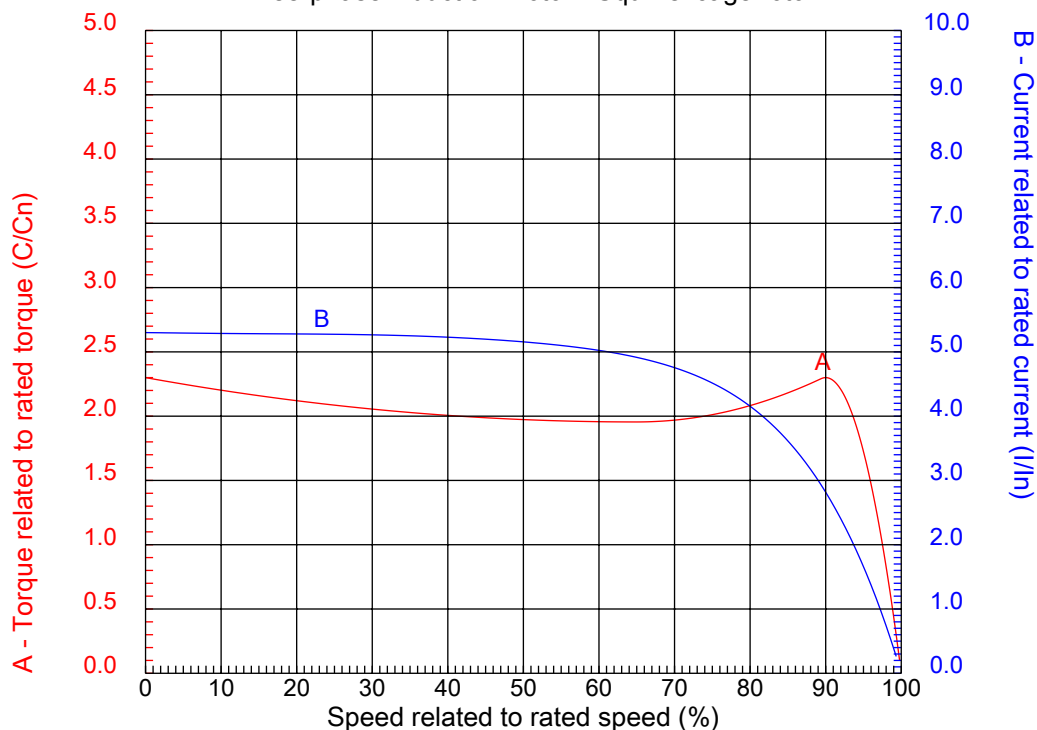


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### CHARACTERISTIC CURVES RELATED TO SPEED

Three-phase induction motor - Squirrel cage rotor



Customer :  
Product line : Three-Phase : Explosion Proof - NEMA Premium

Frame	: 324T	Locked rotor current (I <sub>l</sub> /I <sub>n</sub> )	: 5.3
Output	: 20 HP	Duty cycle	: S1
Frequency	: 60 Hz	Service factor	: 1.15
Full load speed	: 880	Design	: B
Voltage	: 208-230/460 V	Locked rotor torque	: 230 %
Rated current	: 60.8-55.0/27.5 A	Breakdown torque	: 230 %
Insulation class	: F		

Notes:

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Checked

1 2 3 4 5 6 7 8

A

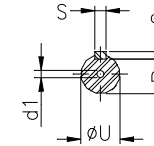
B

C

D

E

F



Notes:

Performed by:

Checked:

Customer:

Three-Phase : Explosion Proof - NEMA Premium

Three-phase induction motor  
Frame 324T - IP54

27-DEC-2012



2E 12.500	A 15.157	2F 10.500	B 13.071	BA 5.250
J 3.228	K 3.346	P 15.697	ES 3.937	depth 0.500
S 0.500	N-W 5.250	U 2.125	R 1.844	AB 12.961
D 8.000	G 1.307	O 15.992	HD 18.787	H 0.657
C 29.602	AA NPT 2"	d1 A 4	d2 A 4	T 2.795
Flange FD-406	AJ 16.000	AK 14.000	BD 18.000	BF 0.828
BB 0.203				