



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 : 07512XT3E405T

List Price : \$13,836

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 : 404/5T  
Output : 75 HP  
Frequency : 60 Hz  
Poles : 6  
Full load speed : 1180  
Slip : 1.67 %  
Voltage : 208-230/460 V  
Rated current : 192-174/87.0 A  
Locked rotor current : 1340/670 A  
Locked rotor current (I<sub>L</sub>/I<sub>n</sub>) : 7.7  
No-load current : 62.5/31.3 A  
Full load torque : 329 lb.ft  
Locked rotor torque : 250 %  
Breakdown torque : 260 %  
Design : B  
Insulation class : F  
Temperature rise : 80 K  
Locked rotor time : 15 s (hot)  
Service factor : 1.15  
Duty cycle : S1  
Ambient temperature : -20°C - +40°C  
Altitude : 1000  
Degree of Protection : IP54  
Approximate weight : 1257 lb  
Moment of inertia : 40.209 sq.ft.lb  
Noise level : 65 dB(A)

	D.E.	N.D.E.	Load	Power factor	Efficiency (%)
Bearings	6217 C3	6314 C3	100%	0.84	94.5
Regreasing interval	13507 h	14267 h	75%	0.81	95.0
Grease amount	21 g	27 g	50%	0.72	94.1

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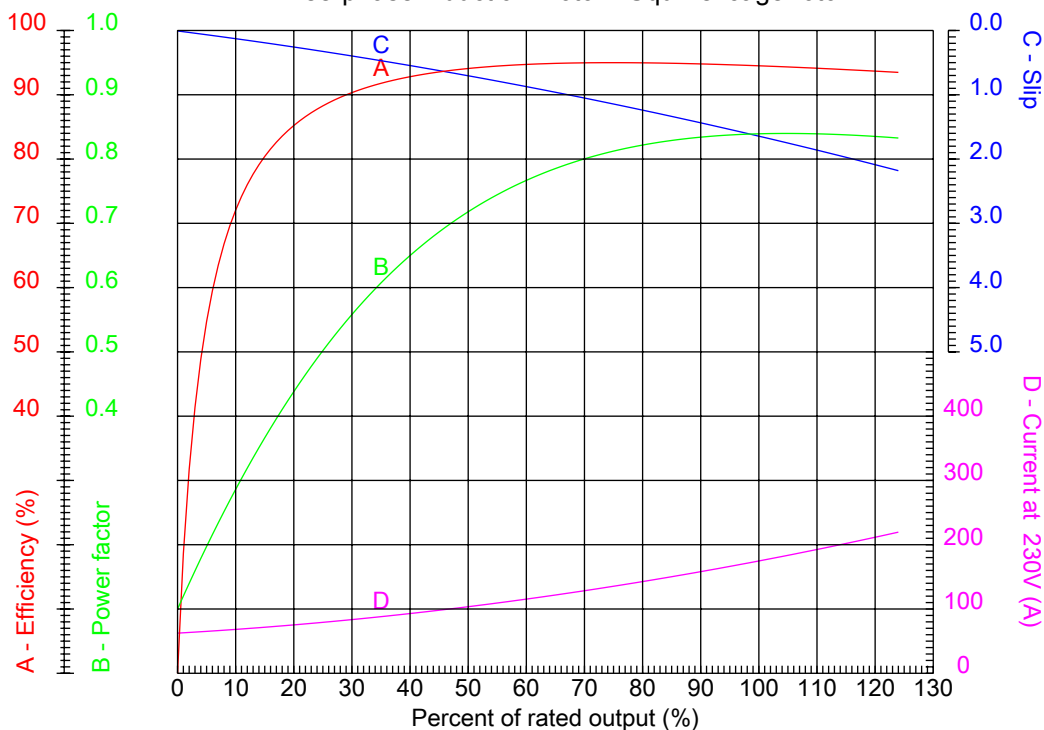


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### PERFORMANCE CURVES RELATED TO RATED OUTPUT

Three-phase induction motor - Squirrel cage rotor



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

Frame	: 404/5T	Locked rotor current (I <sub>l</sub> /I <sub>n</sub> )	: 7.7
Output	: 75 HP	Duty cycle	: S1
Frequency	: 60 Hz	Service factor	: 1.15
Full load speed	: 1180	Design	: B
Voltage	: 208-230/460 V	Locked rotor torque	: 250 %
Rated current	: 192-174/87.0 A	Breakdown torque	: 260 %
Insulation class	: F		

Notes:

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Checked

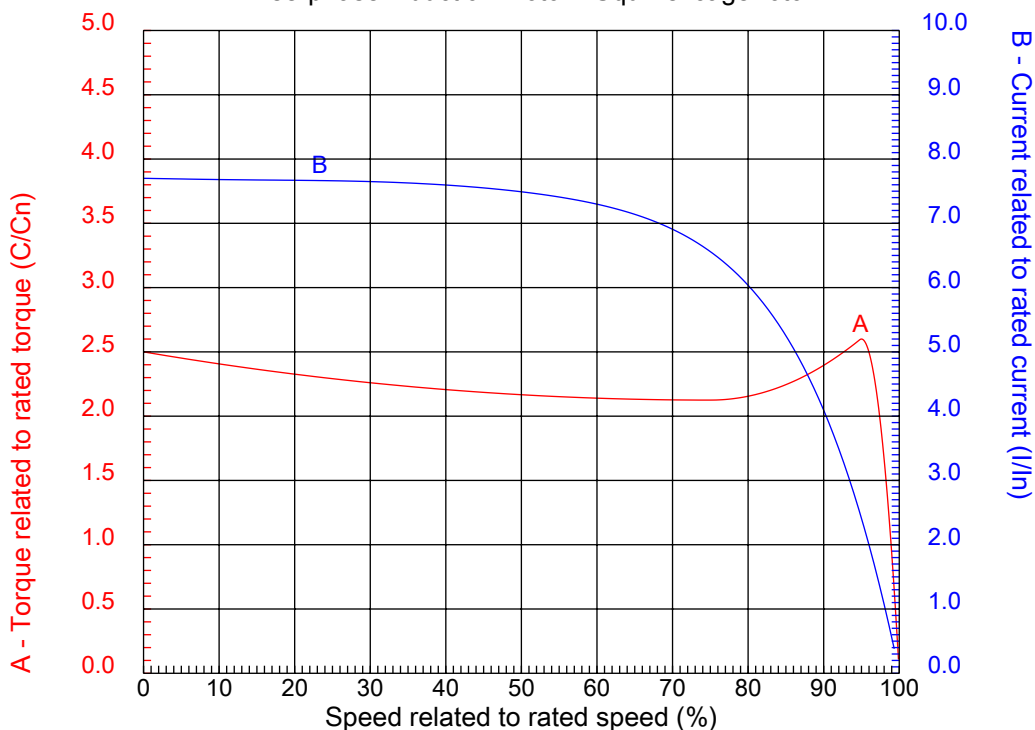


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### CHARACTERISTIC CURVES RELATED TO SPEED

Three-phase induction motor - Squirrel cage rotor



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

Frame	: 404/5T	Locked rotor current (I <sub>l</sub> /I <sub>n</sub> )	: 7.7
Output	: 75 HP	Duty cycle	: S1
Frequency	: 60 Hz	Service factor	: 1.15
Full load speed	: 1180	Design	: B
Voltage	: 208-230/460 V	Locked rotor torque	: 250 %
Rated current	: 192-174/87.0 A	Breakdown torque	: 260 %
Insulation class	: F		

Notes:

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1 2 3 4 5 6 7 8

A

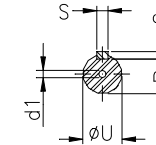
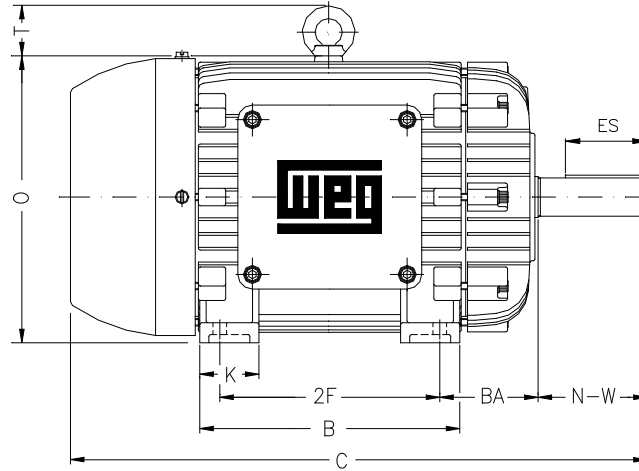
B

C

D

E

F



Notes:

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Checked:

Customer:

Three-Phase : Explosion Proof - NEMA Premium

Three-phase induction motor  
Frame 404/5T - IP54

27-DEC-2012



2E 16.000	A 19.921	2F 12.250/13.752	B 17.520	BA 6.625
J 3.937	K 5.433	P 18.583	ES 5.512	depth 0.750
S 0.750	N-W 7.250	U 2.875	R 2.449	AB 16.654
D 10.000	G 1.812	O 19.843	HD 22.638	H 0.807
C 38.074	AA NPT 3"	d1 DUNC 3/4"-10	d2 DUNC 3/4"-10	T 2.795
Flange FD-508	AJ 20.000	AK 18.000	BD 21.656	BF 0.828
BB 0.203				