



No.:

Date: 27-DEC-2012

Customer :

TECHNICAL PROPOSAL

Three-phase induction motor - Squirrel cage rotor

Product line : Three-Phase: W22 IEEE-841™ Petrochem Motors - NEMA Premium® Efficiency

Catalog Number : 07512ST3HIE405T-W22

List Price : \$12,866

Notes:

Performed by:

Checked:



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## DATA SHEET

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

Customer :  
Product line : Three-Phase: W22 IEEE-841™ Petrochem Motors - NEMA Premium® Efficiency

Frame : 404/5T  
Output : 75 HP  
Frequency : 60 Hz  
Poles : 6  
Full load speed : 1180  
Slip : 1.67 %  
Voltage : 575 V  
Rated current : 67.9 A  
Locked rotor current : 435 A  
Locked rotor current (I<sub>L</sub>/I<sub>n</sub>) : 6.4  
No-load current : 24.0 A  
Full load torque : 329 lb.ft  
Locked rotor torque : 200 %  
Breakdown torque : 230 %  
Design : B  
Insulation class : F  
Temperature rise : 80 K  
Locked rotor time : 17 s (hot)  
Service factor : 1.25  
Duty cycle : S1  
Ambient temperature : -20°C - +40°C  
Altitude : 1000  
Degree of Protection : IP55  
Approximate weight : 1089 lb  
Moment of inertia : 40.209 sq.ft.lb  
Noise level : 68 dB(A)

	D.E.	N.D.E.	Load	Power factor	Efficiency (%)
Bearings	6316 C3	6314 C3	100%	0.86	94.5
Regreasing interval	16000 h	17000 h	75%	0.83	94.5
Grease amount	34 g	27 g	50%	0.74	94.1

Notes:

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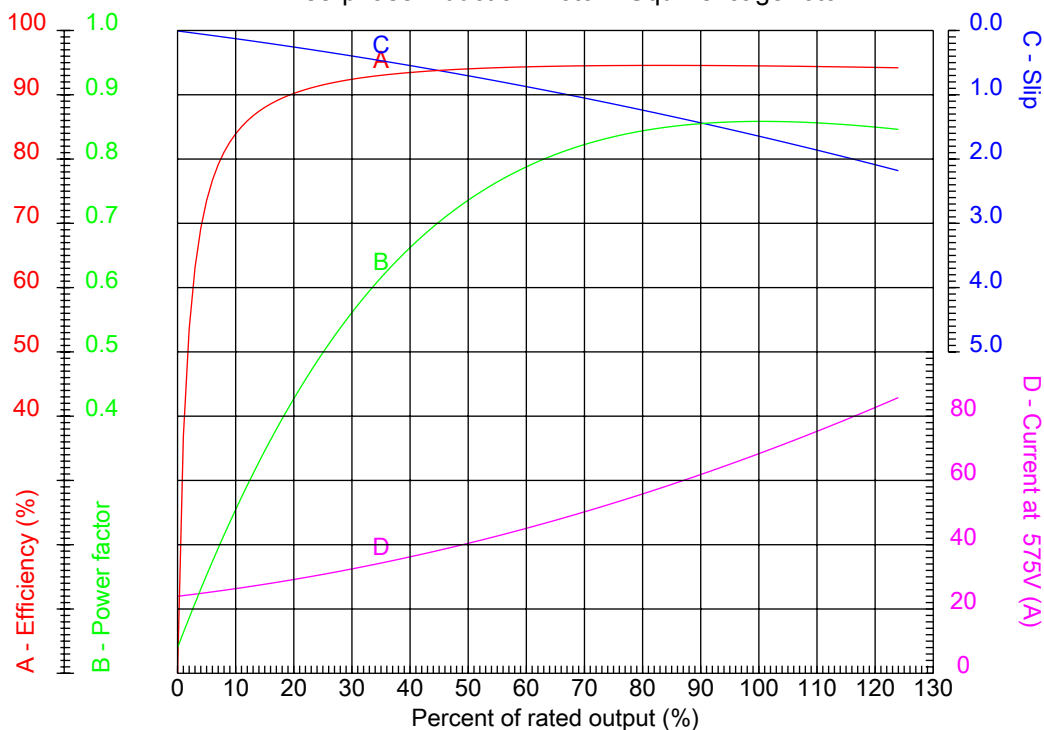
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### PERFORMANCE CURVES RELATED TO RATED OUTPUT Three-phase induction motor - Squirrel cage rotor



Customer :  
Product line : Three-Phase: W22 IEEE-841™ Petrochem Motors - NEMA Premium® Efficiency

Frame : 404/5T	Locked rotor current (I <sub>l</sub> /I <sub>n</sub> ) : 6.4
Output : 75 HP	Duty cycle : S1
Frequency : 60 Hz	Service factor : 1.25
Full load speed : 1180	Design : B
Voltage : 575 V	Locked rotor torque : 200 %
Rated current : 67.9 A	Breakdown torque : 230 %
Insulation class : F	

Notes:

Performed by

Checked

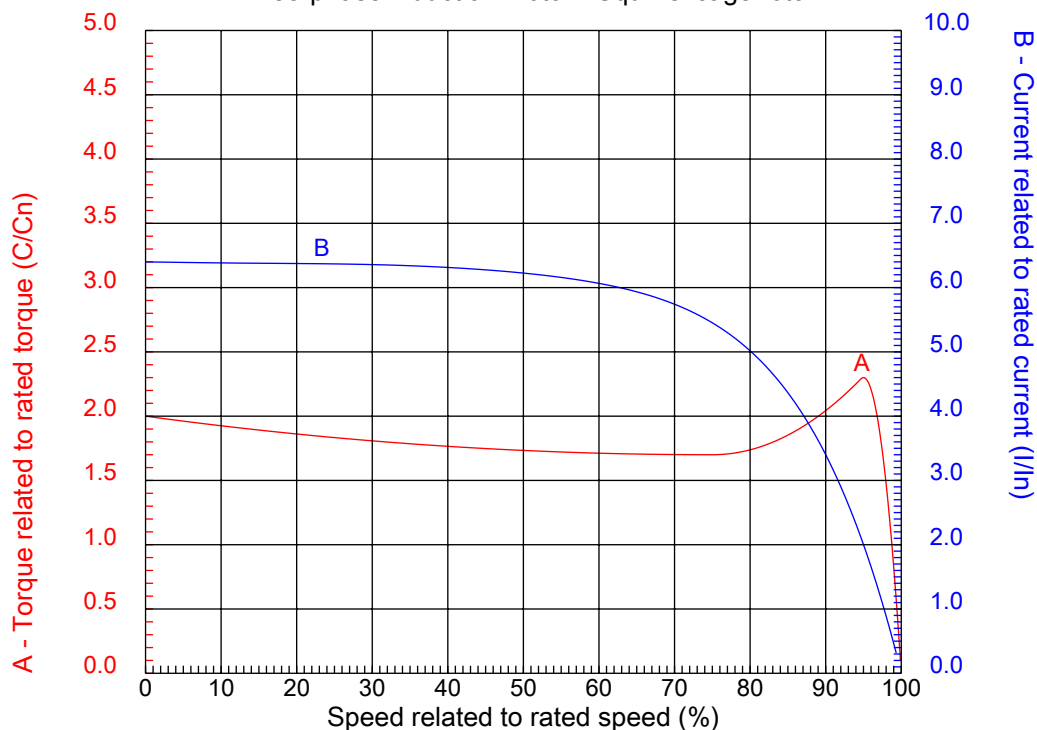


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### CHARACTERISTIC CURVES RELATED TO SPEED

Three-phase induction motor - Squirrel cage rotor



Customer :  
Product line : Three-Phase: W22 IEEE-841™ Petrochem Motors - NEMA Premium® Efficiency

Frame	: 404/5T	Locked rotor current (I <sub>l</sub> /I <sub>n</sub> )	: 6.4
Output	: 75 HP	Duty cycle	: S1
Frequency	: 60 Hz	Service factor	: 1.25
Full load speed	: 1180	Design	: B
Voltage	: 575 V	Locked rotor torque	: 200 %
Rated current	: 67.9 A	Breakdown torque	: 230 %
Insulation class	: F		

Notes:

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1 2 3 4 5 6 7 8

A

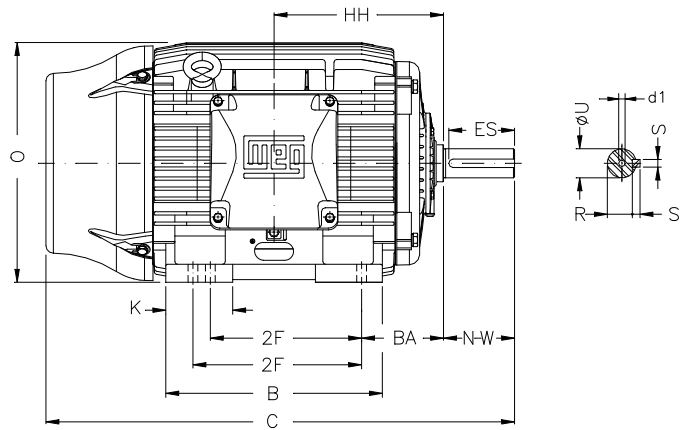
B

C

D

E

F



Notes:

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Customer:

Three-Phase: W22 IEEE-841™ Petrochem Motors - NEMA Premium® Efficiency

Three-phase induction motor  
Frame 404/5T - IP55

27-DEC-2012



2E 15.984	J 3.937	A 19.921	P 19.134	AB 16.023
2F 12.244/13.740	K 5.669	B 18.386	BA 6.625	U 2.875
N-W 7.250	ES 5.708	S 0.750	R 2.449	depth 0.750
D 10.000	G 1.811	HB 3.977	O 19.566	T 3.544
HD 23.110	HH 14.213	HK 6.023	H 0.810	C 39.730
LL 10.590	LM 11.181	AA NPT 3"	d1 DUNC 3/4"-10	d2 DUNC 3/4"-10
Flange FD-508	AJ 20.000	AK 18.000	BD 22.00	BF 0.828
BB 0.203				