



No.:

Date: 31-DEC-2012

Customer :

TECHNICAL PROPOSAL

Three-phase induction motor - Squirrel cage rotor

Product line : Cooling Tower Motors : NEMA Premium

Catalog Number : 10012ET3ECT444T

List Price : \$17,194

Notes:

Performed by:

Checked:



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## DATA SHEET

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

Customer :  
Product line : Cooling Tower Motors : NEMA Premium

Frame : 444/5T  
Output : 100 HP  
Frequency : 60 Hz  
Poles : 6  
Full load speed : 1190  
Slip : 0.83 %  
Voltage : 208-230/460 V  
Rated current : 267-242/121 A  
Locked rotor current : 1640/822 A  
Locked rotor current (I<sub>L</sub>/I<sub>n</sub>) : 6.8  
No-load current : 97.5/48.8 A  
Full load torque : 435 lb.ft  
Locked rotor torque : 230 %  
Breakdown torque : 260 %  
Design : B  
Insulation class : F  
Temperature rise : 80 K  
Locked rotor time : 49 s (hot)  
Service factor : 1.25  
Duty cycle : S1  
Ambient temperature : -20°C - +40°C  
Altitude : 1000  
Degree of Protection : IP55  
Approximate weight : 1830 lb  
Moment of inertia : 87.260 sq.ft.lb  
Noise level : 70 dB(A)

	D.E.	N.D.E.	Load	Power factor	Efficiency (%)
Bearings	6319 C3	6316 C3	100%	0.82	95.0
Regreasing interval	11094 h	12823 h	75%	0.76	95.0
Grease amount	45 g	34 g	50%	0.66	94.1

Notes:

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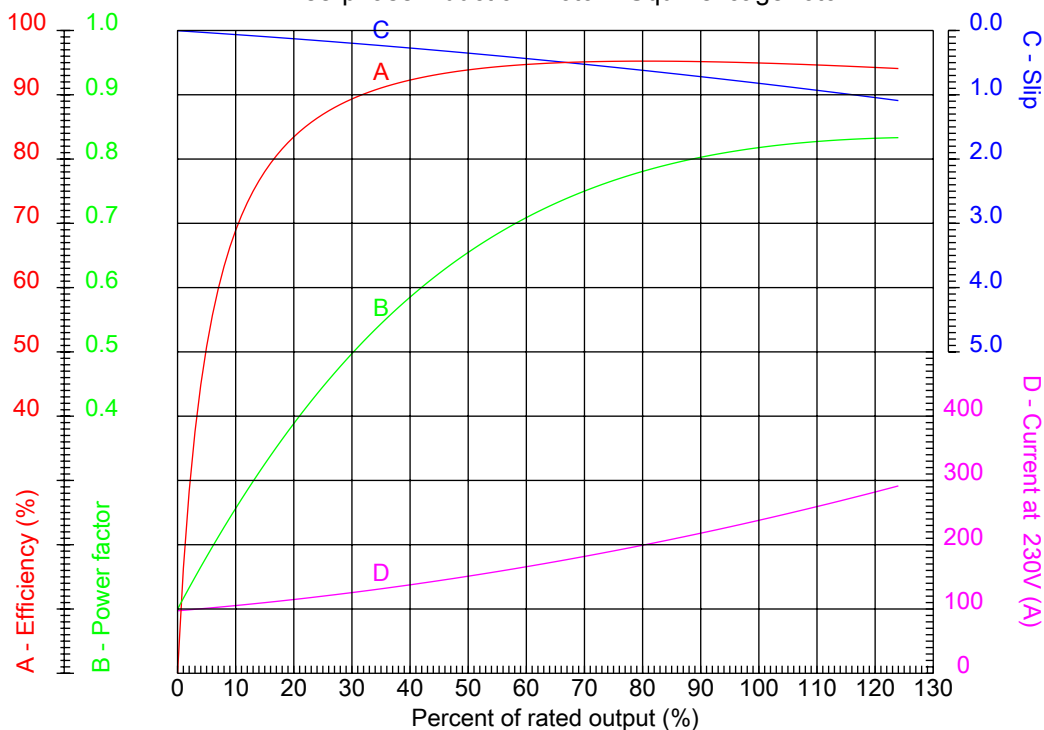
Checked



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



Customer :  
Product line : Cooling Tower Motors : NEMA Premium

Frame	: 444/5T	Locked rotor current (I <sub>l</sub> /I <sub>n</sub> )	: 6.8
Output	: 100 HP	Duty cycle	: S1
Frequency	: 60 Hz	Service factor	: 1.25
Full load speed	: 1190	Design	: B
Voltage	: 208-230/460 V	Locked rotor torque	: 230 %
Rated current	: 267-242/121 A	Breakdown torque	: 260 %
Insulation class	: F		

Notes:

Performed by

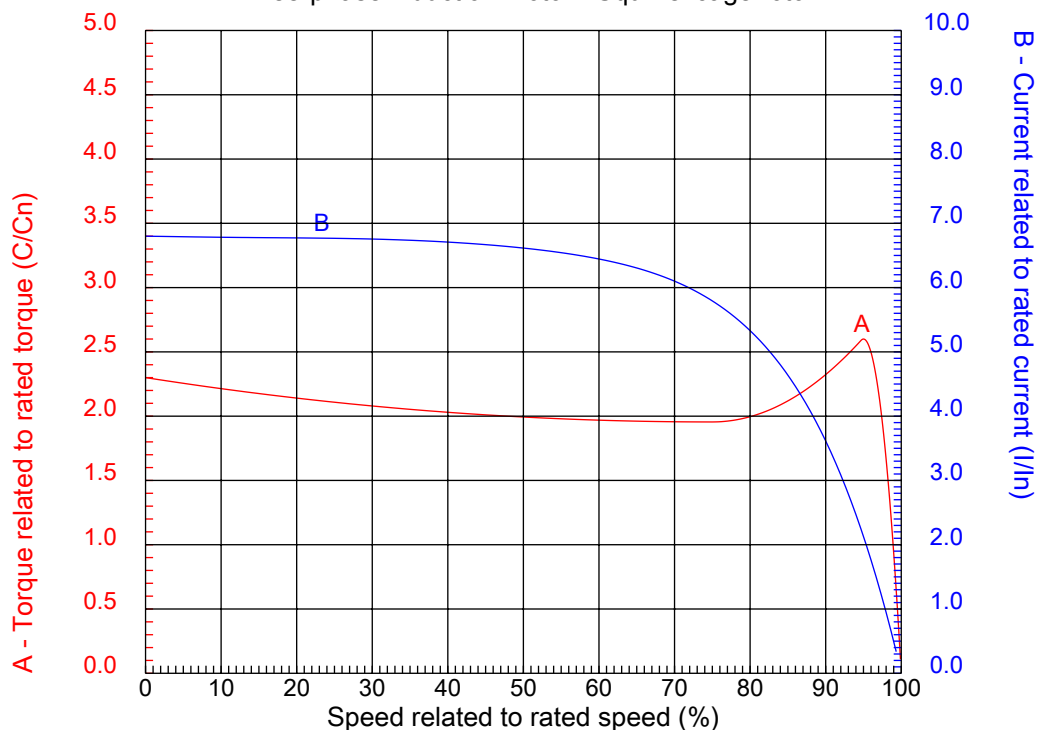
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### CHARACTERISTIC CURVES RELATED TO SPEED Three-phase induction motor - Squirrel cage rotor



Customer :  
Product line : Cooling Tower Motors : NEMA Premium

Frame	: 444/5T	Locked rotor current (I <sub>l</sub> /I <sub>n</sub> )	: 6.8
Output	: 100 HP	Duty cycle	: S1
Frequency	: 60 Hz	Service factor	: 1.25
Full load speed	: 1190	Design	: B
Voltage	: 208-230/460 V	Locked rotor torque	: 230 %
Rated current	: 267-242/121 A	Breakdown torque	: 260 %
Insulation class	: F		

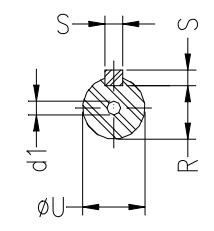
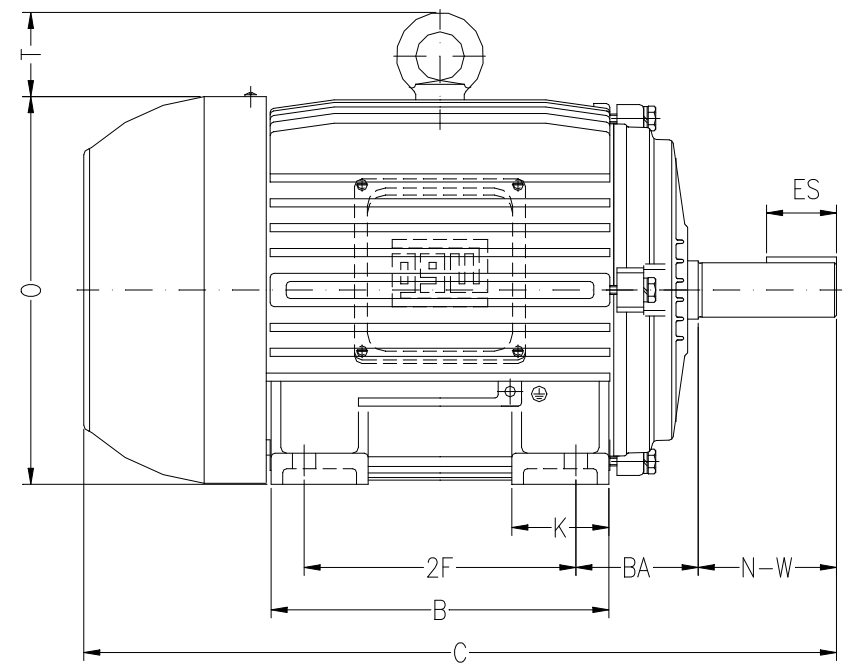
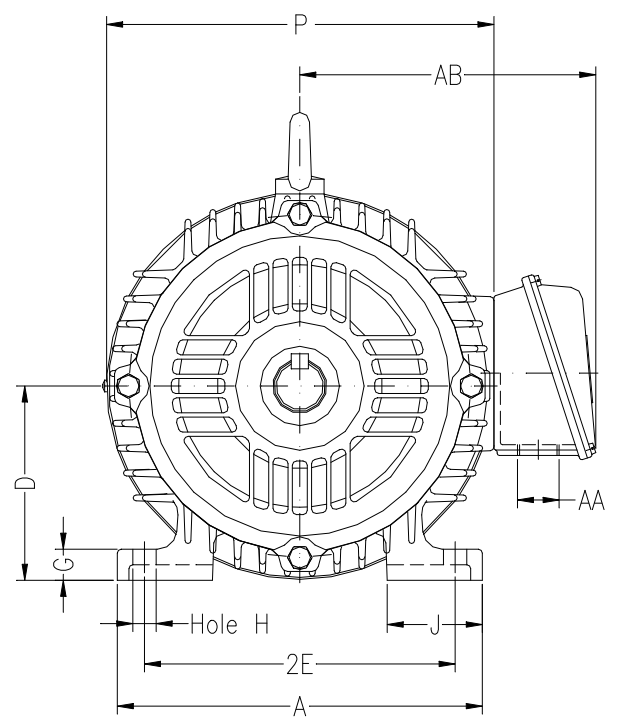
Notes:

Performed by

Checked

1      2      3      4      5      6      7      8

A  
B  
C  
D  
E  
F



Notes:

Performed by:

Checked:

Customer:

Cooling Tower Motors : NEMA Premium

Three-phase induction motor  
Frame 444/5T - IP55

31-DEC-2012



2E 18.000	2F 14.500/16.500	H 0.807	BA 7.500	A 21.929
B 20.079	C 43.776	D 11.000	G 1.630	J 3.937
K 5.591	O 22.713	P 23.622	ES 7.087	S 0.875
N-W 8.500	U 3.375	R 2.880	AB 19.213	AA 2XNPT 3"
d1 DUNC 3/4"-10	Flange FD-508	AJ 20.000	AK 18.000	BD 21.653
BF 0.828	BB 0.203			