



No.:

Date: 31-DEC-2012

Customer :

TECHNICAL PROPOSAL

Three-phase induction motor - Squirrel cage rotor

Product line : W22 Cooling Tower Motors: NEMA Premium

Catalog Number : 00318ET3ECT182TF1-W2

List Price : \$781

Notes:

Performed by:

Checked:



No.:

Date: 31-DEC-2012

## DATA SHEET

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

Customer :  
Product line : W22 Cooling Tower Motors: NEMA Premium

Frame : 182T  
Output : 3 HP  
Frequency : 60 Hz  
Poles : 4  
Full load speed : 1760  
Slip : 2.22 %  
Voltage : 208-230/460 V  
Rated current : 8.58-7.76/3.88 A  
Locked rotor current : 62.9/31.4 A  
Locked rotor current (I<sub>L</sub>/I<sub>n</sub>) : 8.1  
No-load current : 4.00/2.00 A  
Full load torque : 8.83 lb.ft  
Locked rotor torque : 230 %  
Breakdown torque : 340 %  
Design : B  
Insulation class : F  
Temperature rise : 80 K  
Locked rotor time : 23 s (hot)  
Service factor : 1.25  
Duty cycle : S1  
Ambient temperature : -20°C - +40°C  
Altitude : 1000  
Degree of Protection : IP55  
Approximate weight : 90 lb  
Moment of inertia : 0.34005 sq.ft.lb  
Noise level : 56 dB(A)

	D.E.	N.D.E.	Load	Power factor	Efficiency (%)
Bearings	6207 ZZ	6206 ZZ	100%	0.79	89.5
Regreasing interval	---	---	75%	0.73	88.5
Grease amount	---	---	50%	0.61	86.5

Notes:

Performed by

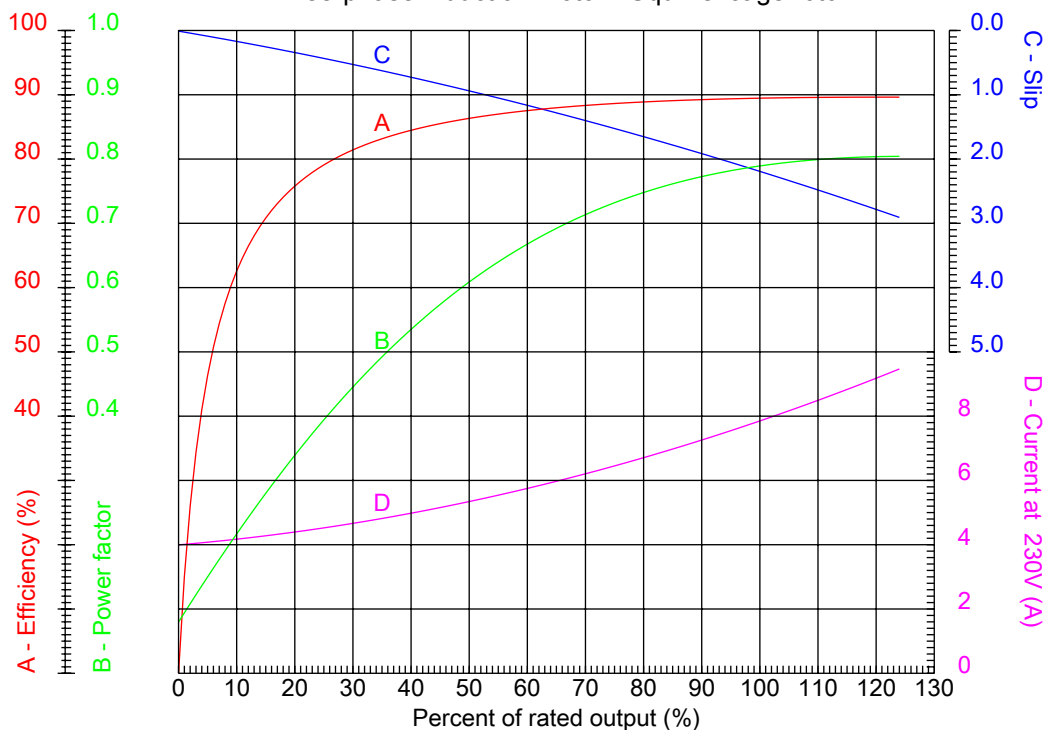
Checked



No.:

Date: 31-DEC-2012

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



Customer :  
Product line : W22 Cooling Tower Motors: NEMA Premium

Frame	: 182T	Locked rotor current (I <sub>l</sub> /I <sub>n</sub> )	: 8.1
Output	: 3 HP	Duty cycle	: S1
Frequency	: 60 Hz	Service factor	: 1.25
Full load speed	: 1760	Design	: B
Voltage	: 208-230/460 V	Locked rotor torque	: 230 %
Rated current	: 8.58-7.76/3.88 A	Breakdown torque	: 340 %
Insulation class	: F		

Notes:

Performed by

Checked

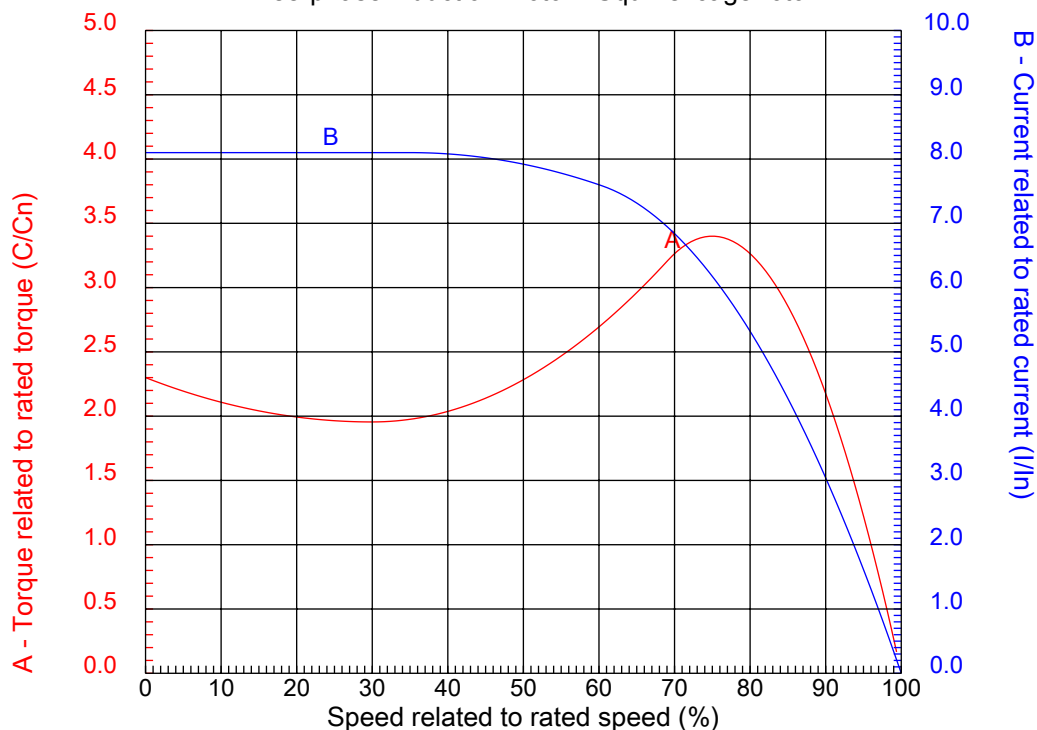


No.:

Date: 31-DEC-2012

### CHARACTERISTIC CURVES RELATED TO SPEED

Three-phase induction motor - Squirrel cage rotor



Customer :  
Product line : W22 Cooling Tower Motors: NEMA Premium

Frame	: 182T	Locked rotor current (I <sub>l</sub> /I <sub>n</sub> )	: 8.1
Output	: 3 HP	Duty cycle	: S1
Frequency	: 60 Hz	Service factor	: 1.25
Full load speed	: 1760	Design	: B
Voltage	: 208-230/460 V	Locked rotor torque	: 230 %
Rated current	: 8.58-7.76/3.88 A	Breakdown torque	: 340 %
Insulation class	: F		

Notes:

Performed by

Checked

1 2 3 4 5 6 7 8

A

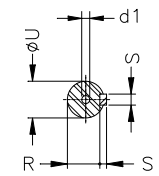
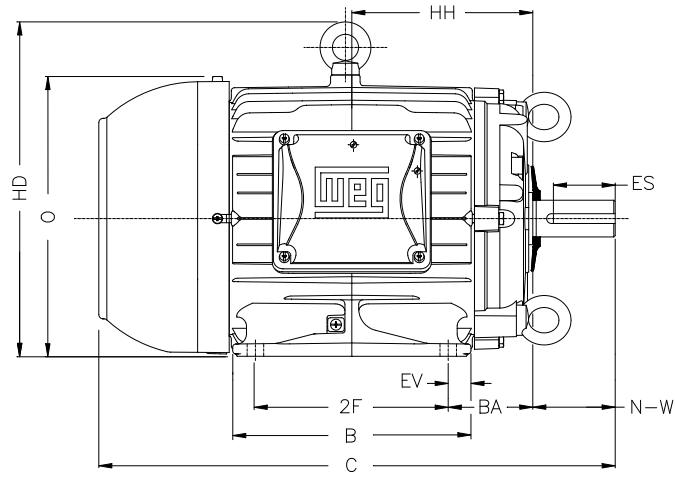
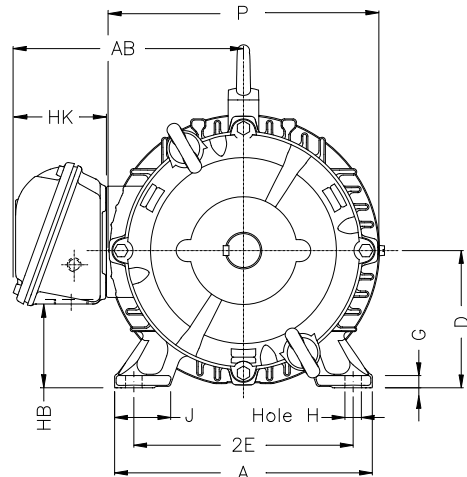
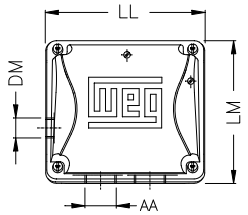
B

C

D

E

F



Notes:

Performed by:

Checked:

Customer:

W22 Cooling Tower Motors: NEMA Premium

Three-phase induction motor  
Frame 182T - IP55

31-DEC-2012



2E 7.500	J 1.594	A 8.661	P 8.504	AB 7.559
2F 4.500	B 5.945	BA 2.750	U 1.125	N-W 2.750
ES 1.969	S 0.250	R 0.984	depth 0.250	D 4.500
G 0.394	HB 2.236	O 9.343	T 1.772	HD 11.115
HF 4.500	HH 5.000	HK 3.155	H 0.406	C 14.860
LL 5.512	LM 5.236	AA NPT 1"	d1 A 4	d2 A 4