



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 : 00312ET3ECT213T-W22

List Price : \$1,329

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 : 213T  
Output : 3 HP  
Frequency : 60 Hz  
Poles : 6  
Full load speed : 1170  
Slip : 2.50 %  
Voltage : 208-230/460 V  
Rated current : 9.76-8.83/4.41 A  
Locked rotor current : 61.8/30.9 A  
Locked rotor current (I<sub>L</sub>/I<sub>n</sub>) : 7.0  
No-load current : 5.50/2.75 A  
Full load torque : 13.3 lb.ft  
Locked rotor torque : 200 %  
Breakdown torque : 280 %  
Design : B  
Insulation class : F  
Temperature rise : 80 K  
Locked rotor time : 58 s (hot)  
Service factor : 1.25  
Duty cycle : S1  
Ambient temperature : -20°C - +40°C  
Altitude : 1000  
Degree of Protection : IP55  
Approximate weight : 121 lb  
Moment of inertia : 1.1958 sq.ft.lb  
Noise level : 55 dB(A)

|                     | D.E.    | N.D.E.  | Load | Power factor | Efficiency (%) |
|---------------------|---------|---------|------|--------------|----------------|
| Bearings            | 6308 ZZ | 6207 ZZ | 100% | 0.70         | 89.5           |
| Regreasing interval | ---     | ---     | 75%  | 0.63         | 88.5           |
| Grease amount       | ---     | ---     | 50%  | 0.50         | 86.5           |

Notes:

Performed by

Checked

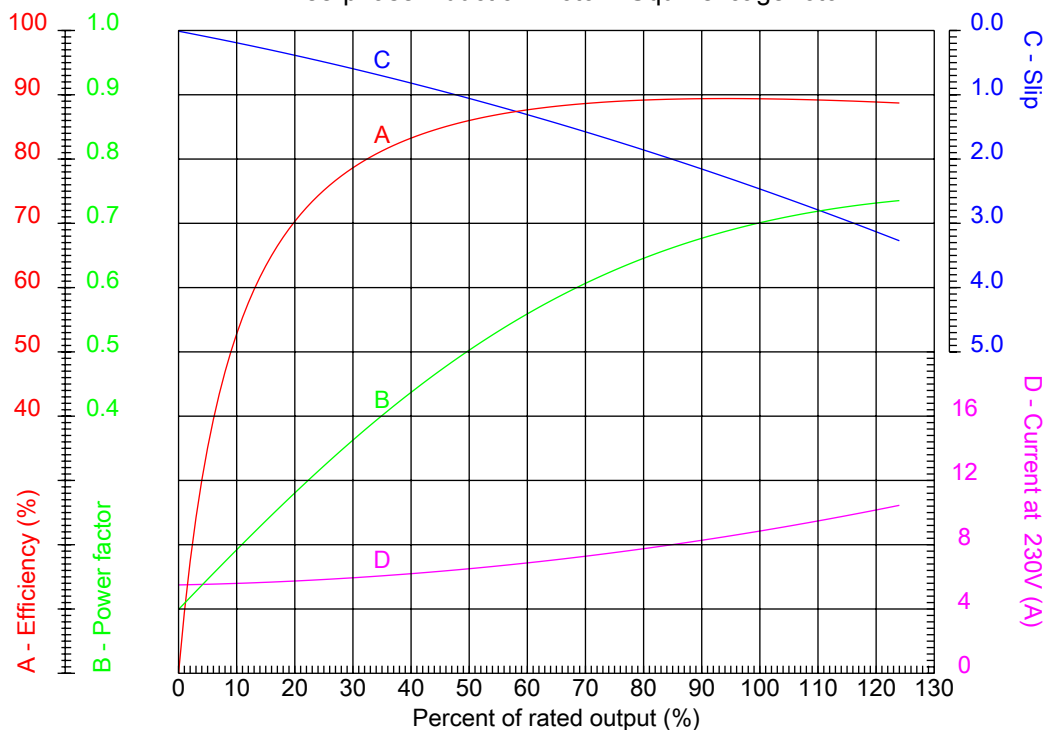


No.:

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            | : 213T             | Locked rotor current (I <sub>l</sub> /I <sub>n</sub> ) | : 7.0   |
| Output           | : 3 HP             | Duty cycle   | : S1    |
| Frequency        | : 60 Hz            | Service factor   | : 1.25  |
| Full load speed  | : 1170             | Design   | : B     |
| Voltage          | : 208-230/460 V    | Locked rotor torque                                    | : 200 % |
| Rated current    | : 9.76-8.83/4.41 A | Breakdown torque                                       | : 280 % |
| Insulation class | : F                |  |         |

Notes:

Performed by

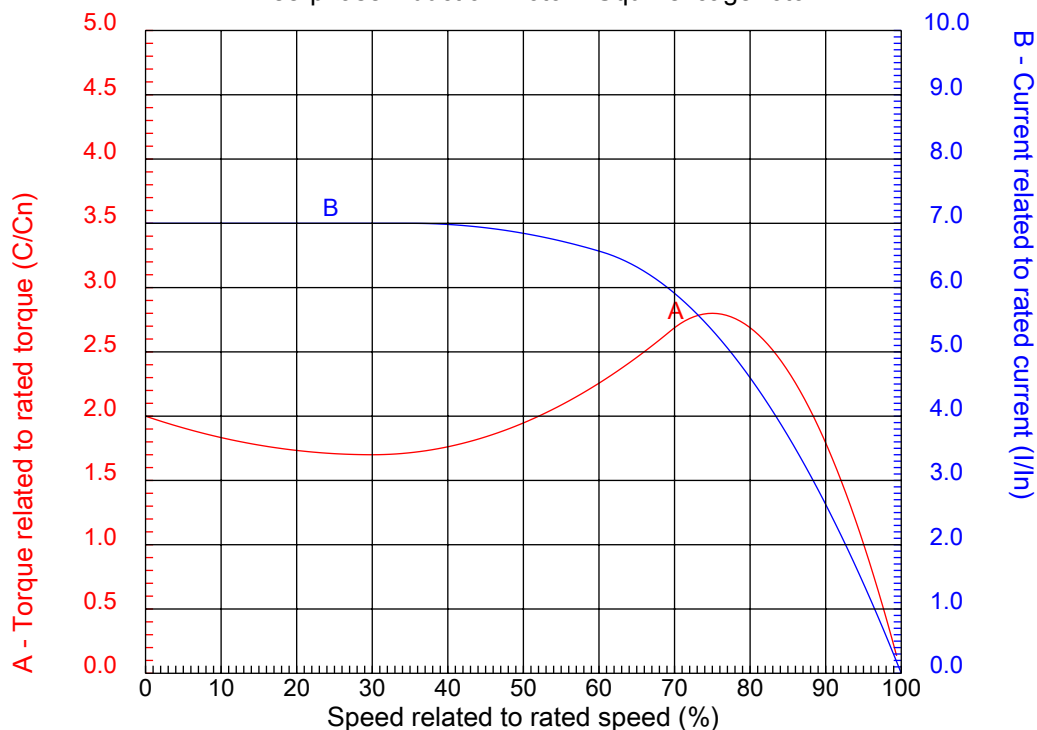
Checked



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            | : 213T             | Locked rotor current (I <sub>l</sub> /I <sub>n</sub> ) | : 7.0   |
| Output           | : 3 HP             | Duty cycle   | : S1    |
| Frequency        | : 60 Hz            | Service factor   | : 1.25  |
| Full load speed  | : 1170             | Design   | : B     |
| Voltage          | : 208-230/460 V    | Locked rotor torque                                    | : 200 % |
| Rated current    | : 9.76-8.83/4.41 A | Breakdown torque                                       | : 280 % |
| Insulation class | : F                |  |         |

Notes:

Performed by

Checked

1 2 3 4 5 6 7 8

A

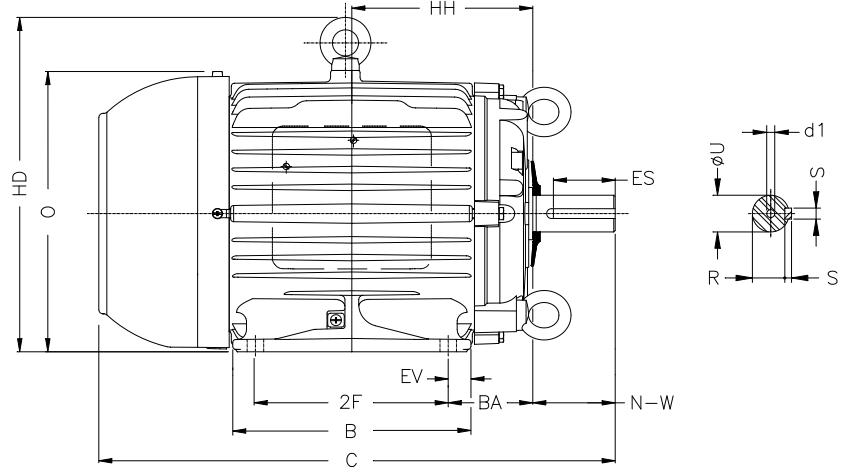
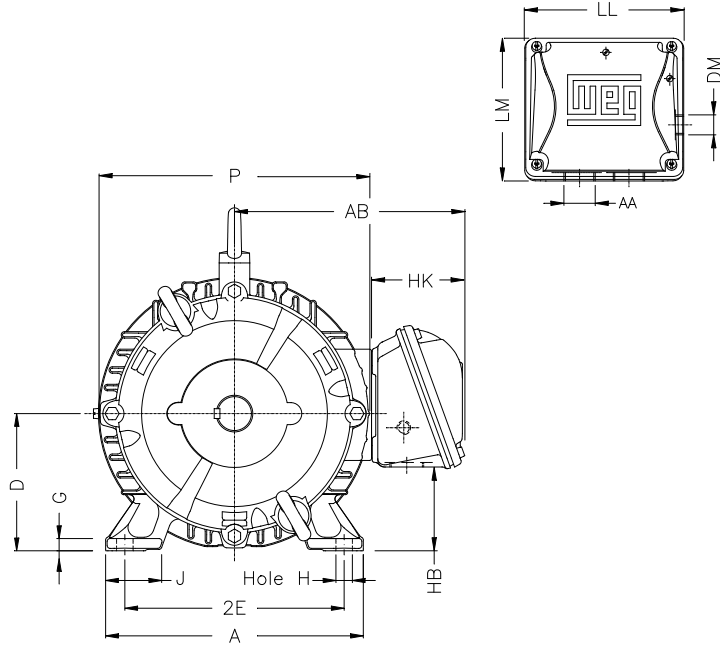
B

C

D

E

F



Notes:

|              |             |             |              |                |
|--------------|-------------|-------------|--------------|----------------|
| 2E<br>8.500  | J<br>1.791  | A<br>9.764  | P<br>10.236  | AB<br>8.667    |
| 2F<br>5.500  | K<br>2.165  | B<br>7.362  | BA<br>3.500  | U<br>1.375     |
| N-W<br>3.375 | ES<br>2.480 | S<br>0.313  | R<br>1.203   | depth<br>0.313 |
| D<br>5.250   | G<br>0.669  | HB<br>3.006 | O<br>10.841  | T<br>1.772     |
| HD<br>12.613 | HF<br>5.250 | HH<br>6.250 | HK<br>3.155  | H<br>0.406     |
| C<br>18.021  | LL<br>5.512 | LM<br>5.236 | AA<br>NPT 1" | d1<br>A 4      |
| d2<br>A 4    |             |             |              |                |

Performed by:

Checked:

Customer:

W22 Cooling Tower Motors: NEMA Premium

Three-phase induction motor  
Frame 213T - IP55

31-DEC-2012

