



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 : 00736XT3E213T

List Price : \$1,646

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 : 213T  
Output : 7.5 HP  
Frequency : 60 Hz  
Poles : 2  
Full load speed : 3540  
Slip : 1.67 %  
Voltage : 208-230/460 V  
Rated current : 19.8-17.9/8.97 A  
Locked rotor current : 161/80.7 A  
Locked rotor current (I<sub>L</sub>/I<sub>n</sub>) : 9.0  
No-load current : 7.60/3.80 A  
Full load torque : 11.0 lb.ft  
Locked rotor torque : 300 %  
Breakdown torque : 380 %  
Design : B  
Insulation class : F  
Temperature rise : 80 K  
Locked rotor time : 23 s (hot)  
Service factor : 1.15  
Duty cycle : S1  
Ambient temperature : -20°C - +40°C  
Altitude : 1000  
Degree of Protection : IP54  
Approximate weight : 190 lb  
Moment of inertia : 0.46962 sq.ft.lb  
Noise level : 72 dB(A)

|                     | D.E.    | N.D.E.  | Load | Power factor | Efficiency (%) |
|---------------------|---------|---------|------|--------------|----------------|
| Bearings            | 6308 Z  | 6207 Z  | 100% | 0.86         | 89.5           |
| Regreasing interval | 18447 h | 20000 h | 75%  | 0.81         | 88.5           |
| Grease amount       | 11 g    | 7 g     | 50%  | 0.71         | 85.5           |

Notes:

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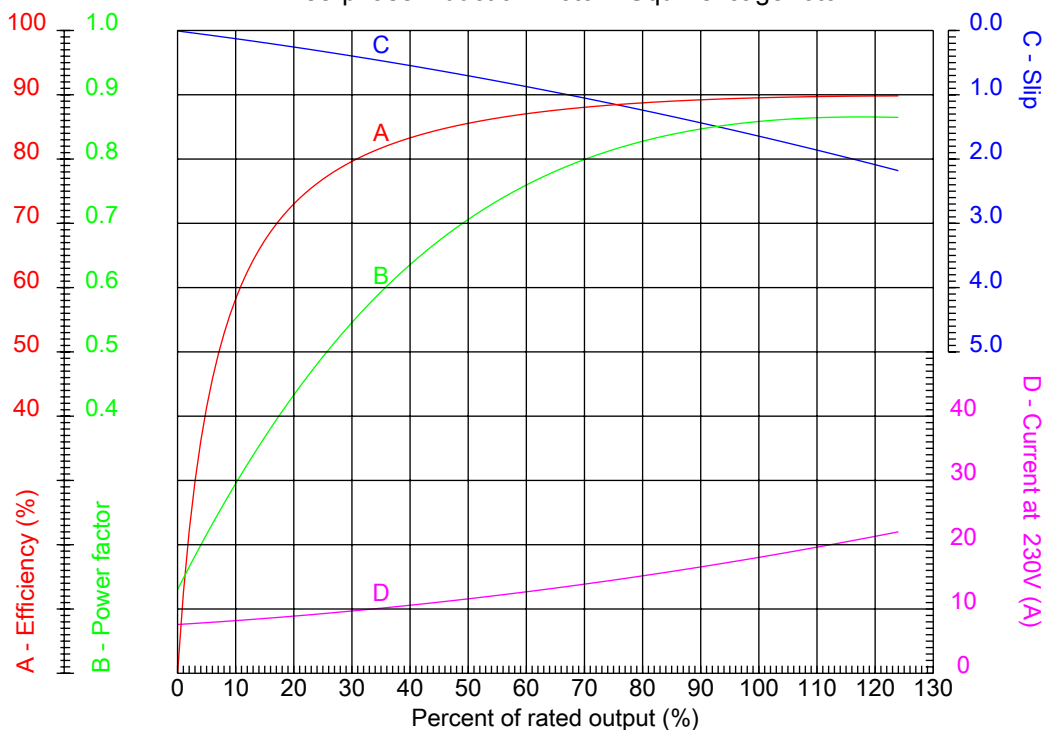
Checked



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



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

|                  |                    |  |         |
|------------------|--------------------|--|---------|
| Frame            | : 213T             | Locked rotor current (I <sub>l</sub> /I <sub>n</sub> ) | : 9.0   |
| Output           | : 7.5 HP           | Duty cycle   | : S1    |
| Frequency        | : 60 Hz            | Service factor   | : 1.15  |
| Full load speed  | : 3540             | Design   | : B     |
| Voltage          | : 208-230/460 V    | Locked rotor torque                                    | : 300 % |
| Rated current    | : 19.8-17.9/8.97 A | Breakdown torque                                       | : 380 % |
| Insulation class | : F                |  |         |

Notes:

Performed by

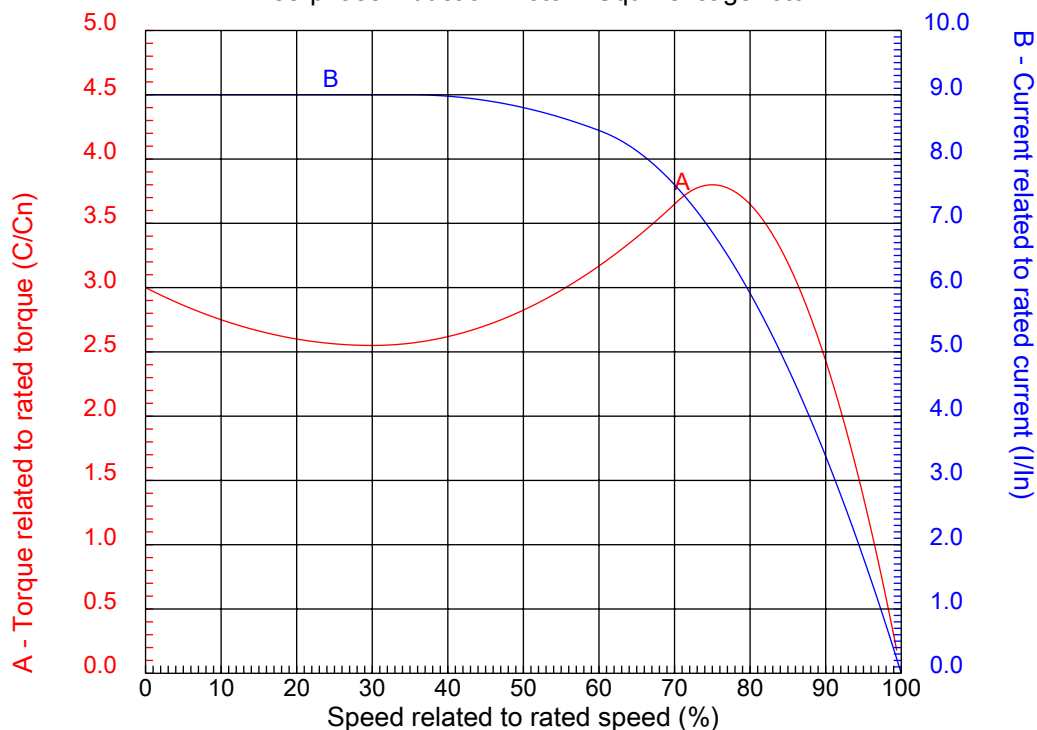
Checked



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



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

|                  |                    |  |         |
|------------------|--------------------|--|---------|
| Frame            | : 213T             | Locked rotor current (I <sub>l</sub> /I <sub>n</sub> ) | : 9.0   |
| Output           | : 7.5 HP           | Duty cycle   | : S1    |
| Frequency        | : 60 Hz            | Service factor   | : 1.15  |
| Full load speed  | : 3540             | Design   | : B     |
| Voltage          | : 208-230/460 V    | Locked rotor torque                                    | : 300 % |
| Rated current    | : 19.8-17.9/8.97 A | Breakdown torque                                       | : 380 % |
| Insulation class | : F                |  |         |

Notes:

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Checked

1 2 3 4 5 6 7 8

A

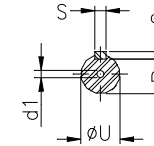
B

C

D

E

F



Notes:

Performed by:

Checked:

Customer:

Three-Phase : Explosion Proof - NEMA Premium

Three-phase induction motor  
Frame 213T - IP54

27-DEC-2012



|                  |              |             |              |                |
|------------------|--------------|-------------|--------------|----------------|
| 2E<br>8.500      | A<br>9.764   | 2F<br>5.500 | B<br>7.402   | BA<br>3.500    |
| J<br>2.008       | K<br>2.165   | P<br>10.709 | ES<br>2.480  | depth<br>0.313 |
| S<br>0.313       | N-W<br>3.375 | U<br>1.375  | R<br>1.203   | AB<br>9.252    |
| D<br>5.250       | G<br>0.827   | O<br>11.156 | HD<br>12.928 | H<br>0.406     |
| C<br>17.952      | AA<br>NPT 1" | d1<br>A 4   | d2<br>A 4    | T<br>1.772     |
| Flange<br>FD-254 | AJ<br>10.000 | AK<br>9.000 | BD<br>11.000 | BF<br>0.562    |
| BB<br>0.203      |              |             |              |                |