



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 : 00209XT3E213T

List Price : \$2,439

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 : 2 HP  
 Frequency : 60 Hz  
 Poles : 8  
 Full load speed : 870  
 Slip : 3.33 %  
 Voltage : 208-230/460 V  
 Rated current : 7.63-6.90/3.45 A  
 Locked rotor current : 52.4/26.2 A  
 Locked rotor current (I<sub>L</sub>/I<sub>n</sub>) : 7.6  
 No-load current : 4.60/2.30 A  
 Full load torque : 11.9 lb.ft  
 Locked rotor torque : 270 %  
 Breakdown torque : 300 %  
 Design : B  
 Insulation class : F  
 Temperature rise : 80 K  
 Locked rotor time : 35 s (hot)  
 Service factor : 1.15  
 Duty cycle : S1  
 Ambient temperature : -20°C - +40°C  
 Altitude : 1000  
 Degree of Protection : IP54  
 Approximate weight : 165 lb  
 Moment of inertia : 1.3099 sq.ft.lb  
 Noise level : 52 dB(A)

|                     | D.E.    | N.D.E.  | Load | Power factor | Efficiency (%) |
|---------------------|---------|---------|------|--------------|----------------|
| Bearings            | 6308 ZZ | 6207 ZZ | 100% | 0.65         | 84.0           |
| Regreasing interval | ---     | ---     | 75%  | 0.57         | 82.5           |
| Grease amount       | ---     | ---     | 50%  | 0.45         | 80.0           |

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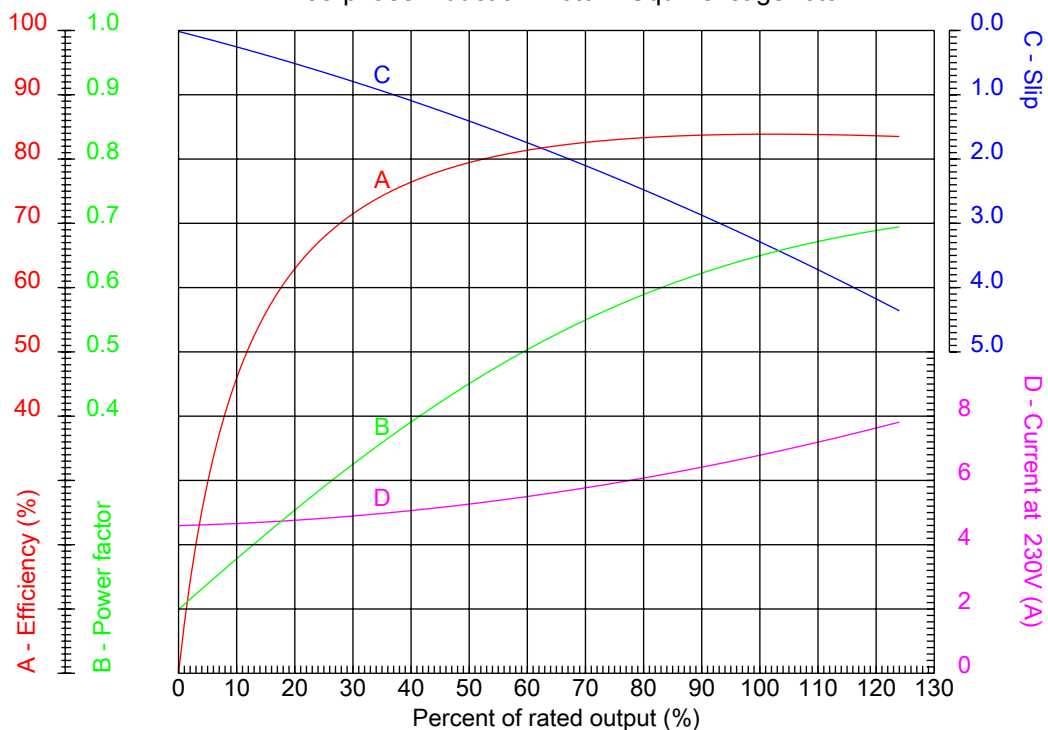


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### PERFORMANCE CURVES RELATED TO RATED OUTPUT

Three-phase induction motor - Squirrel cage rotor



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

|                  |                    |  |         |
|------------------|--------------------|--|---------|
| Frame            | : 213T             | Locked rotor current (I <sub>L</sub> /I <sub>n</sub> ) | : 7.6   |
| Output           | : 2 HP             | Duty cycle   | : S1    |
| Frequency        | : 60 Hz            | Service factor   | : 1.15  |
| Full load speed  | : 870              | Design   | : B     |
| Voltage          | : 208-230/460 V    | Locked rotor torque                                    | : 270 % |
| Rated current    | : 7.63-6.90/3.45 A | Breakdown torque                                       | : 300 % |
| Insulation class | : F                |  |         |

Notes:

Performed by

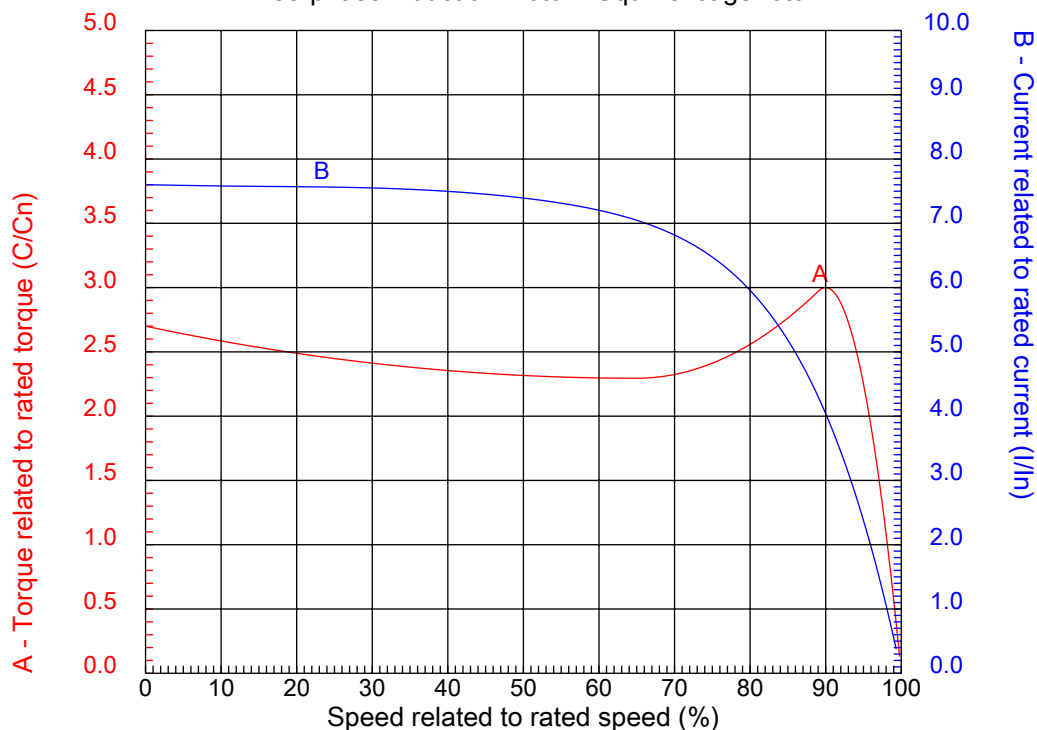
Checked



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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> ) | : 7.6   |
| Output           | : 2 HP             | Duty cycle   | : S1    |
| Frequency        | : 60 Hz            | Service factor   | : 1.15  |
| Full load speed  | : 870              | Design   | : B     |
| Voltage          | : 208-230/460 V    | Locked rotor torque                                    | : 270 % |
| Rated current    | : 7.63-6.90/3.45 A | Breakdown torque                                       | : 300 % |
| Insulation class | : F                |  |         |

Notes:

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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      |              |             |              |                |