



No.:

Date: 2/7/2011

Customer :

TECHNICAL PROPOSAL

Three-phase induction motor - Squirrel cage rotor

Product line : Three-Phase : Rolled Steel Motor - NEMA Premium Efficiency

Catalog Number : 00518ET3ERS184TC

List Price : \$743

Notes:

Three-Phase : Rolled Steel Motor - NEMA Premium Efficiency

Performed by:

Checked:



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## DATA SHEET

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

Customer :  
 Product line : Three-Phase : Rolled Steel Motor - NEMA Premium Efficiency

Frame : 184T  
 Output : 5 HP  
 Frequency : 60 Hz  
 Poles : 4  
 Full load speed : 1755  
 Slip : 2.50 %  
 Voltage : 208-230/460 V  
 Rated current : 14.2-12.8/6.40 A  
 Locked rotor current : 100/49.9 A  
 Locked rotor current (I<sub>L</sub>/I<sub>n</sub>) : 7.8  
 No-load current : 6.12/3.06 A  
 Full load torque : 14.8 lb.ft  
 Locked rotor torque : 210 %  
 Breakdown torque : 300 %  
 Design : B  
 Insulation class : F  
 Temperature rise : 80 K  
 Locked rotor time : 20 s (hot)  
 Service factor : 1.15  
 Duty cycle : S1  
 Ambient temperature : -20°C - +40°C  
 Altitude : 1000 m  
 Degree of Protection : IP55  
 Approximate weight : 88 lb  
 Moment of inertia : 0.44494 sq.ft.lb  
 Noise level : ---

|                     | D.E.    | N.D.E.  | Load | Power factor | Efficiency (%) |
|---------------------|---------|---------|------|--------------|----------------|
| Bearings            | 6206 ZZ | 6206 ZZ | 100% | 0.81         | 89.5           |
| Regreasing interval | ---     | ---     | 75%  | 0.75         | 90.2           |
| Grease amount       | ---     | ---     | 50%  | 0.63         | 88.5           |

Notes:

Performed by:

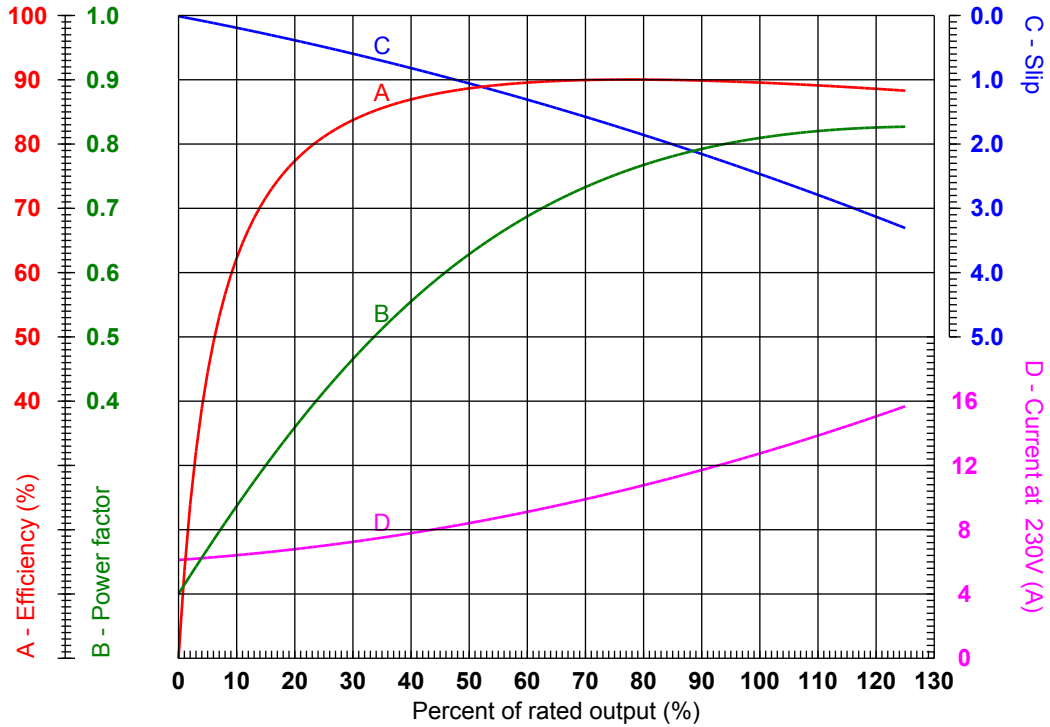
Checked:



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



Customer :  
Product line : Three-Phase : Rolled Steel Motor - NEMA Premium Efficiency

|                  |                    |  |         |
|------------------|--------------------|--|---------|
| Output           | : 5 HP             | Locked rotor current (I <sub>L</sub> /I <sub>n</sub> ) | : 7.8   |
| Frame            | : 184T             | Duty cycle   | : S1    |
| Full load speed  | : 1755             | Service factor   | : 1.15  |
| Frequency        | : 60 Hz            | Design   | : B     |
| Voltage          | : 208-230/460 V    | Locked rotor torque                                    | : 210 % |
| Insulation class | : F                | Breakdown torque                                       | : 300 % |
| Rated current    | : 14.2-12.8/6.40 A |  |         |

Notes:

Performed by:

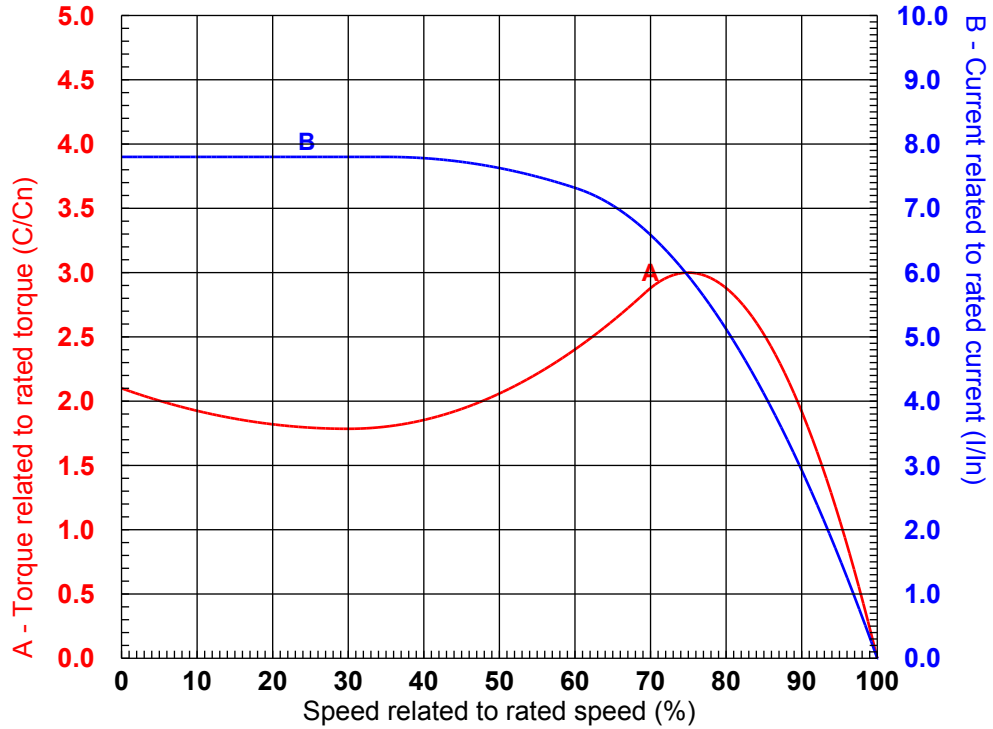
Checked:



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



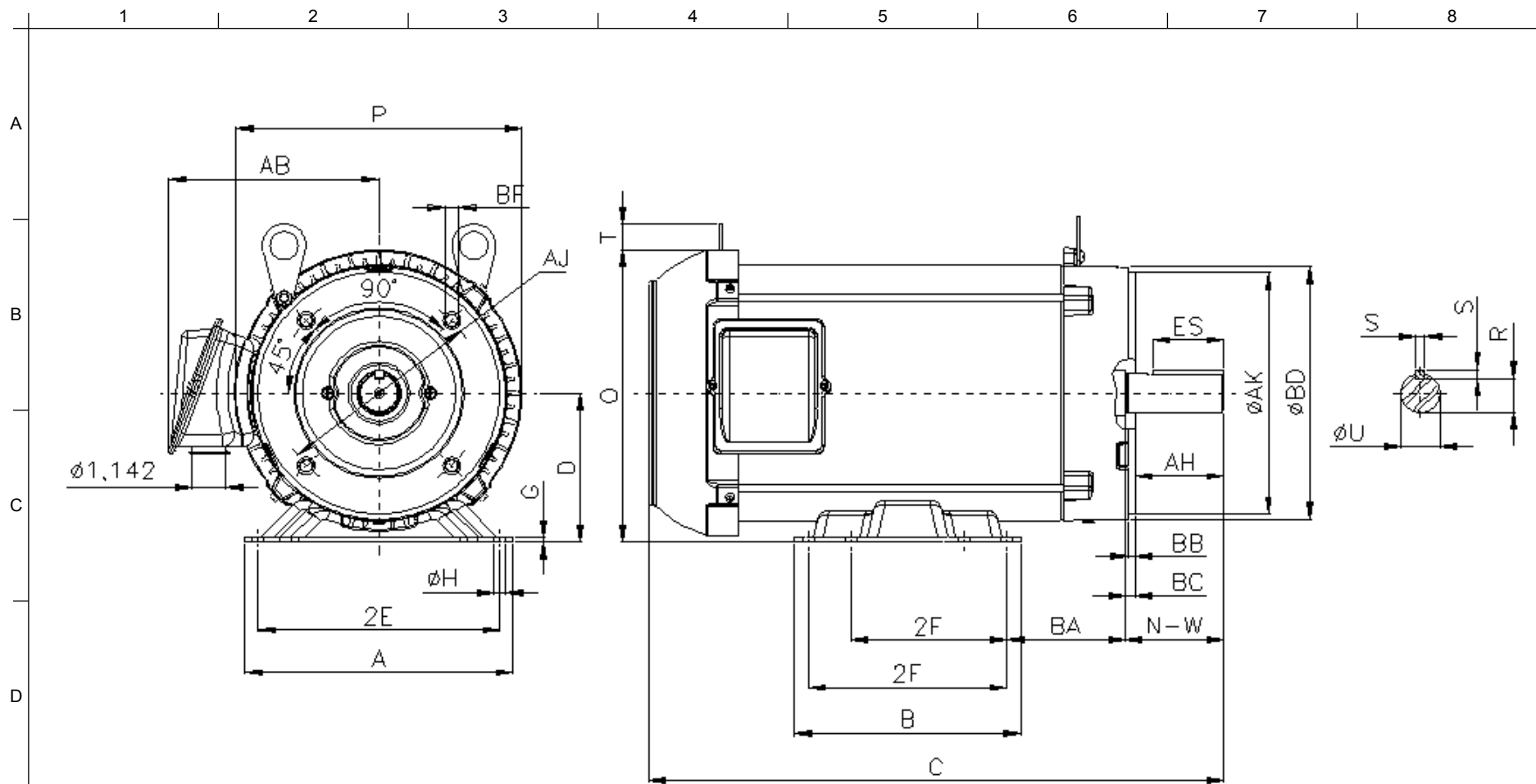
Customer :  
Product line : Three-Phase : Rolled Steel Motor - NEMA Premium Efficiency

|                  |                    |  |         |
|------------------|--------------------|--|---------|
| Output           | : 5 HP             | Locked rotor current (I <sub>l</sub> /I <sub>n</sub> ) | : 7.8   |
| Frame            | : 184T             | Duty cycle   | : S1    |
| Full load speed  | : 1755             | Service factor   | : 1.15  |
| Frequency        | : 60 Hz            | Design   | : B     |
| Voltage          | : 208-230/460 V    | Locked rotor torque                                    | : 210 % |
| Insulation class | : F                | Breakdown torque                                       | : 300 % |
| Rated current    | : 14.2-12.8/6.40 A |  |         |

Notes:

Performed by:

Checked:



Notes:

|                   |              |             |             |                         |
|-------------------|--------------|-------------|-------------|-------------------------|
| 2E<br>7.500       | J<br>---     | A<br>8.661  | P<br>8.694  | AB<br>6.353             |
| 2F<br>4.500/5.500 | K<br>---     | B<br>6.299  | BA<br>3.500 | FBA<br>---              |
| U<br>1.125        | N-W<br>2.750 | ES<br>1.969 | S<br>0.250  | R<br>0.984              |
| depth<br>0.250    | D<br>4.500   | G<br>0.167  | O<br>8.847  | T<br>0.9020000000000001 |
| H<br>0.406        | C<br>16.404  | FC<br>---   | d1<br>A 4   | d2<br>A 4               |
| Flange<br>FC-184  | AJ<br>7.250  | AK<br>8.500 | BD<br>8.875 | BF<br>UNC 1/2"x13       |
| BB<br>0.250       | BC<br>0.125  | AH          |             |                         |

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Customer:

Three-Phase : Rolled Steel Motor - NEMA Premium Efficiency

Three-phase induction motor  
Frame 184T - IP55

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