



No.:

Date: 17-DEC-2012

Customer :

TECHNICAL PROPOSAL

Three-phase induction motor - Squirrel cage rotor

Product line : W22 NEMA Premium - Ball Bearings

Catalog Number : 00736ET3E184T-W22

List Price : \$1,074

Notes:

Performed by:

Checked:



No.:

Date: 17-DEC-2012

## DATA SHEET

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

Customer :  
Product line : W22 NEMA Premium - Ball Bearings

Frame : 184T  
Output : 7.5 HP  
Frequency : 60 Hz  
Poles : 2  
Full load speed : 3485  
Slip : 3.19 %  
Voltage : 208-230/460 V  
Rated current : 19.4-17.5/8.76 A  
Locked rotor current : 144/71.8 A  
Locked rotor current (I<sub>L</sub>/I<sub>n</sub>) : 8.2  
No-load current : 6.51/3.26 A  
Full load torque : 11.1 lb.ft  
Locked rotor torque : 270 %  
Breakdown torque : 330 %  
Design : B  
Insulation class : F  
Temperature rise : 80 K  
Locked rotor time : 17 s (hot)  
Service factor : 1.25  
Duty cycle : S1  
Ambient temperature : -20°C - +40°C  
Altitude : 1000  
Degree of Protection : IP55  
Approximate weight : 93 lb  
Moment of inertia : 0.22425 sq.ft.lb  
Noise level : 69 dB(A)

|                     | D.E.    | N.D.E.  | Load | Power factor | Efficiency (%) |
|---------------------|---------|---------|------|--------------|----------------|
| Bearings            | 6207 ZZ | 6206 ZZ | 100% | 0.88         | 89.5           |
| Regreasing interval | ---     | ---     | 75%  | 0.84         | 89.5           |
| Grease amount       | ---     | ---     | 50%  | 0.75         | 88.5           |

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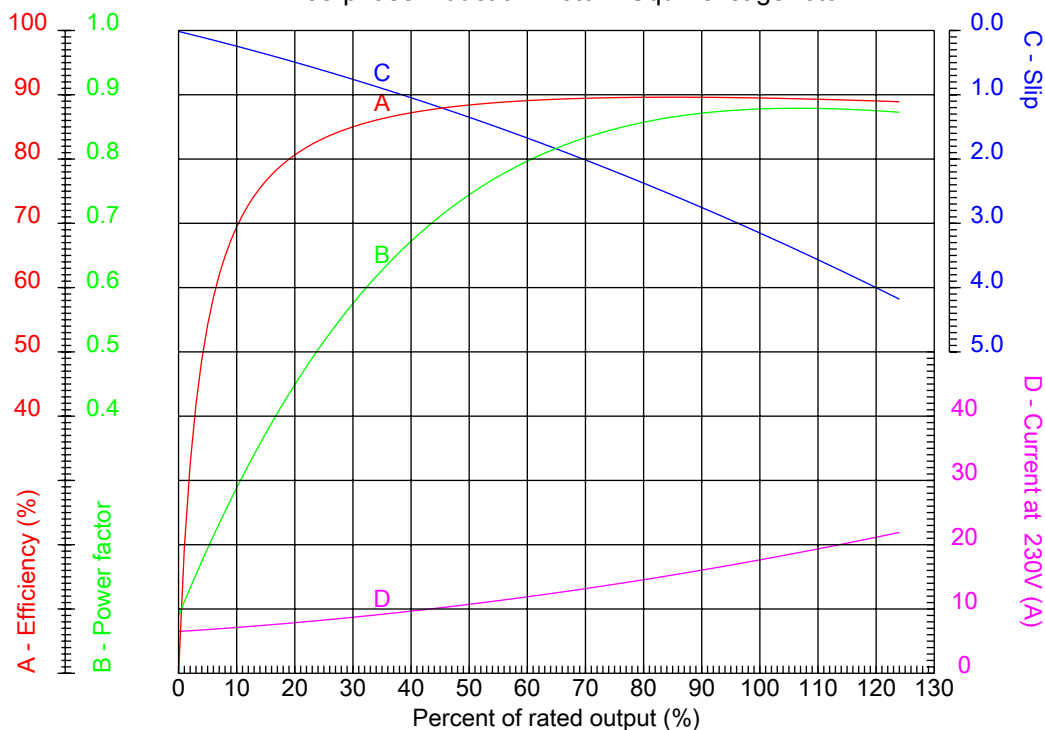


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### PERFORMANCE CURVES RELATED TO RATED OUTPUT

Three-phase induction motor - Squirrel cage rotor



Customer :  
Product line : W22 NEMA Premium - Ball Bearings

|                  |                    |  |         |
|------------------|--------------------|--|---------|
| Frame            | : 184T             | Locked rotor current (I <sub>l</sub> /I <sub>n</sub> ) | : 8.2   |
| Output           | : 7.5 HP           | Duty cycle   | : S1    |
| Frequency        | : 60 Hz            | Service factor   | : 1.25  |
| Full load speed  | : 3485             | Design   | : B     |
| Voltage          | : 208-230/460 V    | Locked rotor torque                                    | : 270 % |
| Rated current    | : 19.4-17.5/8.76 A | Breakdown torque                                       | : 330 % |
| Insulation class | : F                |  |         |

Notes:

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Checked

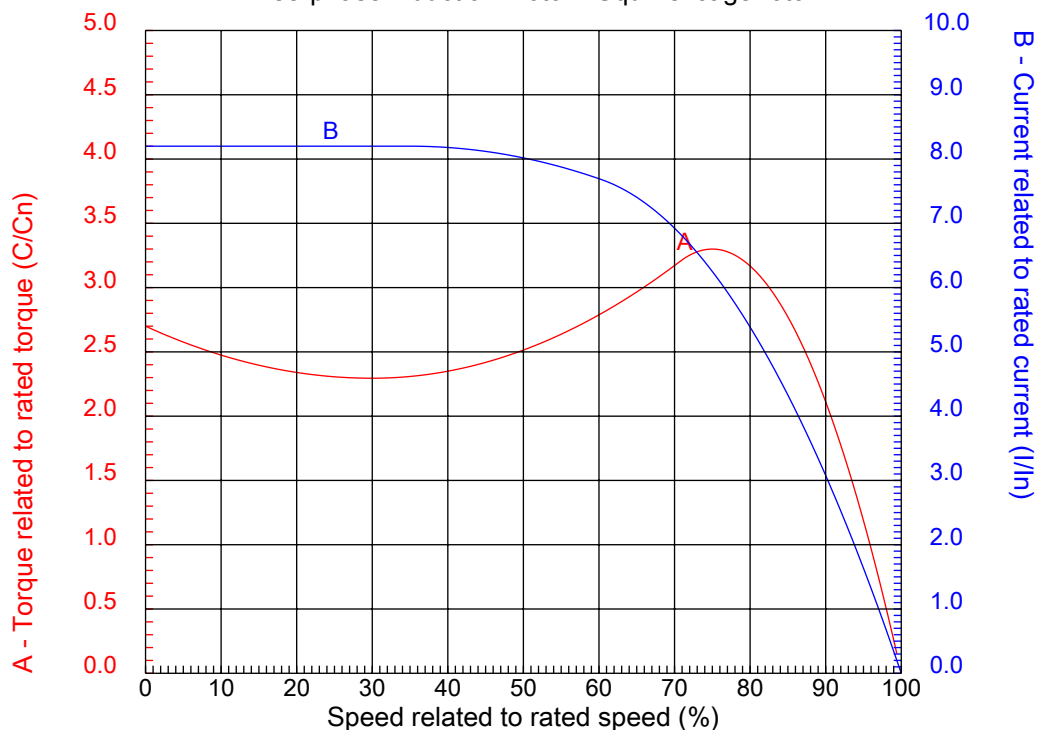


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### CHARACTERISTIC CURVES RELATED TO SPEED

Three-phase induction motor - Squirrel cage rotor



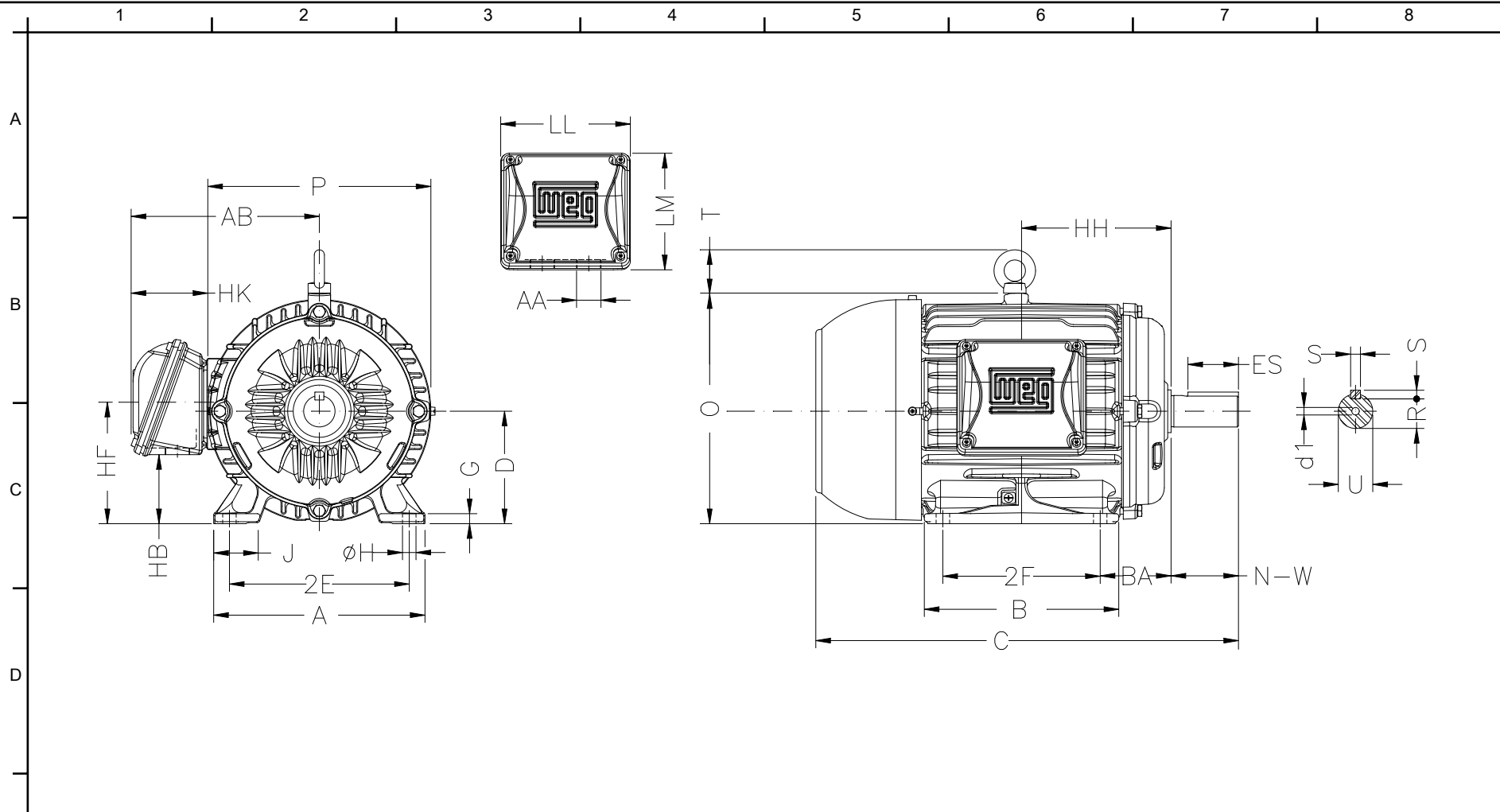
Customer :  
Product line : W22 NEMA Premium - Ball Bearings

|                  |                    |  |         |
|------------------|--------------------|--|---------|
| Frame            | : 184T             | Locked rotor current (I <sub>l</sub> /I <sub>n</sub> ) | : 8.2   |
| Output           | : 7.5 HP           | Duty cycle   | : S1    |
| Frequency        | : 60 Hz            | Service factor   | : 1.25  |
| Full load speed  | : 3485             | Design   | : B     |
| Voltage          | : 208-230/460 V    | Locked rotor torque                                    | : 270 % |
| Rated current    | : 19.4-17.5/8.76 A | Breakdown torque                                       | : 330 % |
| Insulation class | : F                |  |         |

Notes:

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Checked



|   |              |                  |              |              |                |
|---|--------------|------------------|--------------|--------------|----------------|
| E | 2E<br>7.500  | J<br>1.594       | A<br>8.661   | P<br>8.740   | AB<br>7.559    |
|   | 2F<br>5.500  | B<br>6.969       | BA<br>2.750  | FBA<br>5.057 | 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>0.394       | HB<br>2.236  | O<br>9.343   | T<br>1.772     |
|   | HF<br>4.500  | HH<br>5.500      | HK<br>3.110  | H<br>0.406   | C<br>15.860    |
| F | FC<br>18.307 | LL<br>5.512      | LM<br>5.236  | AA<br>NPT 1" | d1<br>A 4      |
|   | d2<br>A 4    | Flange<br>FD-254 | AJ<br>10.000 | AK<br>9.000  | BD<br>11.00    |
|   | BF<br>0.562  | BB<br>0.203      |              |              |                |

|  |             |  |
|--|-------------|--|
| Notes:   |             |  |
| Performed by:                                    |             |  |
| Checked:   |             |  |
| Customer:  |             |  |
| W22 NEMA Premium - Ball Bearings                 |             |  |
| Three-phase induction motor<br>Frame 184T - IP55 | 17-DEC-2012 |  |