



No.:

Date: 20-DEC-2012

Customer :

TECHNICAL PROPOSAL

Three-phase induction motor - Squirrel cage rotor

Product line : Three-Phase : ODP (IP21/IP23) - NEMA Premium Efficiency

Catalog Number : 25036OT3G445TS

List Price : \$18,983

Notes:

Performed by:

Checked:



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## DATA SHEET

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

Customer :  
Product line : Three-Phase : ODP (IP21/IP23) - NEMA Premium Efficiency

Frame : 445TS  
Output : 250 HP  
Frequency : 60 Hz  
Poles : 2  
Full load speed : 3564  
Slip : 1.00 %  
Voltage : 460 V  
Rated current : 272 A  
Locked rotor current : 1630 A  
Locked rotor current (I<sub>L</sub>/I<sub>n</sub>) : 6.0  
No-load current : 65.0 A  
Full load torque : 363 lb.ft  
Locked rotor torque : 190 %  
Breakdown torque : 250 %  
Design : B  
Insulation class : F  
Temperature rise : 80 K  
Locked rotor time : 18 s (hot)  
Service factor : 1.15  
Duty cycle : S1  
Ambient temperature : -20°C - +40°C  
Altitude : 1000  
Degree of Protection : IP23  
Approximate weight : 1806 lb  
Moment of inertia : 30.157 sq.ft.lb  
Noise level : 88 dB(A)

|                     | D.E.    | N.D.E.  | Load | Power factor | Efficiency (%) |
|---------------------|---------|---------|------|--------------|----------------|
| Bearings            | 6314 C3 | 6314 C3 | 100% | 0.90         | 95.0           |
| Regreasing interval | 14418 h | 14418 h | 75%  | 0.88         | 95.0           |
| Grease amount       | 27 g    | 27 g    | 50%  | 0.84         | 94.1           |

Notes:

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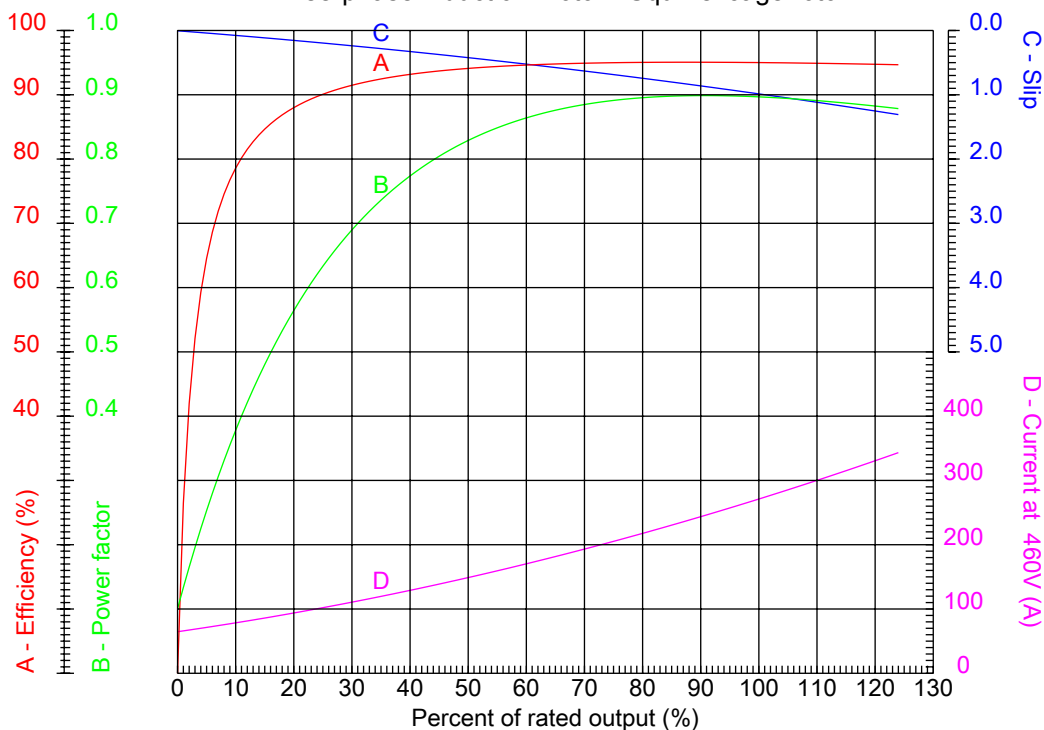


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### PERFORMANCE CURVES RELATED TO RATED OUTPUT

Three-phase induction motor - Squirrel cage rotor



Customer :  
Product line : Three-Phase : ODP (IP21/IP23) - NEMA Premium Efficiency

|                        |  |
|------------------------|--|
| Frame : 445TS          | Locked rotor current (I <sub>l</sub> /I <sub>n</sub> ) : 6.0 |
| Output : 250 HP        | Duty cycle : S1  |
| Frequency : 60 Hz      | Service factor : 1.15  |
| Full load speed : 3564 | Design : B   |
| Voltage : 460 V        | Locked rotor torque : 190 %                                  |
| Rated current : 272 A  | Breakdown torque : 250 %                                     |
| Insulation class : F   |  |

Notes:

Performed by

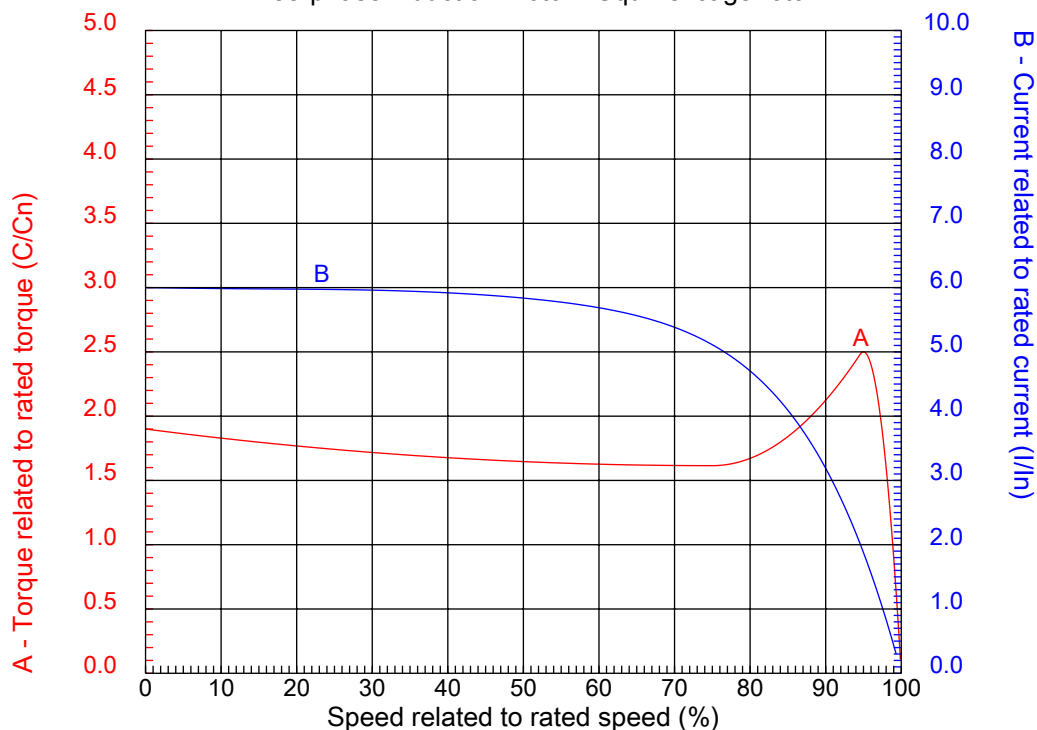
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### CHARACTERISTIC CURVES RELATED TO SPEED Three-phase induction motor - Squirrel cage rotor



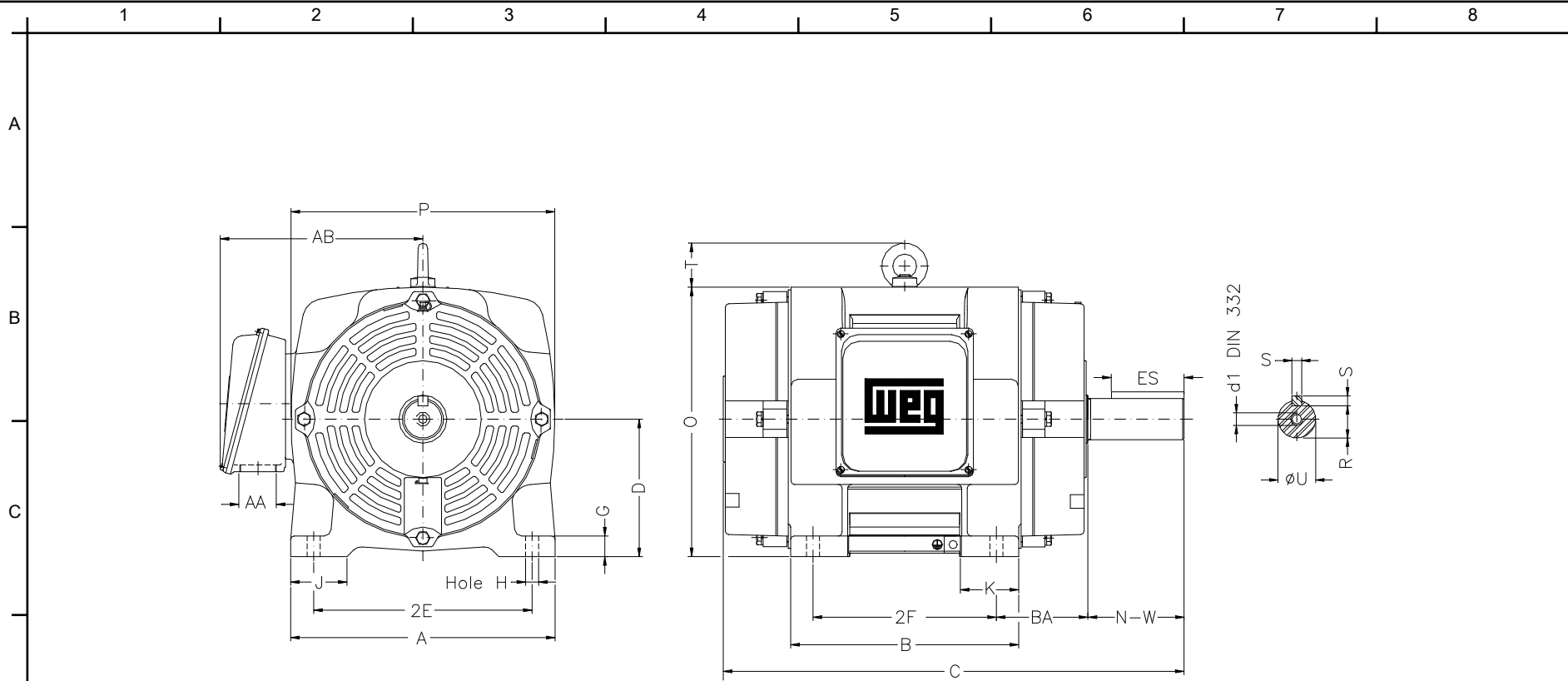
Customer :  
Product line : Three-Phase : ODP (IP21/IP23) - NEMA Premium Efficiency

|                  |          |  |         |
|------------------|----------|--|---------|
| Frame            | : 445TS  | Locked rotor current (I <sub>l</sub> /I <sub>n</sub> ) | : 6.0   |
| Output           | : 250 HP | Duty cycle   | : S1    |
| Frequency        | : 60 Hz  | Service factor   | : 1.15  |
| Full load speed  | : 3564   | Design   | : B     |
| Voltage          | : 460 V  | Locked rotor torque                                    | : 190 % |
| Rated current    | : 272 A  | Breakdown torque                                       | : 250 % |
| Insulation class | : F      |  |         |

Notes:

Performed by

Checked



Notes:

|                  |              |                     |                    |                    |
|------------------|--------------|---------------------|--------------------|--------------------|
| 2E<br>18.000     | A<br>21.929  | 2F<br>14.500/16.500 | B<br>20.078        | BA<br>7.500        |
| J<br>3.937       | K<br>5.590   | P<br>22.125         | ES<br>3.000        | depth<br>0.625     |
| S<br>0.625       | D<br>11.000  | N-W<br>4.750        | G<br>1.811         | U<br>2.375         |
| O<br>22.440      | T<br>3.544   | HD<br>25.984        | R<br>2.021         | H<br>0.807         |
| AB<br>20.236     | C<br>36.062  | AA<br>2XNPT 3"      | d1<br>DUNC 3/4"-10 | d2<br>DUNC 3/4"-10 |
| Flange<br>FD-508 | AJ<br>20.000 | AK<br>18.000        | BD<br>21.653       | BF<br>0.828        |
| BB<br>0.250      |              |                     |                    |                    |

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Customer:

Three-Phase : ODP (IP21/IP23) - NEMA Premium Efficiency

Three-phase induction motor  
Frame 445TS - IP23

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