



No.:

Date: 17-DEC-2012

Customer :

TECHNICAL PROPOSAL

Three-phase induction motor - Squirrel cage rotor

Product line : W22 NEMA Premium - Ball Bearings

Catalog Number : 45012ET3G586/7-W22

List Price : \$62,251

Notes:

Performed by:

Checked:



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## DATA SHEET

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

Customer :  
Product line : W22 NEMA Premium - Ball Bearings

Frame : 586/7T  
Output : 450 HP  
Frequency : 60 Hz  
Poles : 6  
Full load speed : 1190  
Slip : 0.83 %  
Voltage : 460 V  
Rated current : 532 A  
Locked rotor current : 3300 A  
Locked rotor current (I<sub>L</sub>/I<sub>n</sub>) : 6.2  
No-load current : 210 A  
Full load torque : 1959 lb.ft  
Locked rotor torque : 210 %  
Breakdown torque : 210 %  
Design : B  
Insulation class : F  
Temperature rise : 80 K  
Locked rotor time : 26 s (hot)  
Service factor : 1.00  
Duty cycle : S1  
Ambient temperature : -20°C - +40°C  
Altitude : 1000  
Degree of Protection : IP55  
Approximate weight : 4384 lb  
Moment of inertia : 367.54 sq.ft.lb  
Noise level : 77 dB(A)

|                     | D.E.    | N.D.E.  | Load | Power factor | Efficiency (%) |
|---------------------|---------|---------|------|--------------|----------------|
| Bearings            | 6322 C3 | 6319 C3 | 100% | 0.81         | 96.2           |
| Regreasing interval | 11000 h | 13000 h | 75%  | 0.77         | 96.2           |
| Grease amount       | 60 g    | 45 g    | 50%  | 0.67         | 95.8           |

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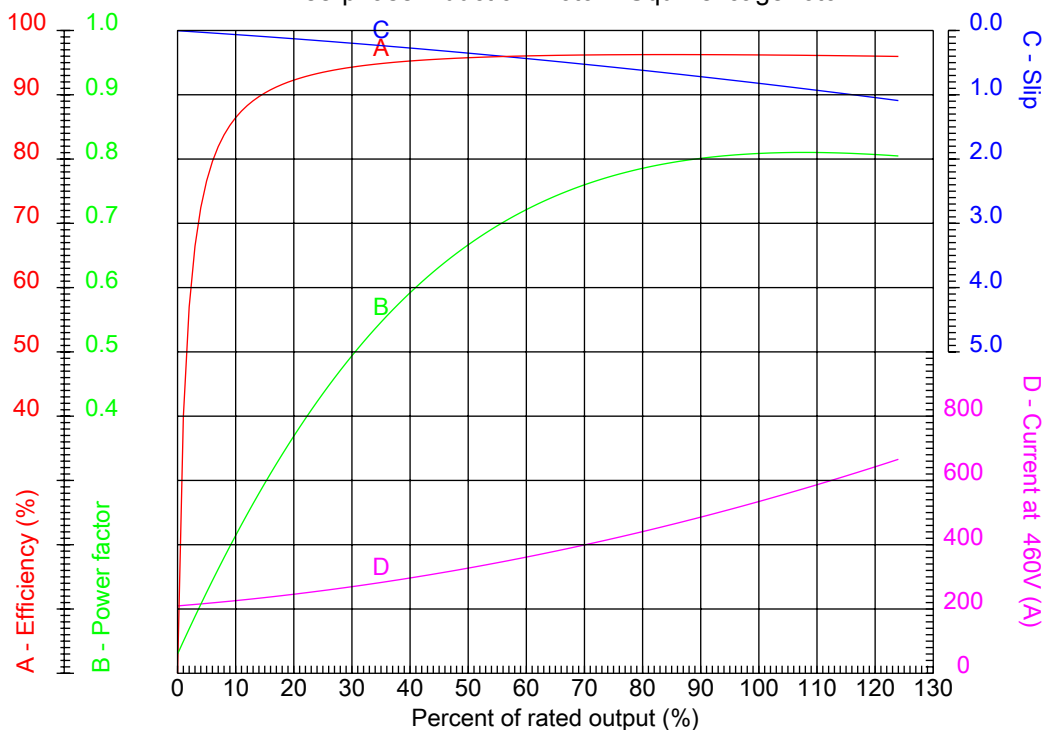


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PERFORMANCE CURVES RELATED TO RATED OUTPUT

Three-phase induction motor - Squirrel cage rotor



Customer :  
 Product line : W22 NEMA Premium - Ball Bearings

|                        |  |
|------------------------|--|
| Frame : 586/7T         | Locked rotor current (I <sub>l</sub> /I <sub>n</sub> ) : 6.2 |
| Output : 450 HP        | Duty cycle : S1  |
| Frequency : 60 Hz      | Service factor : 1.00  |
| Full load speed : 1190 | Design : B   |
| Voltage : 460 V        | Locked rotor torque : 210 %                                  |
| Rated current : 532 A  | Breakdown torque : 210 %                                     |
| Insulation class : F   |  |

Notes:

Performed by

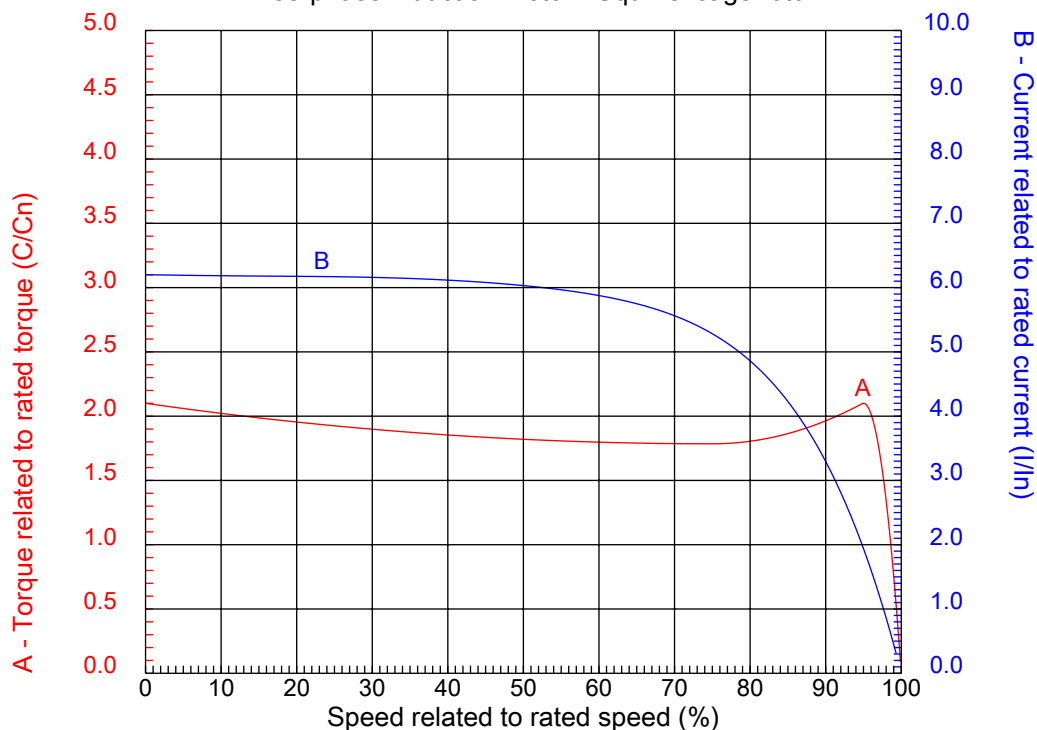
Checked



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



Customer :  
Product line : W22 NEMA Premium - Ball Bearings

|                  |          |                              |         |
|------------------|----------|------------------------------|---------|
| Frame            | : 586/7T | Locked rotor current (I/Iln) | : 6.2   |
| Output           | : 450 HP | Duty cycle                   | : S1    |
| Frequency        | : 60 Hz  | Service factor               | : 1.00  |
| Full load speed  | : 1190   | Design                       | : B     |
| Voltage          | : 460 V  | Locked rotor torque          | : 210 % |
| Rated current    | : 532 A  | Breakdown torque             | : 210 % |
| Insulation class | : F      |                              |         |

Notes:

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1 2 3 4 5 6 7 8

A

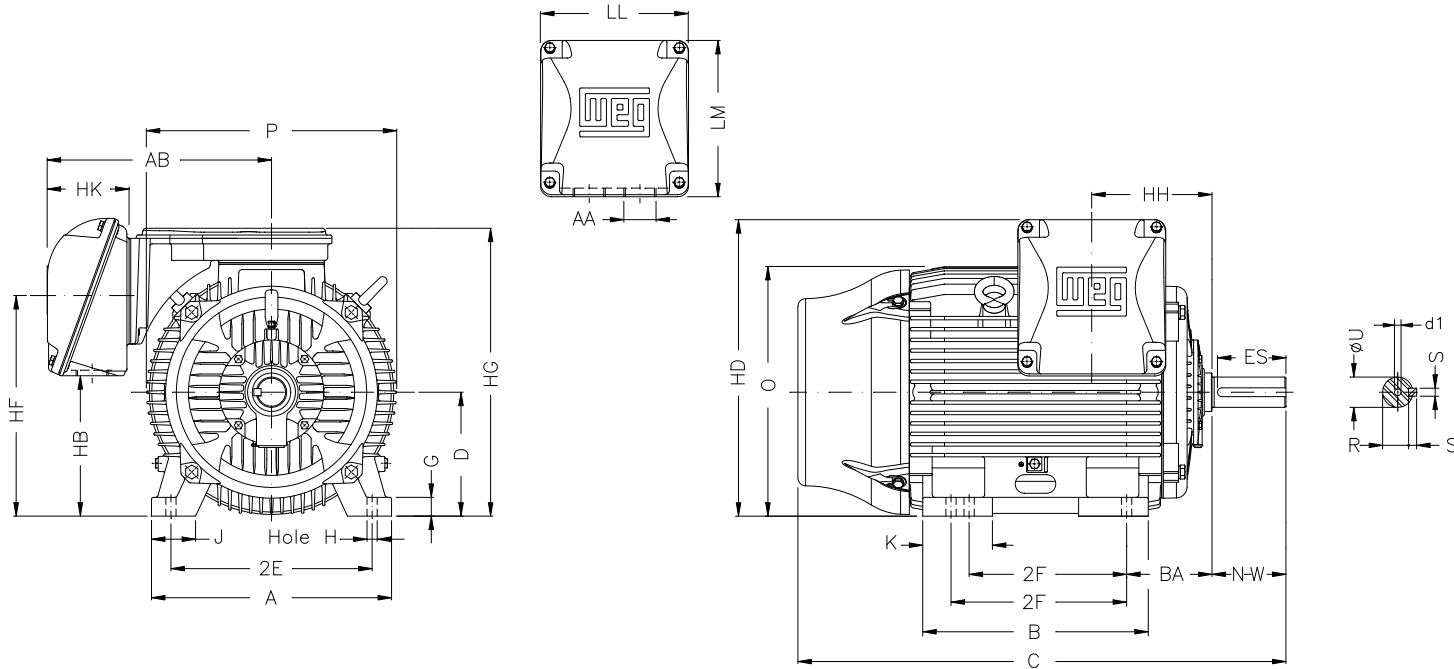
B

C

D

E

F



Notes:

Performed by:

Checked:

Customer:

W22 NEMA Premium - Ball Bearings

Three-phase induction motor  
Frame 586/7T - IP55

17-DEC-2012



|               |        |        |          |             |
|---------------|--------|--------|----------|-------------|
| 2E            | J      | A      | P        | AB          |
| 23.000        | 5.512  | 29.528 | 28.977   | 23.977      |
| 2F            | K      | B      | BA       | U           |
| 22.000/25.000 | 9.055  | 29.921 | 10.000   | 3.875       |
| N-W           | ES     | S      | R        | depth       |
| 11.625        | 8.661  | 1.000  | 3.312    | 1.000       |
| D             | G      | HB     | O        | T           |
| 14.500        | 2.492  | 18.673 | 28.985   | 5.552       |
| HF            | HG     | HH     | HK       | H           |
| 26.732        | 33.346 | 13.386 | 8.464    | 1.181       |
| C             | LL     | LM     | AA       | d1          |
| 61.902        | 15.906 | 17.244 | 2XNPT 3" | DUNC 7/8"-9 |
| d2            | Flange | AJ     | AK       | BD          |
| DUNC 3/4"-10  | FD-762 | 30.000 | 28.000   | 32.00       |
| BF            | BB     |        |          |             |
| 0.828         | 0.250  |        |          |             |