



# Dealers Industrial Equipment

No.:

Date: 27-SEP-2016

Customer :

## TECHNICAL PROPOSAL

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

Product line : W22 NEMA Premium - Roller Bearings

Catalog Number : 07512ET3GRB405T-W22

List Price : \$12,058

#### Notes:

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# Dealers Industrial Equipment

No.:

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

Customer :  
Product line : W22 NEMA Premium - Roller Bearings

Frame : 404/5T  
Output : 75 HP  
Frequency : 60 Hz  
Poles : 6  
Full load speed : 1180 rpm  
Slip : 1.67 %  
Voltage : 460 V  
Rated current : 84.9 A  
Locked rotor current : 543 A  
Locked rotor current (I<sub>L</sub>/I<sub>n</sub>) : 6.4  
No-load current : 30.0 A  
Full load torque : 329 lb.ft  
Locked rotor torque : 200 %  
Breakdown torque : 230 %  
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 m  
Degree of Protection : IP55  
Approximate weight : 1089 lb  
Moment of inertia : 40.209 sq.ft.lb  
Noise level : 68 dB(A)

|                     | D.E.      | N.D.E.  |
|---------------------|-----------|---------|
| Bearings            | NU-316 C3 | 6314 C3 |
| Regreasing interval | 12000 h   | 17000 h |
| Grease amount       | 34 g      | 27 g    |

| Load | Power factor | Efficiency (%) |
|------|--------------|----------------|
| 100% | 0.86         | 94.5           |
| 75%  | 0.83         | 94.5           |
| 50%  | 0.74         | 94.1           |

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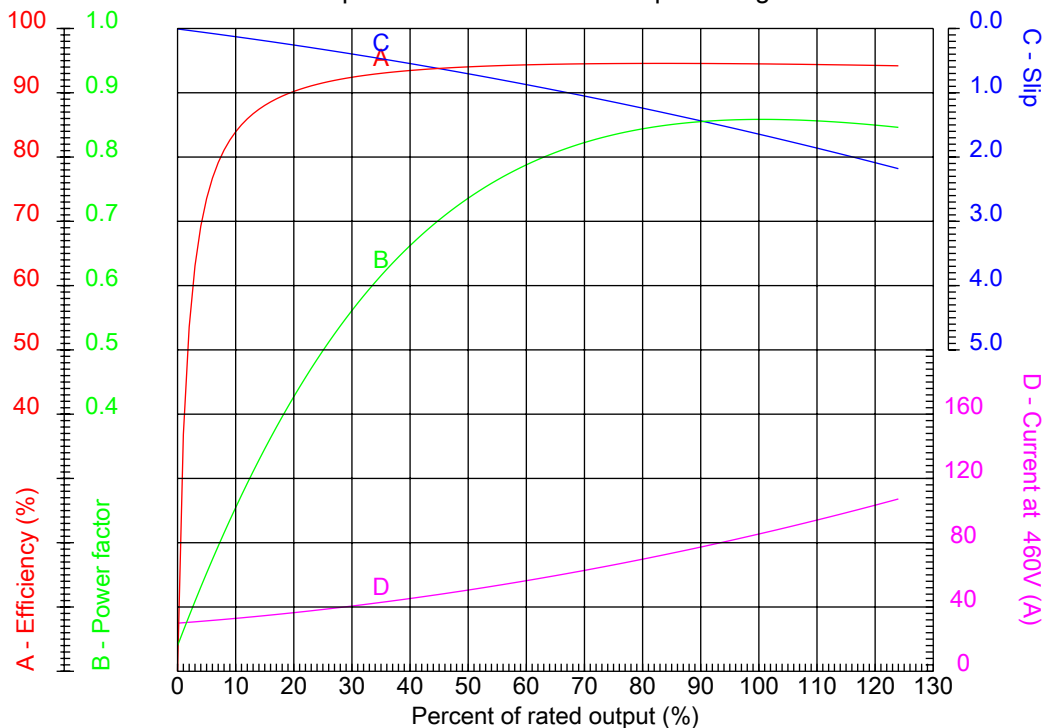


# Dealers Industrial Equipment

No.:

Date: 27-SEP-2016

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



Customer :  
Product line : W22 NEMA Premium - Roller Bearings

|                            |  |
|----------------------------|--|
| Frame : 404/5T             | Locked rotor current (I <sub>l</sub> /I <sub>n</sub> ) : 6.4 |
| Output : 75 HP             | Duty cycle : S1  |
| Frequency : 60 Hz          | Service factor : 1.25  |
| Full load speed : 1180 rpm | Design : B   |
| Voltage : 460 V            | Locked rotor torque : 200 %                                  |
| Rated current : 84.9 A     | Breakdown torque : 230 %                                     |
| Insulation class : F       |  |

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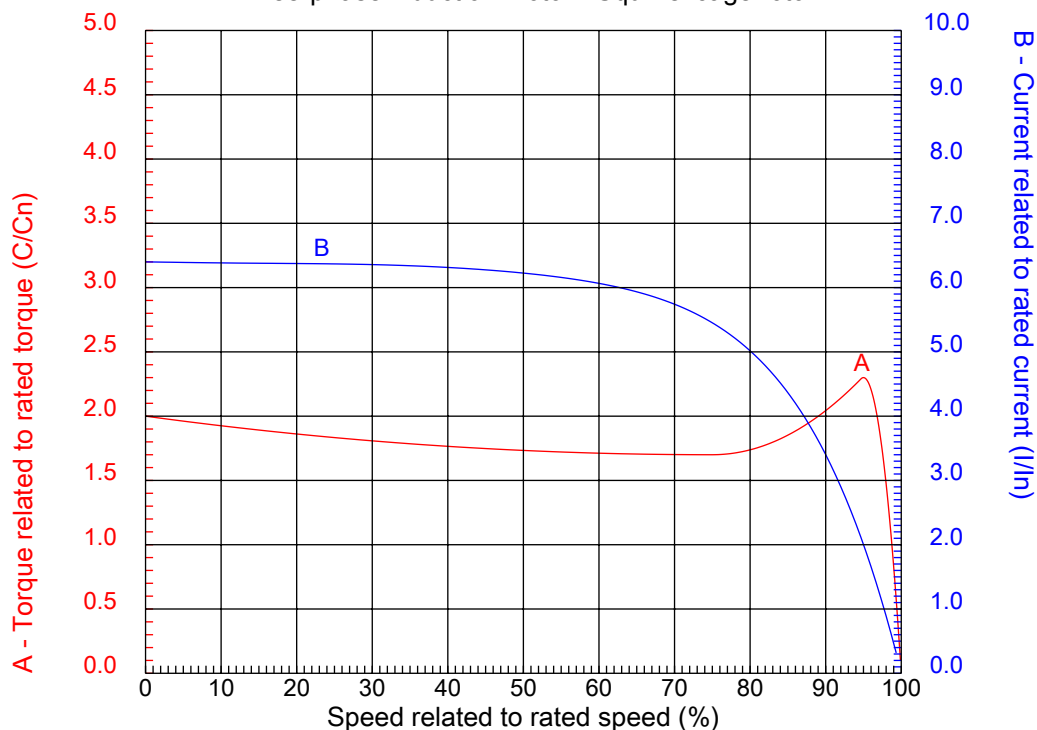
# Dealers Industrial Equipment

No.:

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## CHARACTERISTIC CURVES RELATED TO SPEED

Three-phase induction motor - Squirrel cage rotor



Customer :  
Product line : W22 NEMA Premium - Roller Bearings

|                  |            |  |         |
|------------------|------------|--|---------|
| Frame            | : 404/5T   | Locked rotor current (I <sub>l</sub> /I <sub>h</sub> ) | : 6.4   |
| Output           | : 75 HP    | Duty cycle   | : S1    |
| Frequency        | : 60 Hz    | Service factor   | : 1.25  |
| Full load speed  | : 1180 rpm | Design   | : B     |
| Voltage          | : 460 V    | Locked rotor torque                                    | : 200 % |
| Rated current    | : 84.9 A   | Breakdown torque                                       | : 230 % |
| Insulation class | : F        |  |         |

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Checked

1 2 3 4 5 6 7 8

A

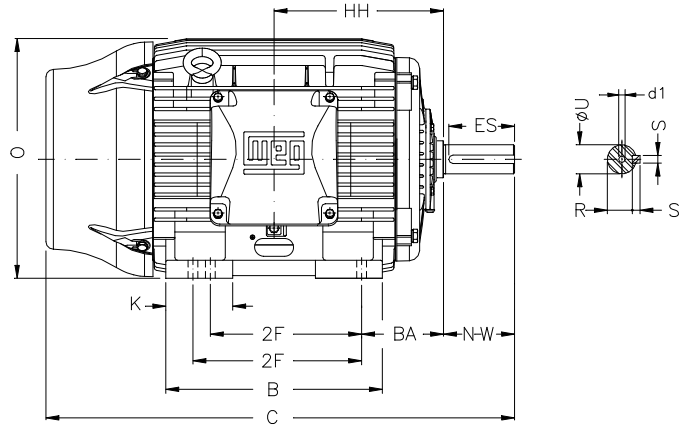
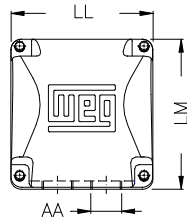
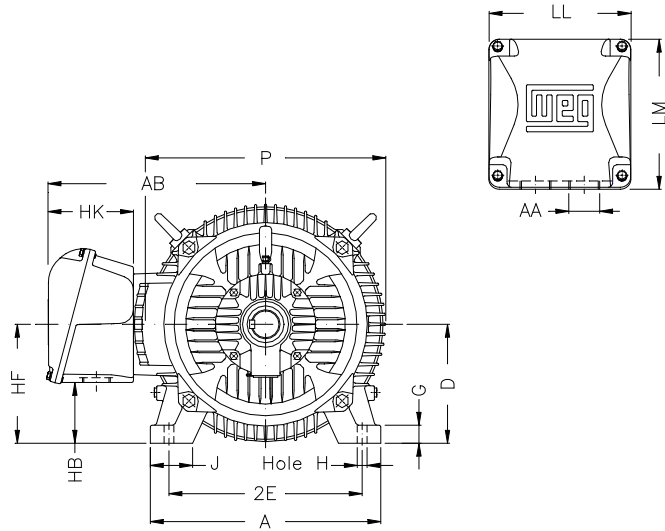
B

C

D

E

F



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Performed by:

Checked:

Customer:

W22 NEMA Premium - Roller Bearings

Three-phase induction motor  
Frame 404/5T - IP55

27-SEP-2016



|                     |              |              |              |                    |
|---------------------|--------------|--------------|--------------|--------------------|
| 2E<br>15.984        | J<br>3.937   | A<br>19.921  | P<br>19.134  | AB<br>16.016       |
| 2F<br>12.244/13.740 | K<br>5.669   | B<br>18.386  | BA<br>6.625  | FBA<br>13.926      |
| U<br>2.875          | N-W<br>7.250 | ES<br>5.512  | S<br>0.750   | R<br>2.449         |
| depth<br>0.750      | D<br>10.000  | G<br>1.811   | HB<br>5.252  | O<br>19.566        |
| HH<br>13.496        | HK<br>6.024  | EV<br>2.323  | H<br>0.810   | C<br>39.730        |
| FC<br>45.295        | LL<br>10.591 | LM<br>11.267 | AA<br>NPT 3" | d1<br>DUNC 3/4"-10 |

1 2 3 4 5 6 7 8

A

### PART-WINDING

### WYE-DELTA

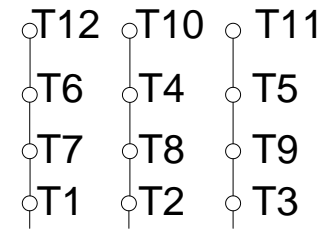
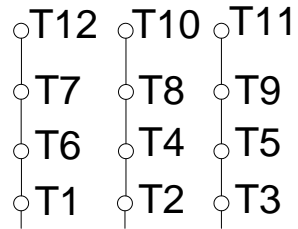
#### START

#### RUN

#### START

#### RUN

B



C

L1 L2 L3

L1 L2 L3

L1 L2 L3

L1 L2 L3

D

E

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Customer:

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F

Three-phase induction motor  
 Frame 404/5T - IP55

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