



Dealers Industrial Equipment

No.:

Date: 23-SEP-2016

Customer :

TECHNICAL PROPOSAL

Three-phase induction motor - Squirrel cage rotor

Product line : Three-Phase: W22 IEEE-841™ Petrochem Motors - NEMA Premium® Efficiency

Catalog Number : 03009ST3QIE364TC-W22

List Price : \$13,524

Notes:

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

Customer :  
 Product line : Three-Phase: W22 IEEE-841™ Petrochem Motors - NEMA Premium® Efficiency

Frame : 364/5T  
 Output : 30 HP  
 Frequency : 60 Hz  
 Poles : 8  
 Full load speed : 880 rpm  
 Slip : 2.22 %  
 Voltage : 460 V  
 Rated current : 37.0 A  
 Locked rotor current : 229 A  
 Locked rotor current (I<sub>L</sub>/I<sub>n</sub>) : 6.2  
 No-load current : 18.0 A  
 Full load torque : 177 lb.ft  
 Locked rotor torque : 170 %  
 Breakdown torque : 240 %  
 Design : B  
 Insulation class : F  
 Temperature rise : 80 K  
 Locked rotor time : 20 s (hot)  
 Service factor : 1.25  
 Duty cycle : S1  
 Ambient temperature : -20°C - +40°C  
 Altitude : 1000 m  
 Degree of Protection : IP55  
 Approximate weight : 803 lb  
 Moment of inertia : 23.455 sq.ft.lb  
 Noise level : 60 dB(A)

|                     | D.E.    | N.D.E.  |
|---------------------|---------|---------|
| Bearings            | 6314 C3 | 6314 C3 |
| Regreasing interval | 20000 h | 20000 h |
| Grease amount       | 27 g    | 27 g    |

| Load | Power factor | Efficiency (%) |
|------|--------------|----------------|
| 100% | 0.80         | 92.4           |
| 75%  | 0.74         | 92.4           |
| 50%  | 0.63         | 92.4           |

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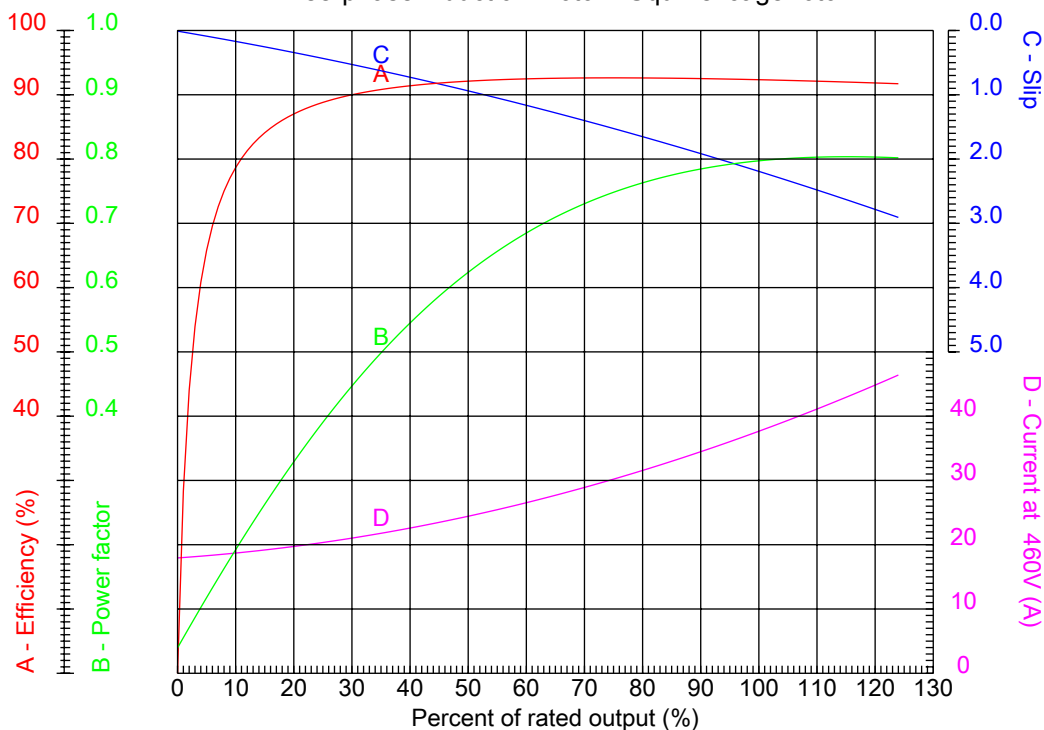
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Date: 23-SEP-2016

## PERFORMANCE CURVES RELATED TO RATED OUTPUT

Three-phase induction motor - Squirrel cage rotor



Customer :  
 Product line : Three-Phase: W22 IEEE-841™ Petrochem Motors - NEMA Premium® Efficiency

|                  |           |  |         |
|------------------|-----------|--|---------|
| Frame            | : 364/5T  | Locked rotor current (I <sub>L</sub> /I <sub>n</sub> ) | : 6.2   |
| Output           | : 30 HP   | Duty cycle   | : S1    |
| Frequency        | : 60 Hz   | Service factor   | : 1.25  |
| Full load speed  | : 880 rpm | Design   | : B     |
| Voltage          | : 460 V   | Locked rotor torque                                    | : 170 % |
| Rated current    | : 37.0 A  | Breakdown torque                                       | : 240 % |
| Insulation class | : F       |  |         |

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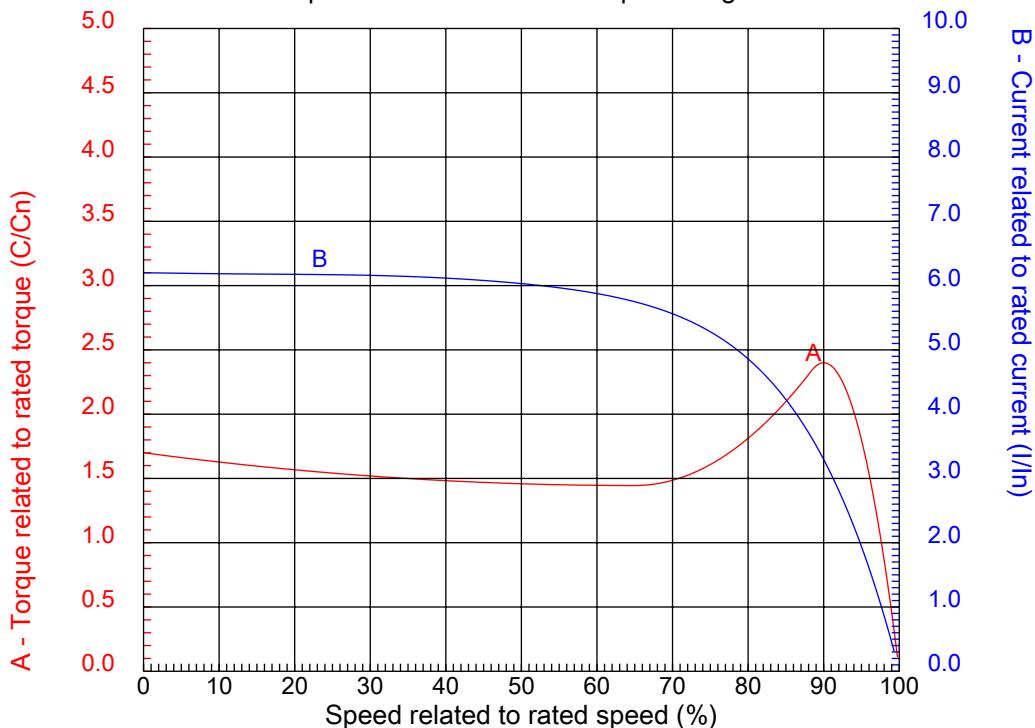
# Dealers Industrial Equipment

No.:

Date: 23-SEP-2016

## CHARACTERISTIC CURVES RELATED TO SPEED

Three-phase induction motor - Squirrel cage rotor



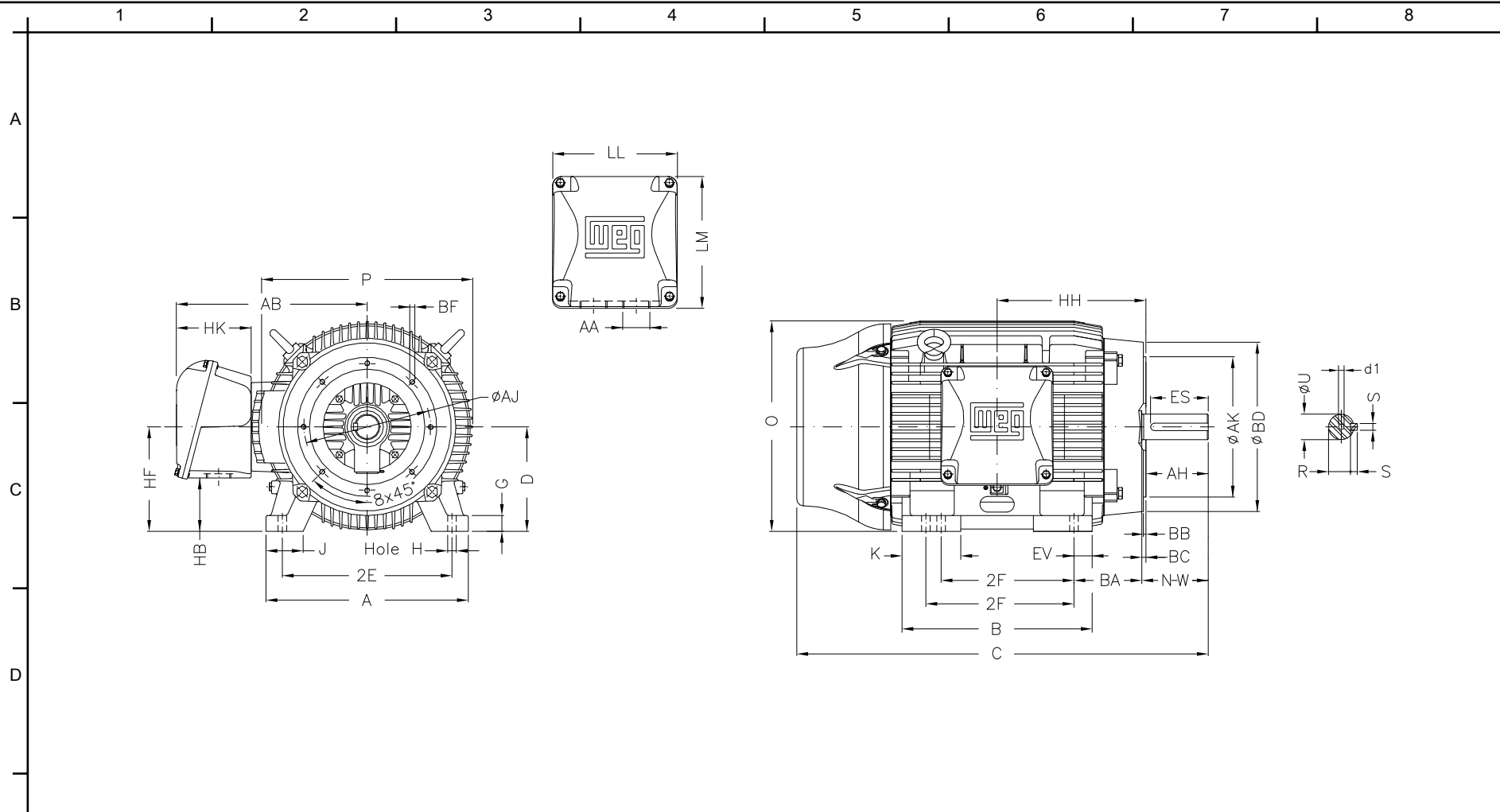
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Product line : Three-Phase: W22 IEEE-841™ Petrochem Motors - NEMA Premium® Efficiency

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| Voltage          | : 460 V   | Locked rotor torque                                    | : 170 % |
| Rated current    | : 37.0 A  | Breakdown torque                                       | : 240 % |
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|   |                     |                    |                    |                  |                |
|---|---------------------|--------------------|--------------------|------------------|----------------|
| E | 2E<br>14.016        | J<br>3.150         | A<br>17.165        | P<br>17.914      | AB<br>16.016   |
|   | 2F<br>11.260/12.244 | K<br>4.138         | B<br>16.220        | BA<br>5.875      | U<br>2.375     |
|   | N-W<br>5.874        | ES<br>4.330        | S<br>0.625         | R<br>2.019       | depth<br>0.625 |
|   | D<br>9.000          | G<br>1.480         | HB<br>4.251        | O<br>17.957      | HH<br>11.988   |
|   | HK<br>6.024         | H<br>0.660         | C<br>34.251        | LL<br>10.591     | LM<br>11.267   |
| F | AA<br>NPT 3"        | d1<br>DUNC 3/4"-10 | d2<br>DUNC 3/4"-10 | Flange<br>FC-279 | AJ<br>11.000   |
|   | AK<br>12.500        | BD<br>15.55        | BF<br>UNC 5/8"x11  | BB<br>0.250      | BC<br>0.250    |
|   | AH<br>5.625         |                    |                    |                  |                |

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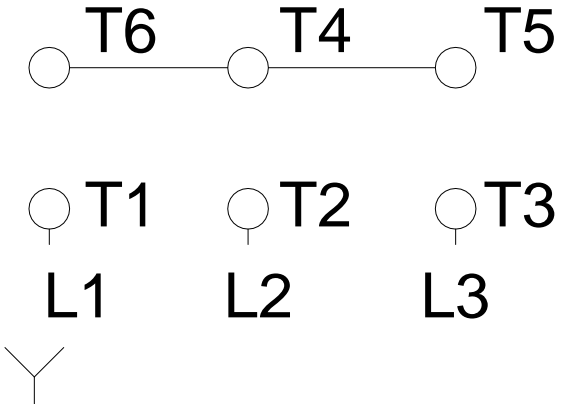
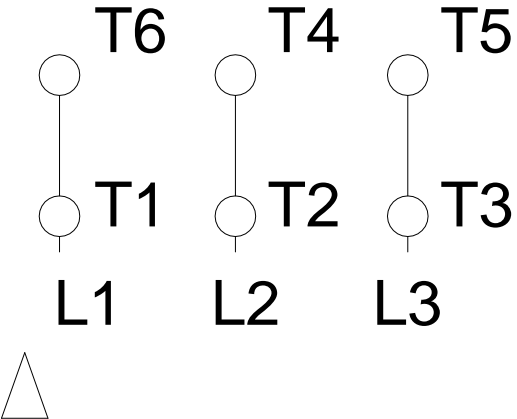
|  |             |  |
|--|-------------|--|
| Three-phase induction motor<br>Frame 364/5T - IP55 | 23-SEP-2016 |  |
|--|-------------|--|

1 2 3 4 5 6 7 8

A  
B  
C  
D  
E  
F

### RUN

### ONLY FOR START



|   |             |  |
|---|-------------|--|
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| Customer:   |             |  |
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| Three-phase induction motor<br>Frame 364/5T - IP55  | 23-SEP-2016 |  |