



Dealers Industrial Equipment

No.:

Date: 12-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 : 00159ST3QIE184TC-W22

List Price : \$2,081

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 : 182/4T  
 Output : 1.5 HP  
 Frequency : 60 Hz  
 Poles : 8  
 Full load speed : 860 rpm  
 Slip : 4.44 %  
 Voltage : 460 V  
 Rated current : 2.70 A  
 Locked rotor current : 14.9 A  
 Locked rotor current (I<sub>L</sub>/I<sub>n</sub>) : 5.5  
 No-load current : 1.81 A  
 Full load torque : 9.04 lb.ft  
 Locked rotor torque : 250 %  
 Breakdown torque : 260 %  
 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 : 111 lb  
 Moment of inertia : 0.57664 sq.ft.lb  
 Noise level : 50 dB(A)

|                     | D.E.    | N.D.E.  |
|---------------------|---------|---------|
| Bearings            | 6207 C3 | 6206 C3 |
| Regreasing interval | 20000 h | 20000 h |
| Grease amount       | 7 g     | 5 g     |

| Load | Power factor | Efficiency (%) |
|------|--------------|----------------|
| 100% | 0.62         | 82.5           |
| 75%  | 0.54         | 82.5           |
| 50%  | 0.43         | 80.0           |

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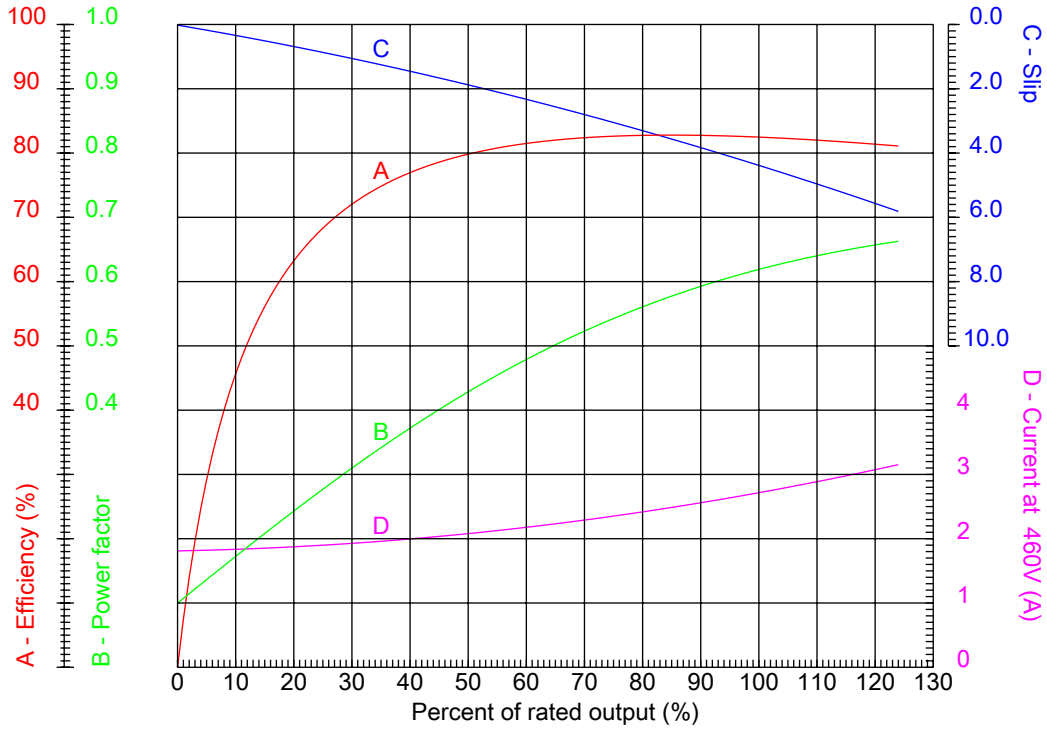
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No.:

Date: 12-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 : 182/4T            | Locked rotor current (I <sub>L</sub> /I <sub>n</sub> ) : 5.5 |
| Output : 1.5 HP           | Duty cycle : S1  |
| Frequency : 60 Hz         | Service factor : 1.25  |
| Full load speed : 860 rpm | Design : B   |
| Voltage : 460 V           | Locked rotor torque : 250 %                                  |
| Rated current : 2.70 A    | Breakdown torque : 260 %                                     |
| Insulation class : F      |  |

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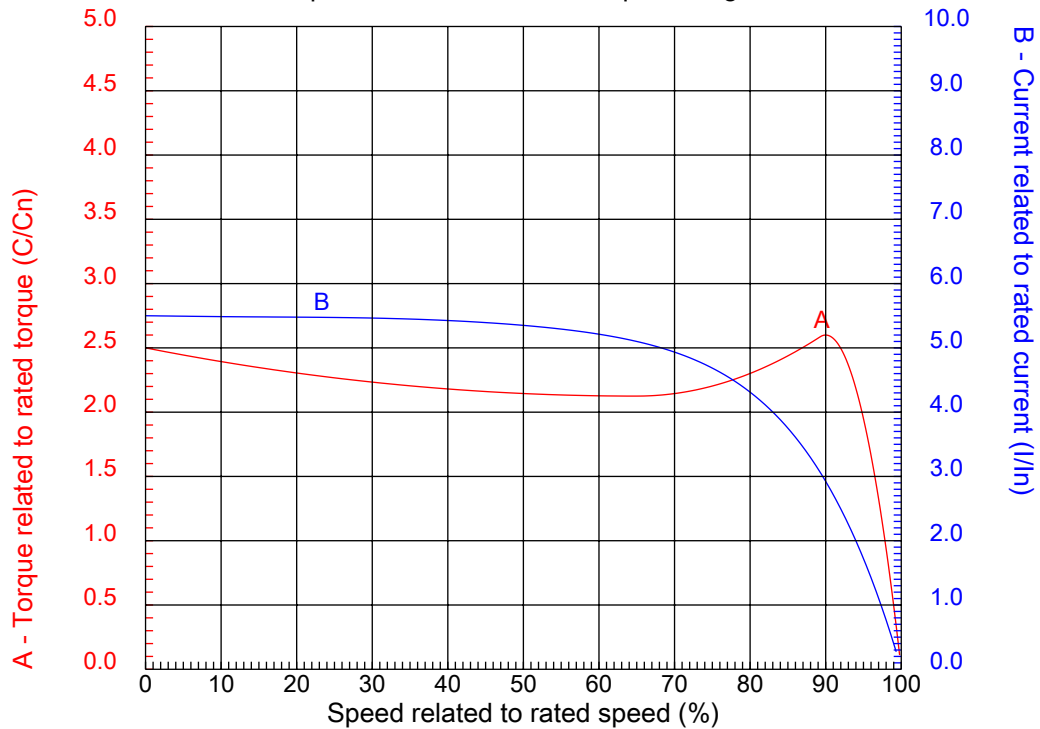
# Dealers Industrial Equipment

No.:

Date: 12-SEP-2016

## CHARACTERISTIC CURVES RELATED TO SPEED

Three-phase induction motor - Squirrel cage rotor



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

|                  |           |  |         |
|------------------|-----------|--|---------|
| Frame            | : 182/4T  | Locked rotor current (I <sub>l</sub> /I <sub>n</sub> ) | : 5.5   |
| Output           | : 1.5 HP  | Duty cycle   | : S1    |
| Frequency        | : 60 Hz   | Service factor   | : 1.25  |
| Full load speed  | : 860 rpm | Design   | : B     |
| Voltage          | : 460 V   | Locked rotor torque                                    | : 250 % |
| Rated current    | : 2.70 A  | Breakdown torque                                       | : 260 % |
| Insulation class | : F       |  |         |

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1 2 3 4 5 6 7 8

A

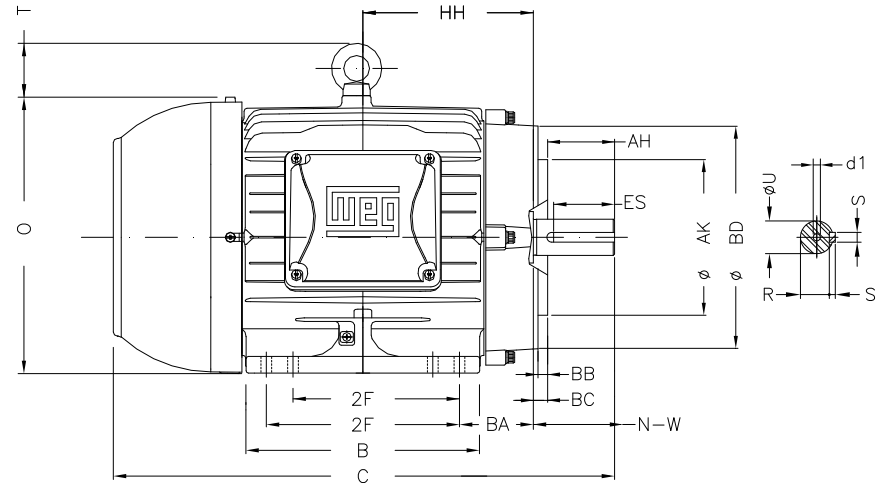
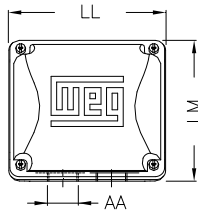
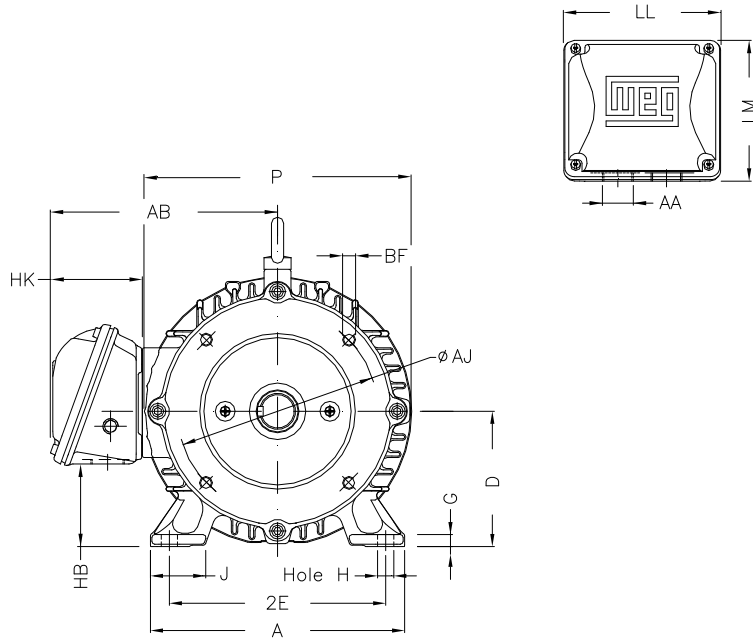
B

C

D

E

F



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Customer:

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

Three-phase induction motor  
Frame 182/4T - IP55

12-SEP-2016



|             |        |       |             |        |
|-------------|--------|-------|-------------|--------|
| 2E          | J      | A     | P           | AB     |
| 7.500       | 1.614  | 8.661 | 8.740       | 7.565  |
| 2F          | B      | BA    | U           | N-W    |
| 4.500/5.500 | 6.969  | 2.750 | 1.125       | 2.750  |
| ES          | S      | R     | depth       | D      |
| 1.969       | 0.250  | 0.984 | 0.250       | 4.500  |
| G           | HB     | O     | T           | HF     |
| 0.374       | 2.236  | 9.400 | 1.715       | 4.500  |
| HH          | HK     | H     | C           | LL     |
| 5.500       | 3.150  | 0.406 | 15.860      | 5.512  |
| LM          | AA     | d1    | d2          | Flange |
| 5.236       | NPT 1" | A 4   | A 4         | FC-184 |
| AJ          | AK     | BD    | BF          | BB     |
| 7.250       | 8.500  | 8.875 | UNC 1/2"x13 | 0.250  |
| BC          | AH     |       |             |        |
| 0.125       | 2.625  |       |             |        |

1 2 3 4 5 6 7 8

A

B


C

D

E

F



|   |             |   |
|---|-------------|---|
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| Customer:   |             |   |
| Three-Phase: W22 IEEE-841™ Petrochem Motors - NEMA Premium® Efficiency  |             |   |
| Three-phase induction motor<br>Frame 182/4T - IP55  | 12-SEP-2016 |  |