



Dealers Industrial Equipment

No.:

Date: 28-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 : 10036ST3QIE405TS-W22

List Price : \$12,806

Notes:

Downloaded from <http://dealerselectric.com>

Generated for Model #10036ST3QIE405TS-W22

Performed by:

Checked:



# Dealers Industrial Equipment

No.:

Date: 28-SEP-2016

## DATA SHEET

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

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

Frame : 404/5TS  
 Output : 100 HP  
 Frequency : 60 Hz  
 Poles : 2  
 Full load speed : 3545 rpm  
 Slip : 1.53 %  
 Voltage : 460 V  
 Rated current : 110 A  
 Locked rotor current : 715 A  
 Locked rotor current (I<sub>L</sub>/I<sub>n</sub>) : 6.5  
 No-load current : 26.0 A  
 Full load torque : 146 lb.ft  
 Locked rotor torque : 200 %  
 Breakdown torque : 240 %  
 Design : B  
 Insulation class : F  
 Temperature rise : 80 K  
 Locked rotor time : 14 s (hot)  
 Service factor : 1.25  
 Duty cycle : S1  
 Ambient temperature : -20°C - +40°C  
 Altitude : 1000 m  
 Degree of Protection : IP55  
 Approximate weight : 1045 lb  
 Moment of inertia : 13.196 sq.ft.lb  
 Noise level : 79 dB(A)

|                     | D.E.    | N.D.E.  | Load | Power factor | Efficiency (%) |
|---------------------|---------|---------|------|--------------|----------------|
| Bearings            | 6314 C3 | 6314 C3 | 100% | 0.91         | 94.1           |
| Regreasing interval | 4000 h  | 4000 h  | 75%  | 0.90         | 94.1           |
| Grease amount       | 27 g    | 27 g    | 50%  | 0.85         | 93.0           |

Notes:  
 Downloaded from <http://dealerselectric.com>  
 Generated for Model #10036ST3QIE405TS-W22

Performed by

Checked



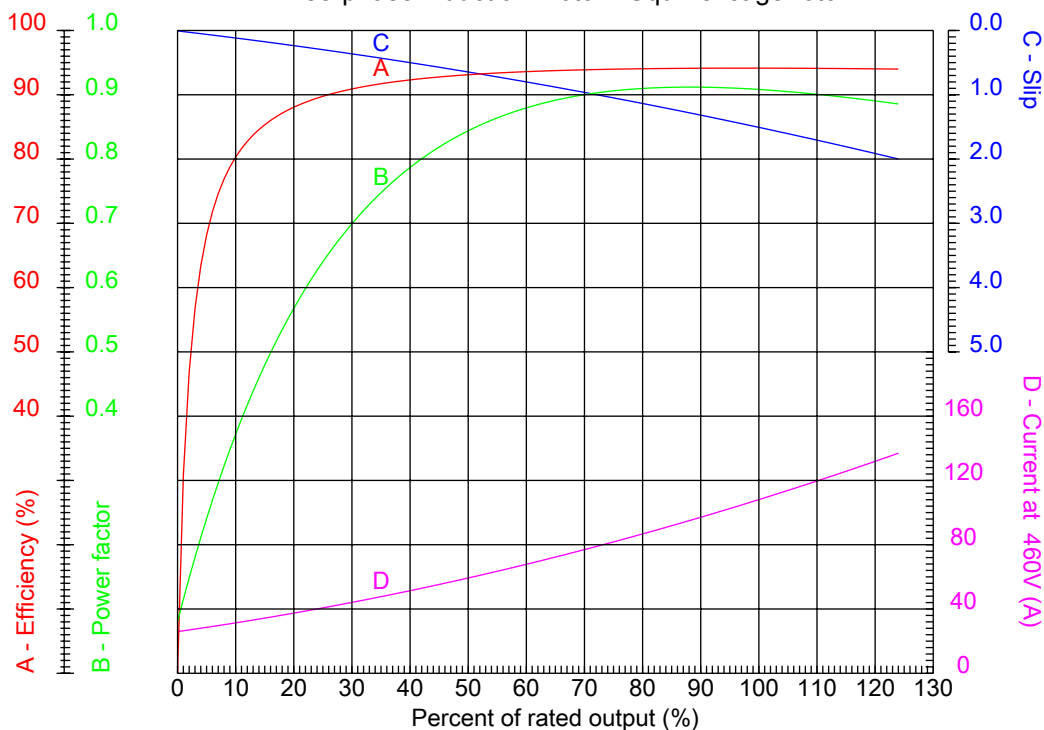
# Dealers Industrial Equipment

No.:

Date: 28-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            | : 404/5TS  | Locked rotor current (I <sub>l</sub> /I <sub>n</sub> ) | : 6.5   |
| Output           | : 100 HP   | Duty cycle   | : S1    |
| Frequency        | : 60 Hz    | Service factor   | : 1.25  |
| Full load speed  | : 3545 rpm | Design   | : B     |
| Voltage          | : 460 V    | Locked rotor torque                                    | : 200 % |
| Rated current    | : 110 A    | Breakdown torque                                       | : 240 % |
| Insulation class | : F        |  |         |

Notes:  
 Downloaded from <http://dealerselectric.com>  
 Generated for Model #10036ST3QIE405TS-W22

Performed by

Checked



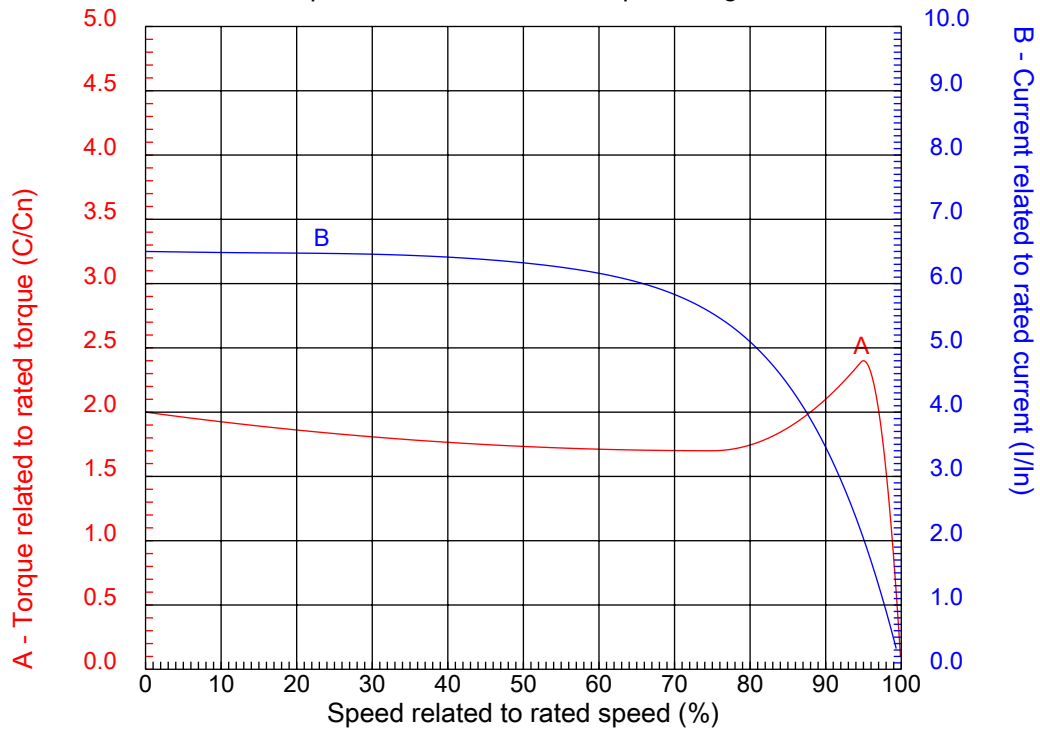
# Dealers Industrial Equipment

No.:

Date: 28-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            | : 404/5TS  | Locked rotor current (I <sub>l</sub> /I <sub>n</sub> ) | : 6.5   |
| Output           | : 100 HP   | Duty cycle   | : S1    |
| Frequency        | : 60 Hz    | Service factor   | : 1.25  |
| Full load speed  | : 3545 rpm | Design   | : B     |
| Voltage          | : 460 V    | Locked rotor torque                                    | : 200 % |
| Rated current    | : 110 A    | Breakdown torque                                       | : 240 % |
| Insulation class | : F        |  |         |

Notes:  
Downloaded from <http://dealerselectric.com>  
Generated for Model #10036ST3QIE405TS-W22

Performed by

Checked

1 2 3 4 5 6 7 8

A

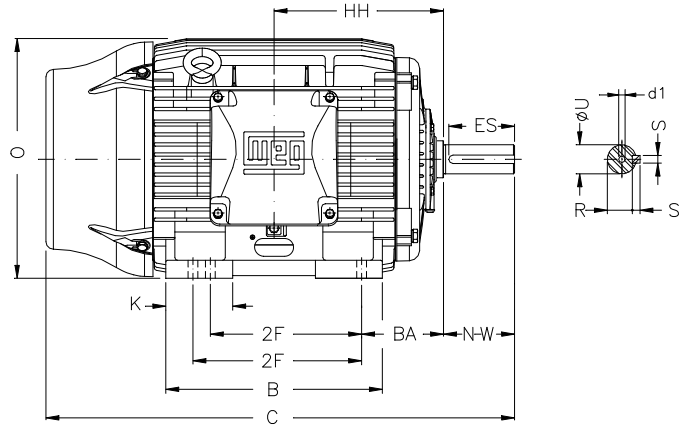
B

C

D

E

F



Notes: Downloaded from <http://dealerselectric.com>  
Generated for Model #10036ST3QIE405TS-W22

Performed by:

Checked:

Customer:

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

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

28-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  | U<br>2.125     |
| N-W<br>4.250        | ES<br>3.150        | S<br>0.500         | R<br>1.842   | depth<br>0.500 |
| D<br>10.000         | G<br>1.811         | HB<br>5.252        | O<br>19.566  | HH<br>13.496   |
| HK<br>6.024         | H<br>0.810         | C<br>36.732        | LL<br>10.591 | LM<br>11.267   |
| AA<br>NPT 3"        | d1<br>DUNC 3/4"-10 | d2<br>DUNC 3/4"-10 |              |                |

1 2 3 4 5 6 7 8

A

B

C

D

E

F



Notes: Downloaded from <http://dealerselectric.com>  
Generated for Model #10036ST3QIE405TS-W22

Performed by:

Checked:

Customer:

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

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

28-SEP-2016

