



No.:

Date: 27-DEC-2012

Customer :

TECHNICAL PROPOSAL

Three-phase induction motor - Squirrel cage rotor

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

Catalog Number : 15036ST3QIE445TS-W22

List Price : \$21,433

Notes:

Performed by:

Checked:



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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 : 444/5TS
Output : 150 HP
Frequency : 60 Hz
Poles : 2
Full load speed : 3570
Slip : 0.83 %
Voltage : 460 V
Rated current : 161 A
Locked rotor current : 1050 A
Locked rotor current (I_L/I_n) : 6.5
No-load current : 41.0 A
Full load torque : 218 lb.ft
Locked rotor torque : 180 %
Breakdown torque : 240 %
Design : B
Insulation class : F
Temperature rise : 80 K
Locked rotor time : 22 s (hot)
Service factor : 1.15
Duty cycle : S1
Ambient temperature : -20°C - +40°C
Altitude : 1000
Degree of Protection : IP55
Approximate weight : 1709 lb
Moment of inertia : 39.092 sq.ft.lb
Noise level : 81 dB(A)

| | D.E. | N.D.E. | Load | Power factor | Efficiency (%) |
|---------------------|---------|---------|------|--------------|----------------|
| Bearings | 6314 C3 | 6314 C3 | 100% | 0.90 | 95.0 |
| Regreasing interval | 4000 h | 4000 h | 75% | 0.88 | 95.0 |
| Grease amount | 27 g | 27 g | 50% | 0.83 | 94.1 |

Notes:

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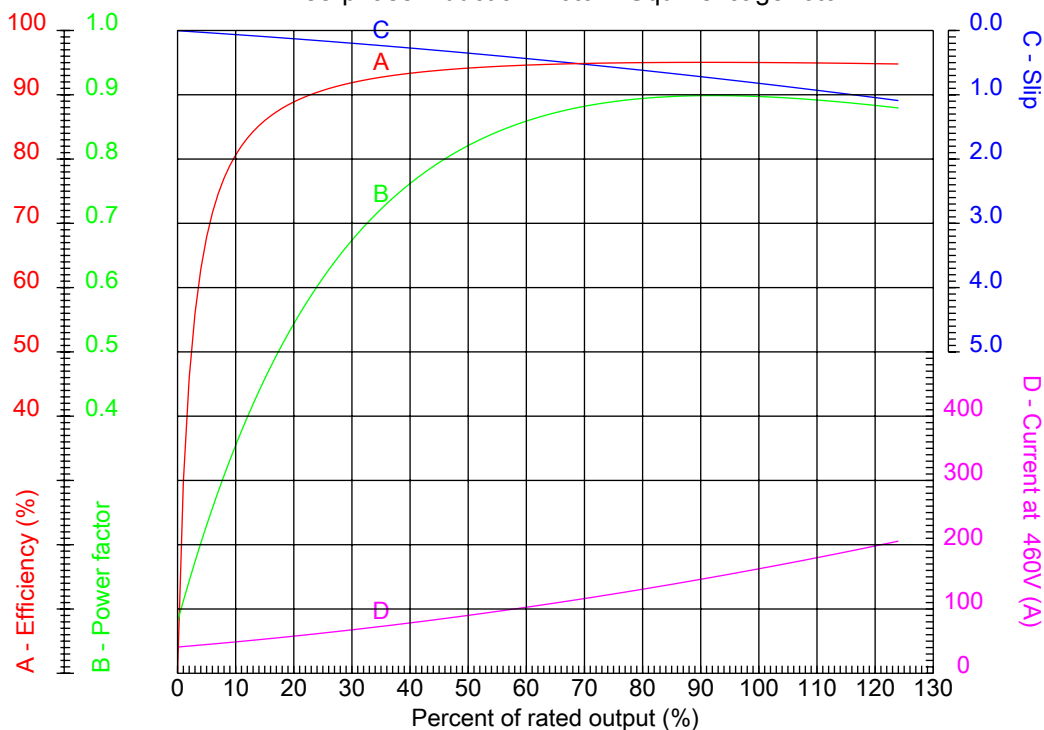


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PERFORMANCE CURVES RELATED TO RATED OUTPUT

Three-phase induction motor - Squirrel cage rotor



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

| | | | |
|------------------|-----------|--|---------|
| Frame | : 444/5TS | Locked rotor current (I _l /I _n) | : 6.5 |
| Output | : 150 HP | Duty cycle | : S1 |
| Frequency | : 60 Hz | Service factor | : 1.15 |
| Full load speed | : 3570 | Design | : B |
| Voltage | : 460 V | Locked rotor torque | : 180 % |
| Rated current | : 161 A | Breakdown torque | : 240 % |
| Insulation class | : F | | |

Notes:

Performed by

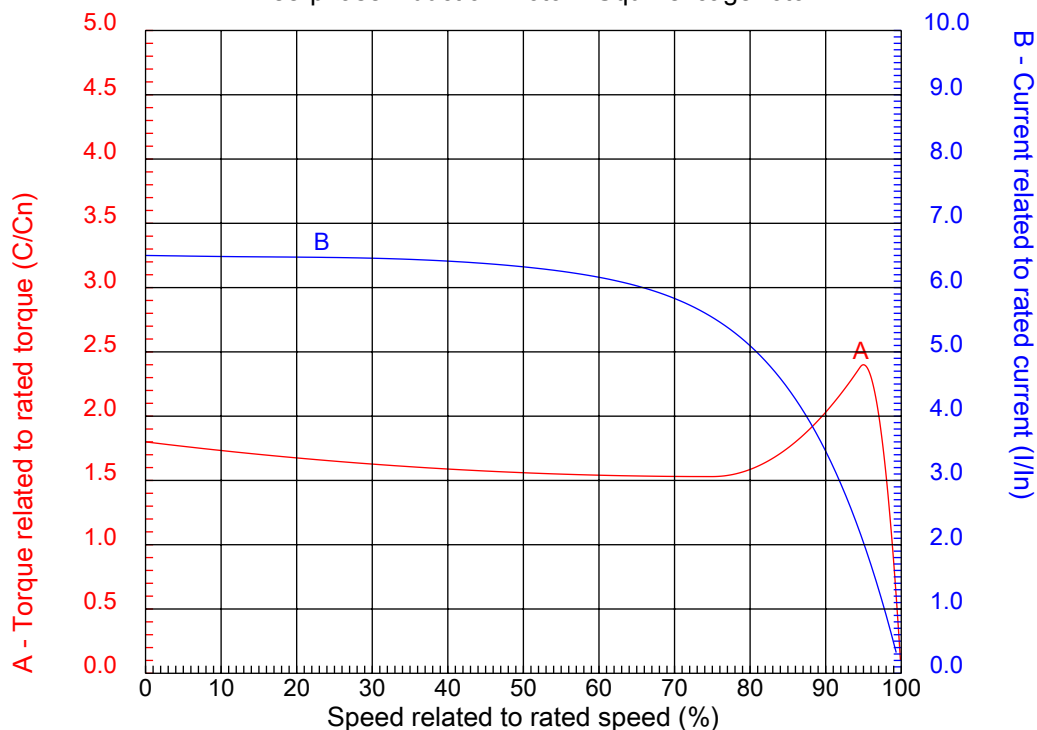
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CHARACTERISTIC CURVES RELATED TO SPEED Three-phase induction motor - Squirrel cage rotor



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

| | | | |
|------------------|-----------|--|---------|
| Frame | : 444/5TS | Locked rotor current (I _l /I _n) | : 6.5 |
| Output | : 150 HP | Duty cycle | : S1 |
| Frequency | : 60 Hz | Service factor | : 1.15 |
| Full load speed | : 3570 | Design | : B |
| Voltage | : 460 V | Locked rotor torque | : 180 % |
| Rated current | : 161 A | Breakdown torque | : 240 % |
| Insulation class | : F | | |

Notes:

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1 2 3 4 5 6 7 8

A

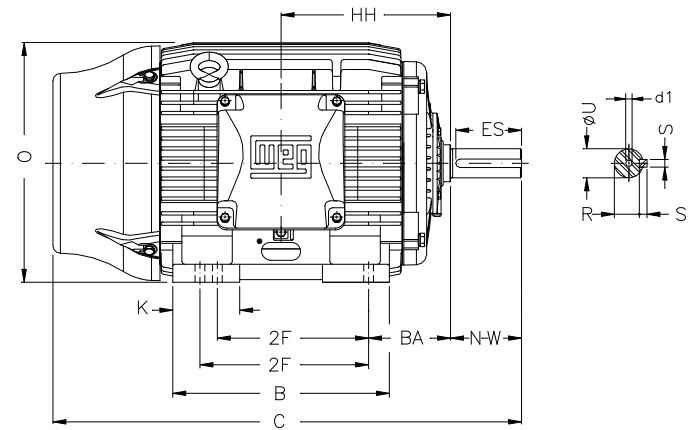
B

C

D

E

F



| | | | | |
|---------------|--------|----------|--------------|--------------|
| 2E | J | A | P | AB |
| 18.000 | 3.937 | 21.929 | 23.583 | 18.622 |
| 2F | K | B | BA | U |
| 14.500/16.500 | 5.866 | 20.315 | 7.500 | 2.375 |
| N-W | ES | S | R | depth |
| 4.750 | 3.000 | 0.625 | 2.021 | 0.625 |
| D | G | HB | O | T |
| 11.000 | 1.630 | 5.039 | 22.795 | 4.567 |
| HD | HH | HK | H | C |
| 27.362 | 15.748 | 6.023 | 0.810 | 41.200 |
| LL | LM | AA | d1 | d2 |
| 12.362 | 12.244 | 2XNPT 3" | DUNC 3/4"-10 | DUNC 3/4"-10 |
| Flange | AJ | AK | BD | BF |
| FD-508 | 20.000 | 18.000 | 21.65 | 0.828 |
| BB | | | | |
| 0.203 | | | | |

Notes:

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Customer:

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

Three-phase induction motor
Frame 444/5TS - IP55

27-DEC-2012

