



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 : 02518ST3QIE284TC-W22

List Price : \$3,126

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 : 284T
Output : 25 HP
Frequency : 60 Hz
Poles : 4
Full load speed : 1765
Slip : 1.94 %
Voltage : 460 V
Rated current : 29.5 A
Locked rotor current : 183 A
Locked rotor current (I_L/I_n) : 6.2
No-load current : 12.0 A
Full load torque : 73.4 lb.ft
Locked rotor torque : 240 %
Breakdown torque : 270 %
Design : B
Insulation class : F
Temperature rise : 80 K
Locked rotor time : 24 s (hot)
Service factor : 1.25
Duty cycle : S1
Ambient temperature : -20°C - +40°C
Altitude : 1000
Degree of Protection : IP55
Approximate weight : 388 lb
Moment of inertia : 5.1084 sq.ft.lb
Noise level : 64 dB(A)

| | D.E. | N.D.E. | Load | Power factor | Efficiency (%) |
|---------------------|---------|---------|------|--------------|----------------|
| Bearings | 6311 C3 | 6211 C3 | 100% | 0.84 | 93.6 |
| Regreasing interval | 20000 h | 20000 h | 75% | 0.80 | 93.0 |
| Grease amount | 18 g | 11 g | 50% | 0.70 | 92.4 |

Notes:

Performed by

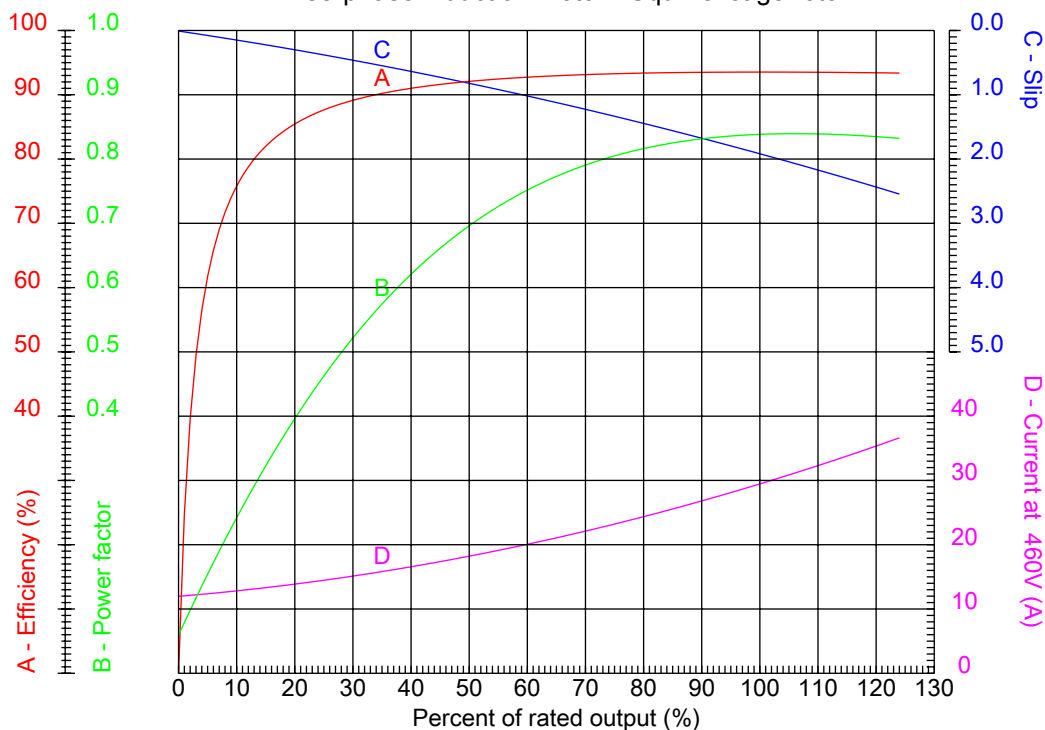
Checked



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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 : 284T | Locked rotor current (I _L /I _n) : 6.2 |
| Output : 25 HP | Duty cycle : S1 |
| Frequency : 60 Hz | Service factor : 1.25 |
| Full load speed : 1765 | Design : B |
| Voltage : 460 V | Locked rotor torque : 240 % |
| Rated current : 29.5 A | Breakdown torque : 270 % |
| Insulation class : F | |

Notes:

Performed by

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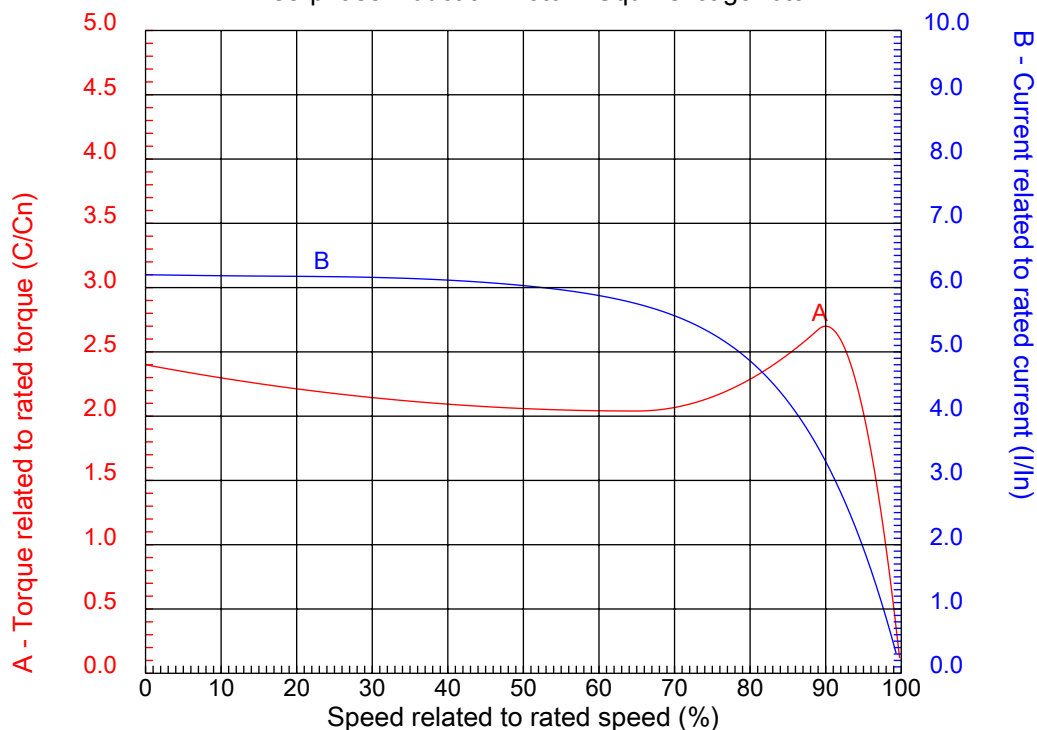


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CHARACTERISTIC CURVES RELATED TO SPEED

Three-phase induction motor - Squirrel cage rotor



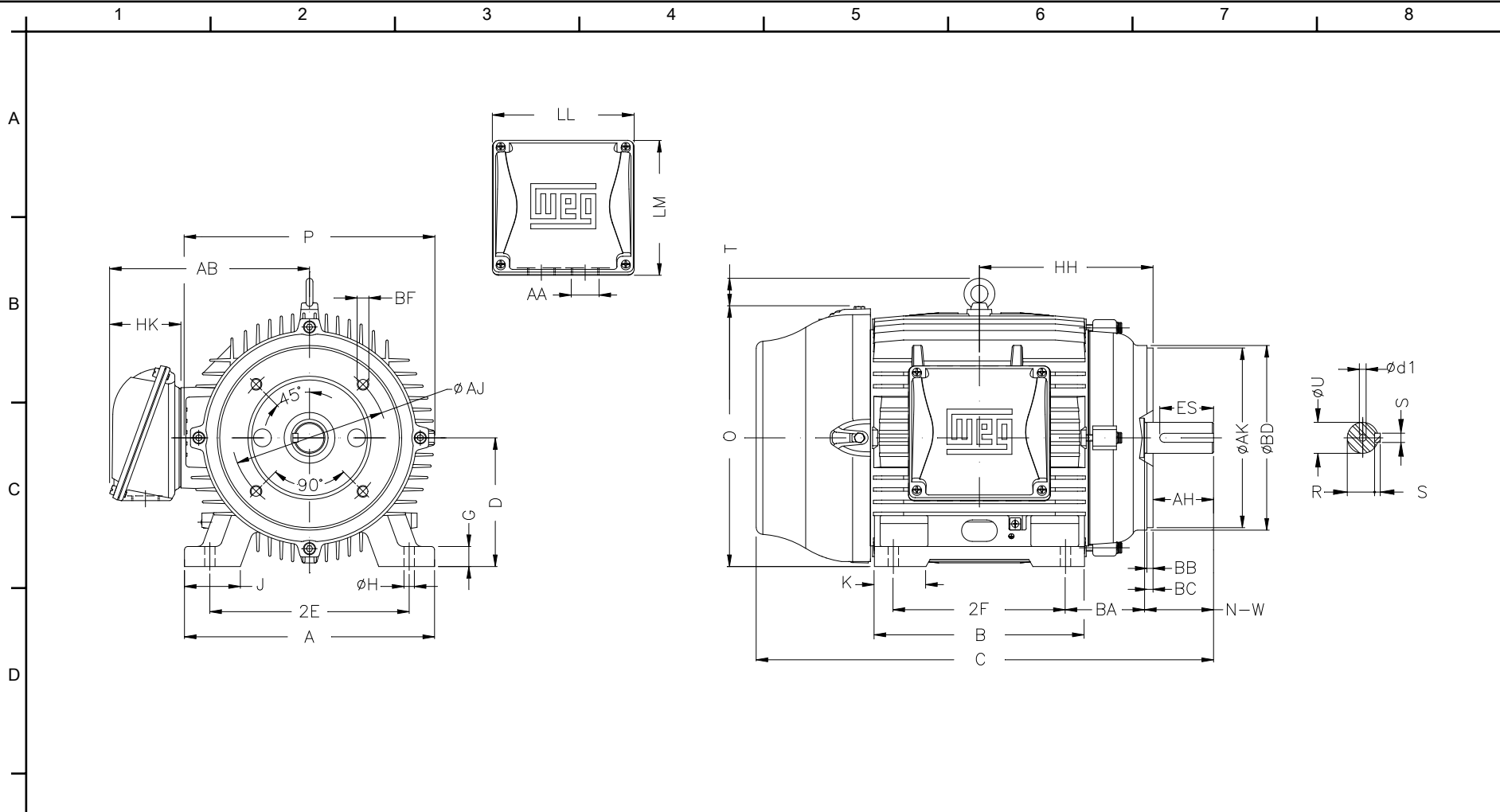
Customer :
Product line : Three-Phase: W22 IEEE-841™ Petrochem Motors - NEMA Premium® Efficiency

| | | | |
|------------------|----------|--|---------|
| Frame | : 284T | Locked rotor current (I _l /I _n) | : 6.2 |
| Output | : 25 HP | Duty cycle | : S1 |
| Frequency | : 60 Hz | Service factor | : 1.25 |
| Full load speed | : 1765 | Design | : B |
| Voltage | : 460 V | Locked rotor torque | : 240 % |
| Rated current | : 29.5 A | Breakdown torque | : 270 % |
| Insulation class | : F | | |

Notes:

Performed by

Checked



| | | | | | |
|-------------|--------|--------|--------|------------|--------|
| E | 2E | J | A | P | AB |
| | 11.000 | 3.110 | 13.780 | 14.173 | 10.984 |
| F | 2F | K | B | BA | U |
| | 9.500 | 2.874 | 11.575 | 4.750 | 1.875 |
| | N-W | ES | S | R | depth |
| | 4.622 | 3.543 | 0.500 | 1.594 | 0.500 |
| F | D | G | HB | O | T |
| | 7.000 | 1.023 | 3.535 | 14.067 | 2.087 |
| | HD | HF | HH | HK | H |
| | 16.154 | 7.000 | 9.500 | 3.937 | 0.531 |
| | C | LL | LM | AA | d1 |
| | 26.433 | 7.795 | 7.402 | NPT 1 1/2" | A 4 |
| | d2 | Flange | AJ | AK | BD |
| A 4 | FC-228 | 9.000 | 10.500 | 11.03 | |
| BF | BB | BC | AH | | |
| UNC 1/2"x13 | 0.250 | 0.250 | 4.375 | | |

| | | |
|--|-------------|--|
| Notes: | | |
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| Checked: | | |
| Customer: | | |
| Three-Phase: W22 IEEE-841™ Petrochem Motors - NEMA Premium® Efficiency | | |
| Three-phase induction motor Frame 284T - IP55 | 27-DEC-2012 | |