



No.:

Date: 28-DEC-2012

Customer :

TECHNICAL PROPOSAL

Three-phase induction motor - Squirrel cage rotor

Product line : Saw Arbor Motors : Single and Double Shaft End

Catalog Number : 00518ES3ESA90LR

List Price : \$1,701

Notes:

Performed by:

Checked:



No.:

Date: 28-DEC-2012

DATA SHEET

Three-phase induction motor - Squirrel cage rotor

Customer :
Product line : Saw Arbor Motors : Single and Double Shaft End

Frame : 90L
Output : 5 HP
Frequency : 60 Hz
Poles : 4
Full load speed : 1740
Slip : 3.33 %
Voltage : 208-230/460 V
Rated current : 15.5-14.1/7.03 A
Locked rotor current : 112/56.2 A
Locked rotor current (I_L/I_n) : 8.0
No-load current : 8.03/4.02 A
Full load torque : 14.9 lb.ft
Locked rotor torque : 380 %
Breakdown torque : 410 %
Design : N
Insulation class : F
Temperature rise : 80 K
Locked rotor time : 8 s (hot)
Service factor : 1.15
Duty cycle : S6 50%
Ambient temperature : -20°C - +40°C
Altitude : 1000
Degree of Protection : IP54
Approximate weight : 143 lb
Moment of inertia : 0.26601 sq.ft.lb
Noise level : 51 dB(A)

| | D.E. | N.D.E. | Load | Power factor | Efficiency (%) |
|---------------------|---------|---------|------|--------------|----------------|
| Bearings | 6308 ZZ | 6208 ZZ | 100% | 0.78 | 84.5 |
| Regreasing interval | --- | --- | 75% | 0.71 | 84.0 |
| Grease amount | --- | --- | 50% | 0.58 | 82.0 |

Notes:

Performed by

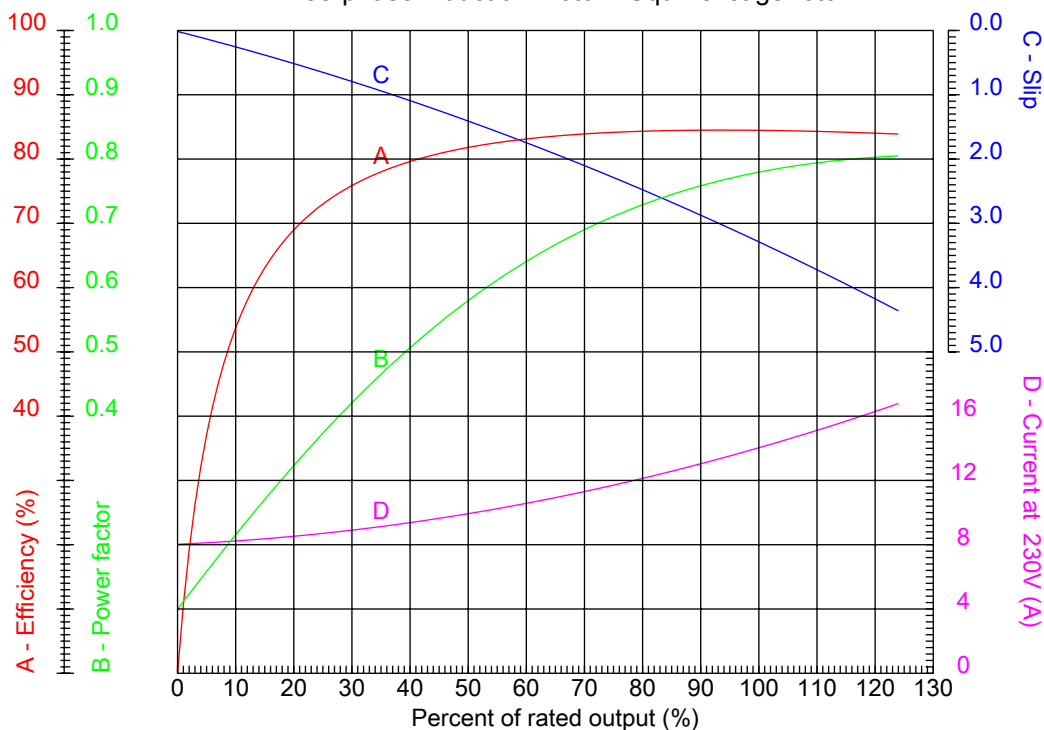
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PERFORMANCE CURVES RELATED TO RATED OUTPUT
Three-phase induction motor - Squirrel cage rotor



Customer :
Product line : Saw Arbor Motors : Single and Double Shaft End

| | |
|----------------------------------|--|
| Frame : 90L | Locked rotor current (I _l /I _n) : 8.0 |
| Output : 5 HP | Duty cycle : S6 50% |
| Frequency : 60 Hz | Service factor : 1.15 |
| Full load speed : 1740 | Design : N |
| Voltage : 208-230/460 V | Locked rotor torque : 380 % |
| Rated current : 15.5-14.1/7.03 A | Breakdown torque : 410 % |
| Insulation class : F | |

Notes:

Performed by

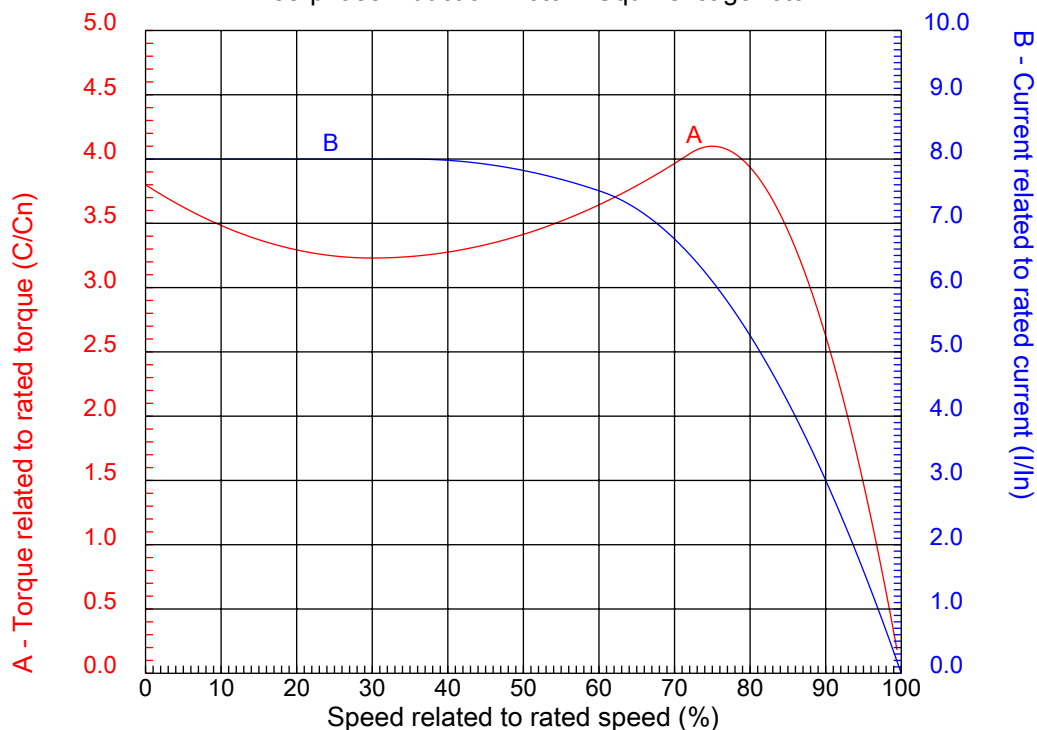
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CHARACTERISTIC CURVES RELATED TO SPEED Three-phase induction motor - Squirrel cage rotor



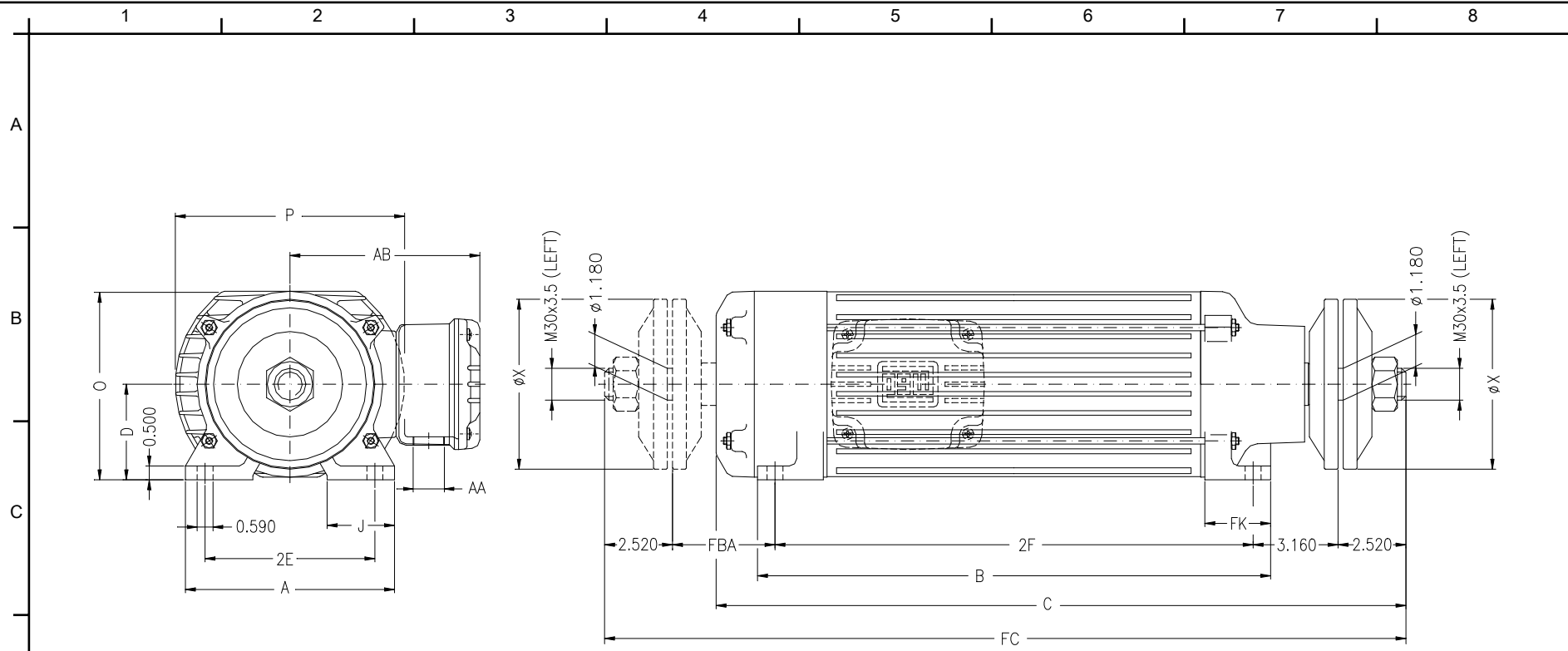
Customer :
Product line : Saw Arbor Motors : Single and Double Shaft End

| | | | |
|------------------|--------------------|--|----------|
| Frame | : 90L | Locked rotor current (I _l /I _n) | : 8.0 |
| Output | : 5 HP | Duty cycle | : S6 50% |
| Frequency | : 60 Hz | Service factor | : 1.15 |
| Full load speed | : 1740 | Design | : N |
| Voltage | : 208-230/460 V | Locked rotor torque | : 380 % |
| Rated current | : 15.5-14.1/7.03 A | Breakdown torque | : 410 % |
| Insulation class | : F | | |

Notes:

Performed by

Checked




D

E

F

| | | | | |
|-----|-------|-------|--------|----|
| 2E | 2F | A | B | FK |
| 160 | 510 | 197 | 543 | 62 |
| FBA | C | FC | D | J |
| 43 | 672.5 | 758.0 | 90 | 63 |
| O | P | AB | AA | |
| 177 | 208 | 179 | NPT 1" | |

| | | |
|---|-------------|---|
| Notes: | | |
| Performed by: | | |
| Checked: | | |
| Customer: | | |
| Saw Arbor Motors : Single and Double Shaft End | | |
| Three-phase induction motor Frame 90L - IP54 | 28-DEC-2012 |  |