



No.:

Date: 11-SEP-2020

Customer :

TECHNICAL PROPOSAL

Three-phase induction motor - Squirrel cage rotor

Product line : TEFC - Explosion Proof - NEMA Premium Efficiency

Catalog Number :

List Price : \$

Notes:

Performed by:

Checked:



No.:

Date: 11-SEP-2020

DATA SHEET

Three-phase induction motor - Squirrel cage rotor

Customer :
Product line : TEFC - Explosion Proof - NEMA Premium Efficiency

Frame : 254T
Output : 7.5 HP
Frequency : 60 Hz
Poles : 6
Full load speed : 1175 rpm
Slip : 2.08 %
Voltage : 575 V
Rated current : 7.78 A
Locked rotor current : 54.5 A
Locked rotor current (I_L/I_n) : 7.0
No-load current : 4.16 A
Full load torque : 33.1 lb.ft
Locked rotor torque : 270 %
Breakdown torque : 320 %
Design : B
Insulation class : F
Temperature rise : 80 K
Locked rotor time : 25 s (hot)
Service factor : 1.15
Duty cycle : S1
Ambient temperature : -20°C - +40°C
Altitude : 1000 m
Degree of Protection : IP55
Approximate weight : 309 lb
Moment of inertia : 3.3236 sq.ft.lb
Noise level : 59 dB(A)

| | D.E. | N.D.E. | Load | Power factor | Efficiency (%) |
|---------------------|---------|---------|------|--------------|----------------|
| Bearings | 6309 C3 | 6209 C3 | 100% | 0.78 | 91.0 |
| Regreasing interval | 20000 h | 20000 h | 75% | 0.71 | 90.2 |
| Grease amount | 13 g | 9 g | 50% | 0.58 | 88.5 |

Notes:

Performed by

Checked

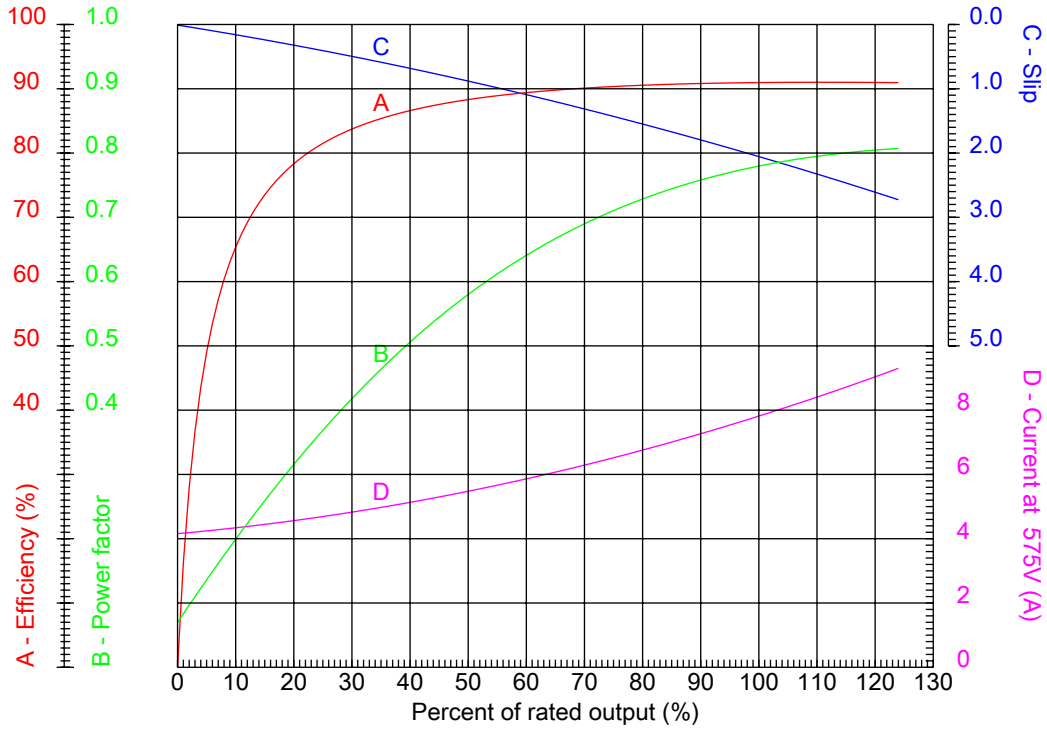


No.:

Date: 11-SEP-2020

PERFORMANCE CURVES RELATED TO RATED OUTPUT

Three-phase induction motor - Squirrel cage rotor



Customer :
Product line : TEFC - Explosion Proof - NEMA Premium Efficiency

| | | | |
|------------------|------------|--|---------|
| Frame | : 254T | Locked rotor current (I _L /I _n) | : 7.0 |
| Output | : 7.5 HP | Duty cycle | : S1 |
| Frequency | : 60 Hz | Service factor | : 1.15 |
| Full load speed | : 1175 rpm | Design | : B |
| Voltage | : 575 V | Locked rotor torque | : 270 % |
| Rated current | : 7.78 A | Breakdown torque | : 320 % |
| Insulation class | : F | | |

Notes:

Performed by

Checked

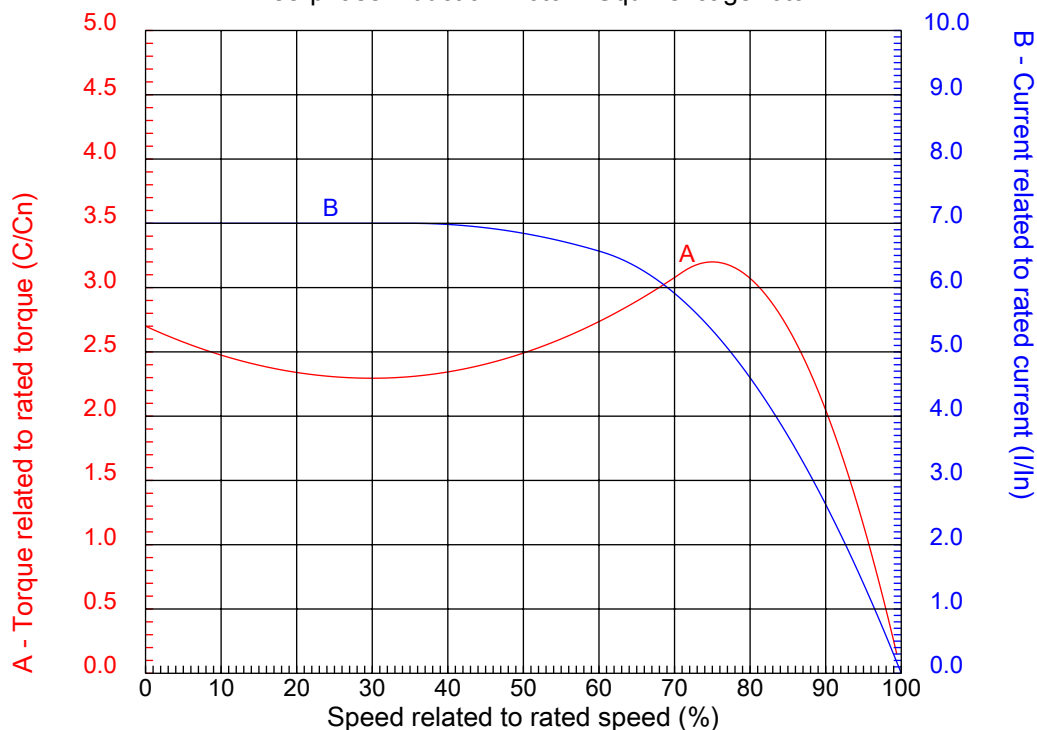


No.:

Date: 11-SEP-2020

CHARACTERISTIC CURVES RELATED TO SPEED

Three-phase induction motor - Squirrel cage rotor



Customer :
Product line : TEFC - Explosion Proof - NEMA Premium Efficiency

| | | | |
|------------------|------------|--|---------|
| Frame | : 254T | Locked rotor current (I _l /I _n) | : 7.0 |
| Output | : 7.5 HP | Duty cycle | : S1 |
| Frequency | : 60 Hz | Service factor | : 1.15 |
| Full load speed | : 1175 rpm | Design | : B |
| Voltage | : 575 V | Locked rotor torque | : 270 % |
| Rated current | : 7.78 A | Breakdown torque | : 320 % |
| Insulation class | : F | | |

Notes:

Performed by

Checked

1 2 3 4 5 6 7 8

A

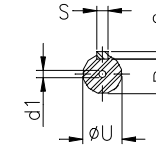
B

C

D

E

F



Notes:

Performed by:

Checked:

Customer:

TEFC - Explosion Proof - NEMA Premium Efficiency

Three-phase induction motor

Frame 254T - IP55

11-SEP-2020



| | | | | |
|--------------|------------------|-------------|-------------|----------------|
| 2E 10.000 | A 12.126 | 2F 8.252 | B 10.000 | BA 4.250 |
| J 2.520 | K 2.559 | P 12.224 | ES 2.756 | depth 0.375 |
| S 0.375 | N-W 4.000 | U 1.625 | R 1.416 | AB 11.063 |
| D 6.250 | G 0.817 | O 12.352 | T 2.087 | H 0.531 |
| C 23.189 | AA NPT 1 1/2" | d1 A 4 | d2 A 4 | |