



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:



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## DATA SHEET

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

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

Frame : 284T  
Output : 15 HP  
Frequency : 60 Hz  
Poles : 6  
Full load speed : 1180 rpm  
Slip : 1.67 %  
Voltage : 575 V  
Rated current : 14.0 A  
Locked rotor current : 101 A  
Locked rotor current (I<sub>L</sub>/I<sub>n</sub>) : 7.2  
No-load current : 5.60 A  
Full load torque : 65.9 lb.ft  
Locked rotor torque : 250 %  
Breakdown torque : 260 %  
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 : 463 lb  
Moment of inertia : 7.0742 sq.ft.lb  
Noise level : 59 dB(A)

|                     | D.E.    | N.D.E.  | Load | Power factor | Efficiency (%) |
|---------------------|---------|---------|------|--------------|----------------|
| Bearings            | 6311 C3 | 6211 C3 | 100% | 0.86         | 91.7           |
| Regreasing interval | 20000 h | 20000 h | 75%  | 0.83         | 91.7           |
| Grease amount       | 18 g    | 11 g    | 50%  | 0.74         | 91.0           |

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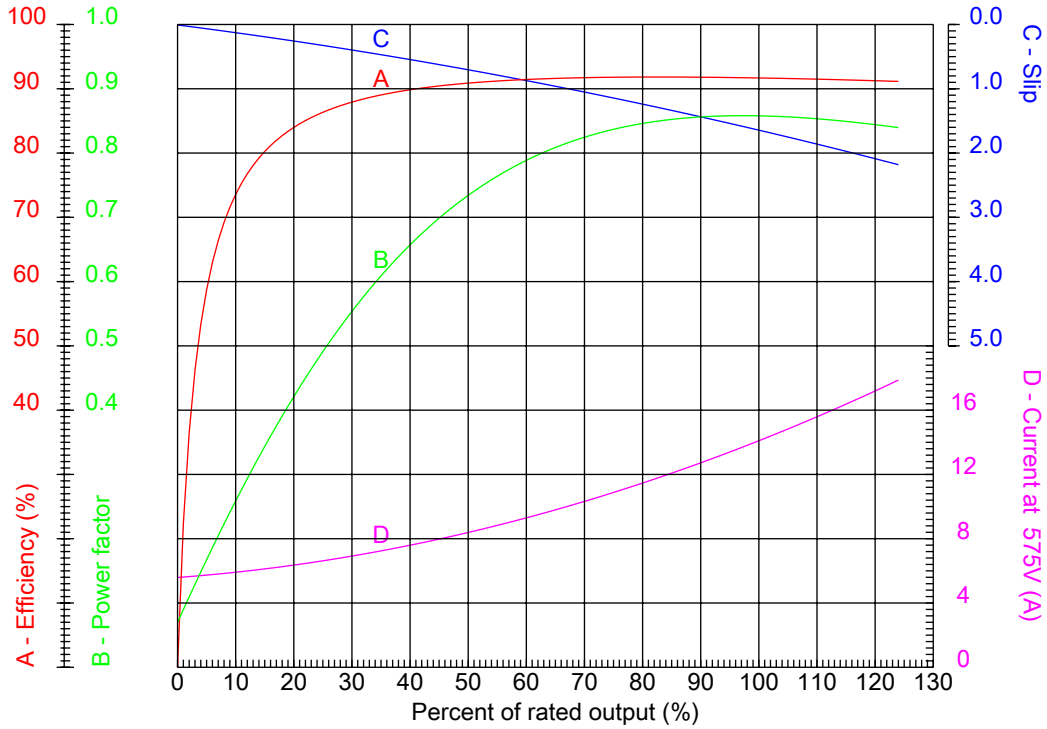


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### PERFORMANCE CURVES RELATED TO RATED OUTPUT

Three-phase induction motor - Squirrel cage rotor



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

|                            |  |
|----------------------------|--|
| Frame : 284T               | Locked rotor current (I <sub>l</sub> /I <sub>n</sub> ) : 7.2 |
| Output : 15 HP             | Duty cycle : S1  |
| Frequency : 60 Hz          | Service factor : 1.15  |
| Full load speed : 1180 rpm | Design : B   |
| Voltage : 575 V            | Locked rotor torque : 250 %                                  |
| Rated current : 14.0 A     | Breakdown torque : 260 %                                     |
| Insulation class : F       |  |

Notes:

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Checked

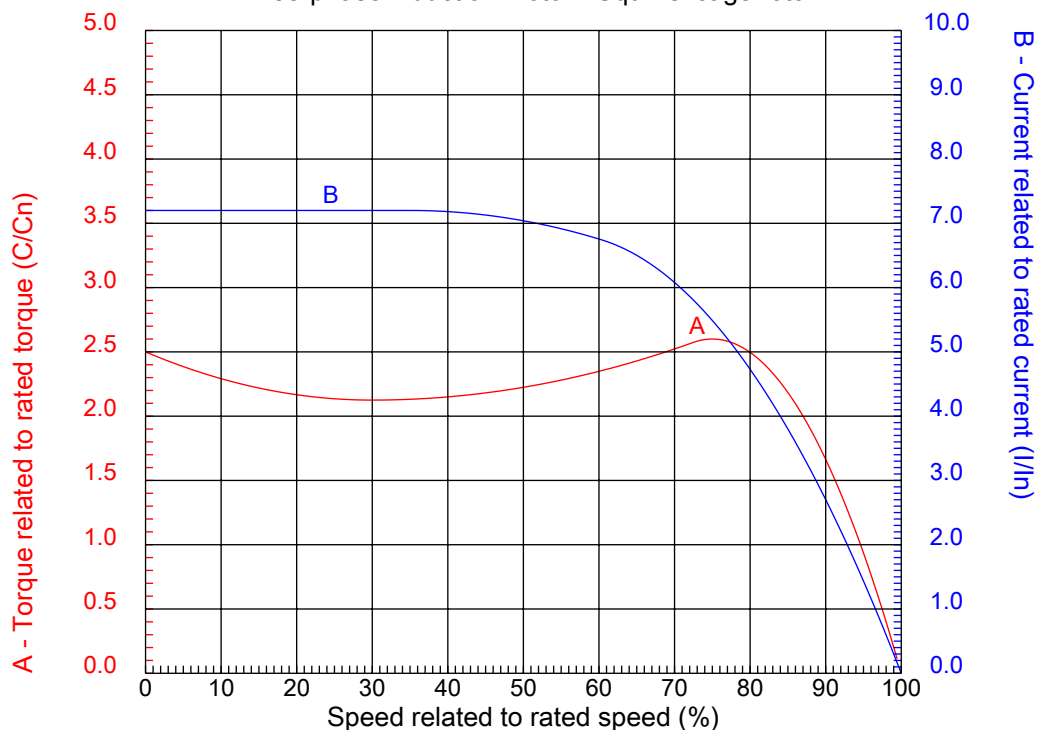


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### CHARACTERISTIC CURVES RELATED TO SPEED

Three-phase induction motor - Squirrel cage rotor



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

|                  |            |  |         |
|------------------|------------|--|---------|
| Frame            | : 284T     | Locked rotor current (I <sub>l</sub> /I <sub>n</sub> ) | : 7.2   |
| Output           | : 15 HP    | Duty cycle   | : S1    |
| Frequency        | : 60 Hz    | Service factor   | : 1.15  |
| Full load speed  | : 1180 rpm | Design   | : B     |
| Voltage          | : 575 V    | Locked rotor torque                                    | : 250 % |
| Rated current    | : 14.0 A   | Breakdown torque                                       | : 260 % |
| Insulation class | : F        |  |         |

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1 2 3 4 5 6 7 8

A

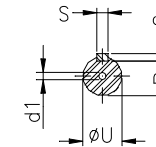
B

C

D

E

F



Notes:

Performed by:

Checked:

Customer:

TEFC - Explosion Proof - NEMA Premium Efficiency

Three-phase induction motor

Frame 284T - IP55

11-SEP-2020



|              |                  |             |             |                |
|--------------|------------------|-------------|-------------|----------------|
| 2E<br>11.000 | A<br>13.780      | 2F<br>9.500 | B<br>11.575 | BA<br>4.750    |
| J<br>3.150   | K<br>2.953       | P<br>14.094 | ES<br>3.150 | depth<br>0.500 |
| S<br>0.500   | N-W<br>4.622     | U<br>1.875  | R<br>1.594  | AB<br>11.850   |
| D<br>7.000   | G<br>1.024       | O<br>14.362 | T<br>2.441  | H<br>0.531     |
| C<br>26.417  | AA<br>NPT 1 1/2" | d1<br>A 4   | d2<br>A 4   |                |