



Dealers Industrial Equipment

No.:

Date: 12-SEP-2016

Customer :

TECHNICAL PROPOSAL

Three-phase induction motor - Squirrel cage rotor

Product line : Three-Phase : Rolled Steel Motor - NEMA Premium Efficiency

Catalog Number : 00156ET3ERS143T

List Price : \$>(discontinued)</span>

Notes:

Downloaded from <http://dealerselectric.com>

Generated for Model #00156ET3ERS143T

Performed by:

Checked:



# Dealers Industrial Equipment

No.:

Date: 12-SEP-2016

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

Customer :  
 Product line : Three-Phase : Rolled Steel Motor - NEMA Premium Efficiency

Frame : 143/5T  
 Output : 1.5 HP  
 Frequency : 60 Hz  
 Poles : 2  
 Full load speed : 3420 rpm  
 Slip : 5.00 %  
 Voltage : 208-230/460 V  
 Rated current : 4.30-3.90/1.95 A  
 Locked rotor current : 33.2/16.6 A  
 Locked rotor current (I<sub>L</sub>/I<sub>n</sub>) : 8.5  
 No-load current : 1.70/0.850 A  
 Full load torque : 2.27 lb.ft  
 Locked rotor torque : 420 %  
 Breakdown torque : 390 %  
 Design : B  
 Insulation class : F  
 Temperature rise : 80 K  
 Locked rotor time : 15 s (hot)  
 Service factor : 1.15 (1.00 at 208V)  
 Duty cycle : S1  
 Ambient temperature : -20°C - +40°C  
 Altitude : 1000 m  
 Degree of Protection : IP55  
 Approximate weight : 34 lb  
 Moment of inertia : 0.05102 sq.ft.lb  
 Noise level : ---

|                     | D.E.    | N.D.E.  |
|---------------------|---------|---------|
| Bearings            | 6205 ZZ | 6203 ZZ |
| Regreasing interval | ---     | ---     |
| Grease amount       | ---     | ---     |

| Load | Power factor | Efficiency (%) |
|------|--------------|----------------|
| 100% | 0.86         | 84.0           |
| 75%  | 0.81         | 81.5           |
| 50%  | 0.71         | 77.0           |

Notes:  
 Downloaded from <http://dealerselectric.com>  
 Generated for Model #00156ET3ERS143T

Performed by

Checked



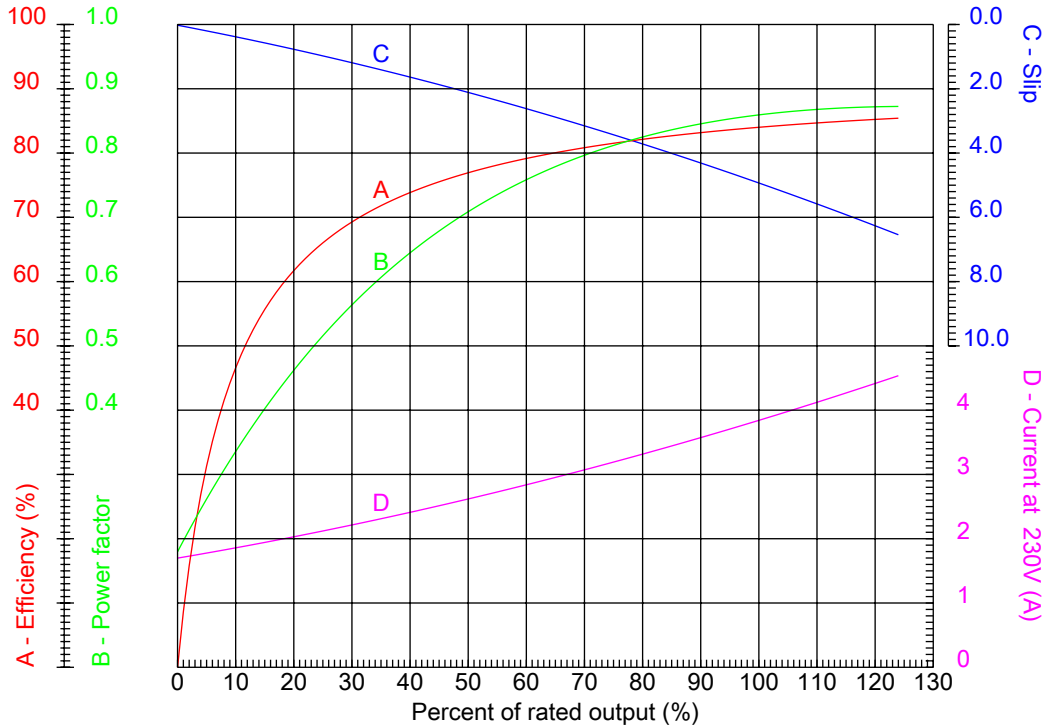
# Dealers Industrial Equipment

No.:

Date: 12-SEP-2016

## PERFORMANCE CURVES RELATED TO RATED OUTPUT

Three-phase induction motor - Squirrel cage rotor



Customer :  
 Product line : Three-Phase : Rolled Steel Motor - NEMA Premium Efficiency

|                                  |  |
|----------------------------------|--|
| Frame : 143/5T                   | Locked rotor current (I <sub>l</sub> /I <sub>n</sub> ) : 8.5 |
| Output : 1.5 HP                  | Duty cycle : S1  |
| Frequency : 60 Hz                | Service factor : 1.15 (1.00 at 208V)                         |
| Full load speed : 3420 rpm       | Design : B   |
| Voltage : 208-230/460 V          | Locked rotor torque : 420 %                                  |
| Rated current : 4.30-3.90/1.95 A | Breakdown torque : 390 %                                     |
| Insulation class : F             |  |

Notes:  
 Downloaded from <http://dealerselectric.com>  
 Generated for Model #00156ET3ERS143T

Performed by

Checked



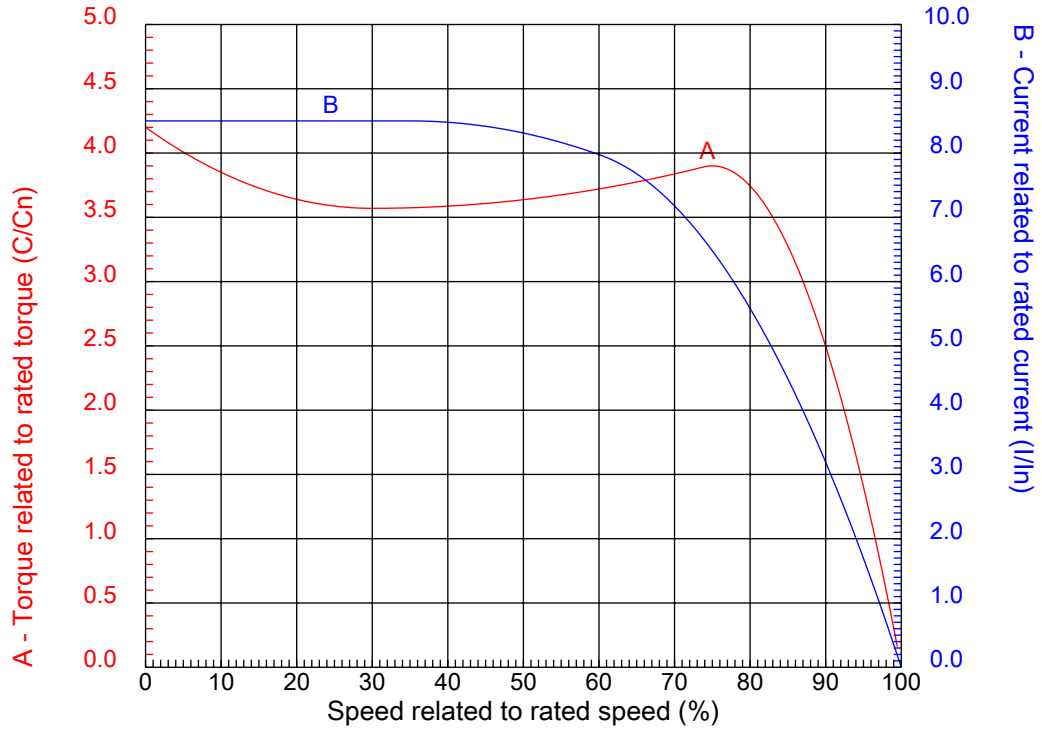
# Dealers Industrial Equipment

No.:

Date: 12-SEP-2016

## CHARACTERISTIC CURVES RELATED TO SPEED

Three-phase induction motor - Squirrel cage rotor



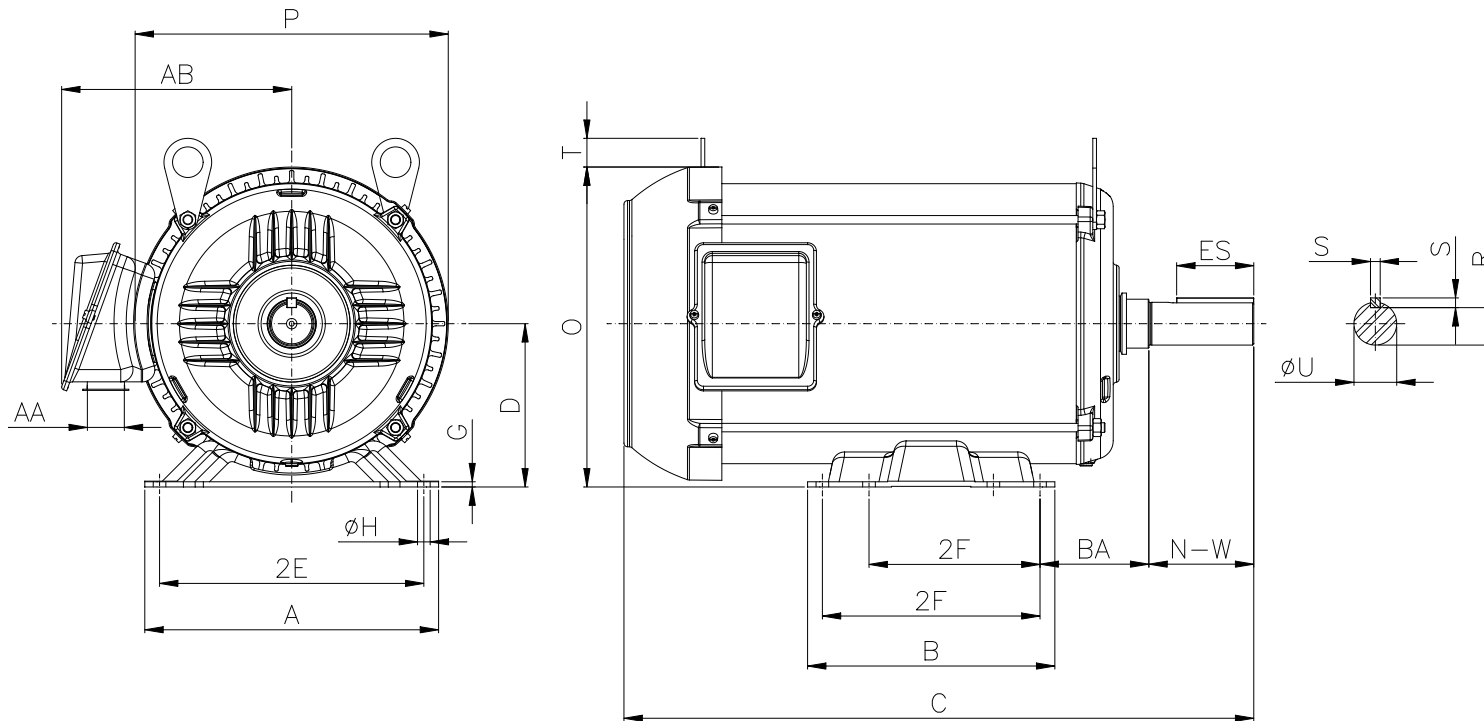
Customer :  
Product line : Three-Phase : Rolled Steel Motor - NEMA Premium Efficiency

|                  |                    |  |                       |
|------------------|--------------------|--|-----------------------|
| Frame            | : 143/5T           | Locked rotor current (I <sub>l</sub> /I <sub>n</sub> ) | : 8.5                 |
| Output           | : 1.5 HP           | Duty cycle   | : S1                  |
| Frequency        | : 60 Hz            | Service factor   | : 1.15 (1.00 at 208V) |
| Full load speed  | : 3420 rpm         | Design   | : B                   |
| Voltage          | : 208-230/460 V    | Locked rotor torque                                    | : 420 %               |
| Rated current    | : 4.30-3.90/1.95 A | Breakdown torque                                       | : 390 %               |
| Insulation class | : F                |  |                       |

Notes:  
Downloaded from <http://dealerselectric.com>  
Generated for Model #00156ET3ERS143T

Performed by

Checked



Notes: Downloaded from <http://dealerselectric.com>  
 Generated for Model #00156ET3ERS143T

Performed by:

Checked:

Customer:

Three-Phase : Rolled Steel Motor - NEMA Premium Efficiency

Three-phase induction motor  
 Frame 143/5T - IP55

12-SEP-2016



|             |             |                |              |             |
|-------------|-------------|----------------|--------------|-------------|
| 2E<br>5.500 | A<br>6.535  | P<br>7.323     | AB<br>5.945  | 2F<br>4.016 |
| B<br>6.496  | BA<br>2.250 | U<br>0.8750    | N-W<br>2.250 | ES<br>1.417 |
| S<br>0.187  | R<br>0.766  | depth<br>0.187 | D<br>3.500   | O<br>7.165  |
| T<br>1.063  | H<br>0.343  | C<br>14.095    | FC<br>7.874  | d1<br>A4    |
| d2<br>DM6   |             |                |              |             |

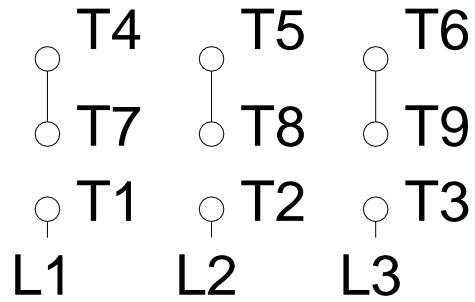
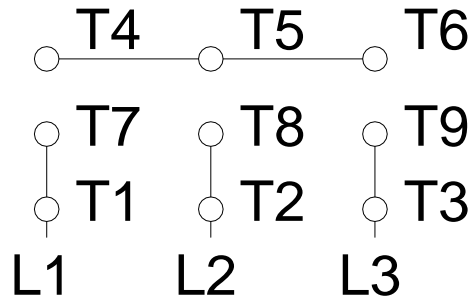
1 2 3 4 5 6 7 8

A

### LOW VOLTAGE

### HIGH VOLTAGE

B



C



D

E

F

Notes: Downloaded from <http://dealerselectric.com>  
 Generated for Model #00156ET3ERS143T

Performed by:

Checked:

Customer:

Three-Phase : Rolled Steel Motor - NEMA Premium Efficiency

Three-phase induction motor  
 Frame 143/5T - IP55

12-SEP-2016

