



Dealers Industrial Equipment

No.:

Date: 27-SEP-2016

Customer :

TECHNICAL PROPOSAL

Three-phase induction motor - Squirrel cage rotor

Product line : Oil Well Pumping : High Slip - NEMA Design "D" - TEFC (IP55)

Catalog Number : 10012ES3EOW445T

List Price : \$18,074

Notes:

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No.:

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DATA SHEET Three-phase induction motor - Squirrel cage rotor

Customer :
 Product line : Oil Well Pumping : High Slip - NEMA Design "D" - TEFC (IP55)

Frame : 445T
 Output : 100 HP
 Frequency : 60 Hz
 Poles : 6
 Full load speed : 1130 rpm
 Slip : 5.83 %
 Voltage : 208-230/460 V
 Rated current : 265-240/120 A
 Locked rotor current : 1630/816 A
 Locked rotor current (I_L/I_n) : 6.8
 No-load current : 90.0/45.0 A
 Full load torque : 458 lb.ft
 Locked rotor torque : 300 %
 Breakdown torque : 0 %
 Design : D
 Insulation class : F
 Temperature rise : 80 K
 Locked rotor time : 26 s (hot)
 Service factor : 1.15
 Duty cycle : S1
 Ambient temperature : -20°C - +40°C
 Altitude : 1000 m
 Degree of Protection : IP55
 Approximate weight : 1897 lb
 Moment of inertia : 103.62 sq.ft.lb
 Noise level : 70 dB(A)

| | D.E. | N.D.E. |
|---------------------|-----------|---------|
| Bearings | NU-319 C3 | 6316 C3 |
| Regreasing interval | 7683 h | 12823 h |
| Grease amount | 45 g | 34 g |

| Load | Power factor | Efficiency (%) |
|------|--------------|----------------|
| 100% | 0.87 | 90.2 |
| 75% | 0.85 | 89.5 |
| 50% | 0.75 | 88.5 |

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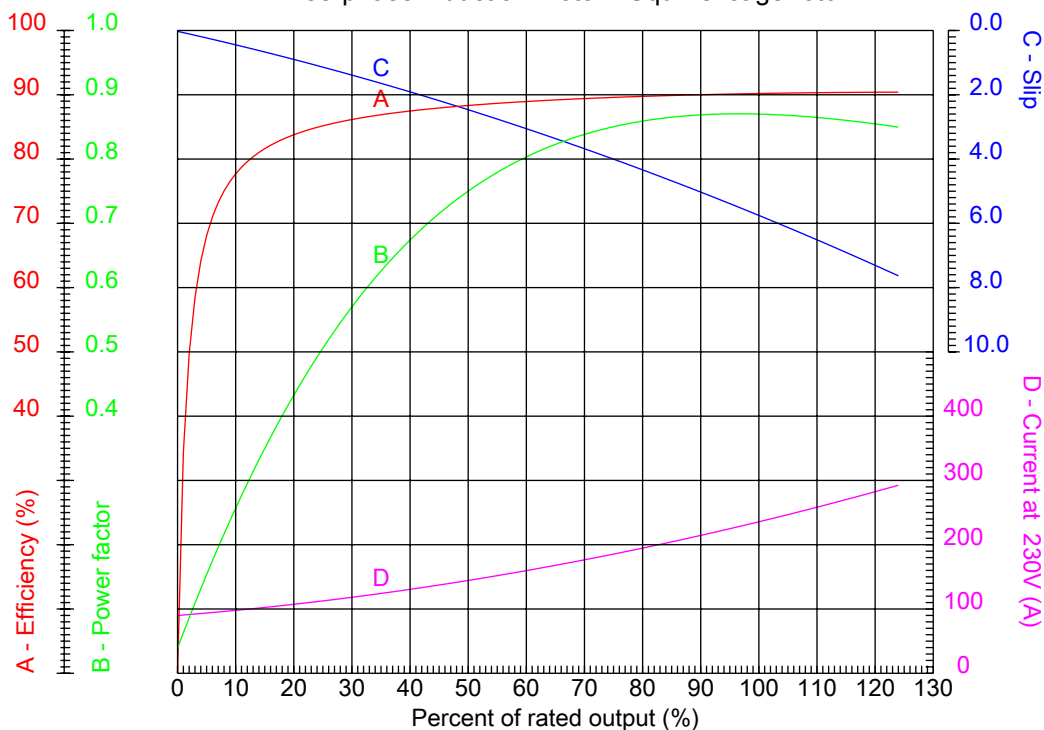
Dealers Industrial Equipment

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PERFORMANCE CURVES RELATED TO RATED OUTPUT

Three-phase induction motor - Squirrel cage rotor



Customer :
 Product line : Oil Well Pumping : High Slip - NEMA Design "D" - TEFC (IP55)

| | |
|-------------------------------|--|
| Frame : 445T | Locked rotor current (I _l /I _n) : 6.8 |
| Output : 100 HP | Duty cycle : S1 |
| Frequency : 60 Hz | Service factor : 1.15 |
| Full load speed : 1130 rpm | Design : D |
| Voltage : 208-230/460 V | Locked rotor torque : 300 % |
| Rated current : 265-240/120 A | Breakdown torque : 0 % |
| Insulation class : F | |

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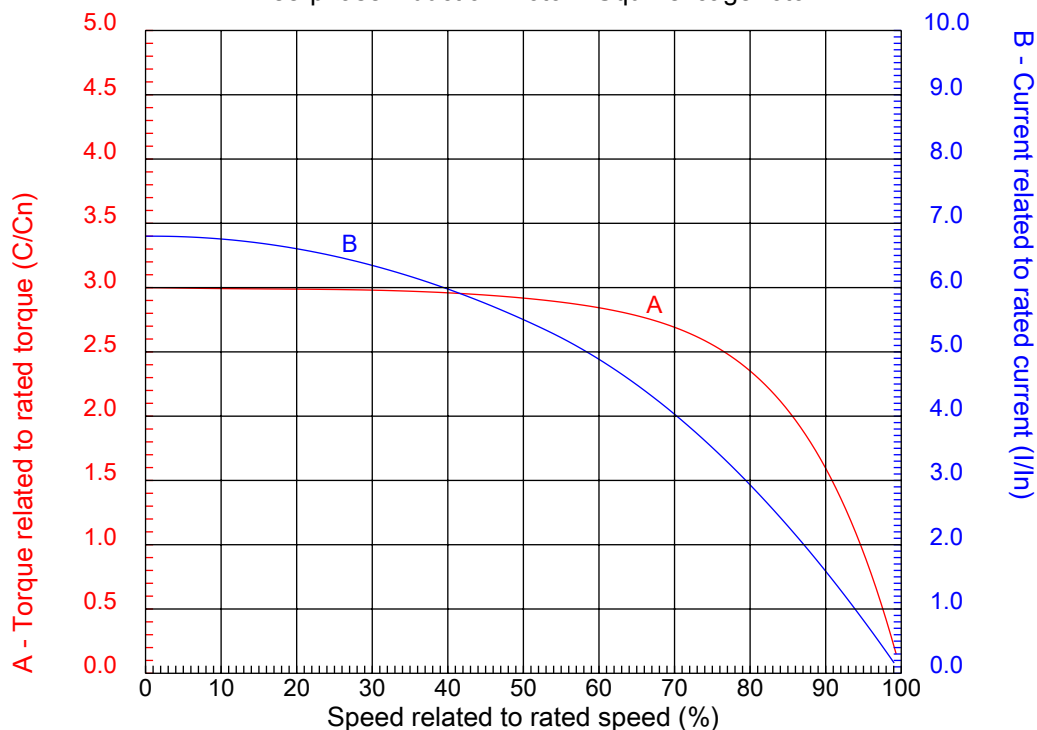
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CHARACTERISTIC CURVES RELATED TO SPEED

Three-phase induction motor - Squirrel cage rotor



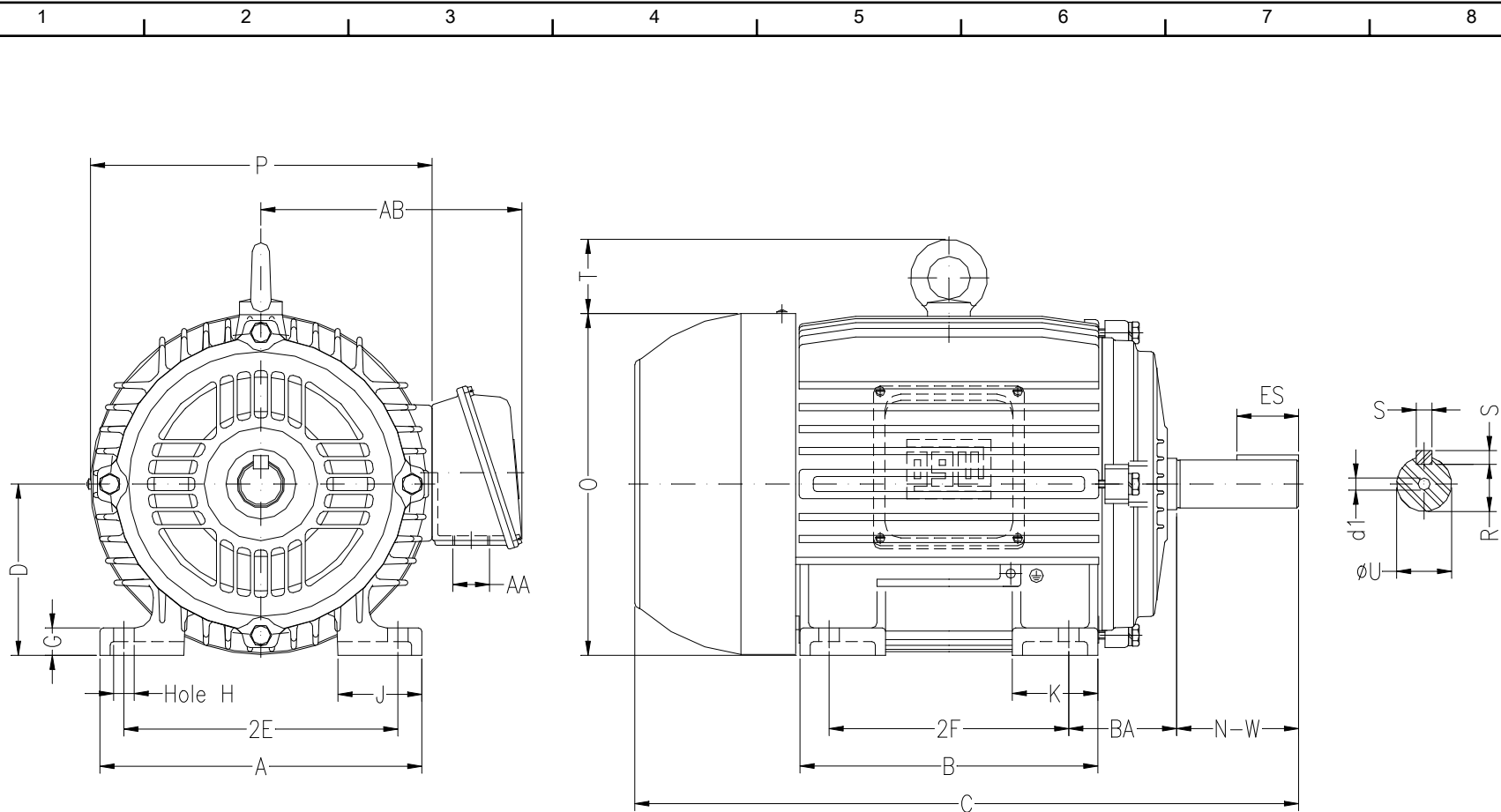
Customer :
Product line : Oil Well Pumping : High Slip - NEMA Design "D" - TEFC (IP55)

| | | | |
|------------------|-----------------|--|---------|
| Frame | : 445T | Locked rotor current (I _l /I _n) | : 6.8 |
| Output | : 100 HP | Duty cycle | : S1 |
| Frequency | : 60 Hz | Service factor | : 1.15 |
| Full load speed | : 1130 rpm | Design | : D |
| Voltage | : 208-230/460 V | Locked rotor torque | : 300 % |
| Rated current | : 265-240/120 A | Breakdown torque | : 255 % |
| Insulation class | : F | | |

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Customer:

Oil Well Pumping : High Slip - NEMA Design "D" - TEFC (IP55)

Three-phase induction motor
Frame 445T - IP55

27-SEP-2016



| | | | | |
|--------------|----------------|---------------------|--------------------|----------------|
| 2E 18.000 | A 21.929 | 2F 14.500/16.500 | B 20.079 | BA 7.500 |
| J 3.937 | K 5.591 | P 23.622 | ES 7.087 | depth 0.875 |
| S 0.875 | N-W 8.500 | U 3.375 | R 2.880 | AB 19.213 |
| D 11.000 | G 1.630 | O 22.713 | T 3.543 | H 0.807 |
| C 43.776 | AA 2xNPT 3" | d1 DUNC 3/4"-10 | d2 DUNC 3/4"-10 | |

1 2 3 4 5 6 7 8

A
B
C
D
E
F

LOW VOLTAGE

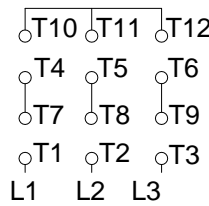
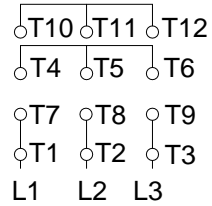
HIGH VOLTAGE



CONNECTIONS FOR STARTING ONLY:

LOW VOLTAGE

HIGH VOLTAGE



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