



Dealers Industrial Equipment

No.:

Date: 27-SEP-2016

Customer :

TECHNICAL PROPOSAL

Three-phase induction motor - Squirrel cage rotor

Product line : Three-Phase: W22 IEEE-841™ Petrochem Motors - NEMA Premium® Efficiency

Catalog Number : 10009ST3QIE445T-W22

List Price : \$24,681

Notes:

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

Customer :  
 Product line : Three-Phase: W22 IEEE-841™ Petrochem Motors - NEMA Premium® Efficiency

Frame : 444/5T  
 Output : 100 HP  
 Frequency : 60 Hz  
 Poles : 8  
 Full load speed : 890 rpm  
 Slip : 1.11 %  
 Voltage : 460 V  
 Rated current : 127 A  
 Locked rotor current : 762 A  
 Locked rotor current (I<sub>L</sub>/I<sub>n</sub>) : 6.0  
 No-load current : 56.0 A  
 Full load torque : 582 lb.ft  
 Locked rotor torque : 190 %  
 Breakdown torque : 220 %  
 Design : B  
 Insulation class : F  
 Temperature rise : 80 K  
 Locked rotor time : 15 s (hot)  
 Service factor : 1.25  
 Duty cycle : S1  
 Ambient temperature : -20°C - +40°C  
 Altitude : 1000 m  
 Degree of Protection : IP55  
 Approximate weight : 1599 lb  
 Moment of inertia : 87.260 sq.ft.lb  
 Noise level : 63 dB(A)

	D.E.	N.D.E.
Bearings	6319 C3	6316 C3
Regreasing interval	17000 h	20000 h
Grease amount	45 g	34 g

Load	Power factor	Efficiency (%)
100%	0.79	94.1
75%	0.74	94.1
50%	0.63	93.6

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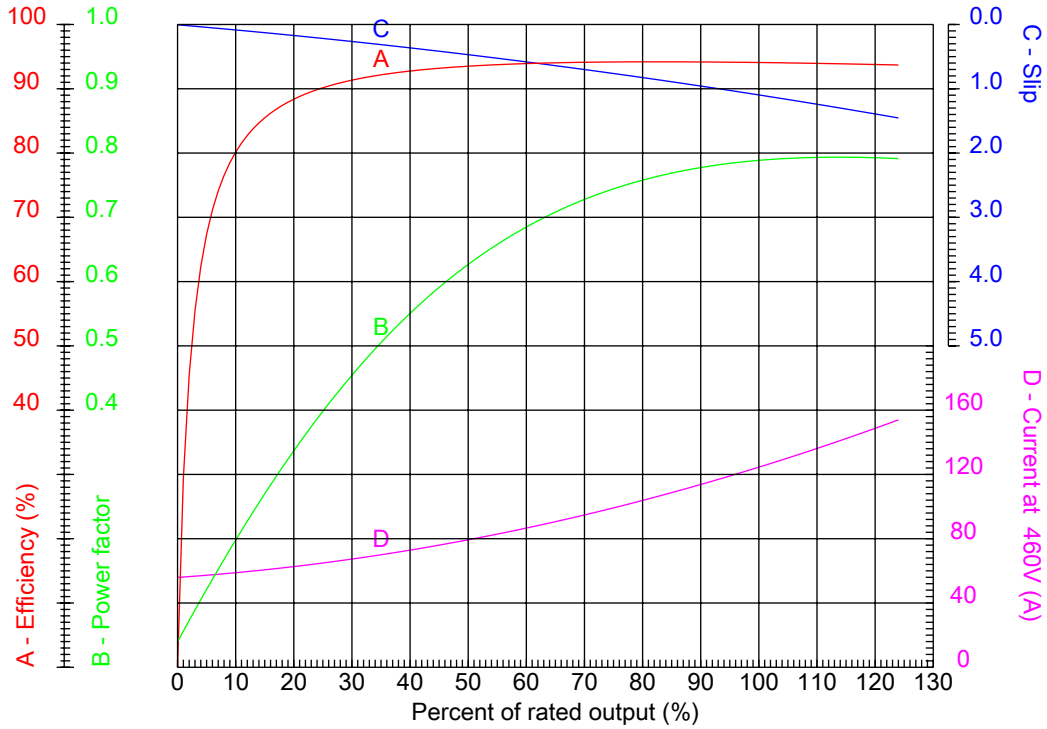
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## PERFORMANCE CURVES RELATED TO RATED OUTPUT

Three-phase induction motor - Squirrel cage rotor



Customer :  
 Product line : Three-Phase: W22 IEEE-841™ Petrochem Motors - NEMA Premium® Efficiency

Frame	: 444/5T	Locked rotor current (I <sub>l</sub> /I <sub>n</sub> )	: 6.0
Output	: 100 HP	Duty cycle	: S1
Frequency	: 60 Hz	Service factor	: 1.25
Full load speed	: 890 rpm	Design	: B
Voltage	: 460 V	Locked rotor torque	: 190 %
Rated current	: 127 A	Breakdown torque	: 220 %
Insulation class	: F		

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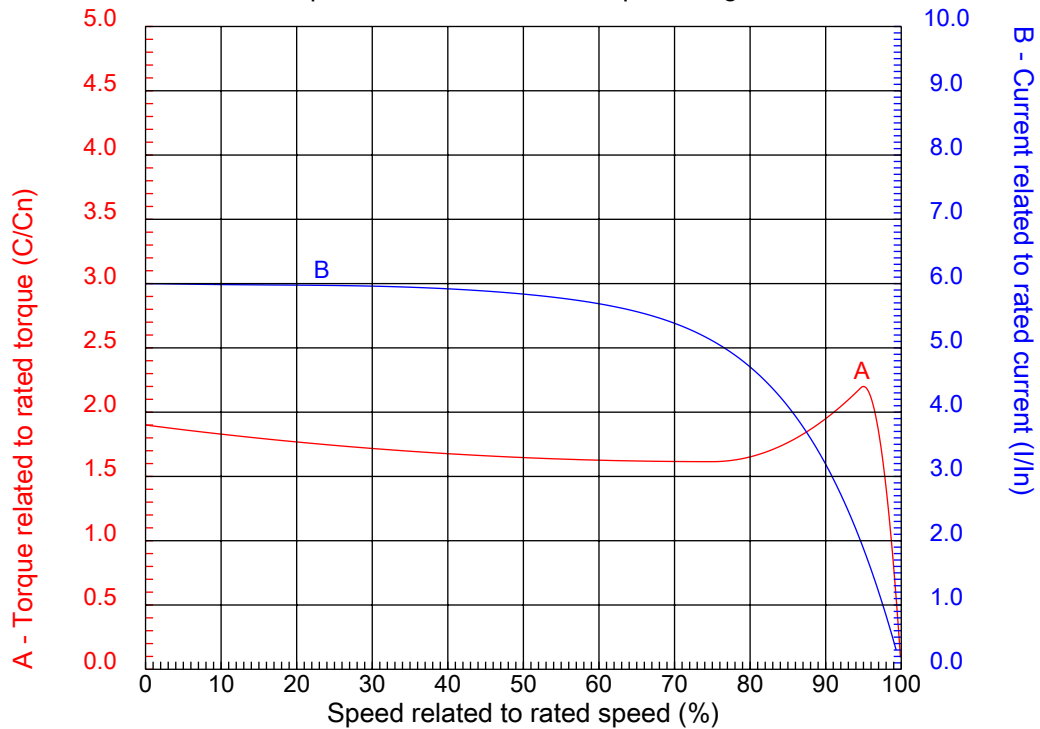
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## CHARACTERISTIC CURVES RELATED TO SPEED

Three-phase induction motor - Squirrel cage rotor



Customer :  
Product line : Three-Phase: W22 IEEE-841™ Petrochem Motors - NEMA Premium® Efficiency

Frame	: 444/5T	Locked rotor current (I <sub>l</sub> /I <sub>n</sub> )	: 6.0
Output	: 100 HP	Duty cycle	: S1
Frequency	: 60 Hz	Service factor	: 1.25
Full load speed	: 890 rpm	Design	: B
Voltage	: 460 V	Locked rotor torque	: 190 %
Rated current	: 127 A	Breakdown torque	: 220 %
Insulation class	: F		

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1 2 3 4 5 6 7 8

A

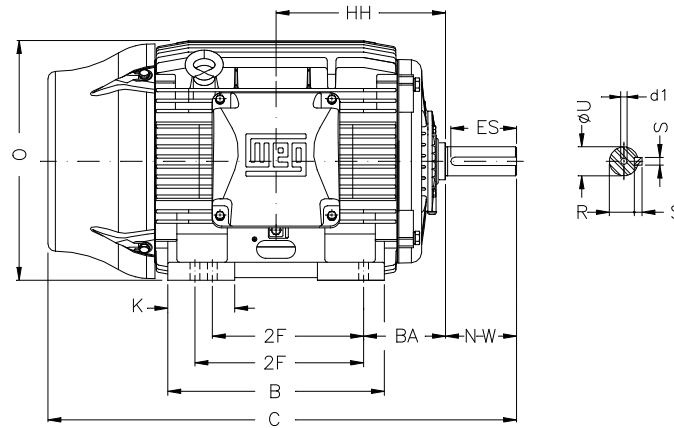
B

C

D

E

F



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Customer:

Three-Phase: W22 IEEE-841™ Petrochem Motors - NEMA Premium® Efficiency

Three-phase induction motor  
Frame 444/5T - IP55

27-SEP-2016



2E 18.000	J 3.937	A 21.929	P 23.583	AB 18.570
2F 14.500/16.500	K 5.866	B 20.315	BA 7.500	U 3.375
N-W 8.500	ES 7.087	S 0.875	R 2.880	depth 0.875
D 11.000	G 1.630	HB 5.687	O 22.795	HH 15.748
HK 5.970	H 0.810	C 44.950	LL 12.362	LM 12.283
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

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F



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Three-phase induction motor  
Frame 444/5T - IP55

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