



No.:

Date: 27-DEC-2012

Customer :

TECHNICAL PROPOSAL

Three-phase induction motor - Squirrel cage rotor

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

Catalog Number : 02009ST3QIE324TC-W22

List Price : \$8,494

Notes:

Performed by:

Checked:



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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 : 324T  
Output : 20 HP  
Frequency : 60 Hz  
Poles : 8  
Full load speed : 880  
Slip : 2.22 %  
Voltage : 460 V  
Rated current : 28.3 A  
Locked rotor current : 142 A  
Locked rotor current (I<sub>L</sub>/I<sub>n</sub>) : 5.0  
No-load current : 16.0 A  
Full load torque : 118 lb.ft  
Locked rotor torque : 190 %  
Breakdown torque : 220 %  
Design : B  
Insulation class : F  
Temperature rise : 80 K  
Locked rotor time : 27 s (hot)  
Service factor : 1.25  
Duty cycle : S1  
Ambient temperature : -20°C - +40°C  
Altitude : 1000  
Degree of Protection : IP55  
Approximate weight : 452 lb  
Moment of inertia : 9.3650 sq.ft.lb  
Noise level : 56 dB(A)

	D.E.	N.D.E.	Load	Power factor	Efficiency (%)
Bearings	6312 C3	6212 C3	100%	0.73	91.0
Regreasing interval	20000 h	20000 h	75%	0.66	91.0
Grease amount	21 g	13 g	50%	0.54	89.5

Notes:

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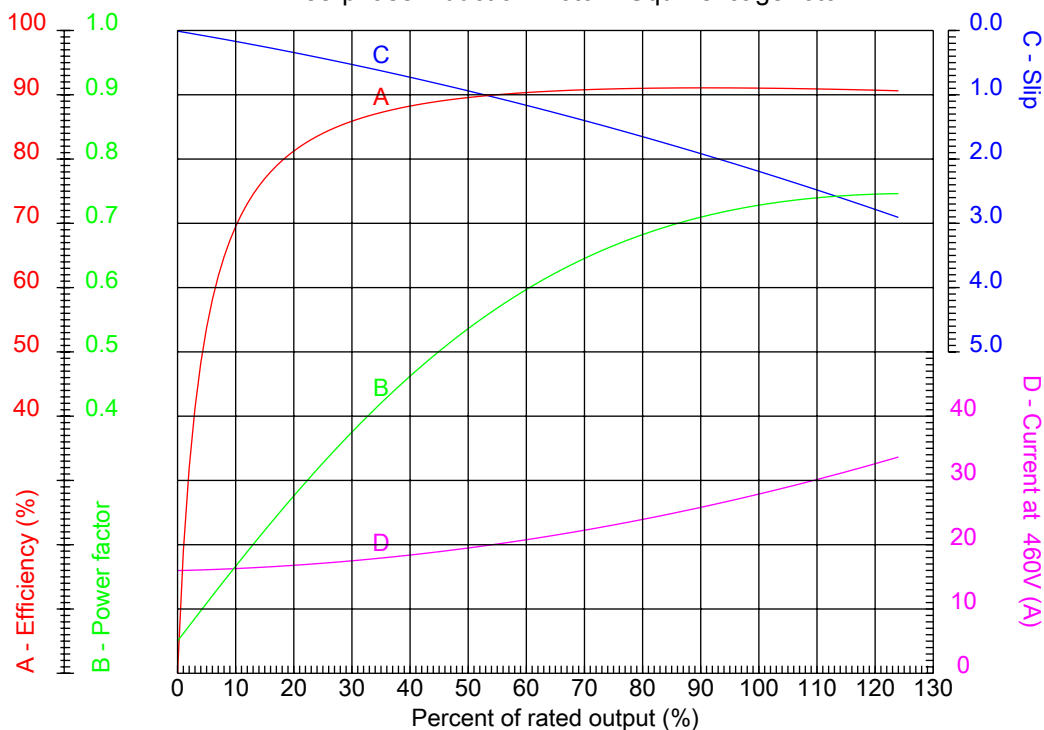
Checked



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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 : 324T	Locked rotor current (I <sub>L</sub> /I <sub>n</sub> ) : 5.0
Output : 20 HP	Duty cycle : S1
Frequency : 60 Hz	Service factor : 1.25
Full load speed : 880	Design : B
Voltage : 460 V	Locked rotor torque : 190 %
Rated current : 28.3 A	Breakdown torque : 220 %
Insulation class : F	

Notes:

Performed by

Checked

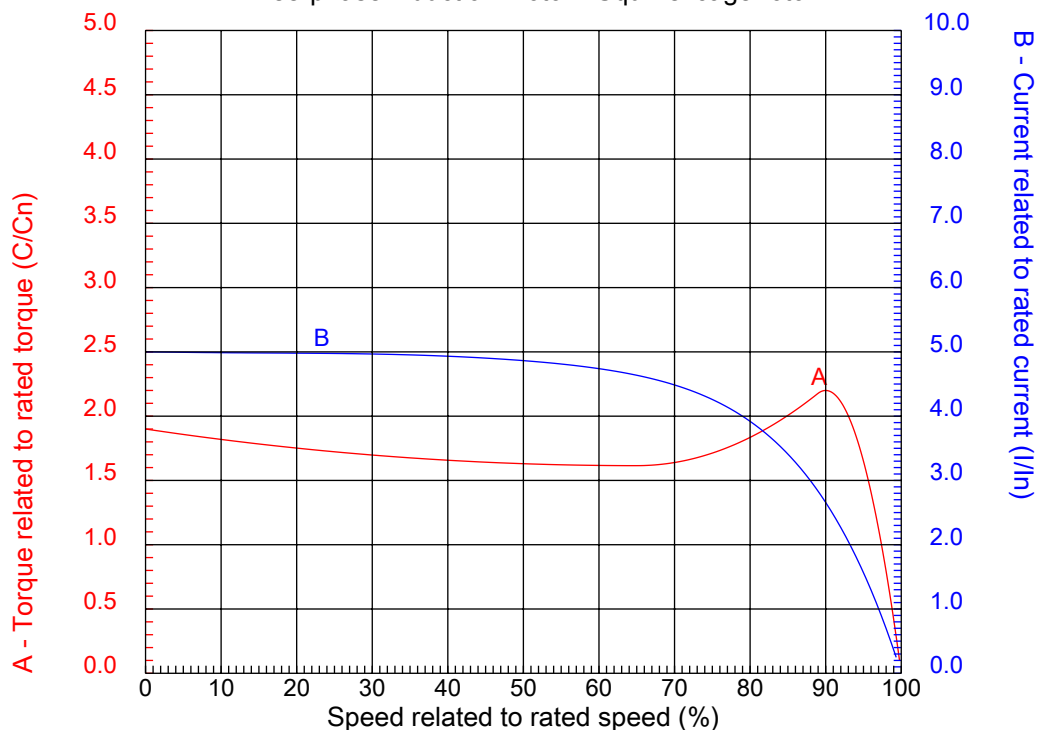


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### CHARACTERISTIC CURVES RELATED TO SPEED

Three-phase induction motor - Squirrel cage rotor



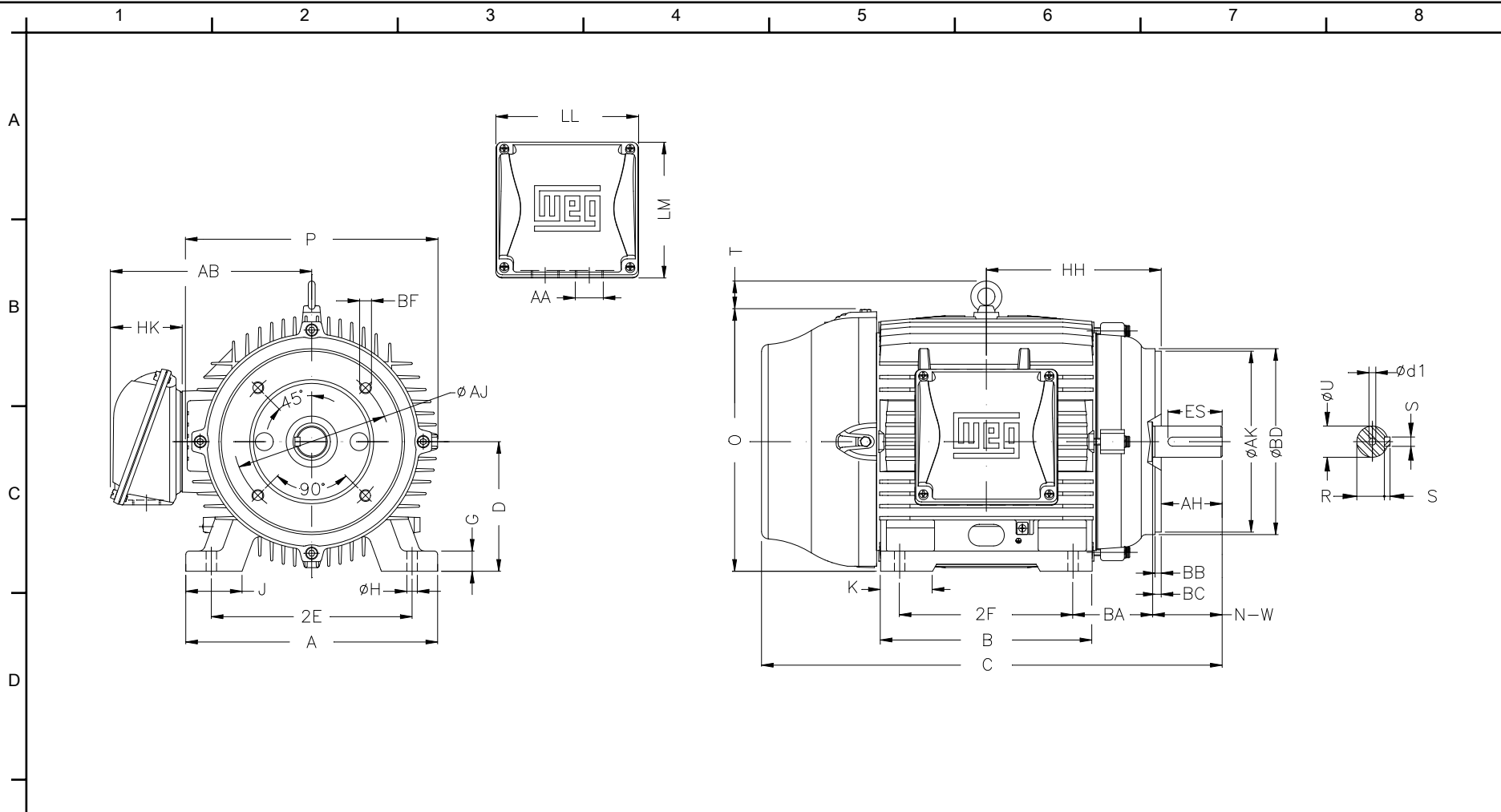
Customer :  
Product line : Three-Phase: W22 IEEE-841™ Petrochem Motors - NEMA Premium® Efficiency

Frame	: 324T	Locked rotor current (I <sub>l</sub> /I <sub>n</sub> )	: 5.0
Output	: 20 HP	Duty cycle	: S1
Frequency	: 60 Hz	Service factor	: 1.25
Full load speed	: 880	Design	: B
Voltage	: 460 V	Locked rotor torque	: 190 %
Rated current	: 28.3 A	Breakdown torque	: 220 %
Insulation class	: F		

Notes:

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E	2E 12.500	J 3.189	A 15.157	P 15.827	AB 12.480
	2F 10.500	K 3.189	B 13.071	BA 5.250	U 2.125
	N-W 5.250	ES 3.937	S 0.500	R 1.844	depth 0.500
	D 8.000	G 1.300	HB 4.811	O 15.953	T 2.441
	HD 18.394	HF 8.708	HH 10.500	HK 4.645	H 0.657
F	C 29.620	LL 8.976	LM 8.543	AA NPT 2"	d1 A 4
	d2 A 4	Flange FC-279	AJ 11.000	AK 12.500	BD 13.58
	BF UNC 5/8"x11	BB 0.250	BC 0.250	AH 5.000	

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Checked:	
Customer:	
Three-Phase: W22 IEEE-841™ Petrochem Motors - NEMA Premium® Efficiency	
Three-phase induction motor Frame 324T - IP55	27-DEC-2012

