



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 : 00209ST3QIE213T-W22

List Price : \$2,701

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 : 213T  
Output : 2 HP  
Frequency : 60 Hz  
Poles : 8  
Full load speed : 870  
Slip : 3.33 %  
Voltage : 460 V  
Rated current : 3.39 A  
Locked rotor current : 25.7 A  
Locked rotor current (I<sub>L</sub>/I<sub>n</sub>) : 7.6  
No-load current : 2.38 A  
Full load torque : 11.9 lb.ft  
Locked rotor torque : 240 %  
Breakdown torque : 290 %  
Design : B  
Insulation class : F  
Temperature rise : 80 K  
Locked rotor time : 39 s (hot)  
Service factor : 1.25  
Duty cycle : S1  
Ambient temperature : -20°C - +40°C  
Altitude : 1000  
Degree of Protection : IP55  
Approximate weight : 149 lb  
Moment of inertia : 1.7862 sq.ft.lb  
Noise level : 52 dB(A)

	D.E.	N.D.E.	Load	Power factor	Efficiency (%)
Bearings	6308 C3	6207 C3	100%	0.65	85.5
Regreasing interval	20000 h	20000 h	75%	0.55	84.0
Grease amount	11 g	7 g	50%	0.45	82.5

Notes:

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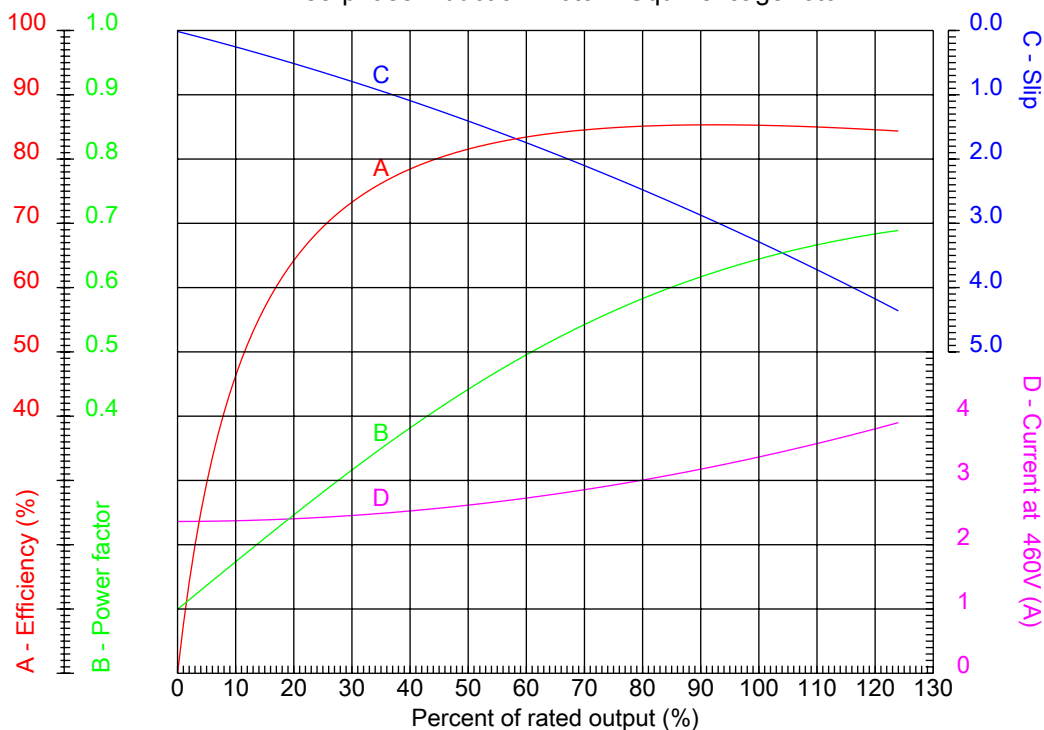
Checked



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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	: 213T	Locked rotor current (I <sub>L</sub> /I <sub>n</sub> )	: 7.6
Output	: 2 HP	Duty cycle	: S1
Frequency	: 60 Hz	Service factor	: 1.25
Full load speed	: 870	Design	: B
Voltage	: 460 V	Locked rotor torque	: 240 %
Rated current	: 3.39 A	Breakdown torque	: 290 %
Insulation class	: F		

Notes:

Performed by

Checked

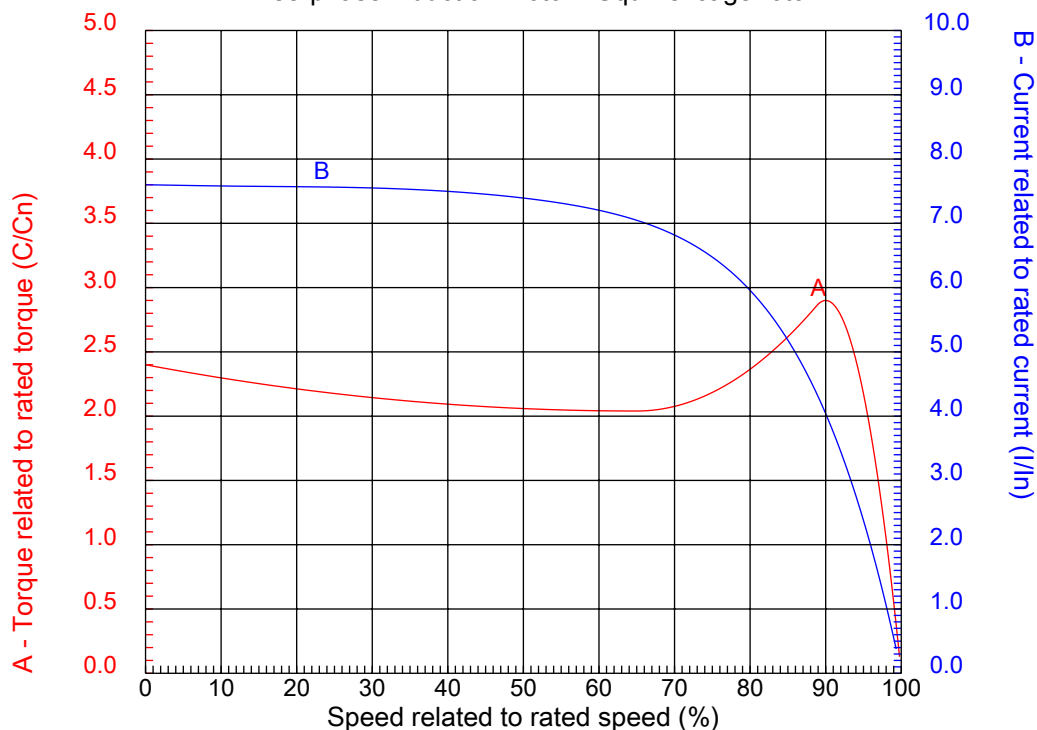


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### CHARACTERISTIC CURVES RELATED TO SPEED

Three-phase induction motor - Squirrel cage rotor



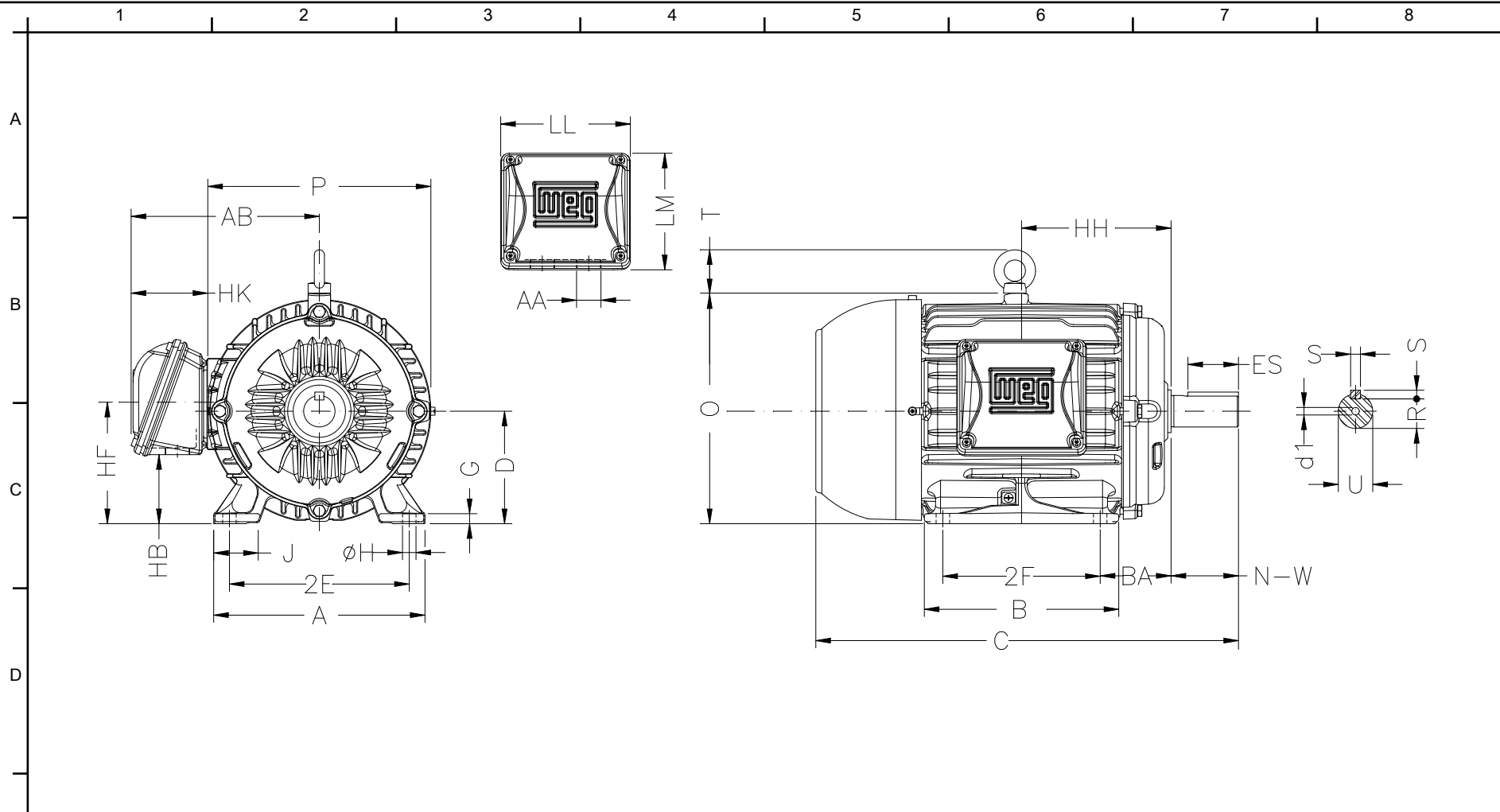
Customer :  
Product line : Three-Phase: W22 IEEE-841™ Petrochem Motors - NEMA Premium® Efficiency

Frame	: 213T	Locked rotor current (I <sub>l</sub> /I <sub>n</sub> )	: 7.6
Output	: 2 HP	Duty cycle	: S1
Frequency	: 60 Hz	Service factor	: 1.25
Full load speed	: 870	Design	: B
Voltage	: 460 V	Locked rotor torque	: 240 %
Rated current	: 3.39 A	Breakdown torque	: 290 %
Insulation class	: F		

Notes:

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E	2E 8.500	J 1.988	A 9.764	P 10.669	AB 8.583
	2F 5.500	K 2.165	B 7.362	BA 3.500	U 1.375
	N-W 3.375	ES 2.756	S 0.313	R 1.203	depth 0.313
	D 5.250	G 0.827	HB 3.006	O 10.841	T 1.772
	HD 12.613	HF 5.250	HH 6.250	HK 3.110	H 0.406
F	C 18.021	LL 5.512	LM 5.236	AA NPT 1"	d1 A 4
	d2 A 4	Flange FD-254	AJ 10.000	AK 9.000	BD 11.00
	BF 0.562	BB 0.203			

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Checked:

Customer:

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

Three-phase induction motor Frame 213T - IP55	27-DEC-2012	
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