



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 : 05009ST3QIE404TC-W22

List Price : \$19,856

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 : 404/5T  
Output : 50 HP  
Frequency : 60 Hz  
Poles : 8  
Full load speed : 880  
Slip : 2.22 %  
Voltage : 460 V  
Rated current : 60.0 A  
Locked rotor current : 408 A  
Locked rotor current (I<sub>L</sub>/I<sub>n</sub>) : 6.8  
No-load current : 25.0 A  
Full load torque : 294 lb.ft  
Locked rotor torque : 170 %  
Breakdown torque : 260 %  
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  
Degree of Protection : IP55  
Approximate weight : 1012 lb  
Moment of inertia : 34.625 sq.ft.lb  
Noise level : 60 dB(A)

	D.E.	N.D.E.	Load	Power factor	Efficiency (%)
Bearings	6316 C3	6314 C3	100%	0.83	93.0
Regreasing interval	20000 h	20000 h	75%	0.78	93.0
Grease amount	34 g	27 g	50%	0.68	93.0

Notes:

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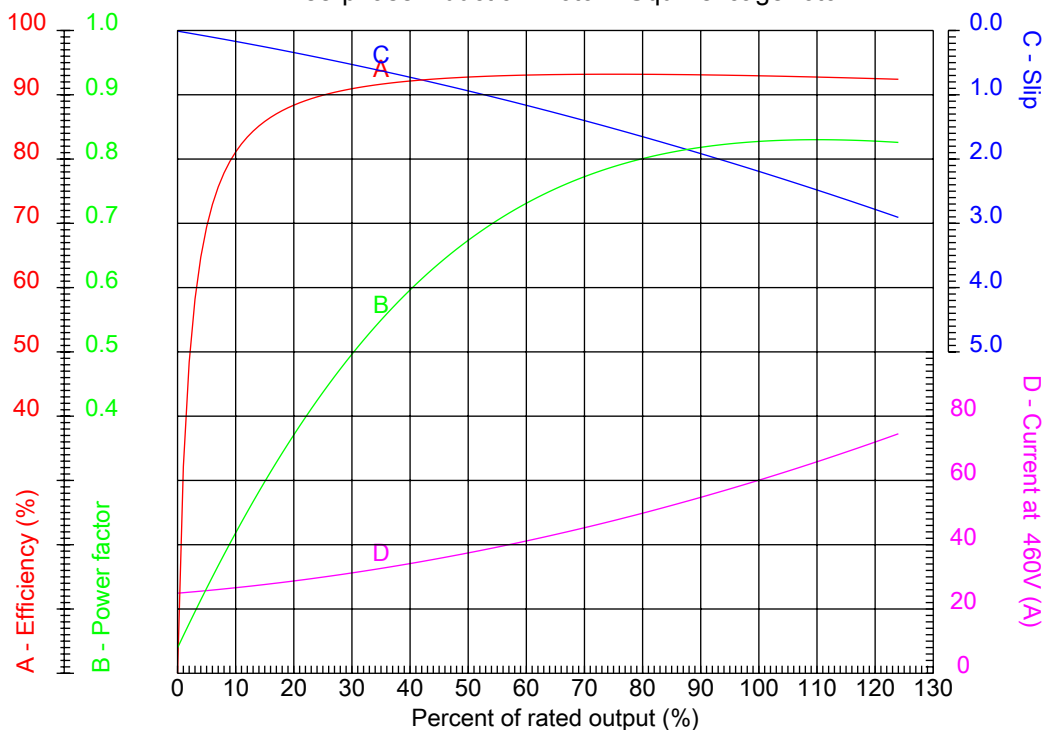
Checked



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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	: 404/5T	Locked rotor current (I <sub>l</sub> /I <sub>n</sub> )	: 6.8
Output	: 50 HP	Duty cycle	: S1
Frequency	: 60 Hz	Service factor	: 1.25
Full load speed	: 880	Design	: B
Voltage	: 460 V	Locked rotor torque	: 170 %
Rated current	: 60.0 A	Breakdown torque	: 260 %
Insulation class	: F		

Notes:

Performed by

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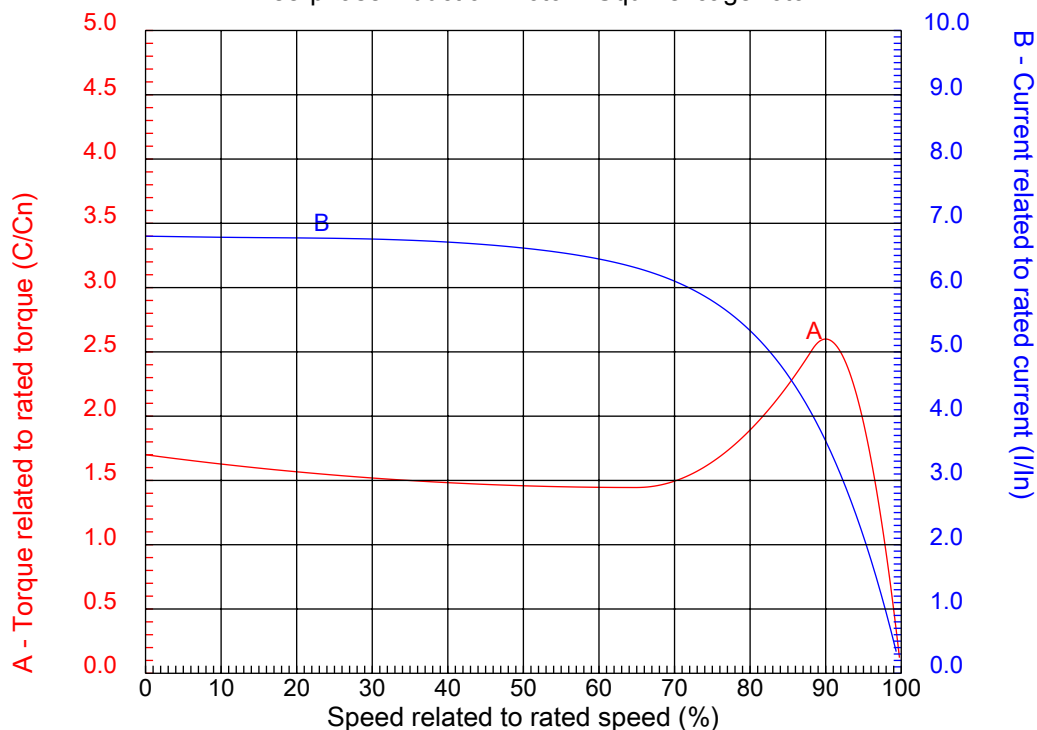


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### CHARACTERISTIC CURVES RELATED TO SPEED

Three-phase induction motor - Squirrel cage rotor



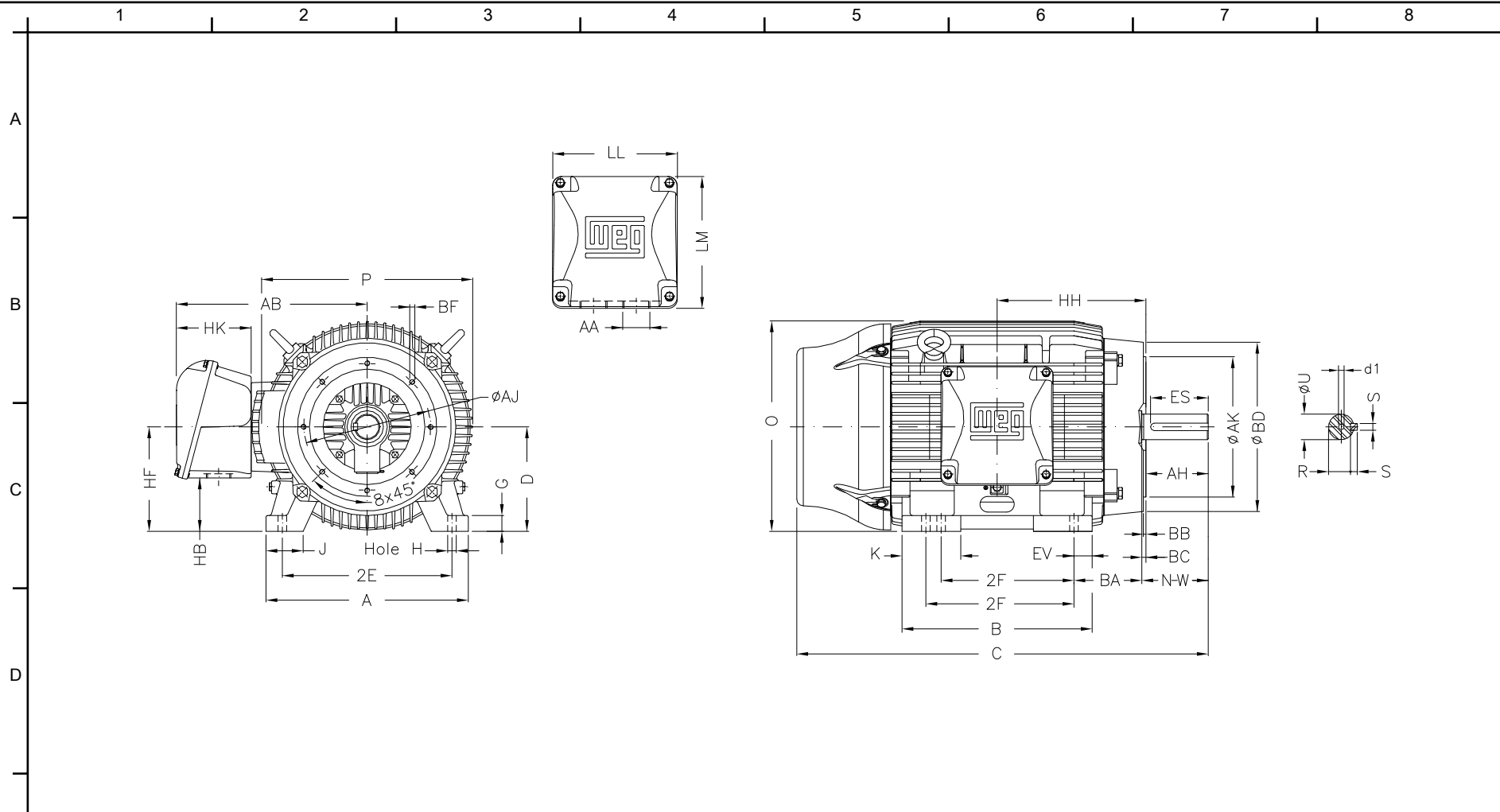
Customer :  
Product line : Three-Phase: W22 IEEE-841™ Petrochem Motors - NEMA Premium® Efficiency

Frame	: 404/5T	Locked rotor current (I <sub>l</sub> /I <sub>n</sub> )	: 6.8
Output	: 50 HP	Duty cycle	: S1
Frequency	: 60 Hz	Service factor	: 1.25
Full load speed	: 880	Design	: B
Voltage	: 460 V	Locked rotor torque	: 170 %
Rated current	: 60.0 A	Breakdown torque	: 260 %
Insulation class	: F		

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E	2E	J	A	P	AB
	15.984	3.937	19.921	19.134	16.023
F	2F	K	B	BA	U
	12.244/13.740	5.669	18.386	6.625	2.875
F	N-W	ES	S	R	depth
	7.250	5.708	0.750	2.449	0.750
F	D	G	HB	O	T
	10.000	1.811	3.977	19.566	3.544
F	HD	HH	HK	H	C
	23.110	14.213	6.023	0.810	39.730
F	LL	LM	AA	d1	d2
	10.590	11.181	NPT 3"	DUNC 3/4"-10	DUNC 3/4"-10
F	Flange	AJ	AK	BD	BF
	FC-279	11.000	12.500	15.55	UNC 5/8"x11
F	BB	BC	AH		
	0.250	0.250	7.000		

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Customer:

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

Three-phase induction motor  
Frame 404/5T - IP55

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