



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 : 00712ST3QIE254TC-W22

List Price : \$2,664

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 : 254T  
Output : 7.5 HP  
Frequency : 60 Hz  
Poles : 6  
Full load speed : 1175  
Slip : 2.08 %  
Voltage : 460 V  
Rated current : 9.48 A  
Locked rotor current : 64.5 A  
Locked rotor current (I<sub>L</sub>/I<sub>n</sub>) : 6.8  
No-load current : 4.50 A  
Full load torque : 33.1 lb.ft  
Locked rotor torque : 250 %  
Breakdown torque : 300 %  
Design : B  
Insulation class : F  
Temperature rise : 80 K  
Locked rotor time : 30 s (hot)  
Service factor : 1.25  
Duty cycle : S1  
Ambient temperature : -20°C - +40°C  
Altitude : 1000  
Degree of Protection : IP55  
Approximate weight : 262 lb  
Moment of inertia : 3.9197 sq.ft.lb  
Noise level : 59 dB(A)

	D.E.	N.D.E.	Load	Power factor	Efficiency (%)
Bearings	6309 C3	6209 C3	100%	0.80	91.0
Regreasing interval	20000 h	20000 h	75%	0.74	90.2
Grease amount	13 g	9 g	50%	0.63	89.5

Notes:

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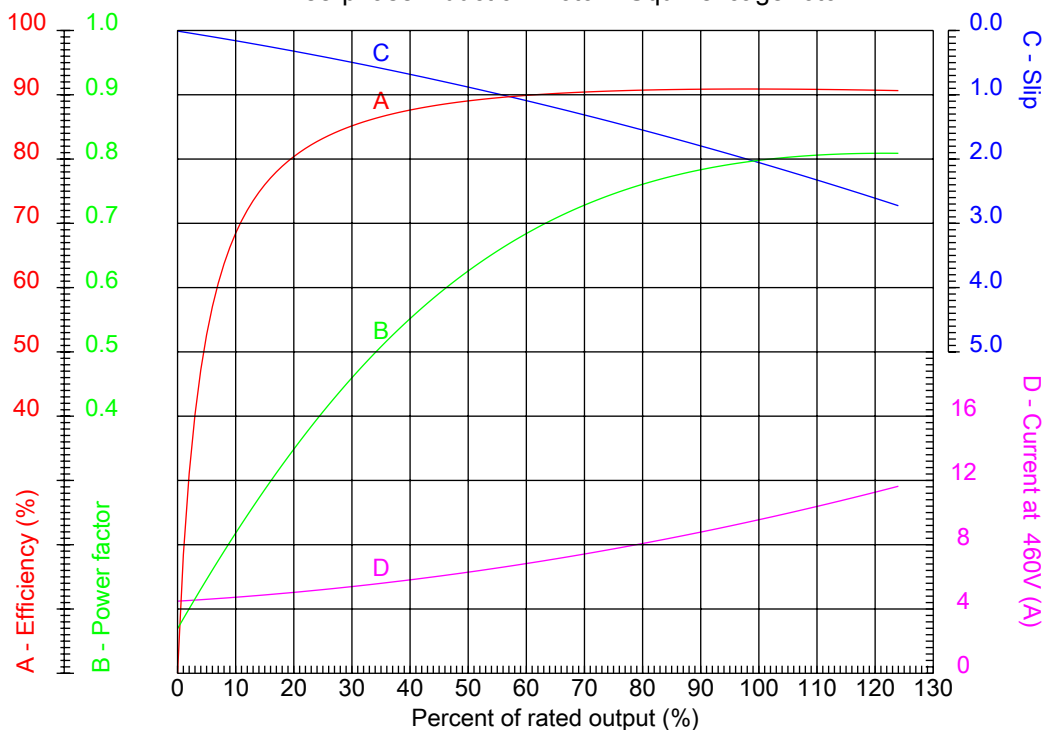
Checked



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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	: 254T	Locked rotor current (I <sub>l</sub> /I <sub>n</sub> )	: 6.8
Output	: 7.5 HP	Duty cycle	: S1
Frequency	: 60 Hz	Service factor	: 1.25
Full load speed	: 1175	Design	: B
Voltage	: 460 V	Locked rotor torque	: 250 %
Rated current	: 9.48 A	Breakdown torque	: 300 %
Insulation class	: F		

Notes:

Performed by

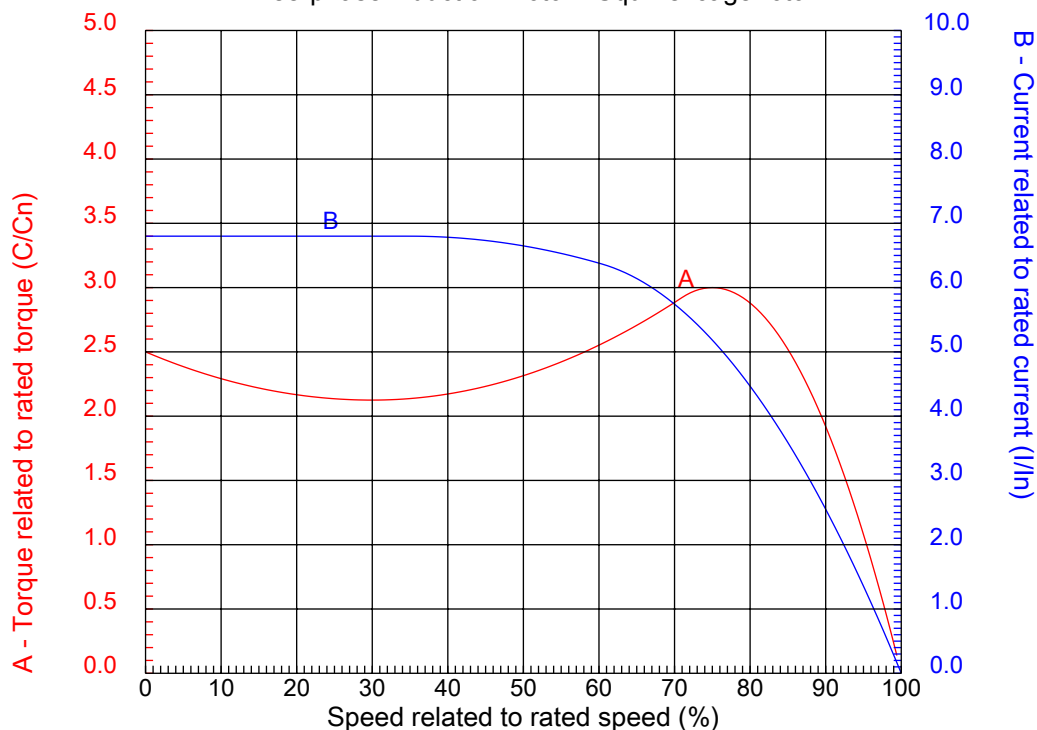
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### CHARACTERISTIC CURVES RELATED TO SPEED Three-phase induction motor - Squirrel cage rotor



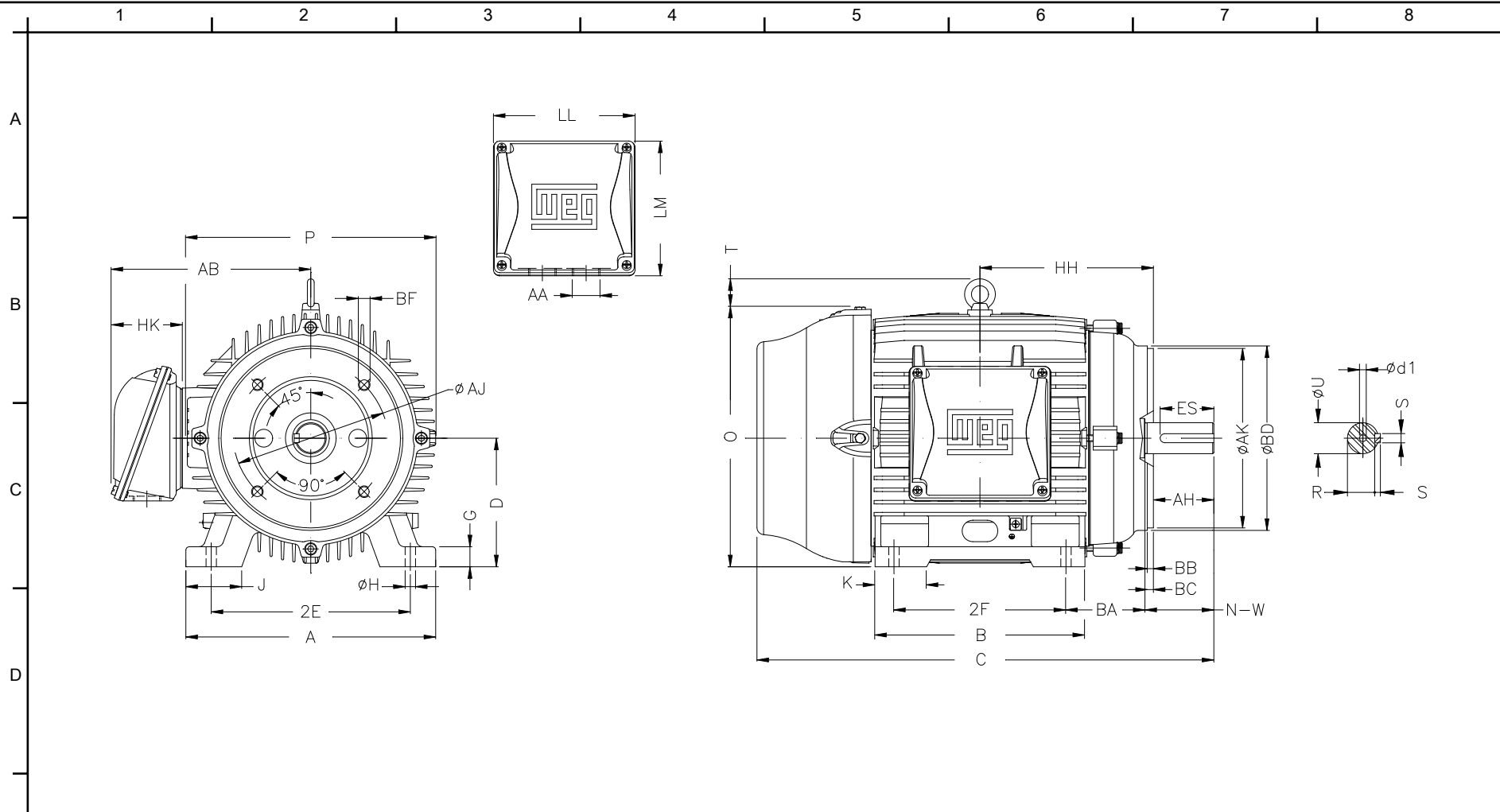
Customer :  
Product line : Three-Phase: W22 IEEE-841™ Petrochem Motors - NEMA Premium® Efficiency

Frame	: 254T	Locked rotor current (I <sub>l</sub> /I <sub>n</sub> )	: 6.8
Output	: 7.5 HP	Duty cycle	: S1
Frequency	: 60 Hz	Service factor	: 1.25
Full load speed	: 1175	Design	: B
Voltage	: 460 V	Locked rotor torque	: 250 %
Rated current	: 9.48 A	Breakdown torque	: 300 %
Insulation class	: F		

Notes:

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E	2E 10.000	J 2.539	A 12.126	P 12.953	AB 10.394
	2F 8.252	K 2.559	B 10.000	BA 4.250	U 1.625
	N-W 4.000	ES 2.756	S 0.375	R 1.406	depth 0.375
	D 6.250	G 0.827	HB 3.061	O 12.598	T 2.087
	HD 14.685	HF 6.565	HH 8.376	HK 3.937	H 0.531
F	C 23.213	LL 7.795	LM 7.402	AA NPT 1 1/2"	d1 A 4
	d2 A 4	Flange FC-184	AJ 7.250	AK 8.500	BD 8.875
	BF UNC 1/2"x13	BB 0.250	BC 0.250	AH 3.750	

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Customer:

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

Three-phase induction motor  
Frame 254T - IP55

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