



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 : 02012ST3QIE286T-W22

List Price : \$4,773

Notes:

Performed by:

Checked:



No.:

Date: 27-DEC-2012

## DATA SHEET

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

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

Frame : 286T  
 Output : 20 HP  
 Frequency : 60 Hz  
 Poles : 6  
 Full load speed : 1175  
 Slip : 2.08 %  
 Voltage : 460 V  
 Rated current : 24.2 A  
 Locked rotor current : 150 A  
 Locked rotor current (I<sub>L</sub>/I<sub>n</sub>) : 6.2  
 No-load current : 9.50 A  
 Full load torque : 88.2 lb.ft  
 Locked rotor torque : 230 %  
 Breakdown torque : 260 %  
 Design : B  
 Insulation class : F  
 Temperature rise : 80 K  
 Locked rotor time : 16 s (hot)  
 Service factor : 1.25  
 Duty cycle : S1  
 Ambient temperature : -20°C - +40°C  
 Altitude : 1000  
 Degree of Protection : IP55  
 Approximate weight : 426 lb  
 Moment of inertia : 9.1624 sq.ft.lb  
 Noise level : 59 dB(A)

	D.E.	N.D.E.	Load	Power factor	Efficiency (%)
Bearings	6311 C3	6211 C3	100%	0.85	91.7
Regreasing interval	20000 h	20000 h	75%	0.80	91.7
Grease amount	18 g	11 g	50%	0.70	91.0

Notes:

Performed by

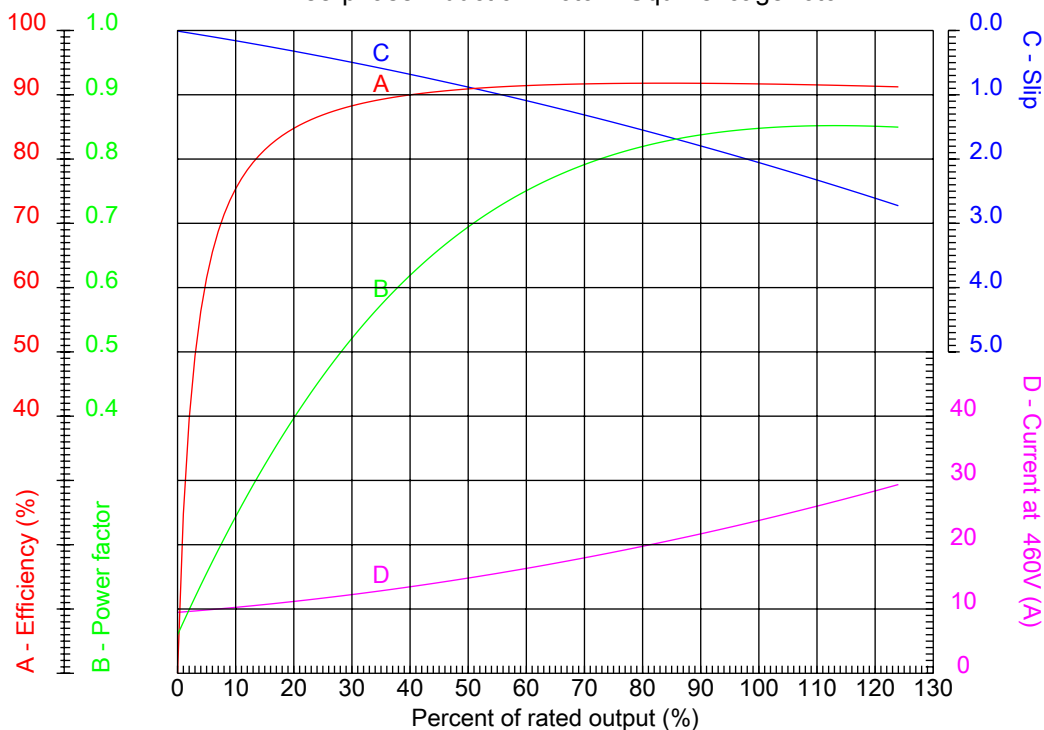
Checked



No.:

Date: 27-DEC-2012

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	: 286T	Locked rotor current (I <sub>l</sub> /I <sub>n</sub> )	: 6.2
Output	: 20 HP	Duty cycle	: S1
Frequency	: 60 Hz	Service factor	: 1.25
Full load speed	: 1175	Design	: B
Voltage	: 460 V	Locked rotor torque	: 230 %
Rated current	: 24.2 A	Breakdown torque	: 260 %
Insulation class	: F		

Notes:

Performed by

Checked

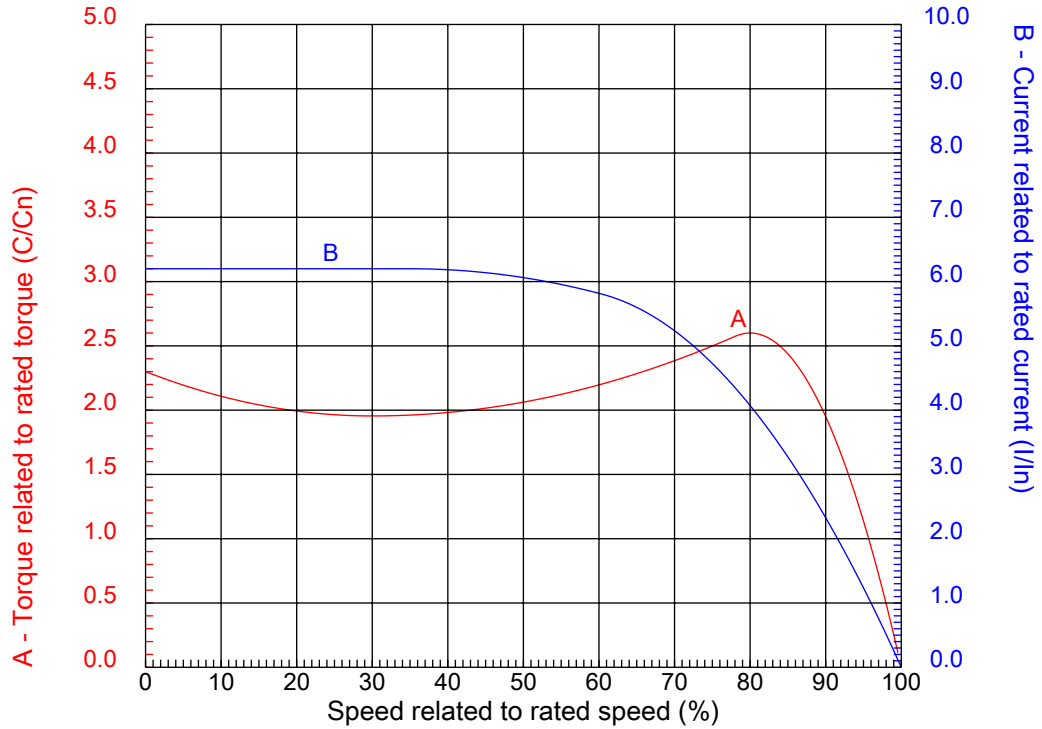


No.:

Date: 27-DEC-2012

### CHARACTERISTIC CURVES RELATED TO SPEED

Three-phase induction motor - Squirrel cage rotor



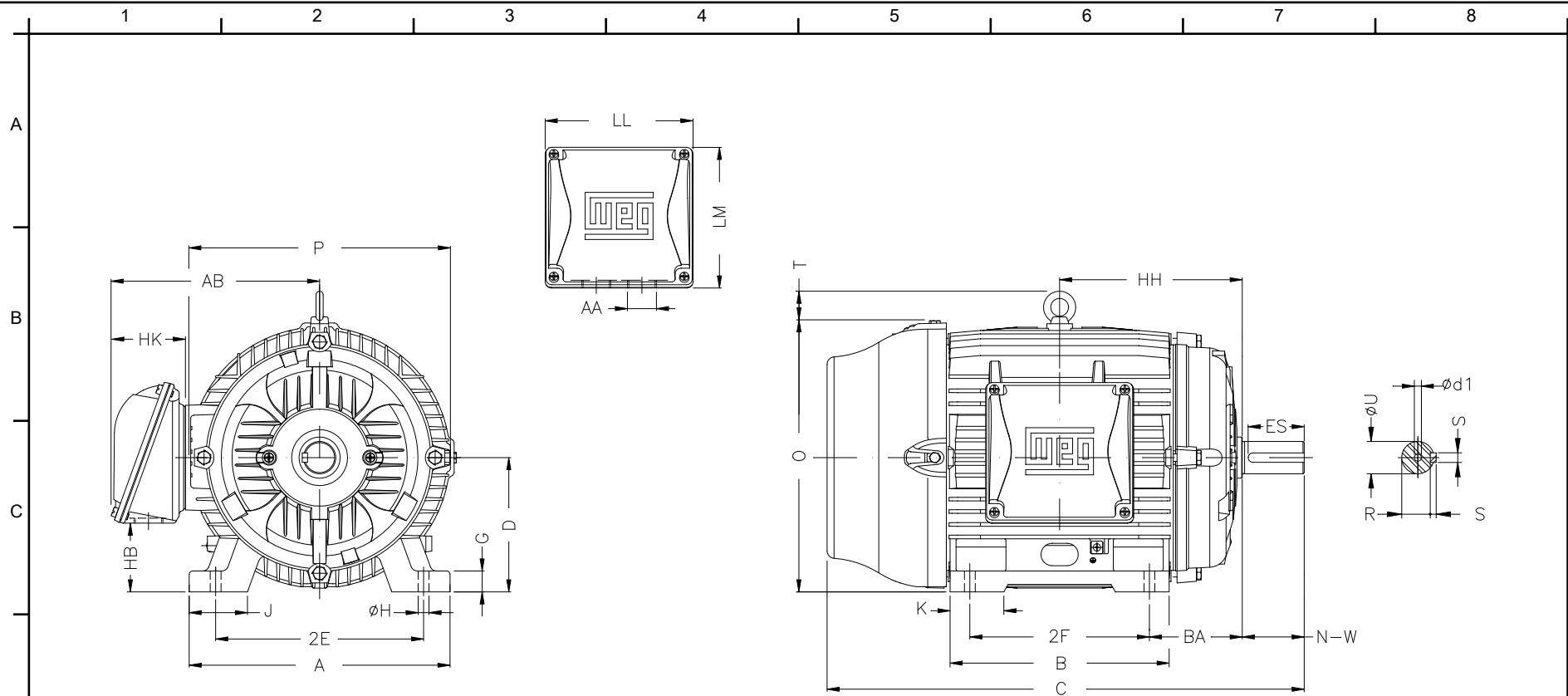
Customer :  
Product line : Three-Phase: W22 IEEE-841™ Petrochem Motors - NEMA Premium® Efficiency

Frame	: 286T	Locked rotor current (I <sub>l</sub> /I <sub>n</sub> )	: 6.2
Output	: 20 HP	Duty cycle	: S1
Frequency	: 60 Hz	Service factor	: 1.25
Full load speed	: 1175	Design	: B
Voltage	: 460 V	Locked rotor torque	: 230 %
Rated current	: 24.2 A	Breakdown torque	: 260 %
Insulation class	: F		

Notes:

Performed by

Checked



E	2E 11.000	J 3.110	A 13.780	P 14.173	AB 10.984
	2F 11.000	K 2.874	B 13.071	BA 4.750	U 1.875
	N-W 4.622	ES 3.149	S 0.500	R 1.594	depth 0.500
	D 7.000	G 1.023	HB 3.535	O 14.067	T 2.087
	HD 16.154	HF 7.000	HH 10.250	HK 3.937	H 0.531
F	C 27.929	LL 7.795	LM 7.402	AA NPT 1 1/2"	d1 A 4
	d2 A 4	Flange FD-317	AJ 12.500	AK 11.000	BD 14.00
	BF 0.828	BB 0.203			

Notes:		
Performed by:		
Checked:		
Customer:		
Three-Phase: W22 IEEE-841™ Petrochem Motors - NEMA Premium® Efficiency		
Three-phase induction motor Frame 286T - IP55	27-DEC-2012	