



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 : 02012ST3QIE286TC-W22

List Price : \$4,973

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 : 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_L/I_n) : 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:

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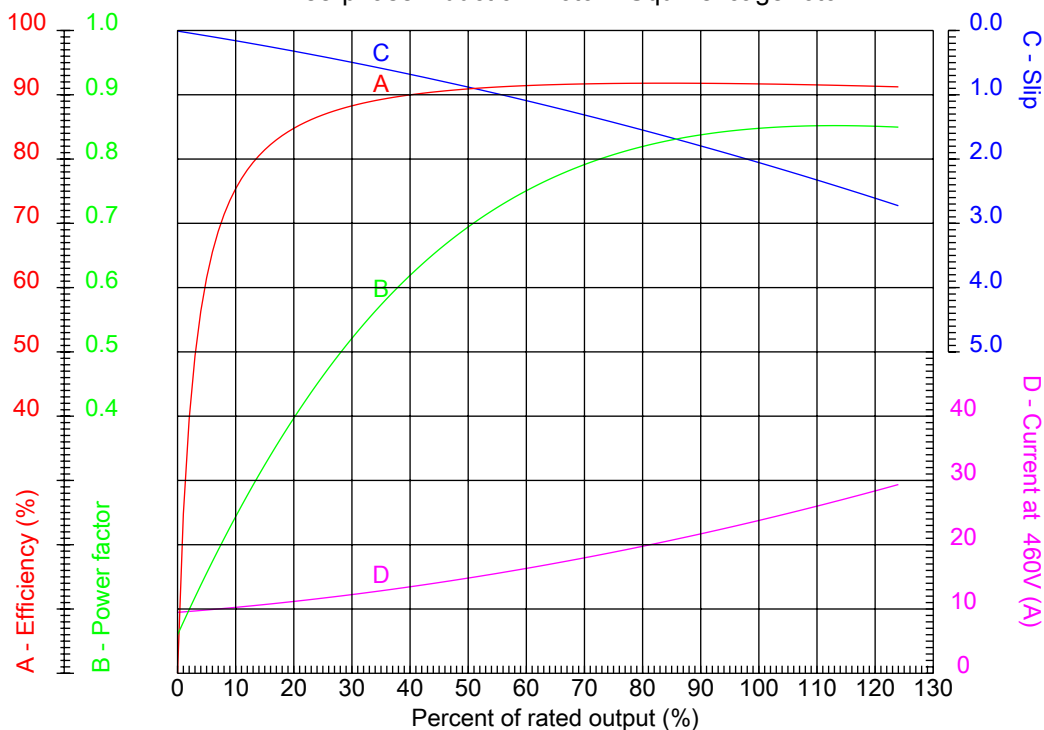
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PERFORMANCE CURVES RELATED TO RATED OUTPUT
Three-phase induction motor - Squirrel cage rotor



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

Frame	: 286T	Locked rotor current (I _L /I _n)	: 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:

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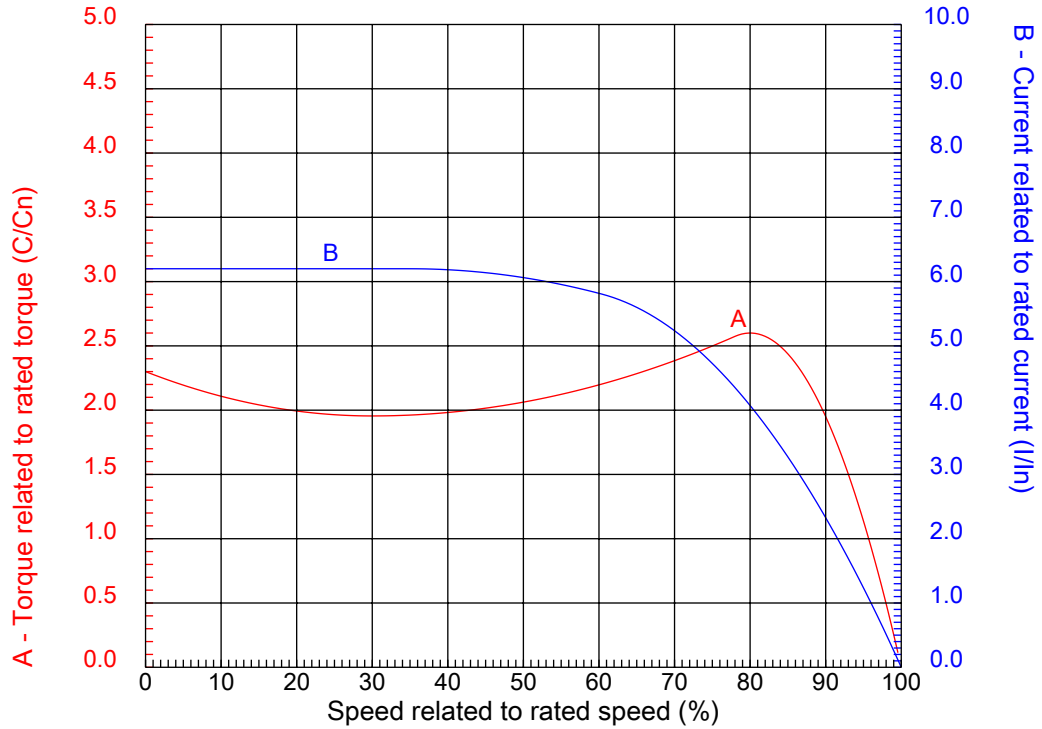


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CHARACTERISTIC CURVES RELATED TO SPEED

Three-phase induction motor - Squirrel cage rotor



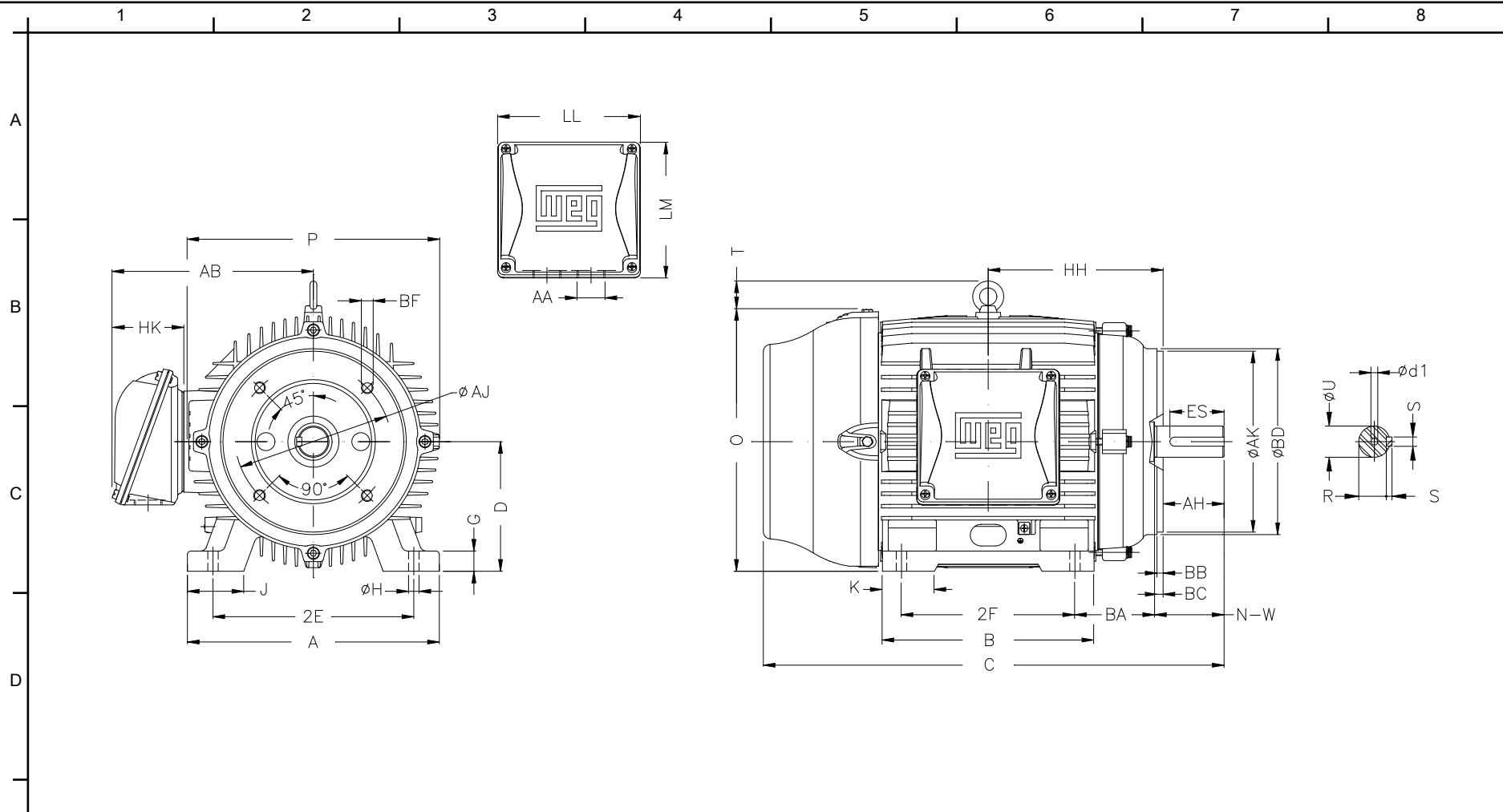
Customer :
Product line : Three-Phase: W22 IEEE-841™ Petrochem Motors - NEMA Premium® Efficiency

Frame	: 286T	Locked rotor current (I _l /I _n)	: 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:

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E	2E	J	A	P	AB
	11.000	3.110	13.780	14.173	10.984
F	2F	K	B	BA	U
	11.000	2.874	13.071	4.750	1.875
	N-W	ES	S	R	depth
F	4.622	3.149	0.500	1.594	0.500
	D	G	HB	O	T
	7.000	1.023	3.535	14.067	2.087
	HD	HF	HH	HK	H
F	16.154	7.000	10.250	3.937	0.531
	C	LL	LM	AA	d1
	27.929	7.795	7.402	NPT 1 1/2"	A 4
	d2	Flange	AJ	AK	BD
	A 4	FC-228	9.000	10.500	11.03
	BF	BB	BC	AH	
	UNC 1/2"x13	0.250	0.250	4.375	

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Customer:

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

Three-phase induction motor
Frame 286T - IP55

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