



No.:

Date: 17-DEC-2012

Customer :

TECHNICAL PROPOSAL

Three-phase induction motor - Squirrel cage rotor

Product line : W22 NEMA Premium - Ball Bearings

Catalog Number : 45009ET3G588/9-W22

List Price : \$68,715

Notes:

Performed by:

Checked:



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## DATA SHEET

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

Customer :  
Product line : W22 NEMA Premium - Ball Bearings

Frame : 588/9T  
Output : 450 HP  
Frequency : 60 Hz  
Poles : 8  
Full load speed : 895  
Slip : 0.56 %  
Voltage : 460 V  
Rated current : 554 A  
Locked rotor current : 3880 A  
Locked rotor current (I<sub>L</sub>/I<sub>n</sub>) : 7.0  
No-load current : 280 A  
Full load torque : 2605 lb.ft  
Locked rotor torque : 160 %  
Breakdown torque : 260 %  
Design : B  
Insulation class : F  
Temperature rise : 80 K  
Locked rotor time : 27 s (hot)  
Service factor : 1.00  
Duty cycle : S1  
Ambient temperature : -20°C - +40°C  
Altitude : 1000  
Degree of Protection : IP55  
Approximate weight : 5281 lb  
Moment of inertia : 616.65 sq.ft.lb  
Noise level : 75 dB(A)

	D.E.	N.D.E.	Load	Power factor	Efficiency (%)
Bearings	6322 C3	6319 C3	100%	0.78	95.8
Regreasing interval	14000 h	17000 h	75%	0.72	95.7
Grease amount	60 g	45 g	50%	0.60	95.2

Notes:

Performed by

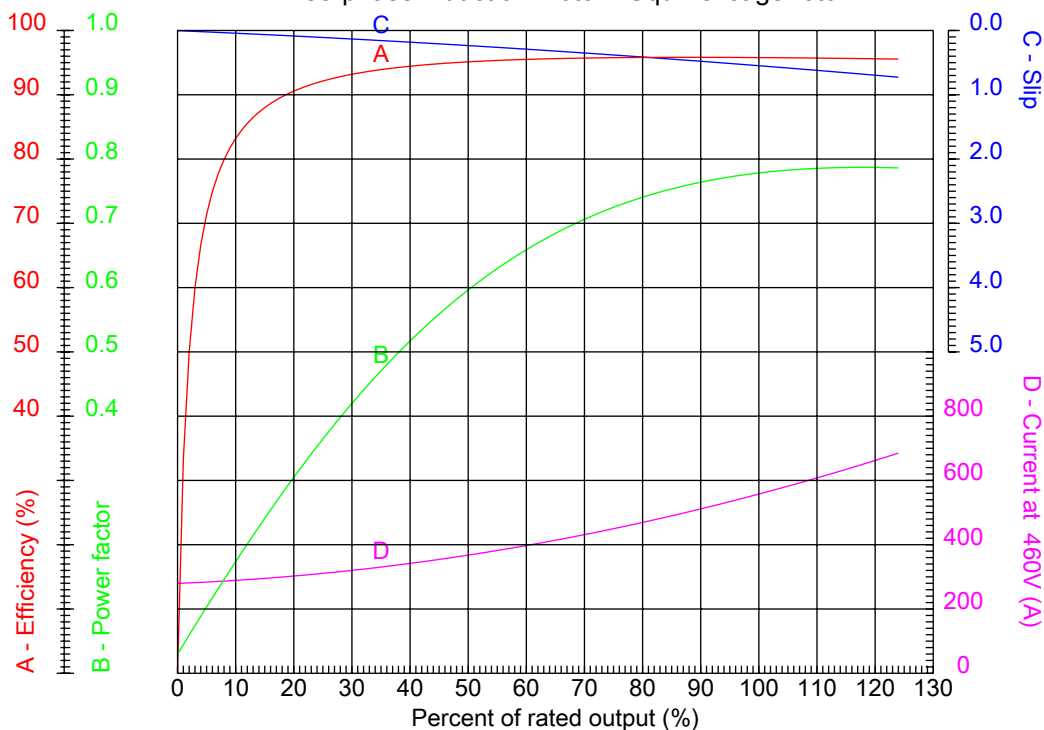
Checked



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



Customer :  
 Product line : W22 NEMA Premium - Ball Bearings

Frame : 588/9T	Locked rotor current (I <sub>l</sub> /I <sub>n</sub> ) : 7.0
Output : 450 HP	Duty cycle : S1
Frequency : 60 Hz	Service factor : 1.00
Full load speed : 895	Design : B
Voltage : 460 V	Locked rotor torque : 160 %
Rated current : 554 A	Breakdown torque : 260 %
Insulation class : F	

Notes:

Performed by

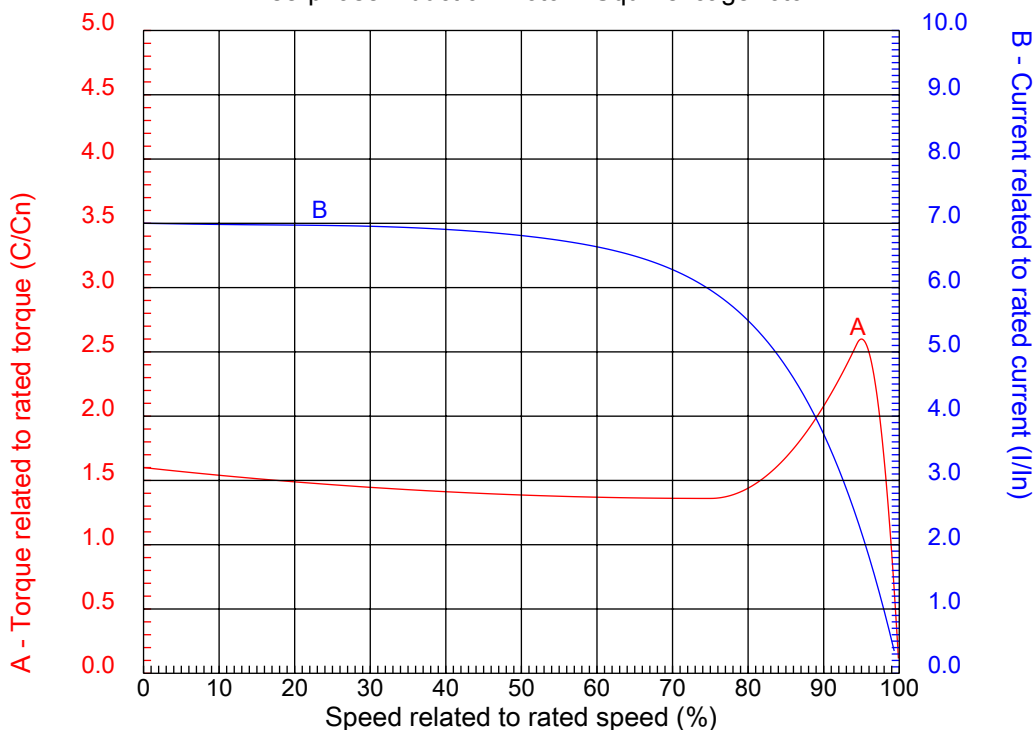
Checked



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



Customer :  
Product line : W22 NEMA Premium - Ball Bearings

Frame	: 588/9T	Locked rotor current (I <sub>l</sub> /I <sub>n</sub> )	: 7.0
Output	: 450 HP	Duty cycle	: S1
Frequency	: 60 Hz	Service factor	: 1.00
Full load speed	: 895	Design	: B
Voltage	: 460 V	Locked rotor torque	: 160 %
Rated current	: 554 A	Breakdown torque	: 260 %
Insulation class	: F		

Notes:

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1 2 3 4 5 6 7 8

A

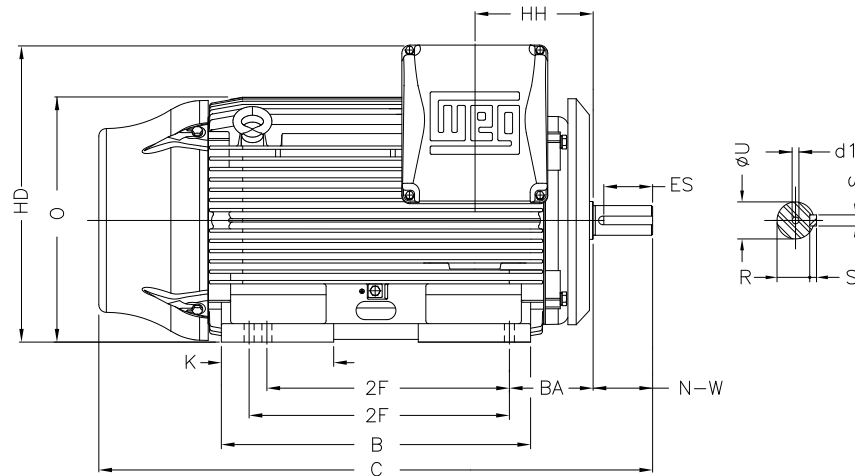
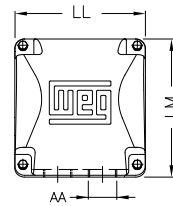
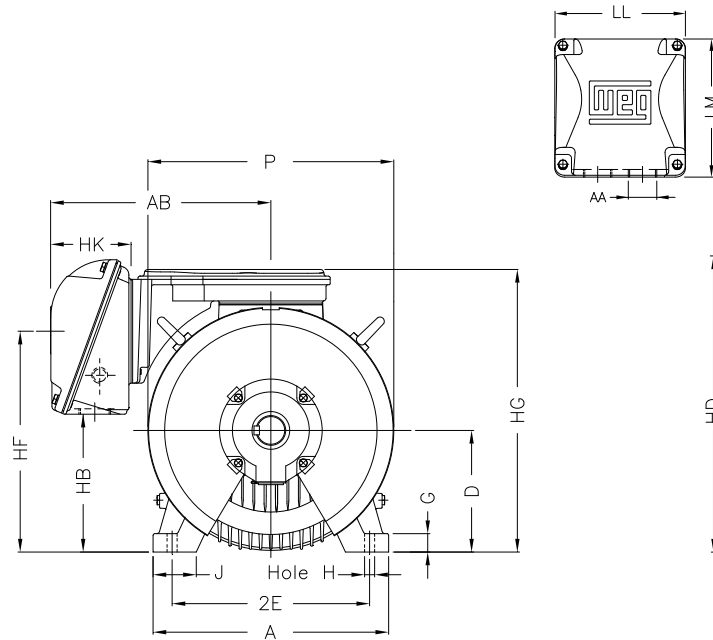
B

C

D

E

F



Notes:

Performed by:

Checked:

Customer:

W22 NEMA Premium - Ball Bearings

Three-phase induction motor  
Frame 588/9T - IP55

17-DEC-2012



2E	J	A	P	AB
23.000	5.512	29.528	28.977	27.600
2F	K	B	BA	U
28.000/32.000	13.030	37.980	10.000	3.875
N-W	ES	S	R	depth
11.625	8.661	1.000	3.312	1.000
D	G	HB	O	T
14.500	2.492	6.063	28.985	6.361
HF	HG	HH	HK	H
26.182	33.346	13.386	11.417	1.181
C	LL	LM	AA	d1
69.381	18.110	21.456	2XNPT 4"	DUNC 7/8"-9
d2	Flange	AJ	AK	BD
DUNC 3/4"-10	FD-762	30.000	28.000	32.000
BF	BB			
0.828	0.250			