

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase Product code : 13249042
Catalog # : 12518ET3G444TC-W22G

Frame	: 444/5TC	Locked rotor time	: 48s (cold) 27s (hot)
Output	: 125 HP	Temperature rise	: 80 K
Poles	: 4	Duty cycle	: Cont.(S1)
Frequency	: 60 Hz	Ambient temperature	: -20°C to +40°C
Rated voltage	: 460 V	Altitude	: 1000 m.a.s.l.
Rated current	: 139 A	Protection degree	: IP55
L. R. Amperes	: 904 A	Cooling method	: IC411 - TEFC
LRC	: 6.5x(Code G)	Mounting	: F-1
No load current	: 40.0 A	Rotation ¹	: Both (CW and CCW)
Rated speed	: 1780 rpm	Noise level ²	: 73.0 dB(A)
Slip	: 1.11 %	Starting method	: Direct On Line
Rated torque	: 369 ft.lb	Approx. weight ³	: 1668 lb
Locked rotor torque	: 200 %		
Breakdown torque	: 229 %		
Insulation class	: F		
Service factor	: 1.15		
Moment of inertia (J)	: 57.2 sq.ft.lb		
Design	: B		

Output	25%	50%	75%	100%	Foundation loads	
Efficiency (%)	94.9	95.0	95.4	95.4	Max. traction	: 1767 lb
Power Factor	0.52	0.74	0.82	0.85	Max. compression	: 3435 lb

		Drive end	Non drive end
Bearing type	:	6319 C3	6316 C3
Sealing	:	WSeal	WSeal
Lubrication interval	:	8000 h	10000 h
Lubricant amount	:	45 g	34 g
Lubricant type	:	Mobil Polyrex EM	

Notes

This revision replaces and cancel the previous one, which must be eliminated.

- (1) Looking the motor from the shaft end.
- (2) Measured at 1m and with tolerance of +3dB(A).
- (3) Approximate weight subject to changes after manufacturing process.
- (4) At 100% of full load.

These are average values based on tests with sinusoidal power supply, subject to the tolerances stipulated in NEMA MG-1.

Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page Revision 1 / 6		
Checked by				
Date	10/04/2020			

TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage

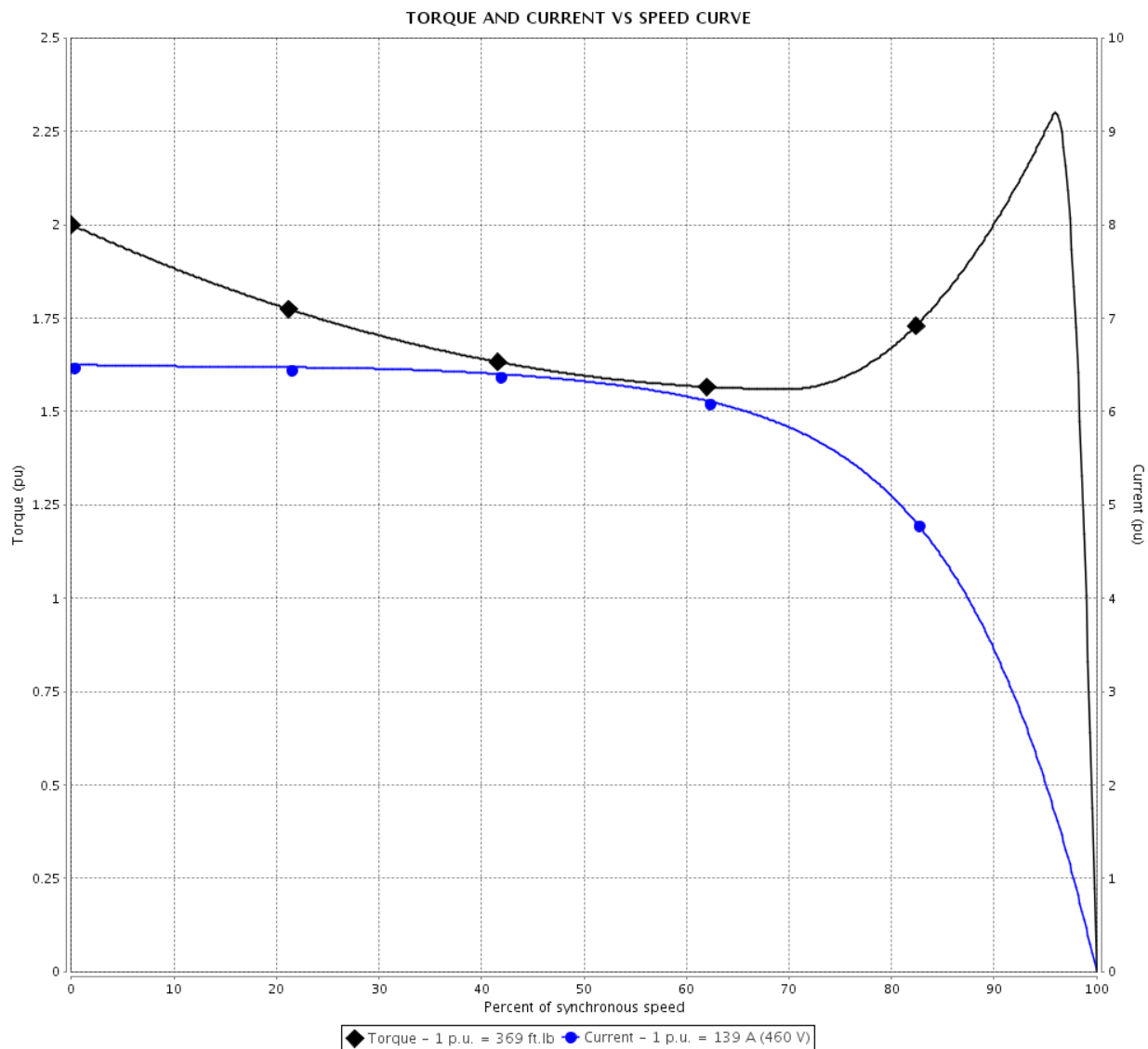


Customer :

Product line : W22 NEMA Premium Efficiency
Three-Phase

Product code : 13249042

Catalog # : 12518ET3G444TC-W22G



Performance : 460 V 60 Hz 4P

Rated current	: 139 A	Moment of inertia (J)	: 57.2 sq.ft.lb
LRC	: 6.5	Duty cycle	: Cont.(S1)
Rated torque	: 369 ft.lb	Insulation class	: F
Locked rotor torque	: 200 %	Service factor	: 1.15
Breakdown torque	: 229 %	Temperature rise	: 80 K
Rated speed	: 1780 rpm	Design	: B

Locked rotor time : 48s (cold) 27s (hot)

Rev.	Changes Summary	Performed	Checked	Date
Performed by		<div style="display: flex; justify-content: space-between;"> <div>Page 2 / 6</div> <div>Revision</div> </div>		
Checked by				
Date	10/04/2020			

LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

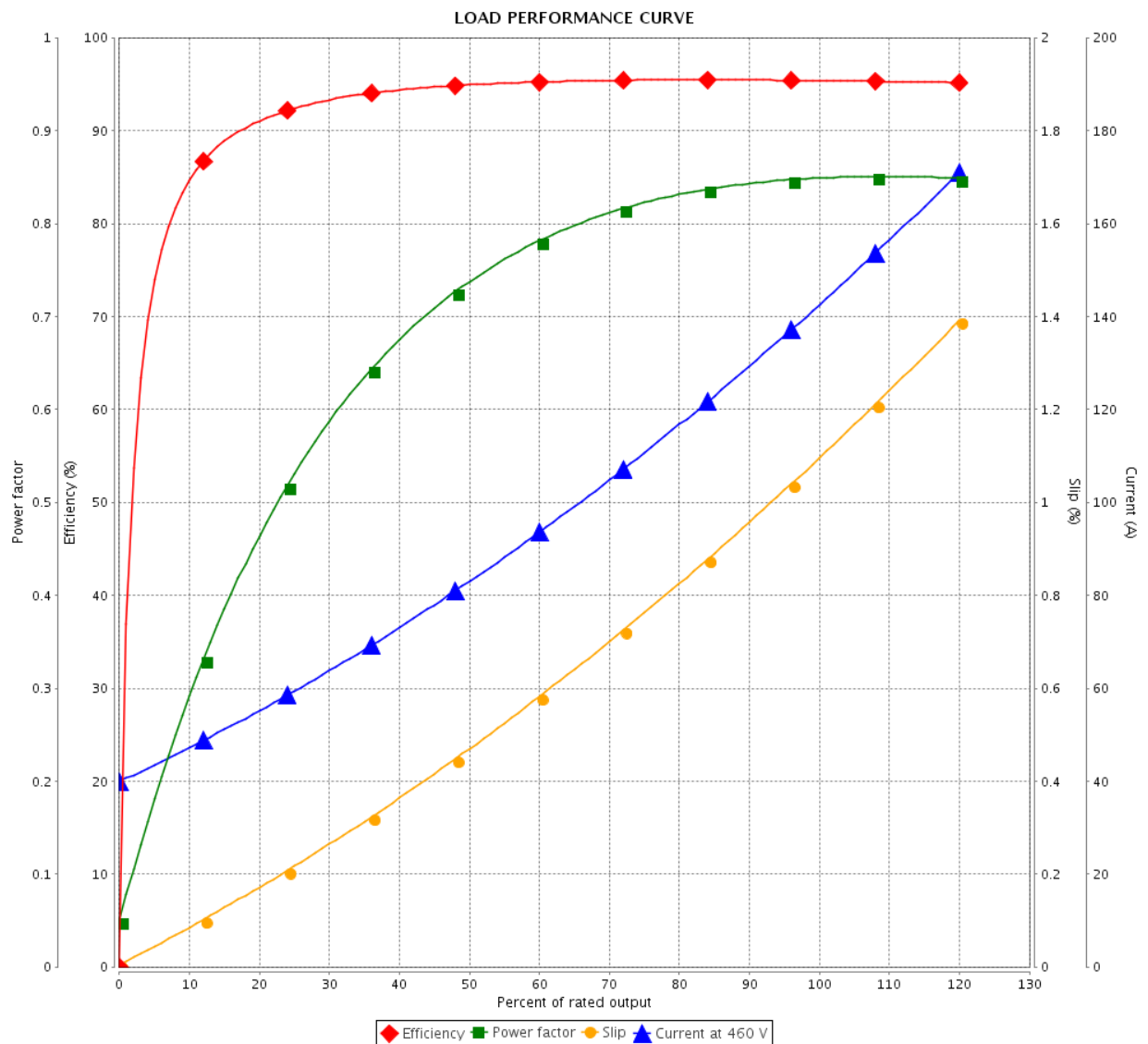


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Three-Phase

Product code : 13249042

Catalog # : 12518ET3G444TC-W22G



Performance : 460 V 60 Hz 4P

Rated current : 139 A
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Rated torque : 369 ft.lb
Locked rotor torque : 200 %
Breakdown torque : 229 %
Rated speed : 1780 rpm

Moment of inertia (J) : 57.2 sq.ft.lb
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.15
Temperature rise : 80 K
Design : B

Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page 3 / 6Revision		
Checked by				
Date	10/04/2020			

THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer

:

Product line

: W22 NEMA Premium Efficiency
Three-Phase

Product code :

13249042

Catalog # :

12518ET3G444TC-W22G

Performance : 460 V 60 Hz 4P

Rated current

: 139 A

LRC

: 6.5

Rated torque

: 369 ft.lb

Locked rotor torque

: 200 %

Breakdown torque

: 229 %

Rated speed

: 1780 rpm

Moment of inertia (J)

: 57.2 sq.ft.lb

Duty cycle

: Cont.(S1)

Insulation class

: F

Service factor

: 1.15

Temperature rise

: 80 K

Design

: B

Heating constant

Cooling constant

Rev.

Changes Summary

Performed

Checked

Date

Performed by

Checked by

Date

10/04/2020

Page

4 / 6

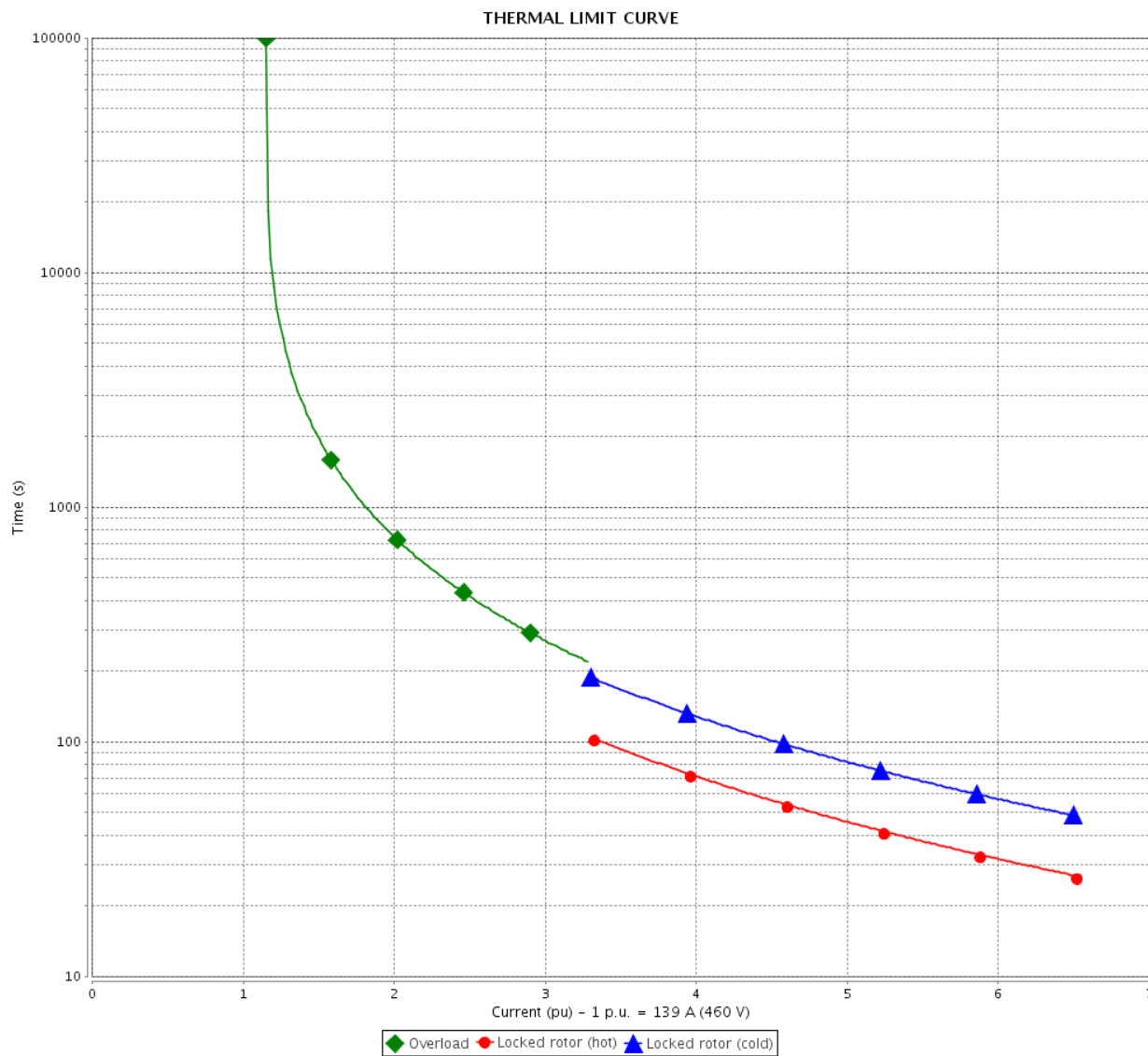
Revision

THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : _____



Rev.	Changes Summary		Performed	Checked	Date
Performed by				Page 5 / 6	Revision
Checked by					
Date	10/04/2020				

VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

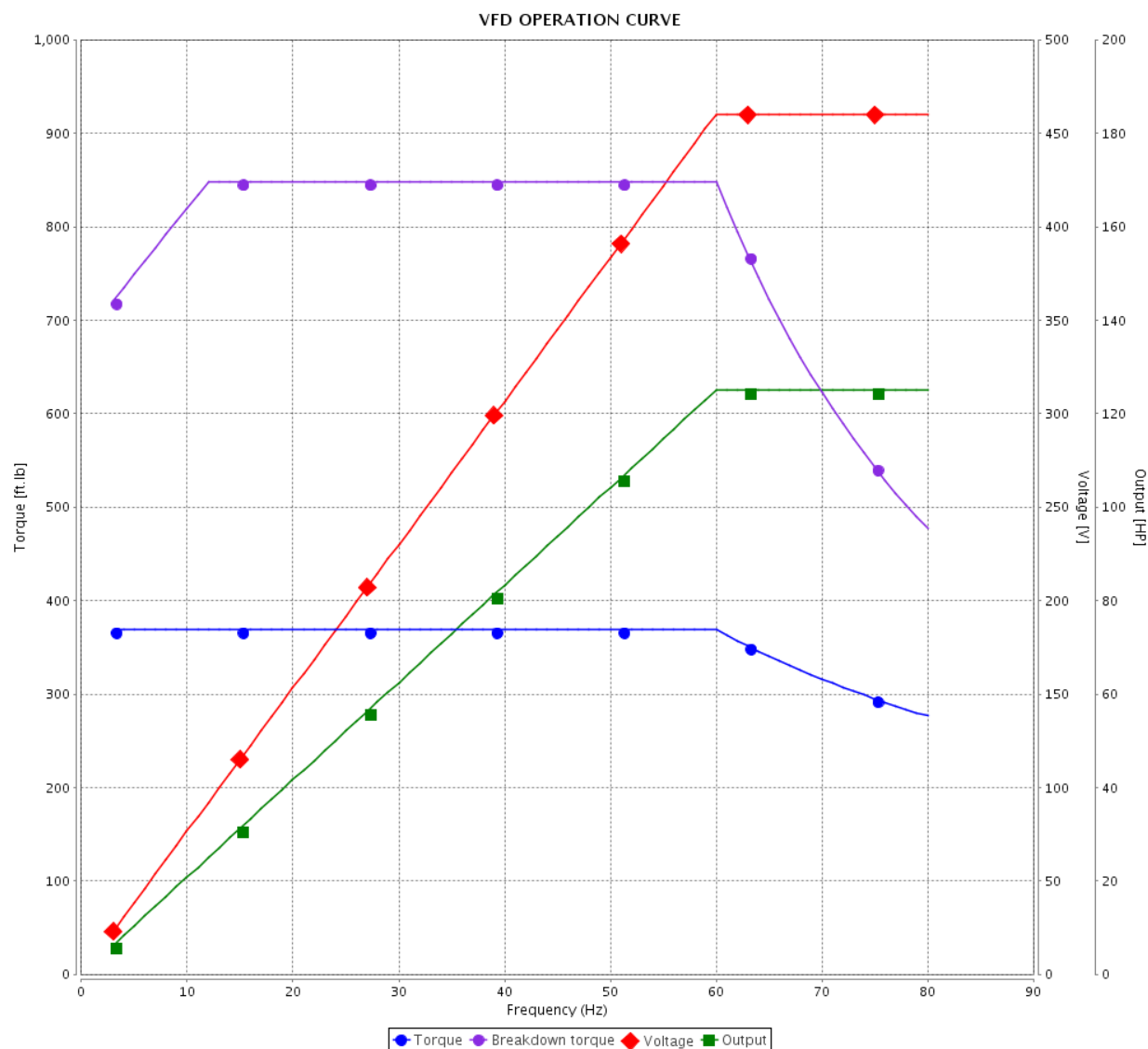


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Product code : 13249042

Catalog # : 12518ET3G444TC-W22G



Performance : 460 V 60 Hz 4P

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Performed by				Page 6 / 6	Revision
Checked by					
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