

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase Product code : 13249038  
Catalog # : 03012ET3E326TC-W22G

Frame	: 324/6TC	Locked rotor time	: 37s (cold) 21s (hot)
Output	: 30 HP (22 kW)	Temperature rise	: 80 K
Poles	: 6	Duty cycle	: Cont.(S1)
Frequency	: 60 Hz	Ambient temperature	: -20°C to +40°C
Rated voltage	: 230/460 V	Altitude	: 1000 m.a.s.l.
Rated current	: 72.4/36.2 A	Protection degree	: IP55
L. R. Amperes	: 449/224 A	Cooling method	: IC411 - TEFC
LRC	: 6.2x(Code G)	Mounting	: F-1
No load current	: 32.0/16.0 A	Rotation <sup>1</sup>	: Both (CW and CCW)
Rated speed	: 1180 rpm	Noise level <sup>2</sup>	: 62.0 dB(A)
Slip	: 1.67 %	Starting method	: Direct On Line
Rated torque	: 134 ft.lb	Approx. weight <sup>3</sup>	: 607 lb
Locked rotor torque	: 229 %		
Breakdown torque	: 260 %		
Insulation class	: F		
Service factor	: 1.25		
Moment of inertia (J)	: 13.2 sq.ft.lb		
Design	: B		

Output	25%	50%	75%	100%	Foundation loads	
Efficiency (%)	91.5	91.7	93.0	93.0	Max. traction	: 1239 lb
Power Factor	0.40	0.65	0.76	0.82	Max. compression	: 1846 lb

		Drive end	Non drive end
Bearing type	:	6312 C3	6212 C3
Sealing	:	V'Ring	V'Ring
Lubrication interval	:	20000 h	20000 h
Lubricant amount	:	21 g	13 g
Lubricant type	:	Mobil Polyrex EM	

Notes  
USABLE @208V 79.2A SF 1.15 SFA 91.0A

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.

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# TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage

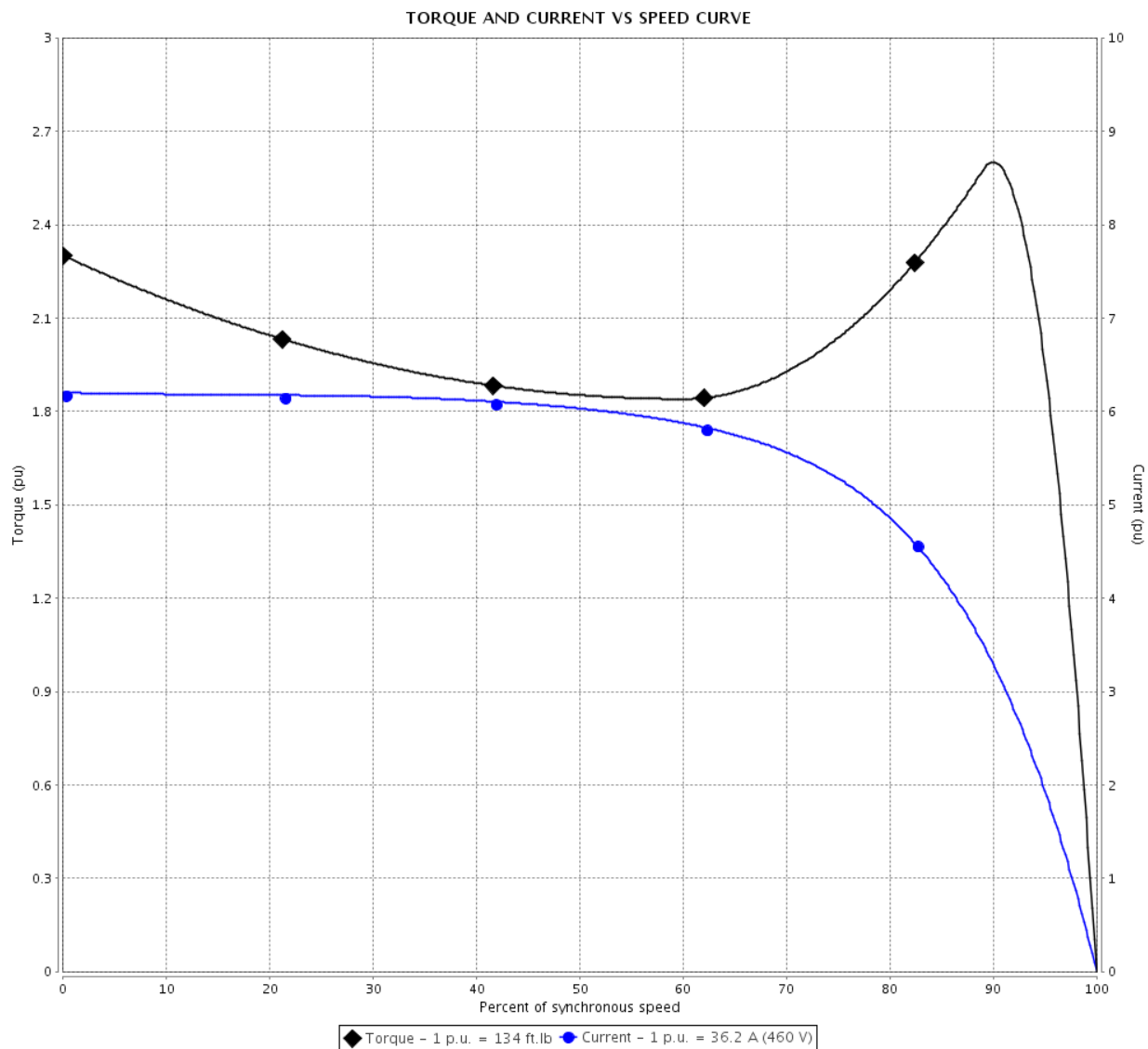


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Performance : 230/460 V 60 Hz 6P

Rated current : 72.4/36.2 A  
LRC : 6.2  
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Locked rotor torque : 229 %  
Breakdown torque : 260 %  
Rated speed : 1180 rpm

Moment of inertia (J) : 13.2 sq.ft.lb  
Duty cycle : Cont.(S1)  
Insulation class : F  
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Design : B

Locked rotor time : 37s (cold) 21s (hot)

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# LOAD PERFORMANCE CURVE

## Three Phase Induction Motor - Squirrel Cage

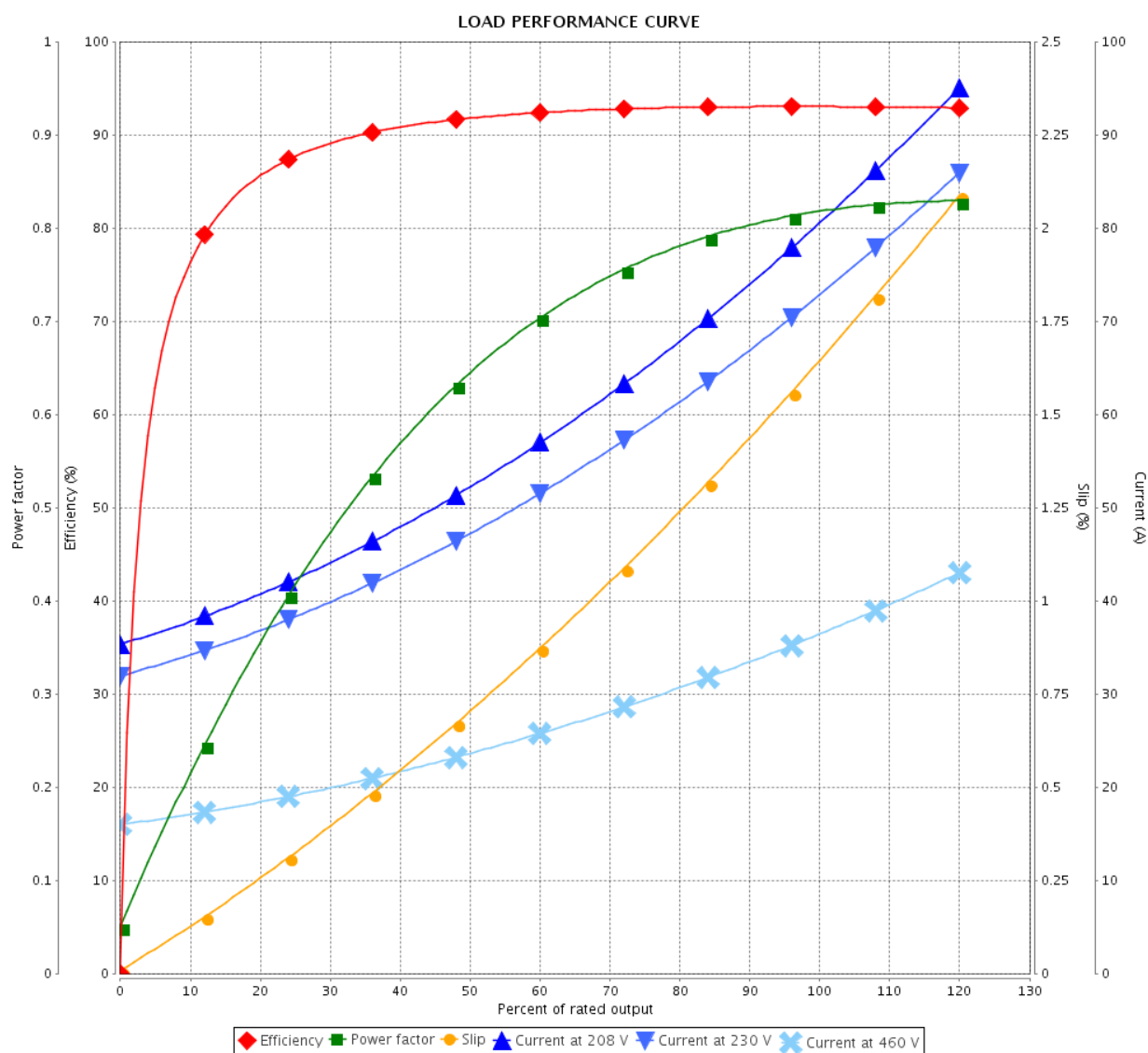


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# THERMAL LIMIT CURVE

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Temperature rise : 80 K  
Design : B

Heating constant

Cooling constant

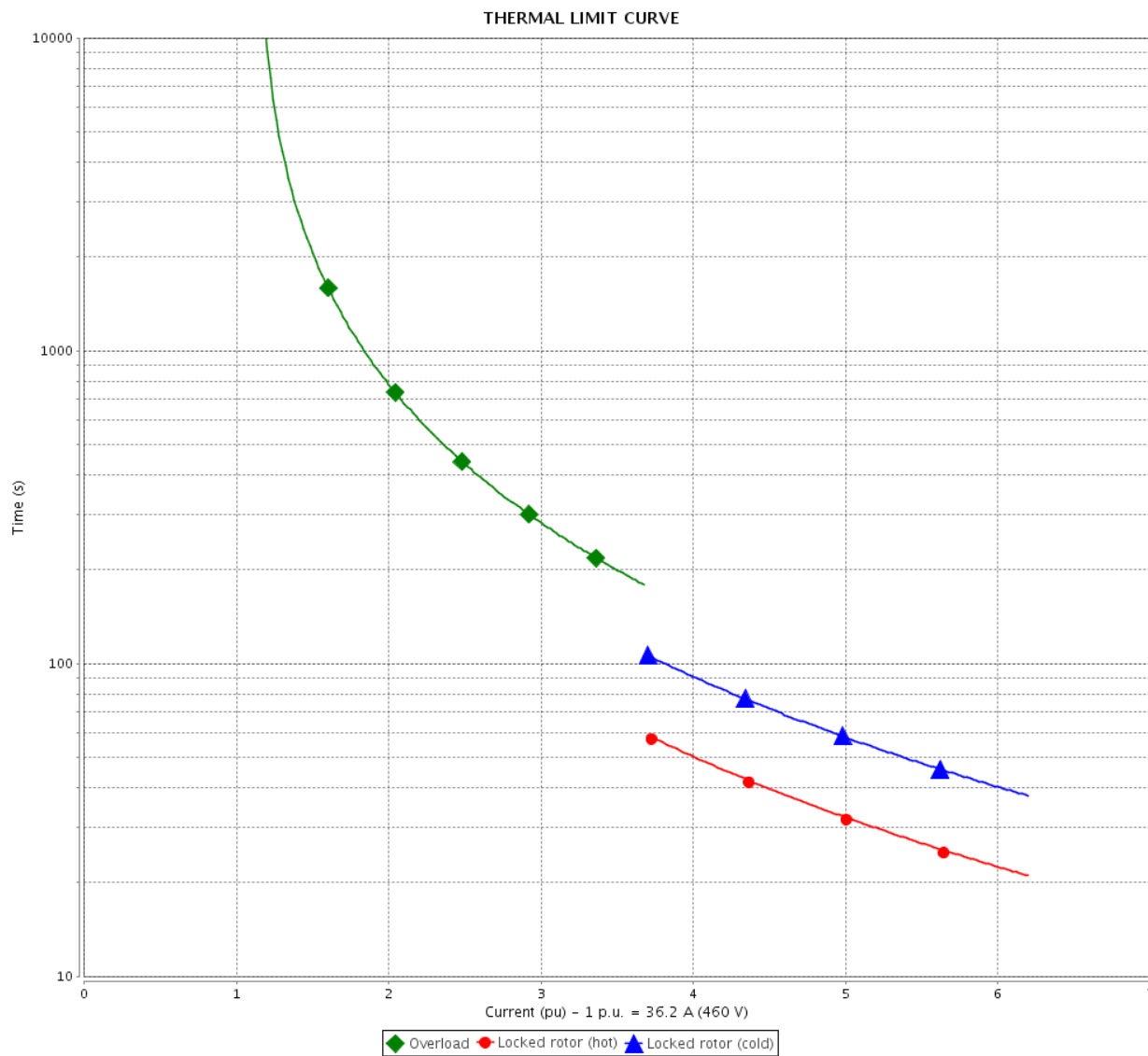
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# THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : \_\_\_\_\_



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# VFD OPERATION CURVE

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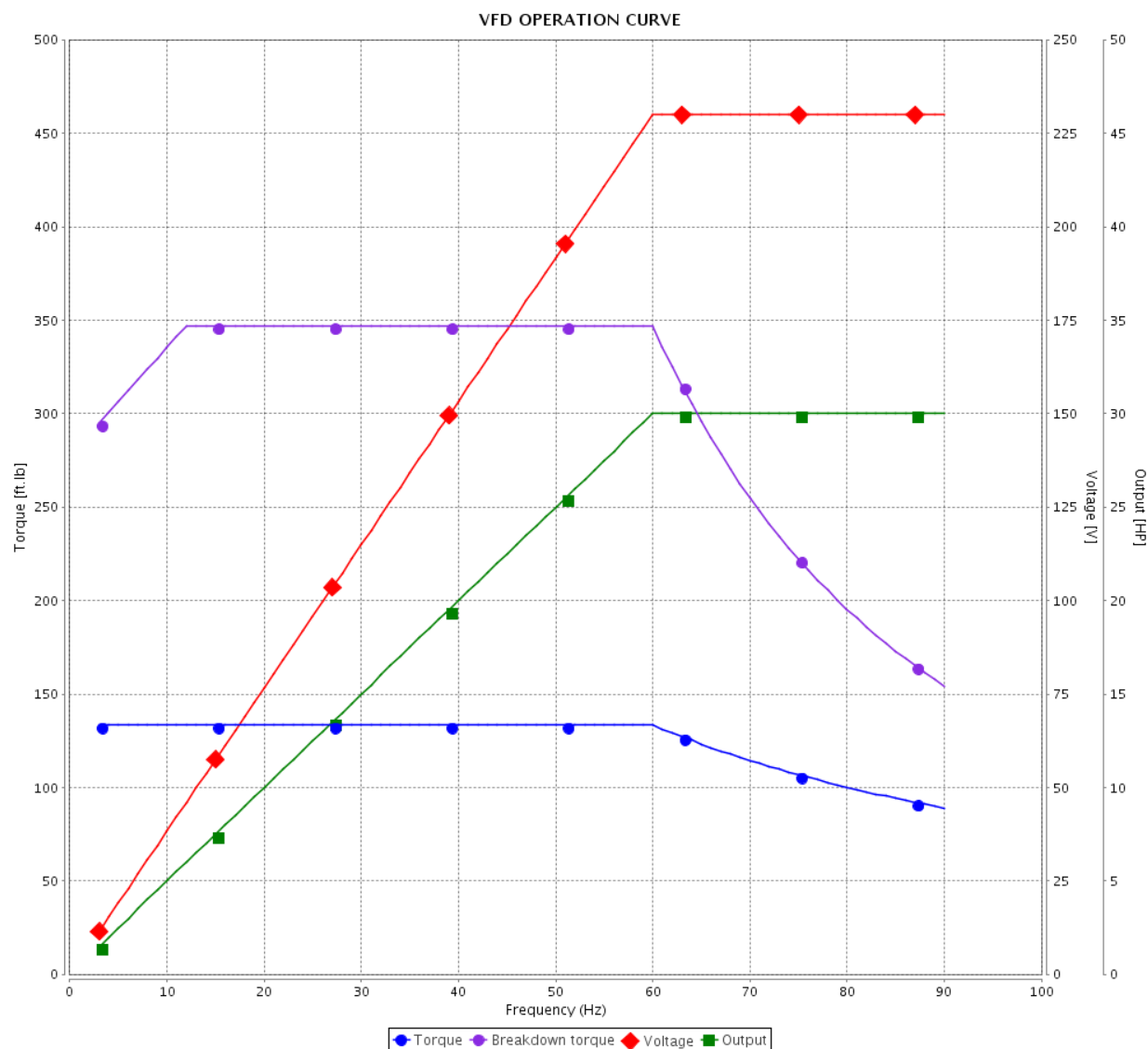


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