

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase Product code : 11402324
Catalog # : CT060402NPW22

Frame	: 364/5TSC	Locked rotor time	: 21s (cold) 12s (hot)
Output	: 60 HP (45 kW)	Temperature rise	: 80 K
Poles	: 2	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	: 136/67.8 A	Protection degree	: IP55
L. R. Amperes	: 895/447 A	Cooling method	: IC411 - TEFC
LRC	: 6.6x(Code G)	Mounting	: F-1
No load current	: 34.0/17.0 A	Rotation ¹	: Both (CW and CCW)
Rated speed	: 3555 rpm	Noise level ²	: 79.0 dB(A)
Slip	: 1.25 %	Starting method	: Direct On Line
Rated torque	: 88.6 ft.lb	Approx. weight ³	: 825 lb
Locked rotor torque	: 200 %		
Breakdown torque	: 260 %		
Insulation class	: F		
Service factor	: 1.25		
Moment of inertia (J)	: 10.6 sq.ft.lb		
Design	: B		

Output	50%	75%	100%	Foundation loads	
Efficiency (%)	92.7	93.6	93.6	Max. traction	: 511 lb
Power Factor	0.81	0.87	0.89	Max. compression	: 1316 lb

Losses at normative operating points (speed;torque), in percentage of rated output power

P1 (0,9;1,0)	P2 (0,5;1,0)	P3 (0,25;1,0)	P4 (0,9;0,5)	P5 (0,5;0,5)	P6 (0,5;0,25)	P7 (0,25;0,25)
6.3	4.7	4.4	3.3	1.8	1.1	0.6

	Drive end	Non drive end
Bearing type	: 6314 C3	: 6314 C3
Sealing	: Oil Seal	: Oil Seal
Lubrication interval	: 4000 h	: 4000 h
Lubricant amount	: 27 g	: 27 g
Lubricant type	: Mobil Polyrex EM	

Notes
USABLE @208V 148A SF 1.10 SFA 163A

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

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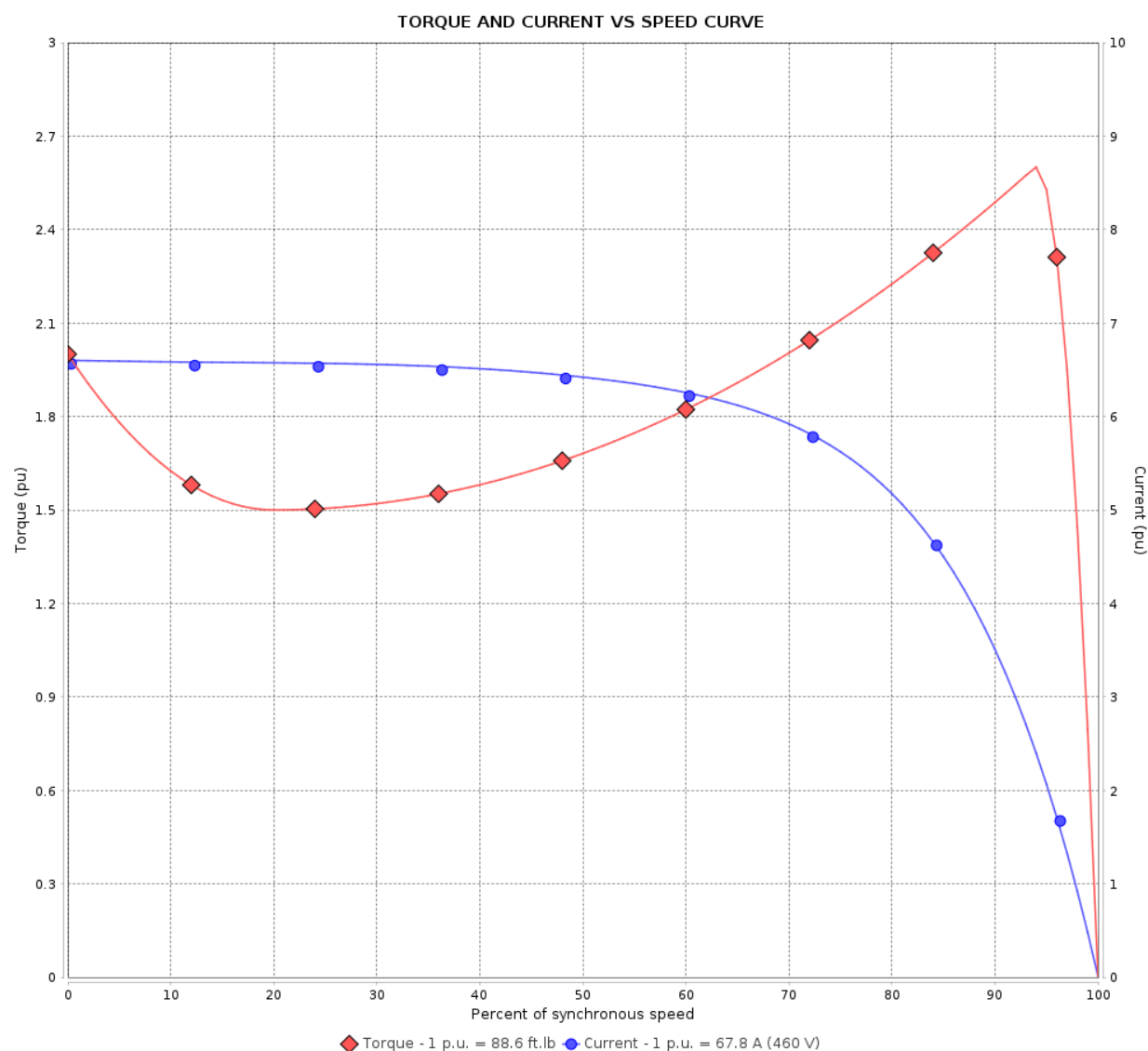


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Moment of inertia (J) : 10.6 sq.ft.lb
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Design : B

Locked rotor time : 21s (cold) 12s (hot)

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LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

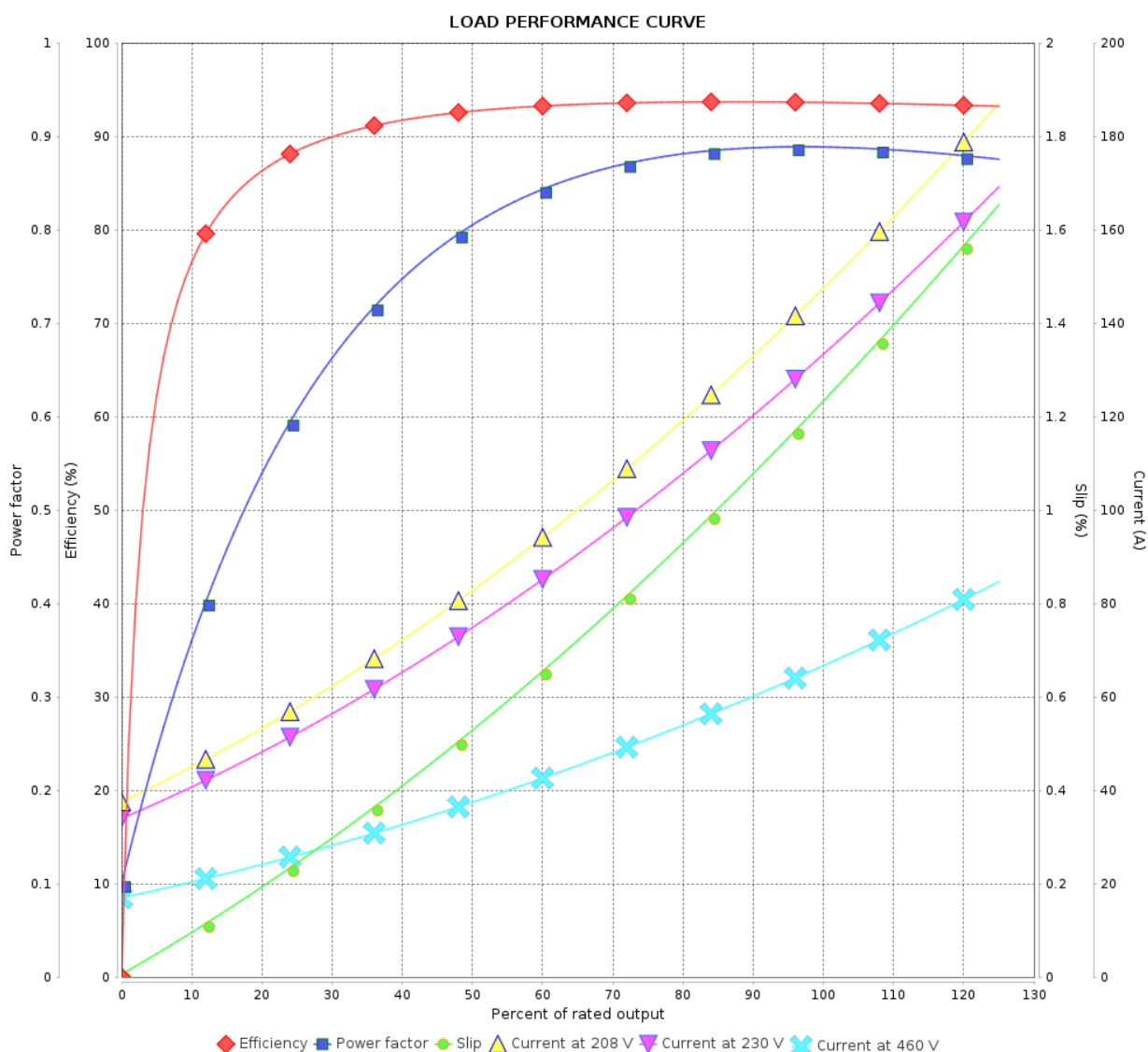


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THERMAL LIMIT CURVE

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Temperature rise : 80 K
Design : B

Heating constant

Cooling constant

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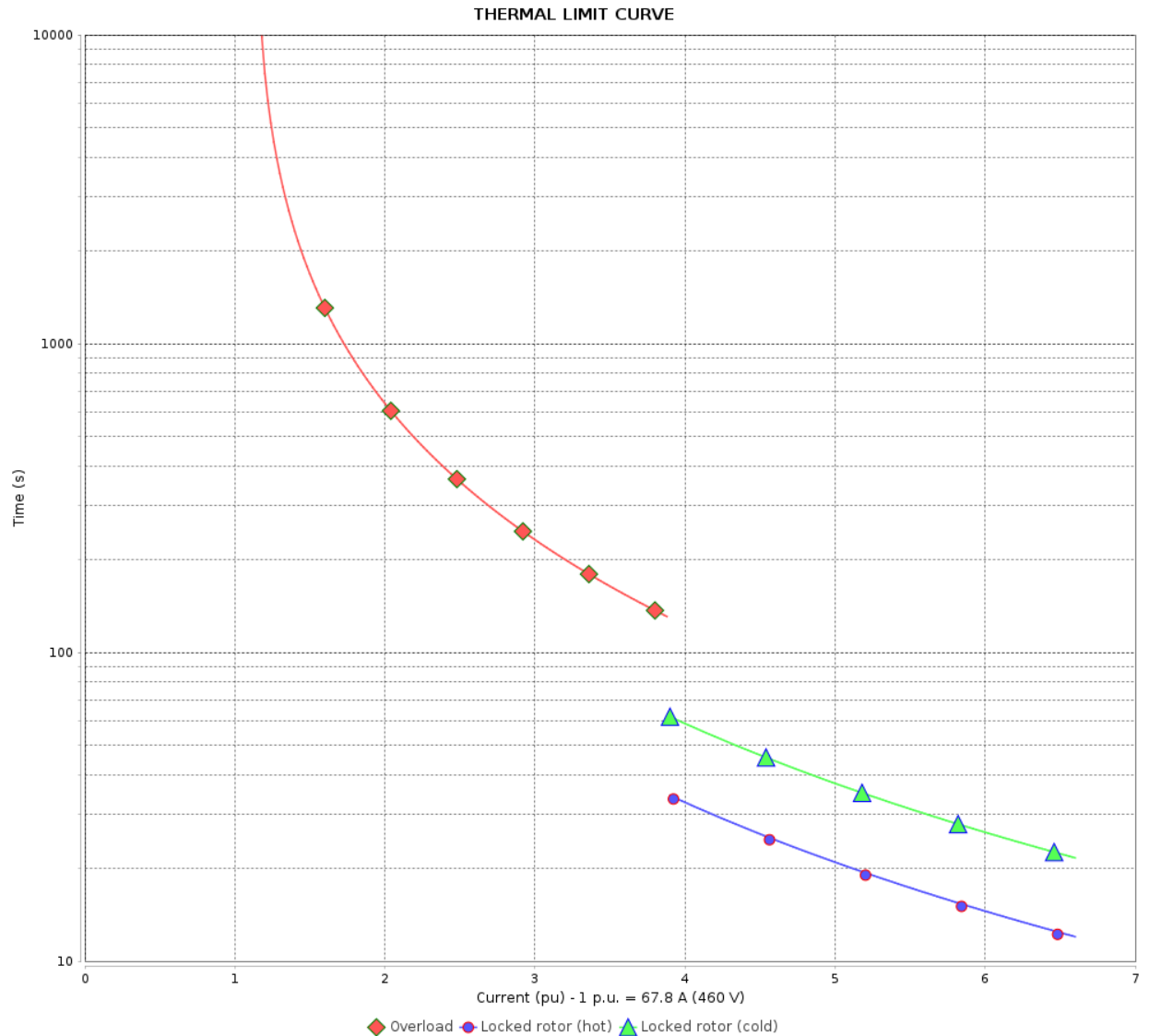
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THERMAL LIMIT CURVE

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VFD OPERATION CURVE

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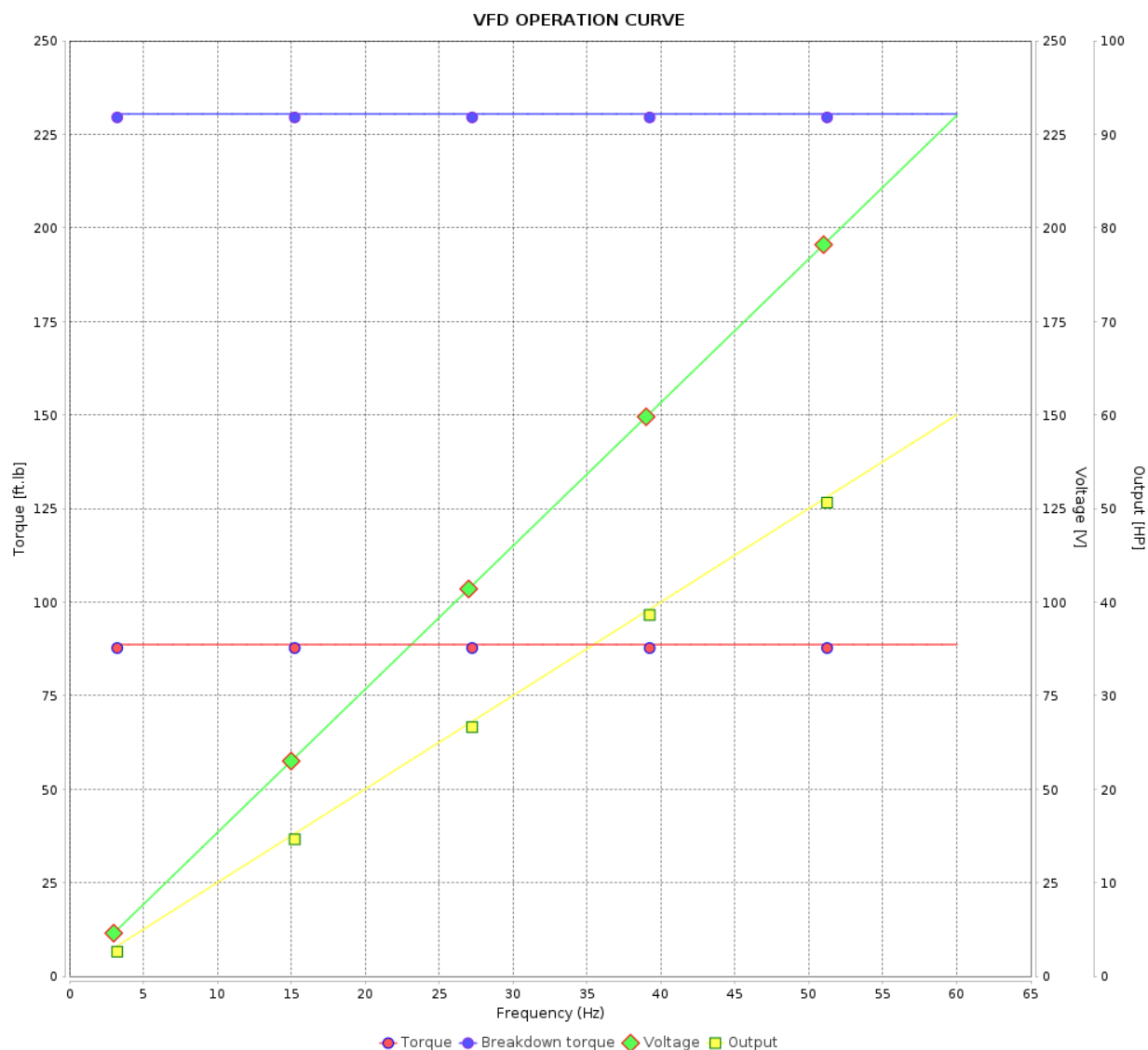


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