

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase Product code : 11438180
Catalog # : HT050402NPW22

Frame	: 324/6TS	Locked rotor time	: 36s (cold) 20s (hot)
Output	: 50 HP (37 kW)	Temperature rise	: 80 K
Frequency	: 60 Hz	Duty cycle	: Cont.(S1)
Rated voltage	: 230/460 V	Ambient temperature	: -20°C to +40°C
Poles	: 2	Altitude	: 1000 m.a.s.l.
Rated current	: 115/57.4 A	Protection degree	: IP55
	: 6.3x(Code G)	Cooling method	: IC411 - TEFC
Rated speed	: 3560 rpm	Mounting	: F-1
Rated torque	: 73.8 ft.lb	Rotation ¹	: Both (CW and CCW)
Insulation class	: F	Noise level ²	: 76.0 dB(A)
Service factor	: 1.25	Starting method	: Direct On Line
Moment of inertia (J)	: 5.75 sq.ft.lb	Approx. weight ³	: 584 lb
Design	: B		

Output	25%	50%	75%	100%	Foundation loads	
Efficiency (%)	0.000	93.0	93.0	93.0	Max. traction	: 598 lb
Power Factor	0.00	0.78	0.85	0.87	Max. compression	: 1106 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)
7.0	5.1	4.6	3.8	2.1	1.4	0.8

	Drive end	Non drive end
Bearing type	: 6312 C3	6212 C3
Sealing	: V'Ring	V'Ring
Lubrication interval	: 12000 h	15000 h
Lubricant amount	: 21 g	13 g
Lubricant type	Mobil Polyrex EM	

Notes

USABLE @208V 124A SF 1.10 SFA 136A

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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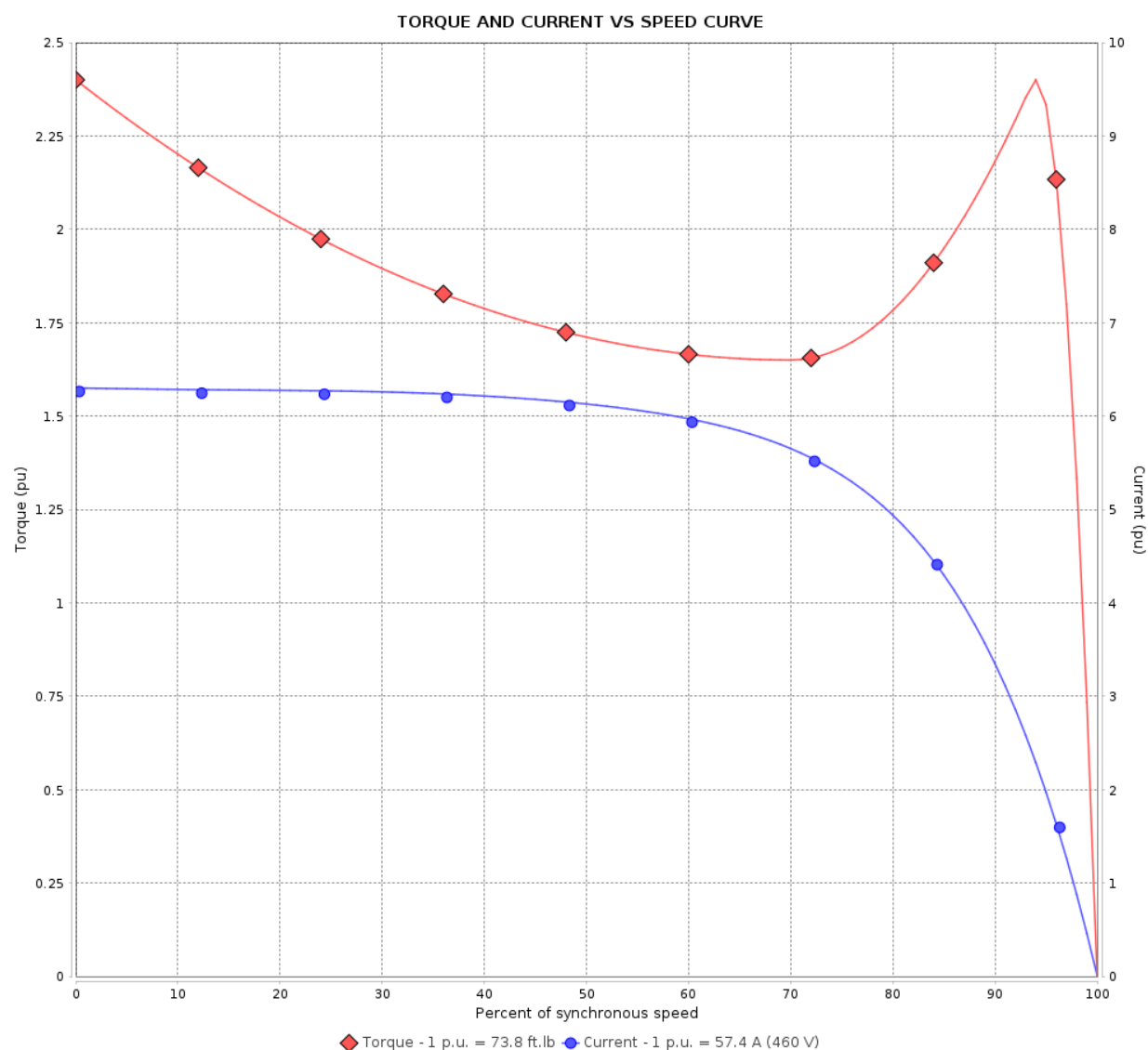


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Performance : 230/460 V 60 Hz 2P

Rated current : 115/57.4 A
LRC : 6.3
Rated torque : 73.8 ft.lb
Locked rotor torque : 240 %
Breakdown torque : 240 %
Rated speed : 3560 rpm

Moment of inertia (J) : 5.75 sq.ft.lb
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.25
Duty cycle : Cont.(S1)

Locked rotor time : 36s (cold) 20s (hot)

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LOAD PERFORMANCE CURVE

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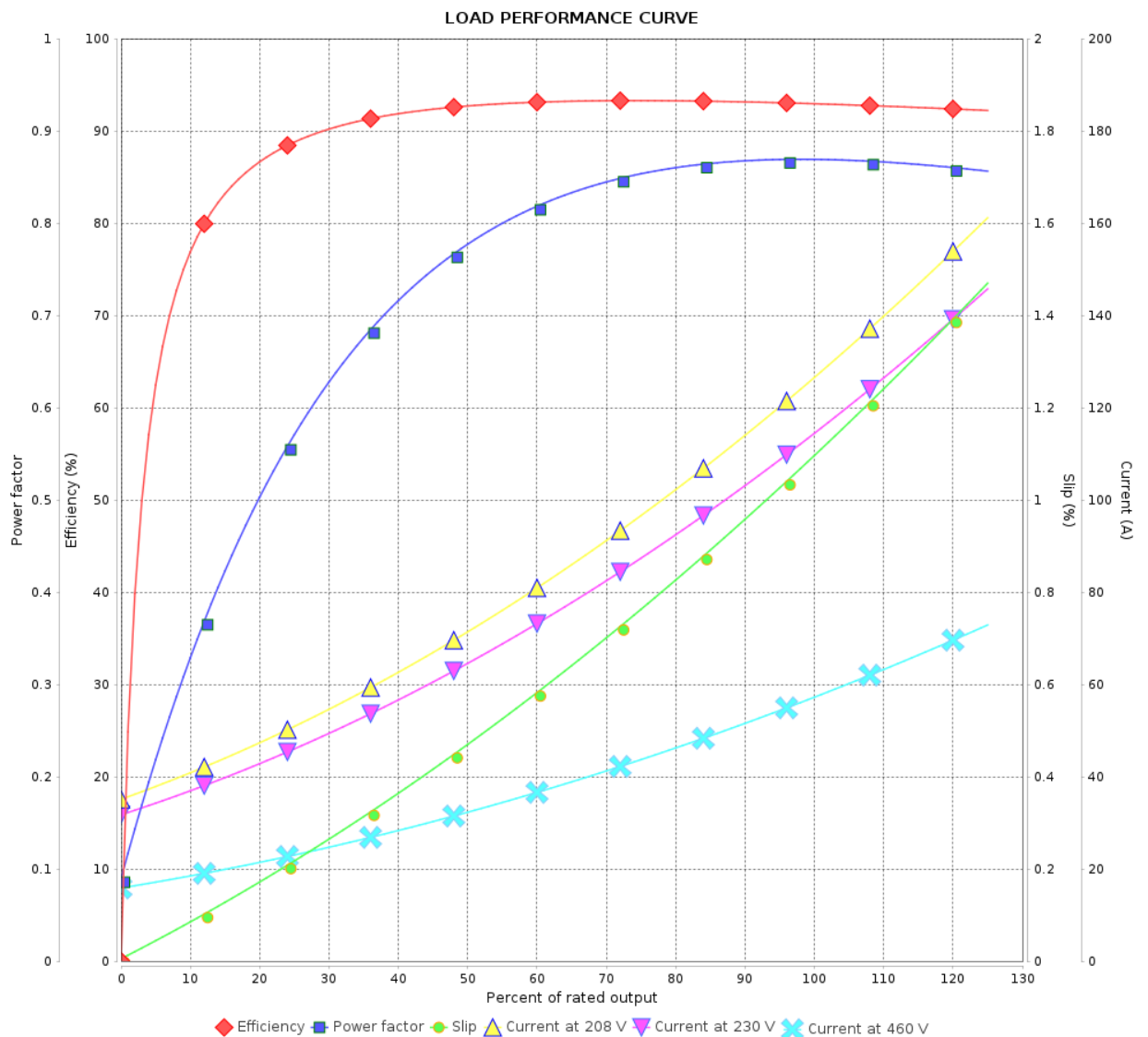


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THERMAL LIMIT CURVE

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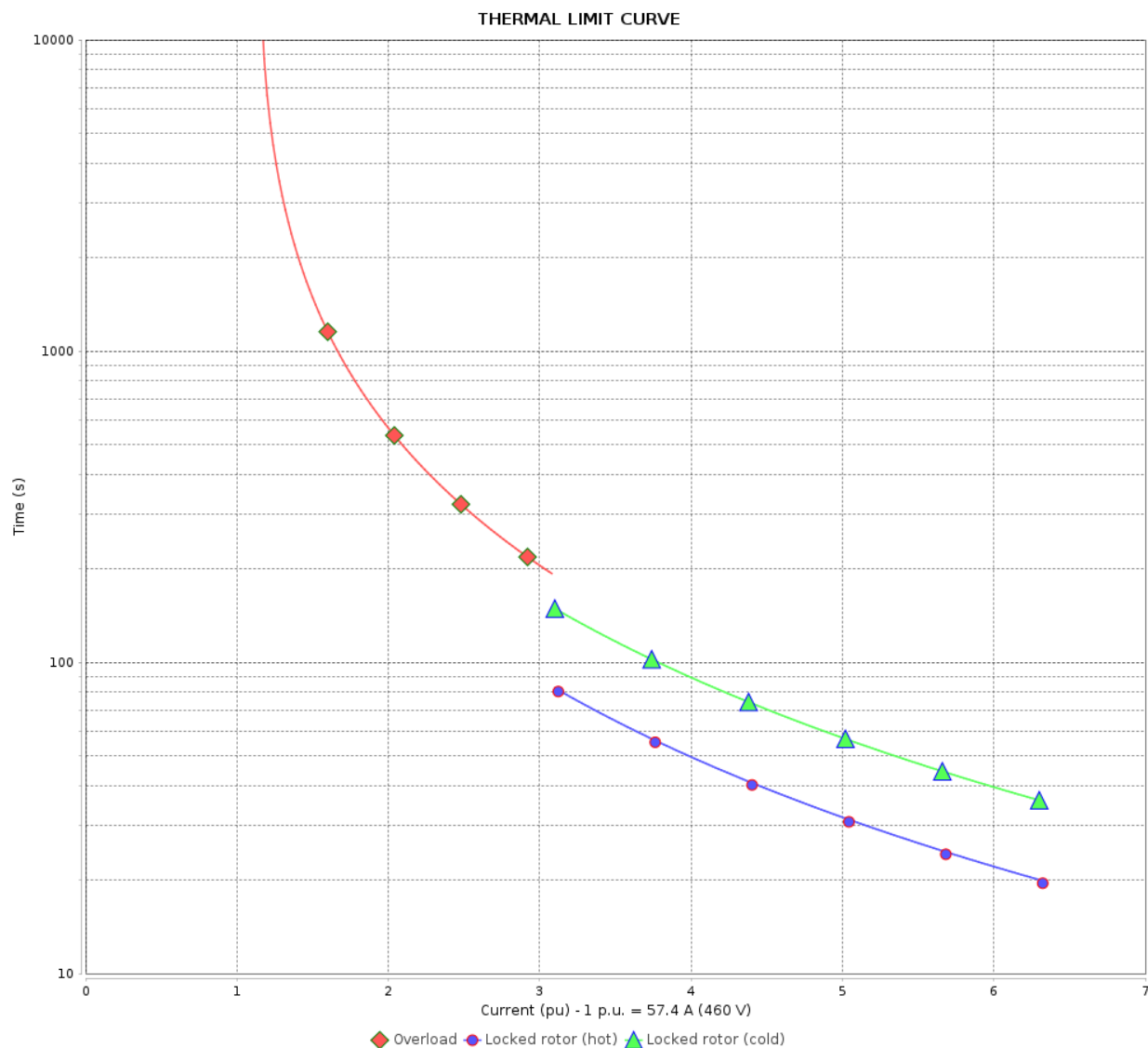


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Heating constant
Cooling constant

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VFD OPERATION CURVE

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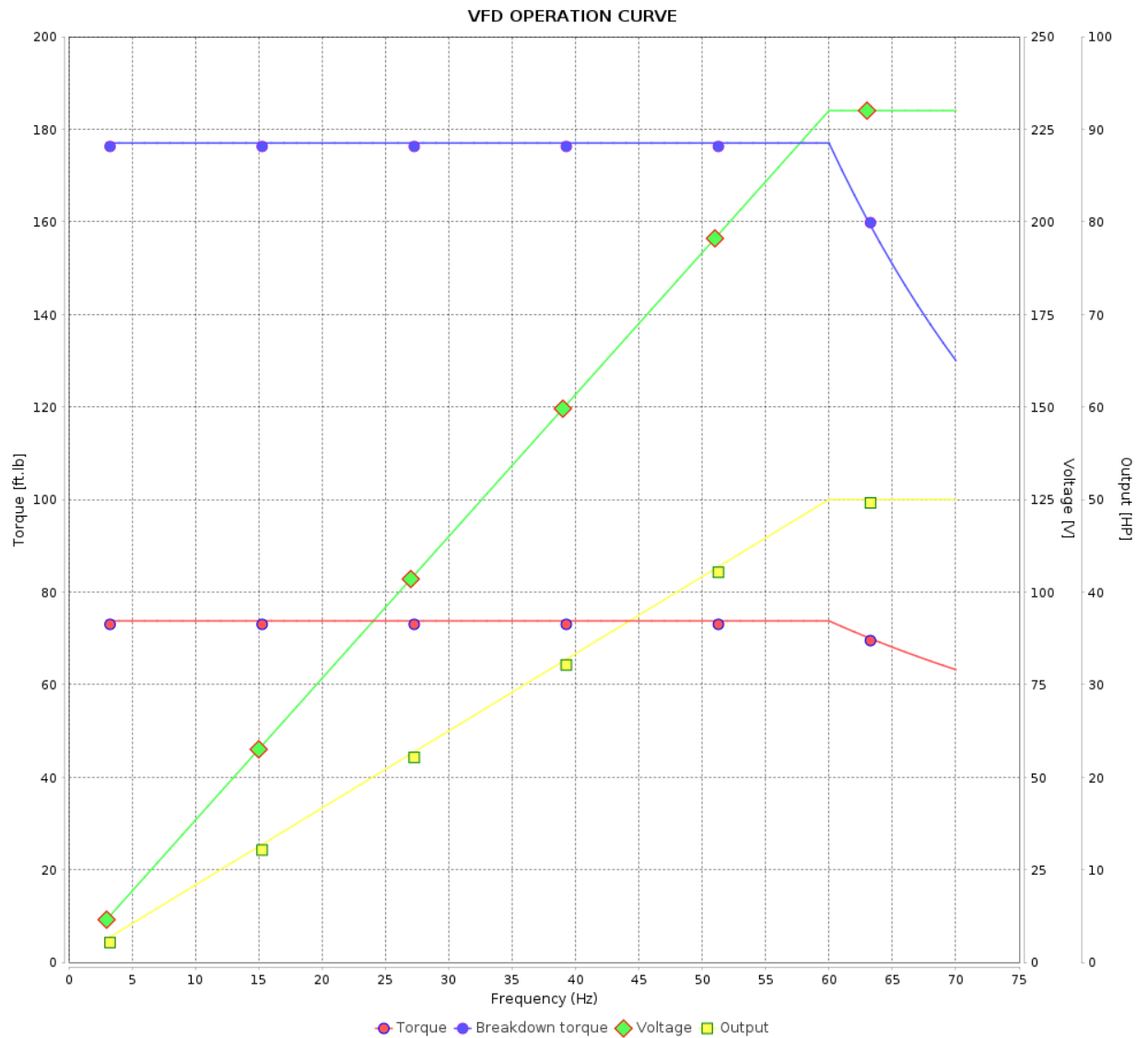


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