

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 High Efficiency Three-Phase Product code : 11815887

Frame	: 143TC	Locked rotor time	: 23s (cold) 13s (hot)
Output	: 1 HP (0.75 kW)	Temperature rise	: 80 K
Poles	: 4	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	: 3.40/1.70 A	Protection degree	: IP55
L. R. Amperes	: 29.2/14.6 A	Cooling method	: IC411 - TEFC
LRC	: 8.6x(Code N)	Mounting	: F-1
No load current	: 2.64/1.32 A	Rotation ¹	: Both (CW and CCW)
Rated speed	: 1770 rpm	Noise level ²	: 51.0 dB(A)
Slip	: 1.67 %	Starting method	: Direct On Line
Rated torque	: 2.97 ft.lb	Approx. weight ³	: 37.5 lb
Locked rotor torque	: 280 %		
Breakdown torque	: 420 %		
Insulation class	: F		
Service factor	: 1.25		
Moment of inertia (J)	: 0.0911 sq.ft.lb		
Design	: B		

Output	50%	75%	100%	Foundation loads	
Efficiency (%)	77.0	81.0	82.5	Max. traction	: 88 lb
Power Factor	0.48	0.58	0.67	Max. compression	: 136 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)
20.2	15.7	13.9	15.3	11.0	10.1	7.7

	Drive end	Non drive end
Bearing type	: 6205 ZZ	6204 ZZ
Sealing	: V'Ring	V'Ring
Lubrication interval	: -	-
Lubricant amount	: -	-
Lubricant type	: 00088	

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
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Date	21/07/2026			

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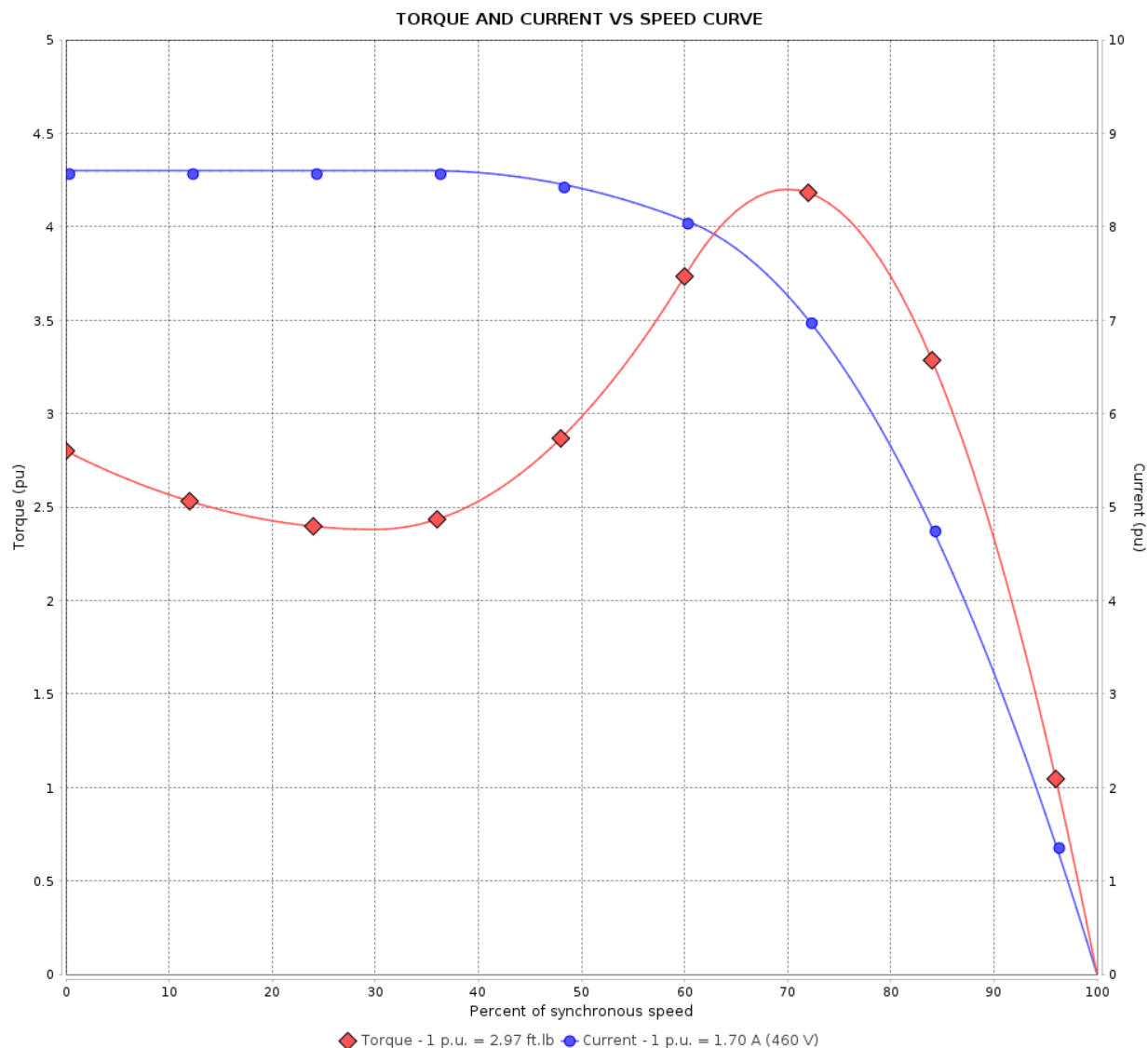
TORQUE AND CURRENT VS SPEED CURVE

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Insulation class : F
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Temperature rise : 80 K
Design : B

Locked rotor time : 23s (cold) 13s (hot)

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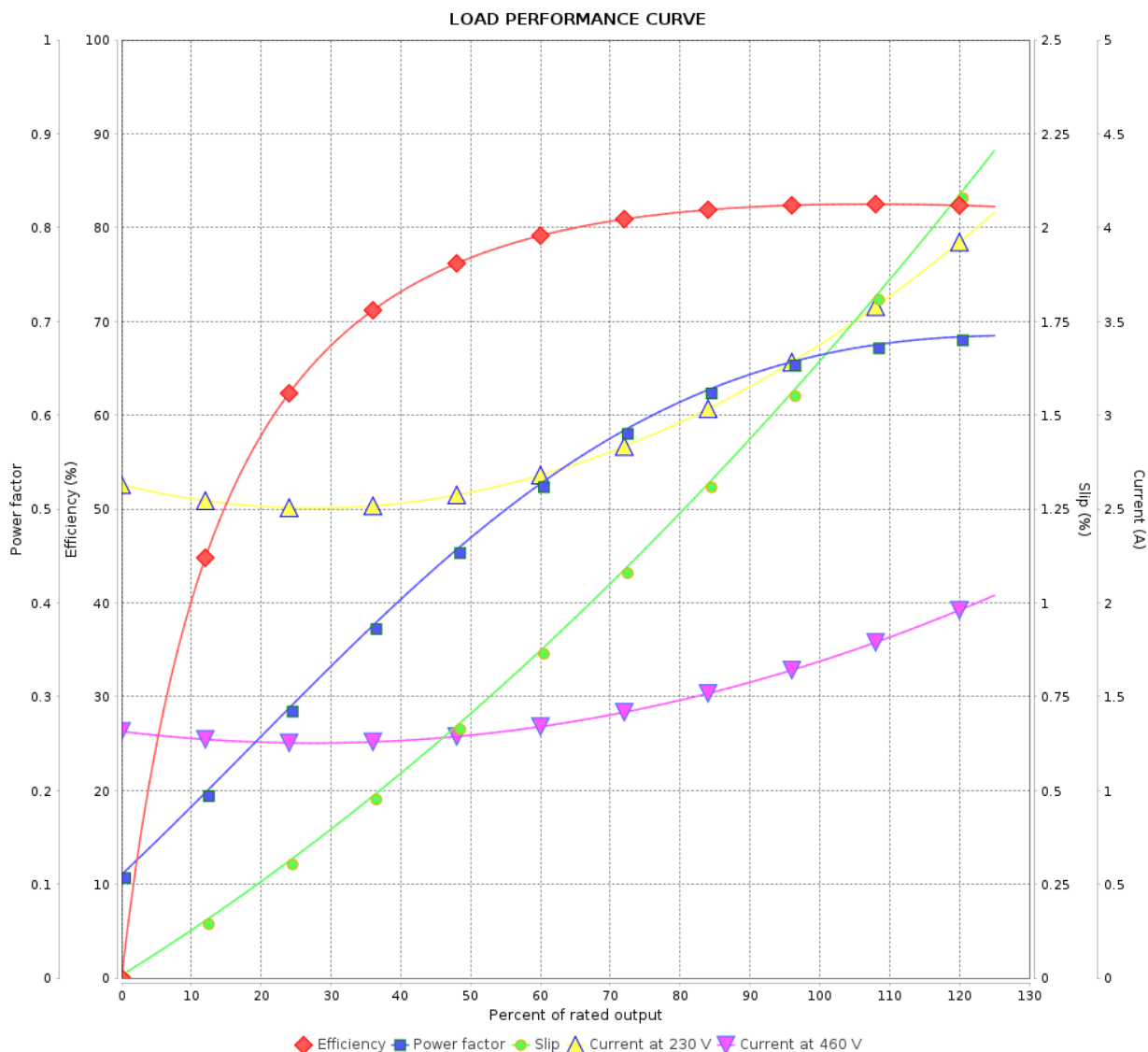
LOAD PERFORMANCE CURVE

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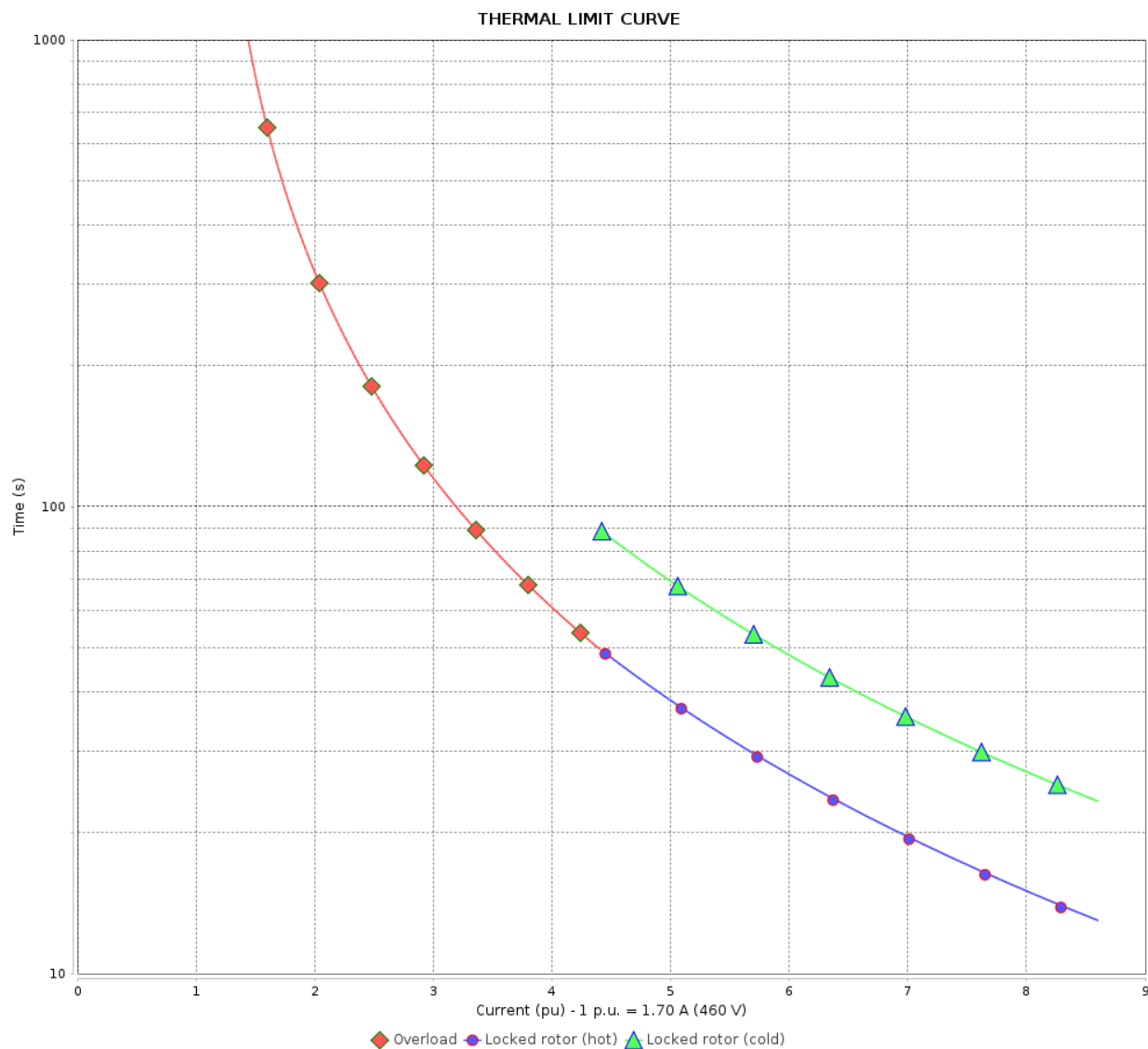
THERMAL LIMIT CURVE

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Heating constant

Cooling constant

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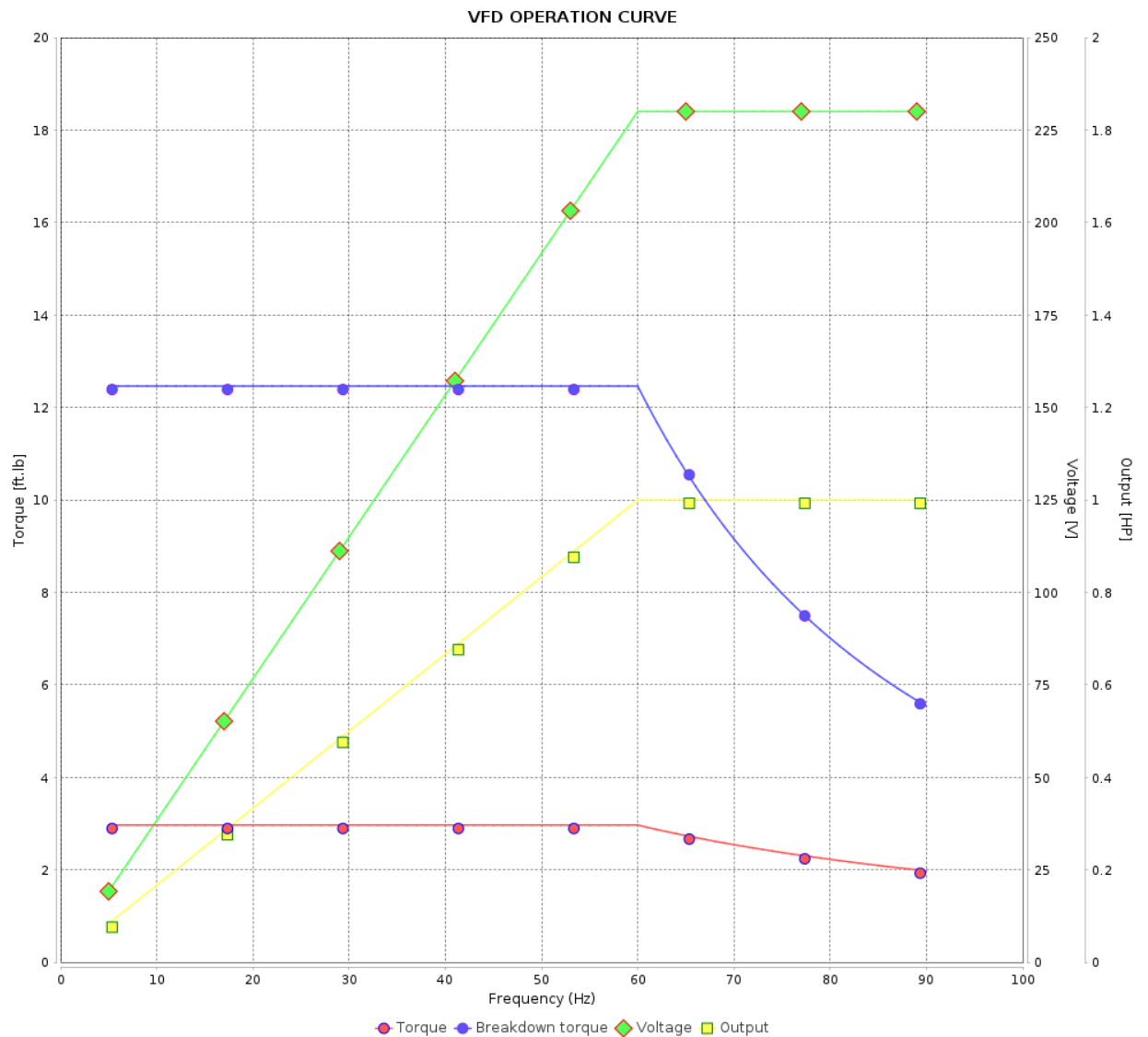
VFD OPERATION CURVE

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