

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 High Efficiency Three-Phase Product code : 11702705

Frame	: 444/5T	Locked rotor time	: 36s (cold) 20s (hot)
Output	: 75 HP (55 kW)	Temperature rise	: 80 K
Poles	: 8	Duty cycle	: Cont.(S1)
Frequency	: 60 Hz	Ambient temperature	: -20°C to +40°C
Rated voltage	: 575 V	Altitude	: 1000 m.a.s.l.
Rated current	: 74.2 A	Protection degree	: IP55
L. R. Amperes	: 416 A	Cooling method	: IC411 - TEFC
LRC	: 5.6x(Code F)	Mounting	: F-1
No load current	: 28.8 A	Rotation ¹	: Both (CW and CCW)
Rated speed	: 885 rpm	Noise level ²	: 63.0 dB(A)
Slip	: 1.67 %	Starting method	: Direct On Line
Rated torque	: 445 ft.lb	Approx. weight ³	: 1444 lb
Locked rotor torque	: 170 %		
Breakdown torque	: 200 %		
Insulation class	: F		
Service factor	: 1.25		
Moment of inertia (J)	: 73.6 sq.ft.lb		
Design	: B		

Output	50%	75%	100%	Foundation loads	
Efficiency (%)	93.0	93.0	93.0	Max. traction	: 1603 lb
Power Factor	0.67	0.76	0.80	Max. compression	: 3142 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)
7.1	5.7	5.3	3.3	2.2	1.4	1.0

	Drive end	Non drive end
Bearing type	: NU-319 C3	6316 C3
Sealing	: WSeal	WSeal
Lubrication interval	: 15000 h	20000 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
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Revision

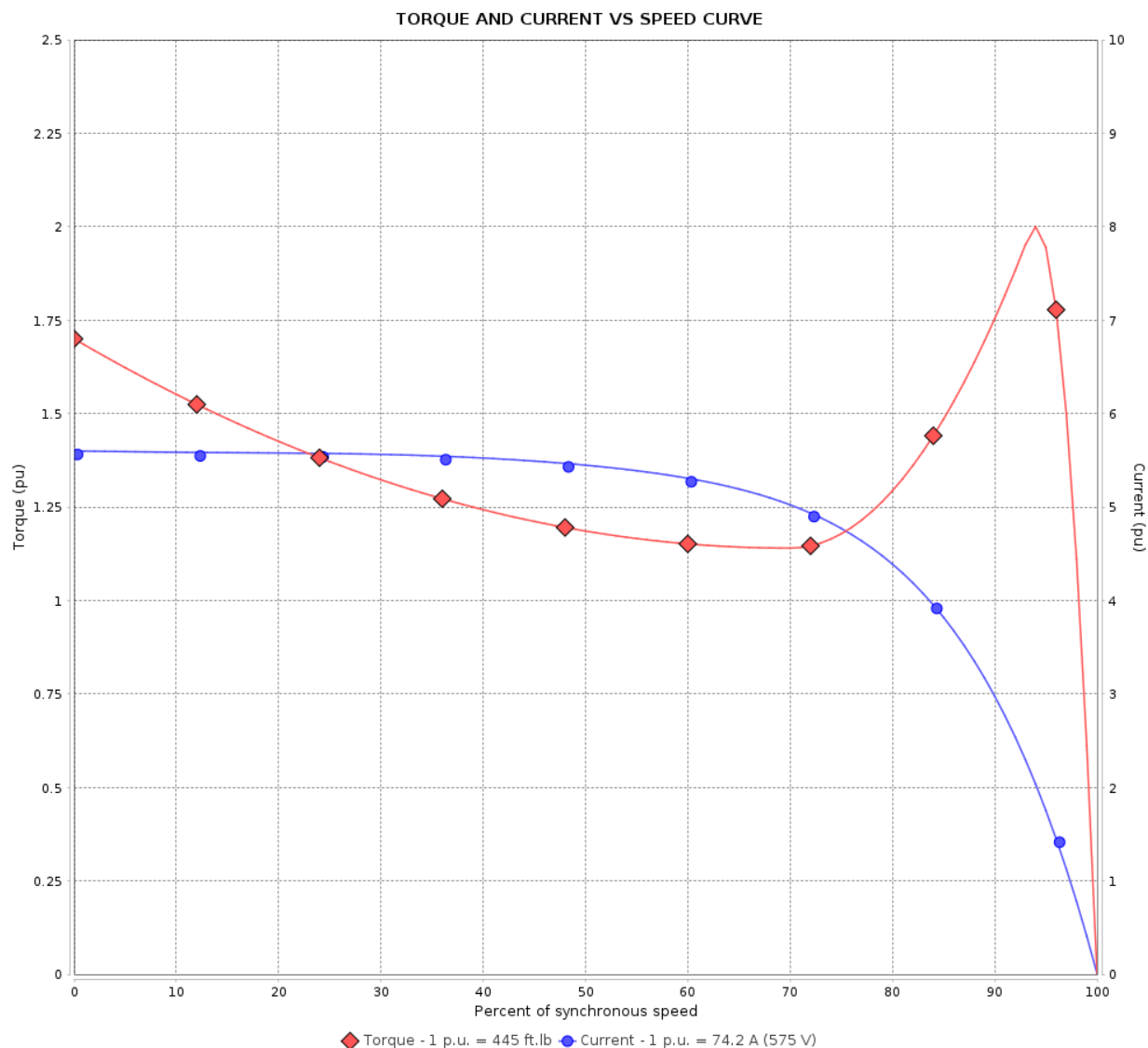
TORQUE AND CURRENT VS SPEED CURVE

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Rated torque	: 445 ft.lb	Insulation class	: F
Locked rotor torque	: 170 %	Service factor	: 1.25
Breakdown torque	: 200 %	Temperature rise	: 80 K
Rated speed	: 885 rpm	Design	: B

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

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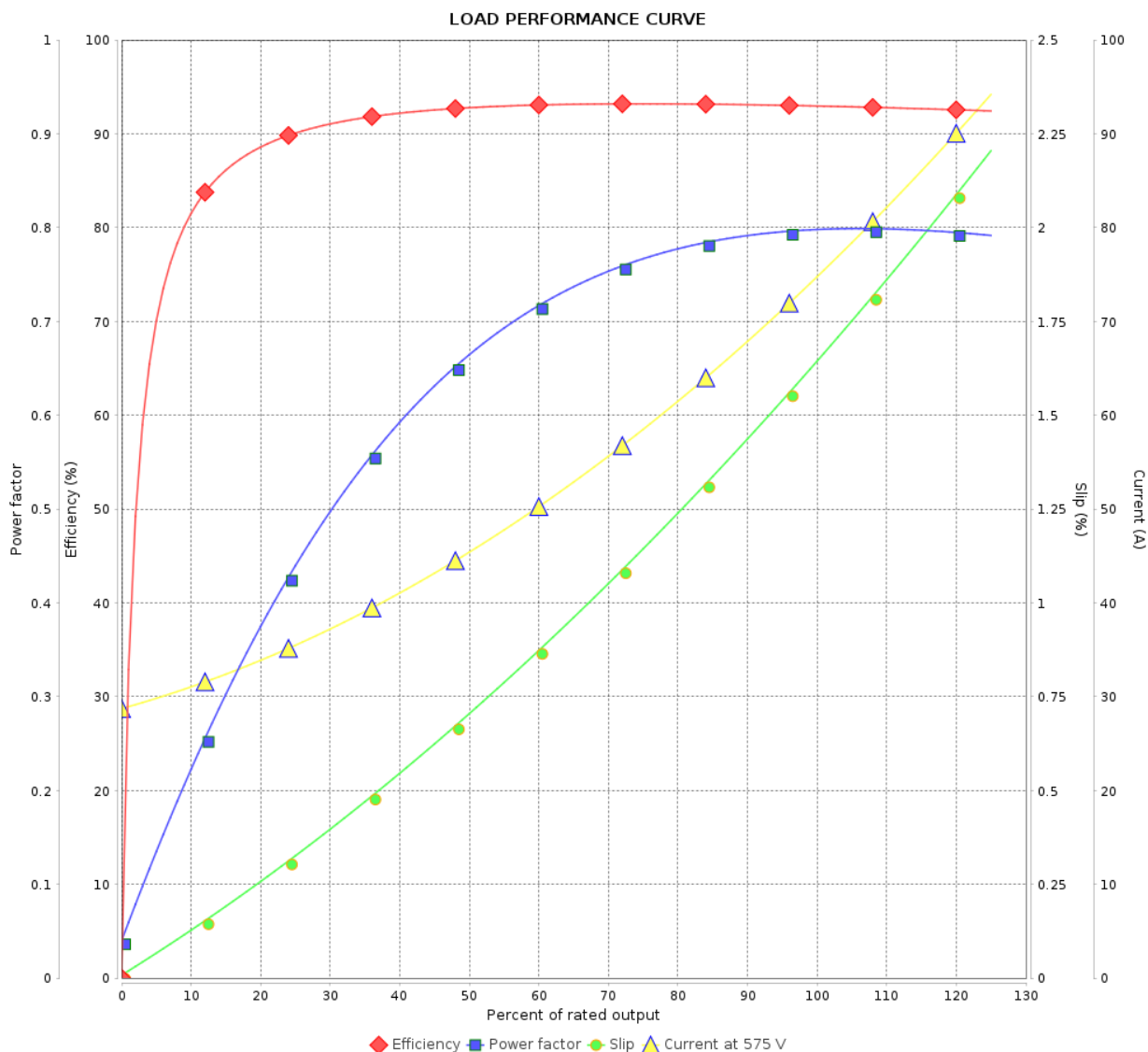
LOAD PERFORMANCE CURVE

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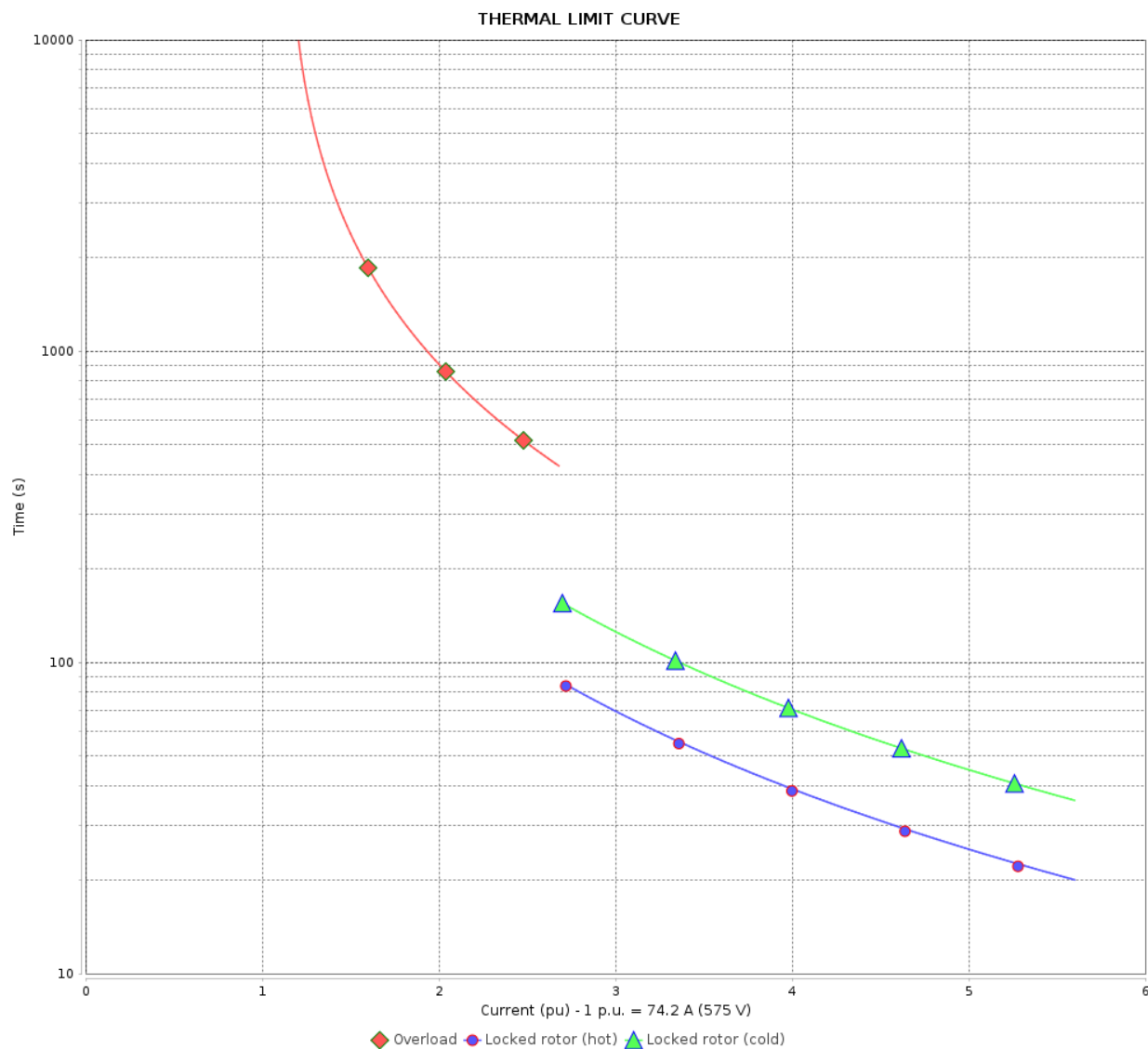
THERMAL LIMIT CURVE

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Heating constant

Cooling constant

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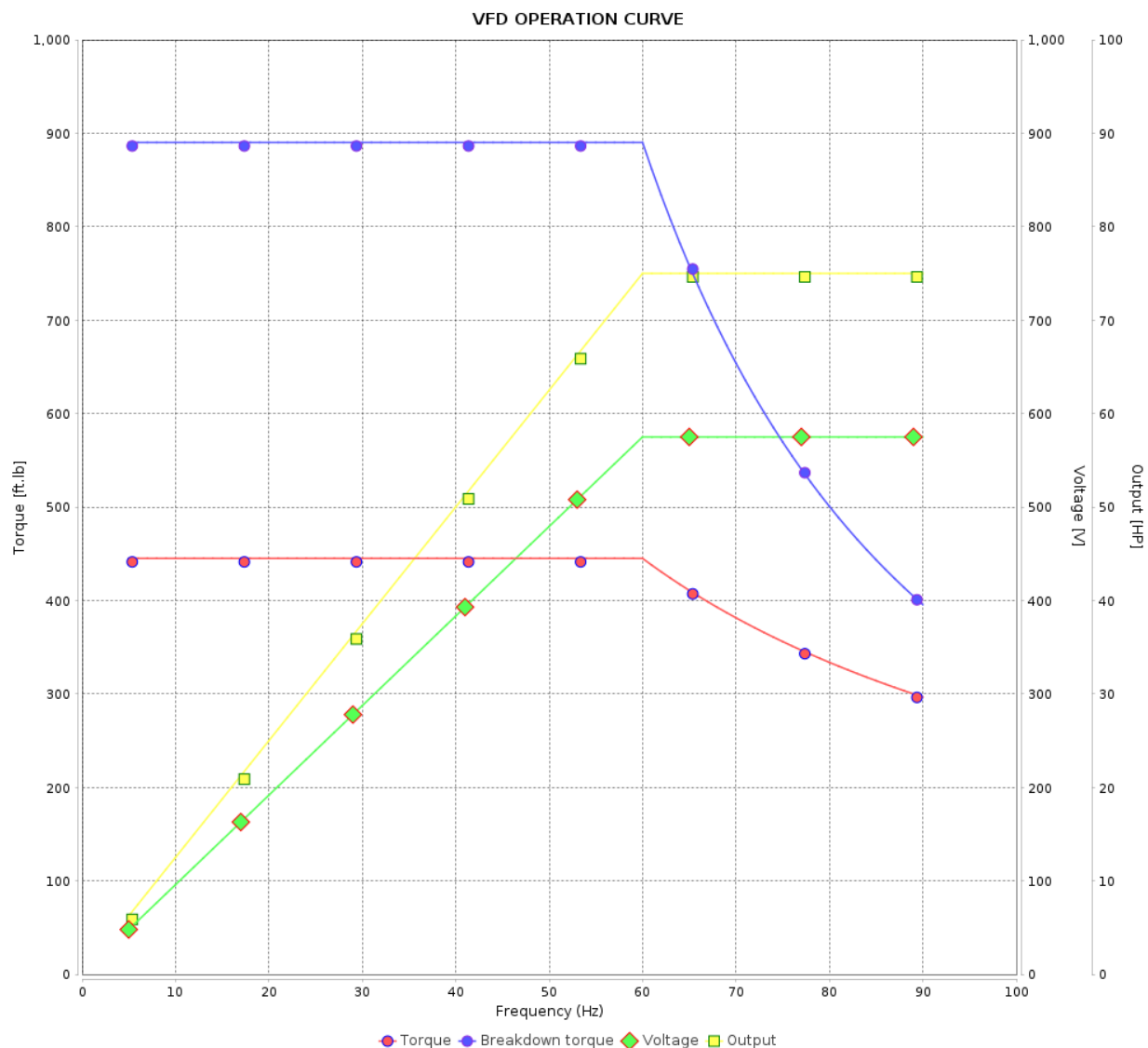
VFD OPERATION CURVE

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