

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase Product code : 11856861
Catalog # : HT003508NPW22

Frame	: 213/5T	Locked rotor time	: 79s (cold) 44s (hot)
Output	: 3 HP (2.2 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	: 3.69 A	Protection degree	: IP55
L. R. Amperes	: 25.1 A	Cooling method	: IC411 - TEFC
LRC	: 6.8x(Code K)	Mounting	: F-1
No load current	: 2.40 A	Rotation ¹	: Both (CW and CCW)
Rated speed	: 870 rpm	Noise level ²	: 52.0 dB(A)
Slip	: 3.33 %	Starting method	: Direct On Line
Rated torque	: 18.1 ft.lb	Approx. weight ³	: 176 lb
Locked rotor torque	: 220 %		
Breakdown torque	: 300 %		
Insulation class	: F		
Service factor	: 1.25		
Moment of inertia (J)	: 2.11 sq.ft.lb		
Design	: B		

Output	25%	50%	75%	100%	Foundation loads	
Efficiency (%)	0.000	84.0	85.5	85.5	Max. traction	: 219 lb
Power Factor	0.00	0.49	0.62	0.70	Max. compression	: 394 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)
19.1	18.2	17.9	9.5	7.8	5.8	4.5

		<u>Drive end</u>	<u>Non drive end</u>
Bearing type	:	6308 ZZ	6207 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.

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TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage

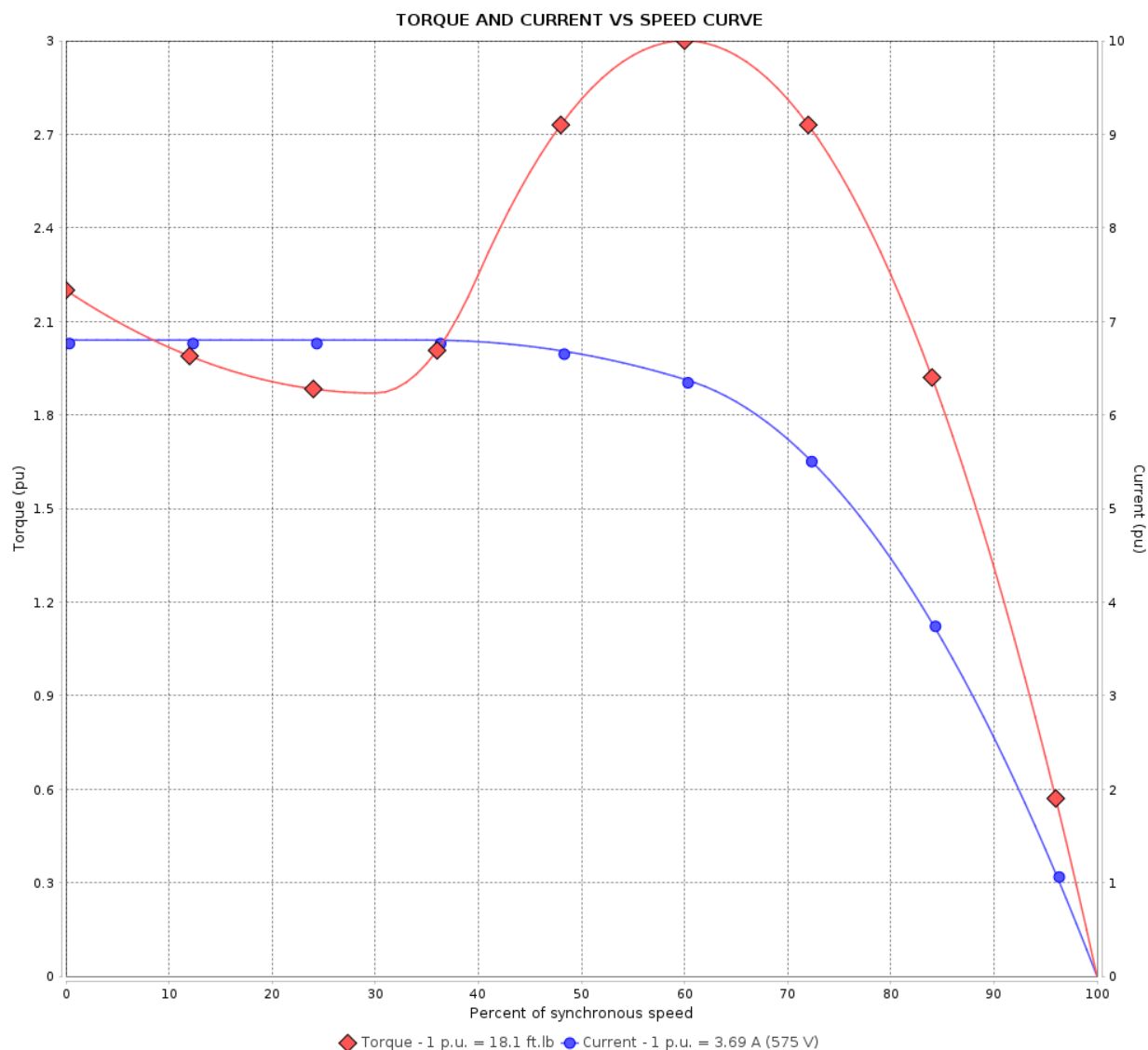


Customer :

Product line : W22 NEMA Premium Efficiency
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Catalog # : HT003508NPW22



Performance : 575 V 60 Hz 8P

Rated current	: 3.69 A	Moment of inertia (J)	: 2.11 sq.ft.lb
LRC	: 6.8	Duty cycle	: Cont.(S1)
Rated torque	: 18.1 ft.lb	Insulation class	: F
Locked rotor torque	: 220 %	Service factor	: 1.25
Breakdown torque	: 300 %	Temperature rise	: 80 K
Rated speed	: 870 rpm	Design	: B

Locked rotor time : 79s (cold) 44s (hot)

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LOAD PERFORMANCE CURVE

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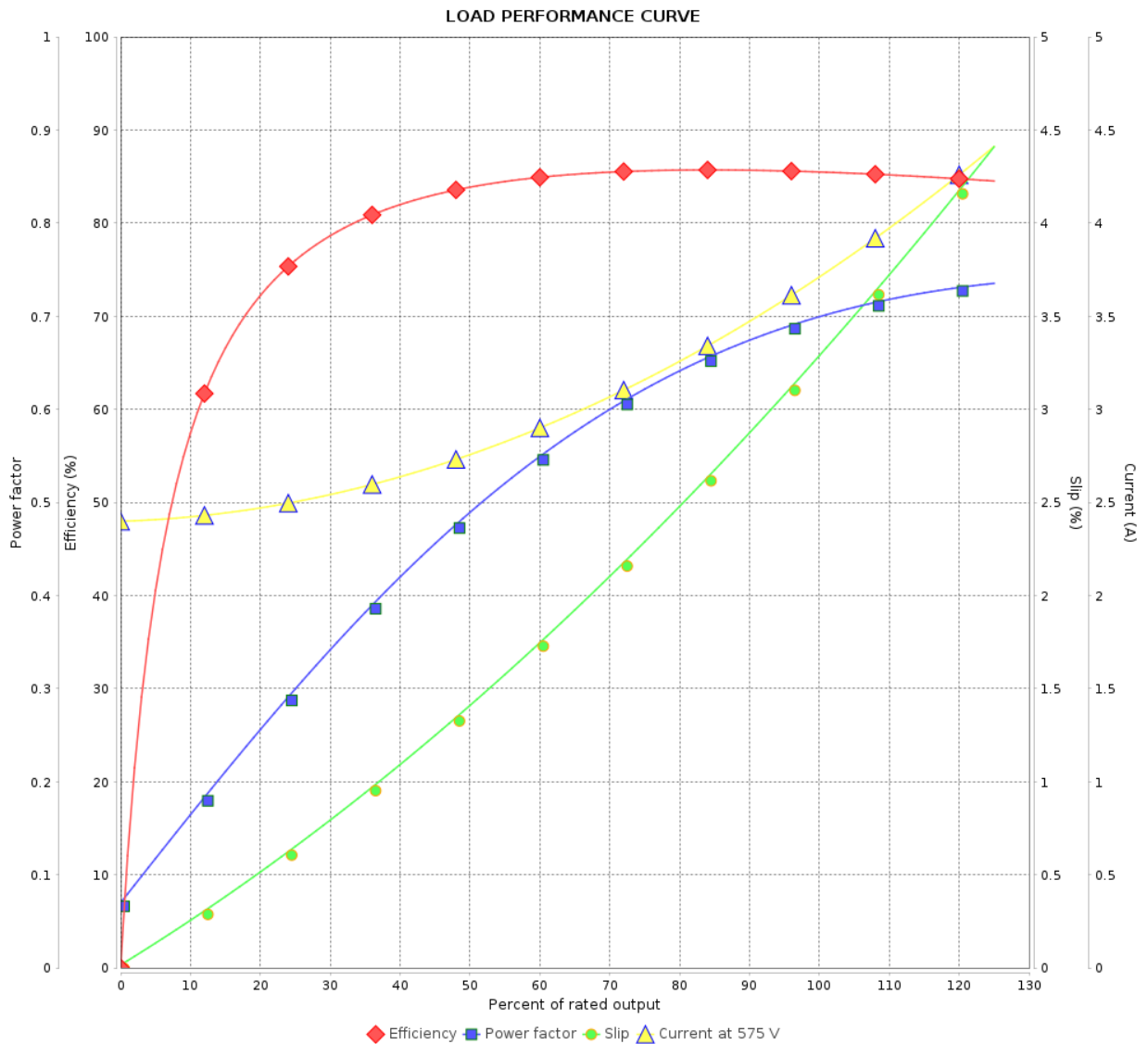


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Performance : 575 V 60 Hz 8P

Rated current : 3.69 A

LRC : 6.8

Rated torque : 18.1 ft.lb

Locked rotor torque : 220 %

Breakdown torque : 300 %

Rated speed : 870 rpm

Moment of inertia (J) : 2.11 sq.ft.lb

Duty cycle : Cont.(S1)

Insulation class : F

Service factor : 1.25

Temperature rise : 80 K

Design : B

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THERMAL LIMIT CURVE

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Breakdown torque	: 300 %	Temperature rise	: 80 K
Rated speed	: 870 rpm	Design	: B

Heating constant

Cooling constant

Rev.

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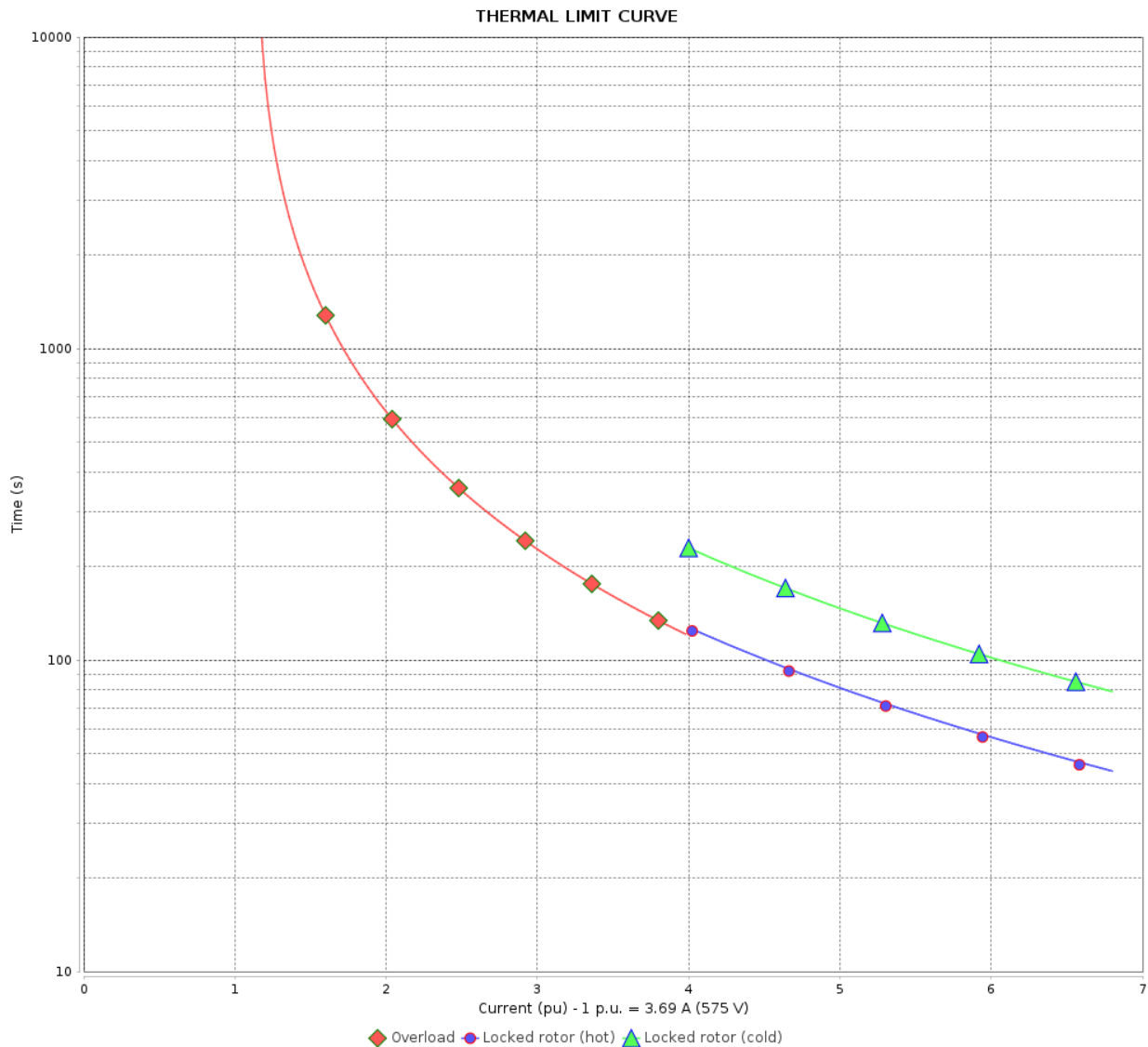
Revision

THERMAL LIMIT CURVE

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VFD OPERATION CURVE

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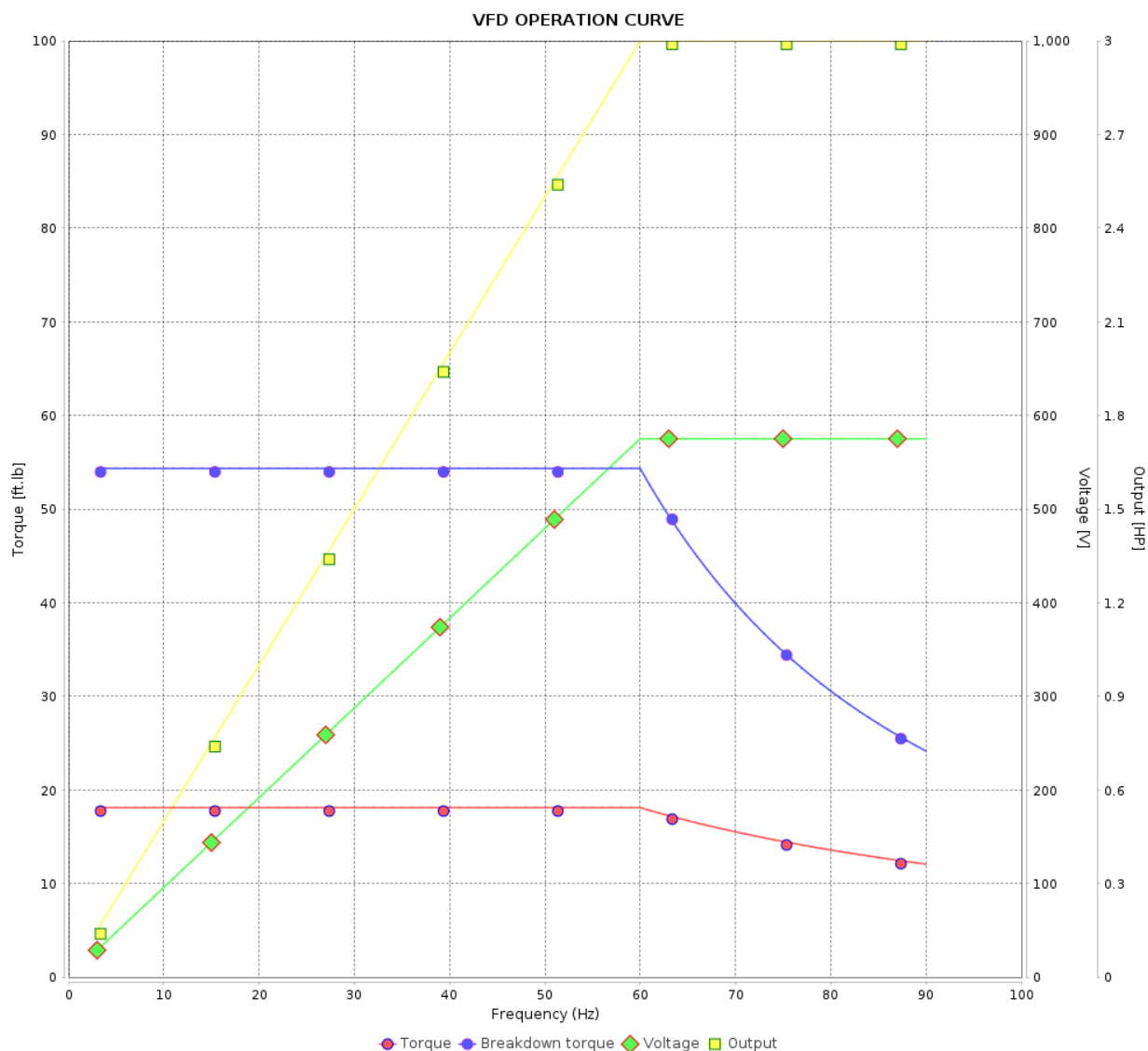


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LRC : 6.8
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Rated speed : 870 rpm

Moment of inertia (J) : 2.11 sq.ft.lb
Duty cycle : Cont.(S1)
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