

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : Multimounting IE3 Three-Phase Product code : 13984018
Catalog # : 00218ET3WAL100LFF-W2

Frame : 100L	Cooling method : IC411 - TEFC
Insulation class : F	Mounting : B35L(E)
Duty cycle : S1	Rotation ¹ : Both (CW and CCW)
Ambient temperature : -20°C to +40°C	Starting method : Direct On Line
Altitude : 1000 m.a.s.l.	Approx. weight ³ : 69.1 lb
Protection degree : IP55	Moment of inertia (J) : 0.2136 sq.ft.lb
Design : N	

Output [HP]	3	3	3
Poles	4	4	4
Frequency [Hz]	50	50	60
Rated voltage [V]	220/380	240/415	460
Rated current [A]	8.43/4.88	8.42/4.87	4.11
L. R. Amperes [A]	62.4/36.1	70.7/40.9	37.0
LRC [A]	7.4	8.4	9.0
No load current [A]	3.80/2.20	4.32/2.50	2.20
Rated speed [RPM]	1430	1445	1750
Slip [%]	4.67	3.67	2.78
Rated torque [ft.lb]	11.0	10.9	9.00
Locked rotor torque [%]	280	380	380
Breakdown torque [%]	300	370	370
Service factor	1.00	1.00	1.25
Temperature rise	80 K	80 K	80 K
Locked rotor time	32s (cold) 18s (hot)	32s (cold) 18s (hot)	36s (cold) 20s (hot)
Noise level ²	53.0 dB(A)	53.0 dB(A)	54.0 dB(A)
Efficiency (%)	25%		
	50%	87.2	86.6
	75%	87.1	88.2
	100%	86.7	89.5
Power Factor	25%		
	50%	0.57	0.54
	75%	0.70	0.67
	100%	0.79	0.75

	<u>Drive end</u>	<u>Non drive end</u>	Foundation loads
Bearing type :	6206 ZZ	6205 ZZ	Max. traction : 215 lb
Sealing :	V'Ring	V'Ring	Max. compression : 284 lb
Lubrication interval :	-	-	
Lubricant amount :	-	-	
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.

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TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



Customer :

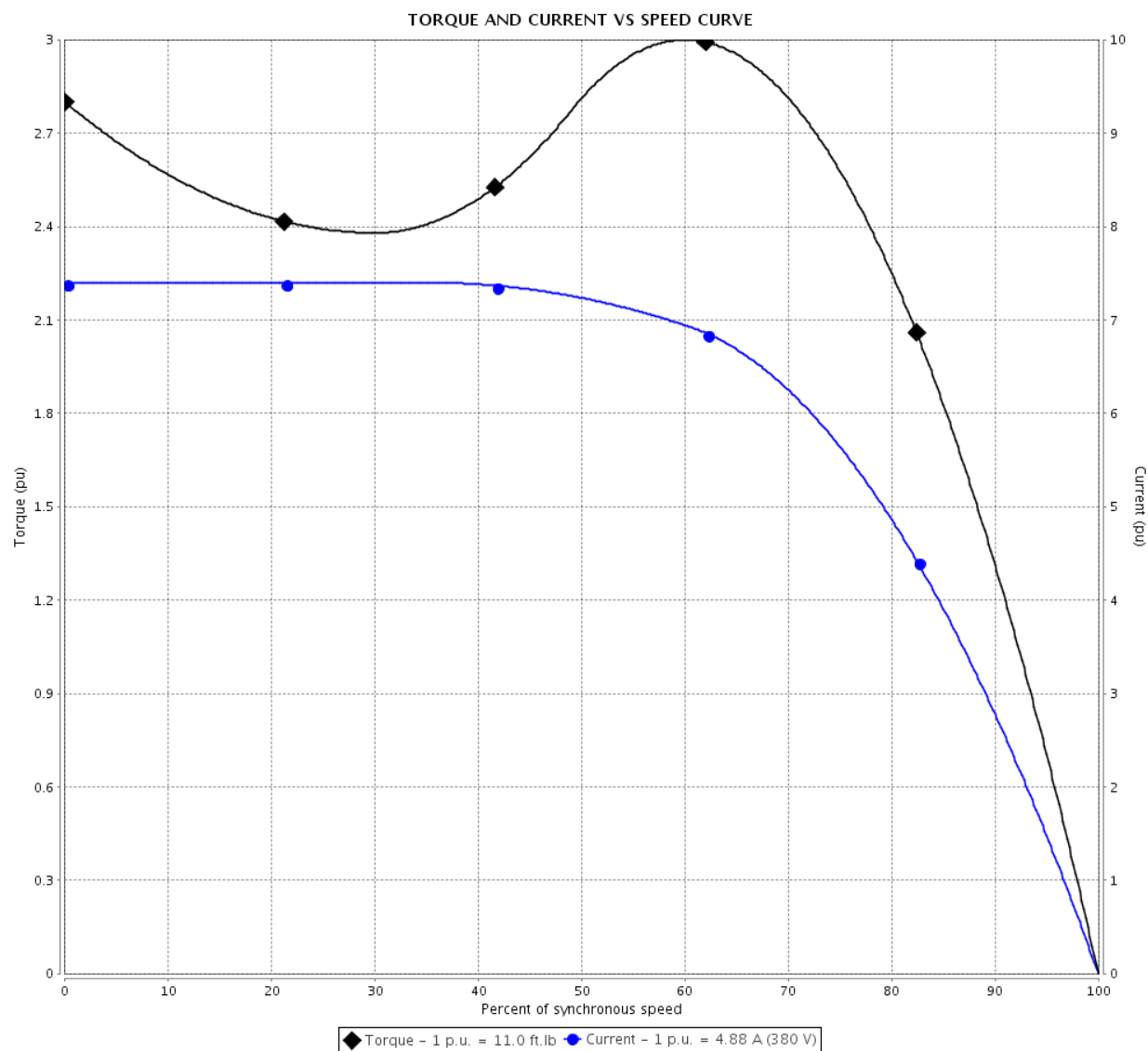
Product line : Multimounting IE3 Three-Phase

Product code :

13984018

Catalog # :

00218ET3WAL100LFF-W2



Performance : 220/380 V 50 Hz 4P

Rated current : 8.43/4.88 A
 LRC : 7.4
 Rated torque : 11.0 ft.lb
 Locked rotor torque : 280 %
 Breakdown torque : 300 %
 Rated speed : 1430 rpm

Moment of inertia (J) : 0.2136 sq.ft.lb
 Duty cycle : S1
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : N

Locked rotor time : 32s (cold) 18s (hot)

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TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



Customer :

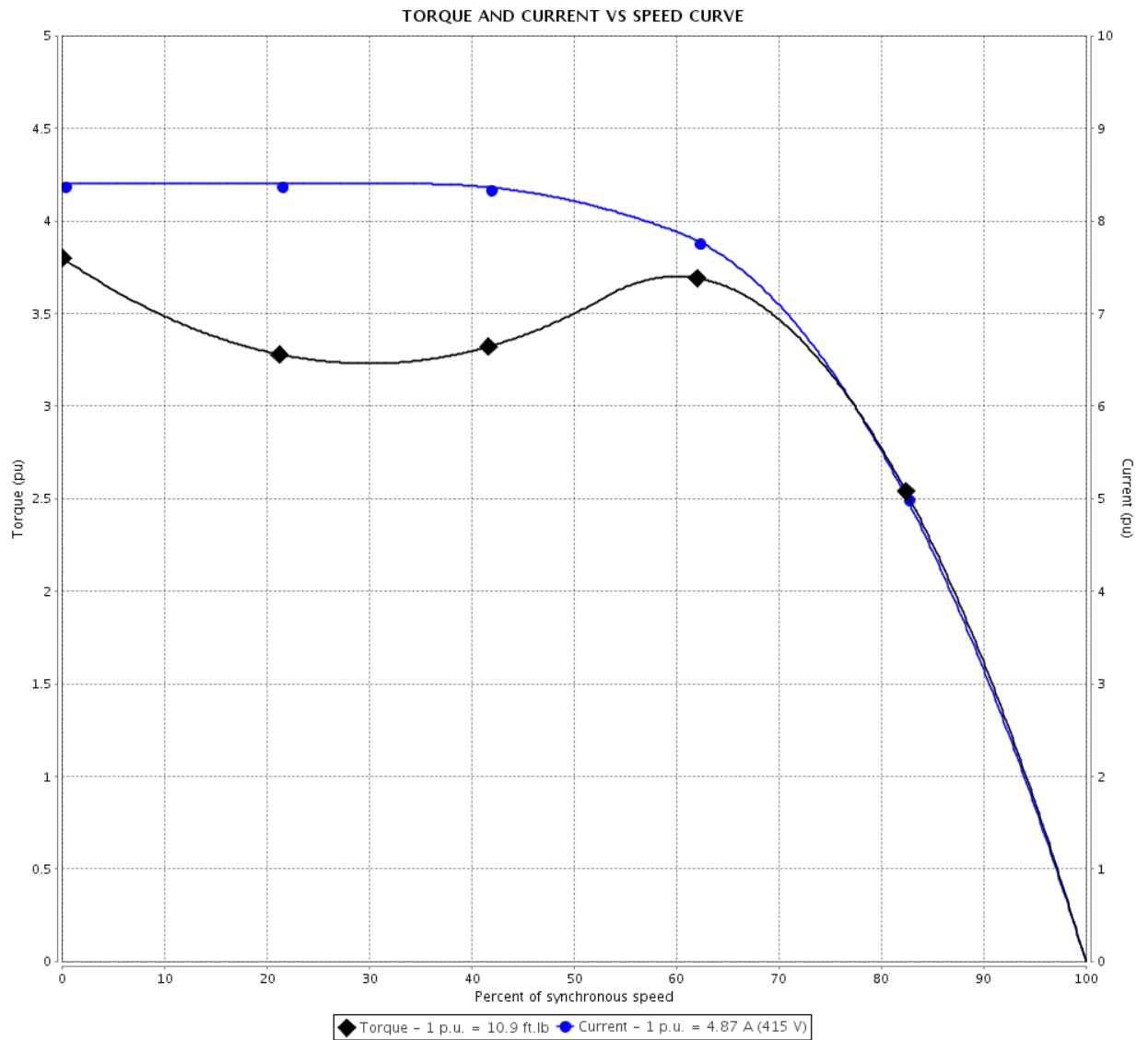
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Performance : 240/415 V 50 Hz 4P

Rated current : 8.42/4.87 A
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 Rated torque : 10.9 ft.lb
 Locked rotor torque : 380 %
 Breakdown torque : 370 %
 Rated speed : 1445 rpm

Moment of inertia (J) : 0.2136 sq.ft.lb
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 Service factor : 1.00
 Temperature rise : 80 K
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TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



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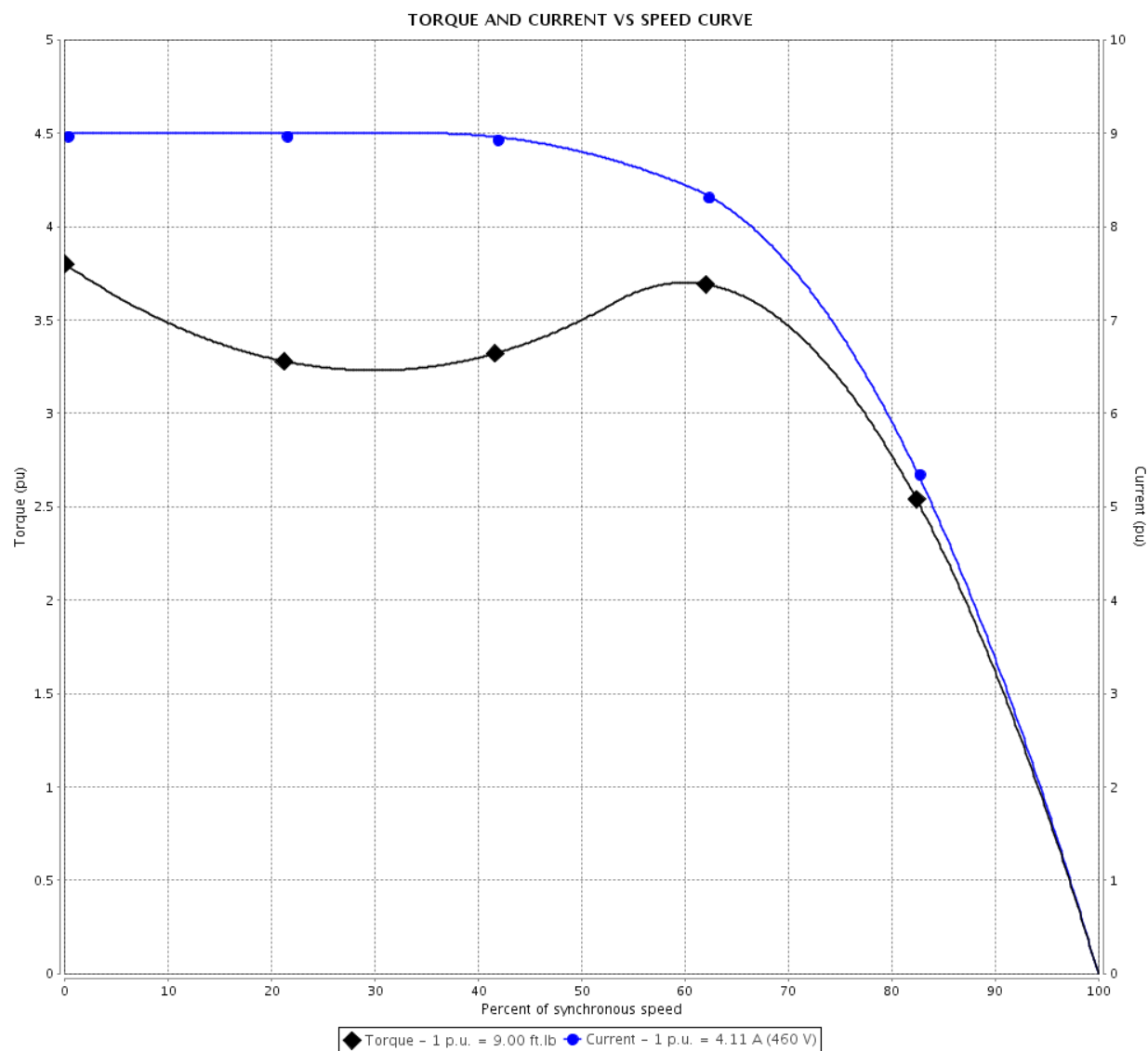
Product line : Multimounting IE3 Three-Phase

Product code :

13984018

Catalog # :

00218ET3WAL100LFF-W2



Performance : 460 V 60 Hz 4P

Rated current	: 4.11 A	Moment of inertia (J)	: 0.2136 sq.ft.lb
LRC	: 9.0	Duty cycle	: S1
Rated torque	: 9.00 ft.lb	Insulation class	: F
Locked rotor torque	: 380 %	Service factor	: 1.25
Breakdown torque	: 370 %	Temperature rise	: 80 K
Rated speed	: 1750 rpm	Design	: N

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

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LOAD PERFORMANCE CURVE

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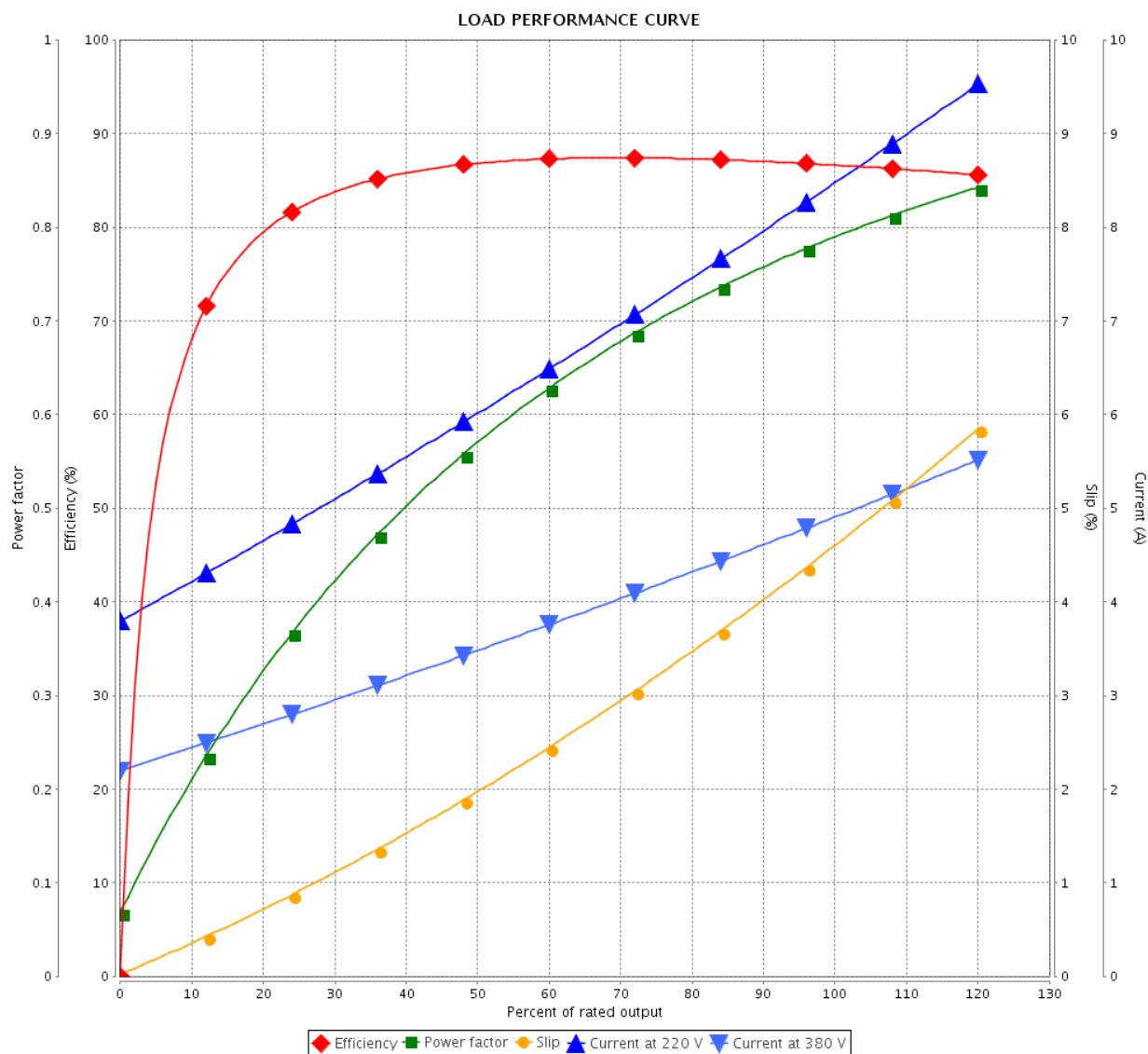
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Performance : 220/380 V 50 Hz 4P

Rated current : 8.43/4.88 A

LRC : 7.4

Rated torque : 11.0 ft.lb

Locked rotor torque : 280 %

Breakdown torque : 300 %

Rated speed : 1430 rpm

Moment of inertia (J) : 0.2136 sq.ft.lb

Duty cycle : S1

Insulation class : F

Service factor : 1.00

Temperature rise : 80 K

Design : N

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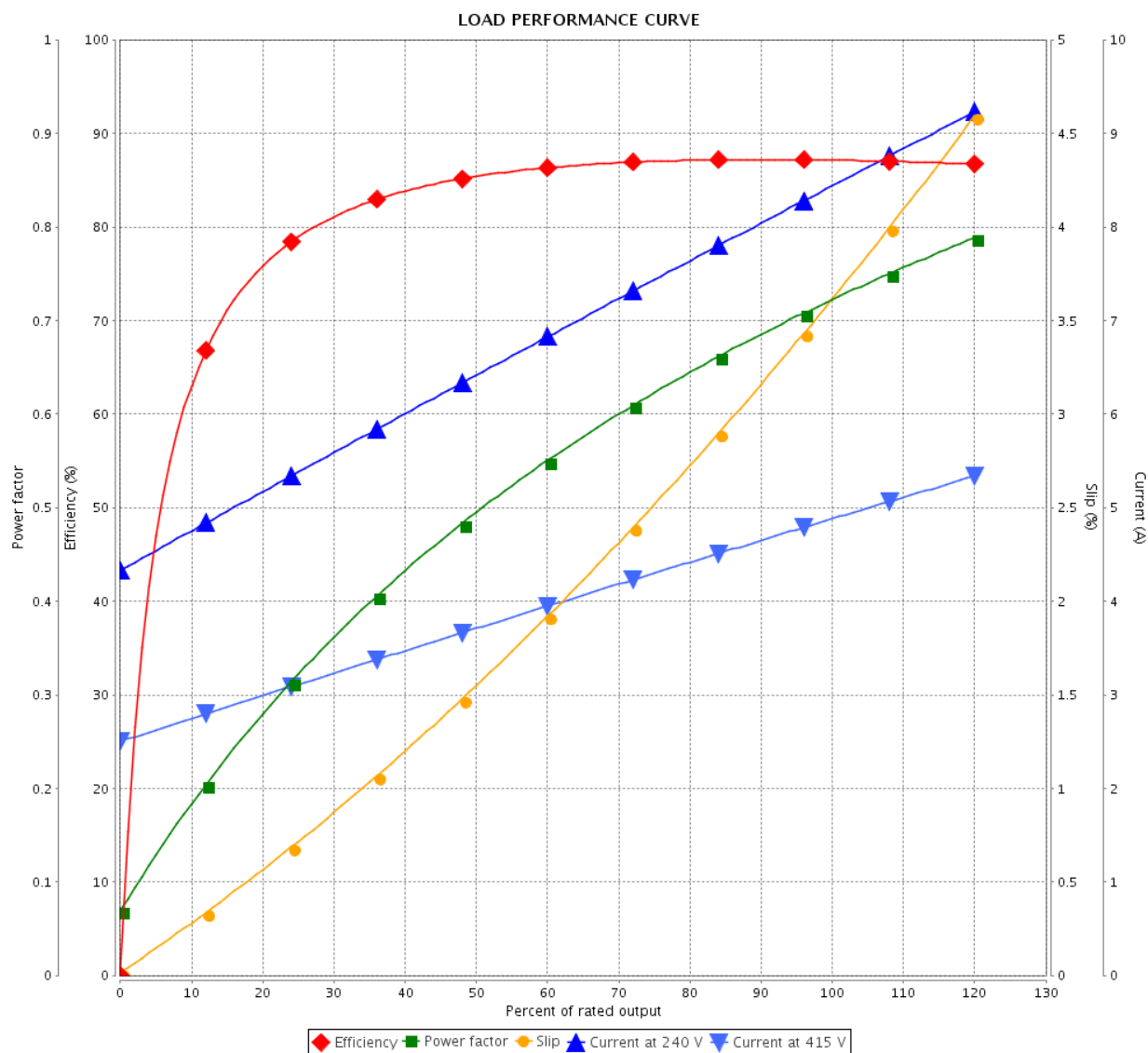
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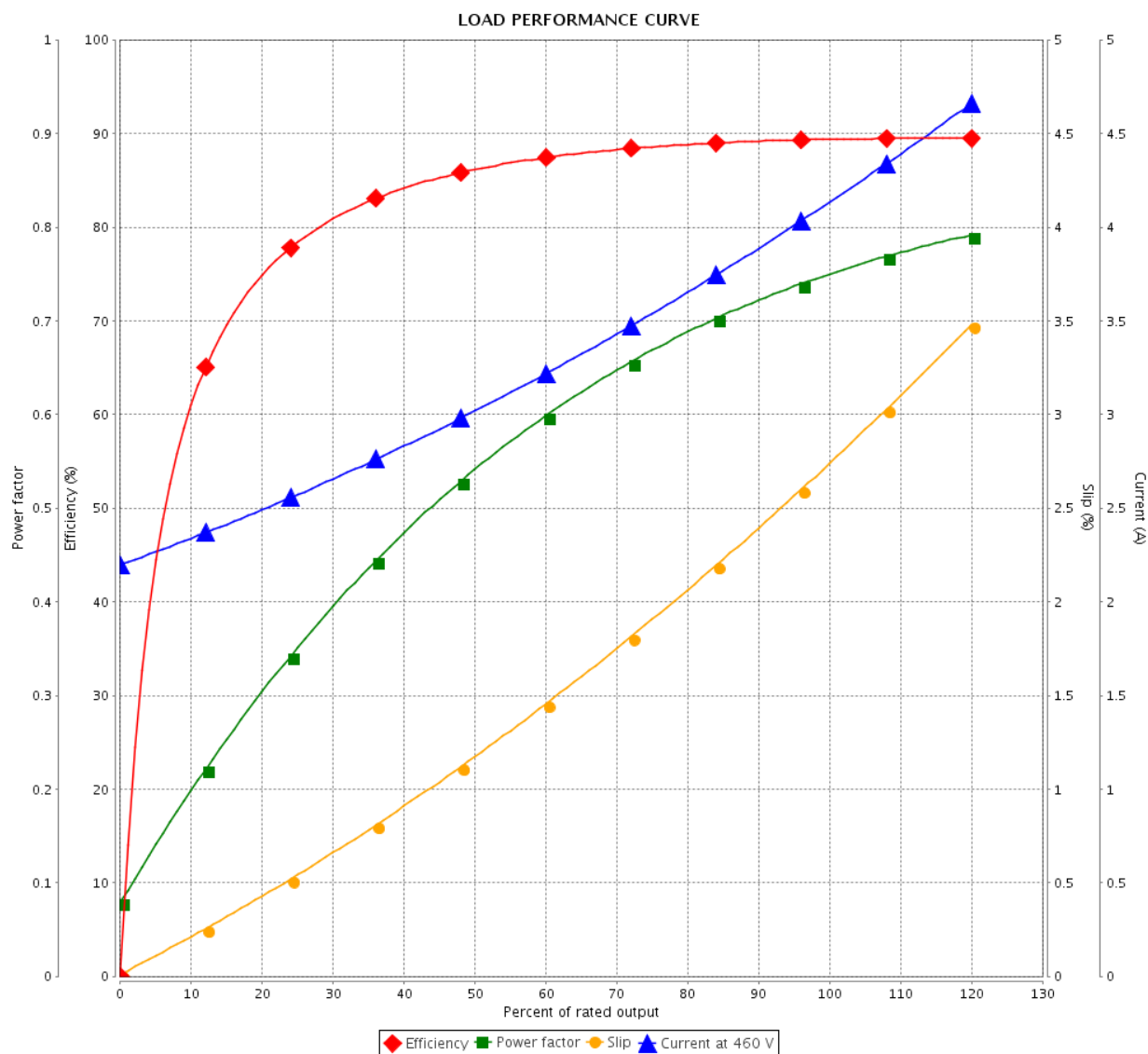
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THERMAL LIMIT CURVE

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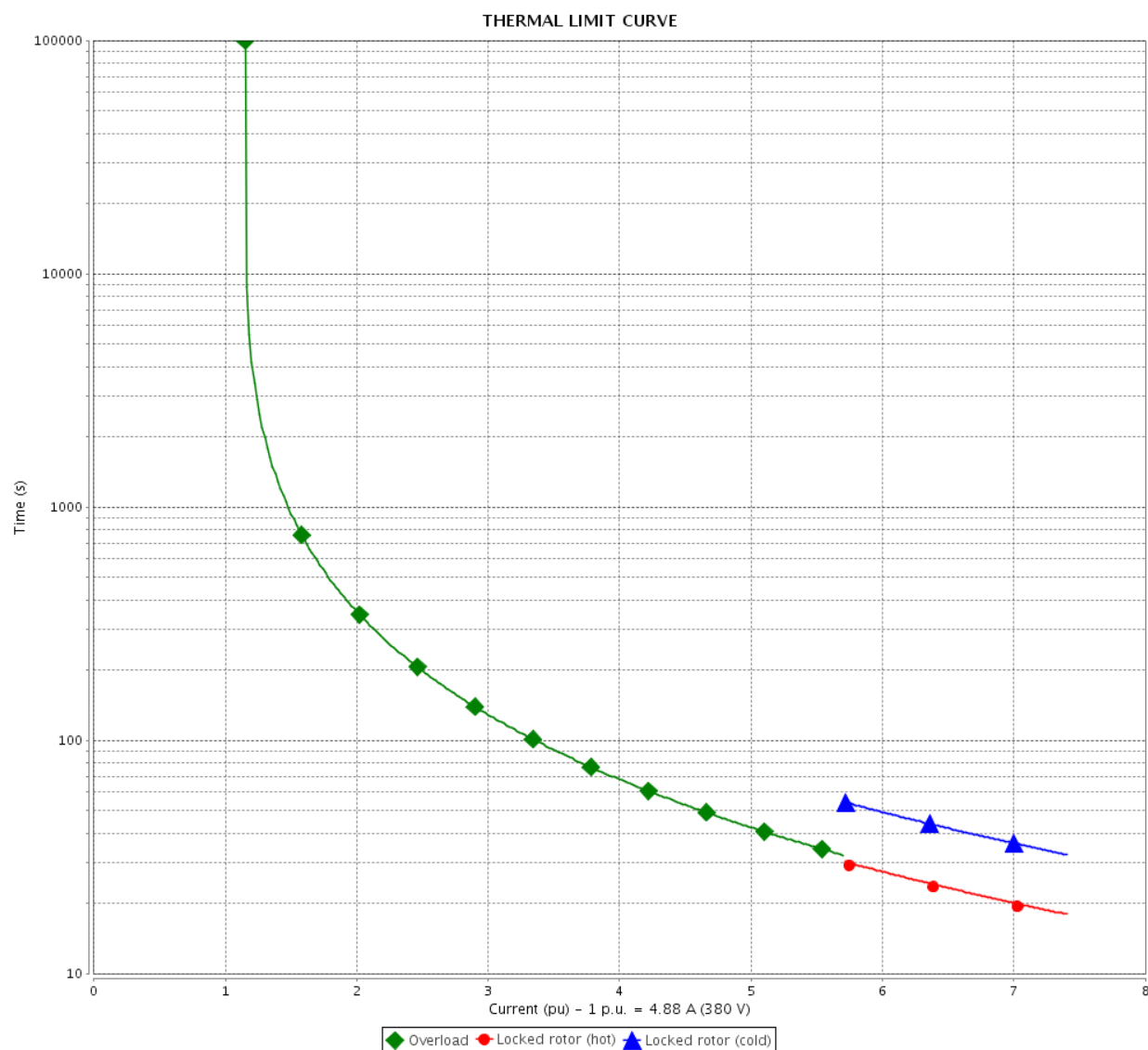
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Performance : 220/380 V 50 Hz 4P

Rated current : 8.43/4.88 A

LRC : 7.4

Rated torque : 11.0 ft.lb

Locked rotor torque : 280 %

Breakdown torque : 300 %

Rated speed : 1430 rpm

Moment of inertia (J) : 0.2136 sq.ft.lb

Duty cycle : S1

Insulation class : F

Service factor : 1.00

Temperature rise : 80 K

Design : N

Heating constant

Cooling constant

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THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



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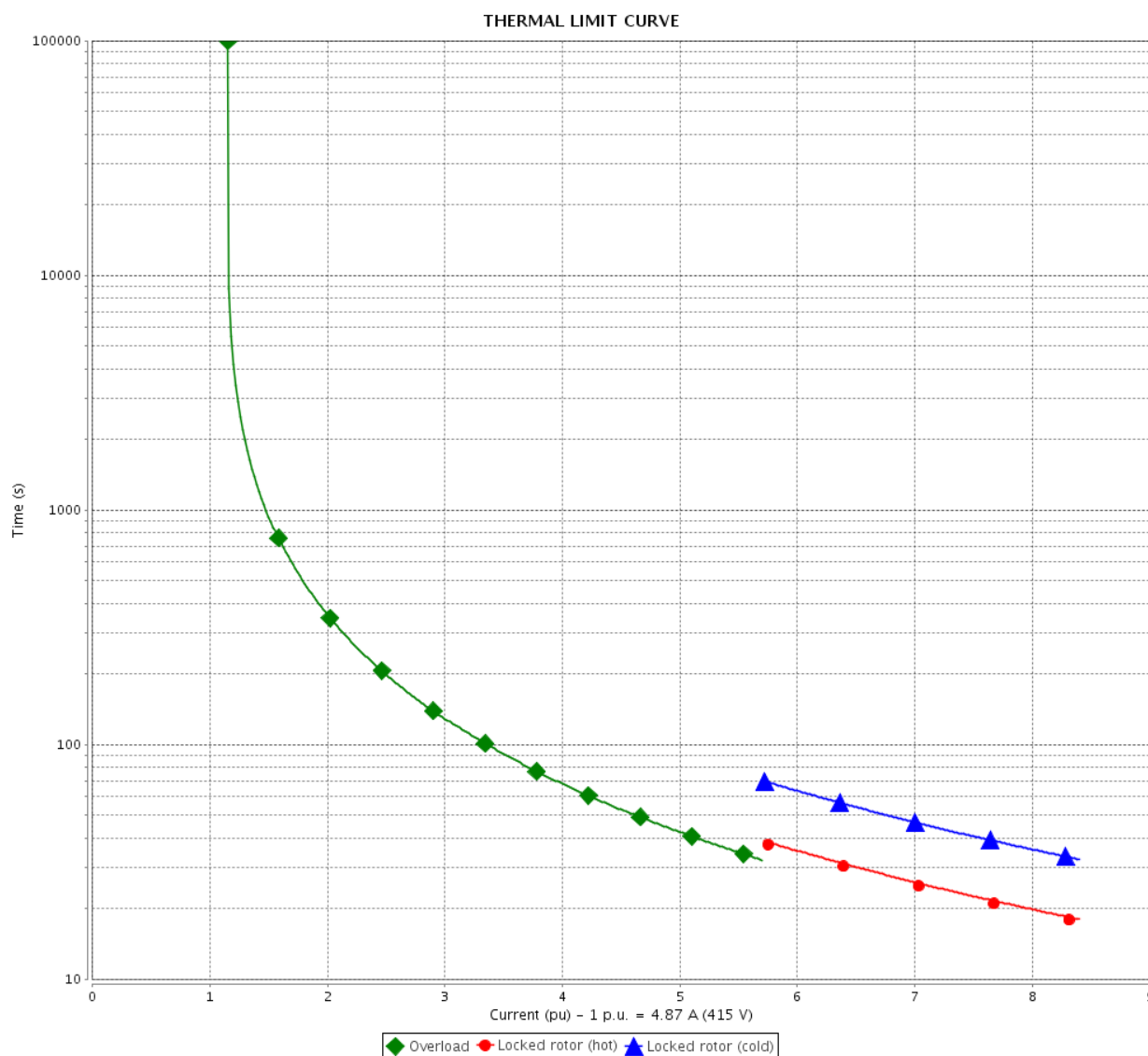
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Cooling constant

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THERMAL LIMIT CURVE

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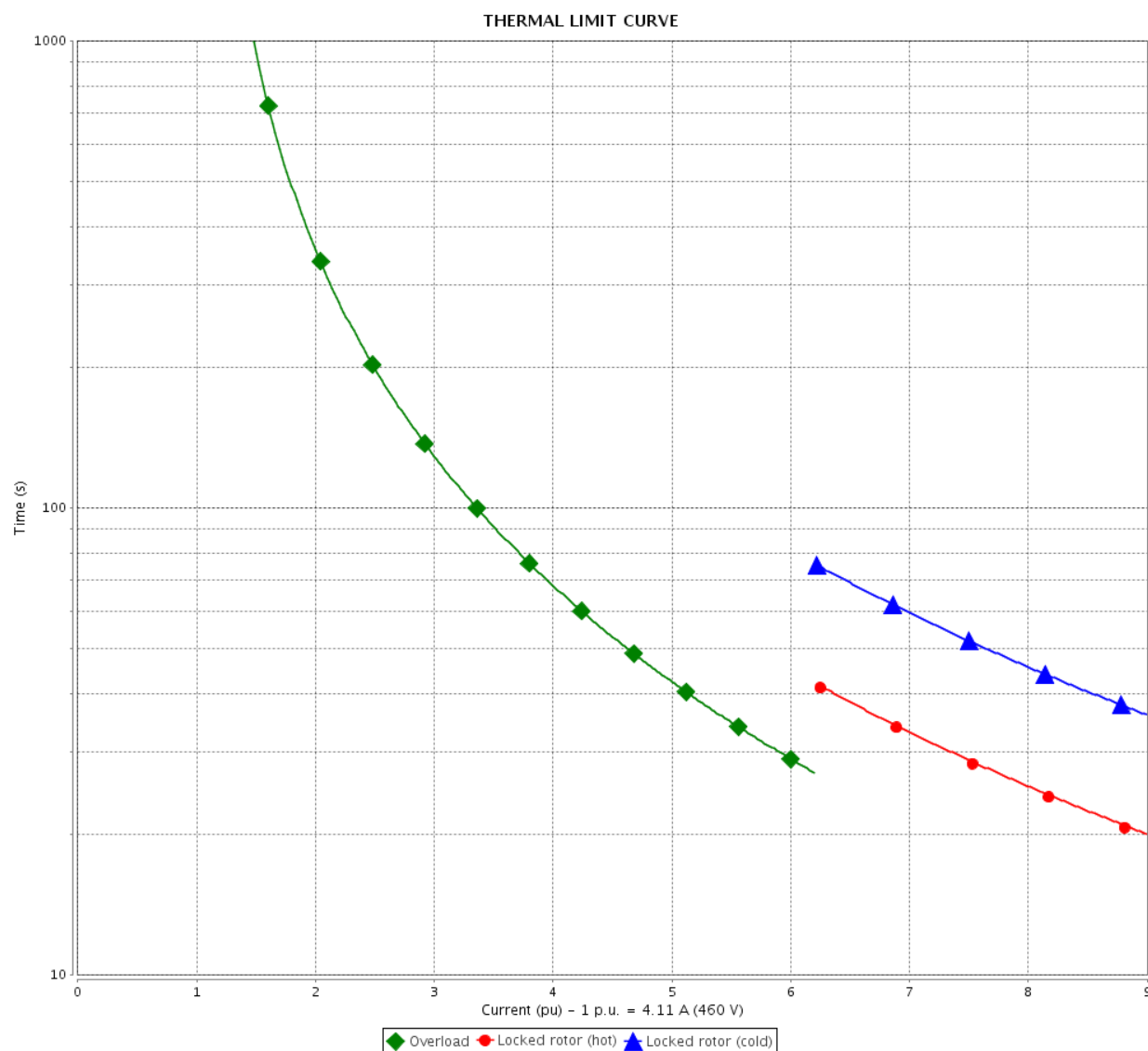
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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



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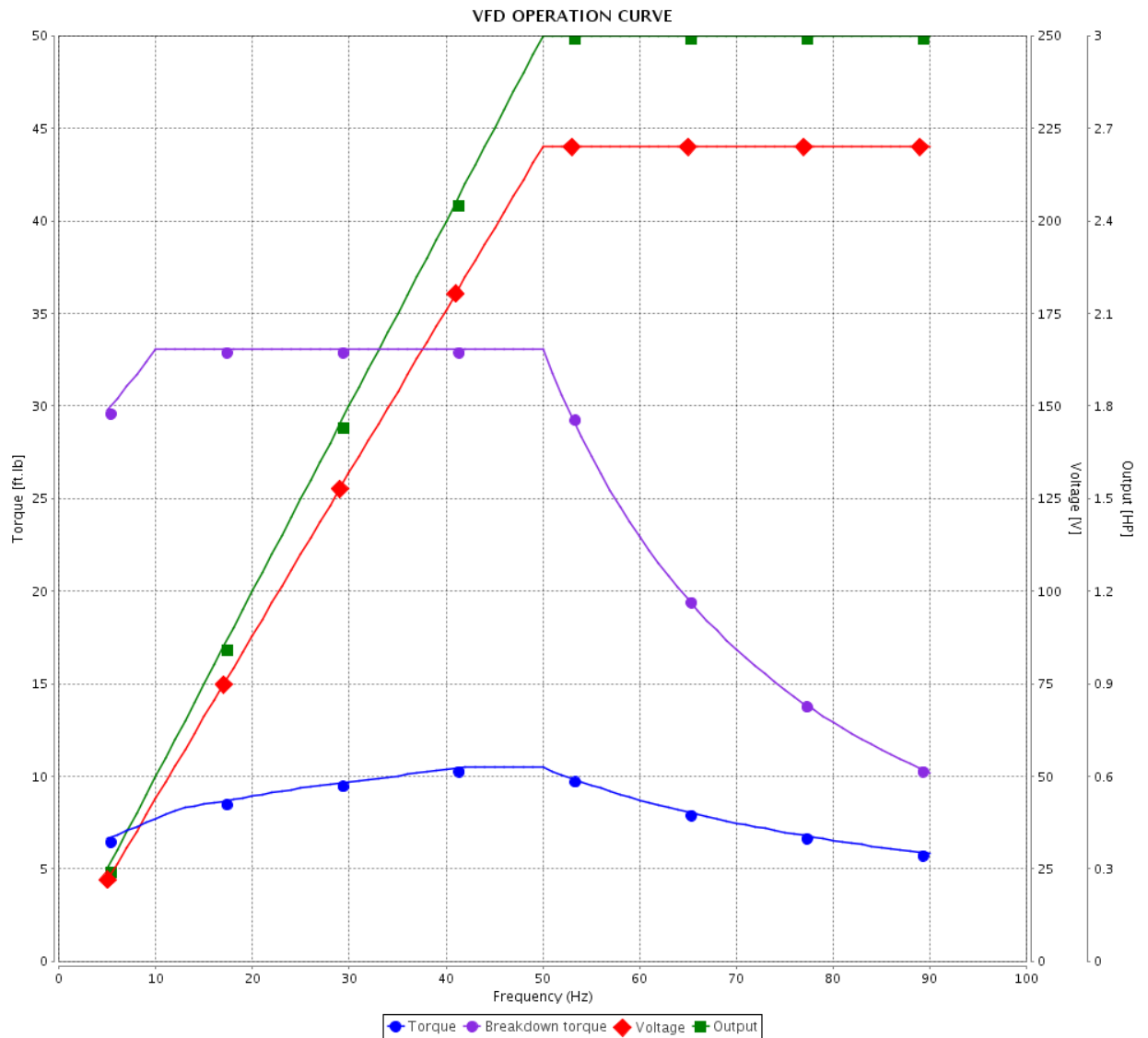
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VFD OPERATION CURVE

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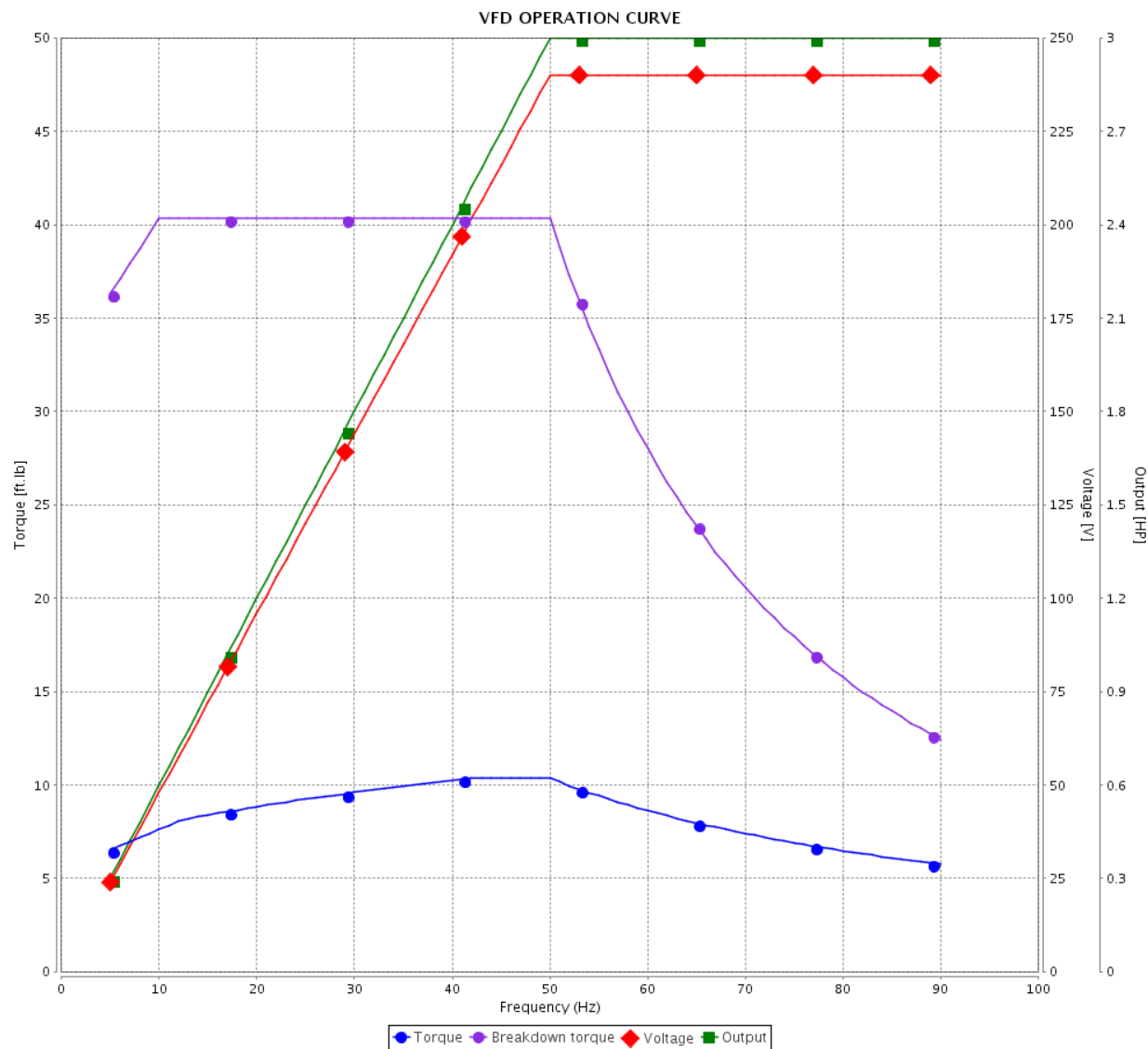
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Insulation class : F

Service factor : 1.00

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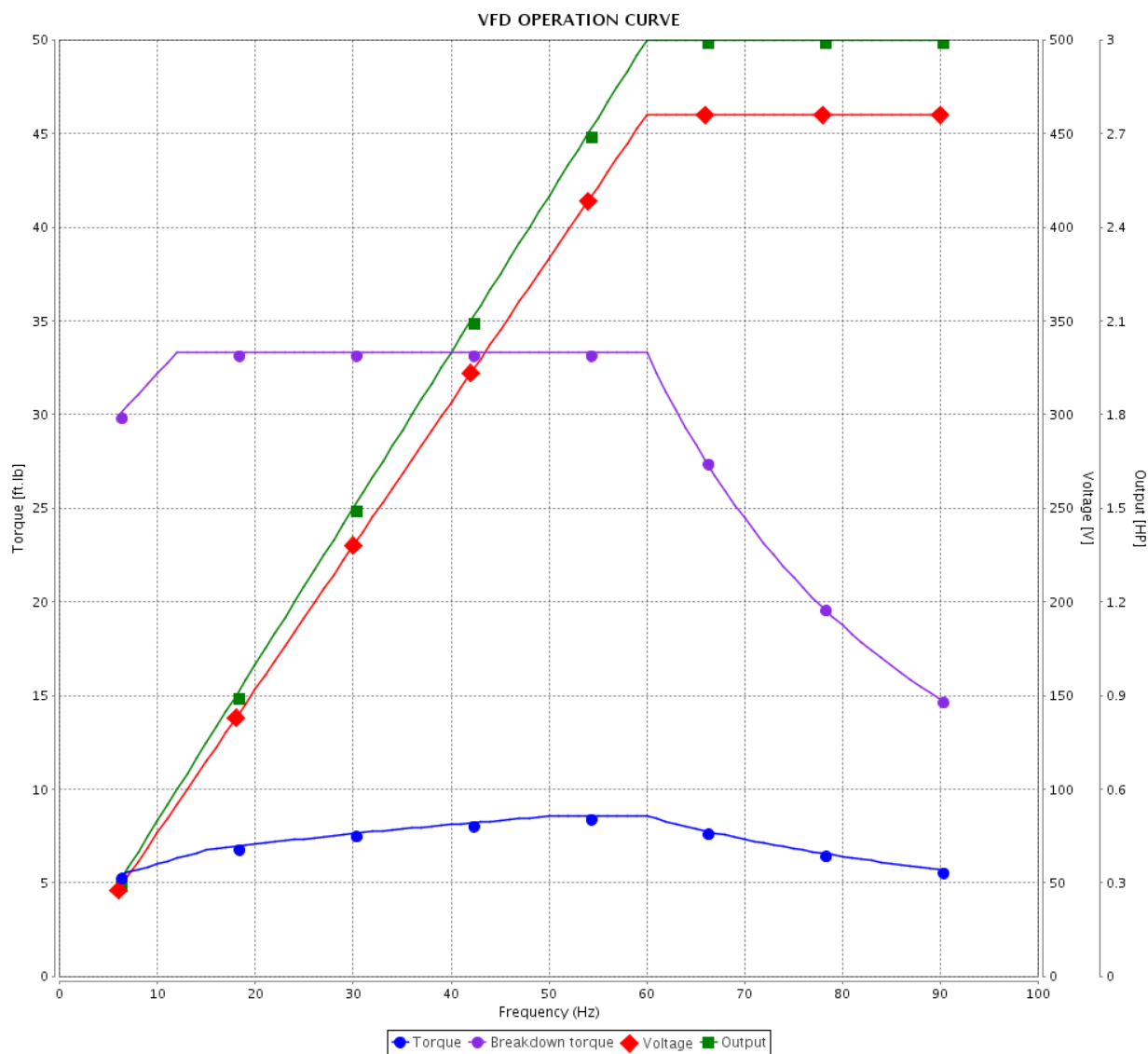
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