

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :					
Product line	: NEMA Premium Efficiency Three-Phase	Product code :	11408341		
		Catalog # :	30009ET3G449T-W22		
Frame	: L447/9T	Cooling method	: IC411 - TEFC		
Insulation class	: F	Mounting	: F-1		
Duty cycle	: Cont.(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 ²	: 3666 lb		
Protection degree	: IP55	Moment of inertia (J)	: 285 sq.ft.lb		
Output [HP]	300	250	250	250	
Poles	8	8	8	8	
Frequency [Hz]	60	50	50	50	
Rated voltage [V]	460	380	400	415	
Rated current [A]	371	375	365	366	
L. R. Amperes [A]	2337	2213	2373	2525	
LRC [A]	6.3x(Code G)	5.9x(Code G)	6.5x(Code H)	6.9x(Code J)	
No load current [A]	170	165	182	198	
Rated speed [RPM]	890	740	740	740	
Slip [%]	1.11	1.33	1.33	1.33	
Rated torque [ft.lb]	1770	1770	1770	1770	
Locked rotor torque [%]	220	200	229	260	
Breakdown torque [%]	240	229	250	270	
Service factor	1.00	1.00	1.00	1.00	
Temperature rise	105 K	105 K	105 K	105 K	
Locked rotor time	28s (cold) 16s (hot)	36s (cold) 20s (hot)	34s (cold) 19s (hot)	30s (cold) 17s (hot)	
Noise level ²	64.0 dB(A)	63.0 dB(A)	63.0 dB(A)	63.0 dB(A)	
Efficiency (%)	25%	95.3	95.2	94.9	94.0
	50%	95.4	95.0	95.0	94.5
	75%	95.4	95.4	95.0	94.5
	100%	95.4	95.0	95.0	95.0
Power Factor	25%	0.38	0.39	0.35	0.32
	50%	0.62	0.63	0.59	0.55
	75%	0.73	0.74	0.71	0.68
	100%	0.78	0.79	0.77	0.74
Bearing type	: <u>Drive end</u> 6322 C3 <u>Non drive end</u> 6319 C3	Foundation loads			
Sealing	: WSeal WSeal	Max. traction	: 10937 lb		
Lubrication interval	: 14000 h 17000 h	Max. compression	: 14603 lb		
Lubricant amount	: 60 g 45 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.		
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TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



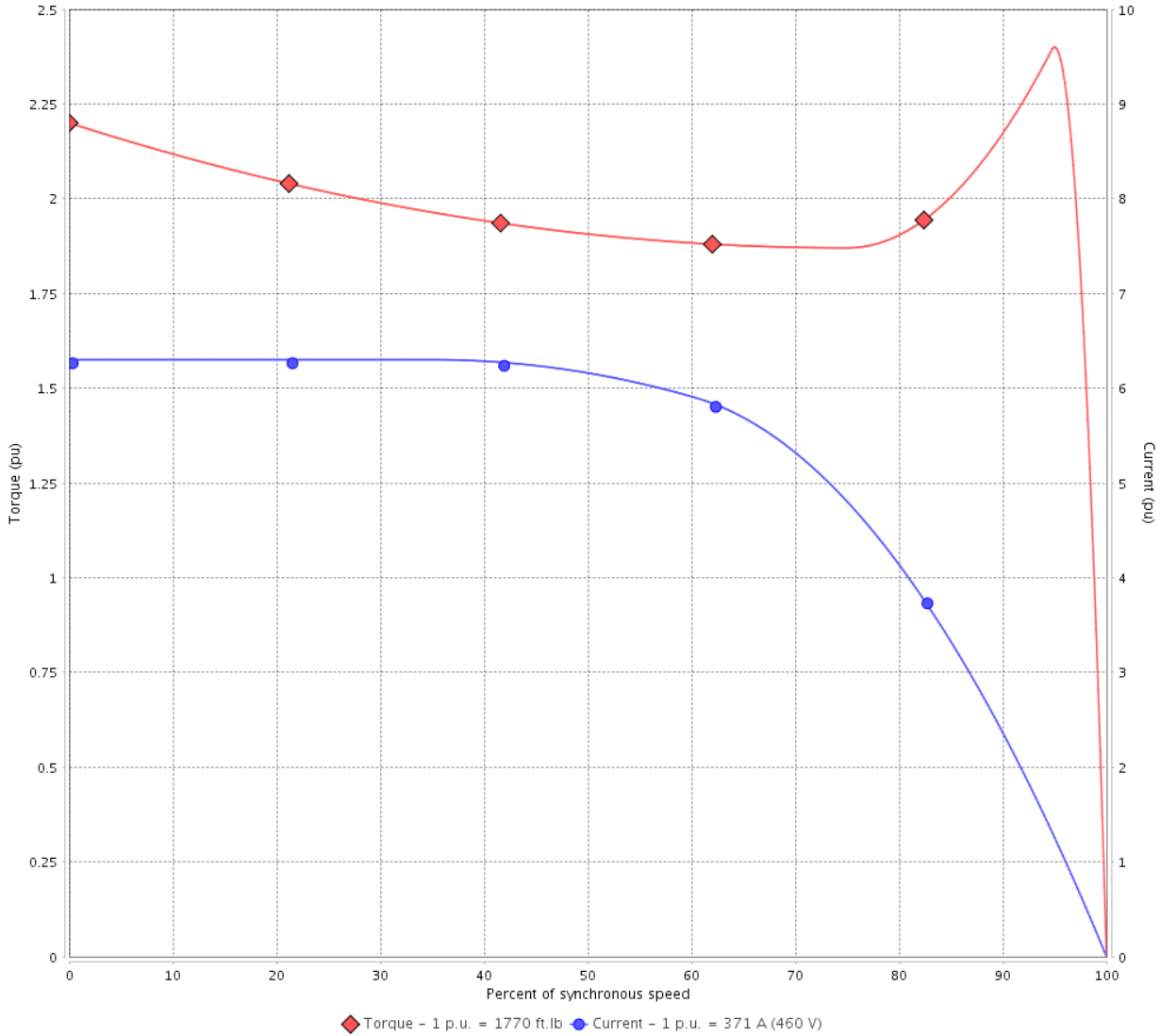
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 11408341

Catalog # : 30009ET3G449T-W22

TORQUE AND CURRENT VS SPEED CURVE



Performance : 460 V 60 Hz 8P

Rated current	: 371 A	Moment of inertia (J)	: 285 sq.ft.lb
LRC	: 6.3	Duty cycle	: Cont.(S1)
Rated torque	: 1770 ft.lb	Insulation class	: F
Locked rotor torque	: 220 %	Service factor	: 1.00
Breakdown torque	: 240 %	Temperature rise	: 105 K
Rated speed	: 890 rpm		

Locked rotor time : 28s (cold) 16s (hot)

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TORQUE AND CURRENT VS SPEED CURVE



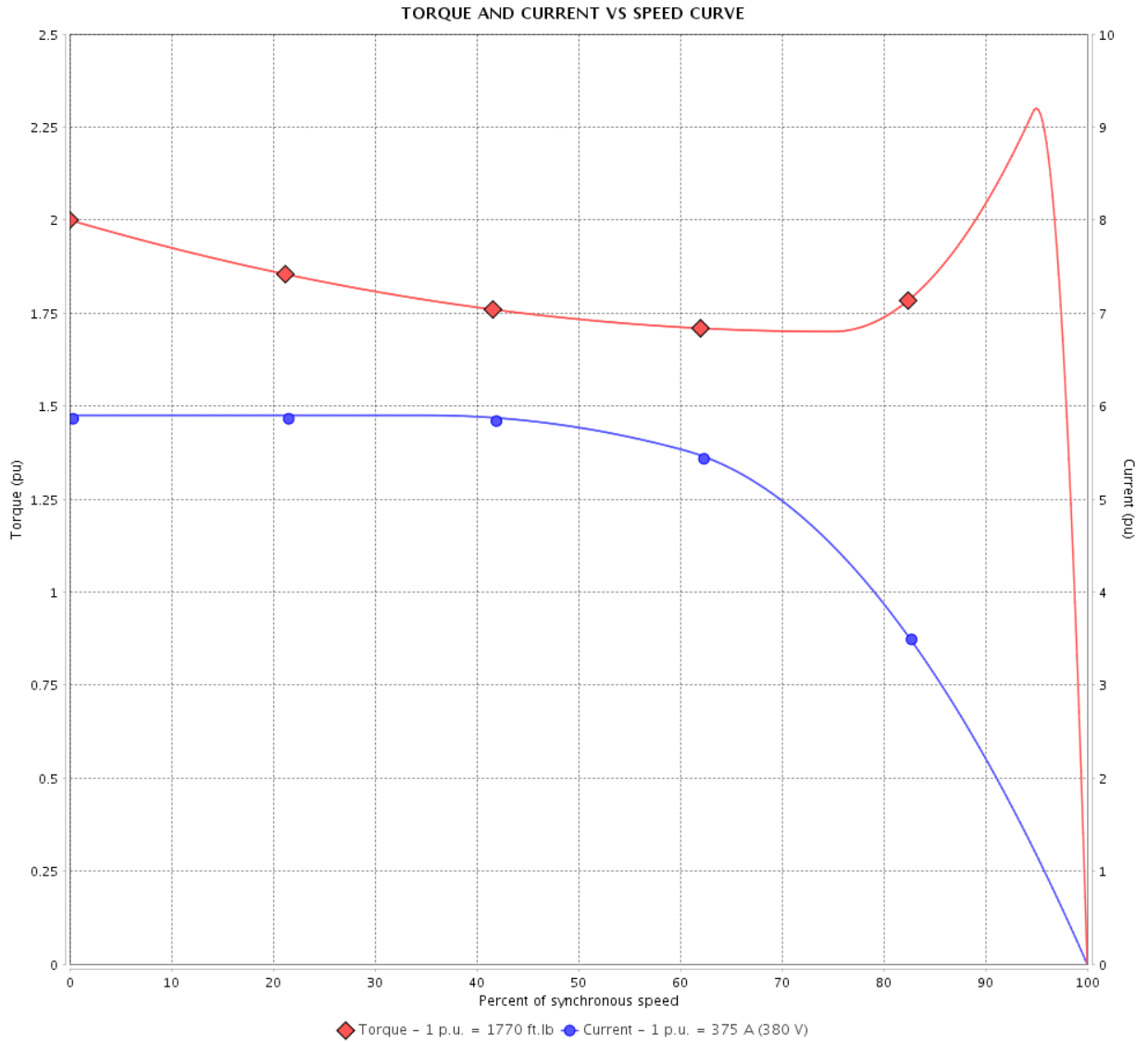
Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 11408341

Catalog # : 30009ET3G449T-W22



Performance : 380 V 50 Hz 8P IE3

Rated current	: 375 A	Moment of inertia (J)	: 285 sq.ft.lb
LRC	: 5.9	Duty cycle	: Cont.(S1)
Rated torque	: 1770 ft.lb	Insulation class	: F
Locked rotor torque	: 200 %	Service factor	: 1.00
Breakdown torque	: 229 %	Temperature rise	: 105 K
Rated speed	: 740 rpm		

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

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TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



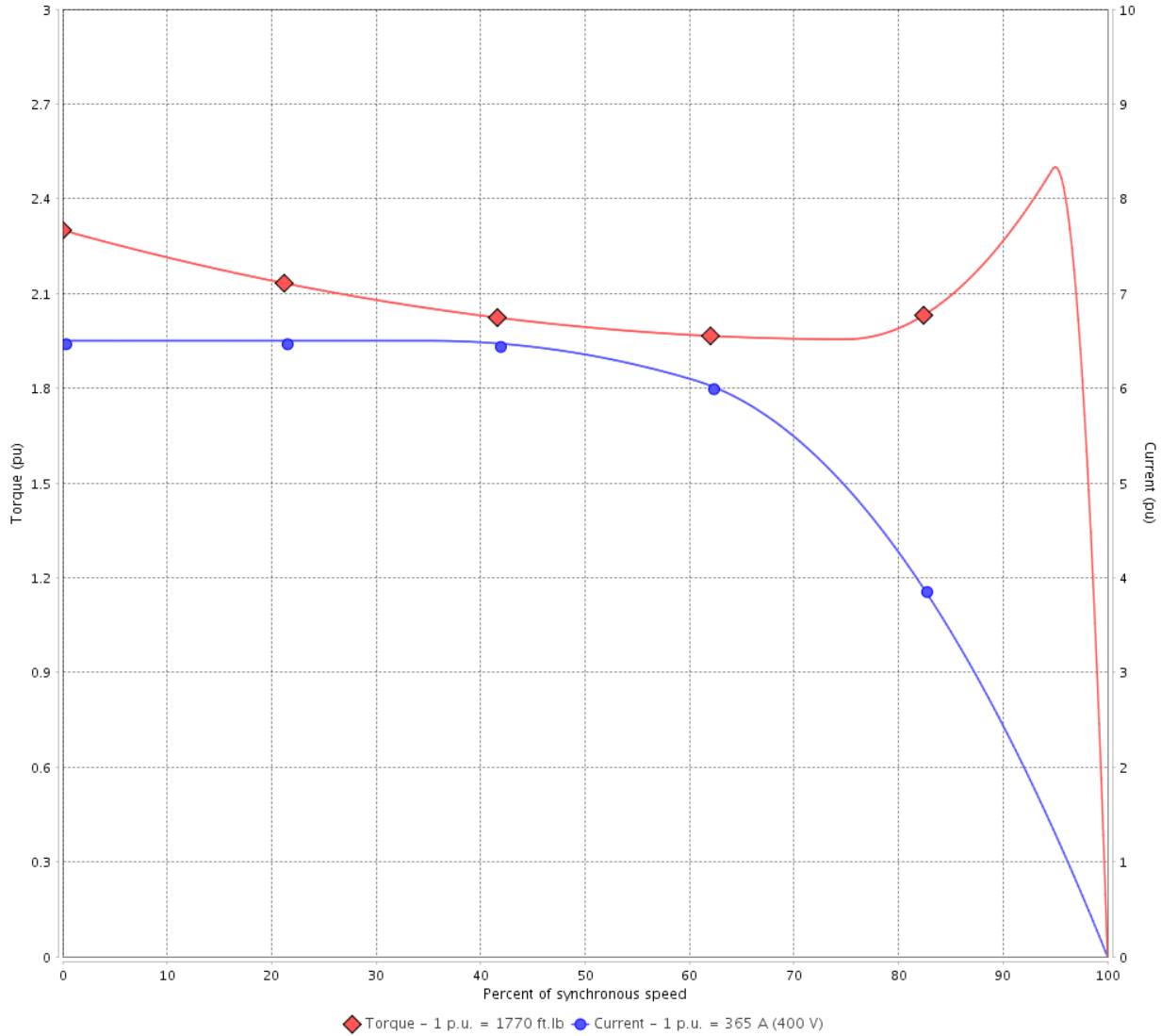
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 11408341

Catalog # : 30009ET3G449T-W22

TORQUE AND CURRENT VS SPEED CURVE



Performance : 400 V 50 Hz 8P IE3

Rated current	: 365 A	Moment of inertia (J)	: 285 sq.ft.lb
LRC	: 6.5	Duty cycle	: Cont.(S1)
Rated torque	: 1770 ft.lb	Insulation class	: F
Locked rotor torque	: 229 %	Service factor	: 1.00
Breakdown torque	: 250 %	Temperature rise	: 105 K
Rated speed	: 740 rpm		

Locked rotor time : 34s (cold) 19s (hot)

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TORQUE AND CURRENT VS SPEED CURVE



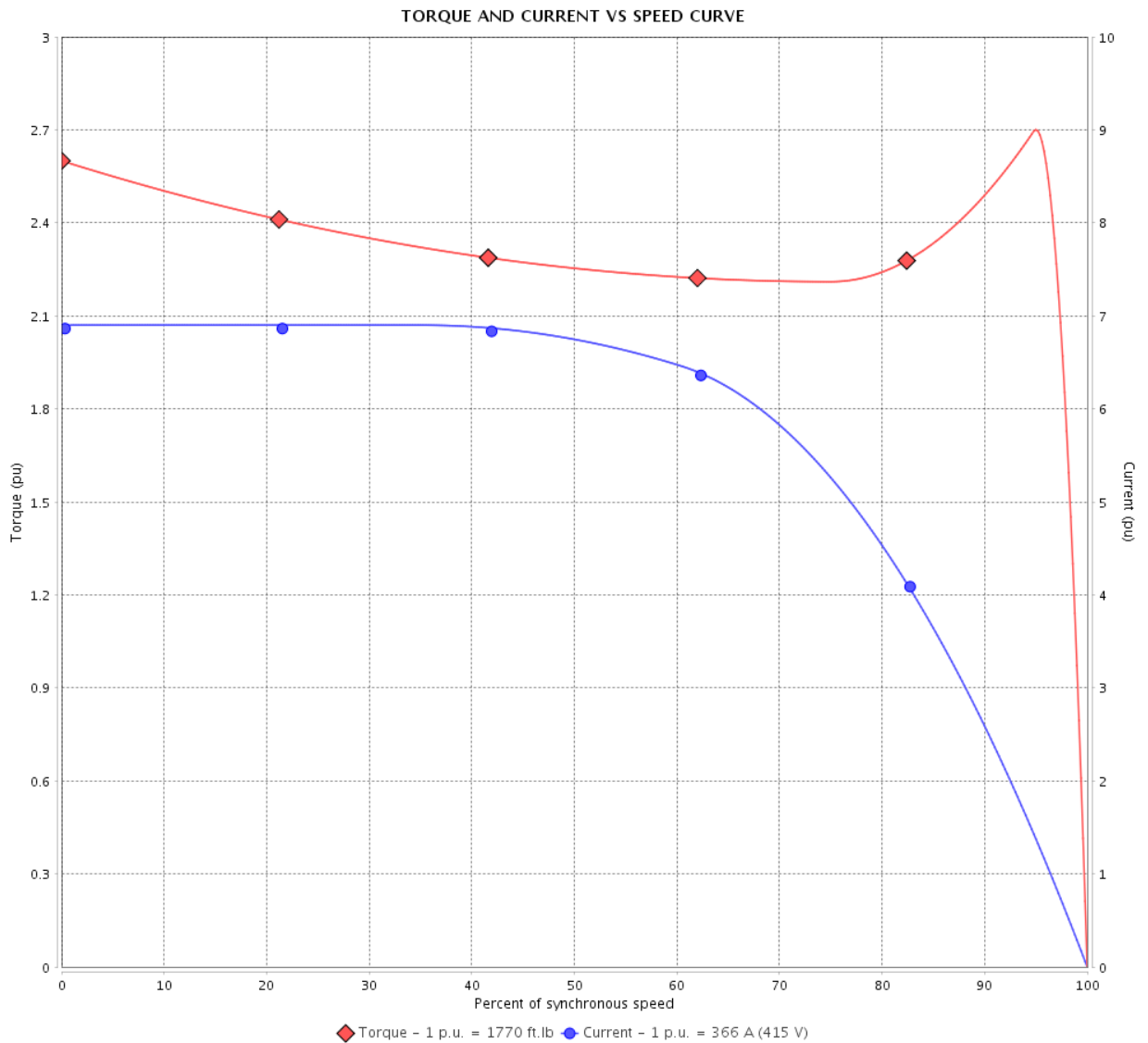
Three Phase Induction Motor - Squirrel Cage

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Performance : 415 V 50 Hz 8P IE3

Rated current : 366 A
 LRC : 6.9
 Rated torque : 1770 ft.lb
 Locked rotor torque : 260 %
 Breakdown torque : 270 %
 Rated speed : 740 rpm

Moment of inertia (J) : 285 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 105 K

Locked rotor time : 30s (cold) 17s (hot)

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LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

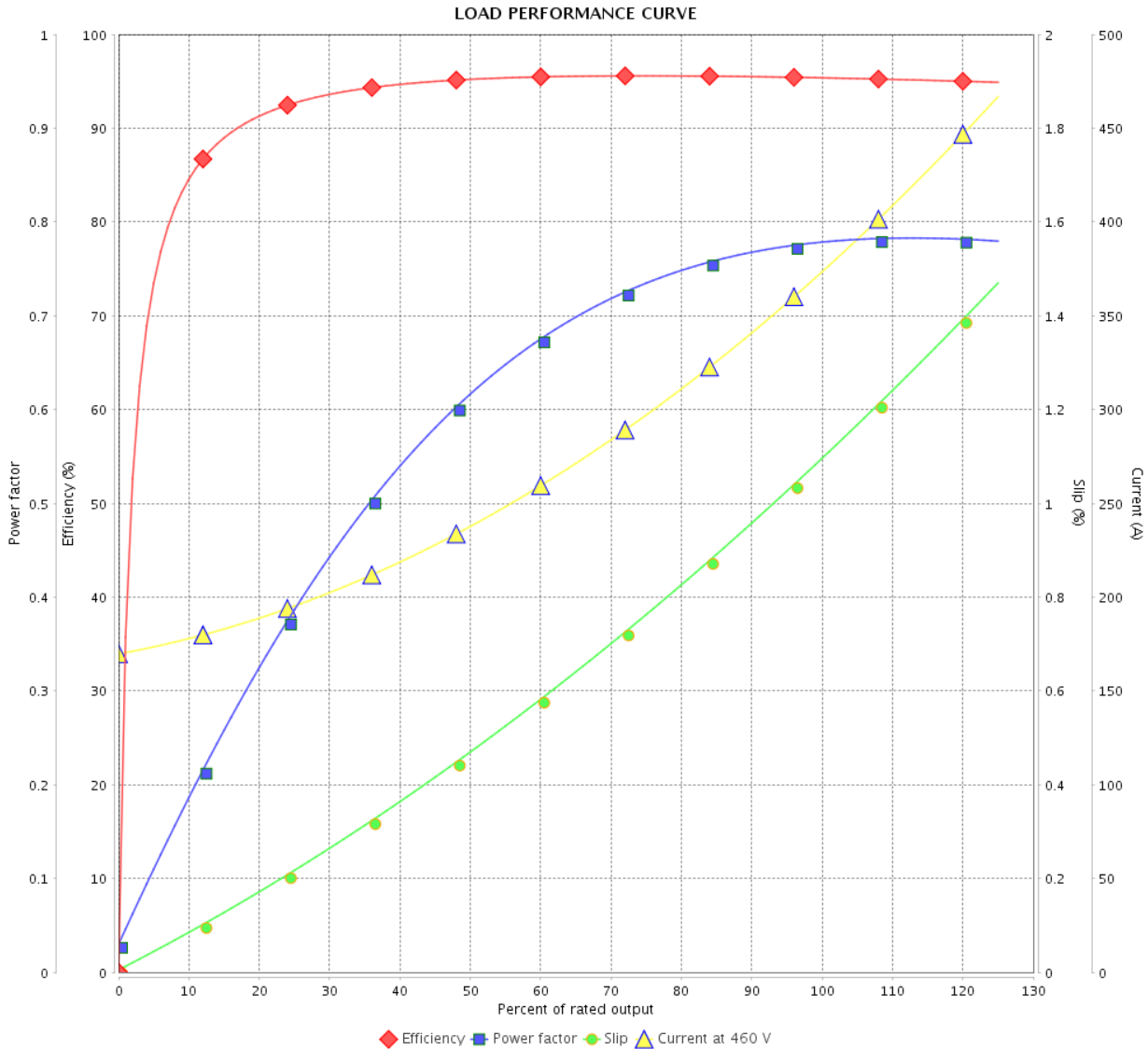


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Three Phase Induction Motor - Squirrel Cage

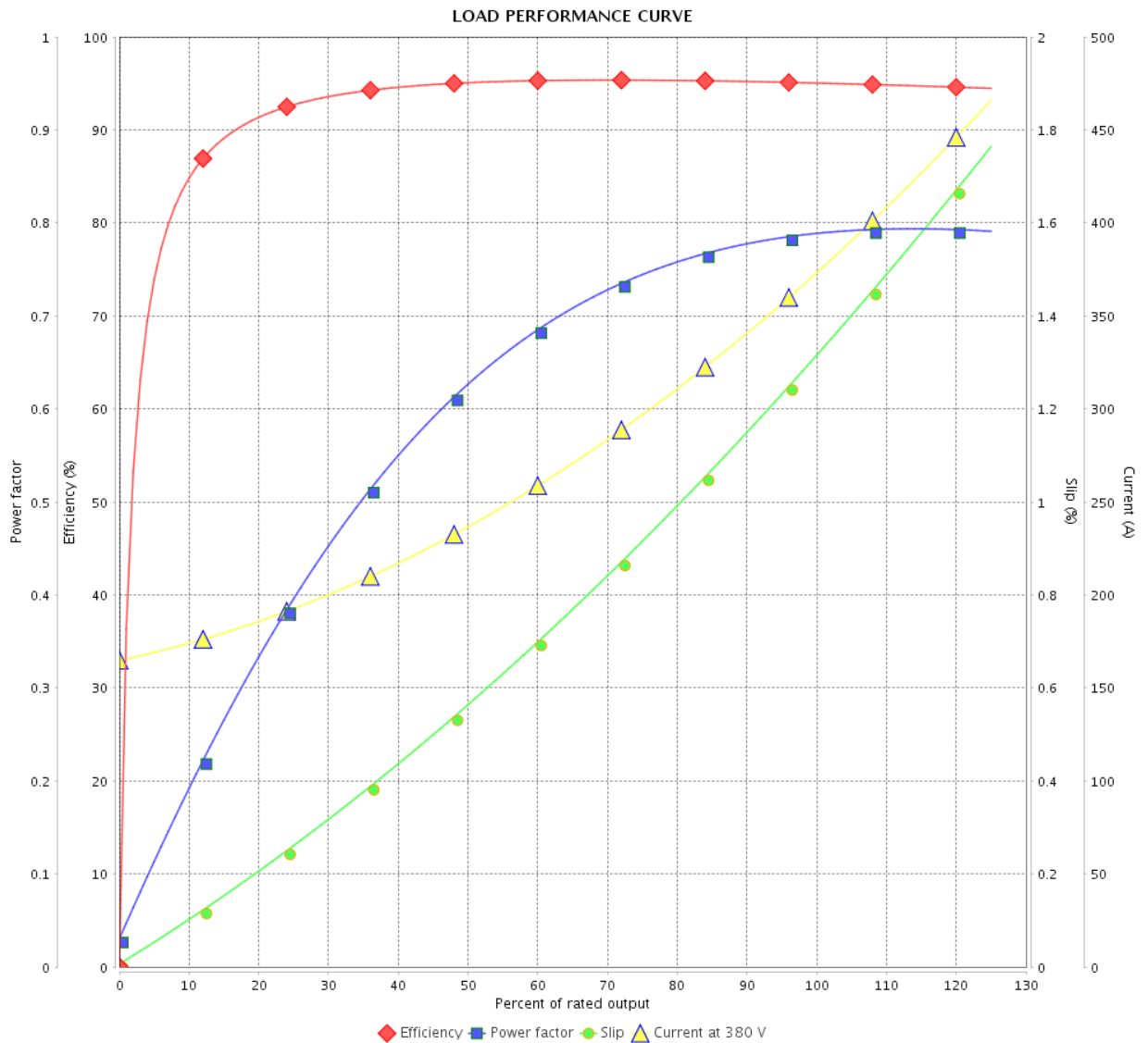


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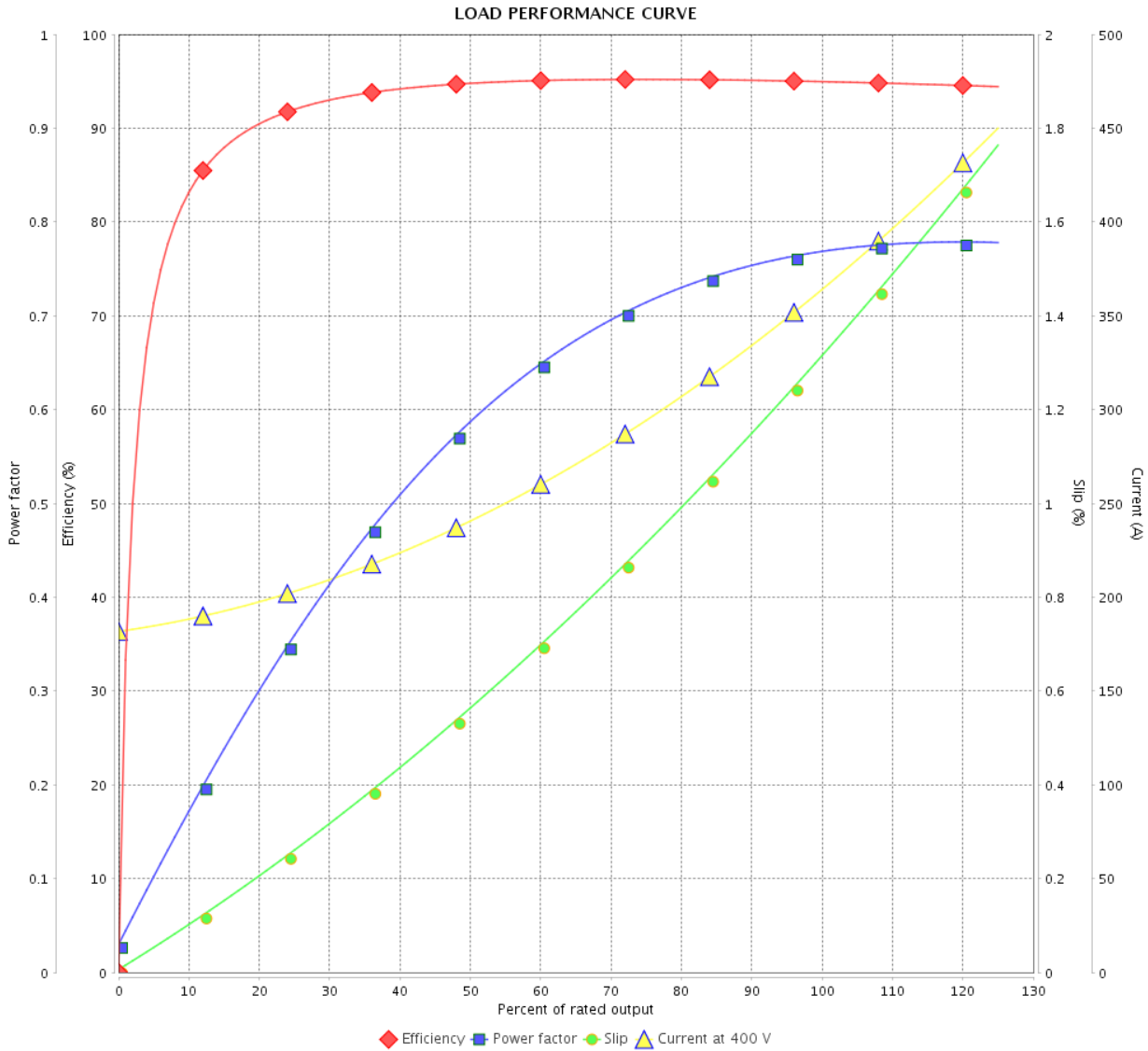


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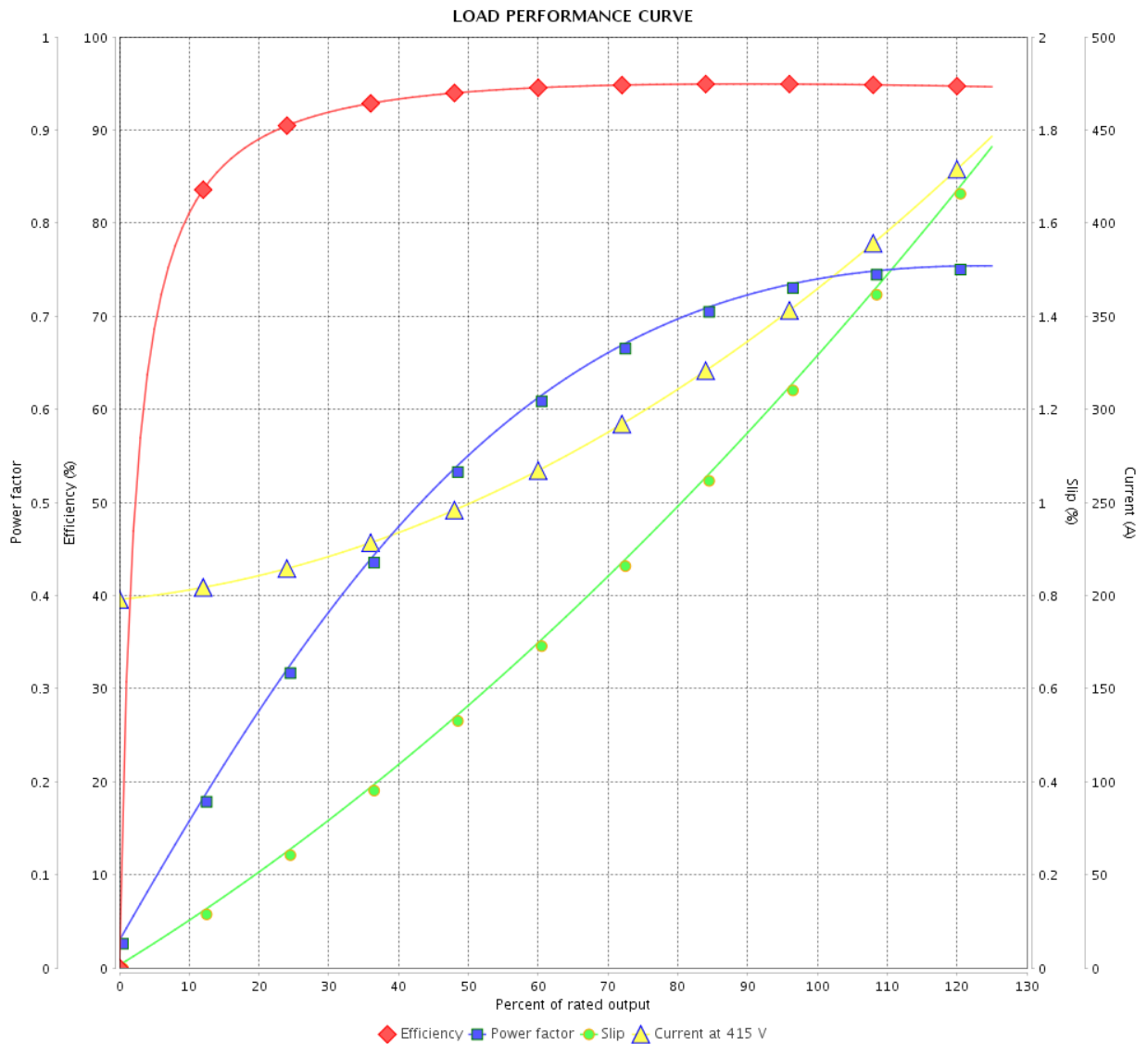


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THERMAL LIMIT CURVE



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Heating constant

Cooling constant

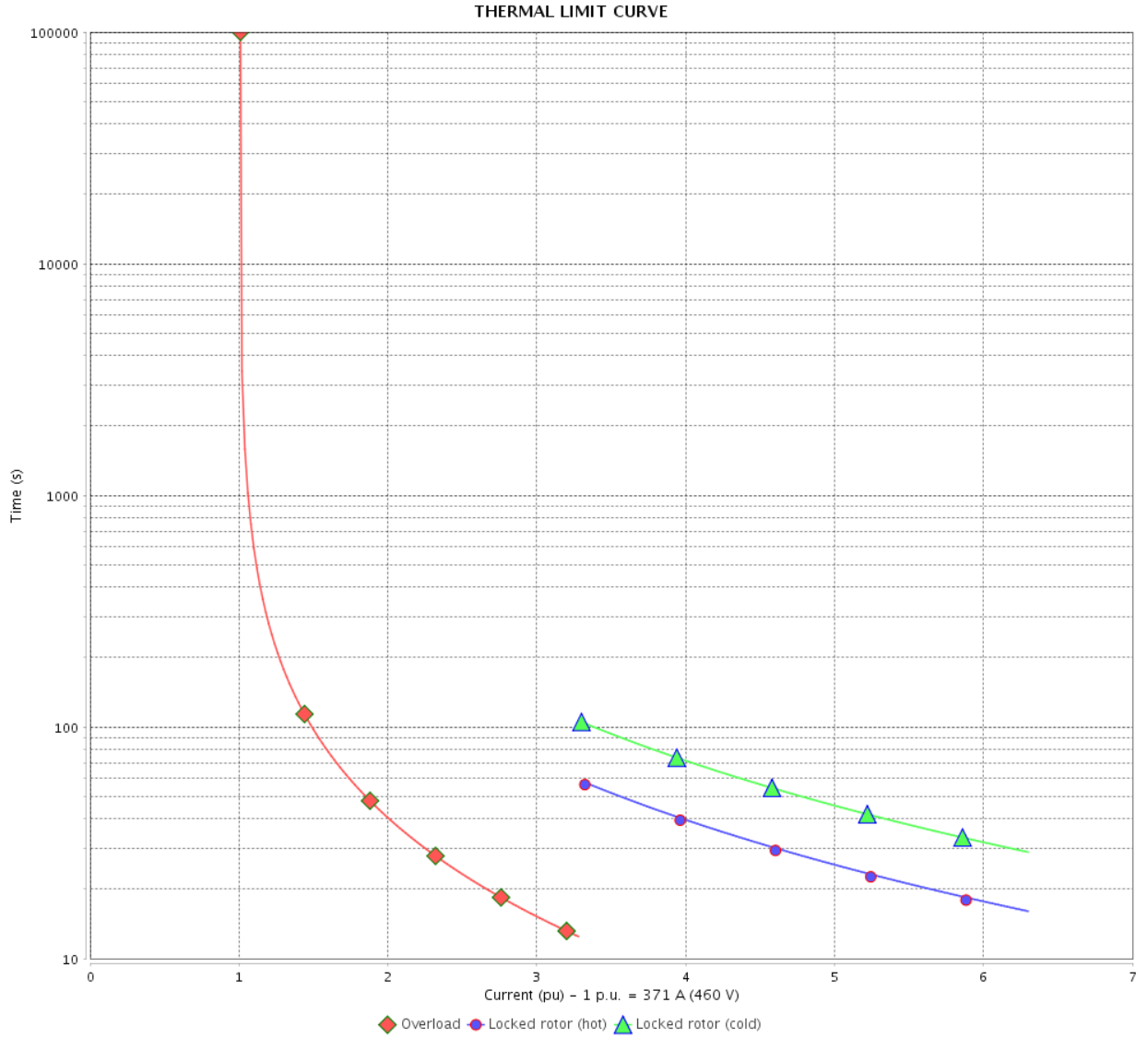
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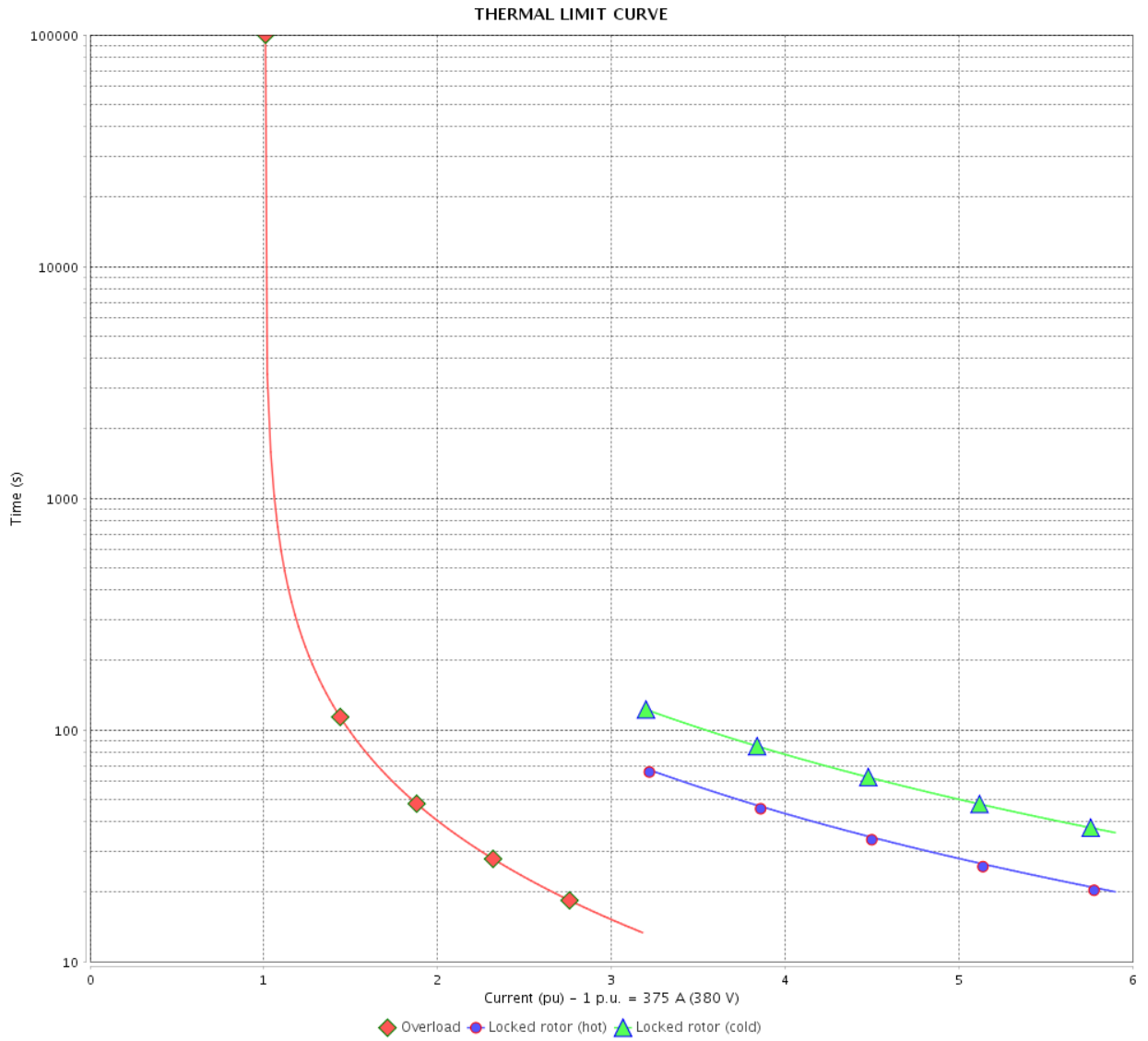
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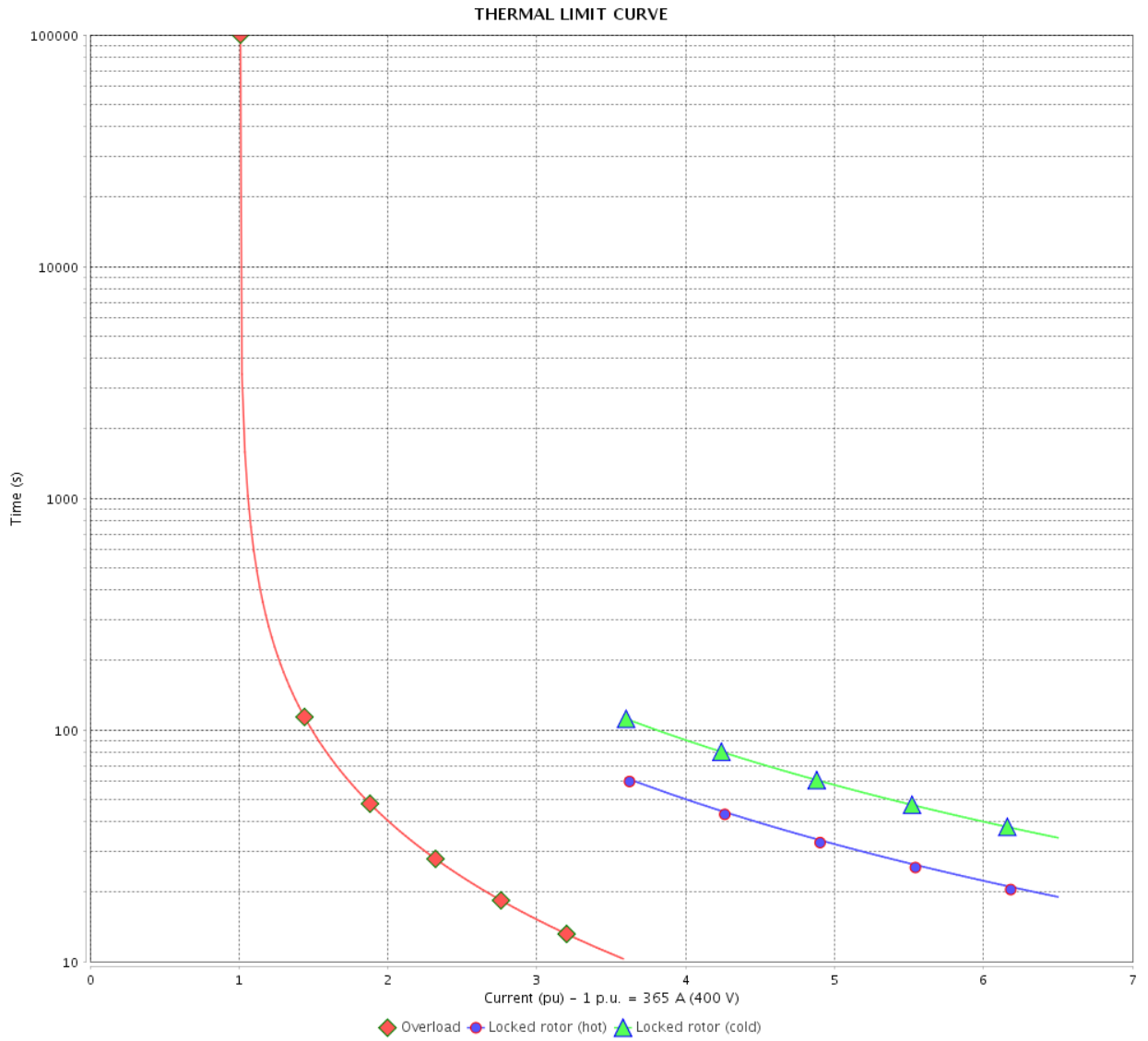
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Date	14/04/2022		14 / 21	

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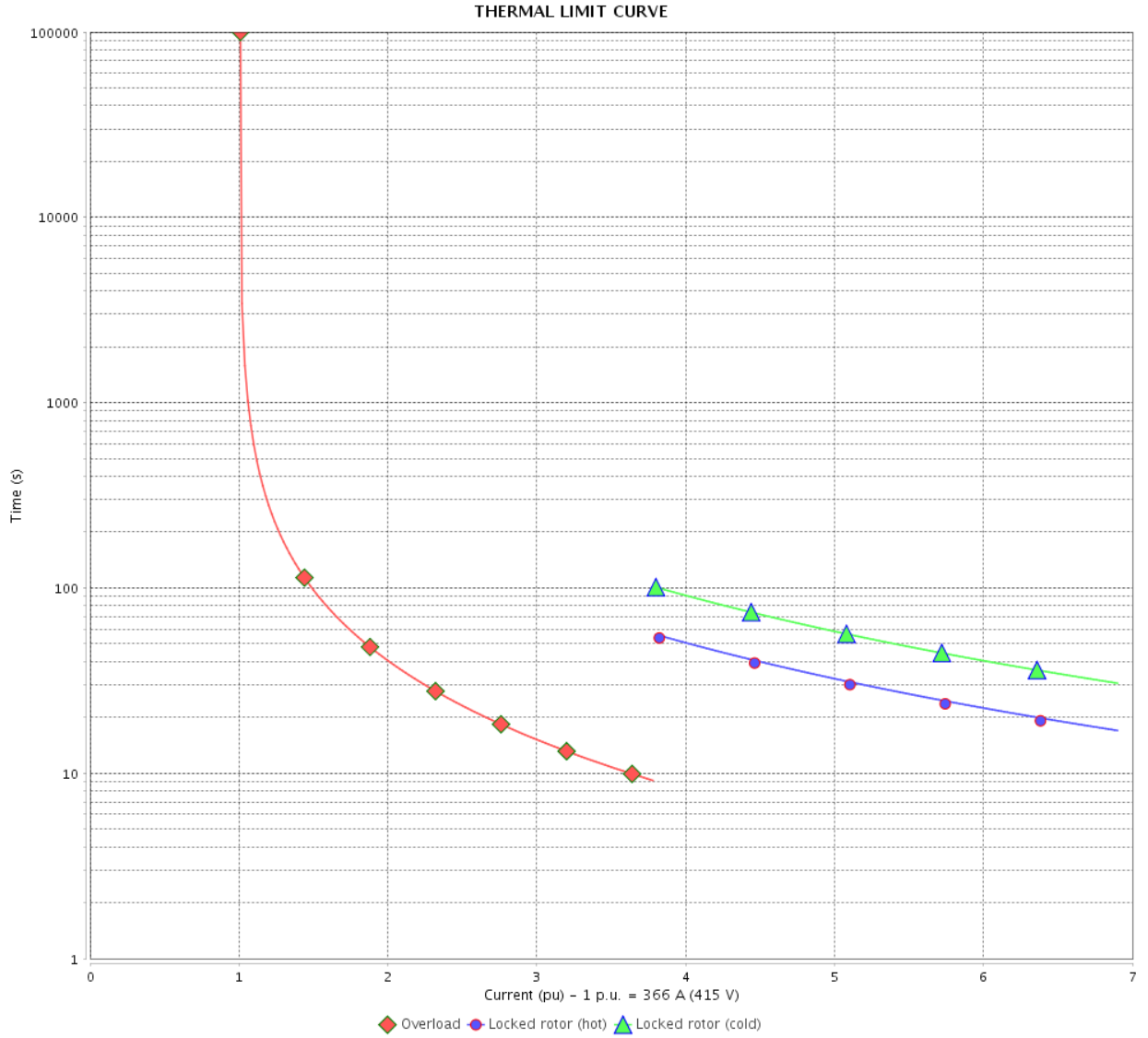
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THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



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Date				

VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

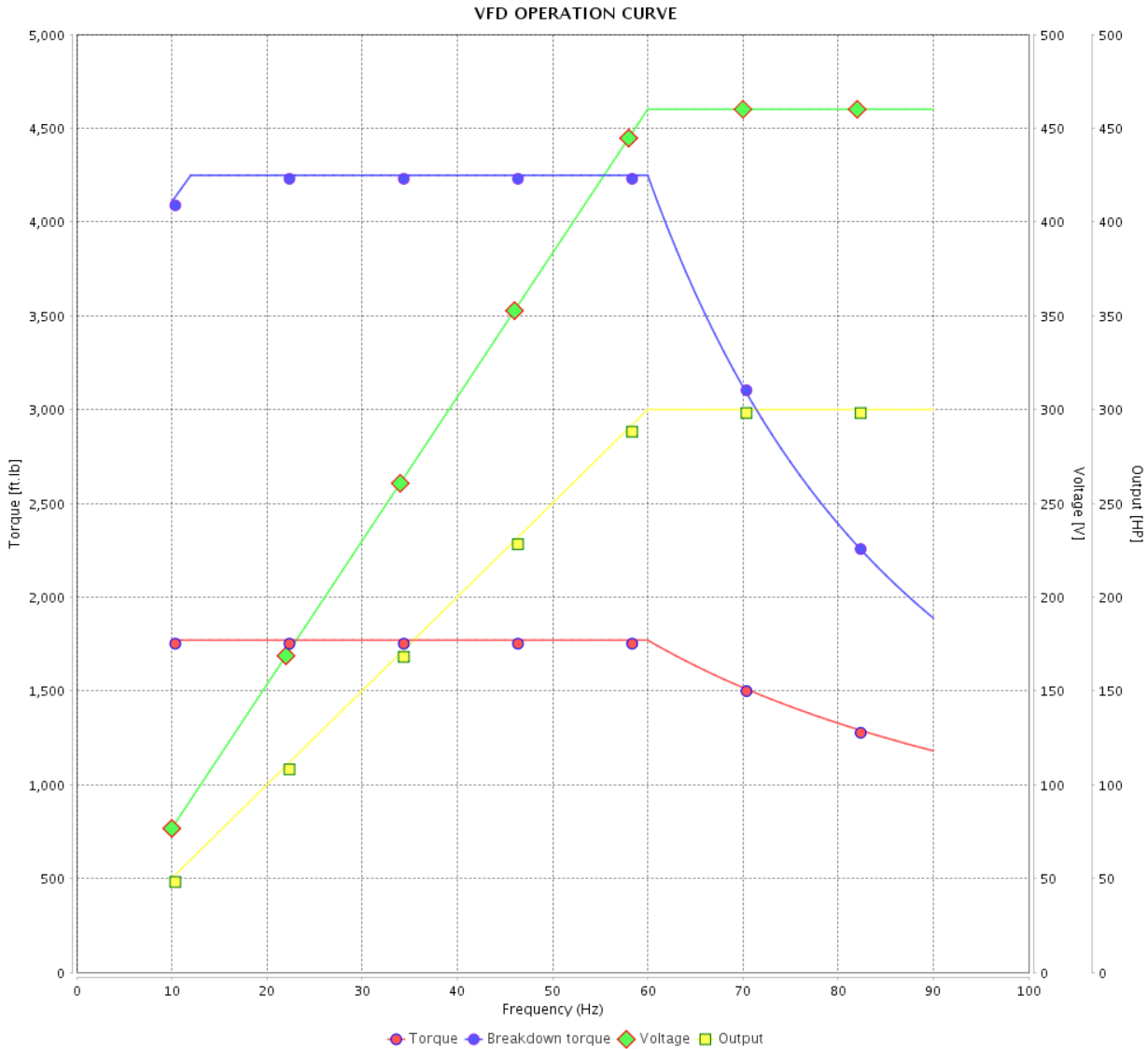


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VFD OPERATION CURVE

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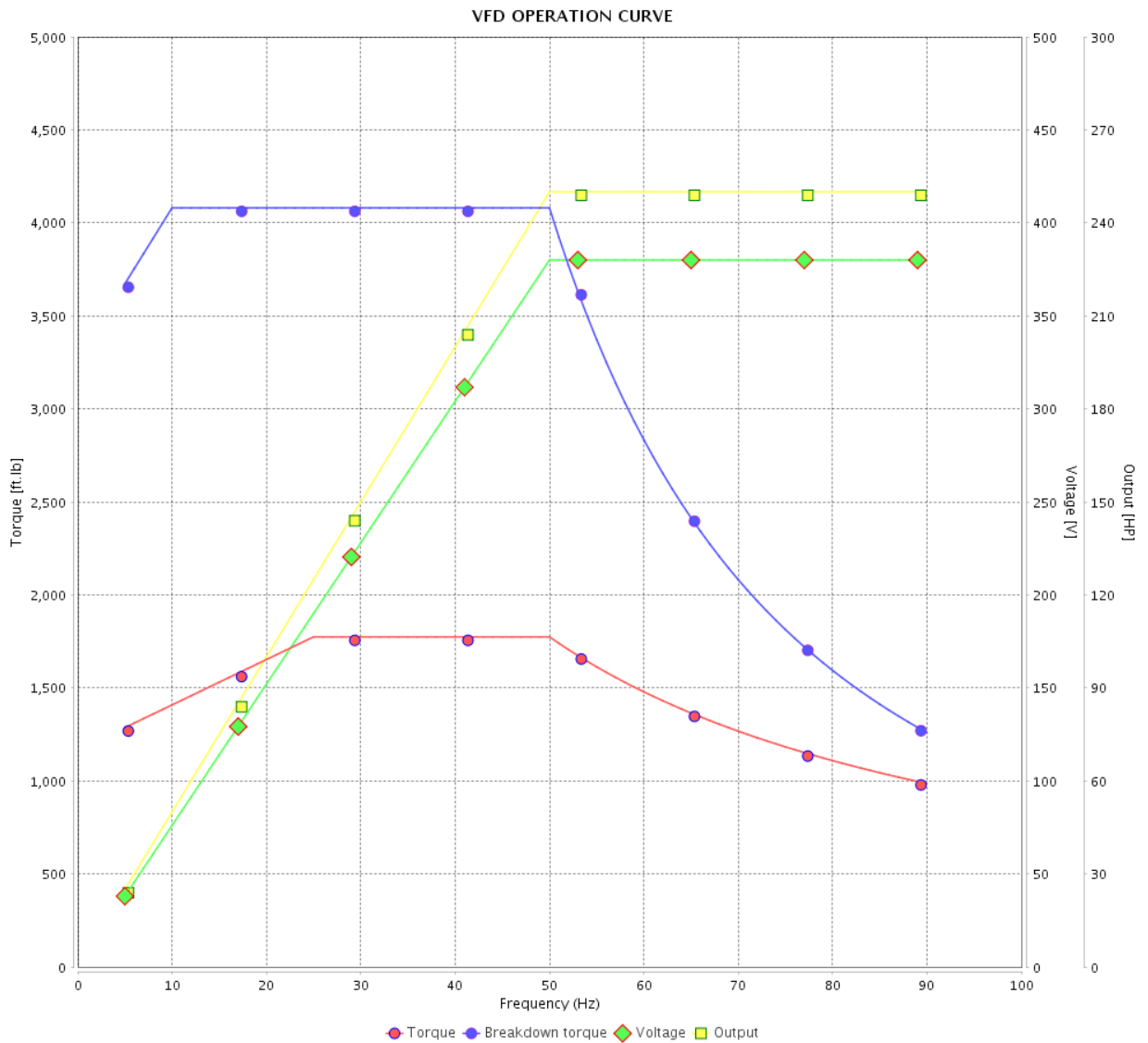


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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



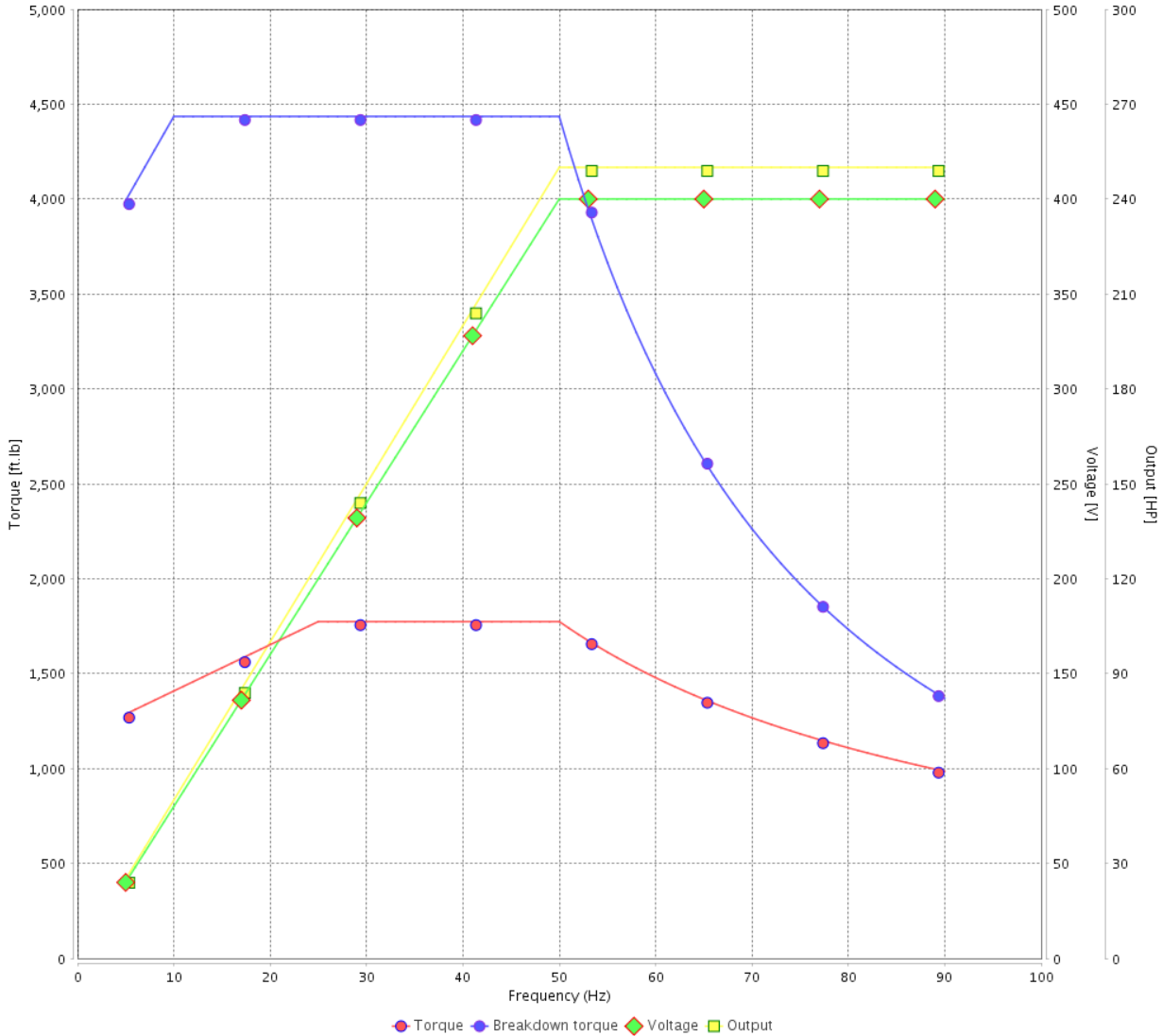
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VFD OPERATION CURVE



Performance : 400 V 50 Hz 8P IE3

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VFD OPERATION CURVE

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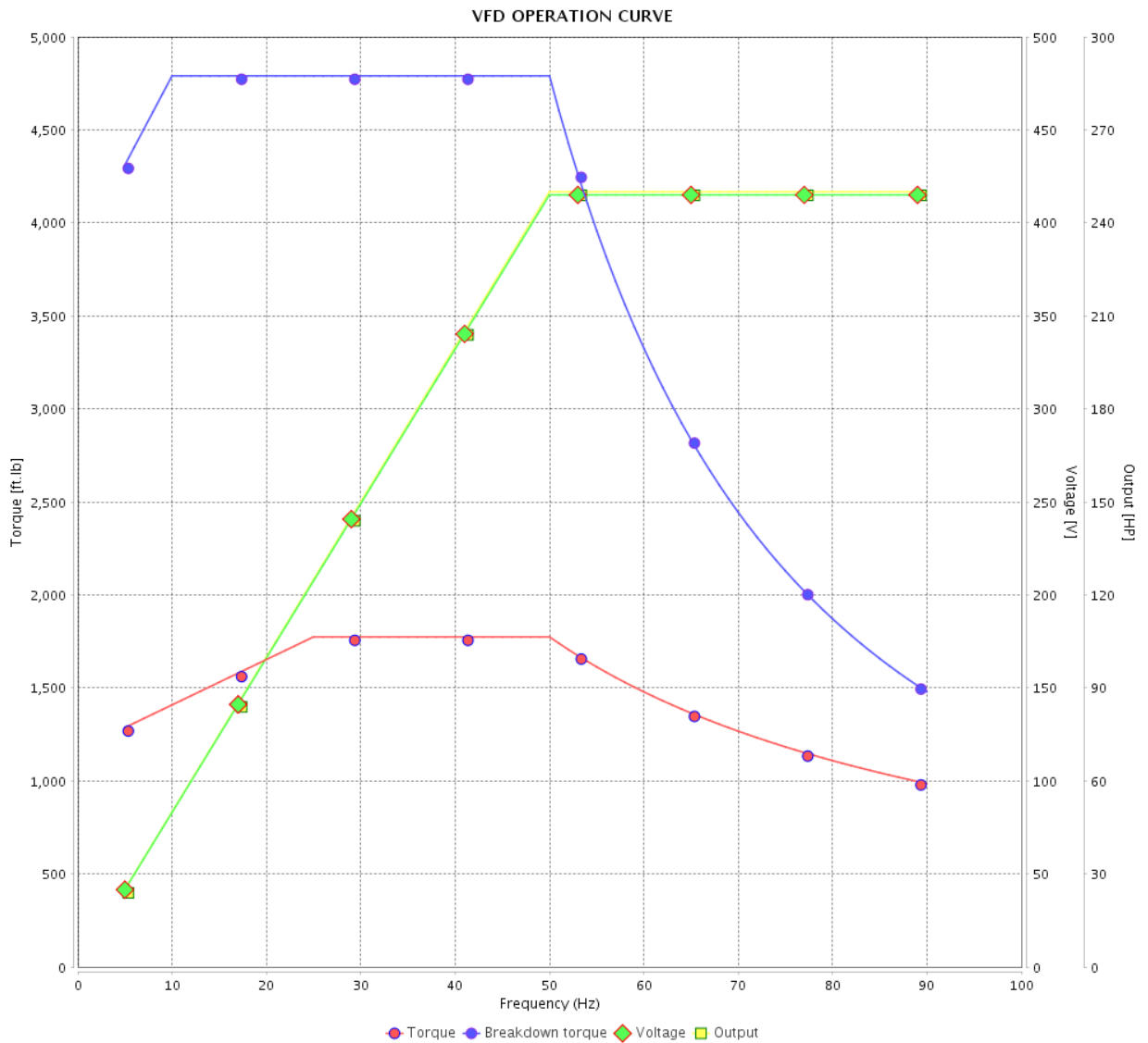


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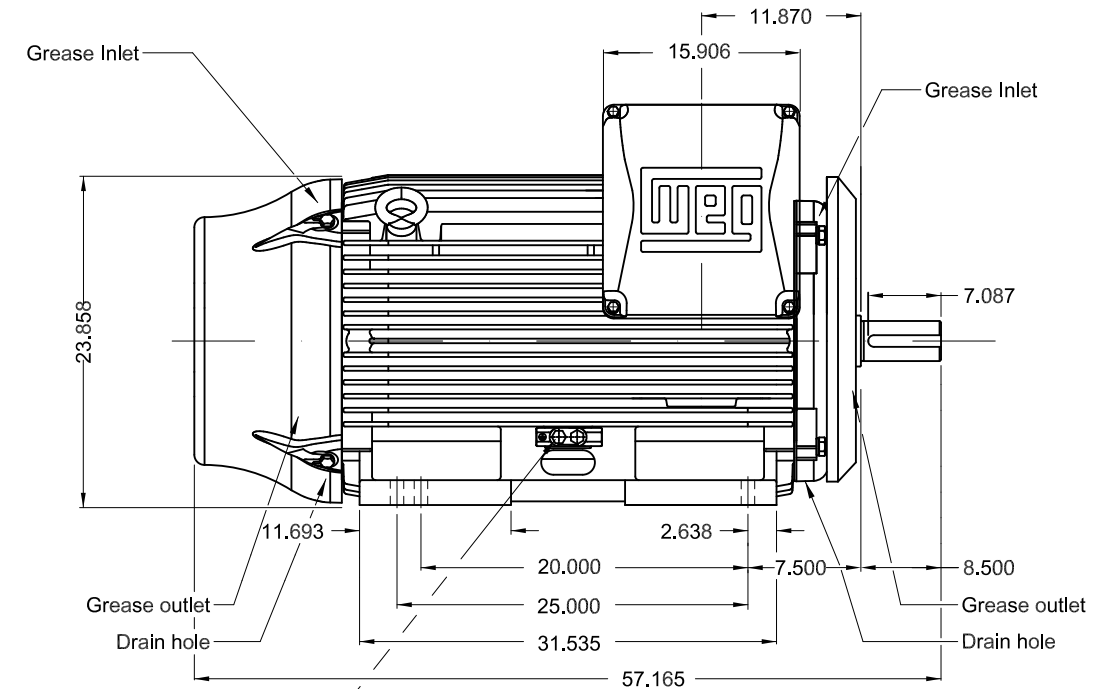
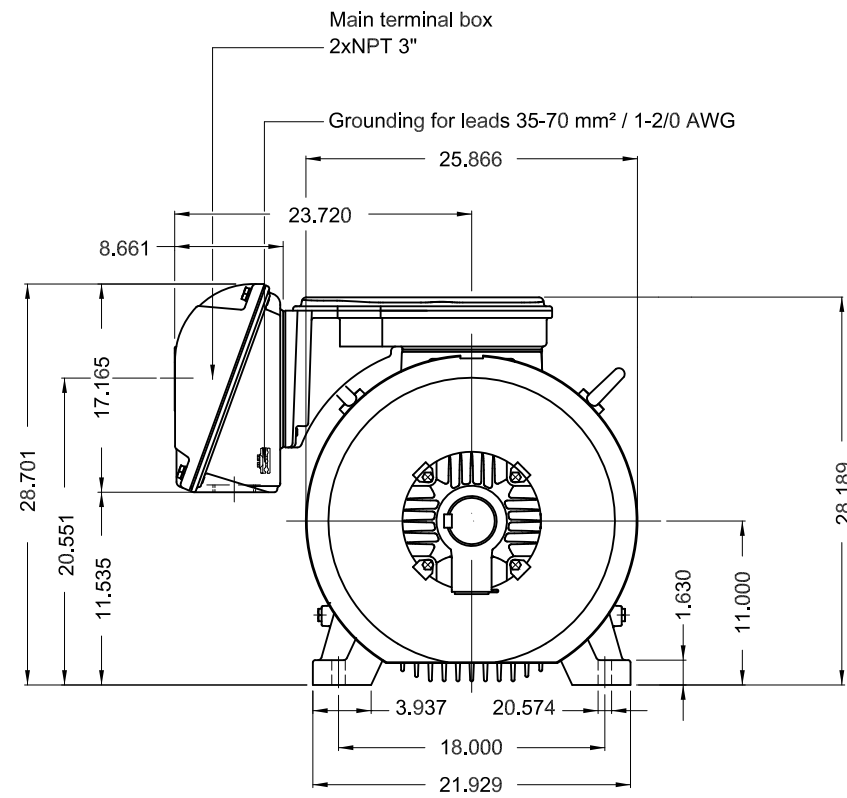


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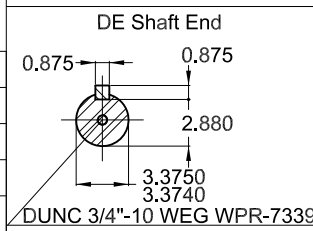


Grounding for leads 25-185 mm² / 3AWG-350MCM

300 HP 08 Poles 60 Hz

Dimensions in inches

- NDE endshield with electrically insulated bearing hub
- Drive-End Air Deflector
- Color RAL 6002
- Painting plan 203A
- Mounting B3R(D)



ECM	LOC	SUMMARY OF MODIFICATIONS	EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	PIRWBUSER	THREE PH. MOTOR W22 PREM. EFF.					
CHECKED		FRAME L447/9T IP55 TEFC					
RELEASED							
REL DT.	WMO	Jaragua do Sul	Product Engineering				

PREVIEW
WDD



SHEET 1 / 1

MADE IN MEXICO
11408341



NEMA
Premium
W22



FOR SAFE AREA
Mod.TE1BFOXON

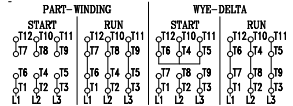


Class I, Div 2, Gr A, B, C and D - T2D
Class I, Zone 2, IIC - T2D
Class II, Div 2, Gr F and G - T4

MODEL 30009ET3G449T-W22

Electric Motor
Severe Duty

PH3	60Hz	Fr. L447/9T	1000m.a.s.l.	IP55	TEFC	3664lb
V 460				A 371		
HP 300				kW 220		
SF 1.00				SFA -		
RPM 890				PF 0.78		
AMB 40°C				INS cl. F	NEMA NOM EFF 95.4%	
DUTY CONT.				DES - Code G		



→ 6322-C3 (60g)
→ 6319-C3 (45g)



MOBIL POLYREX EM (14000h)

