

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer					
Product line	: NEMA Premium Efficiency Three-Phase	Product code :	11564991		
		Catalog # :	30012ET3G586/7-W22		
Frame	: 586/7T	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	: 3759 lb		
Protection degree	: IP55	Moment of inertia (J)	: 277 sq.ft.lb		
Design	: B				
Output [HP]	300	250	250	250	250
Poles	6	6	6	6	6
Frequency [Hz]	60	50	50	50	50
Rated voltage [V]	460	380	400	415	415
Rated current [A]	356	362	348	340	340
L. R. Amperes [A]	2136	2027	2158	2244	2244
LRC [A]	6.0x(Code G)	5.6x(Code F)	6.2x(Code G)	6.6x(Code H)	6.6x(Code H)
No load current [A]	127	125	135	145	145
Rated speed [RPM]	1190	990	990	990	990
Slip [%]	0.83	1.00	1.00	1.00	1.00
Rated torque [ft.lb]	1320	1330	1330	1330	1330
Locked rotor torque [%]	160	150	170	190	190
Breakdown torque [%]	190	180	200	229	229
Service factor	1.15	1.15	1.15	1.15	1.15
Temperature rise	80 K	80 K	80 K	80 K	80 K
Locked rotor time	54s (cold) 30s (hot)	45s (cold) 25s (hot)	45s (cold) 25s (hot)	45s (cold) 25s (hot)	45s (cold) 25s (hot)
Noise level ²	77.0 dB(A)	73.0 dB(A)	73.0 dB(A)	73.0 dB(A)	73.0 dB(A)
Efficiency (%)	25%	95.3	95.3	95.3	94.5
	50%	95.4	95.4	95.4	95.0
	75%	95.8	95.8	95.8	95.4
	100%	95.8	95.8	95.8	95.8
Power Factor	25%	0.45	0.46	0.42	0.39
	50%	0.69	0.70	0.66	0.63
	75%	0.78	0.79	0.76	0.74
	100%	0.81	0.81	0.80	0.79
Bearing type	: <u>Drive end</u> 6322 C3 <u>Non drive end</u> 6319 C3	Foundation loads			
Sealing	: Taconite Labyrinth Labyrinth	Max. traction : 4484 lb			
Lubrication interval	: 11000 h 13000 h	Max. compression : 8243 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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Customer : _____

Space heater information

Voltage: 200 - 240 V

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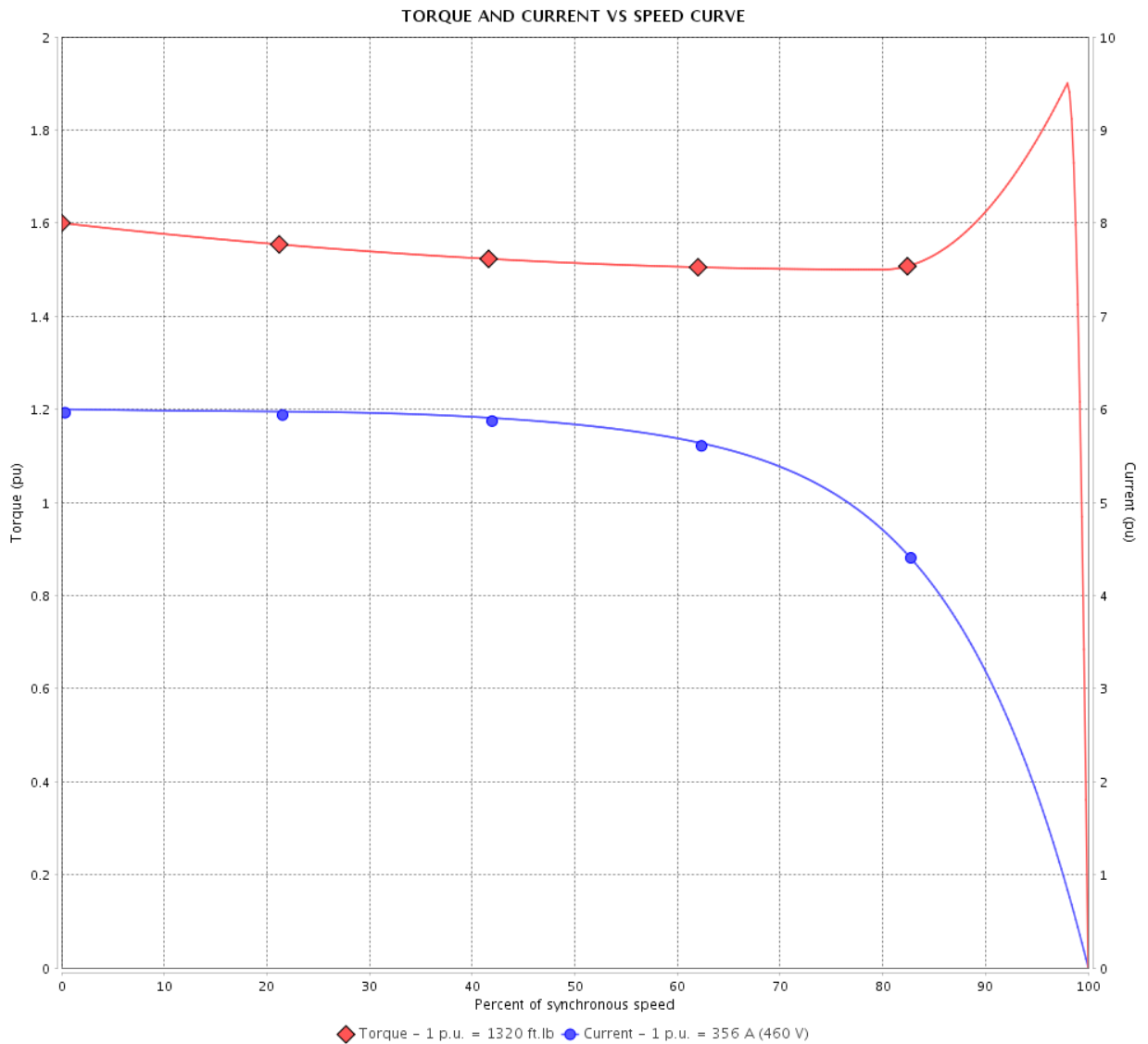
TORQUE AND CURRENT VS SPEED CURVE



Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase
 Product code : 11564991
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Performance : 460 V 60 Hz 6P

Rated current	: 356 A	Moment of inertia (J)	: 277 sq.ft.lb
LRC	: 6.0	Duty cycle	: Cont.(S1)
Rated torque	: 1320 ft.lb	Insulation class	: F
Locked rotor torque	: 160 %	Service factor	: 1.15
Breakdown torque	: 190 %	Temperature rise	: 80 K
Rated speed	: 1190 rpm	Design	: B

Locked rotor time : 54s (cold) 30s (hot)

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TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



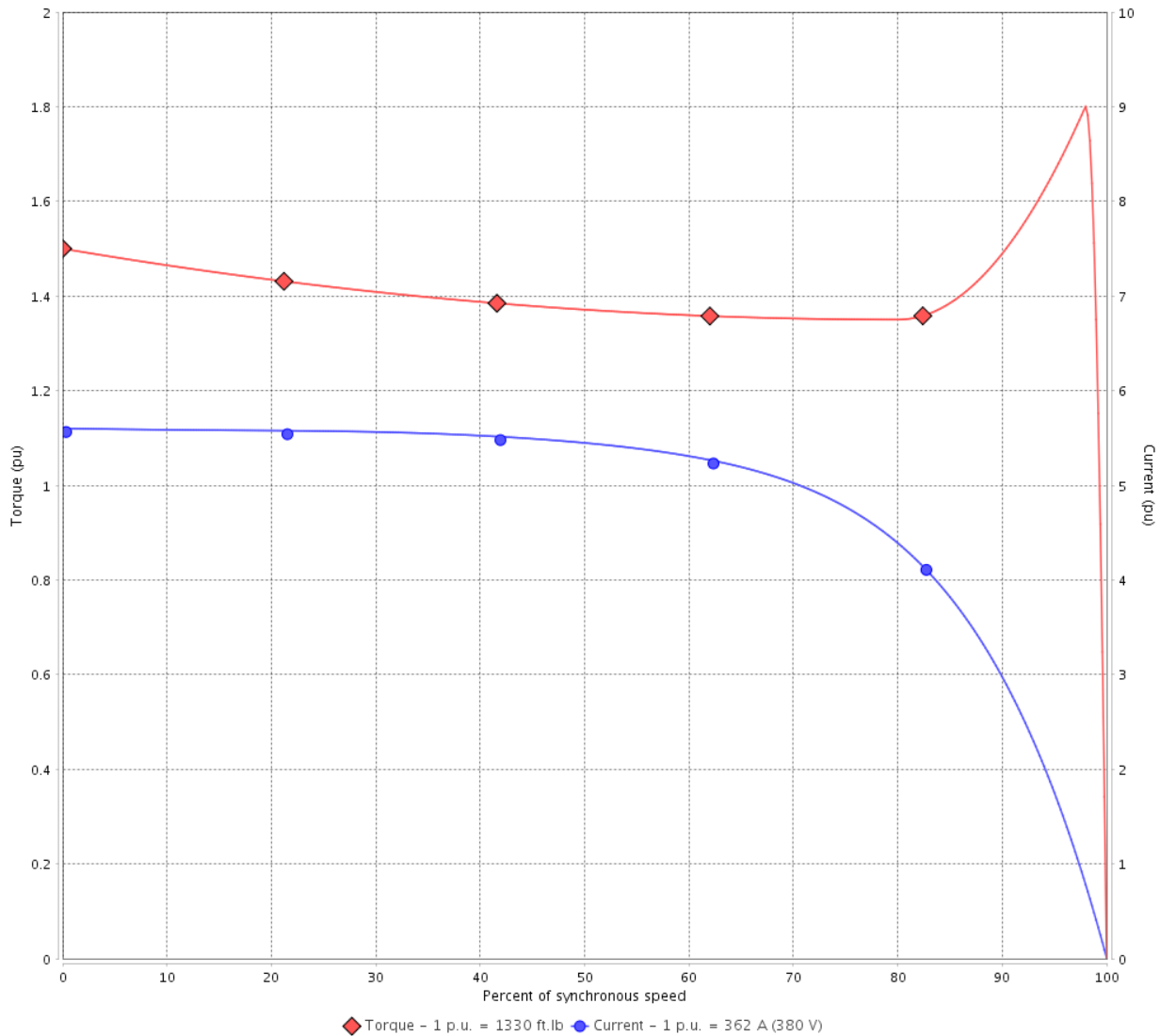
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TORQUE AND CURRENT VS SPEED CURVE



Performance : 380 V 50 Hz 6P IE3

Rated current	: 362 A	Moment of inertia (J)	: 277 sq.ft.lb
LRC	: 5.6	Duty cycle	: Cont.(S1)
Rated torque	: 1330 ft.lb	Insulation class	: F
Locked rotor torque	: 150 %	Service factor	: 1.15
Breakdown torque	: 180 %	Temperature rise	: 80 K
Rated speed	: 990 rpm	Design	: B

Locked rotor time : 45s (cold) 25s (hot)

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TORQUE AND CURRENT VS SPEED CURVE



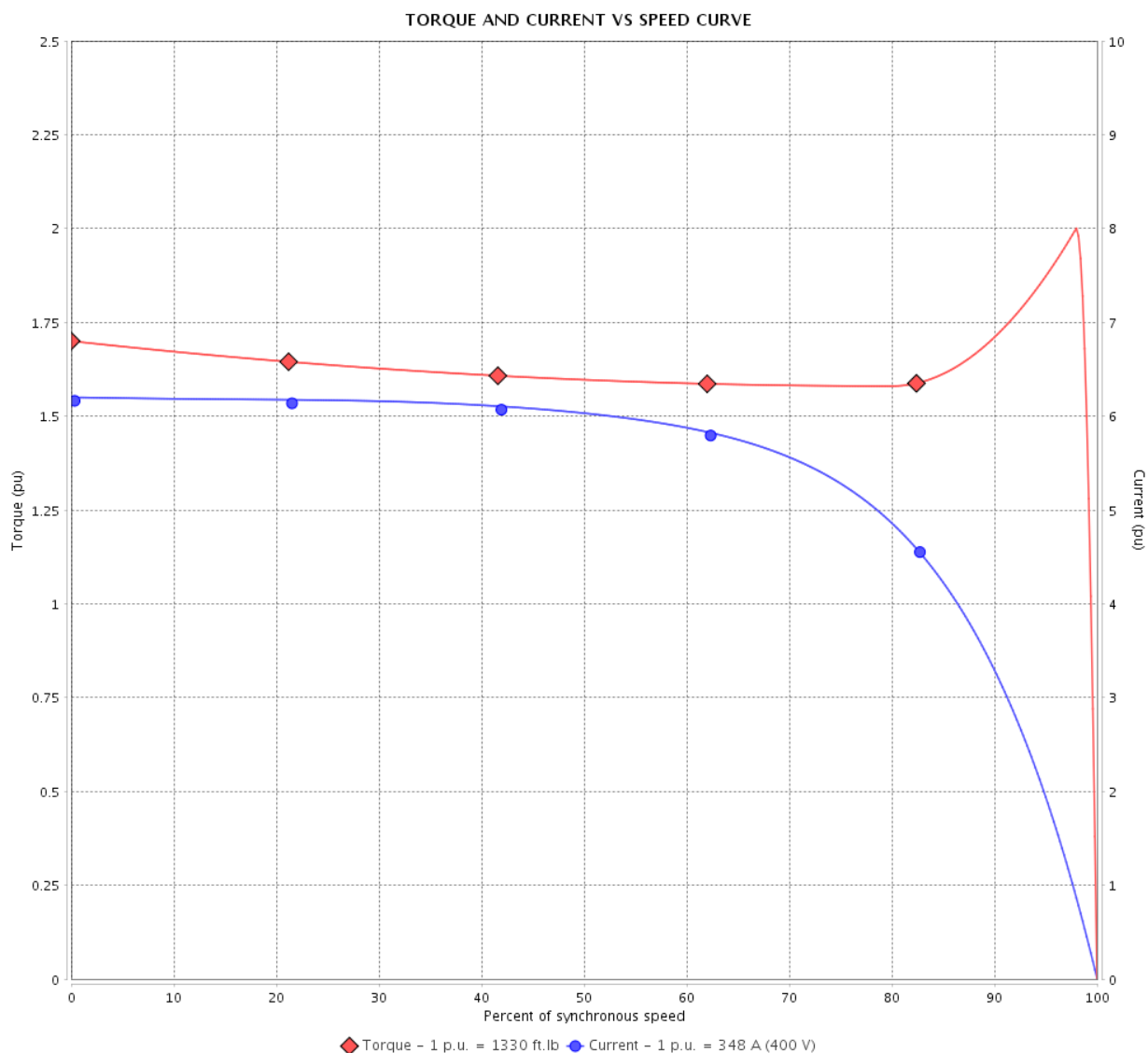
Three Phase Induction Motor - Squirrel Cage

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Catalog # : 30012ET3G586/7-W22



Performance : 400 V 50 Hz 6P IE3

Rated current	: 348 A	Moment of inertia (J)	: 277 sq.ft.lb
LRC	: 6.2	Duty cycle	: Cont.(S1)
Rated torque	: 1330 ft.lb	Insulation class	: F
Locked rotor torque	: 170 %	Service factor	: 1.15
Breakdown torque	: 200 %	Temperature rise	: 80 K
Rated speed	: 990 rpm	Design	: B

Locked rotor time : 45s (cold) 25s (hot)

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TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



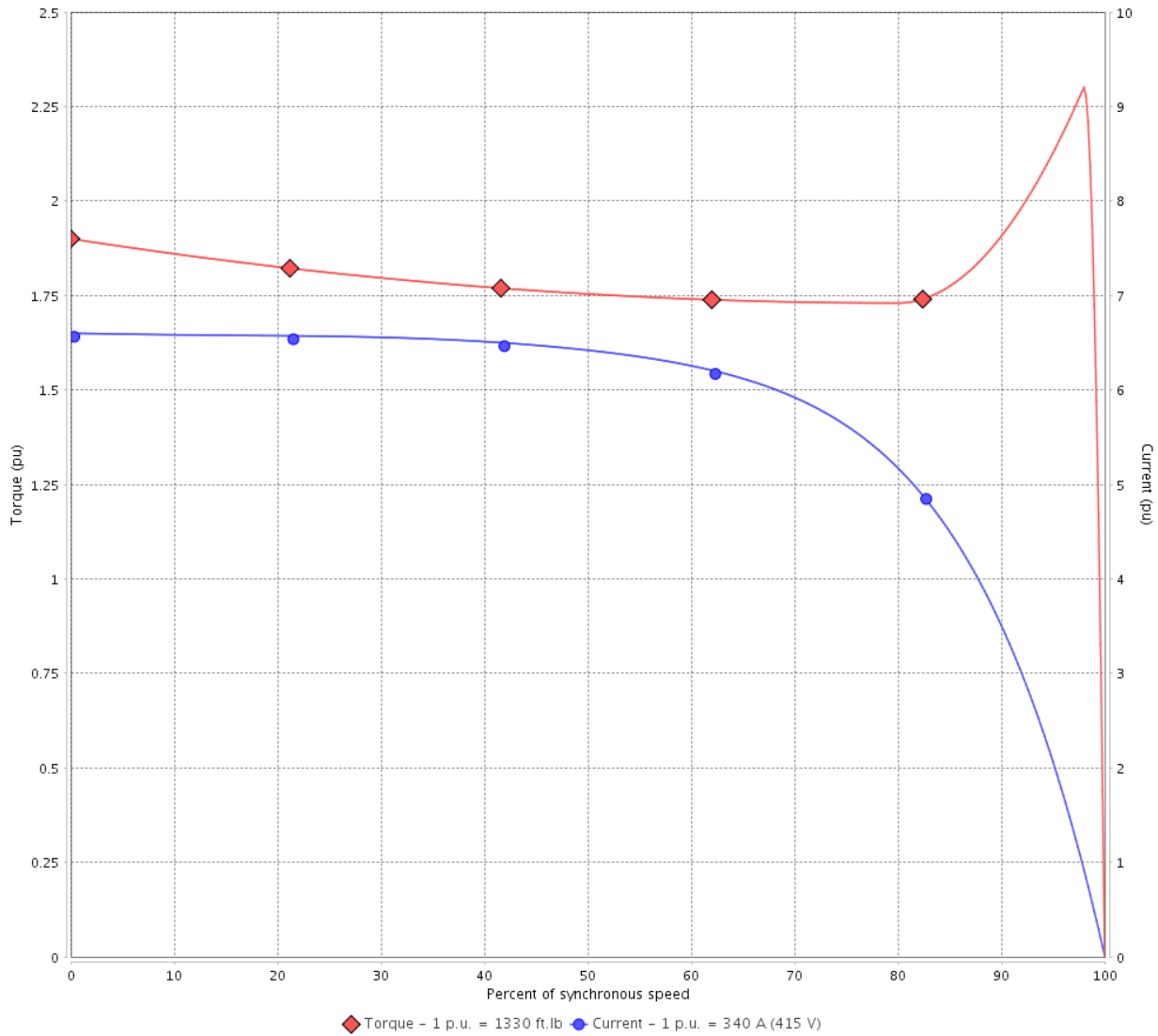
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LOAD PERFORMANCE CURVE

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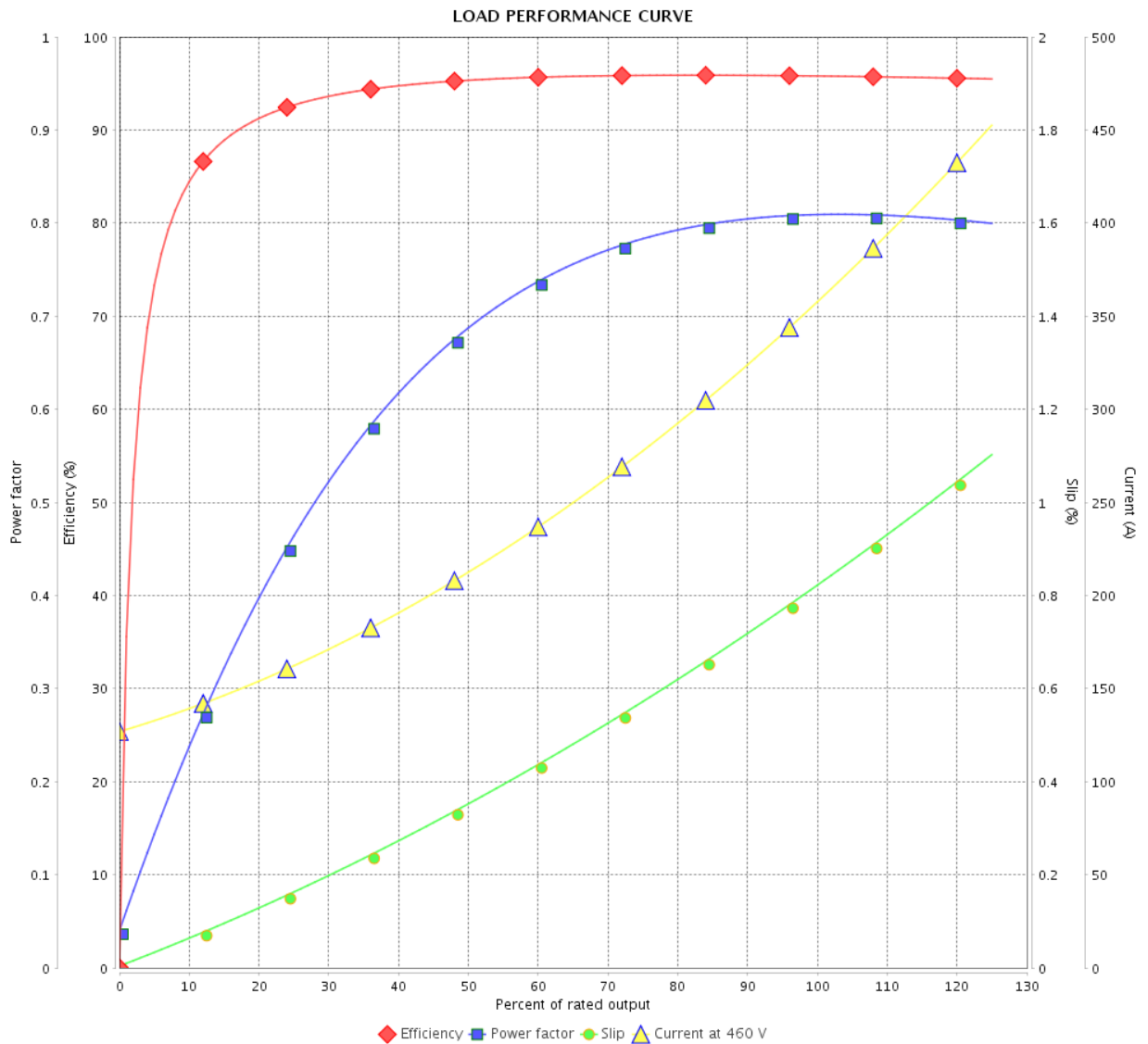


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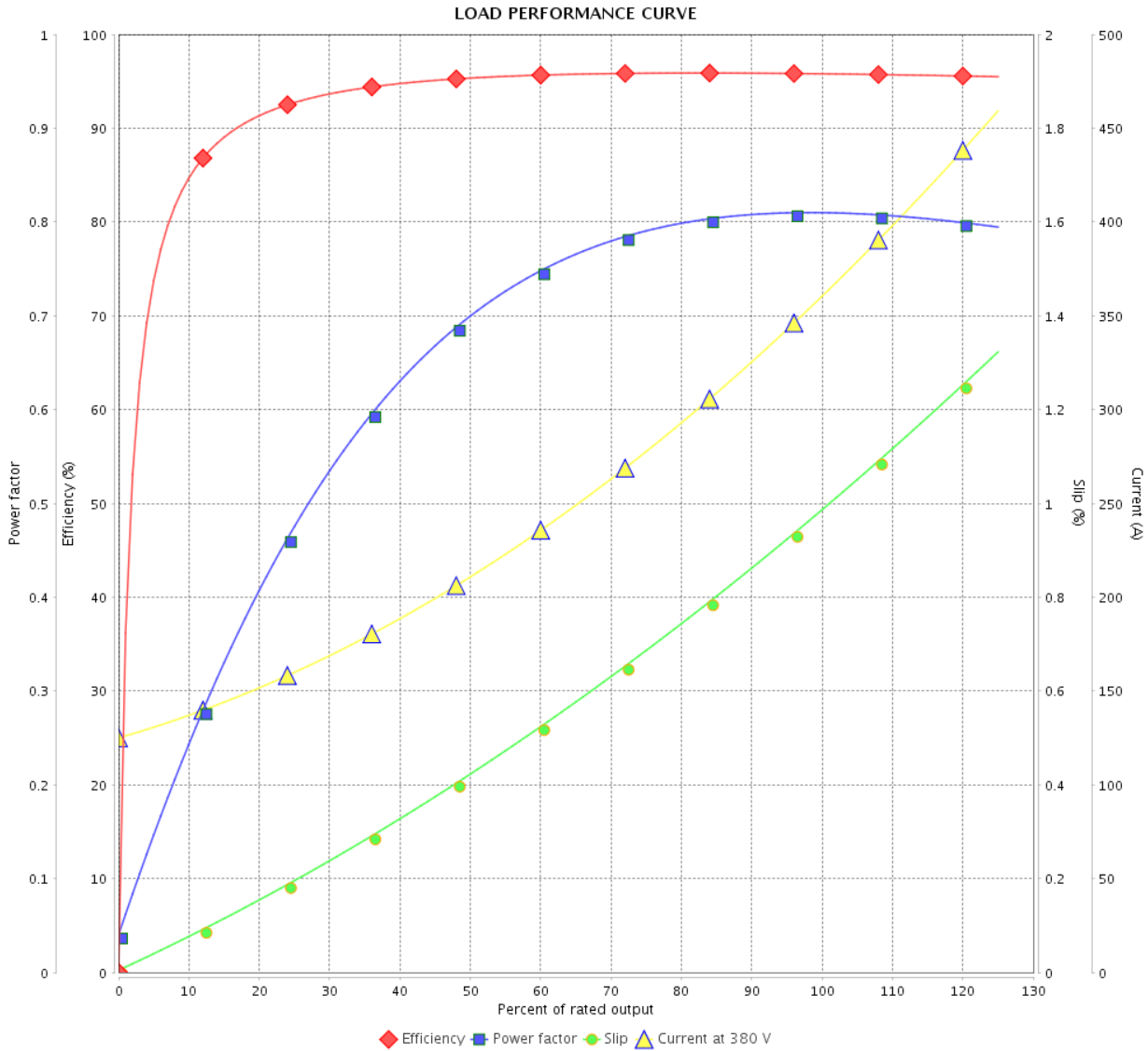


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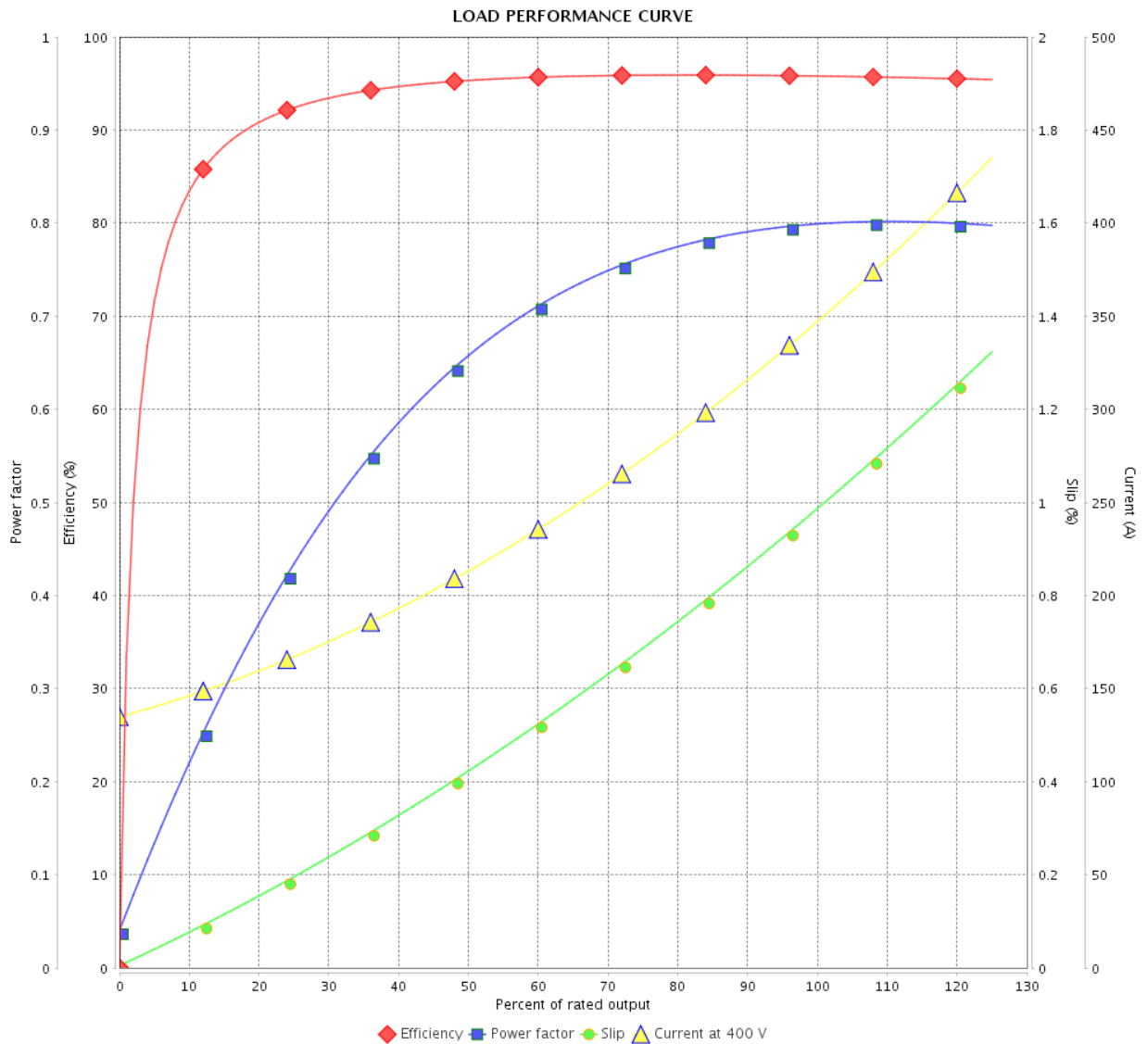


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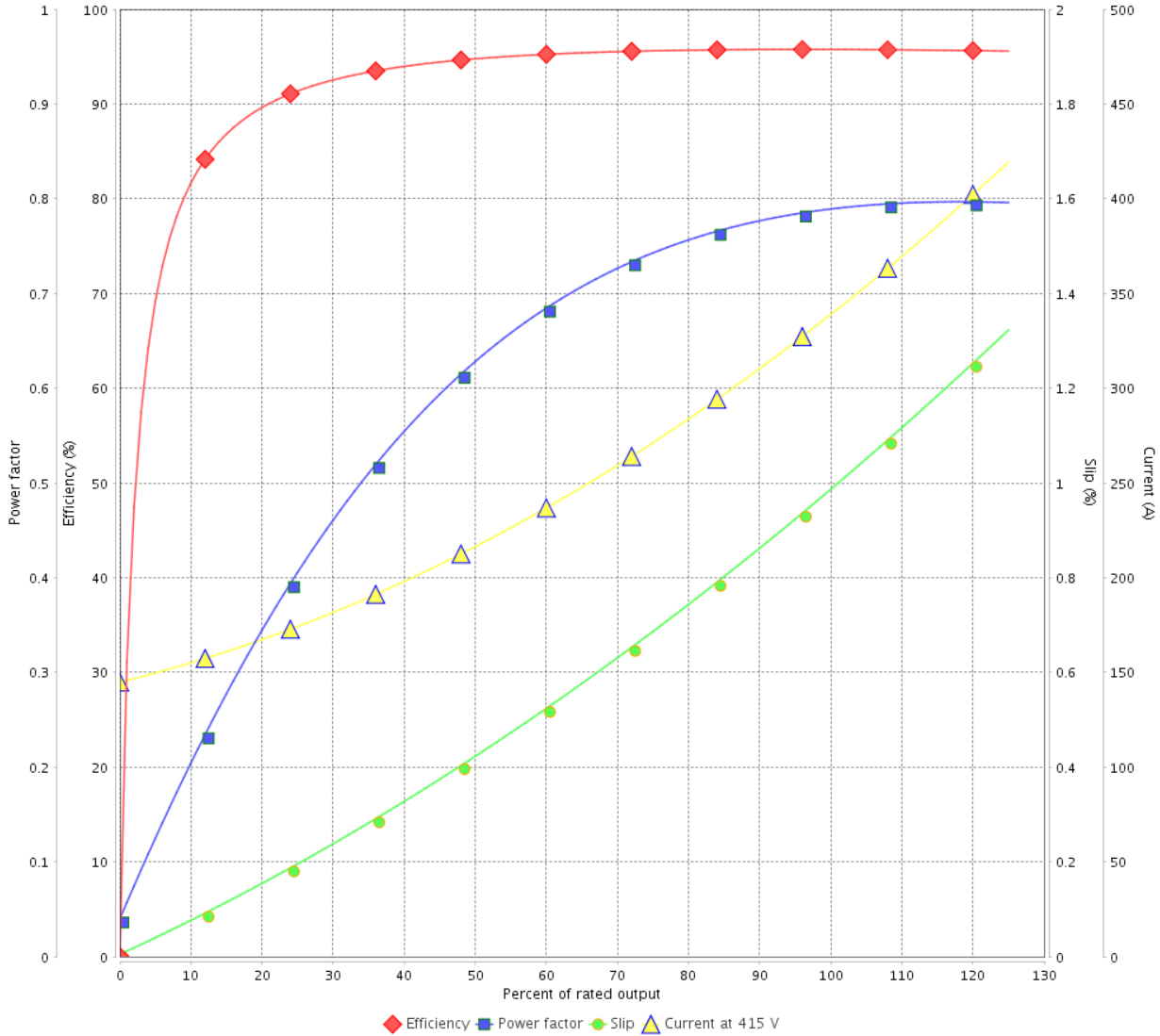
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THERMAL LIMIT CURVE



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Heating constant

Cooling constant

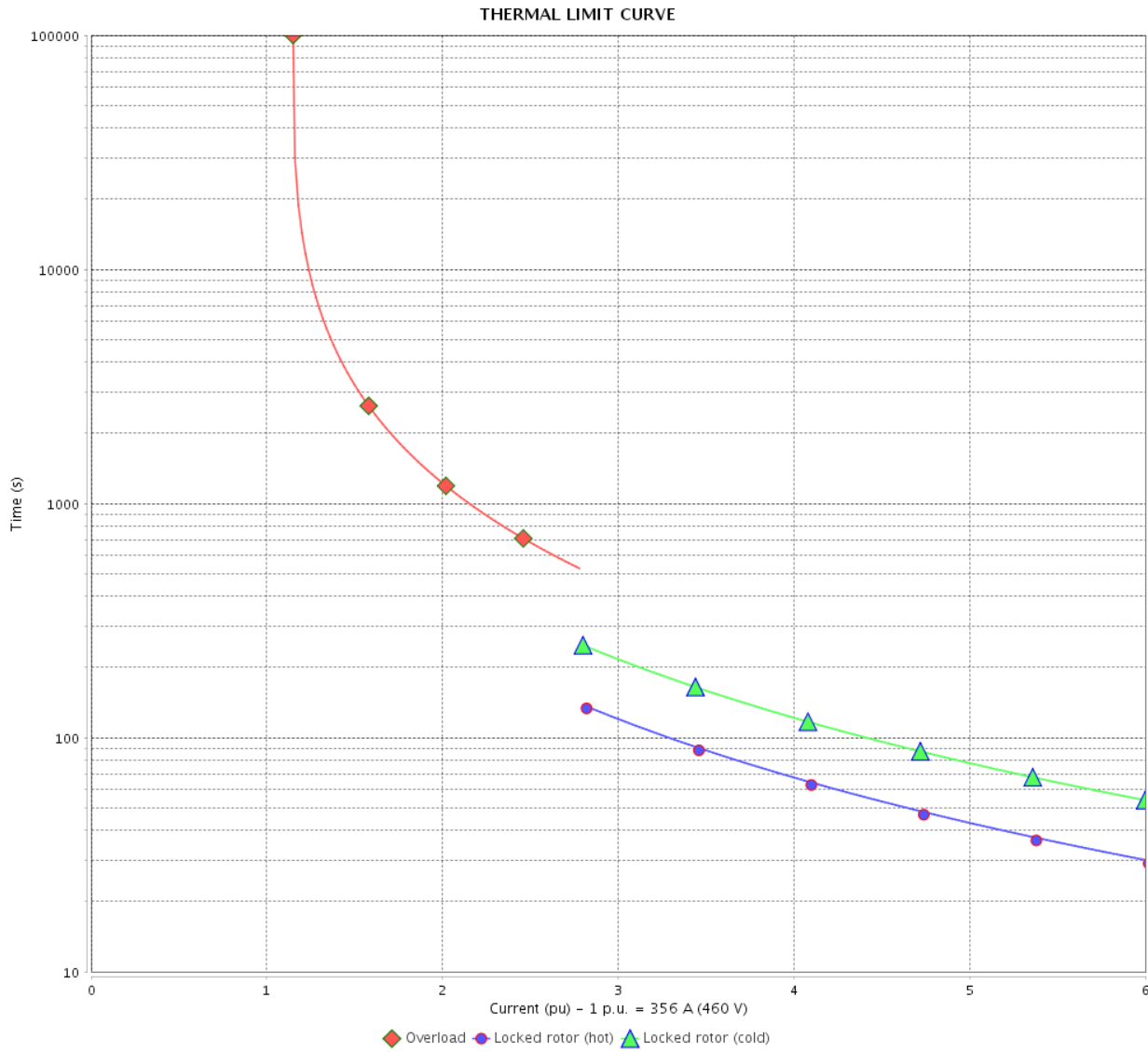
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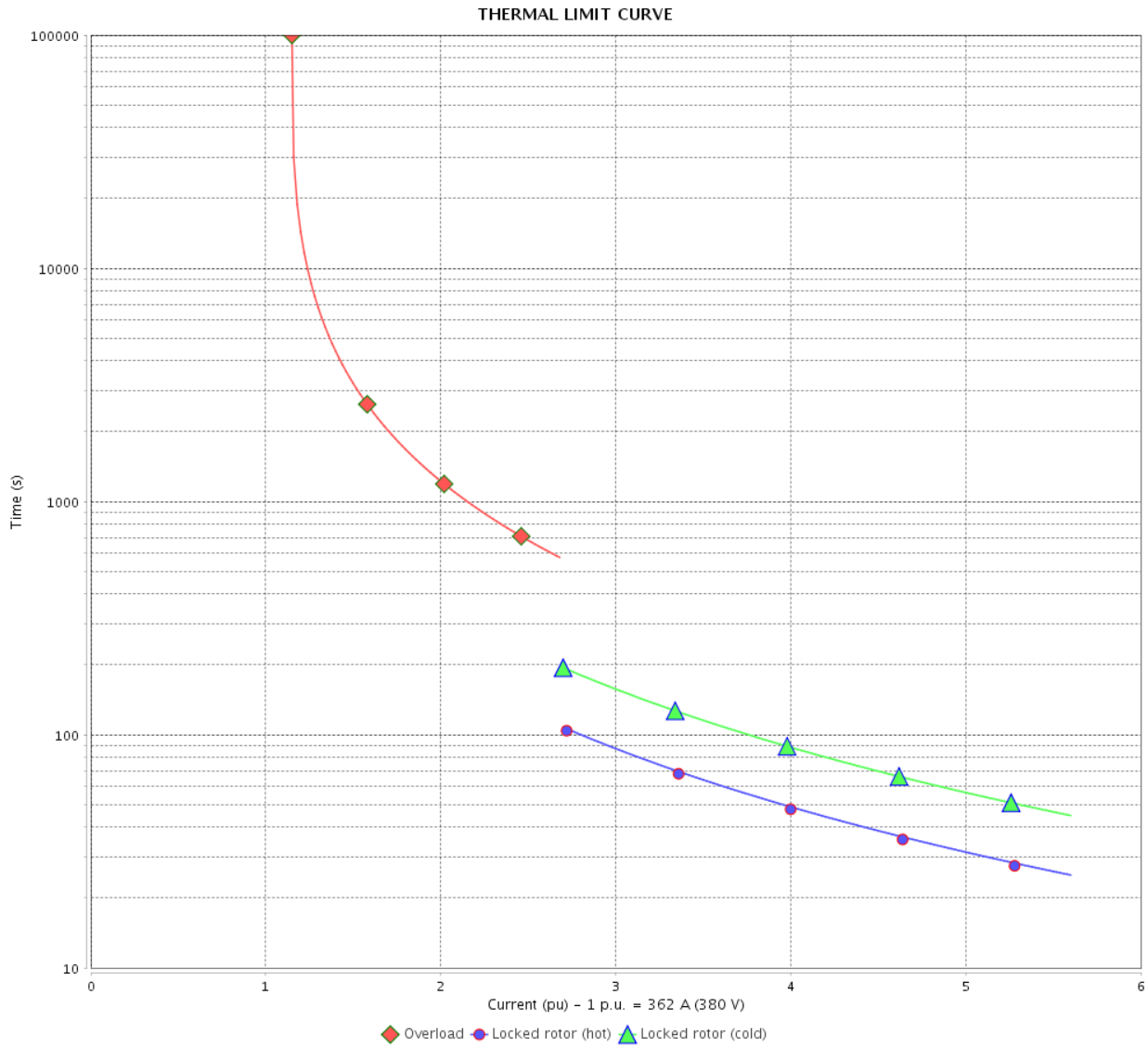
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Cooling constant

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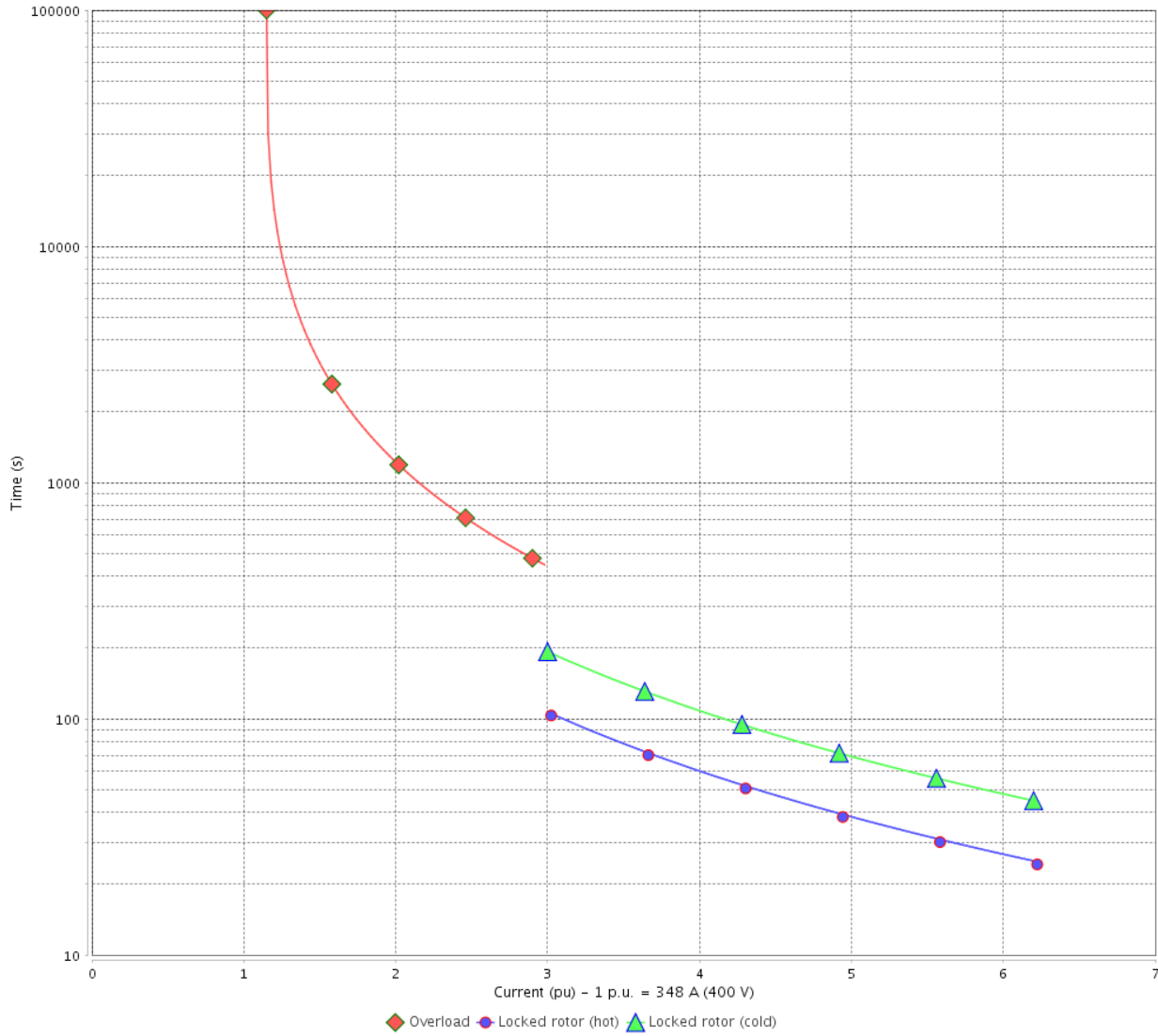
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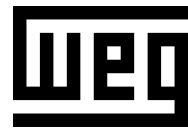
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Cooling constant

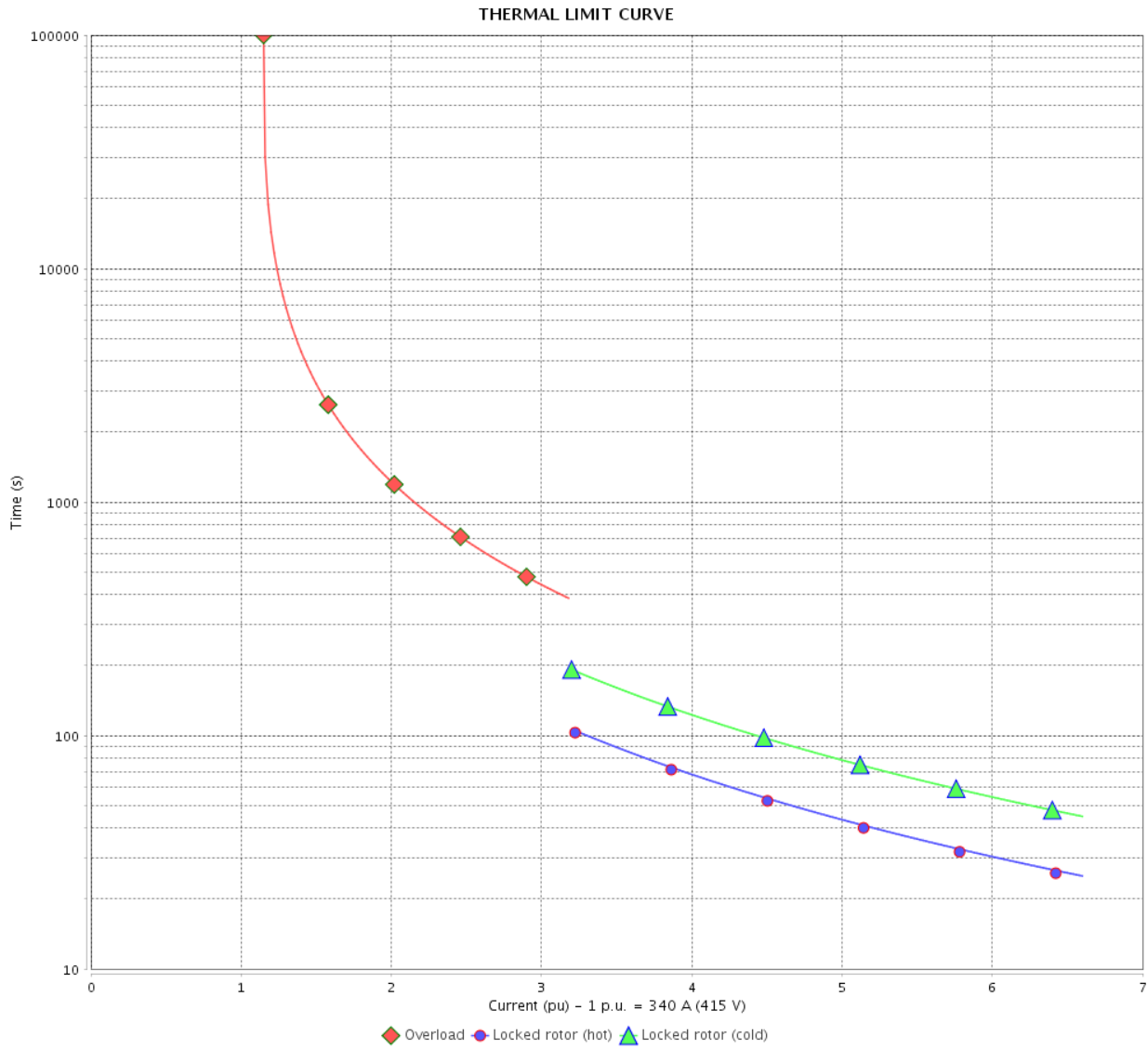
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VFD OPERATION CURVE

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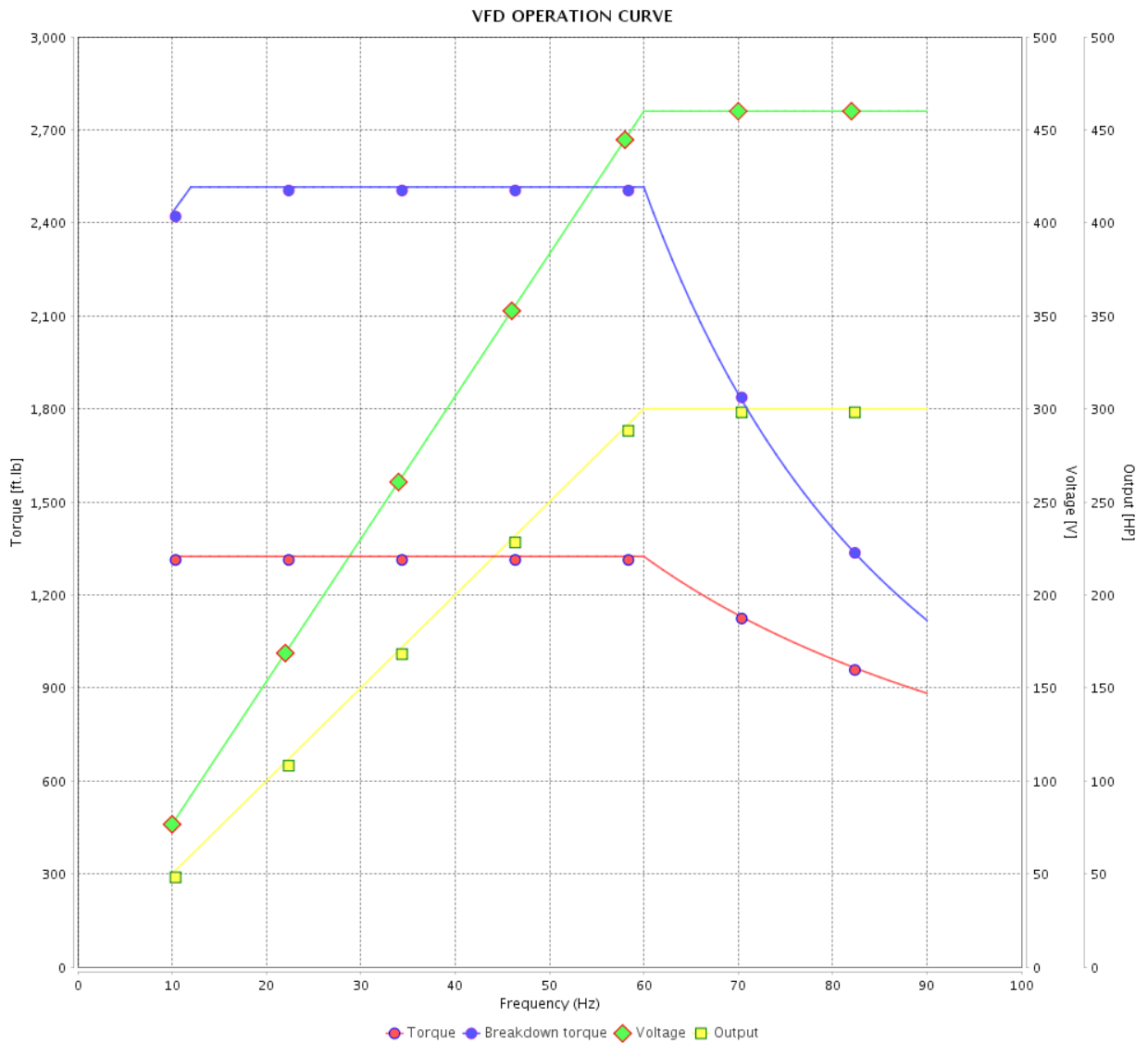


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VFD OPERATION CURVE

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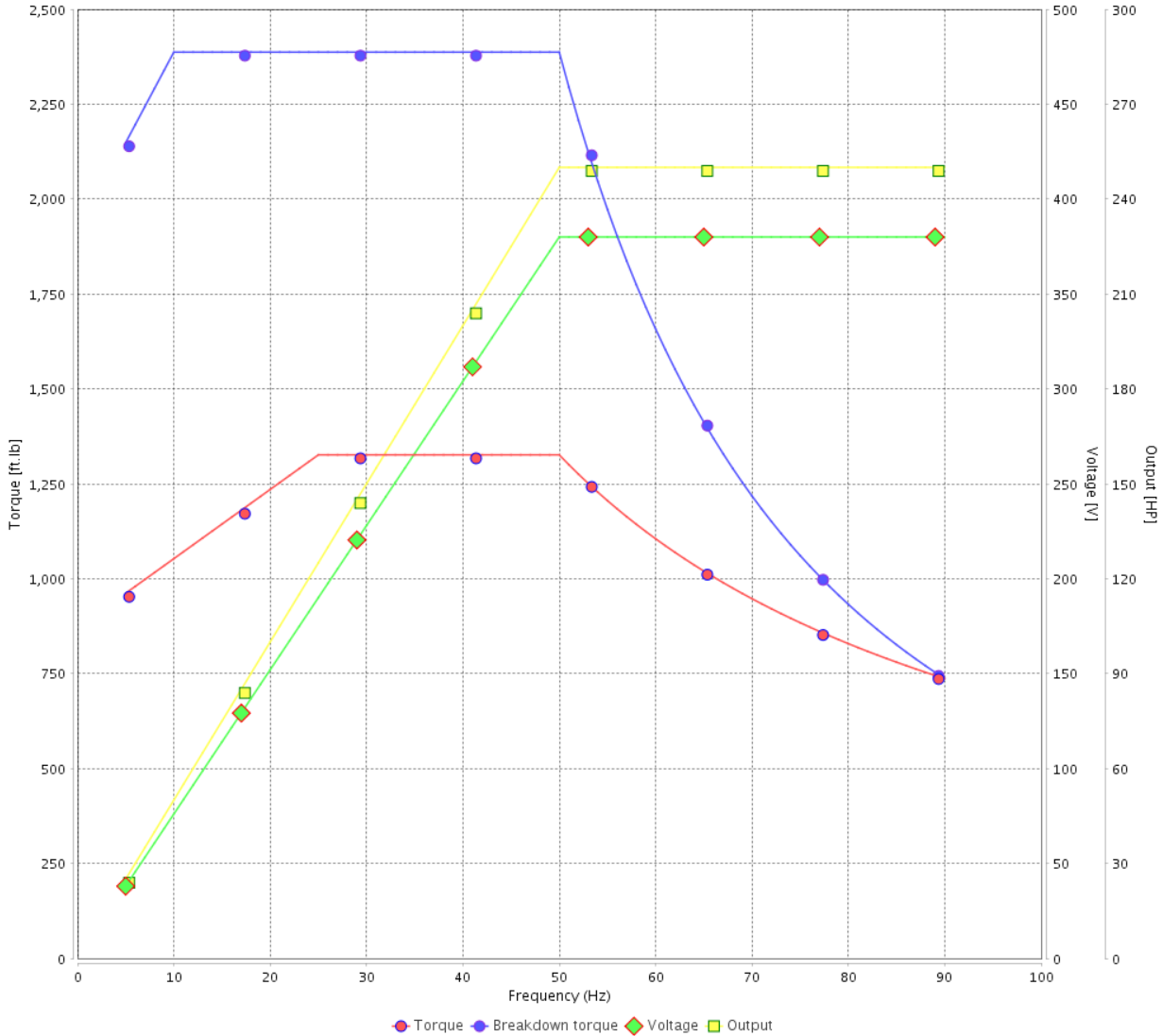
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VFD OPERATION CURVE



Performance : 380 V 50 Hz 6P IE3

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Locked rotor torque	: 150 %	Service factor	: 1.15
Breakdown torque	: 180 %	Temperature rise	: 80 K
Rated speed	: 990 rpm	Design	: B

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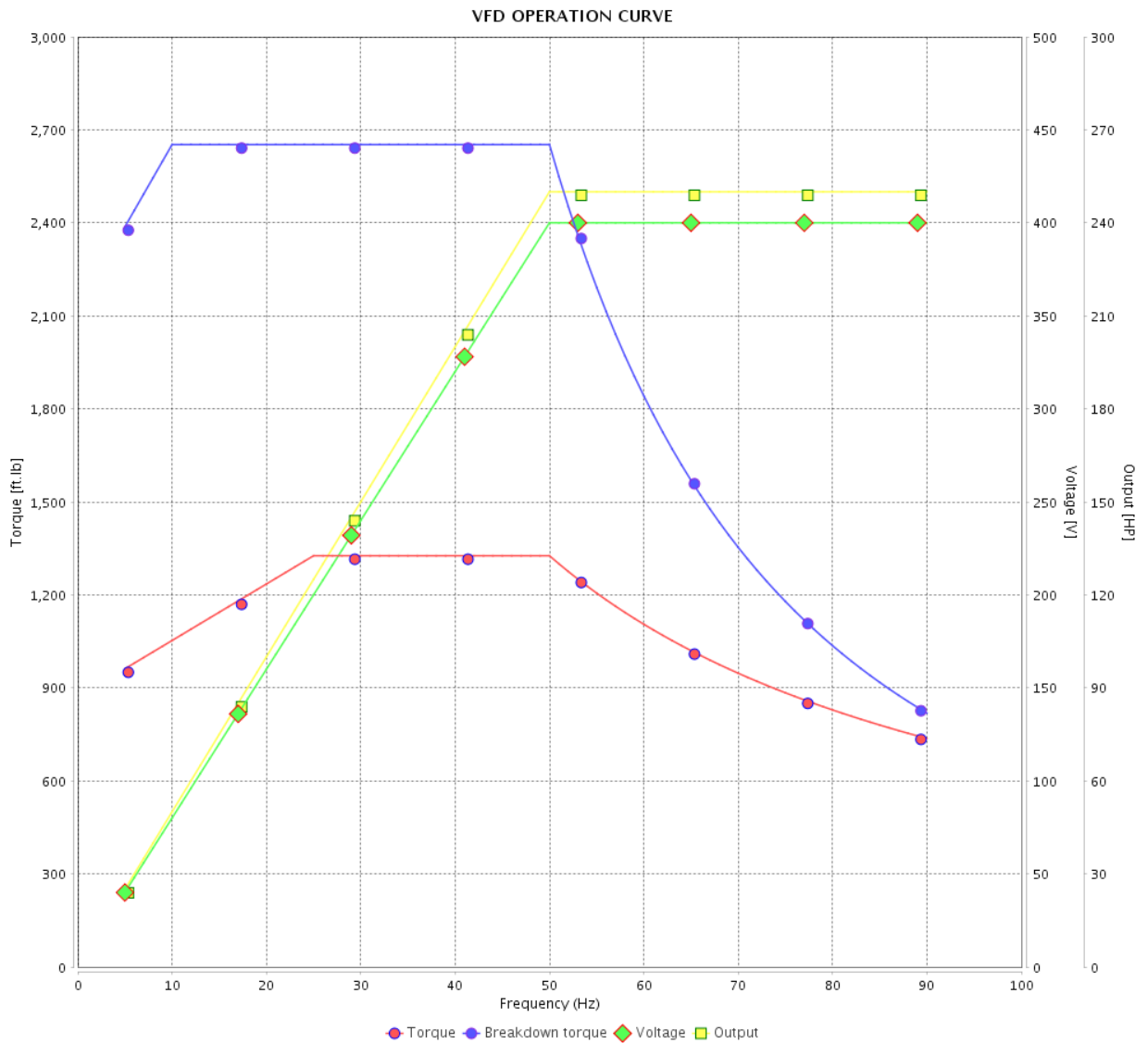


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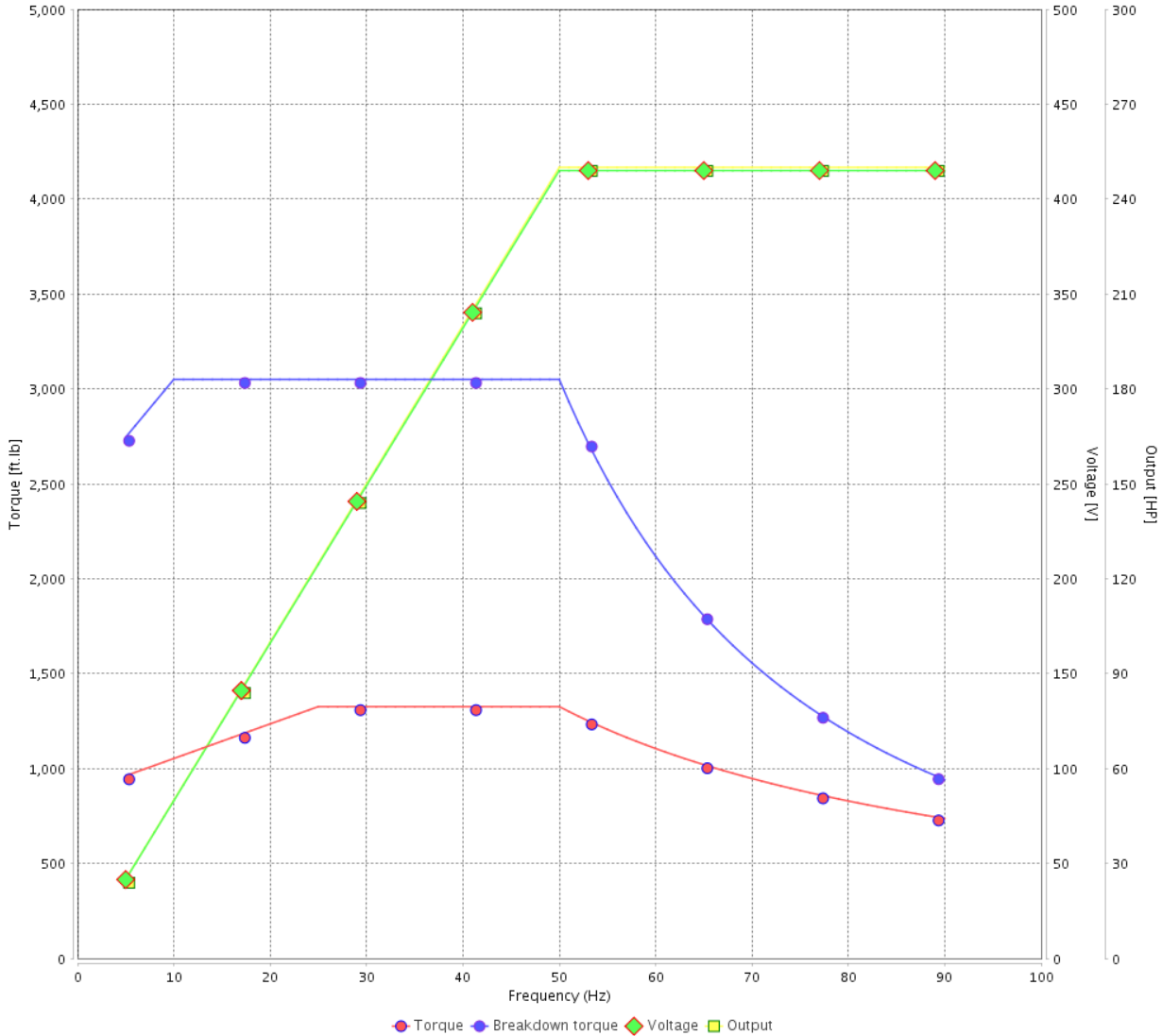
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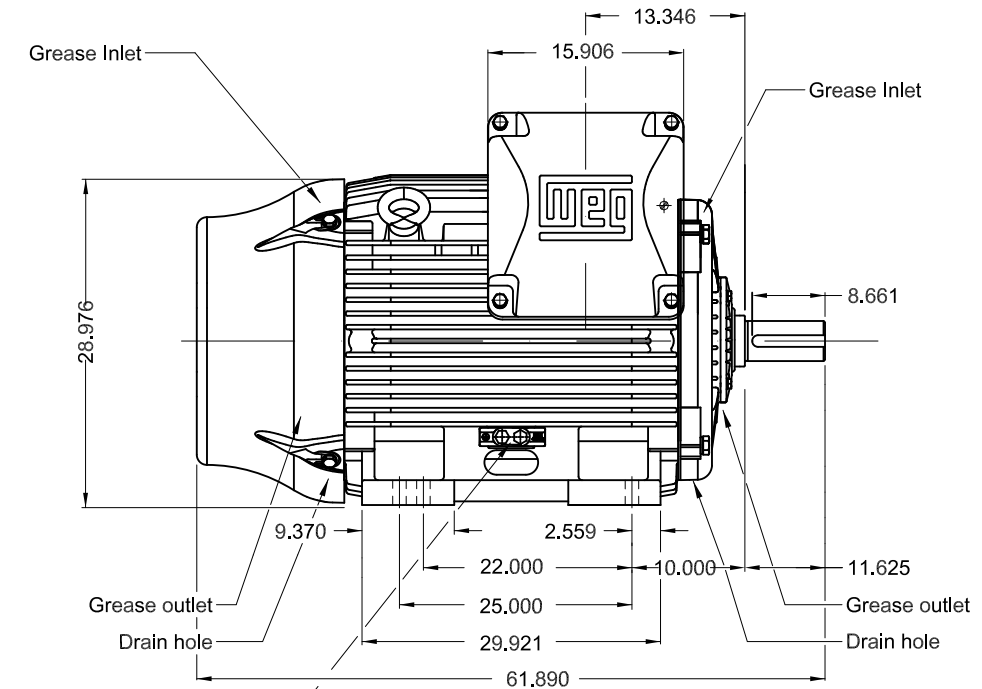
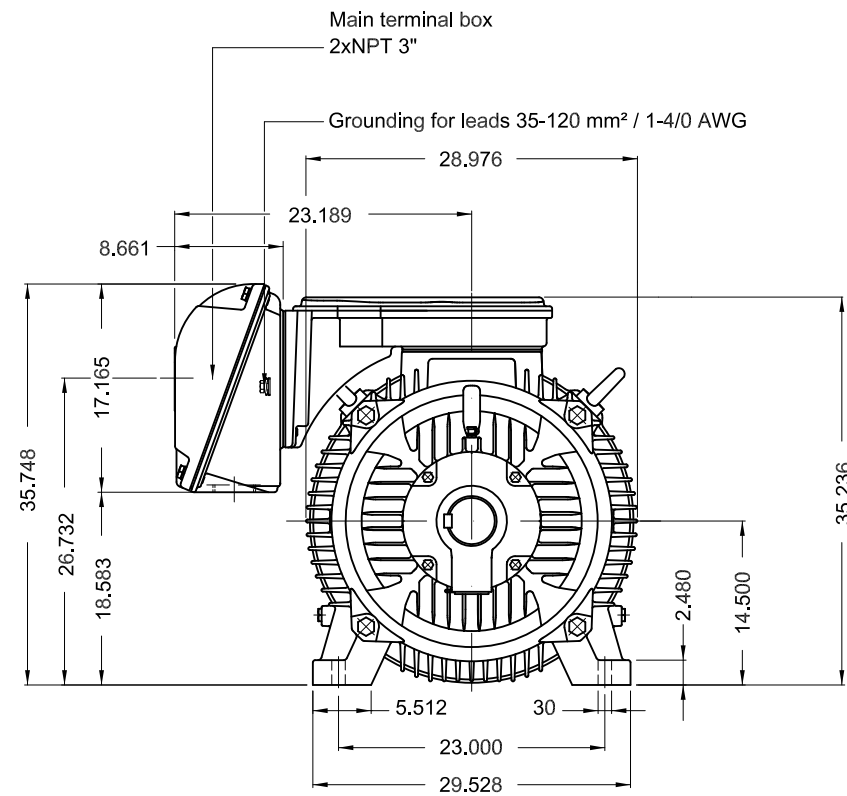


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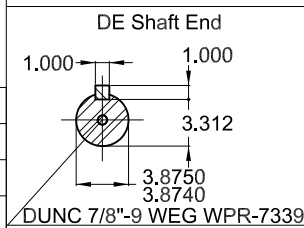
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Grounding for leads 25-185 mm² / 3AWG-350MCM

NDE endshield with electrically insulated bearing hub
 Color RAL 5009
 Painting plan 203A
 Mounting B3R(D)



300 HP 06 Poles 60 Hz

ECM	LOC	SUMMARY OF MODIFICATIONS	EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	PIRWUSER	THREE PH. MOTOR W22 PREM. EFF.					
CHECKED		FRAME 586/7T IP55 TEFC					
RELEASED							
REL DT.	WMO	Jaragua do Sul	Product Engineering	SHEET	1 / 1		

PREVIEW
WDD



MADE IN BRAZIL
11564991



MODEL 30012ET3G586/7-W22



FOR SAFE AREA
Mod.TE1BFOXON
CC029A



Class I, Div 2, Gr A, B, C and D - T3
Class I, Zone 2, IIC - T3
Class II, Div 2, Gr F and G - T3C
For use on PWM: Gr. A, B, C and D,
VT 1000:1, CT 6:1, 1.00SF - T2B

Inverter Duty Motor
Severe Duty

PH3 60Hz Fr. 586/7T 1000m.a.s.l. IP55 TEFC 3763lb

V 460

A 356

HP 300

kW 220

SF 1.15

SFA 409

RPM 1190

PF 0.81

AMB 40°C

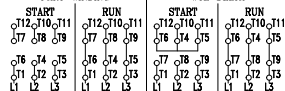
INS cl. F DT80K

NEMA NOM EFF 95.8%

DUTY CONT.

DES B Code G

PART-WINDING



→ 6322-C3 (60g)

→ 6319-C3 (45g)



MOBIL POLYREX EM (11000h)

