

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :			
Product line	: JP Pump NEMA Premium Efficiency Three-Phase	Product code :	14808964
		Catalog # :	00236ET3E145JP-SG
Frame	: 143/5JP	Cooling method	: IC411 - TEFC
Insulation class	: F	Mounting	: F-1
Duty cycle	: Cont.(S1)	Rotation <sup>1</sup>	: Both (CW and CCW)
Ambient temperature	: -20°C to +40°C	Starting method	: Direct On Line
Altitude	: 1000 m.a.s.l.	Approx. weight <sup>2</sup>	: 2.2 lb
Protection degree	: IP55	Moment of inertia (J)	: 0.1279 sq.ft.lb
Design	: B		
Output [HP]	2	2	2
Poles	2	2	2
Frequency [Hz]	60	50	50
Rated voltage [V]	230/460	190/380	220/415
Rated current [A]	4.94/2.47	5.94/2.97	5.39/2.86
L. R. Amperes [A]	48.9/24.5	44.0/22.0	44.2/23.5
LRC [A]	9.9x(Code L)	7.4x(Code J)	8.2x(Code K)
No load current [A]	2.13/1.06	2.10/1.05	2.14/1.13
Rated speed [RPM]	3520	2875	2890
Slip [%]	2.22	4.17	3.67
Rated torque [ft.lb]	2.98	3.65	3.63
Locked rotor torque [%]	250	229	260
Breakdown torque [%]	300	280	310
Service factor		1.15	1.15
Temperature rise	80 K	80 K	80 K
Locked rotor time	23s (cold) 13s (hot)	0s (cold) 0s (hot)	0s (cold) 0s (hot)
Noise level <sup>2</sup>	68.0 dB(A)	65.0 dB(A)	65.0 dB(A)
Efficiency (%)	25%	82.1	84.0
	50%	82.5	83.7
	75%	85.5	84.9
	100%	85.5	84.1
Power Factor	25%	0.45	0.48
	50%	0.73	0.76
	75%	0.83	0.86
	100%	0.89	0.90
Bearing type	: <u>Drive end</u> 6206 ZZ <u>Non drive end</u> 6203 ZZ	Foundation loads	
Sealing	: V'Ring Without Bearing Seal	Max. traction	: 97 lb
		Max. compression	: 99 lb
Lubrication interval	: -		
Lubricant amount	: -		
Lubricant type	: Mobil Polyrex EM		
Notes USABLE @208V 5.46A SF 1.00 SFA 5.46A			
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

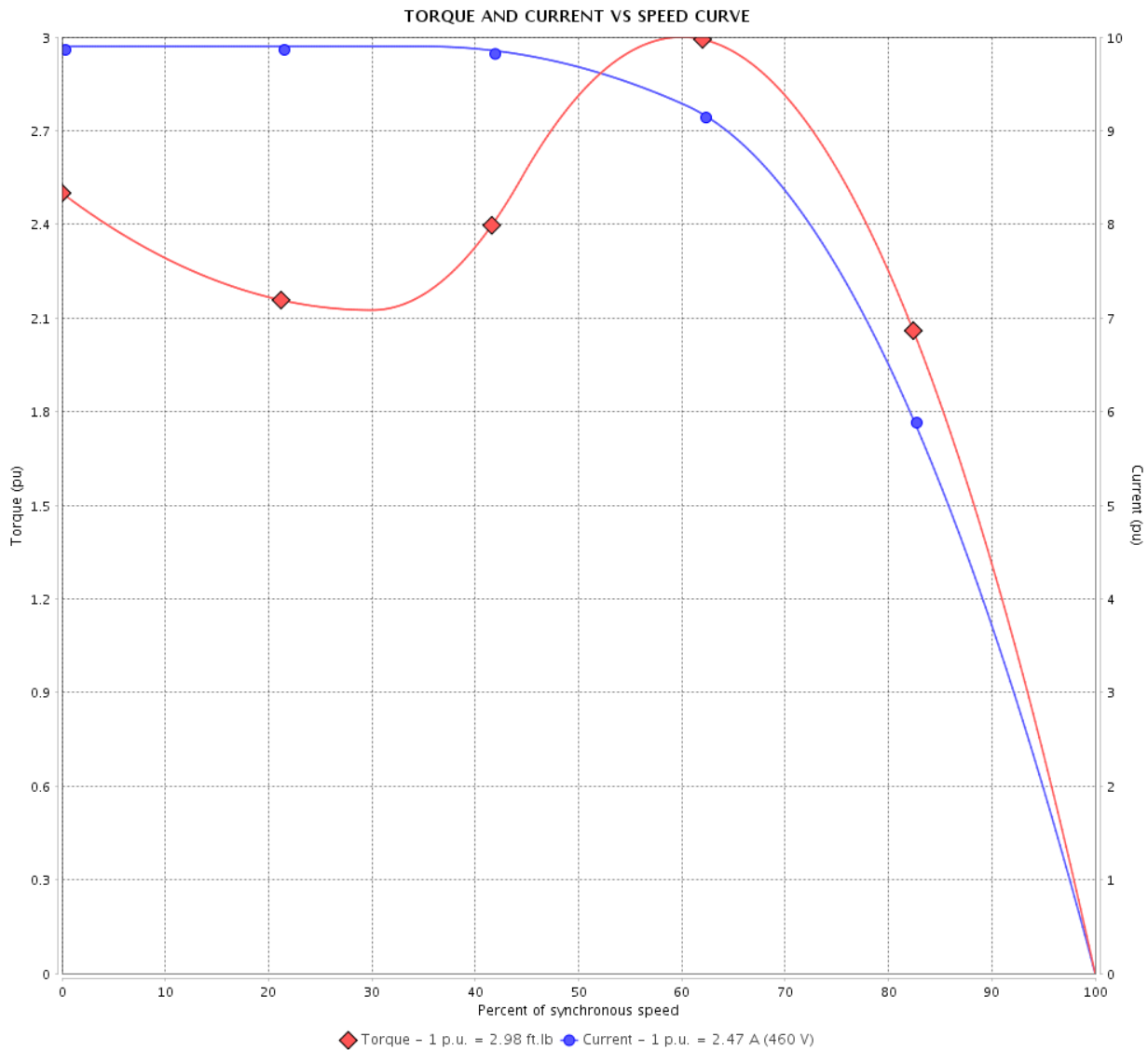


Customer :

Product line : JP Pump NEMA Premium  
Efficiency Three-Phase

Product code : 14808964

Catalog # : 00236ET3E145JP-SG



Performance : 230/460 V 60 Hz 2P

Rated current : 4.94/2.47 A  
LRC : 9.9  
Rated torque : 2.98 ft.lb  
Locked rotor torque : 250 %  
Breakdown torque : 300 %  
Rated speed : 3520 rpm

Moment of inertia (J) : 0.1279 sq.ft.lb  
Duty cycle : Cont.(S1)  
Insulation class : F  
Service factor :  
Temperature rise : 80 K  
Design : B

Locked rotor time : 23s (cold) 13s (hot)

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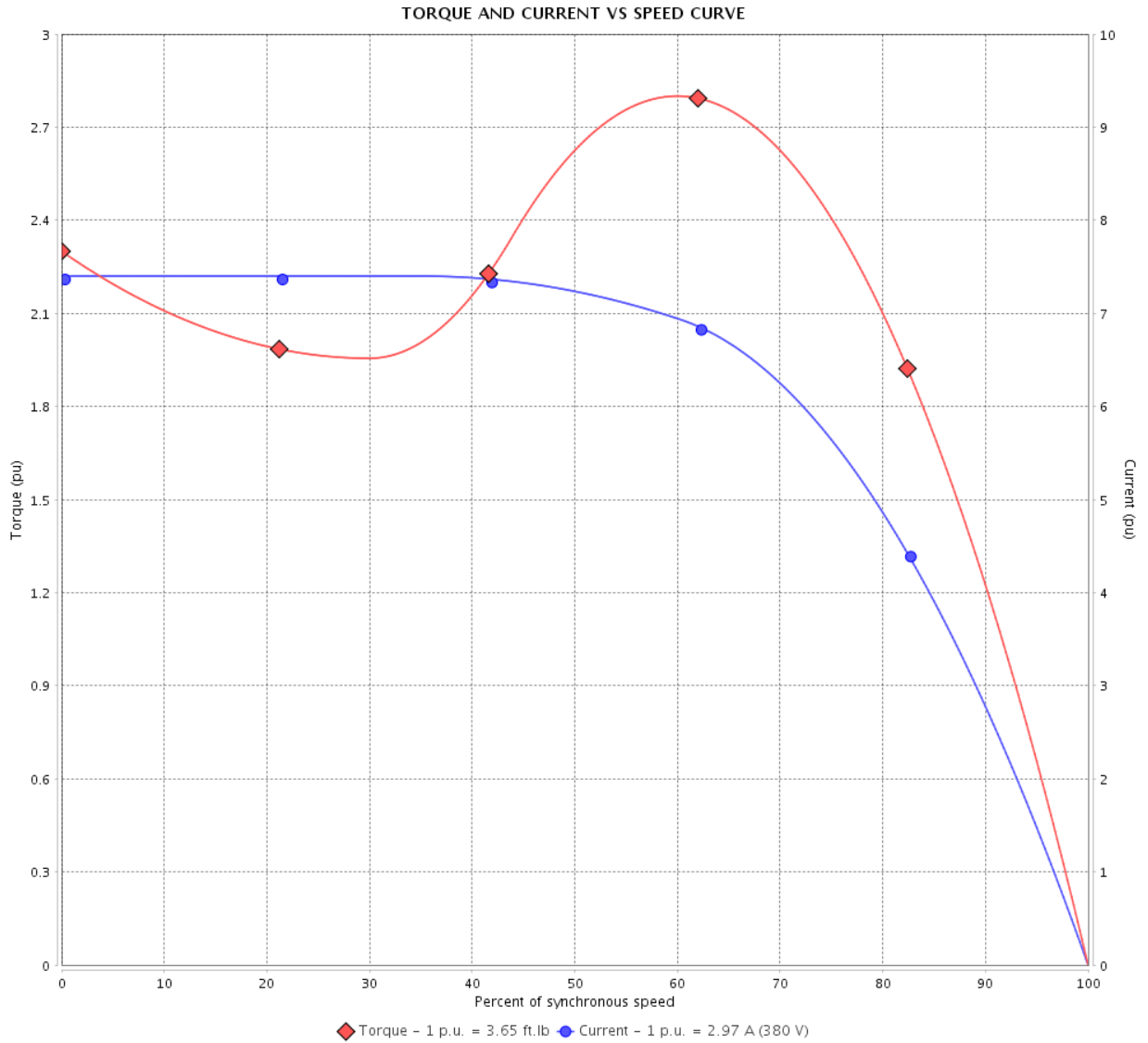
## Three Phase Induction Motor - Squirrel Cage

Customer :

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Product code : 14808964

Catalog # : 00236ET3E145JP-SG



Performance : 190/380 V 50 Hz 2P

Rated current : 5.94/2.97 A  
 LRC : 7.4  
 Rated torque : 3.65 ft.lb  
 Locked rotor torque : 229 %  
 Breakdown torque : 280 %  
 Rated speed : 2875 rpm

Moment of inertia (J) : 0.1279 sq.ft.lb  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.15  
 Temperature rise : 80 K  
 Design : B

Locked rotor time : 0s (cold) 0s (hot)

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Three Phase Induction Motor - Squirrel Cage



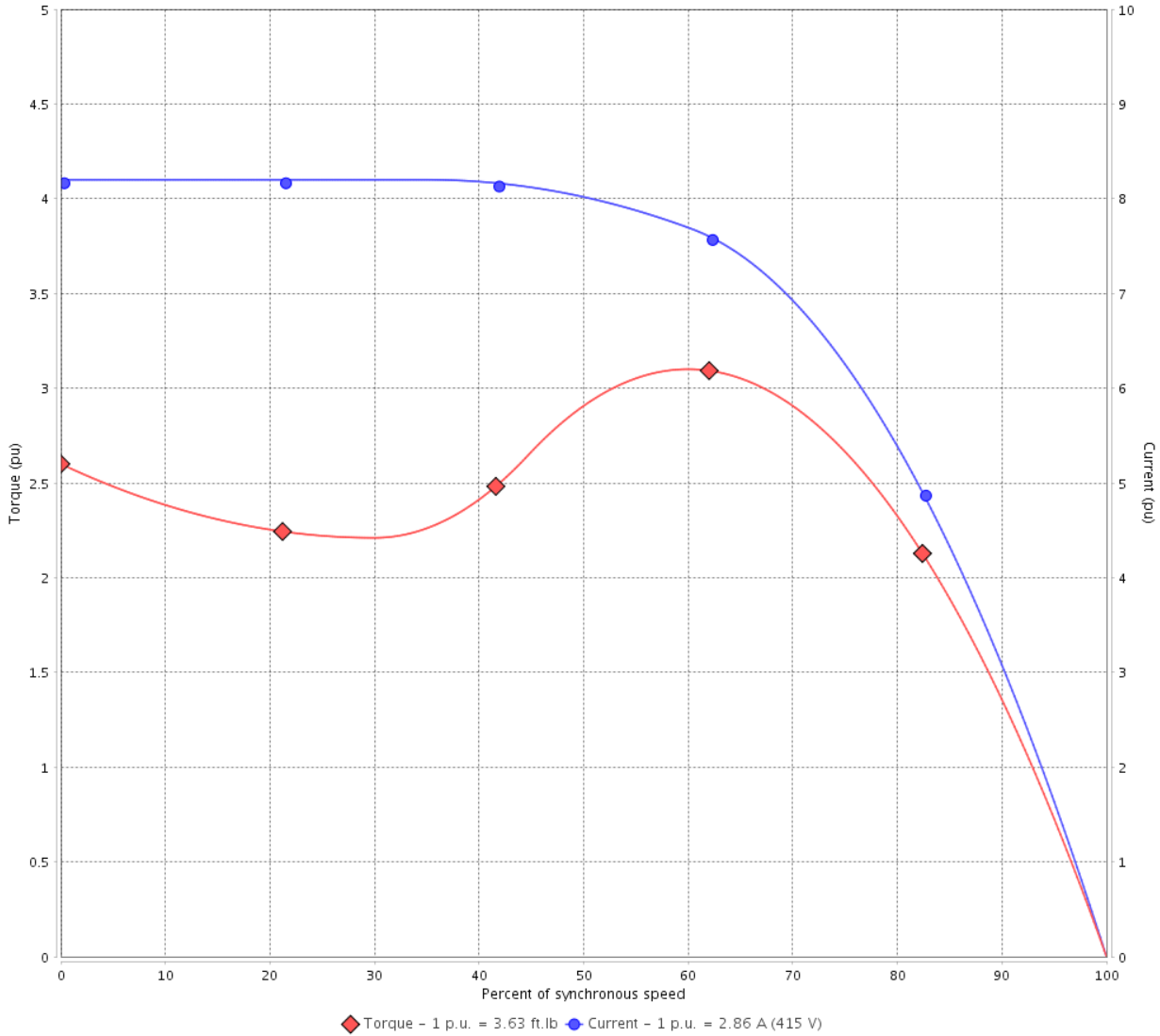
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Product code : 14808964

Catalog # : 00236ET3E145JP-SG

TORQUE AND CURRENT VS SPEED CURVE



Performance : 220/415 V 50 Hz 2P

Rated current : 5.39/2.86 A  
LRC : 8.2  
Rated torque : 3.63 ft.lb  
Locked rotor torque : 260 %  
Breakdown torque : 310 %  
Rated speed : 2890 rpm

Moment of inertia (J) : 0.1279 sq.ft.lb  
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# LOAD PERFORMANCE CURVE

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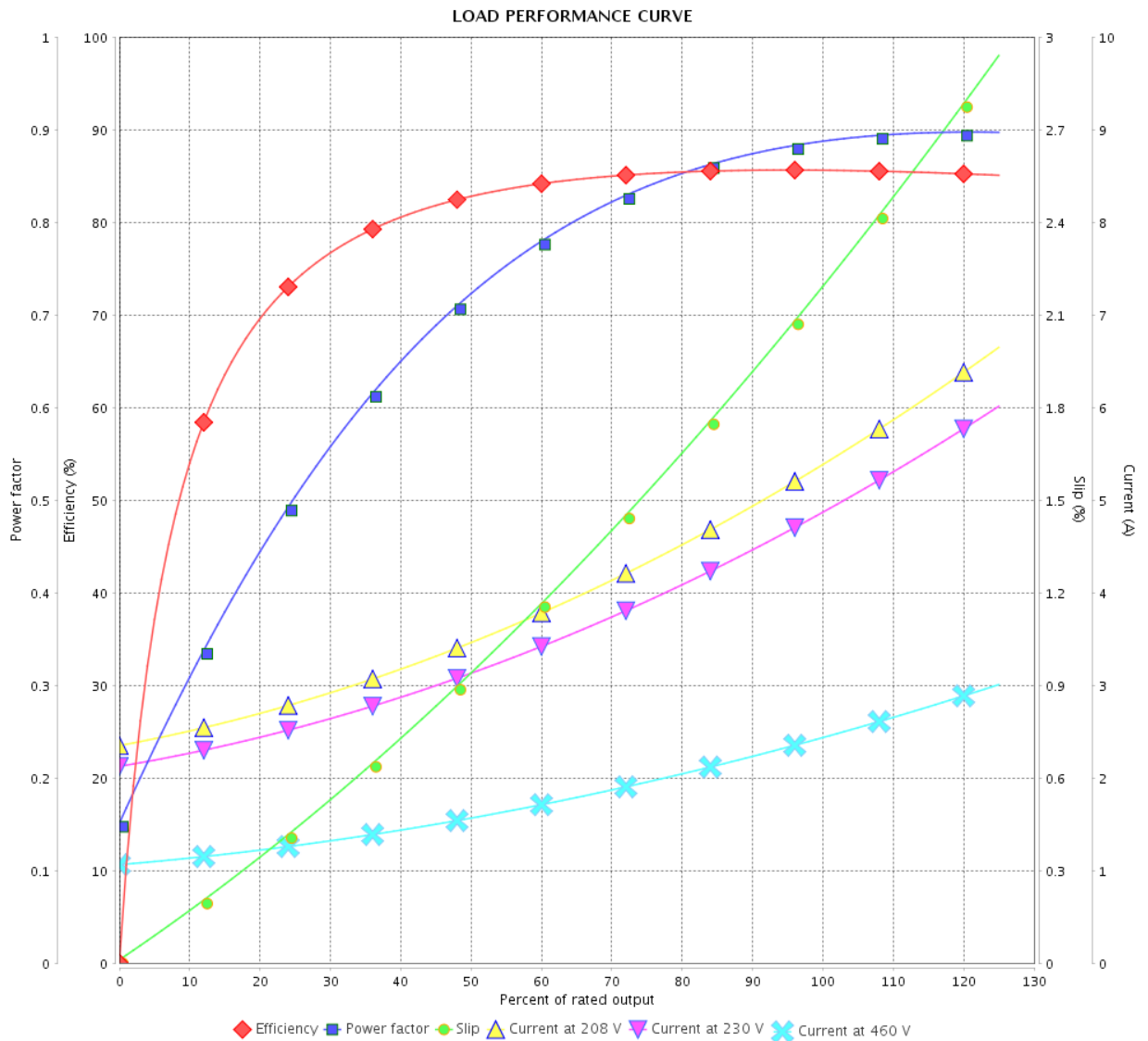


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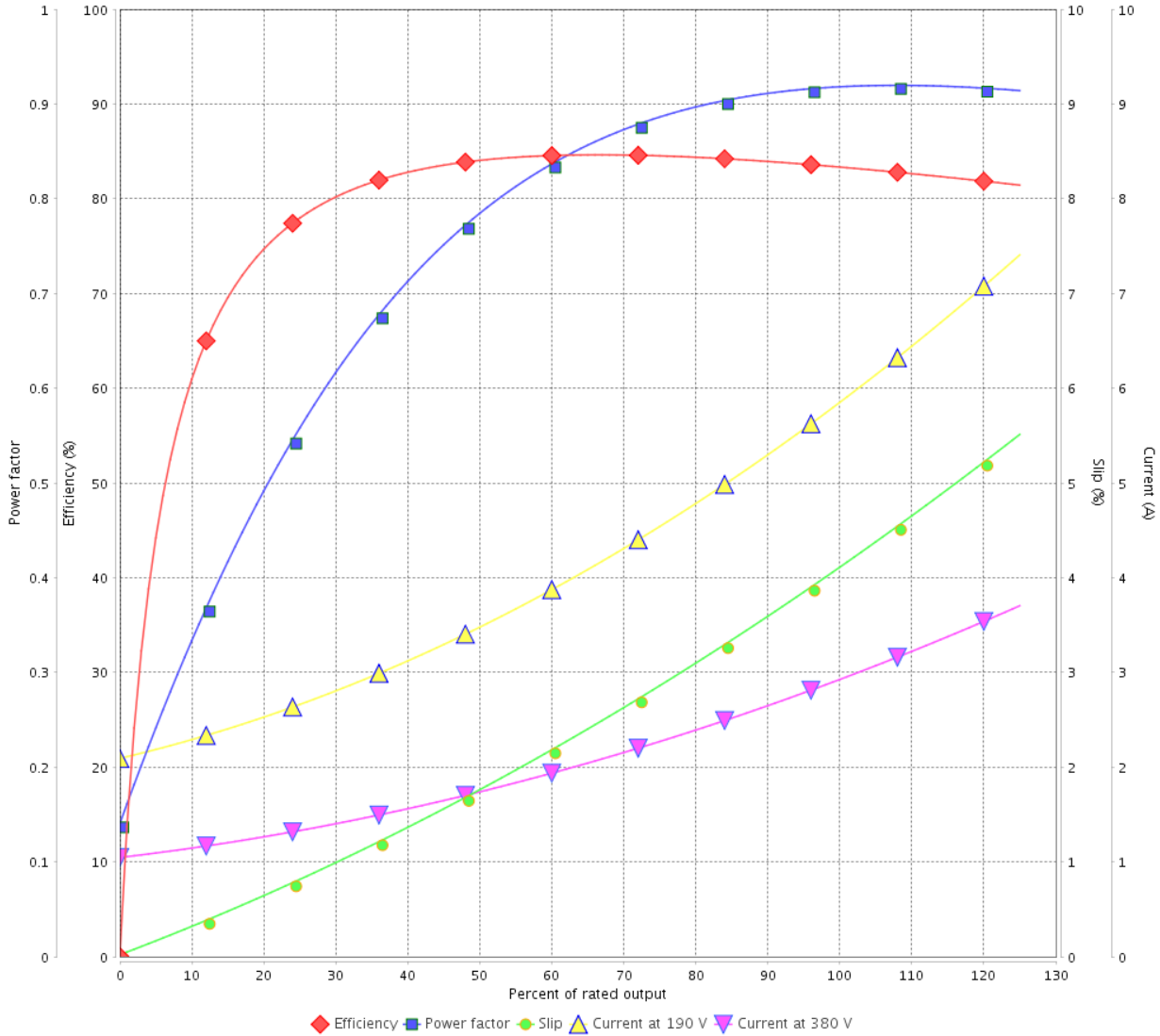
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LOAD PERFORMANCE CURVE



Performance : 190/380 V 50 Hz 2P

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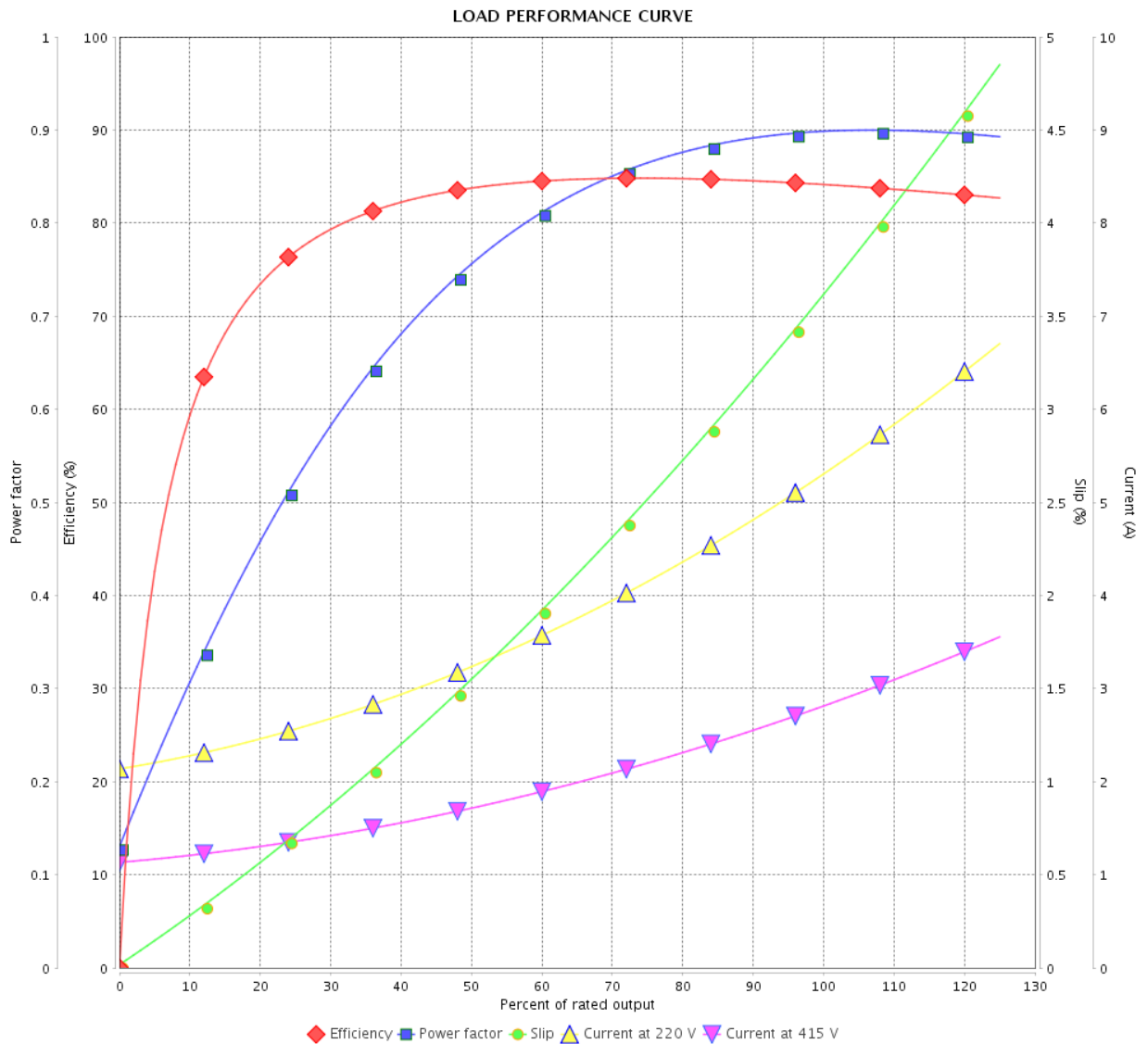


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# THERMAL LIMIT CURVE

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Temperature rise : 80 K  
Design : B

Heating constant

Cooling constant

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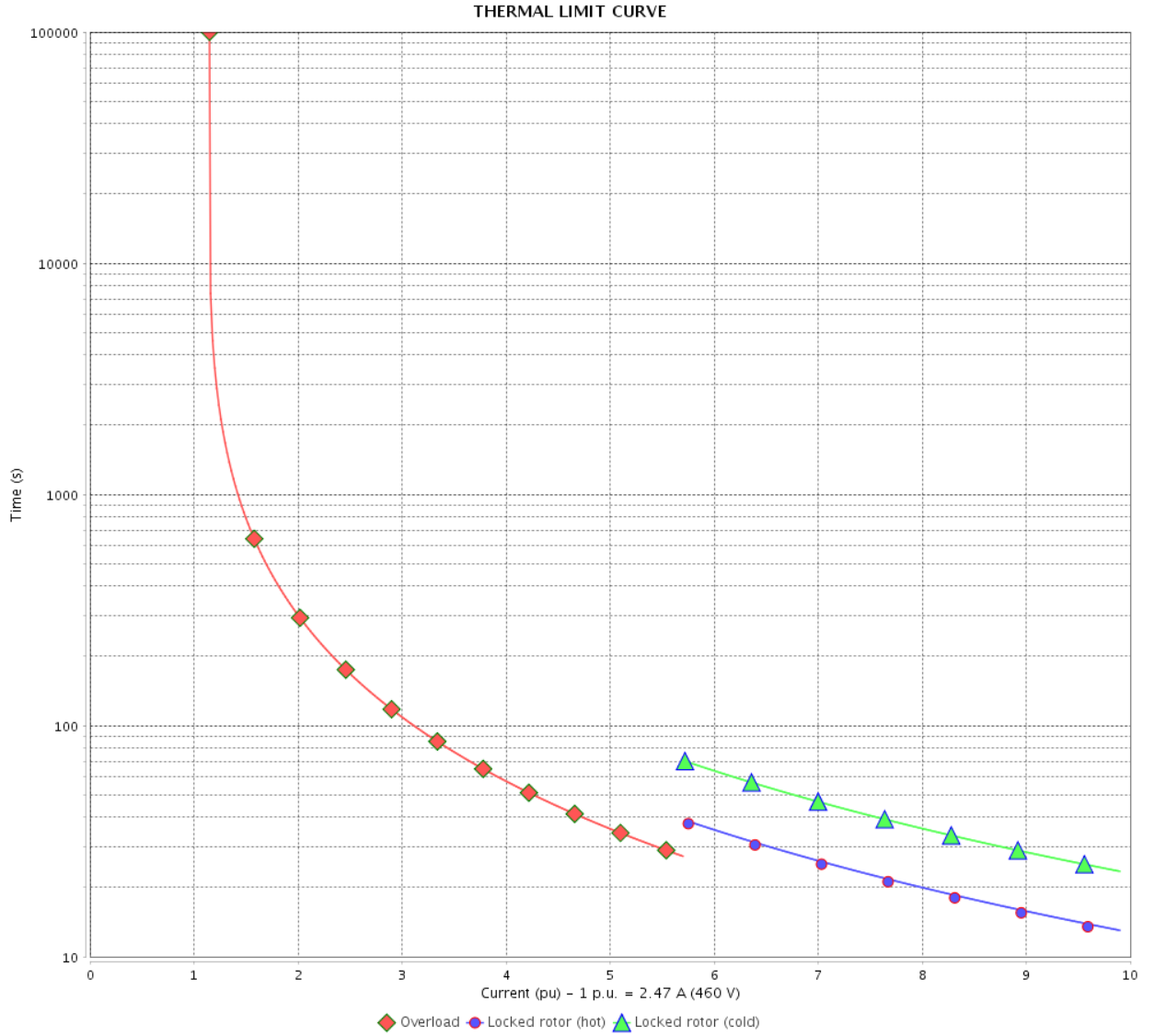


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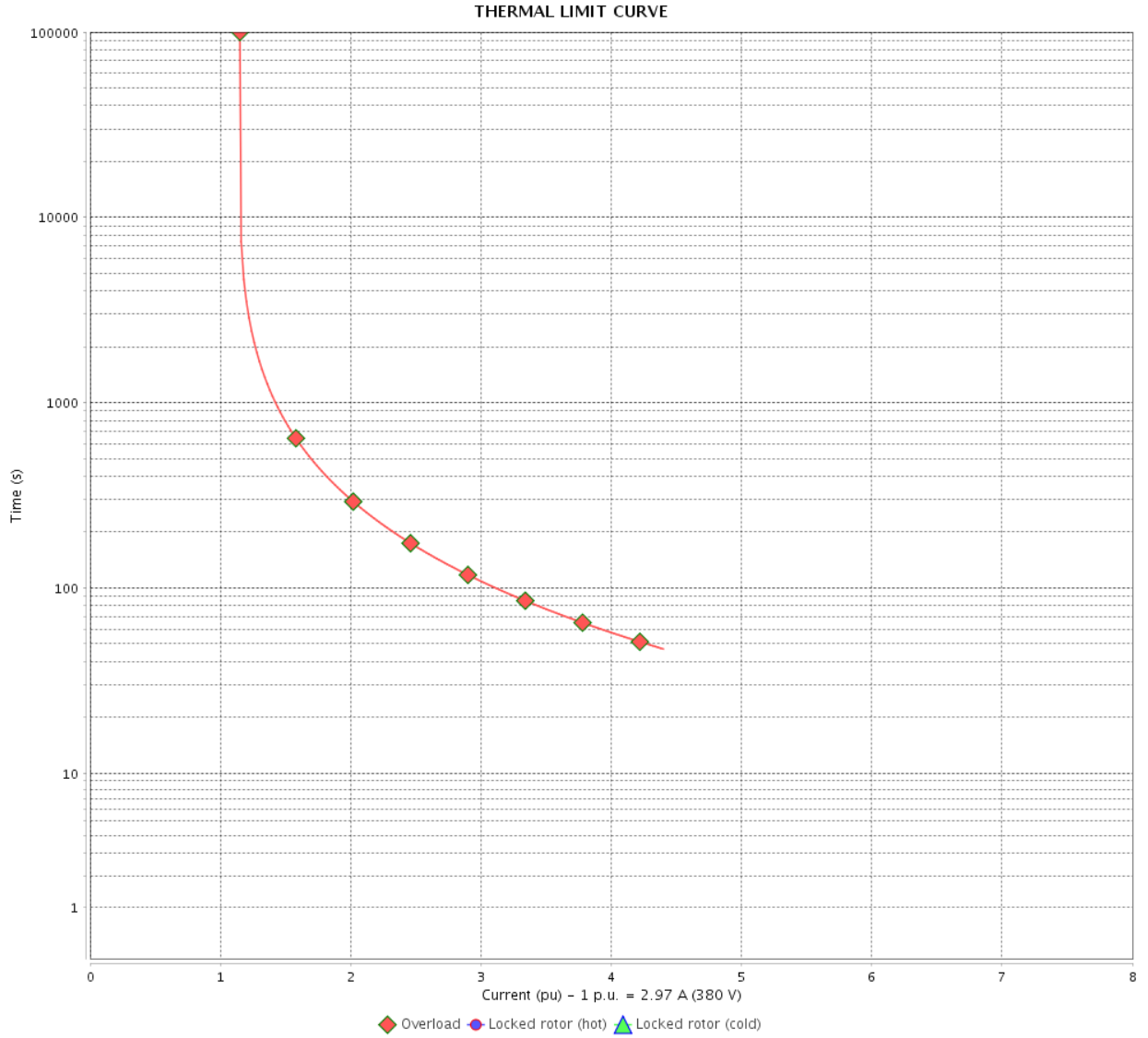
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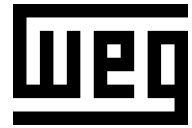


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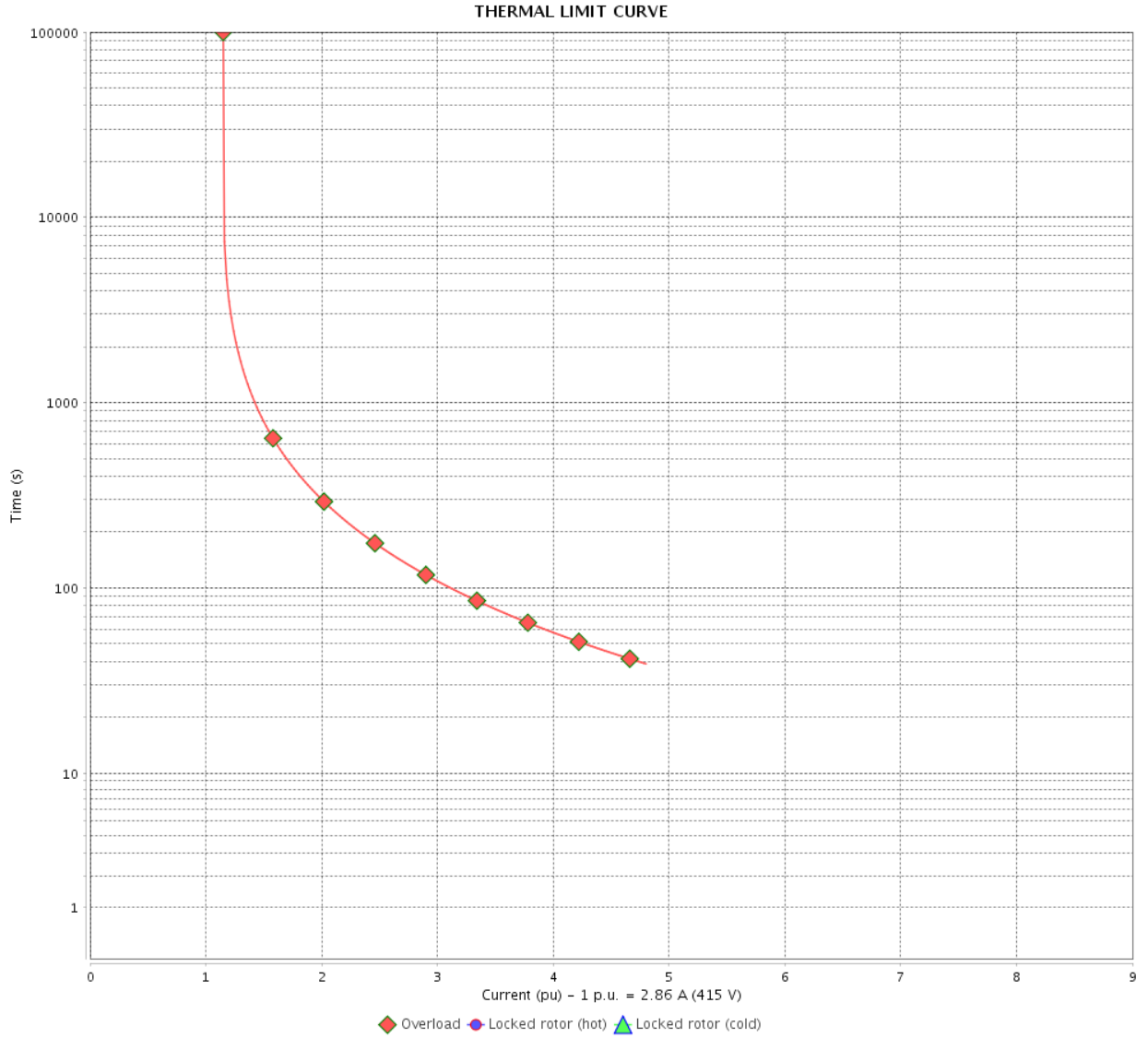
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# VFD OPERATION CURVE

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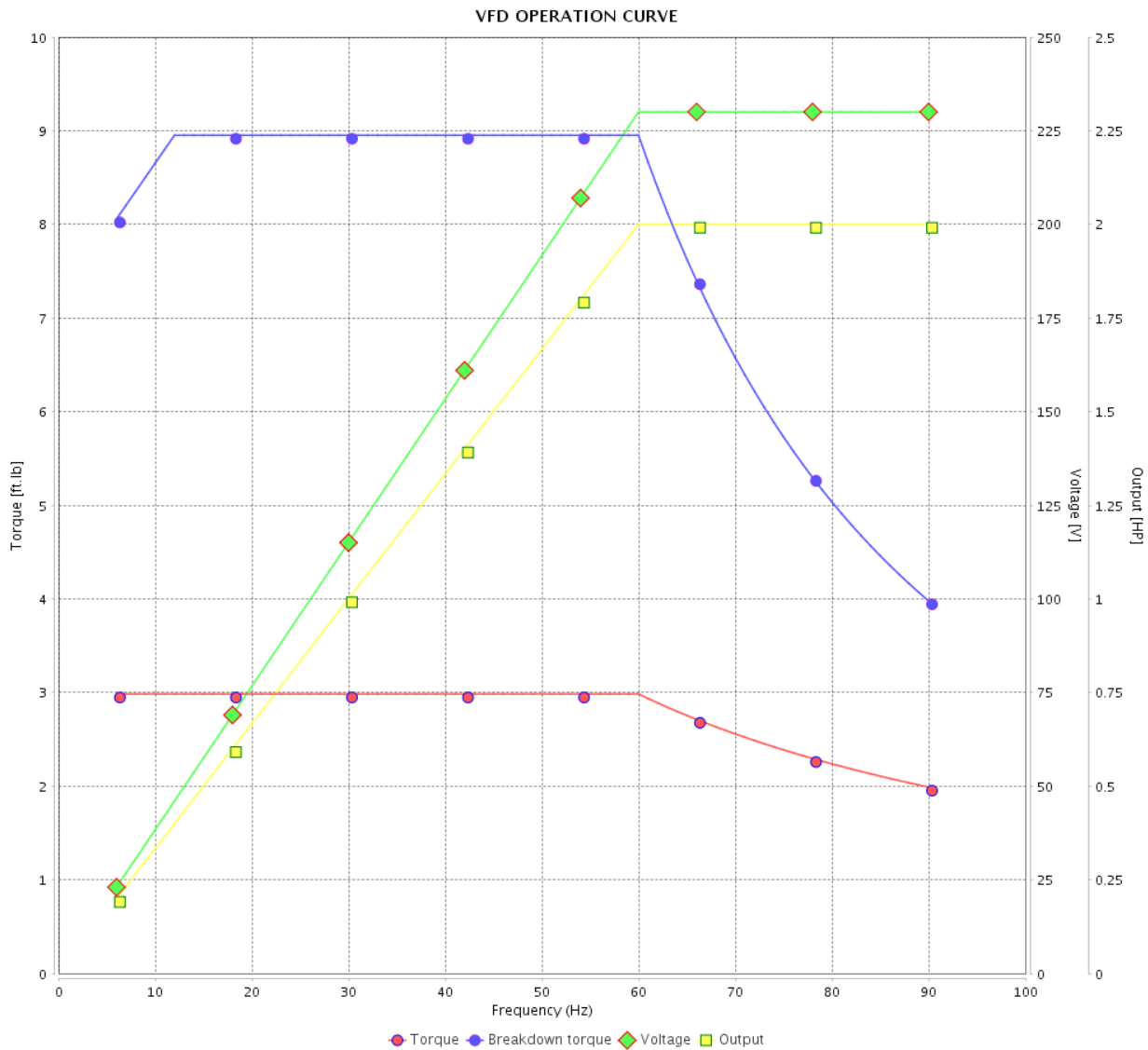


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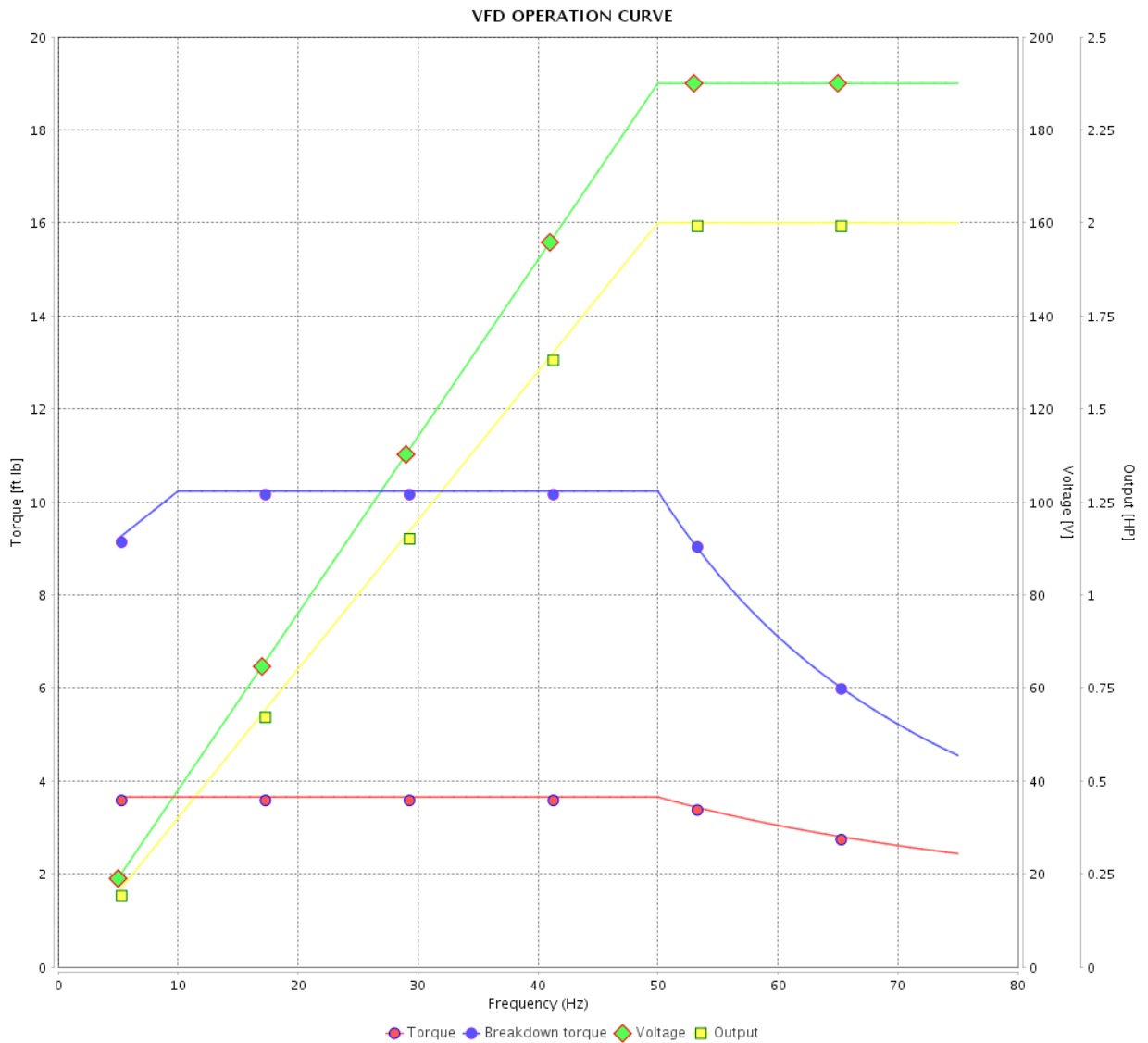


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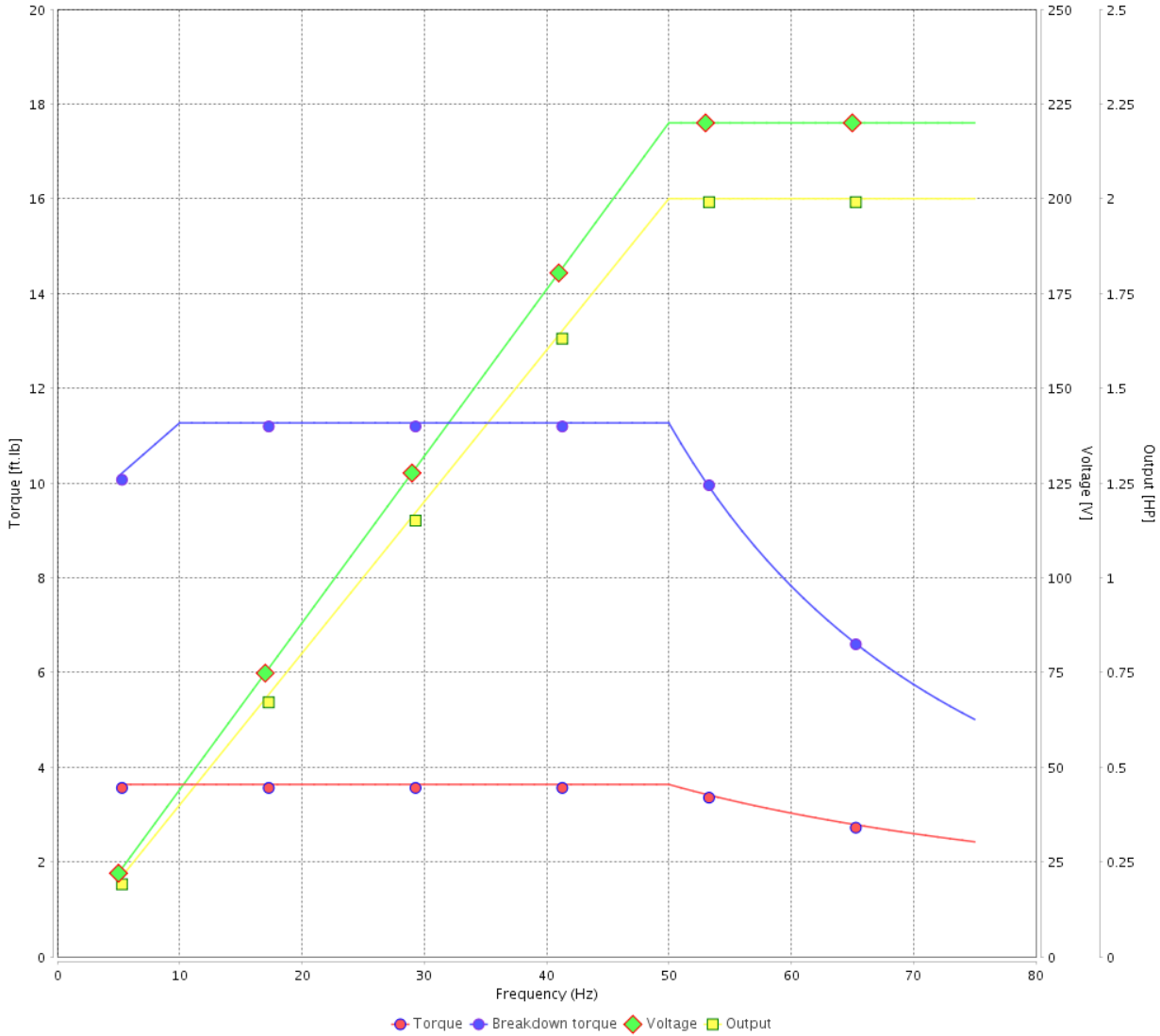
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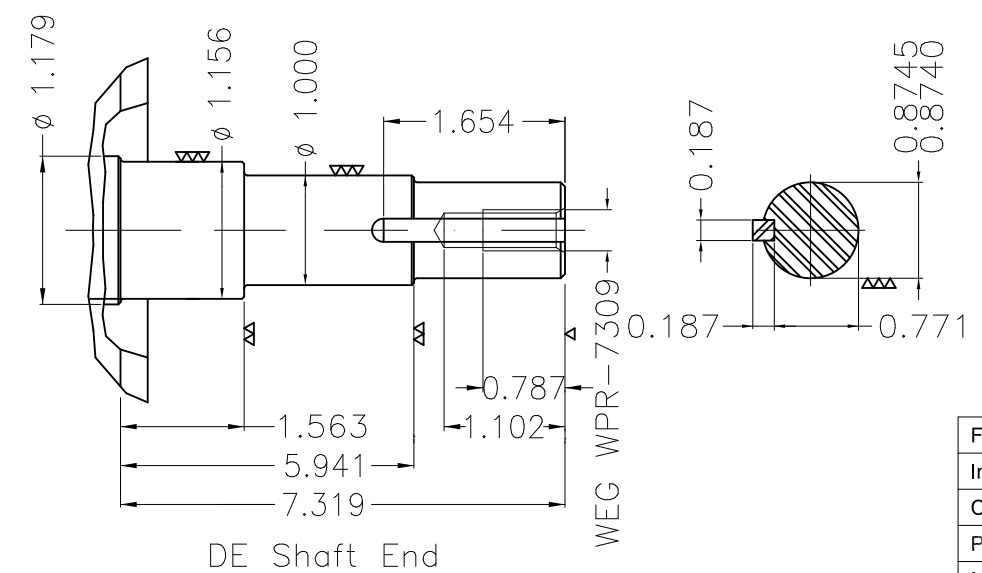
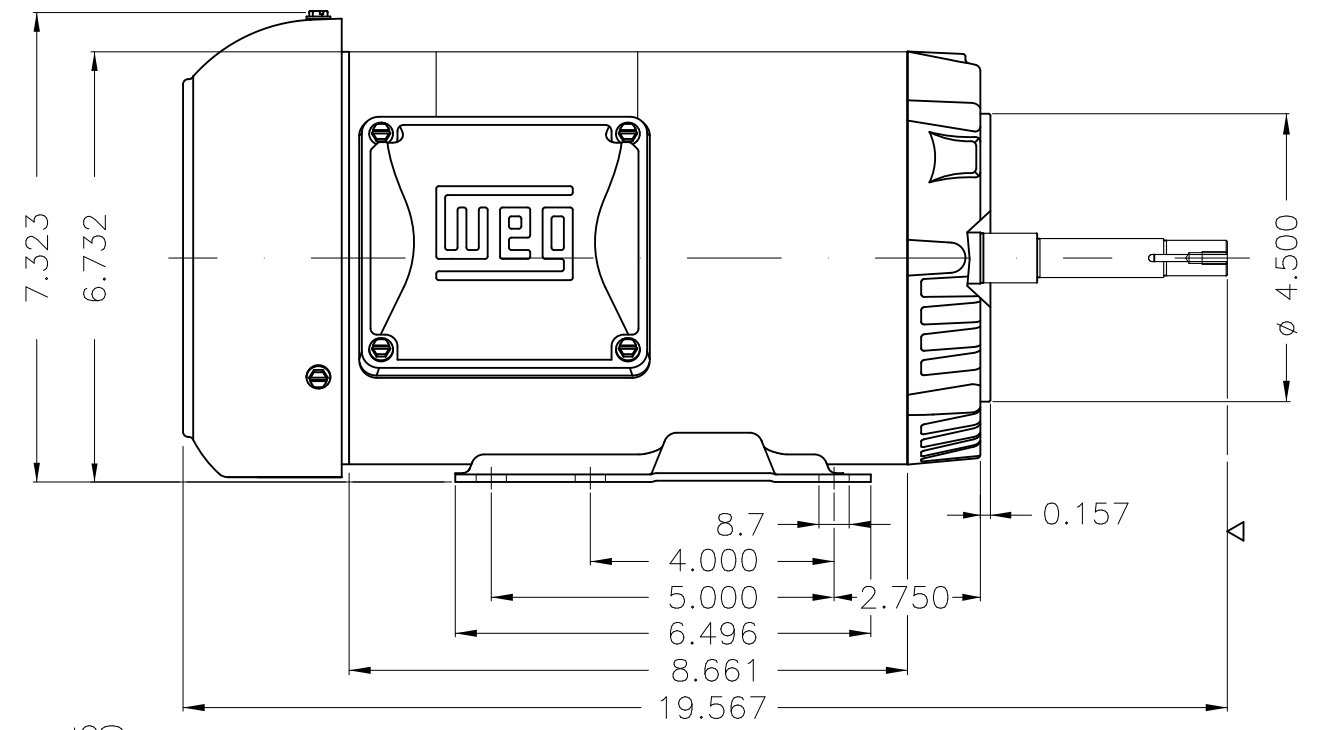
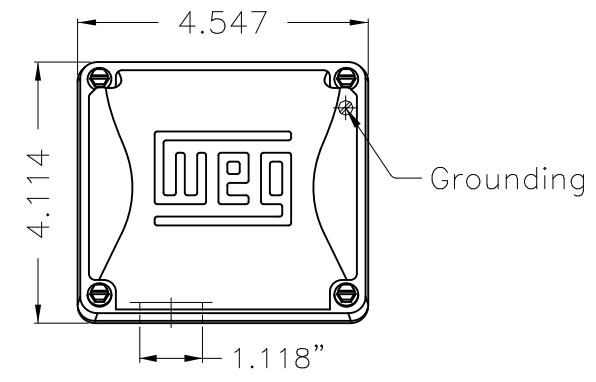
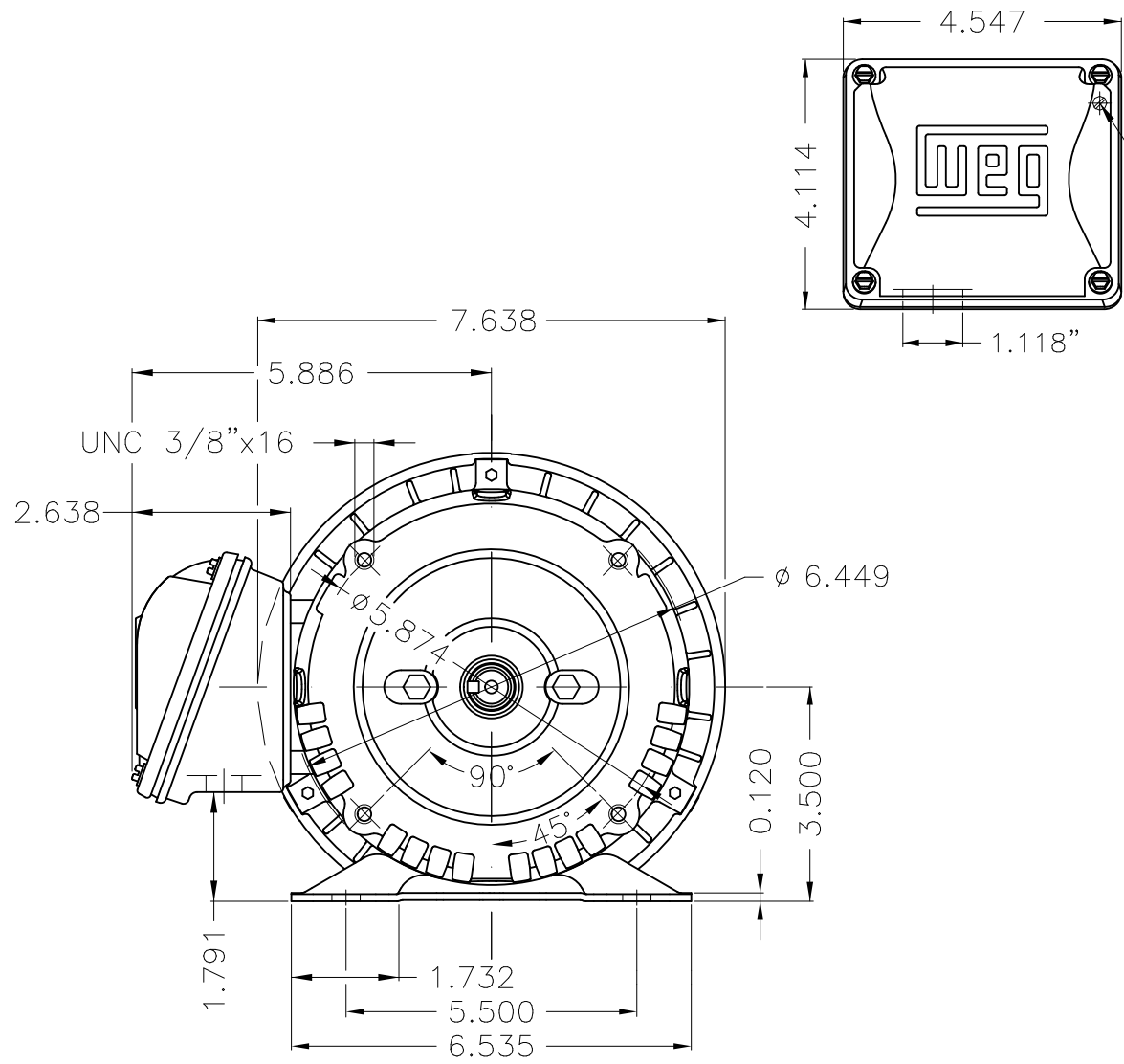
A

B

C

D

E



EUNC 3/8"-16 WEG WPR-7309

DE Shaft End

- Fan cover - steel plate
- Internal AEGIS ground ring on the DE
- Color Munsell N 1 matte black
- Painting plan 207N
- Mounting F-1/B34R(D)

ECM	LOC	SUMMARY OF MODIFICATIONS	EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	PIRWUSER	THREE PH. MOTOR ROLLED STEEL CLOSE COUPLED PUMP JP 55 DE PREM LFA					
CHECKED		FRAME 143/5JP IP55 TEFC					
RELEASED							
REL DT.		WMO Jaragua do Sul	Product Engineering	WDD	SHEET	1 / 1	

2 HP 02 Poles 60 Hz

