

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :			
Product line	: JP Pump NEMA Premium Efficiency Three-Phase	Product code :	14101506
		Catalog # :	00118OT3E143JP-SG
Frame	: 143/5JP	Cooling method	: IC01 - ODP
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	: 37.6 lb
Design	: B	Moment of inertia (J)	: 0.1101 sq.ft.lb
Output [HP]	1	1	1
Poles	4	4	4
Frequency [Hz]	60	50	50
Rated voltage [V]	230/460	190/380	220/415
Rated current [A]	3.02/1.51	3.44/1.72	3.15/1.67
L. R. Amperes [A]	24.2/12.1	22.4/11.2	22.4/11.9
LRC [A]	8.0x(Code L)	6.5x(Code J)	7.1x(Code K)
No load current [A]	1.92/0.958	1.88/0.942	1.93/1.02
Rated speed [RPM]	1760	1445	1450
Slip [%]	2.22	3.67	3.33
Rated torque [ft.lb]	2.98	3.63	3.62
Locked rotor torque [%]	290	200	229
Breakdown torque [%]	360	270	300
Service factor		1.15	1.15
Temperature rise	80 K	80 K	80 K
Locked rotor time	39s (cold) 22s (hot)	0s (cold) 0s (hot)	0s (cold) 0s (hot)
Noise level ²	52.0 dB(A)	49.0 dB(A)	49.0 dB(A)
Efficiency (%)	25%	79.9	80.7
	50%	81.5	81.0
	75%	84.0	83.2
	100%	85.5	83.1
Power Factor	25%	0.29	0.31
	50%	0.51	0.55
	75%	0.65	0.69
	100%	0.73	0.78
Bearing type	: <u>Drive end</u> 6206 ZZ <u>Non drive end</u> 6203 ZZ	Foundation loads	
Sealing	: Without Without Bearing Seal Bearing Seal	Max. traction	: 75 lb
		Max. compression	: 113 lb
Lubrication interval	: - -		
Lubricant amount	: - -		
Lubricant type	: Mobil Polyrex EM		
Notes USABLE @208V 3.34A SF 1.00 SFA 3.34A			
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



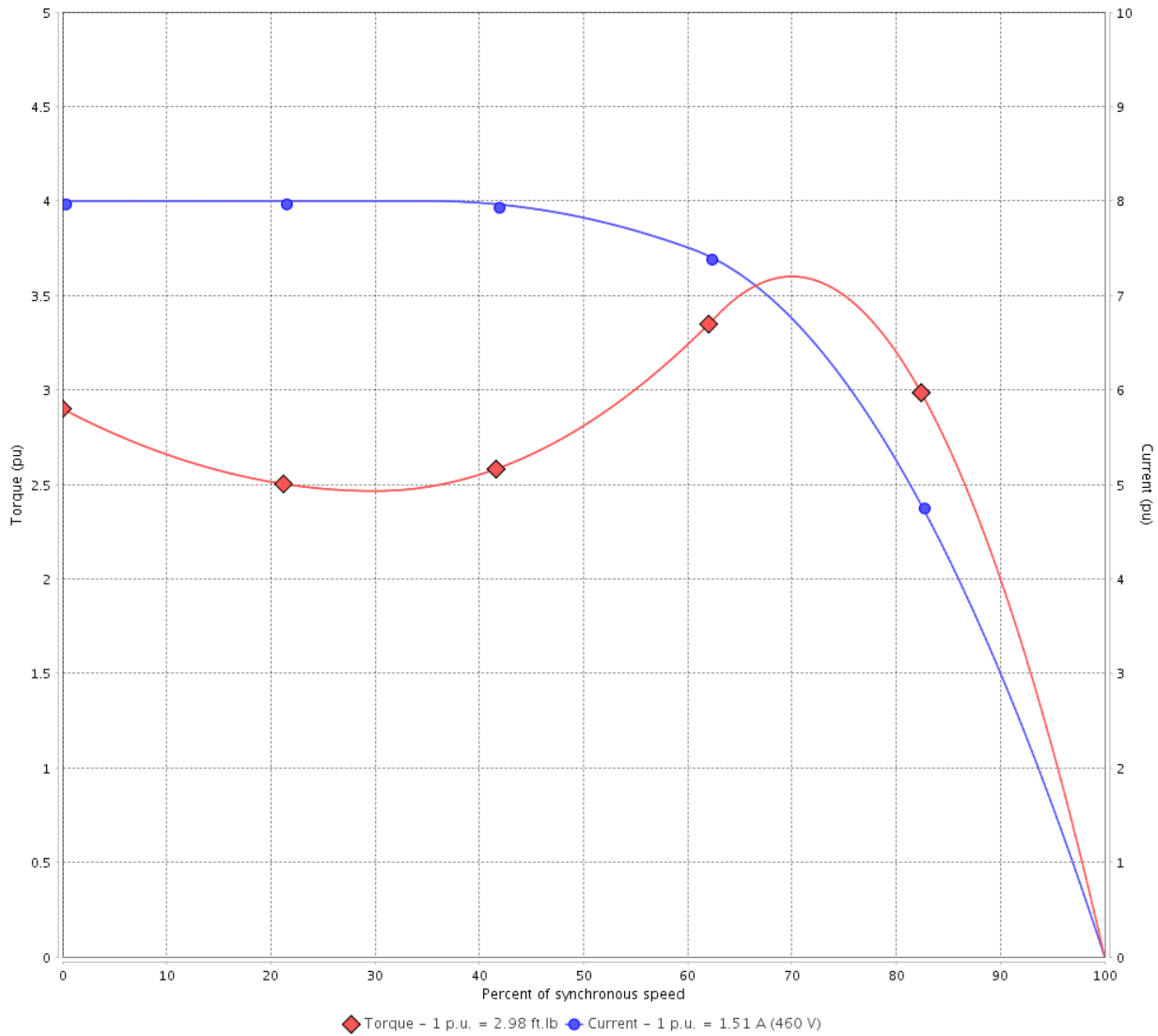
Customer :

Product line : JP Pump NEMA Premium
Efficiency Three-Phase

Product code : 14101506

Catalog # : 001180T3E143JP-SG

TORQUE AND CURRENT VS SPEED CURVE



Performance : 230/460 V 60 Hz 4P

Rated current	: 3.02/1.51 A	Moment of inertia (J)	: 0.1101 sq.ft.lb
LRC	: 8.0	Duty cycle	: Cont.(S1)
Rated torque	: 2.98 ft.lb	Insulation class	: F
Locked rotor torque	: 290 %	Service factor	:
Breakdown torque	: 360 %	Temperature rise	: 80 K
Rated speed	: 1760 rpm	Design	: B

Locked rotor time : 39s (cold) 22s (hot)

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TORQUE AND CURRENT VS SPEED CURVE



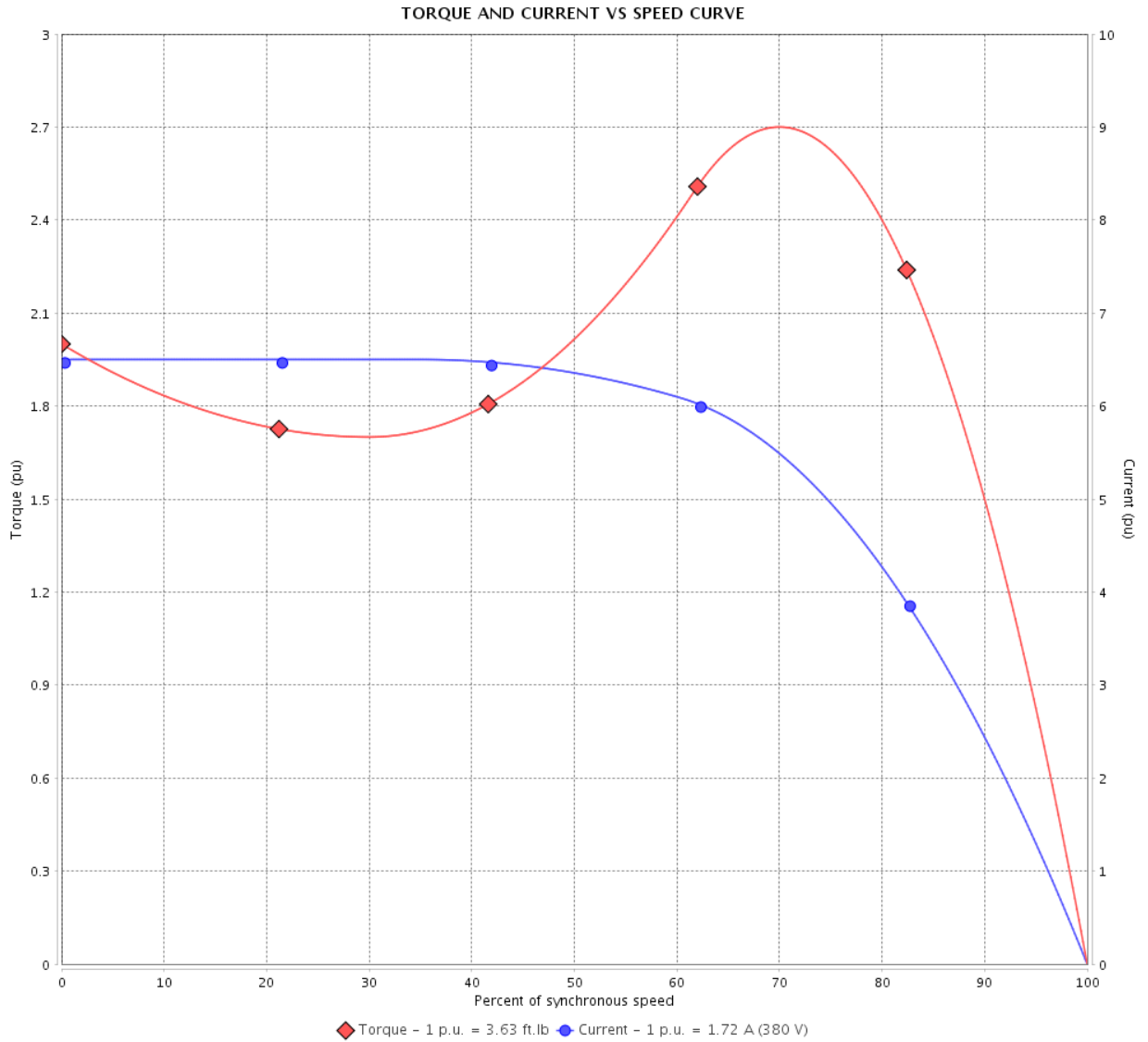
Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : JP Pump NEMA Premium Efficiency Three-Phase

Product code : 14101506

Catalog # : 00118OT3E143JP-SG



Performance : 190/380 V 50 Hz 4P

Rated current : 3.44/1.72 A
 LRC : 6.5
 Rated torque : 3.63 ft.lb
 Locked rotor torque : 200 %
 Breakdown torque : 270 %
 Rated speed : 1445 rpm

Moment of inertia (J) : 0.1101 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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TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



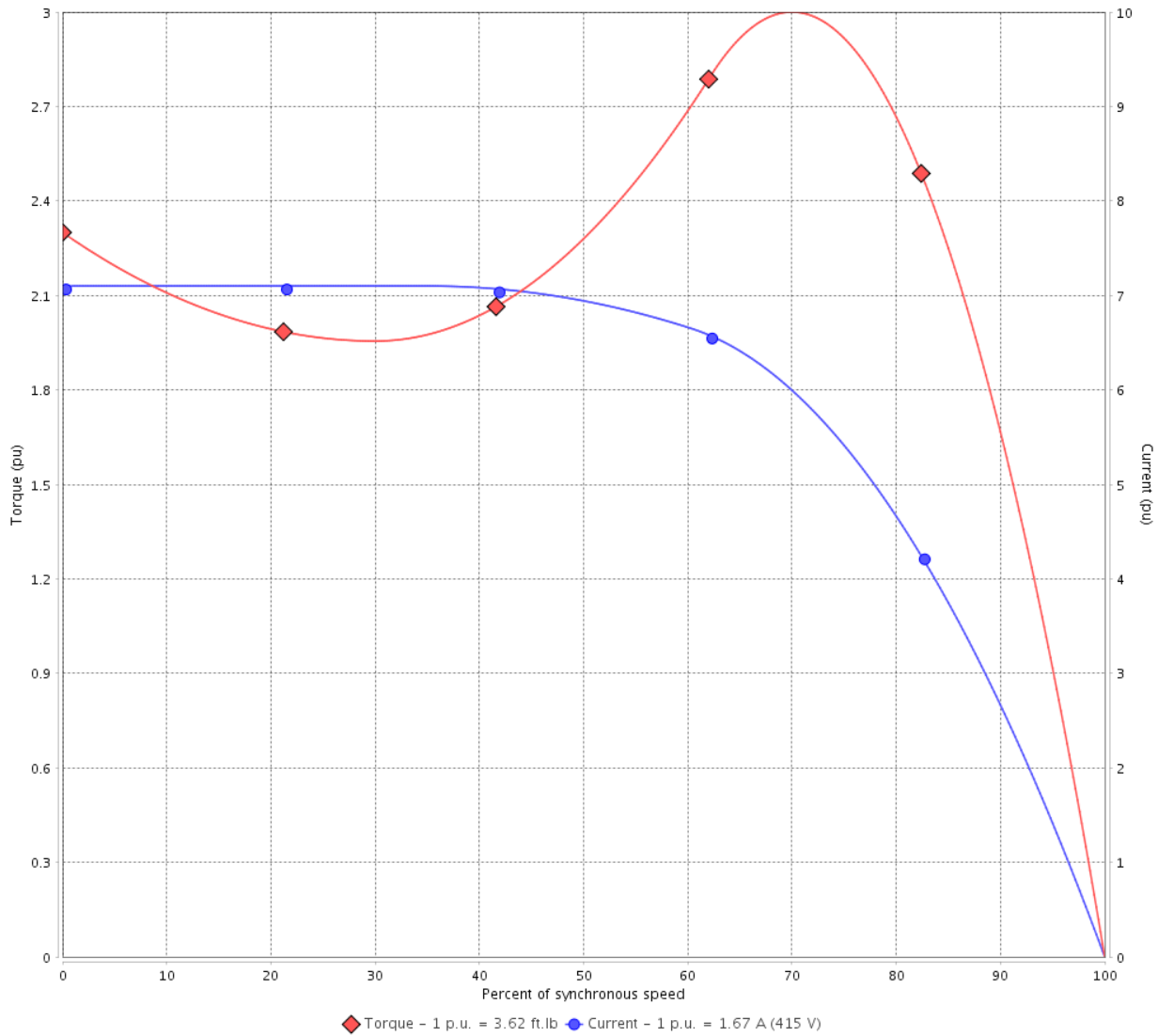
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TORQUE AND CURRENT VS SPEED CURVE



Performance : 220/415 V 50 Hz 4P

Rated current	: 3.15/1.67 A	Moment of inertia (J)	: 0.1101 sq.ft.lb
LRC	: 7.1	Duty cycle	: Cont.(S1)
Rated torque	: 3.62 ft.lb	Insulation class	: F
Locked rotor torque	: 229 %	Service factor	: 1.15
Breakdown torque	: 300 %	Temperature rise	: 80 K
Rated speed	: 1450 rpm	Design	: B

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

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LOAD PERFORMANCE CURVE

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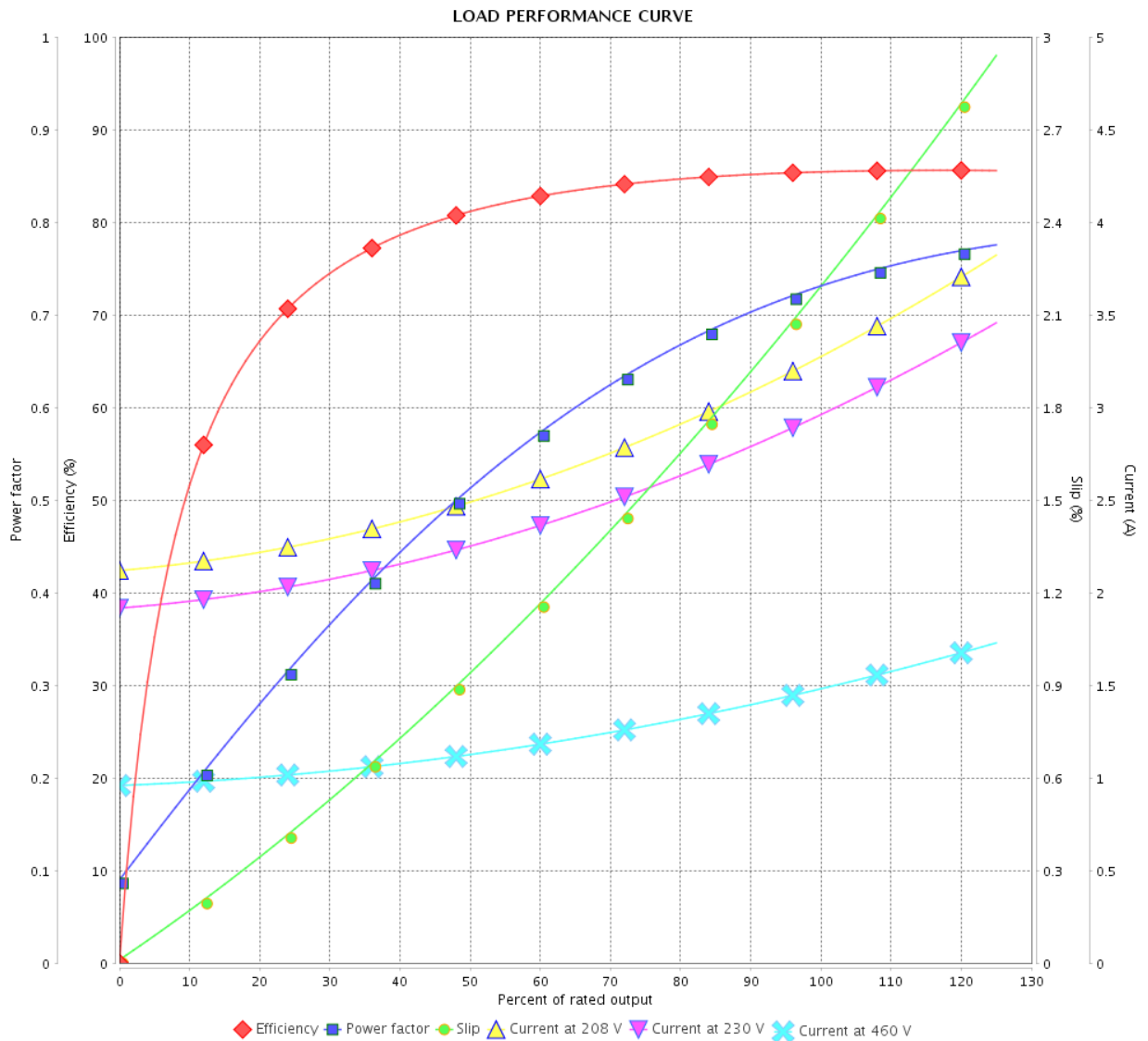


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Performance : 230/460 V 60 Hz 4P

Rated current : 3.02/1.51 A
 LRC : 8.0
 Rated torque : 2.98 ft.lb
 Locked rotor torque : 290 %
 Breakdown torque : 360 %
 Rated speed : 1760 rpm

Moment of inertia (J) : 0.1101 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor :
 Temperature rise : 80 K
 Design : B

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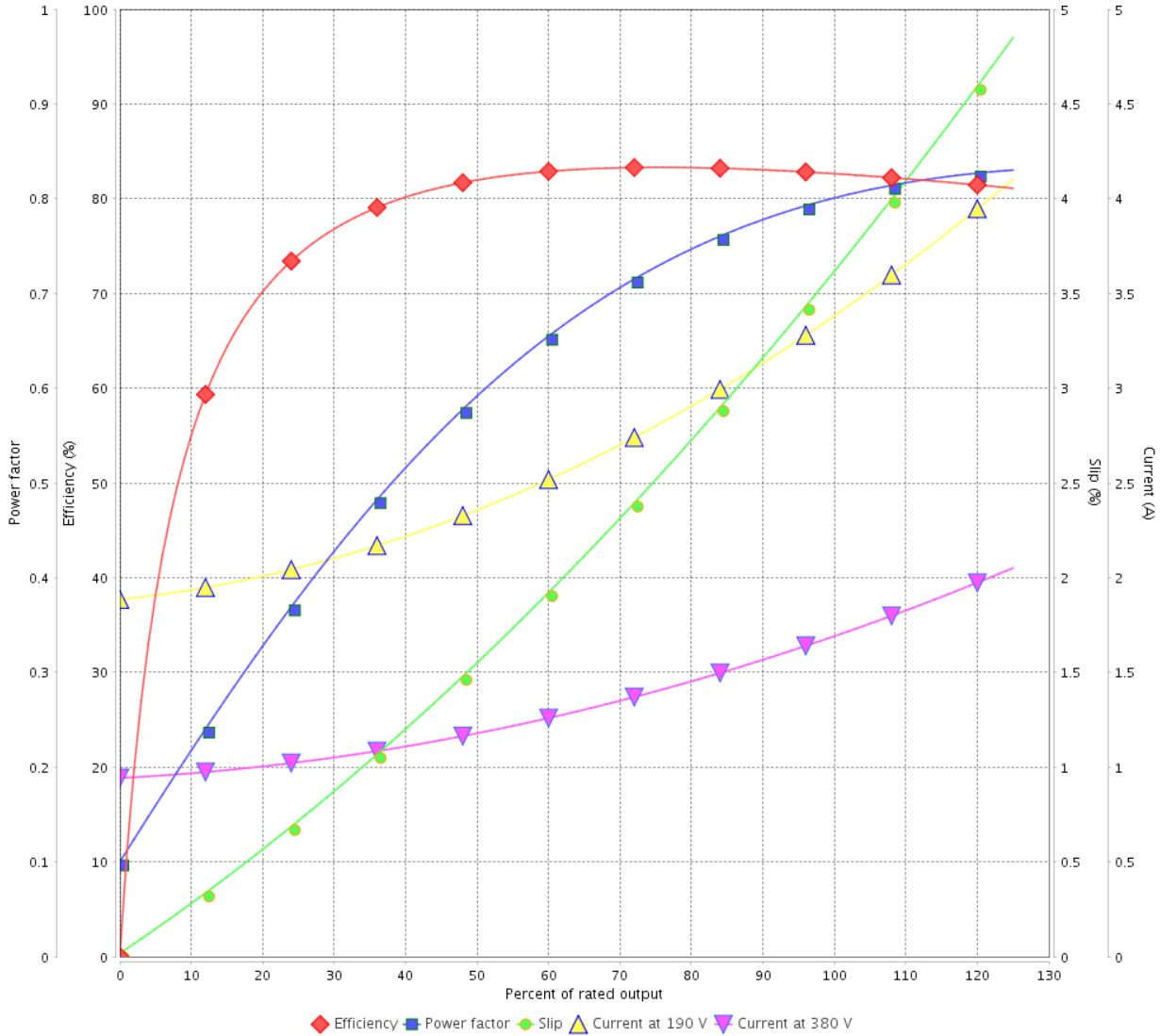
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Insulation class : F
Service factor : 1.15
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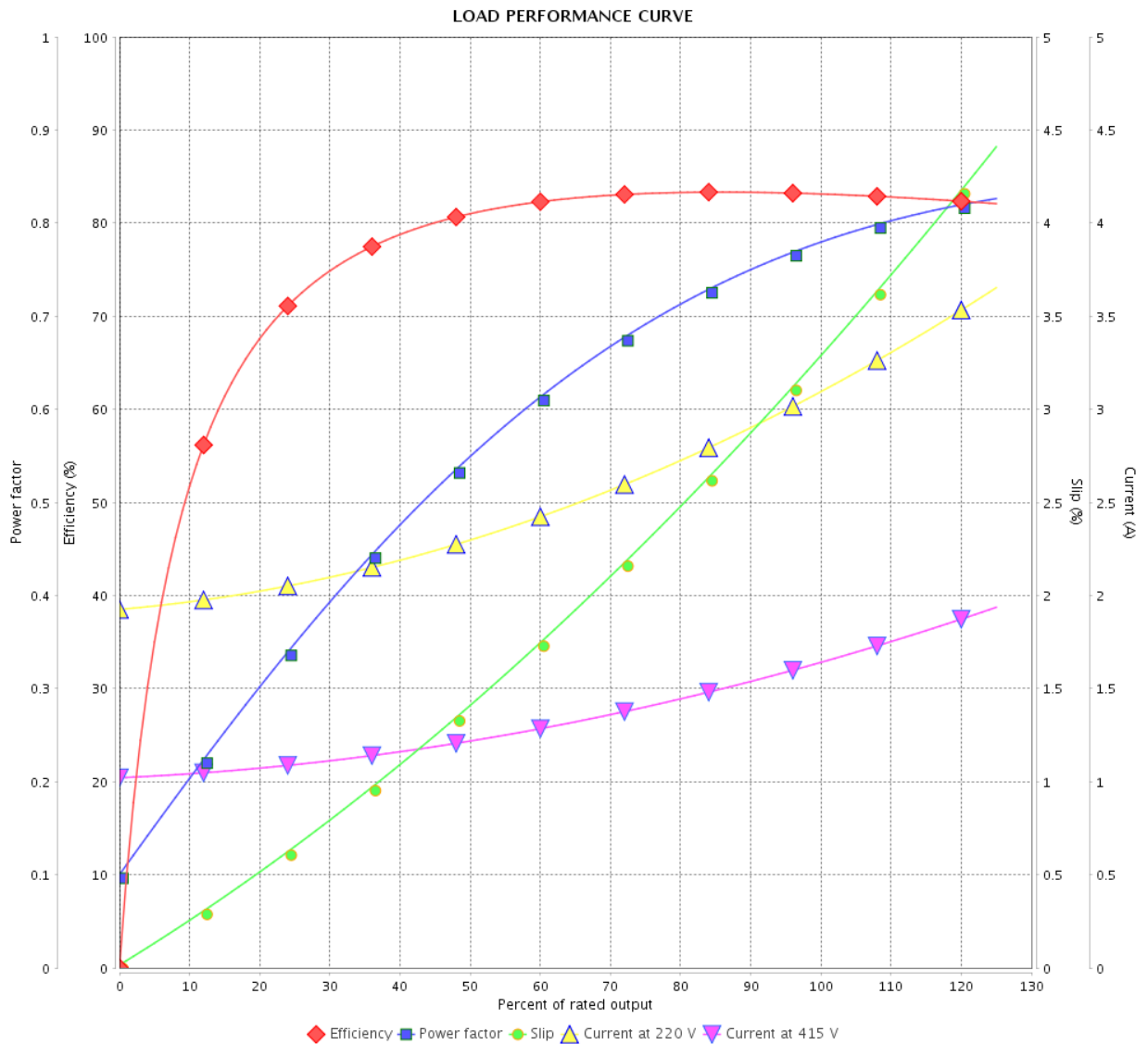


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THERMAL LIMIT CURVE



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Insulation class : F
Service factor :
Temperature rise : 80 K
Design : B

Heating constant

Cooling constant

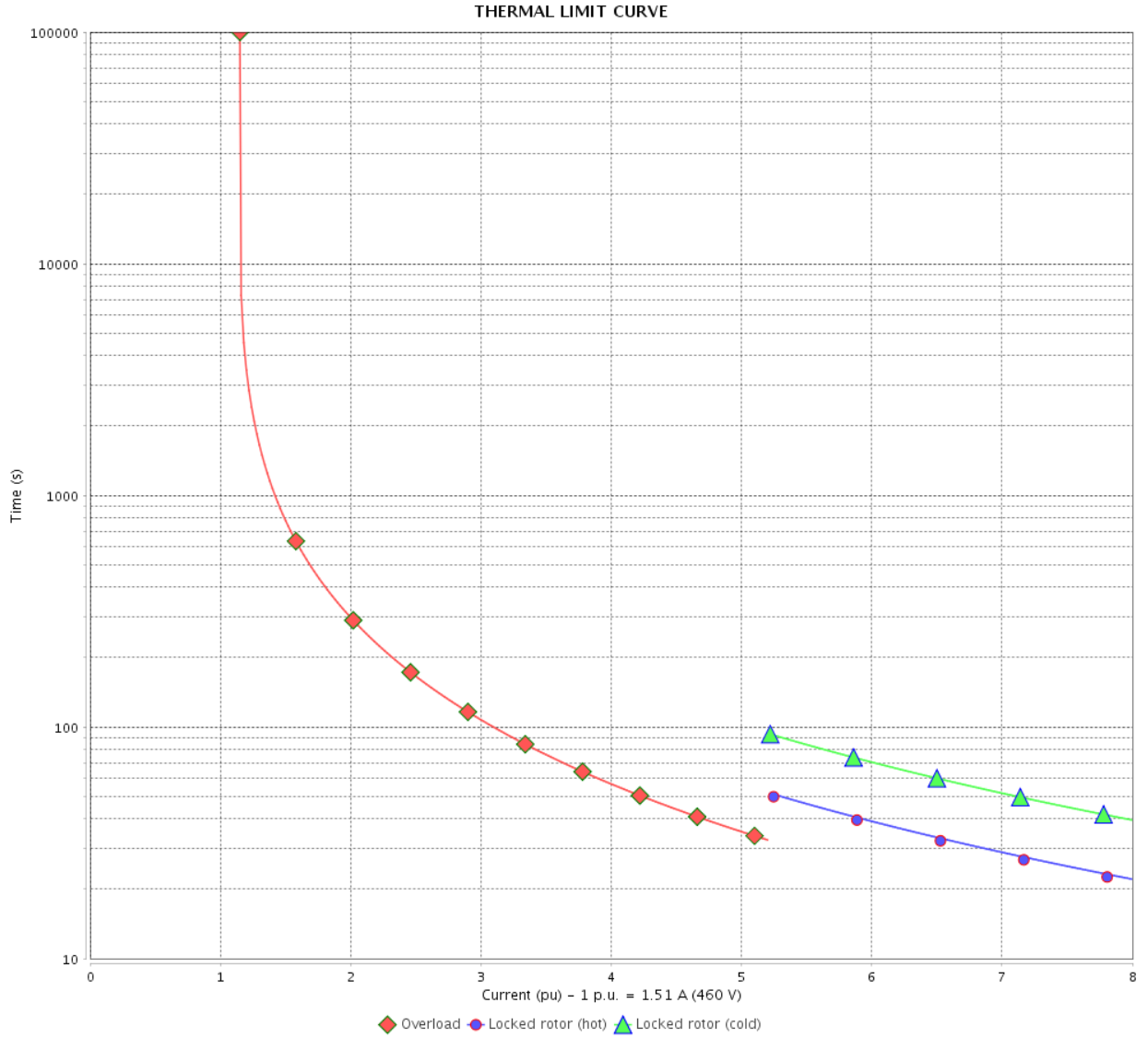
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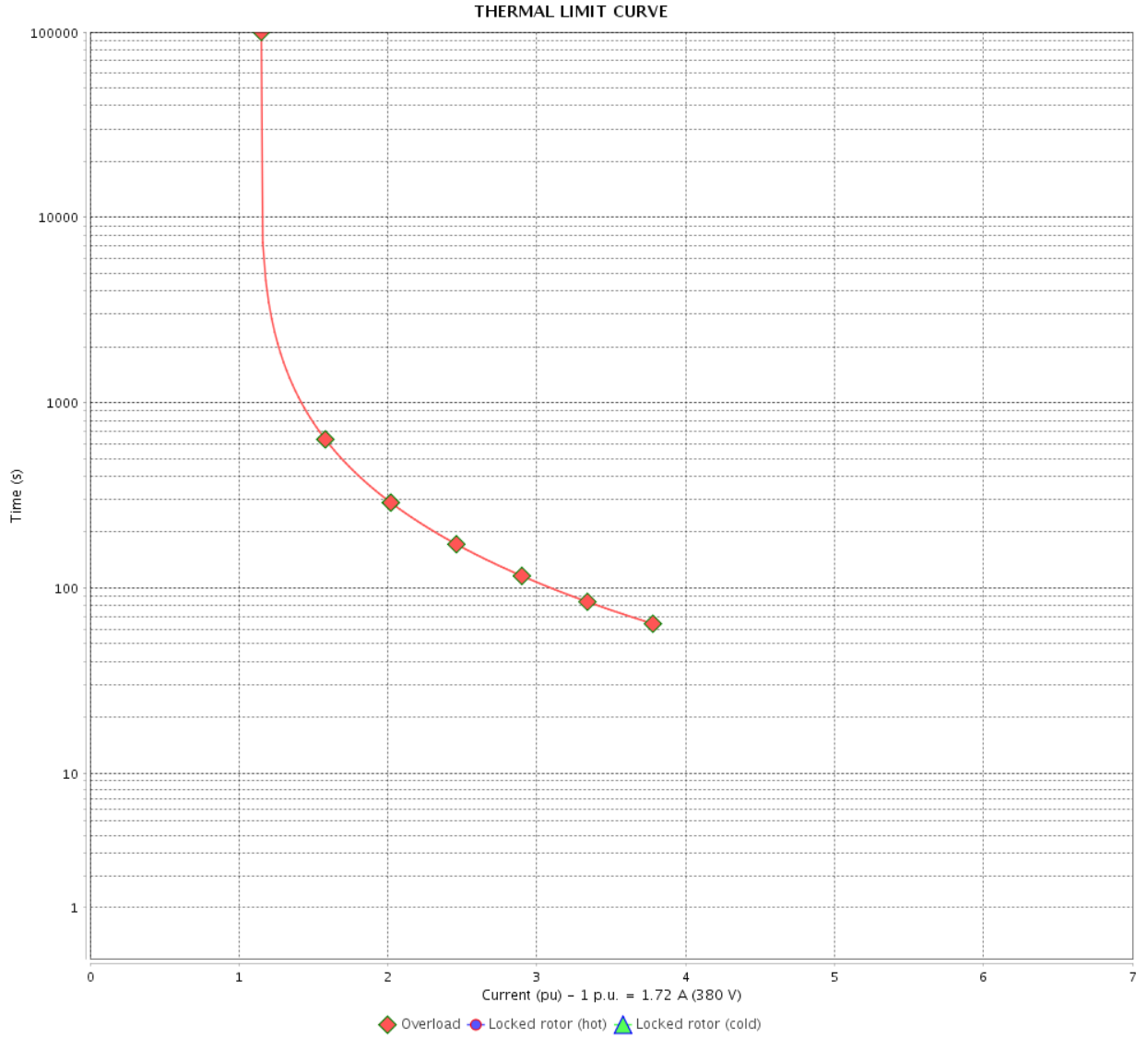
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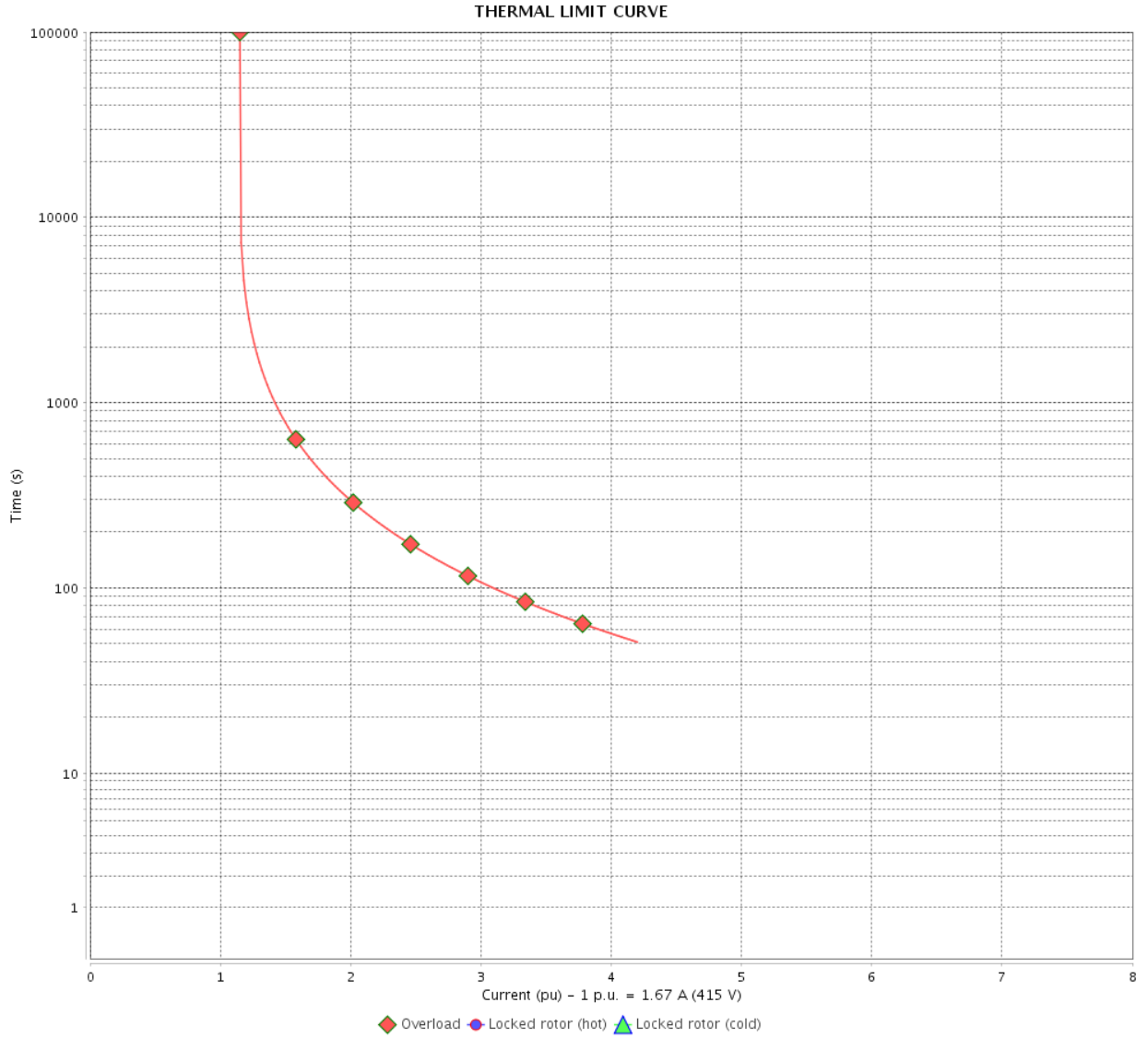
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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



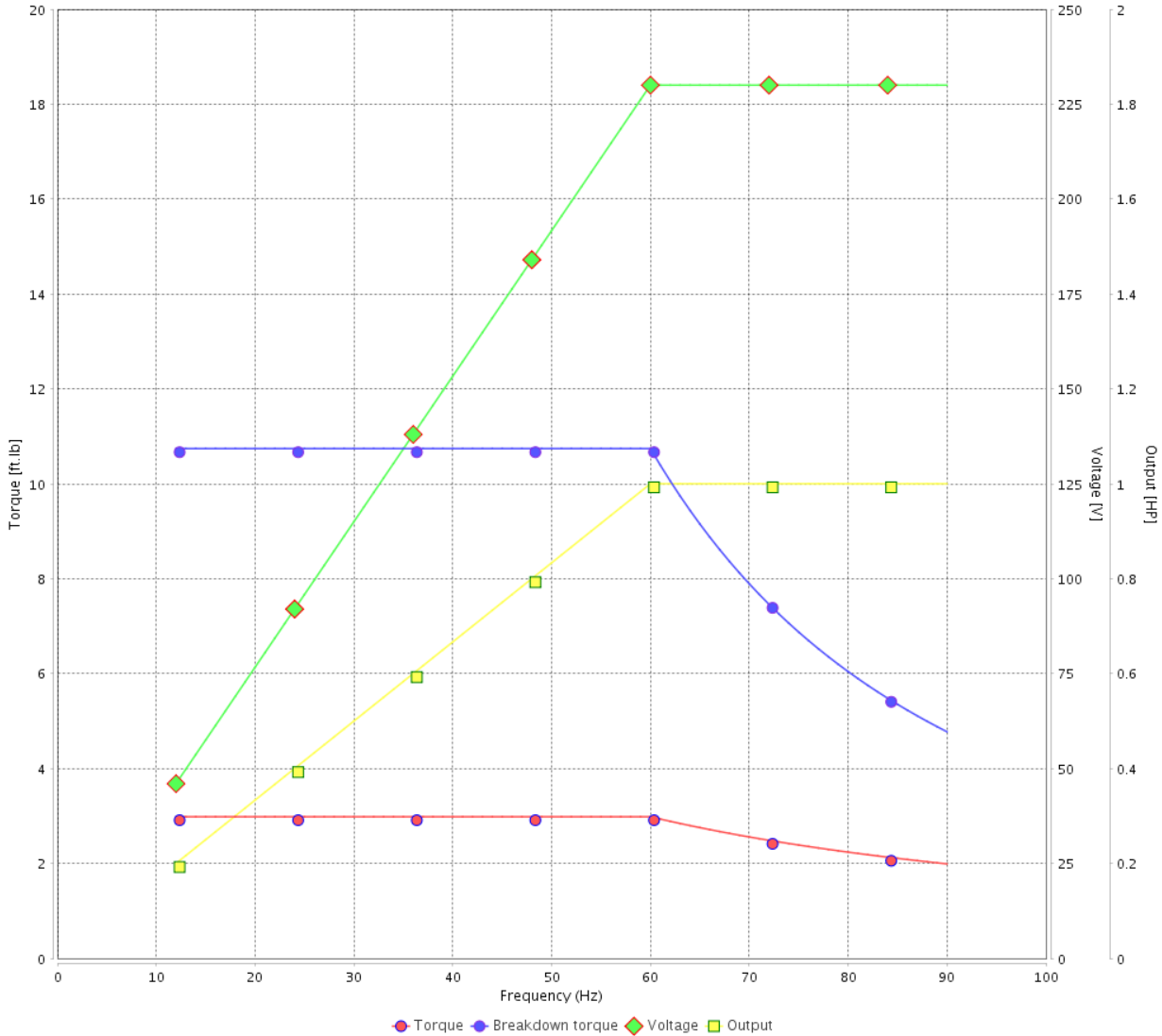
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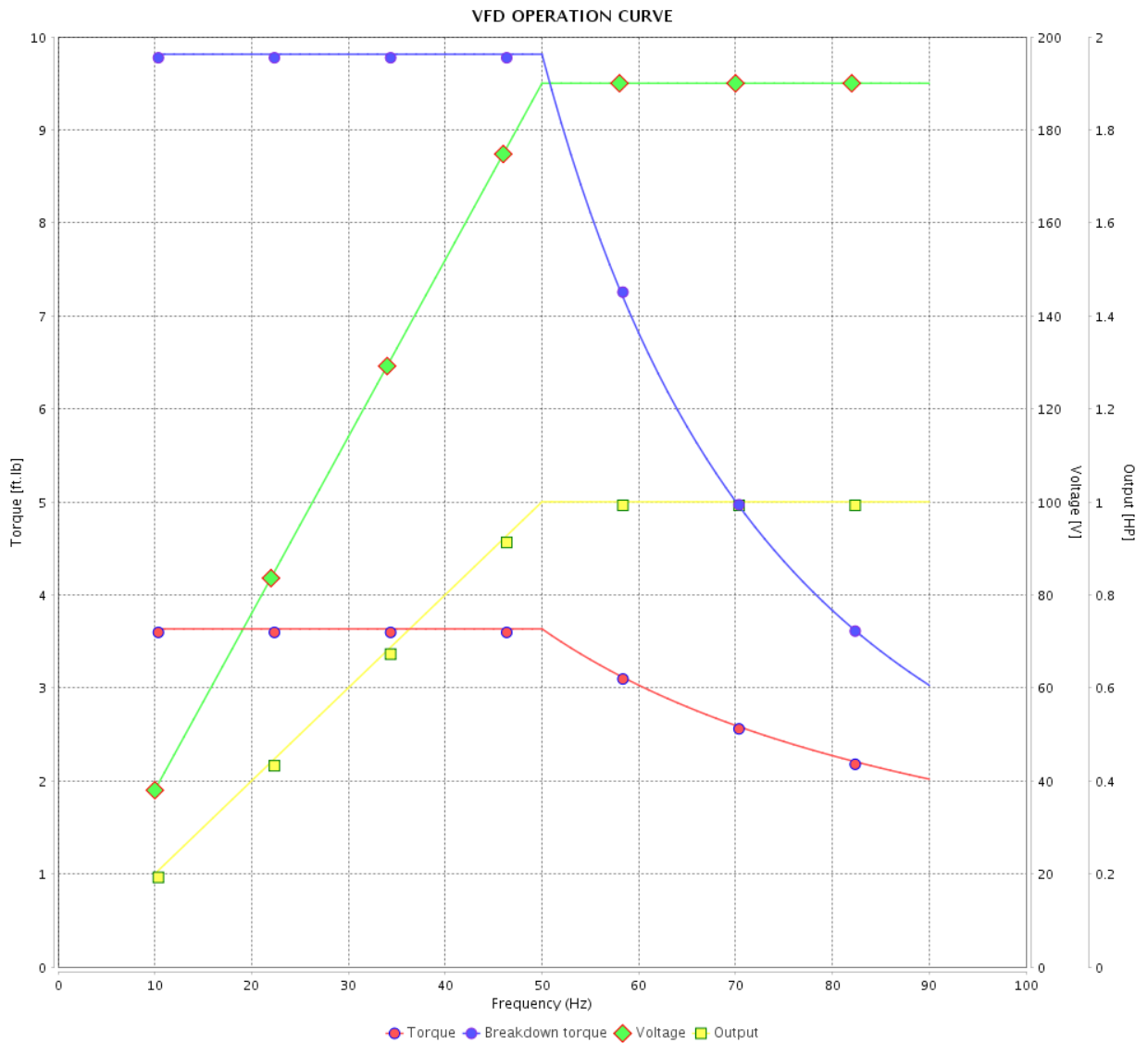


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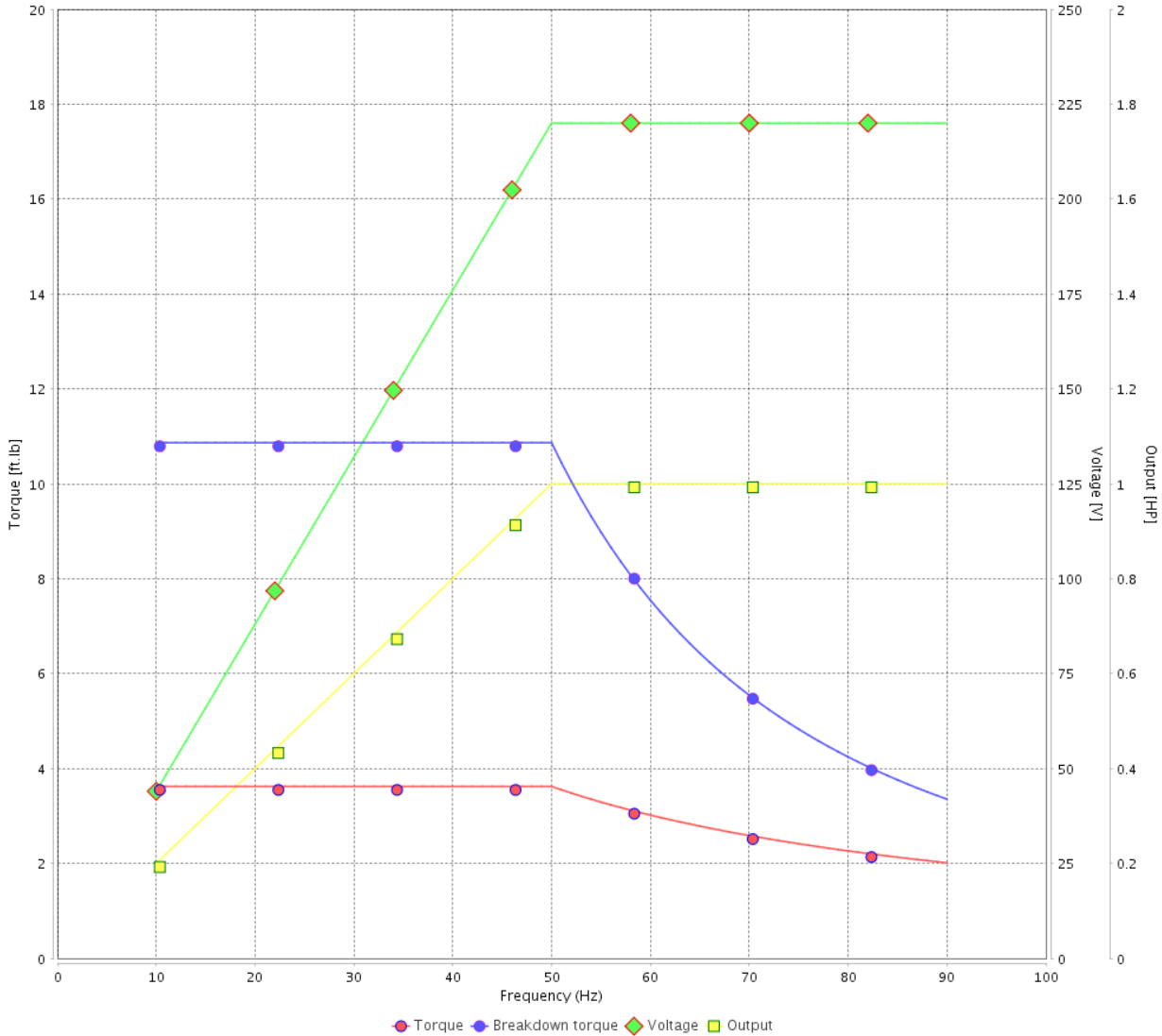
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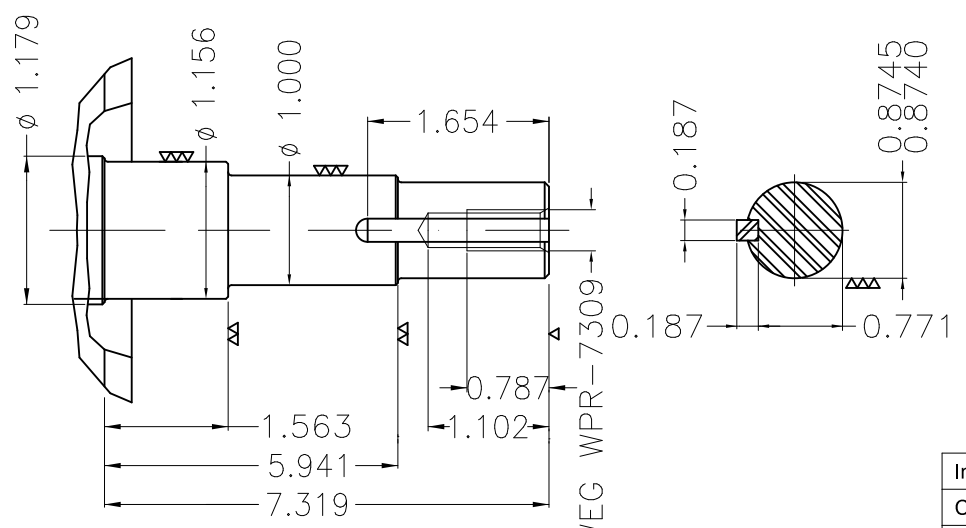
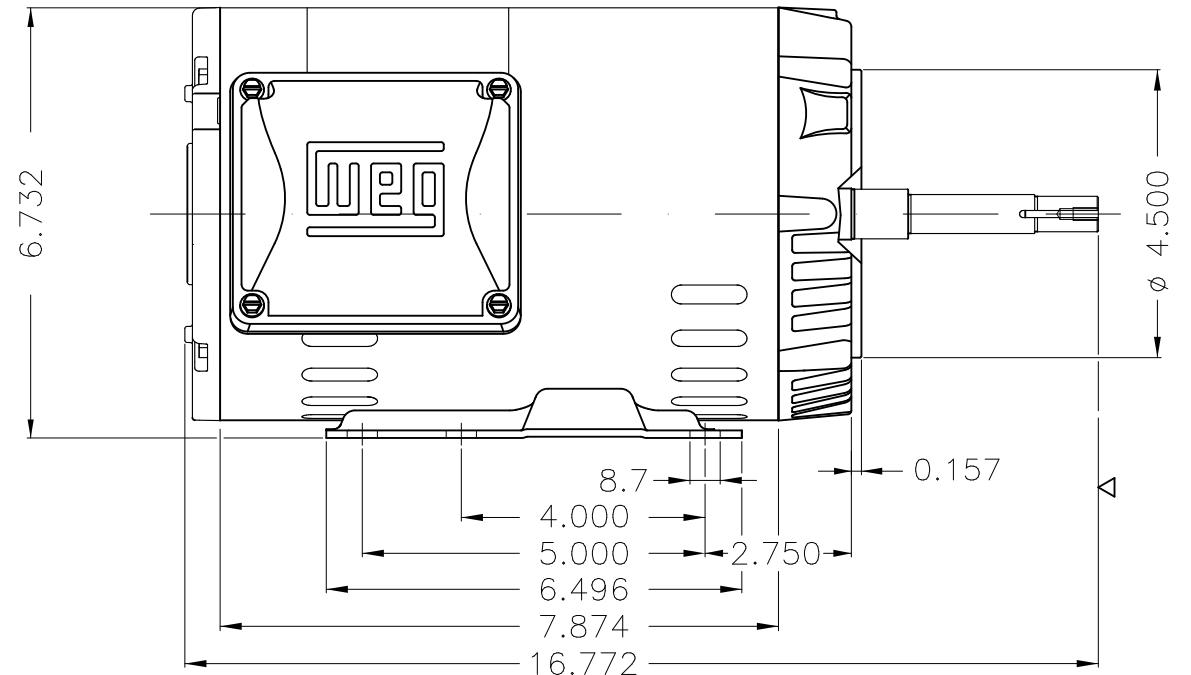
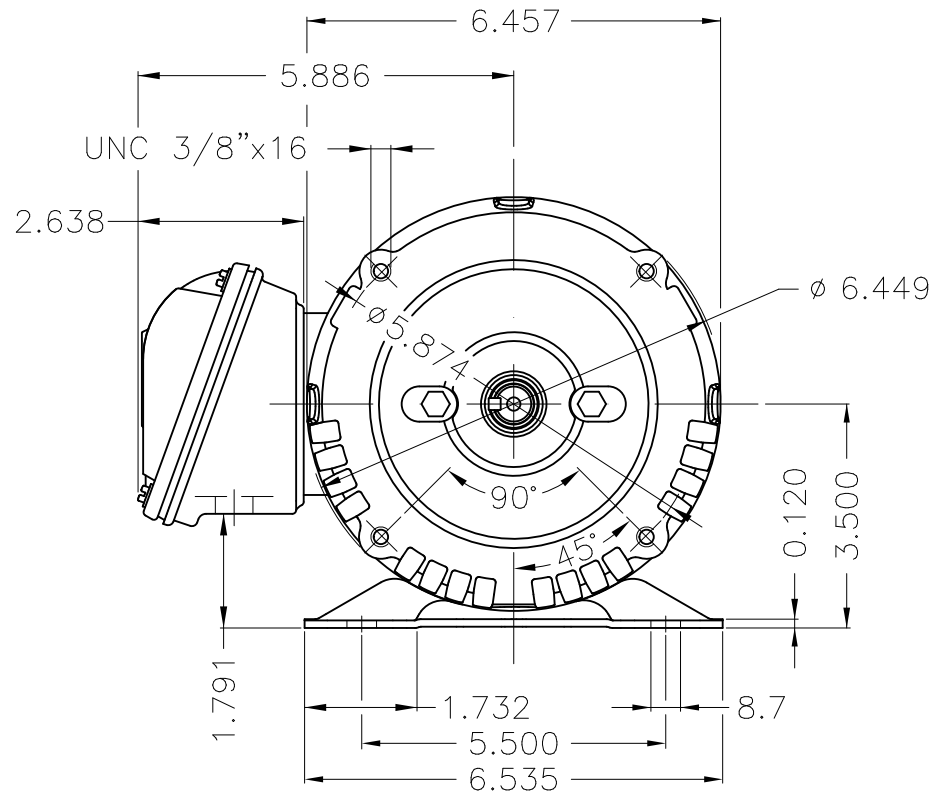
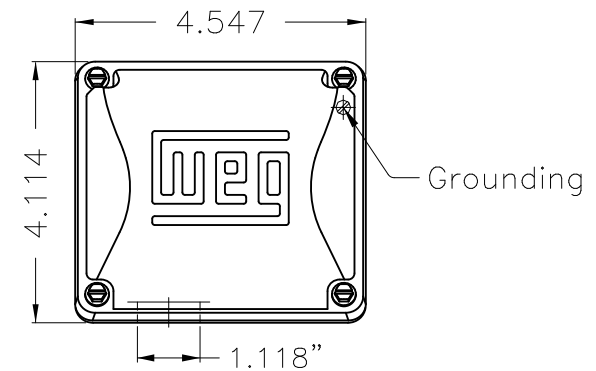
A

B

C

D

E



EUNC 3/8" - 16 WEG WPR-7309

DE Shaft End

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 3/8" DE PRELIM					
CHECKED		FRAME 143/5JP IP21 ODP					
RELEASED							
REL DT.	WMO	Jaragua do Sul	Product Engineering	WDD	SHEET	1 / 1	

1 HP 04 Poles 60 Hz

