

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :	
Product line	: JM Pump NEMA Premium Efficiency Three-Phase
Product code :	14808961
Catalog # :	00236ET3E145JM-SG
Frame	: 143/5JM
Insulation class	: F
Duty cycle	: Cont.(S1)
Ambient temperature	: -20°C to +40°C
Altitude	: 1000 m.a.s.l.
Protection degree	: IP55
Design	: B
Cooling method	: IC411 - TEFC
Mounting	: F-1
Rotation ¹	: Both (CW and CCW)
Starting method	: Direct On Line
Approx. weight ²	: 2.2 lb
Moment of inertia (J)	: 0.1279 sq.ft.lb
Output [HP]	2
Poles	2
Frequency [Hz]	60
Rated voltage [V]	230/460
Rated current [A]	4.94/2.47
L. R. Amperes [A]	48.9/24.5
LRC [A]	9.9x(Code L)
No load current [A]	2.13/1.06
Rated speed [RPM]	3520
Slip [%]	2.22
Rated torque [ft.lb]	2.98
Locked rotor torque [%]	250
Breakdown torque [%]	300
Service factor	1.15
Temperature rise	80 K
Locked rotor time	23s (cold) 13s (hot)
Noise level ²	68.0 dB(A)
Efficiency (%)	25%
	50%
	75%
	100%
Power Factor	25%
	50%
	75%
	100%
Bearing type	: <u>Drive end</u> 6206 ZZ <u>Non drive end</u> 6203 ZZ
Sealing	: V'Ring Without Bearing Seal
Lubrication interval	: - -
Lubricant amount	: - -
Lubricant type	: Mobil Polyrex EM
Foundation loads	Max. traction : 97 lb
	Max. compression : 99 lb
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

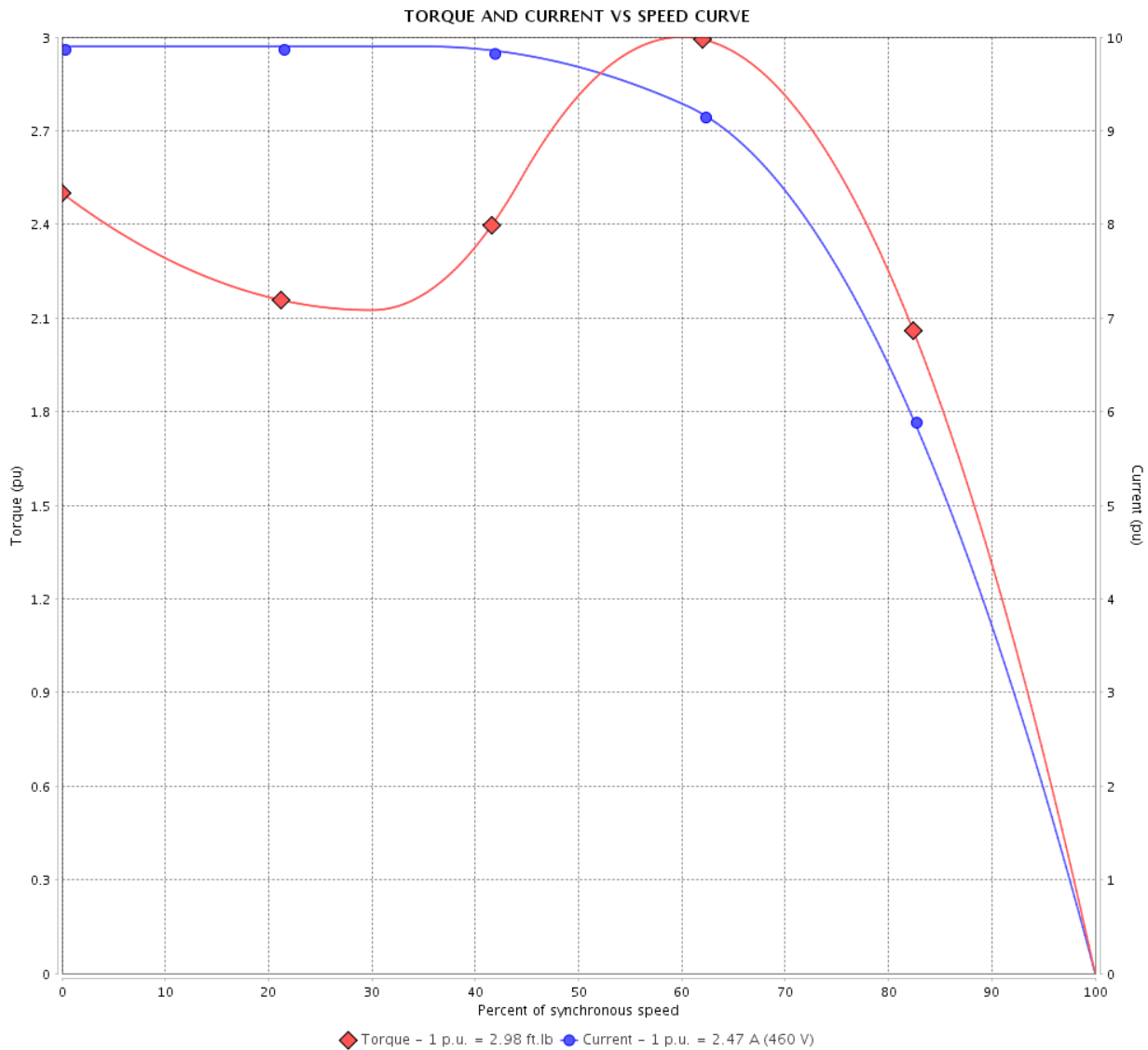


Customer :

Product line : JM Pump NEMA Premium
Efficiency Three-Phase

Product code : 14808961

Catalog # : 00236ET3E145JM-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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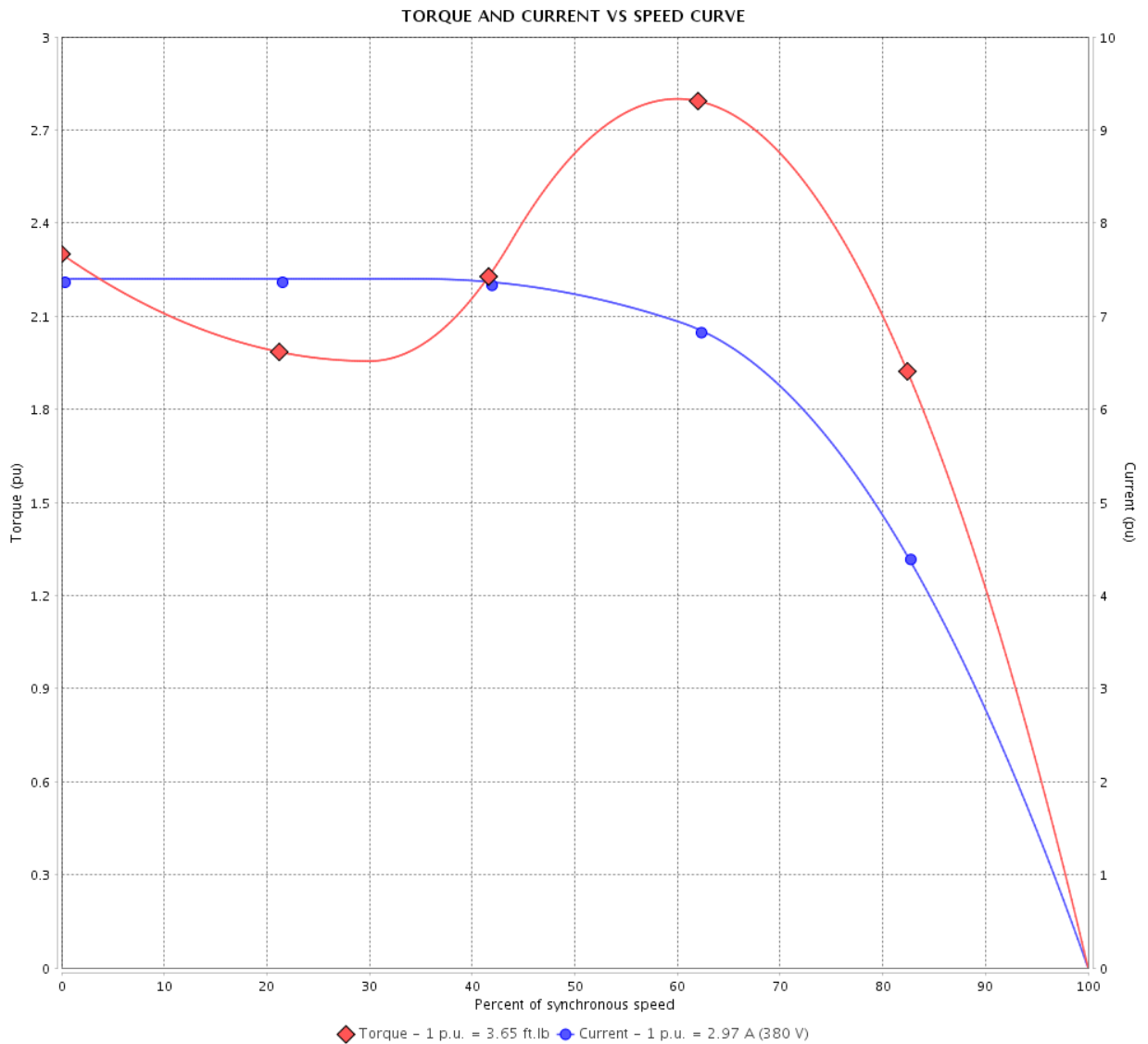
Three Phase Induction Motor - Squirrel Cage

Customer :

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Product code : 14808961

Catalog # : 00236ET3E145JM-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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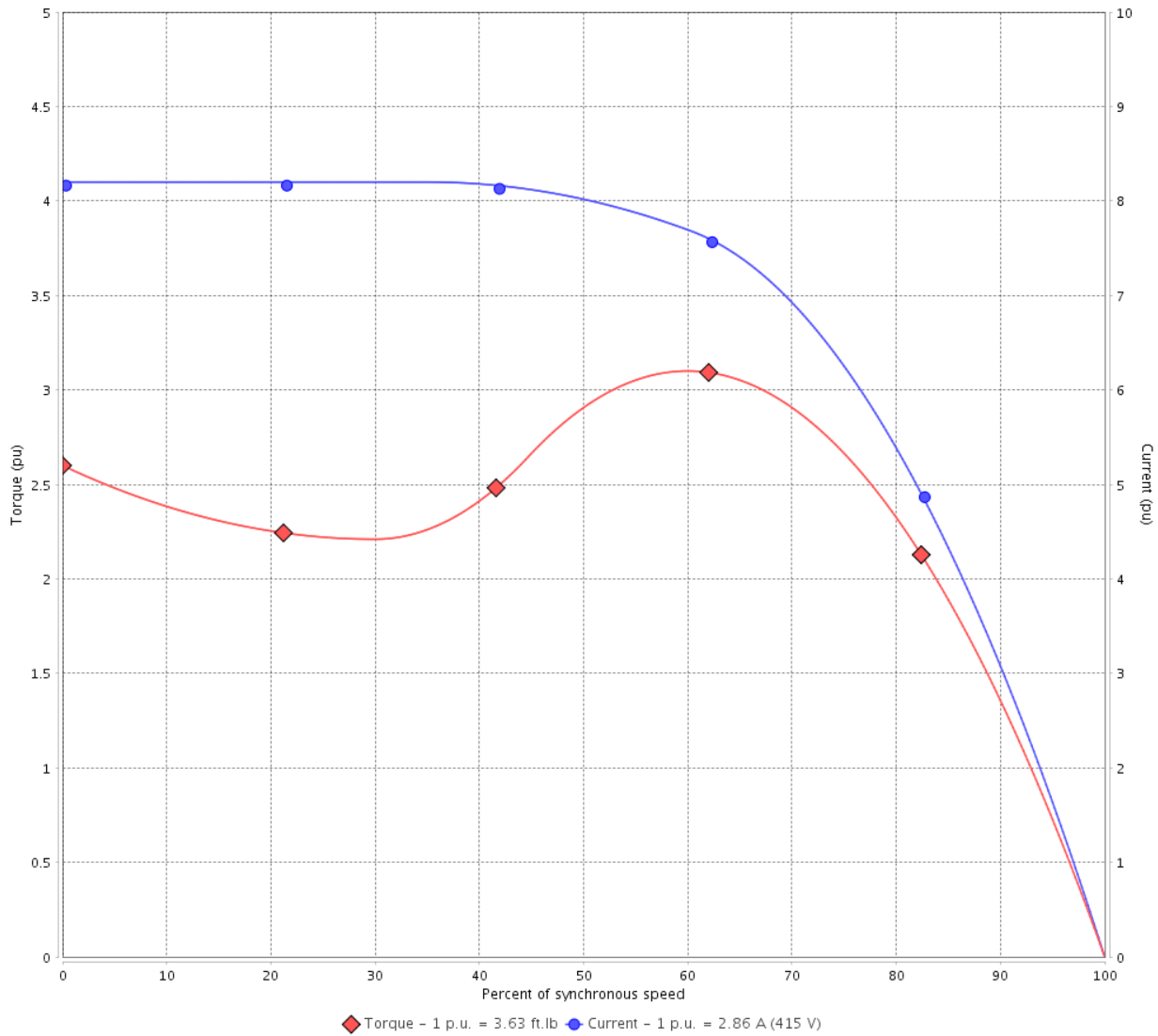
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Product code : 14808961

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TORQUE AND CURRENT VS SPEED CURVE



Performance : 220/415 V 50 Hz 2P

Rated current	: 5.39/2.86 A	Moment of inertia (J)	: 0.1279 sq.ft.lb
LRC	: 8.2	Duty cycle	: Cont.(S1)
Rated torque	: 3.63 ft.lb	Insulation class	: F
Locked rotor torque	: 260 %	Service factor	: 1.15
Breakdown torque	: 310 %	Temperature rise	: 80 K
Rated speed	: 2890 rpm	Design	: B

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

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LOAD PERFORMANCE CURVE

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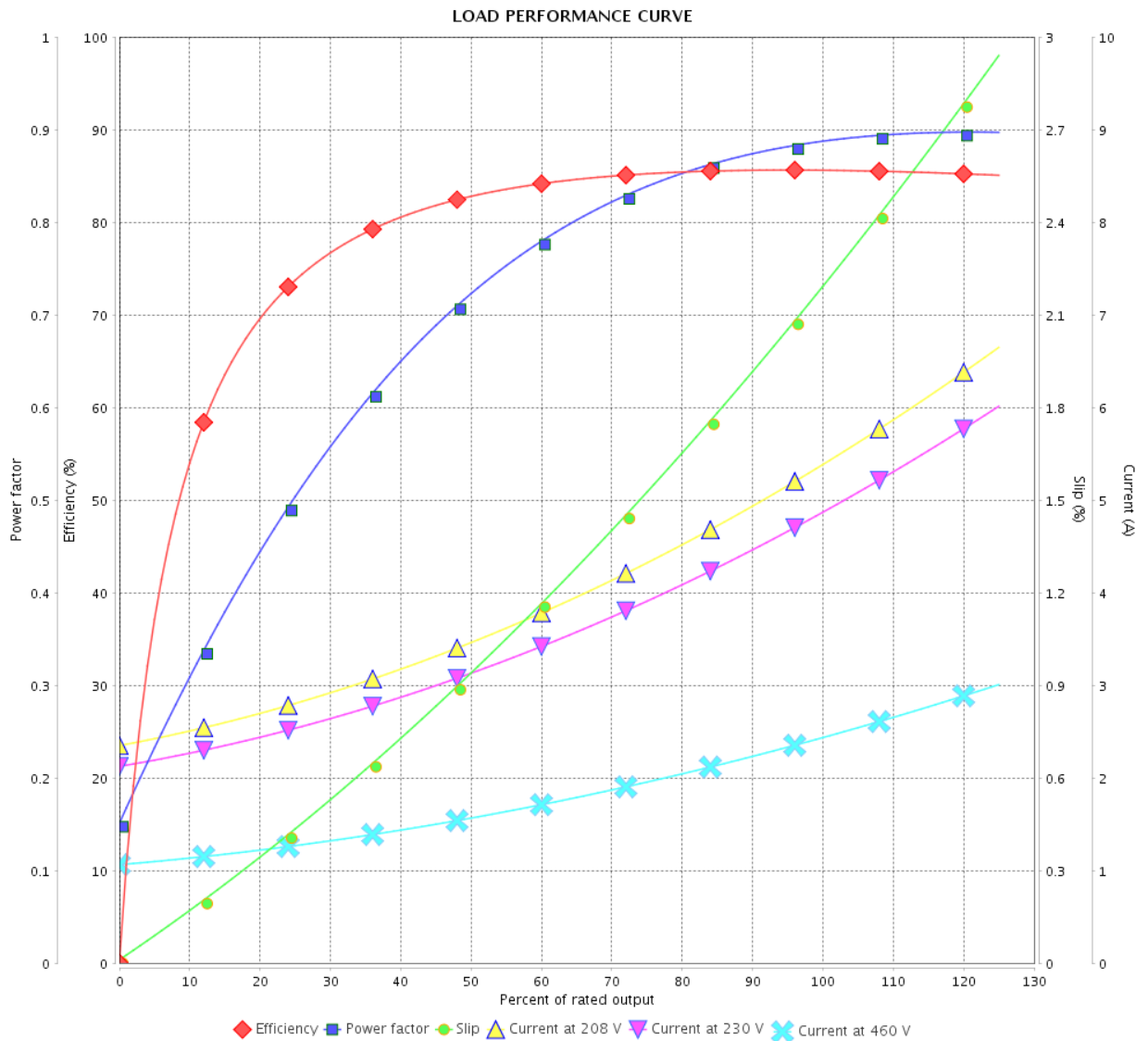


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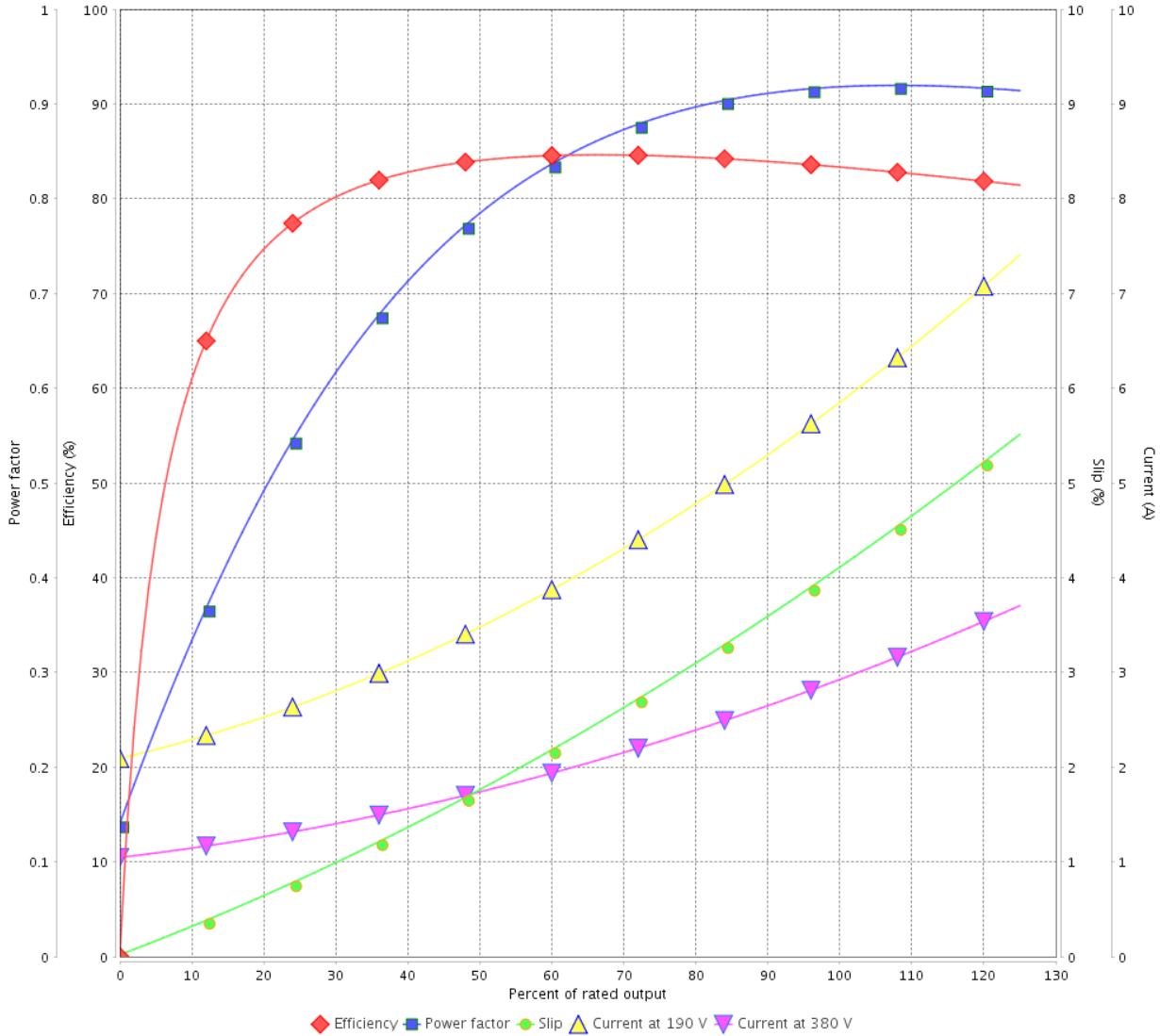
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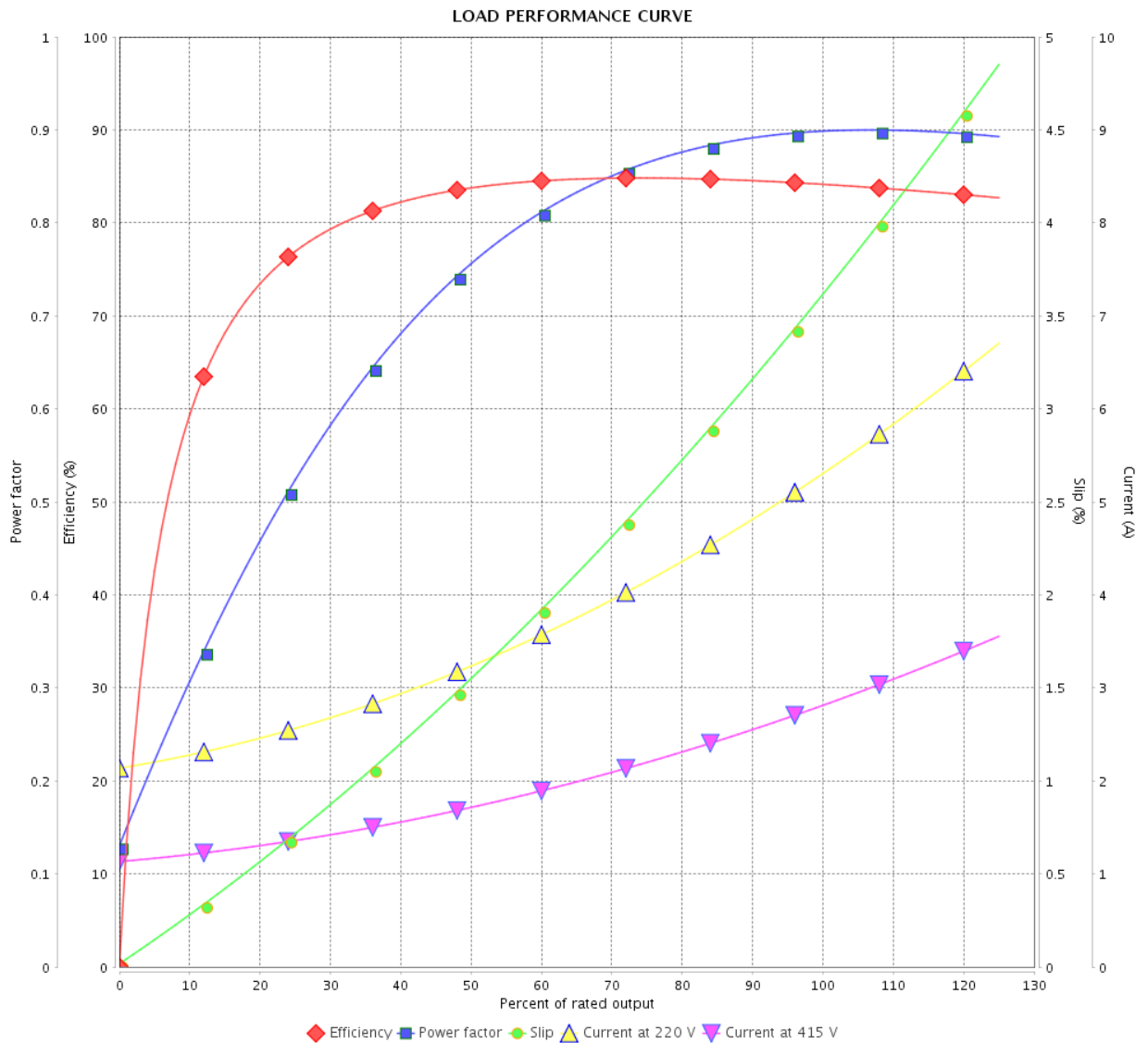


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THERMAL LIMIT CURVE



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Design : B

Heating constant

Cooling constant

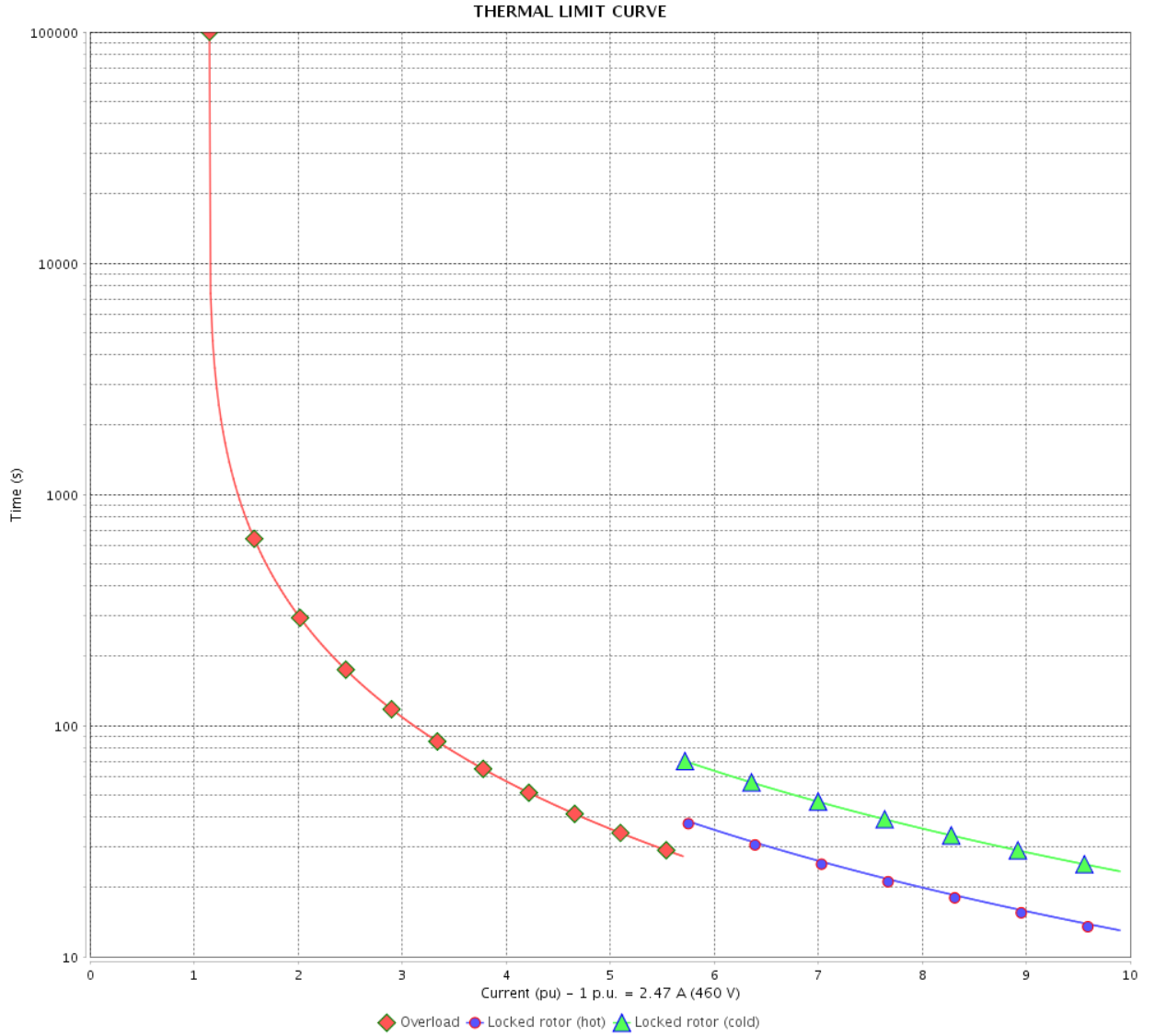
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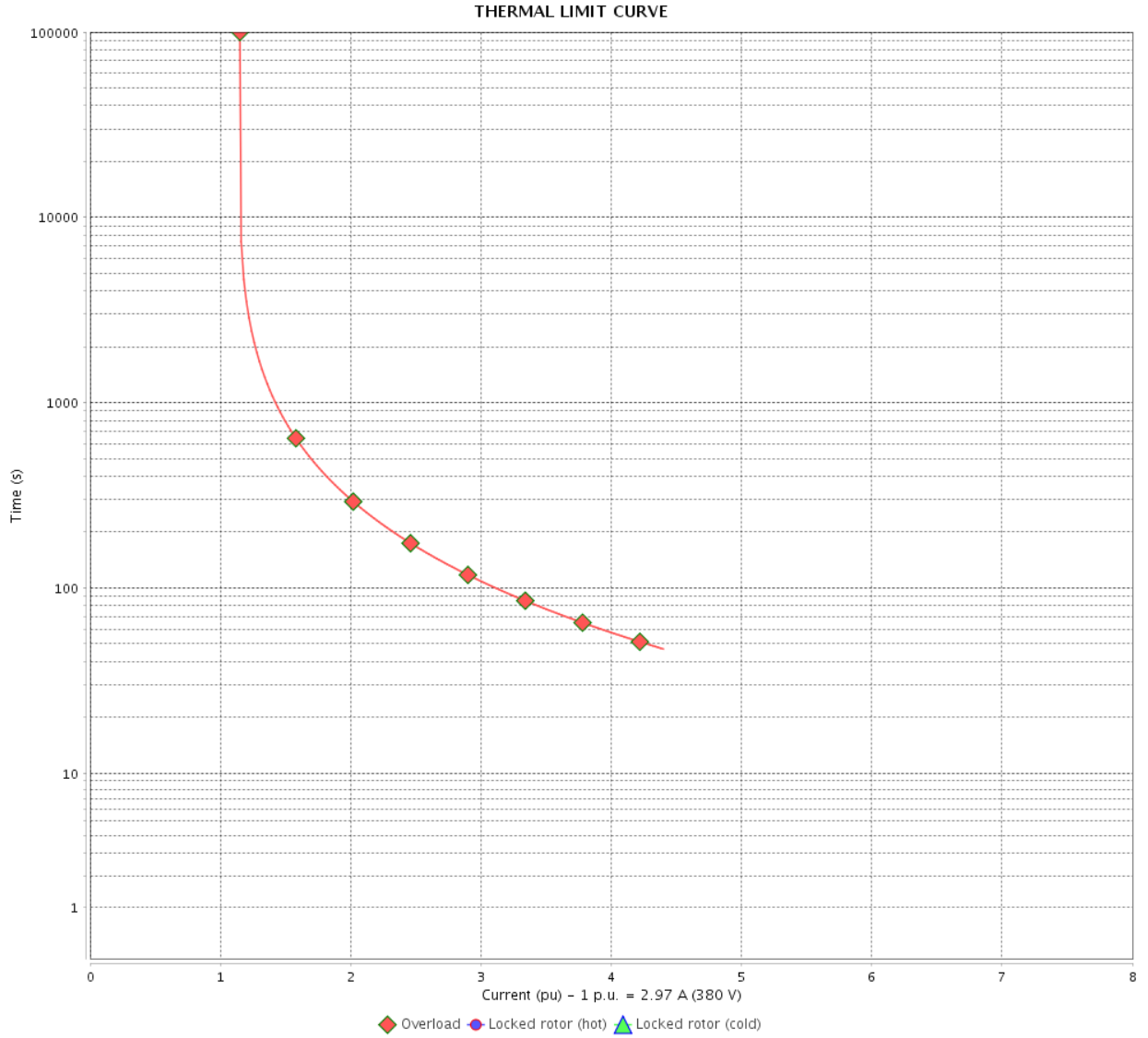
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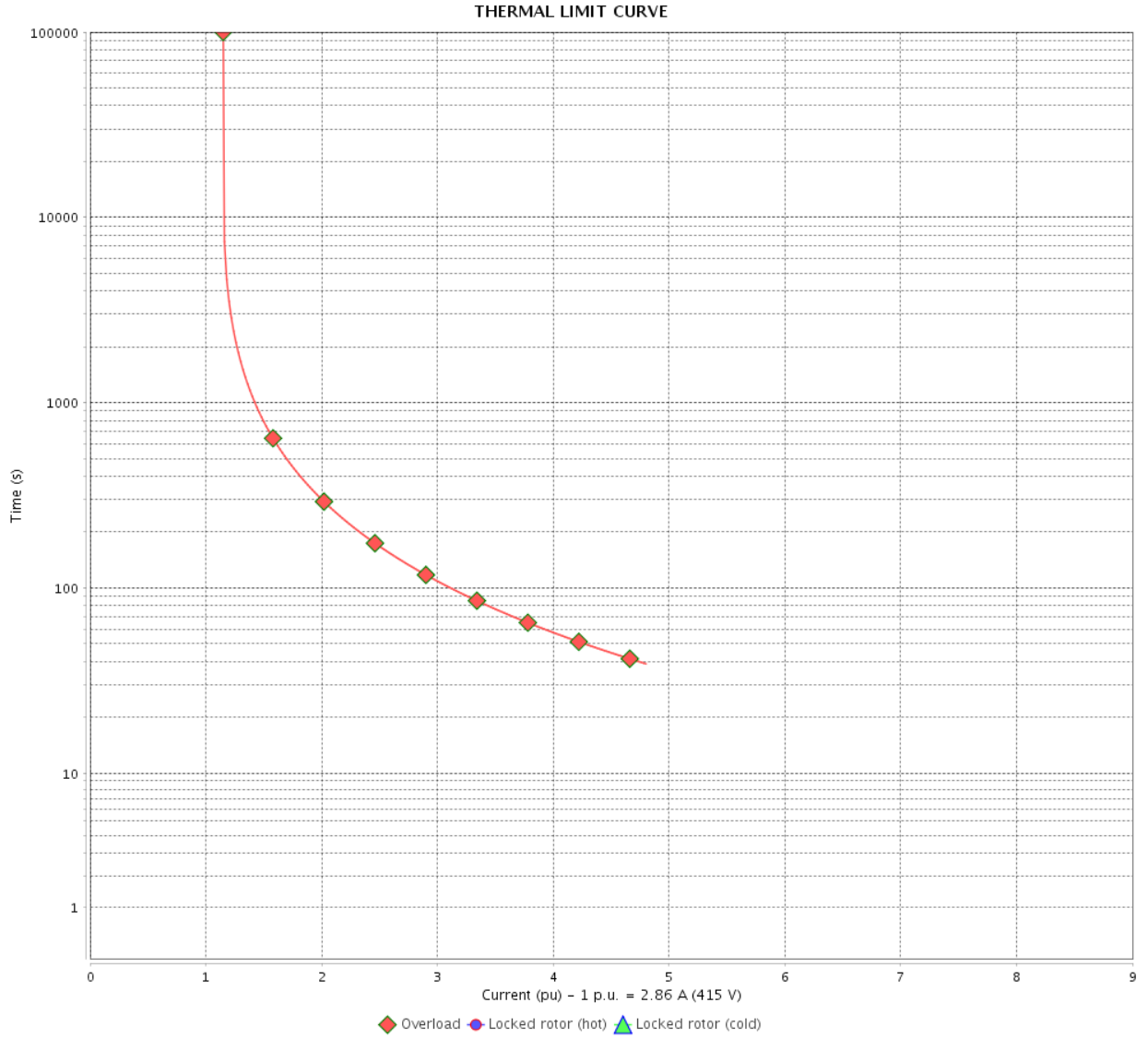
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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



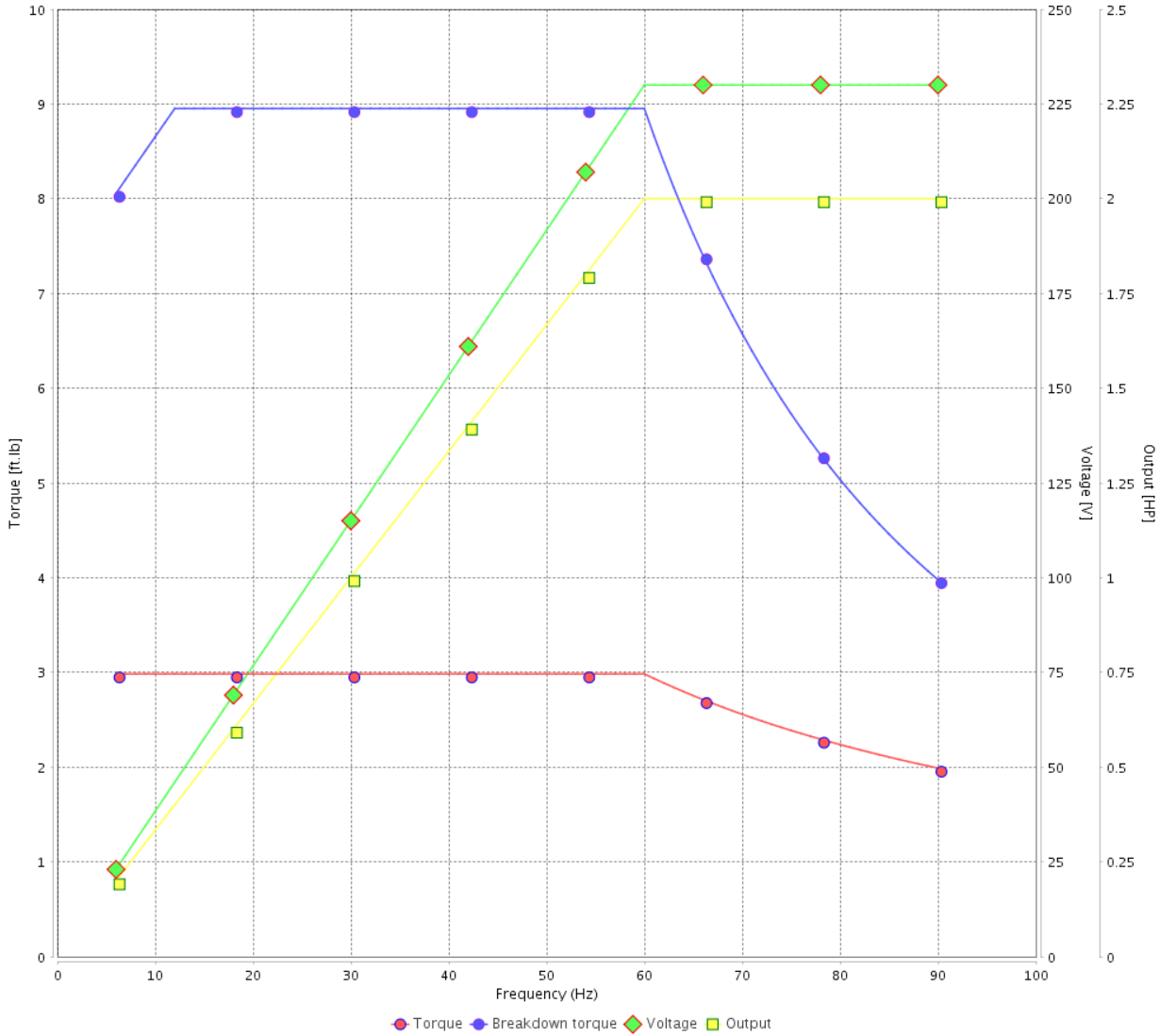
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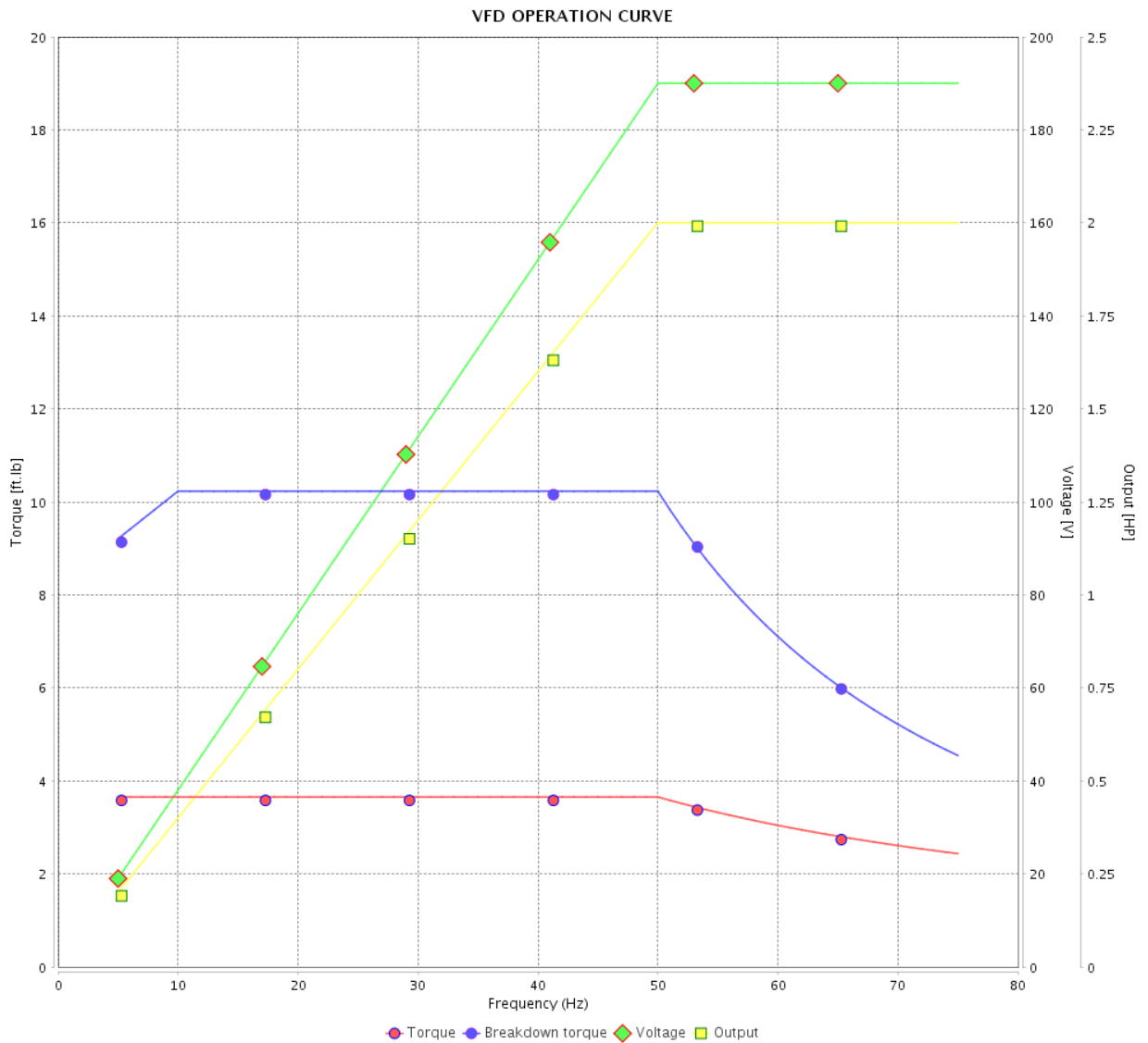


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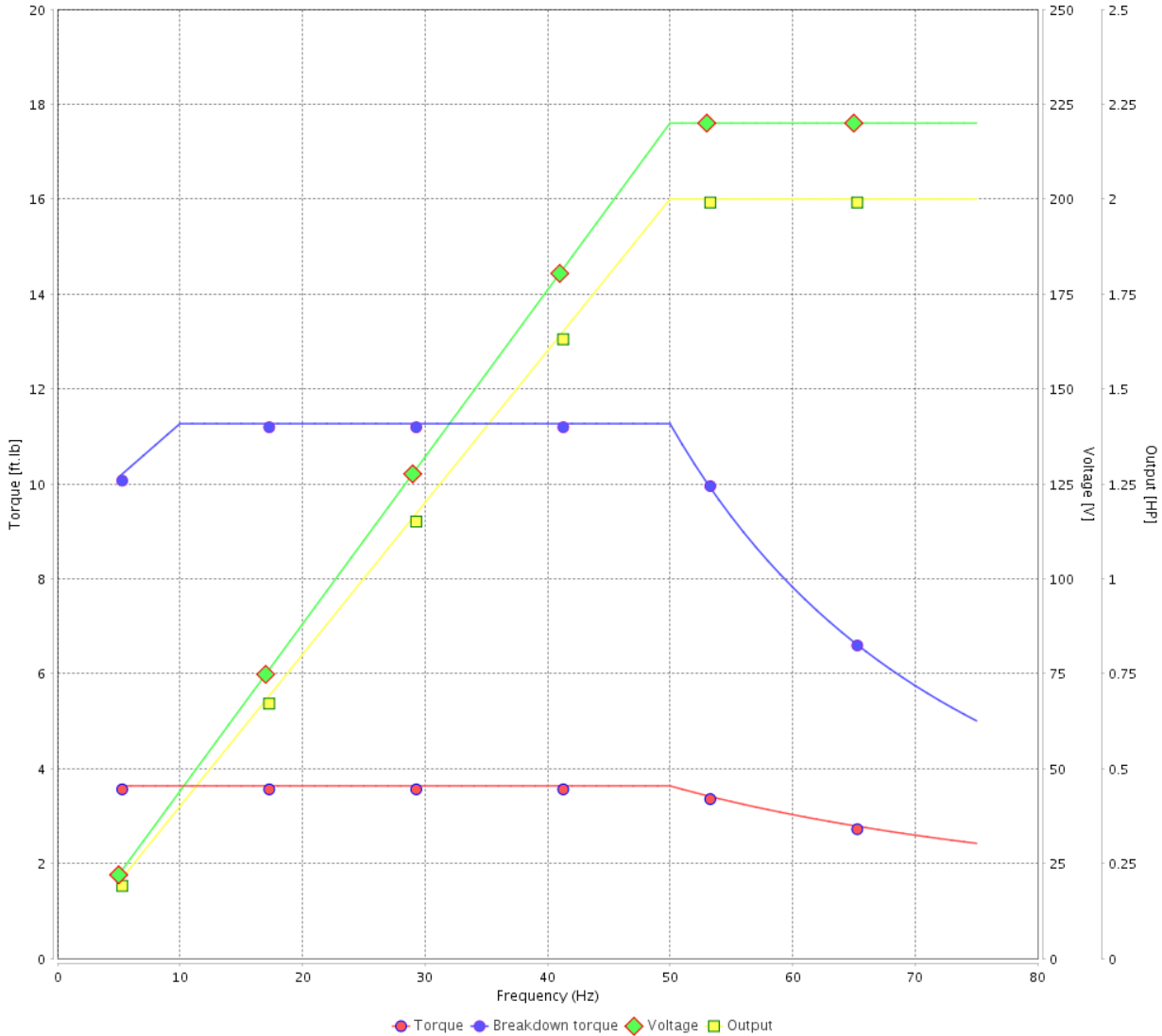
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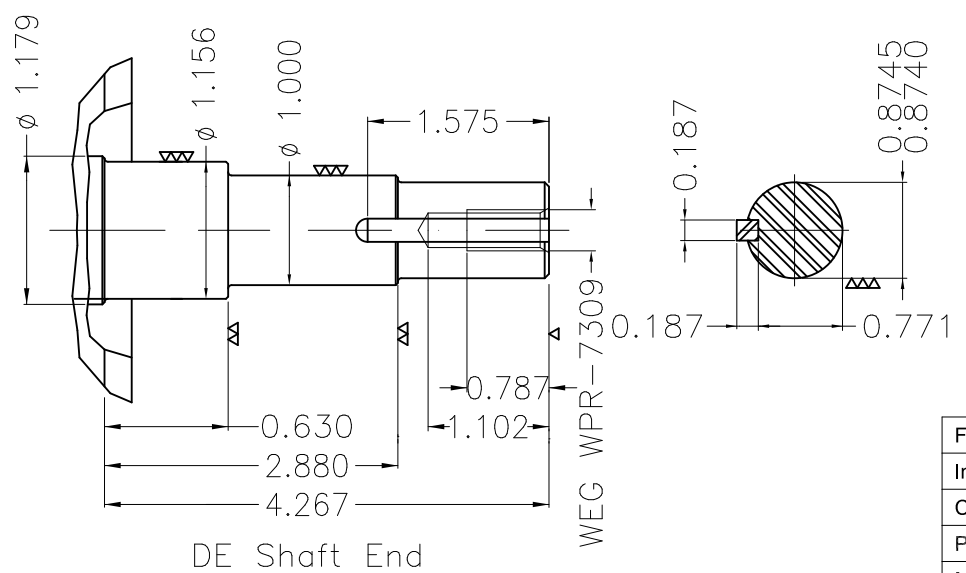
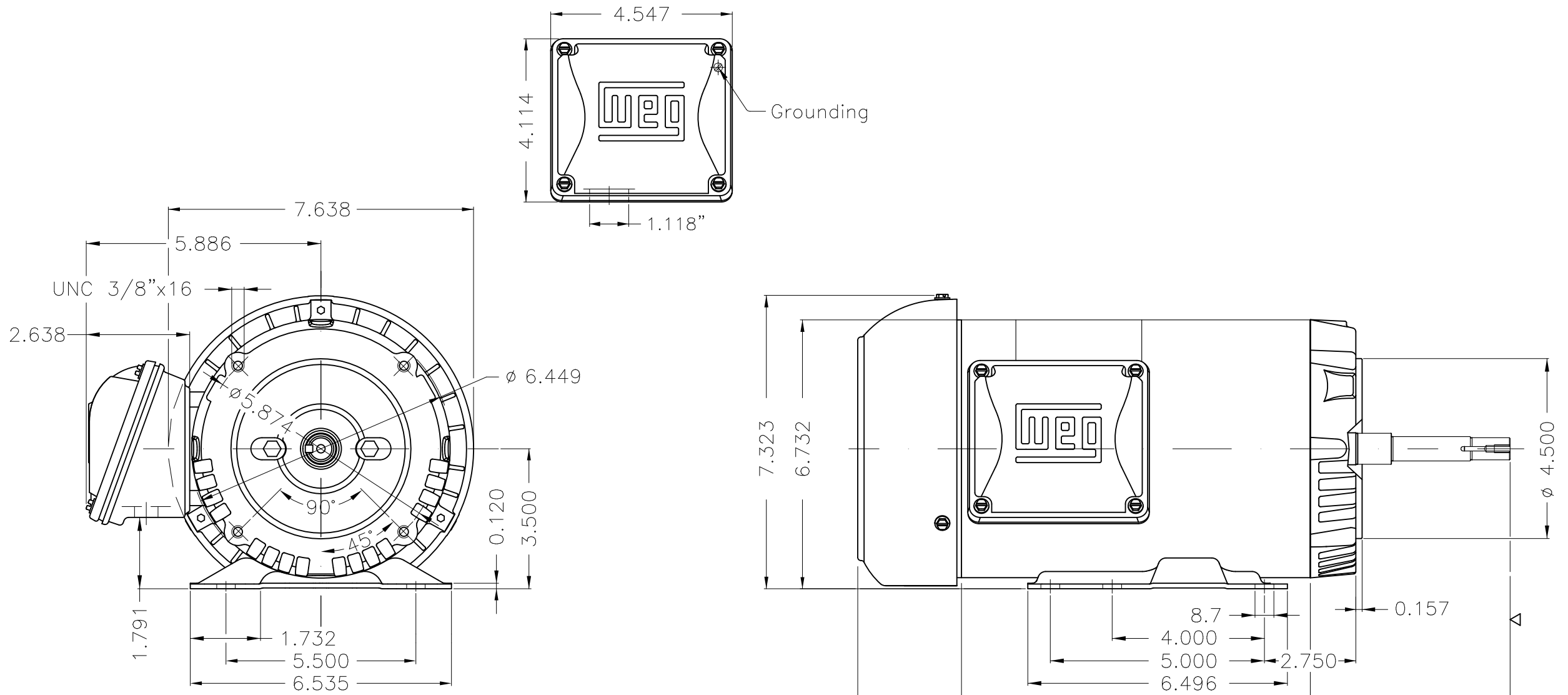
A

B

C

D

E



EUNC 3/8" - 16 WEG WPR-7309

DE Shaft End

- 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 JN TYPE PSEF 143					
CHECKED		FRAME 143/5JM IP55 TEFC					
RELEASED							
REL DT.		WMO Jaragua do Sul	Product Engineering	WDD	SHEET	1 / 1	

2 HP 02 Poles 60 Hz

A

Dimensions in inches XME A3

