

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :			
Product line	: NEMA Premium Efficiency Three-Phase	Product code :	13248778
		Catalog # :	00158OT3E145TC-SG
Frame	: 143/5TC	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	: 42.6 lb
Design	: B	Moment of inertia (J)	: 0.1426 sq.ft.lb
Output [HP]	1.5	1.5	1.5
Poles	4	4	4
Frequency [Hz]	60	50	50
Rated voltage [V]	230/460	190/380	220/415
Rated current [A]	4.14/2.07	4.84/2.42	4.41/2.34
L. R. Amperes [A]	36.0/18.0	31.0/15.5	30.9/16.4
LRC [A]	8.7x(Code L)	6.4x(Code H)	7.0x(Code J)
No load current [A]	2.40/1.20	2.36/1.18	2.41/1.28
Rated speed [RPM]	1760	1440	1445
Slip [%]	2.22	4.00	3.67
Rated torque [ft.lb]	4.48	5.47	5.45
Locked rotor torque [%]	280	190	220
Breakdown torque [%]	330	250	280
Service factor		1.15	1.15
Temperature rise	80 K	80 K	80 K
Locked rotor time	27s (cold) 15s (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%	83.6	84.0
	50%	84.0	83.6
	75%	86.5	84.8
	100%	86.5	83.9
Power Factor	25%	0.32	0.35
	50%	0.56	0.60
	75%	0.69	0.73
	100%	0.77	0.81
Bearing type	: <u>Drive end</u> 6205 ZZ <u>Non drive end</u> 6203 ZZ	Foundation loads	
Sealing	: Without Without Bearing Seal Bearing Seal	Max. traction	: 111 lb
		Max. compression	: 154 lb
Lubrication interval	: - -		
Lubricant amount	: - -		
Lubricant type	: Mobil Polyrex EM		
Notes USABLE @208V 4.58A SF 1.00 SFA 4.58A			
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



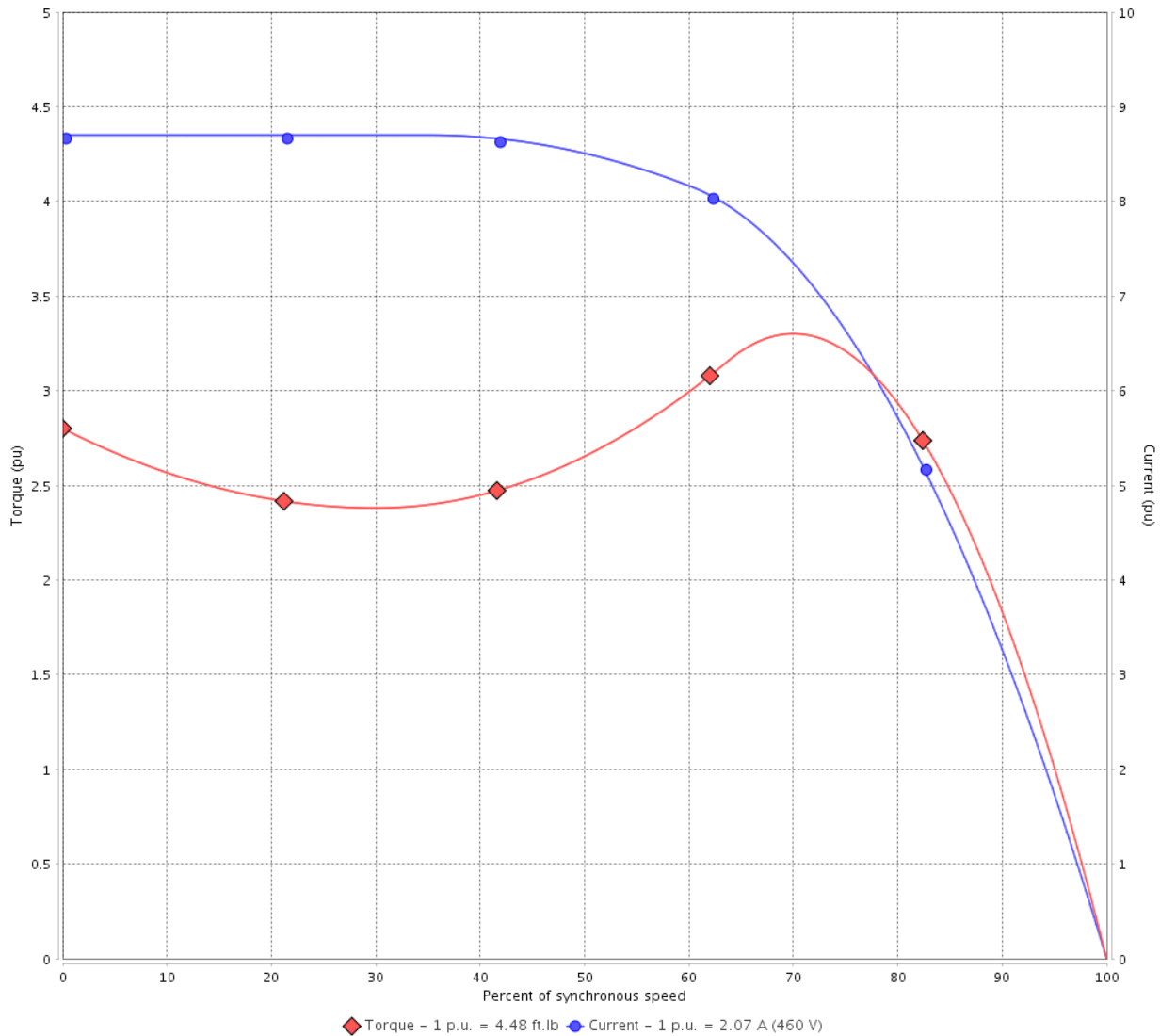
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Catalog # : 00158OT3E145TC-SG

TORQUE AND CURRENT VS SPEED CURVE



Performance : 230/460 V 60 Hz 4P

Rated current : 4.14/2.07 A
 LRC : 8.7
 Rated torque : 4.48 ft.lb
 Locked rotor torque : 280 %
 Breakdown torque : 330 %
 Rated speed : 1760 rpm

Moment of inertia (J) : 0.1426 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor :
 Temperature rise : 80 K
 Design : B

Locked rotor time : 27s (cold) 15s (hot)

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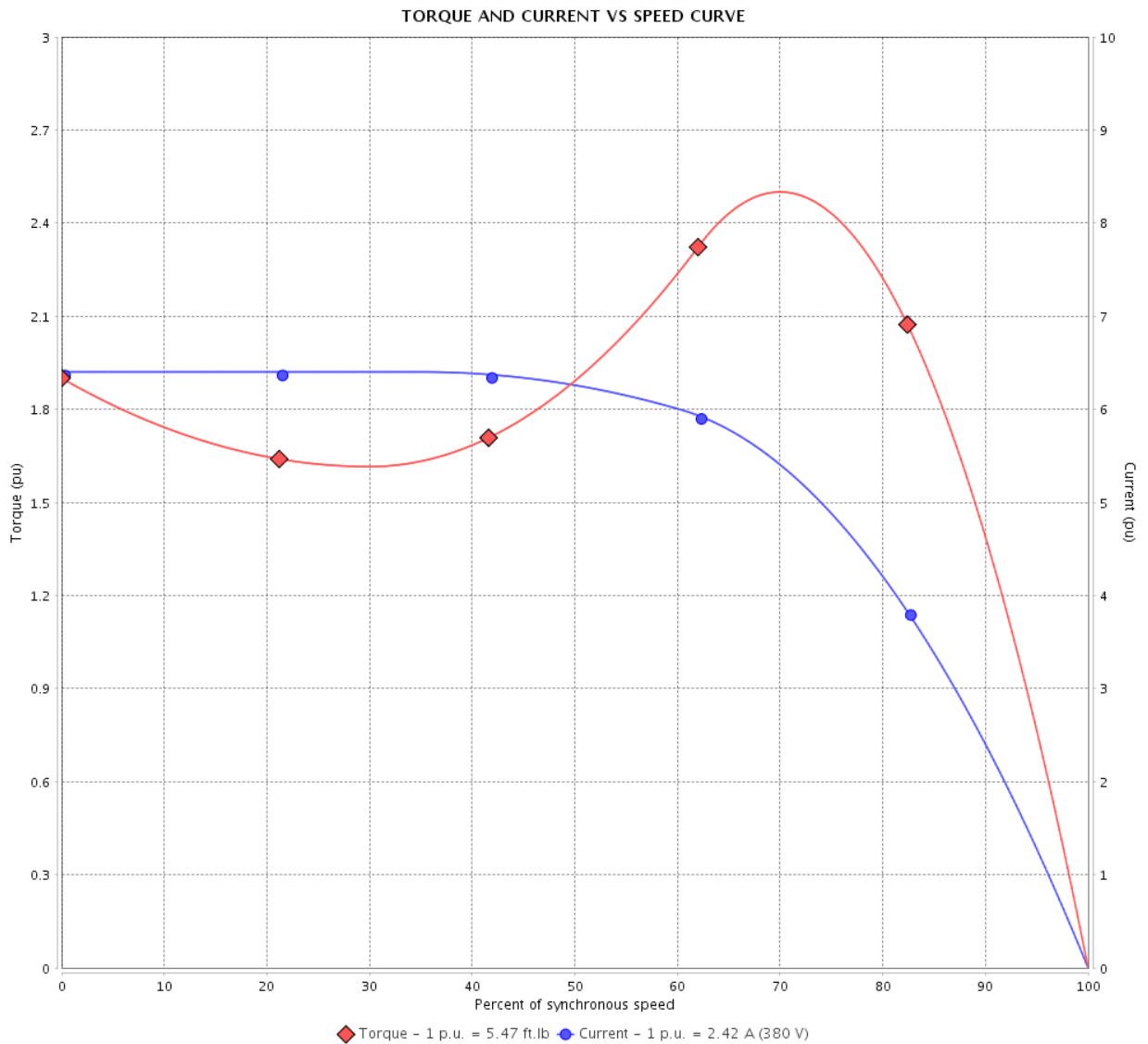
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 Locked rotor torque : 190 %
 Breakdown torque : 250 %
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 Temperature rise : 80 K
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Locked rotor time : 0s (cold) 0s (hot)

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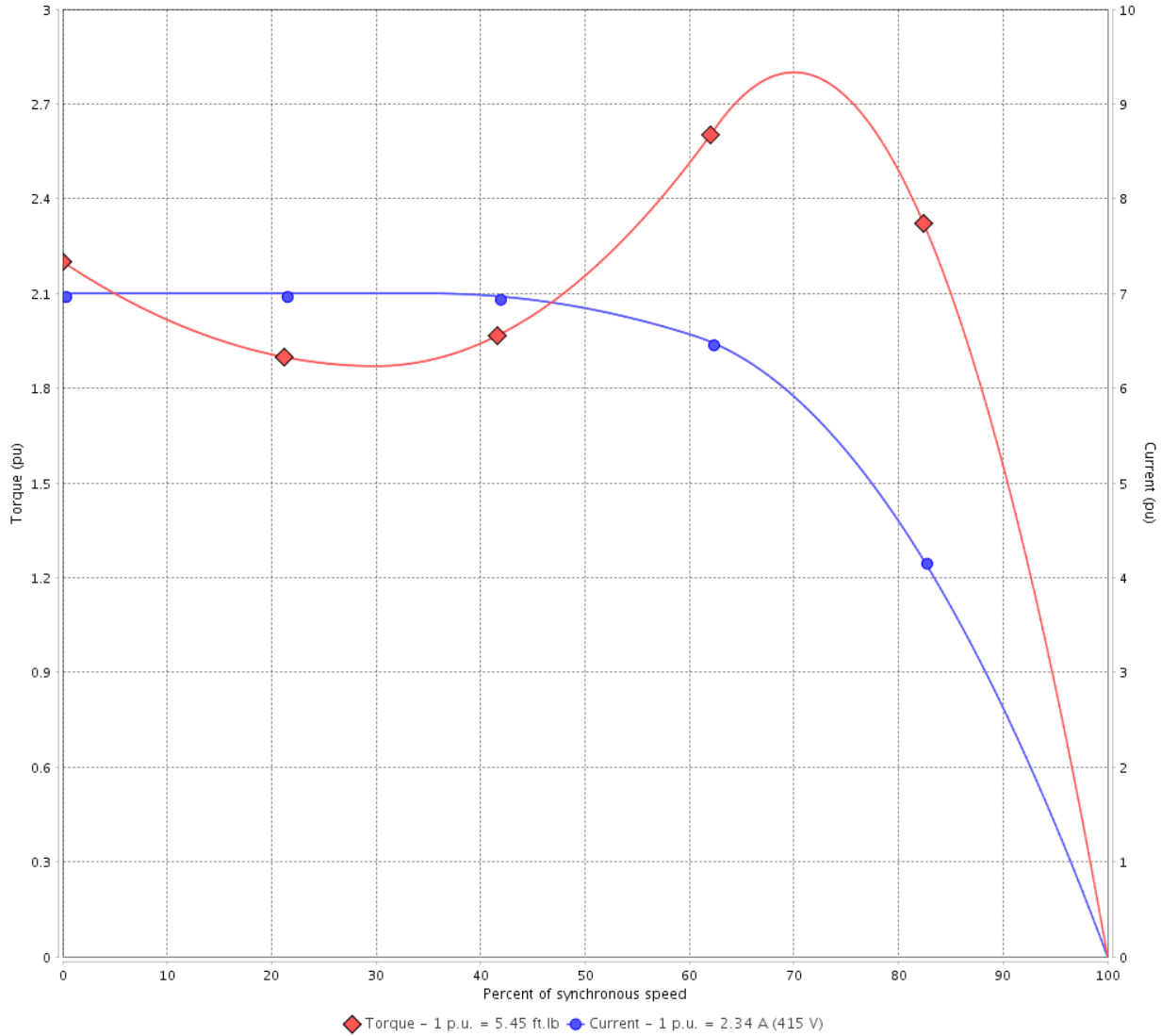
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TORQUE AND CURRENT VS SPEED CURVE



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LOAD PERFORMANCE CURVE

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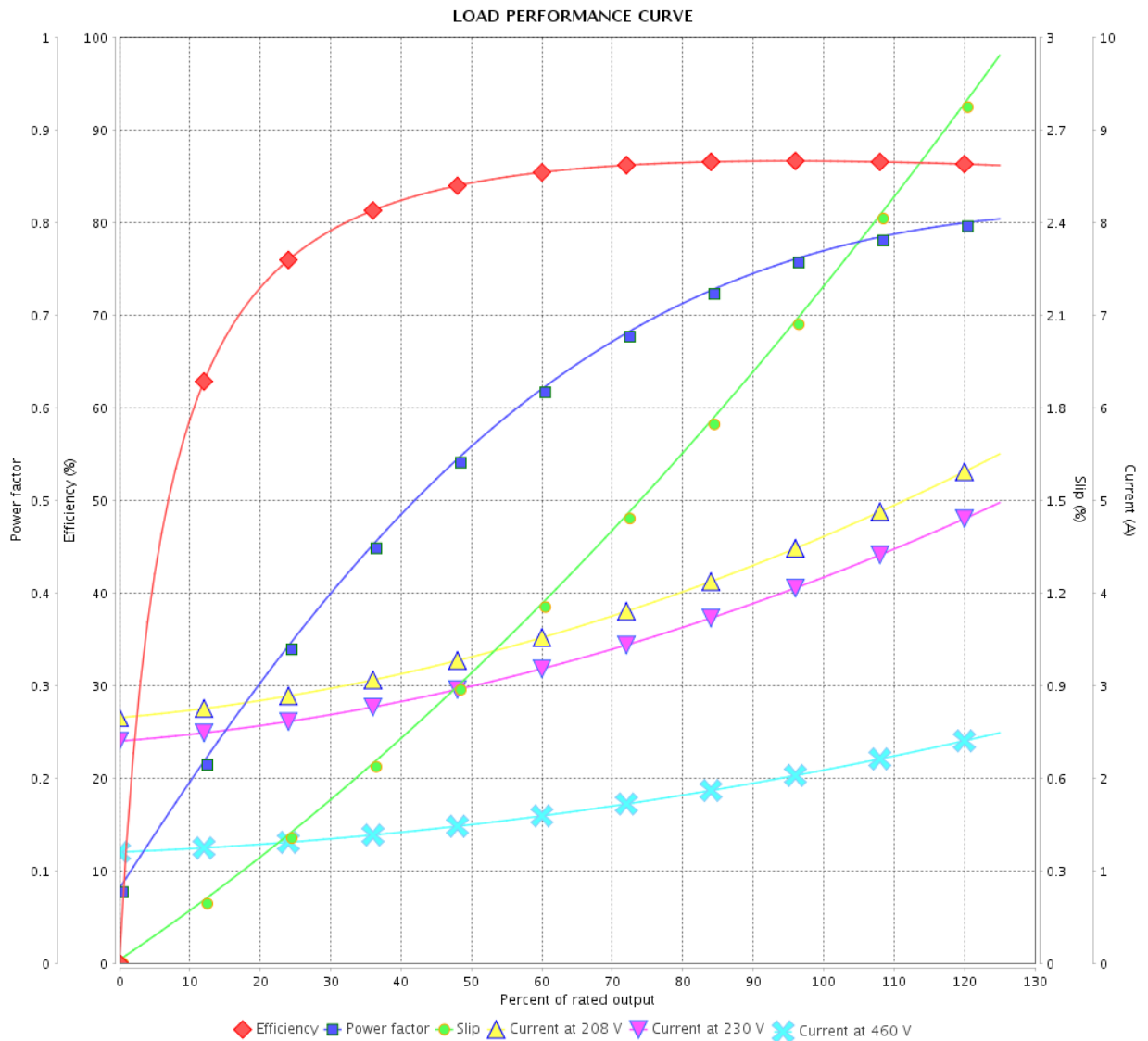


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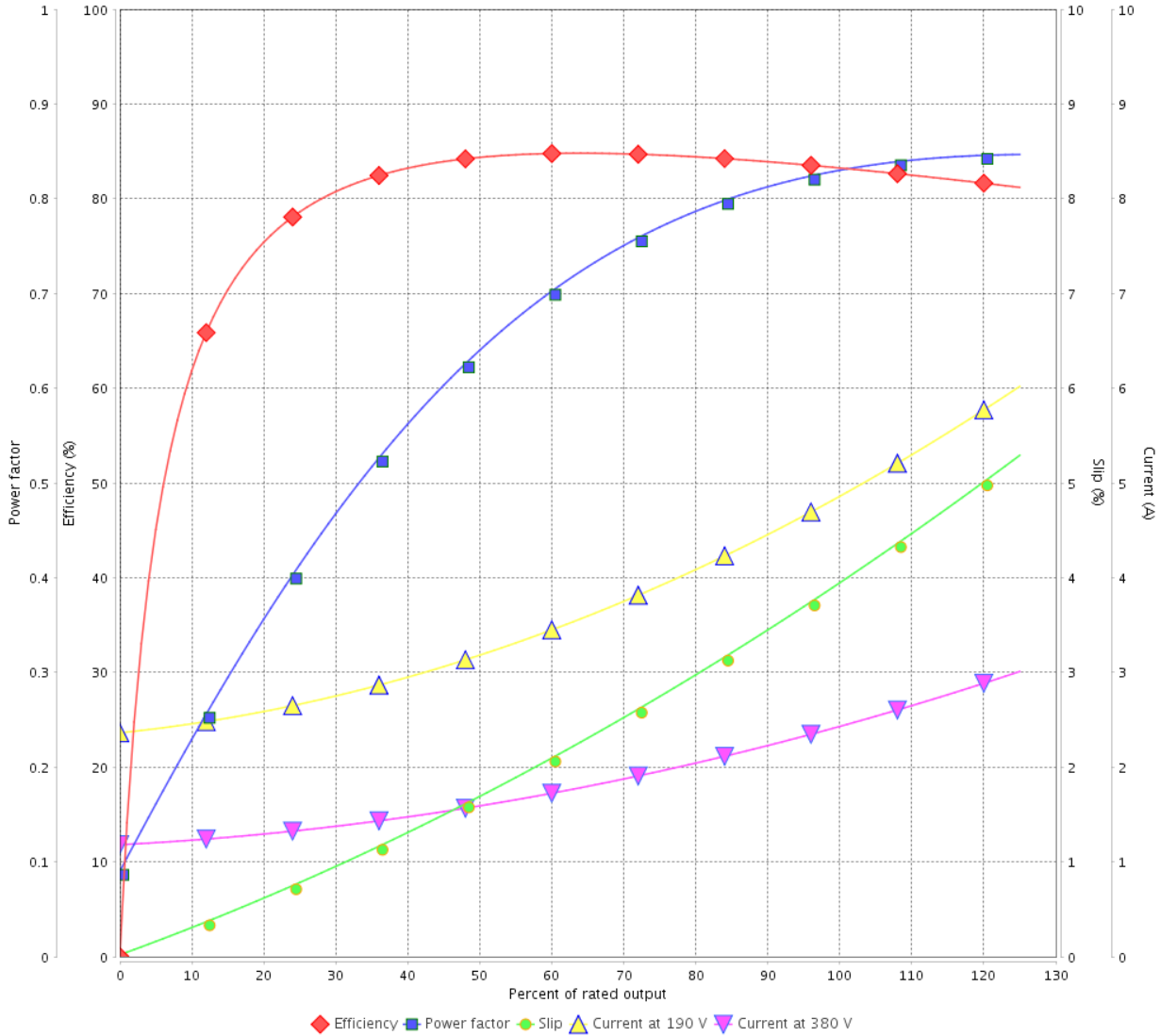
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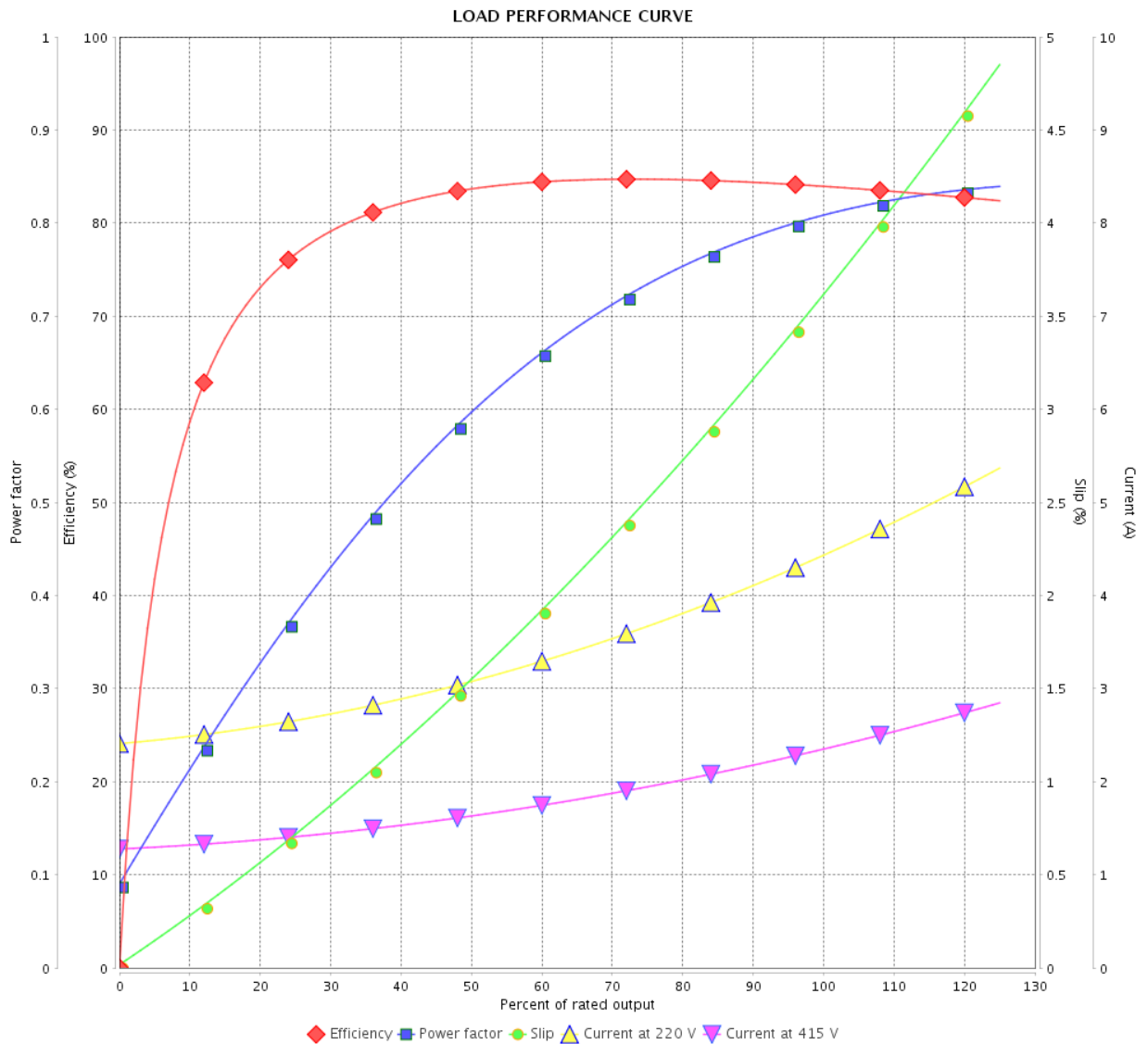


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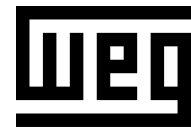
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THERMAL LIMIT CURVE



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Rated speed : 1760 rpm	Design : B

Heating constant

Cooling constant

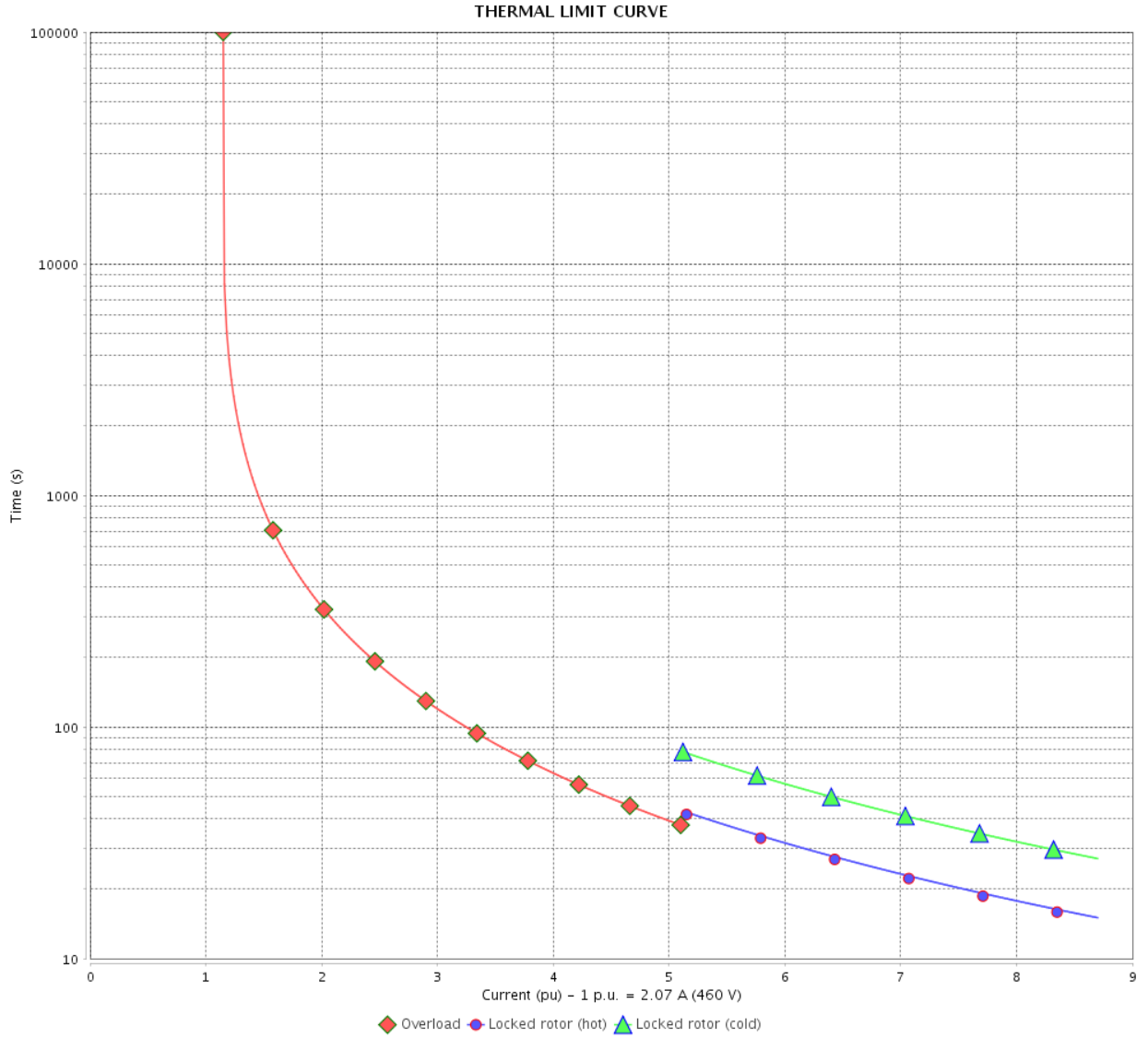
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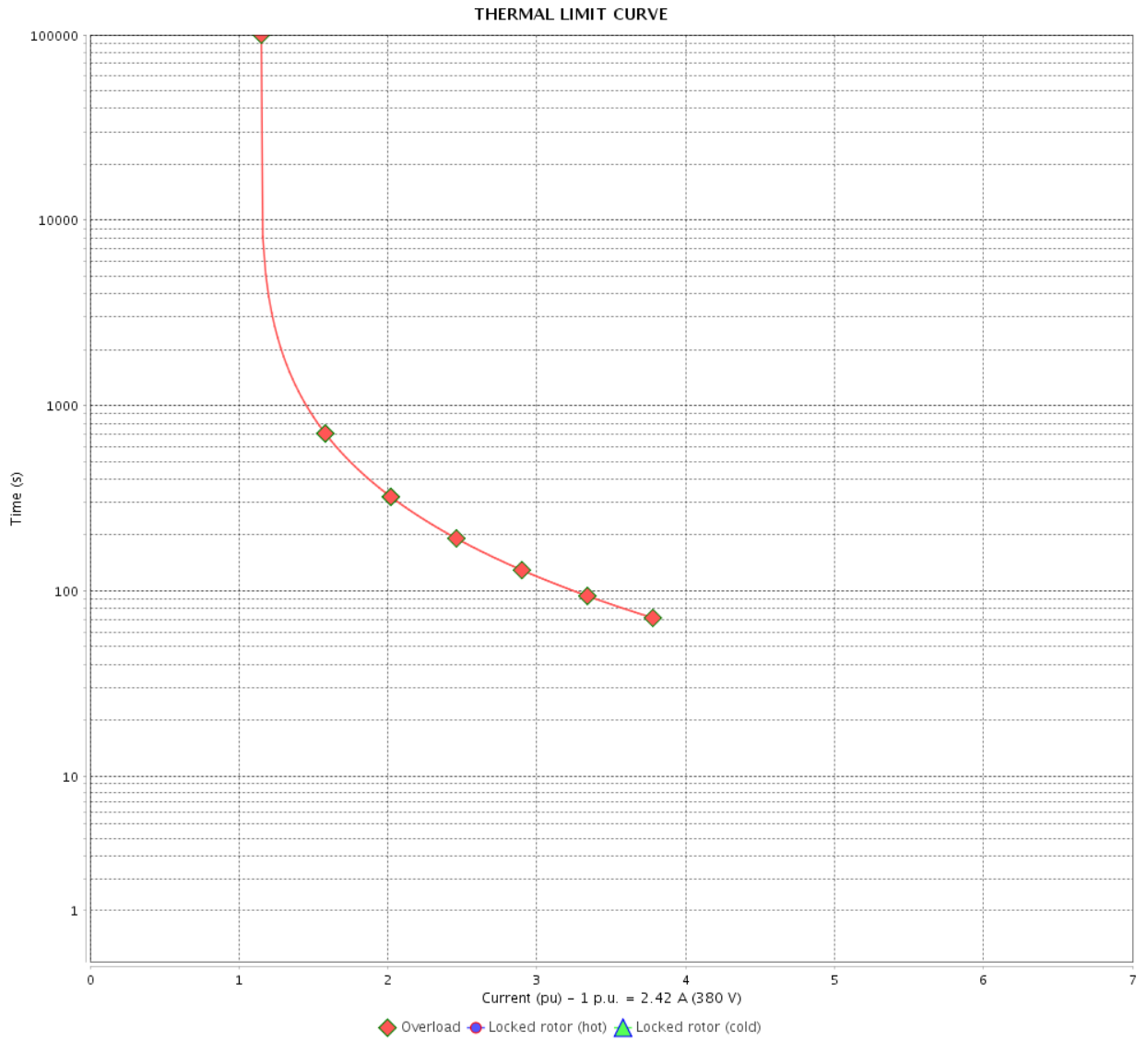
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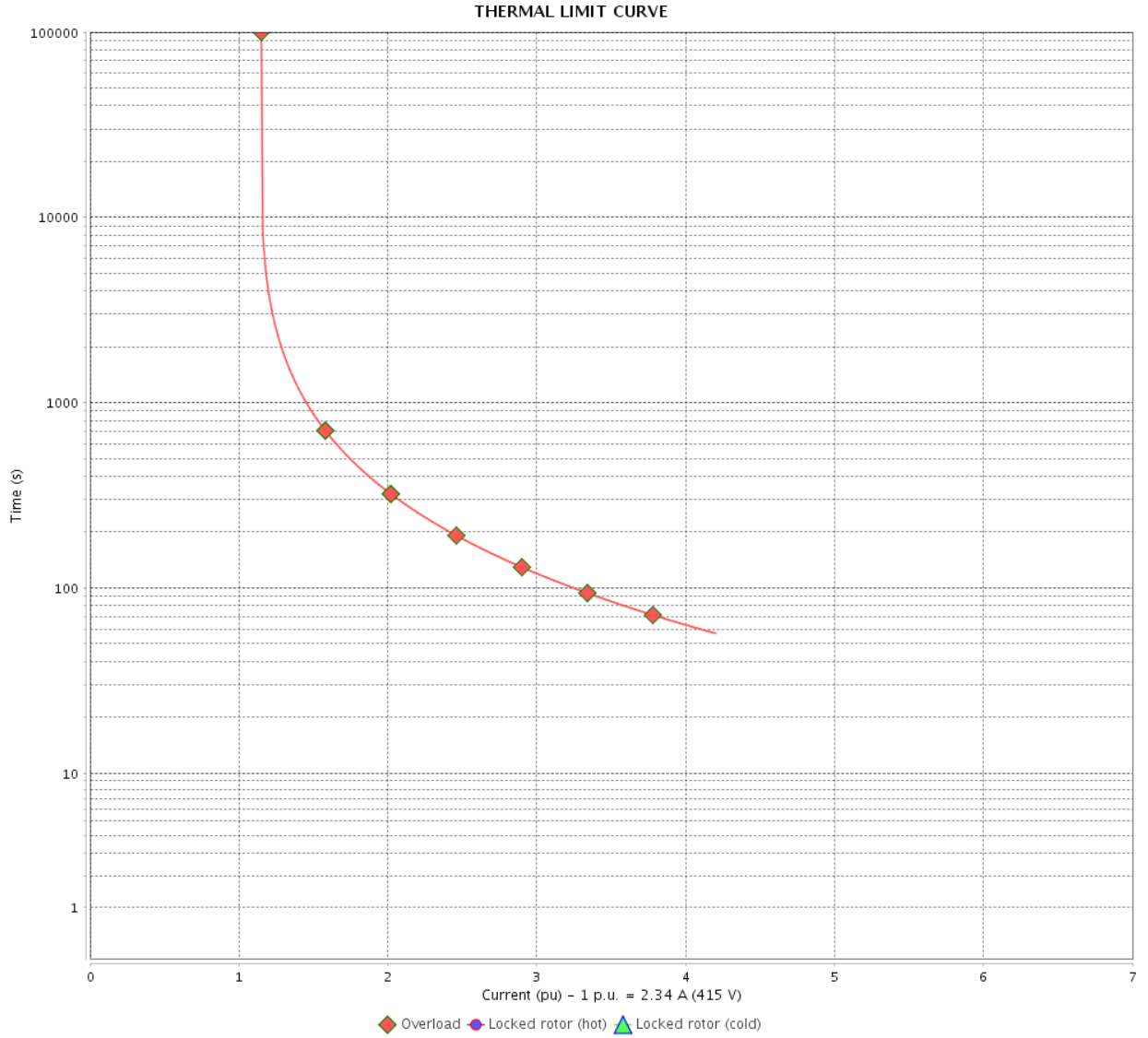
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VFD OPERATION CURVE

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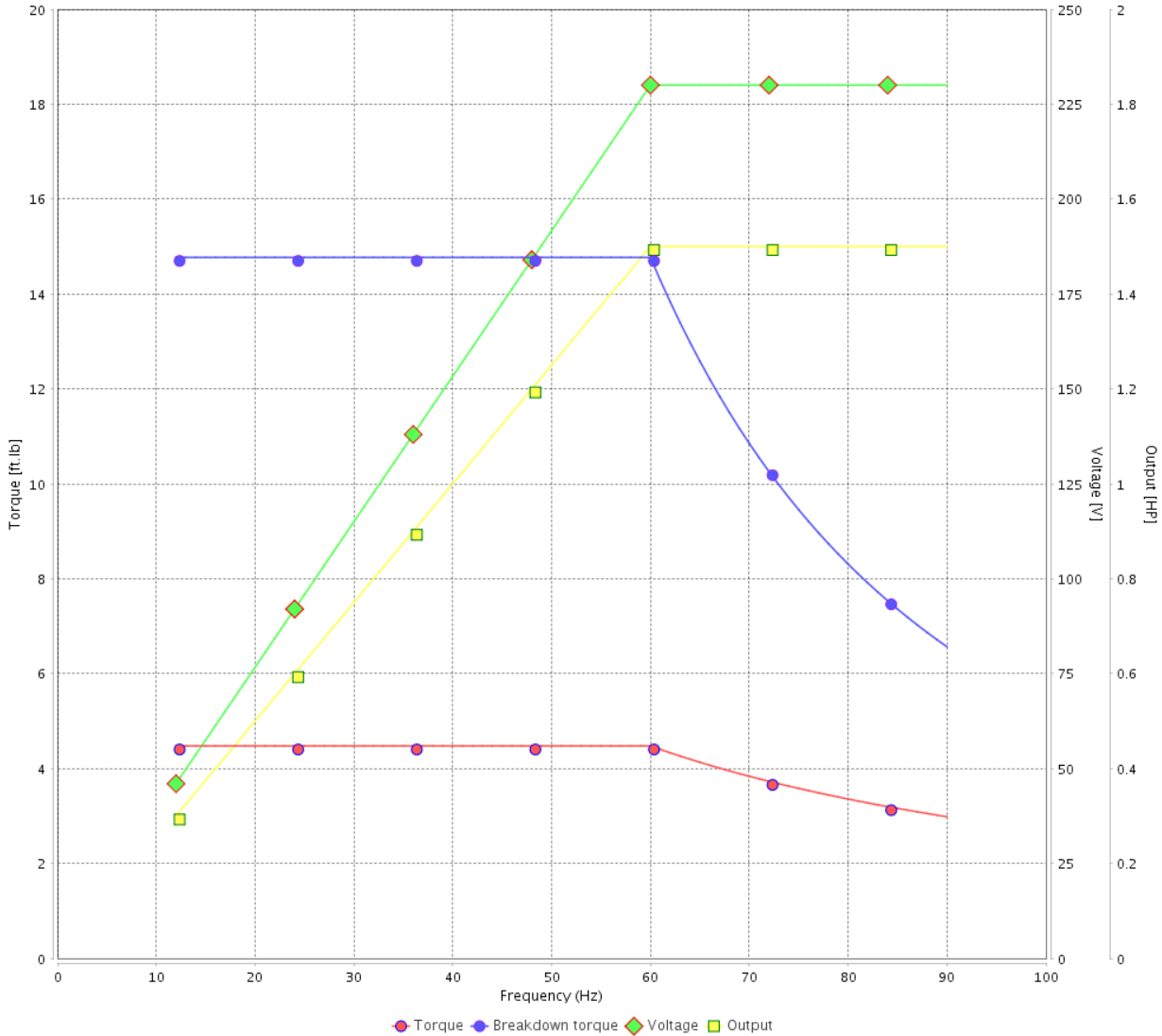
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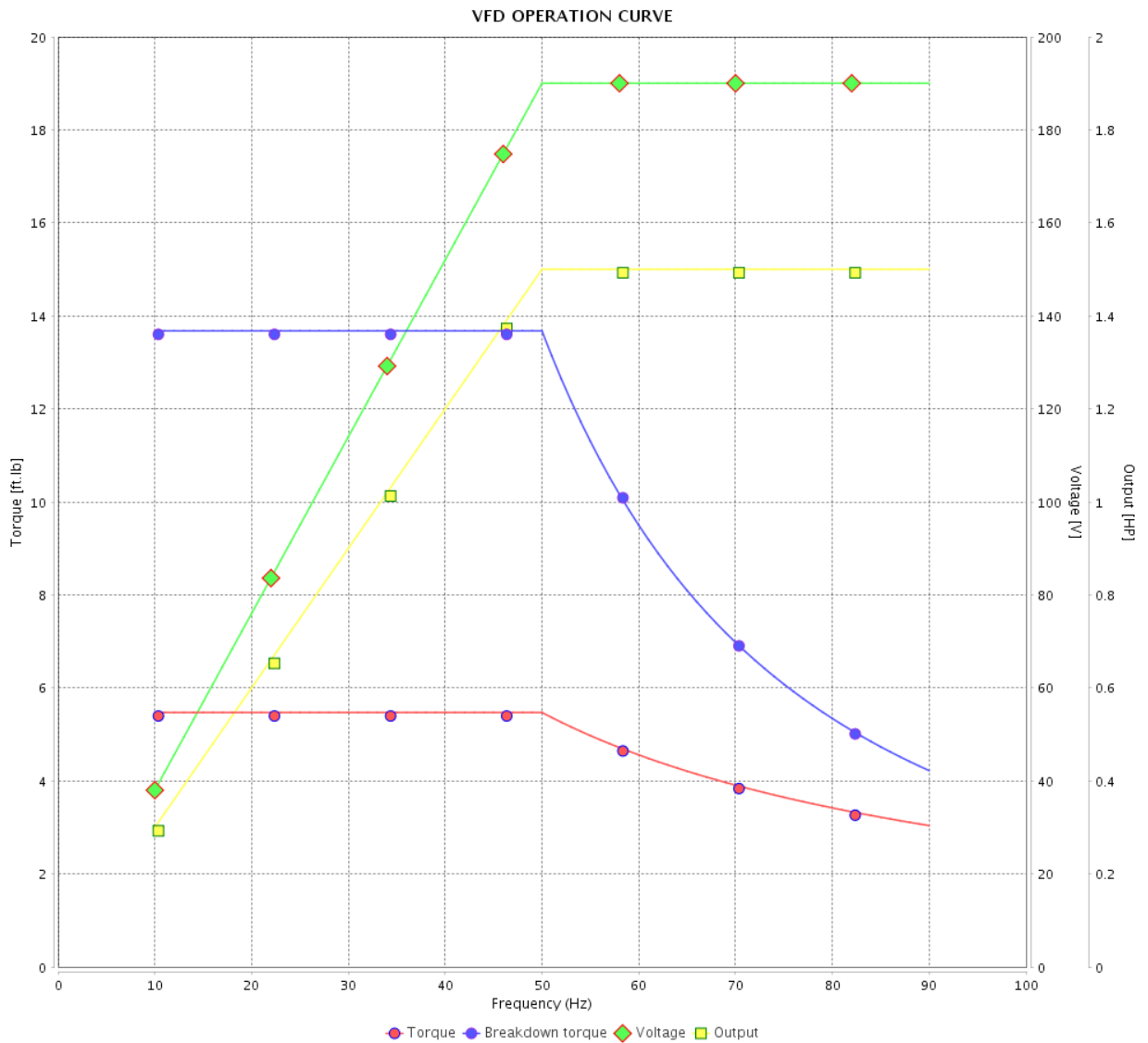


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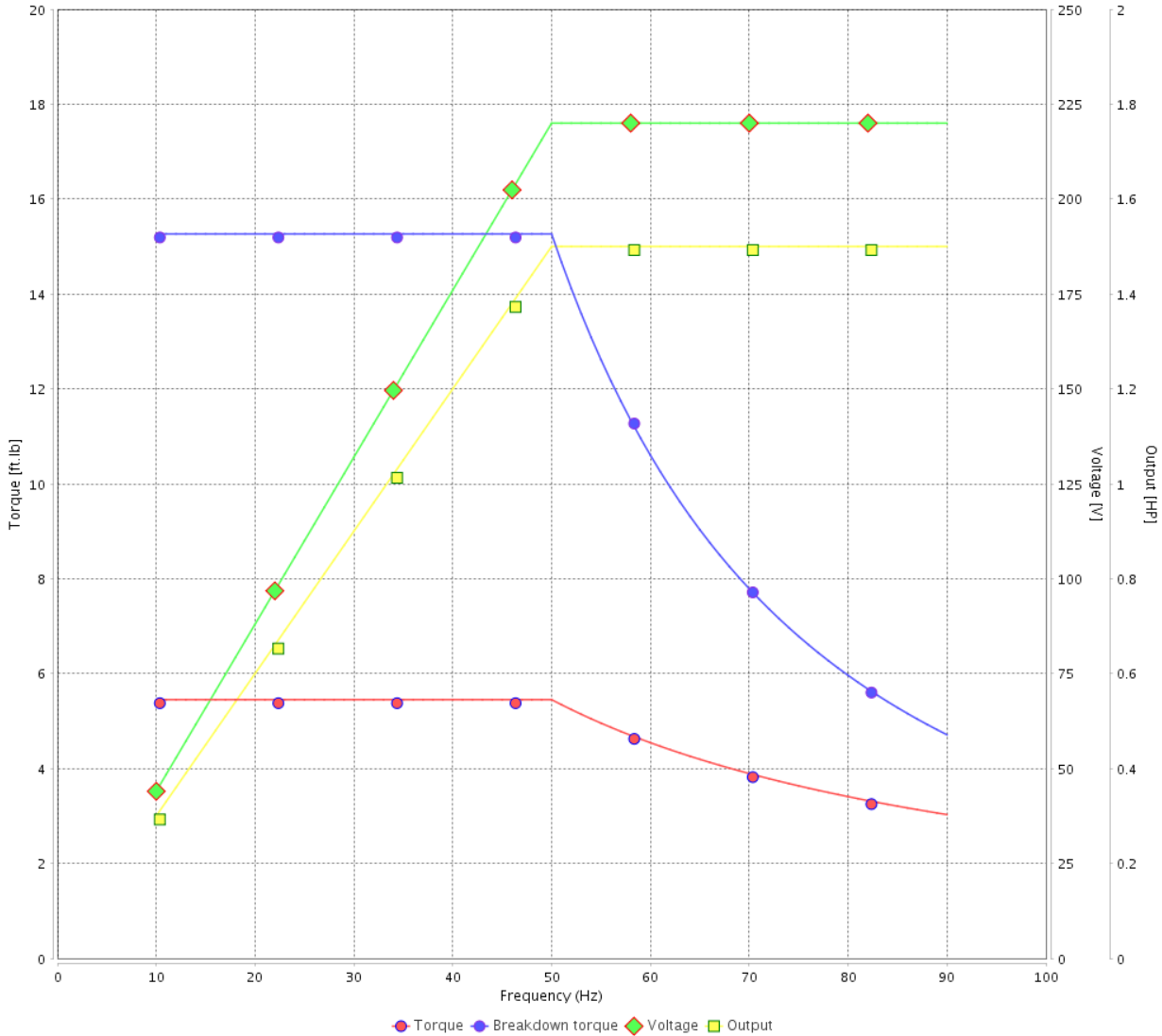
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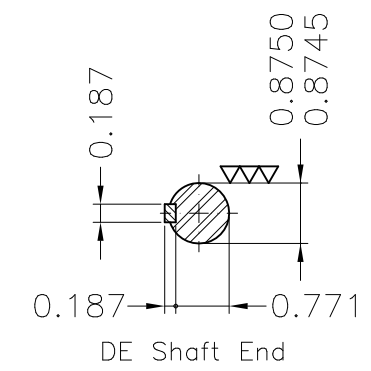
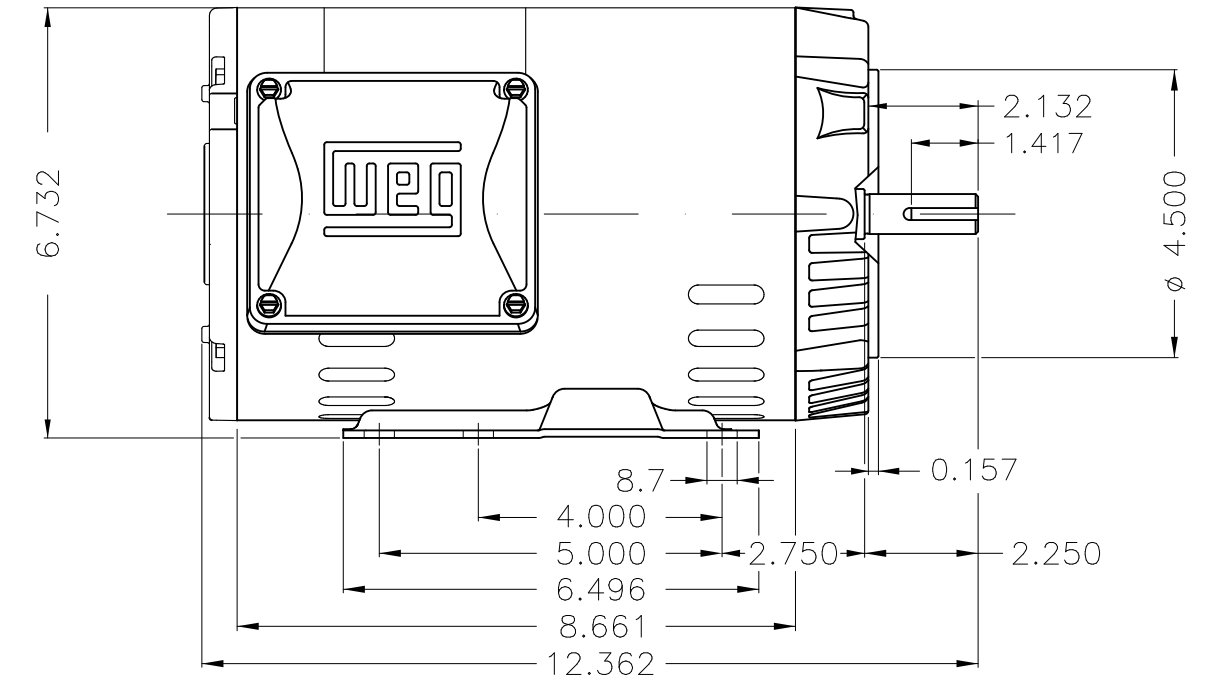
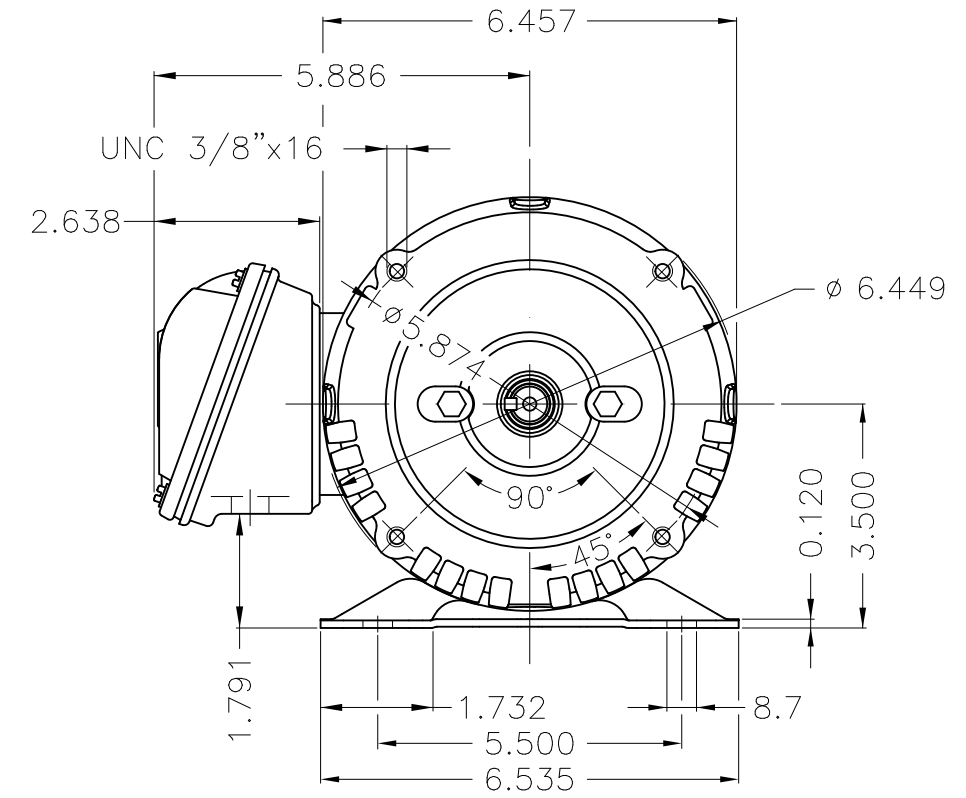
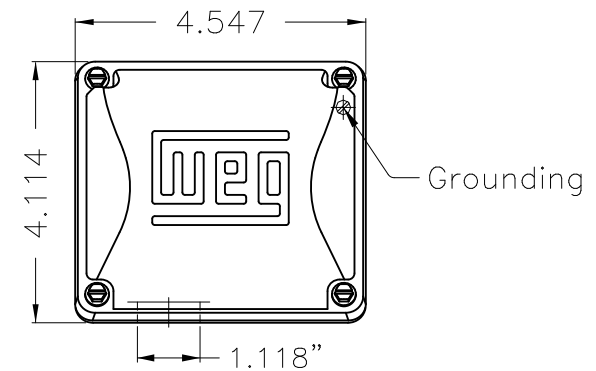
A

B

C

D

E



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 PREM. EFF.					
CHECKED		FRAME 143/5TC IP21 ODP					
RELEASED							
REL DT.	WMO	Jaragua do Sul	Product Engineering	SHEET	1 / 1		

1.5 HP 04 Poles 60 Hz

A

PREVIEW
WDD



Dimensions in inches XME A3