

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :			
Product line	: JP Pump NEMA Premium Efficiency Three-Phase	Product code :	14808721
		Catalog # :	00118ET3E143JP-SG
Frame	: 143/5JP	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	: 2.2 lb
Protection degree	: IP55	Moment of inertia (J)	: 0.1232 sq.ft.lb
Design	: B		
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]	2.94/1.47	3.40/1.70	3.09/1.64
L. R. Amperes [A]	25.3/12.6	22.1/11.0	22.0/11.6
LRC [A]	8.6x(Code M)	6.5x(Code J)	7.1x(Code K)
No load current [A]	1.78/0.890	1.76/0.879	1.77/0.938
Rated speed [RPM]	1765	1450	1455
Slip [%]	1.94	3.33	3.00
Rated torque [ft.lb]	2.98	3.62	3.61
Locked rotor torque [%]	280	200	220
Breakdown torque [%]	300	270	300
Service factor		1.15	1.15
Temperature rise	80 K	80 K	80 K
Locked rotor time	34s (cold) 19s (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%	81.0	81.2
	50%	82.5	81.5
	75%	84.0	83.6
	100%	85.5	83.5
Power Factor	25%	0.30	0.33
	50%	0.52	0.58
	75%	0.66	0.71
	100%	0.75	0.79
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	: 93 lb
		Max. compression	: 95 lb
Lubrication interval	: -		
Lubricant amount	: -		
Lubricant type	: Mobil Polyrex EM		
Notes USABLE @208V 3.25A SF 1.00 SFA 3.25A			
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



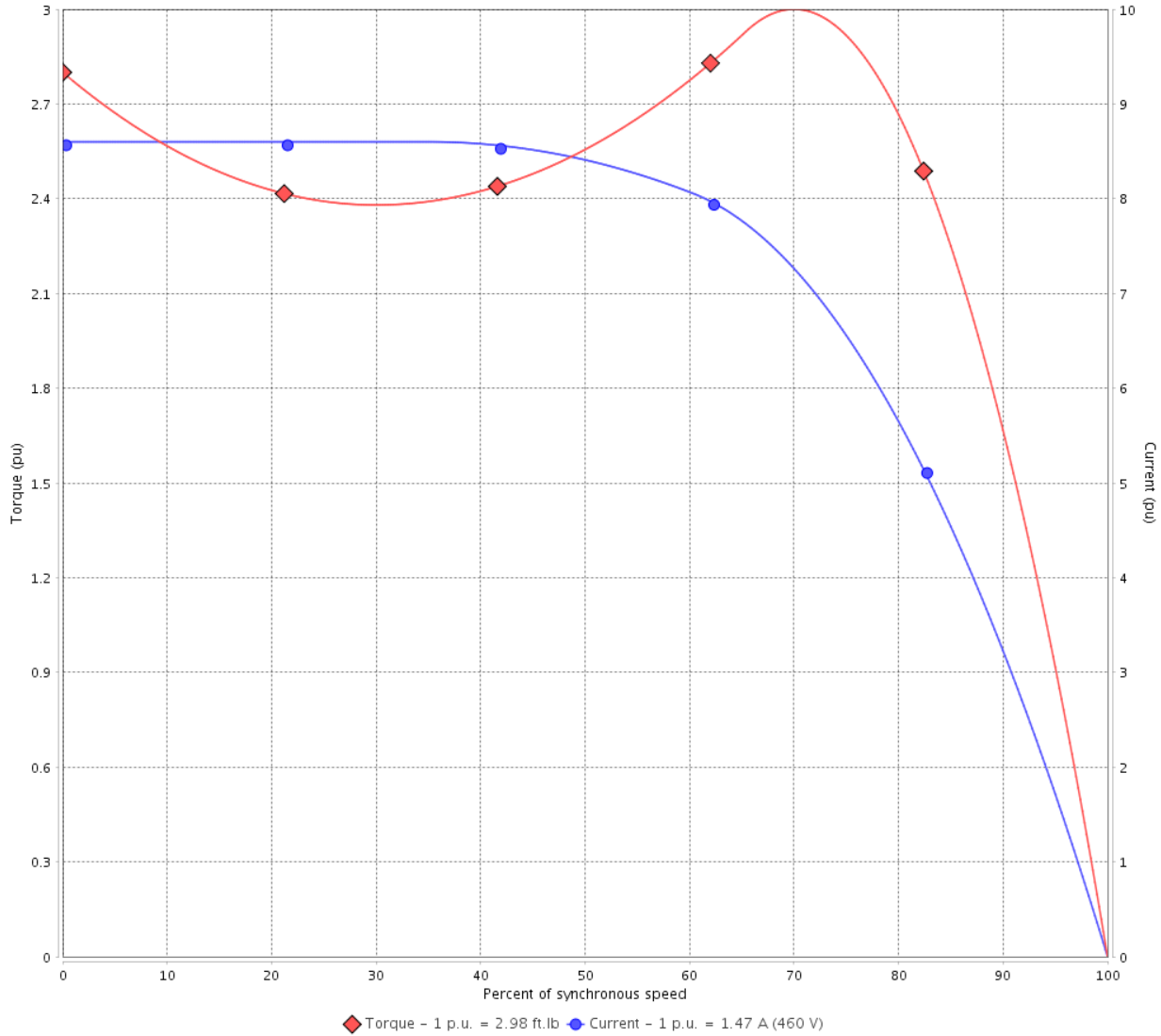
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TORQUE AND CURRENT VS SPEED CURVE



Performance : 230/460 V 60 Hz 4P

Rated current : 2.94/1.47 A
LRC : 8.6
Rated torque : 2.98 ft.lb
Locked rotor torque : 280 %
Breakdown torque : 300 %
Rated speed : 1765 rpm

Moment of inertia (J) : 0.1232 sq.ft.lb
Duty cycle : Cont.(S1)
Insulation class : F
Service factor :
Temperature rise : 80 K
Design : B

Locked rotor time : 34s (cold) 19s (hot)

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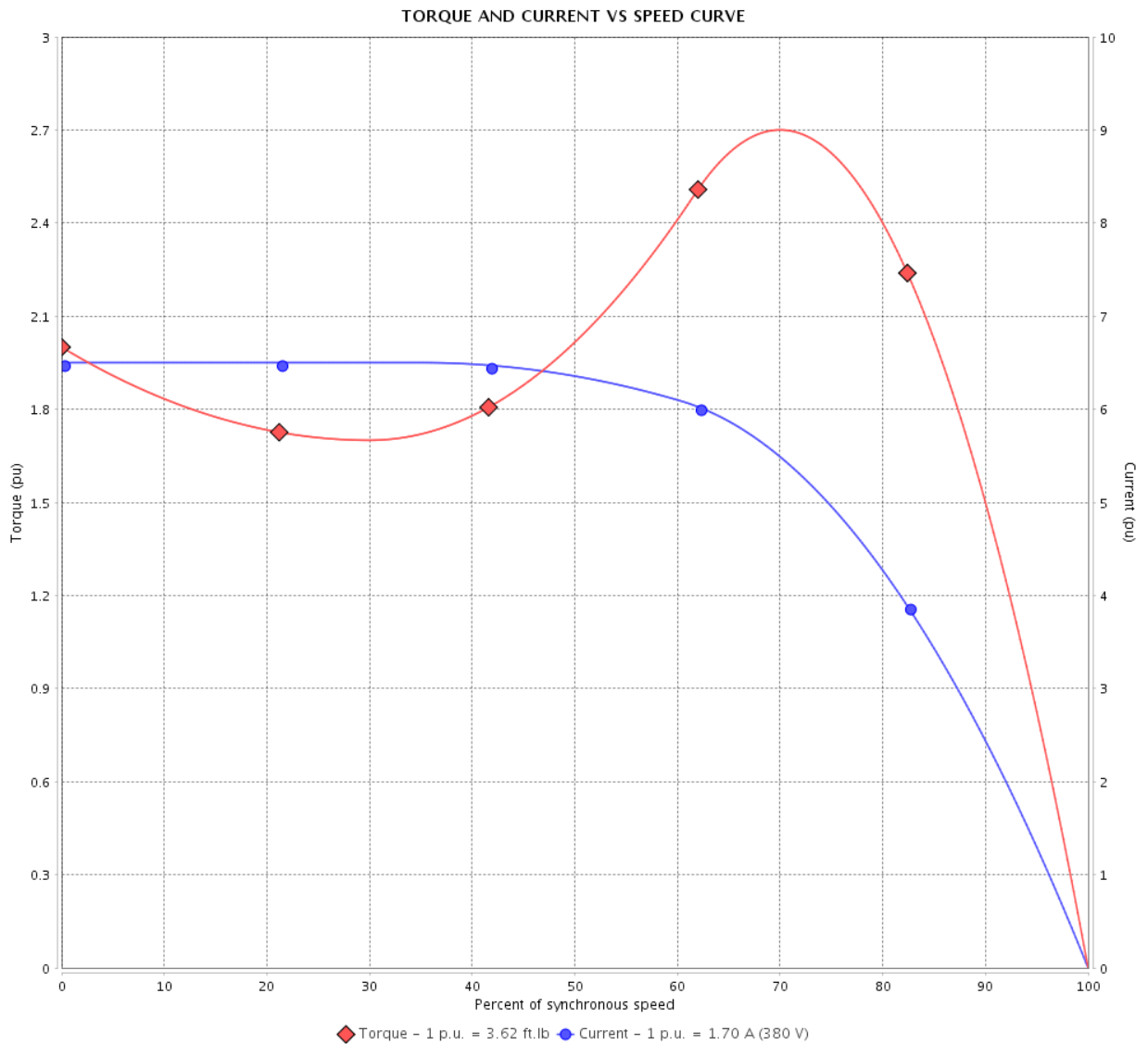
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Performance : 190/380 V 50 Hz 4P

Rated current : 3.40/1.70 A
 LRC : 6.5
 Rated torque : 3.62 ft.lb
 Locked rotor torque : 200 %
 Breakdown torque : 270 %
 Rated speed : 1450 rpm

Moment of inertia (J) : 0.1232 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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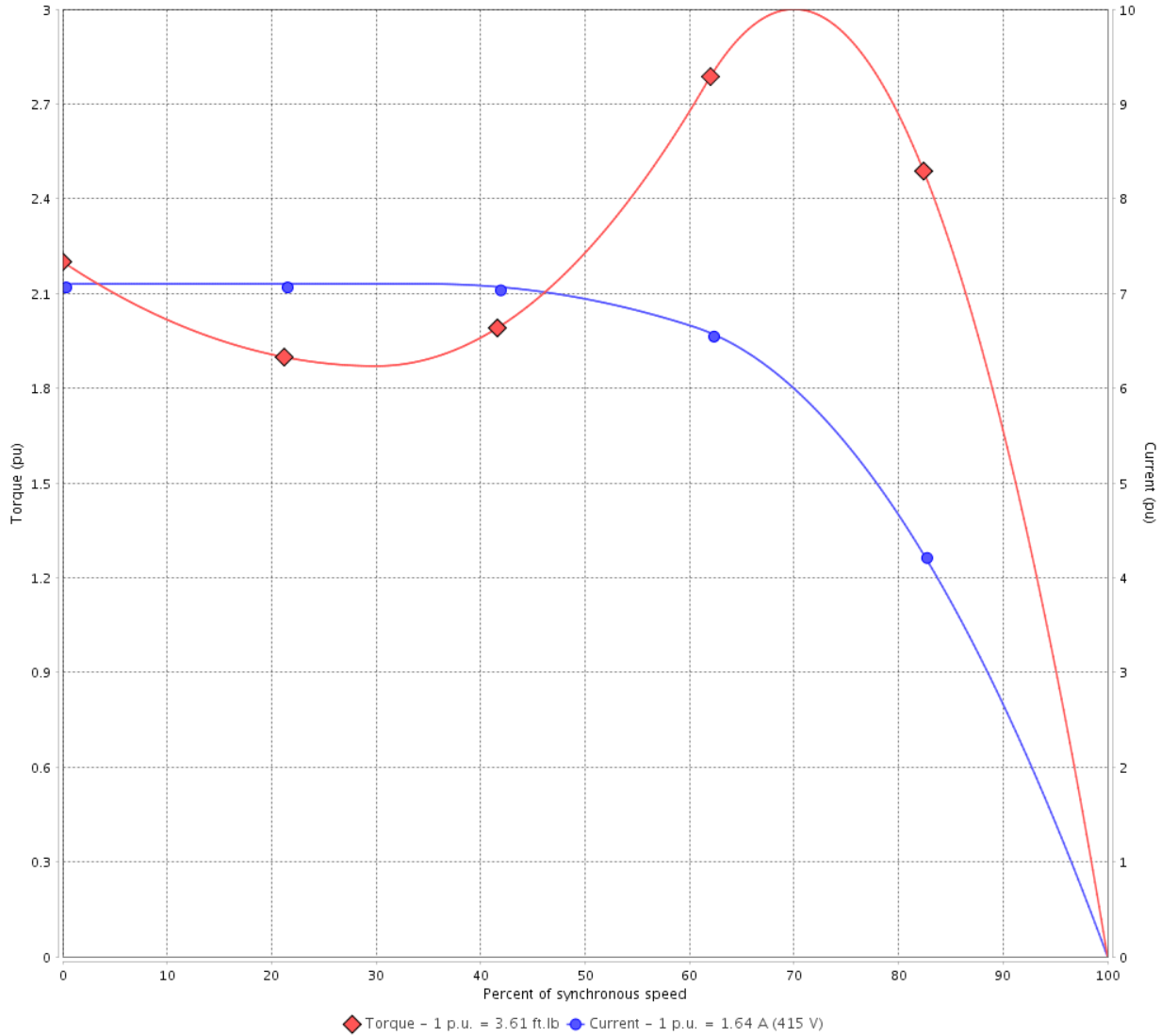
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TORQUE AND CURRENT VS SPEED CURVE



Performance : 220/415 V 50 Hz 4P

Rated current	: 3.09/1.64 A	Moment of inertia (J)	: 0.1232 sq.ft.lb
LRC	: 7.1	Duty cycle	: Cont.(S1)
Rated torque	: 3.61 ft.lb	Insulation class	: F
Locked rotor torque	: 220 %	Service factor	: 1.15
Breakdown torque	: 300 %	Temperature rise	: 80 K
Rated speed	: 1455 rpm	Design	: B

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

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LOAD PERFORMANCE CURVE

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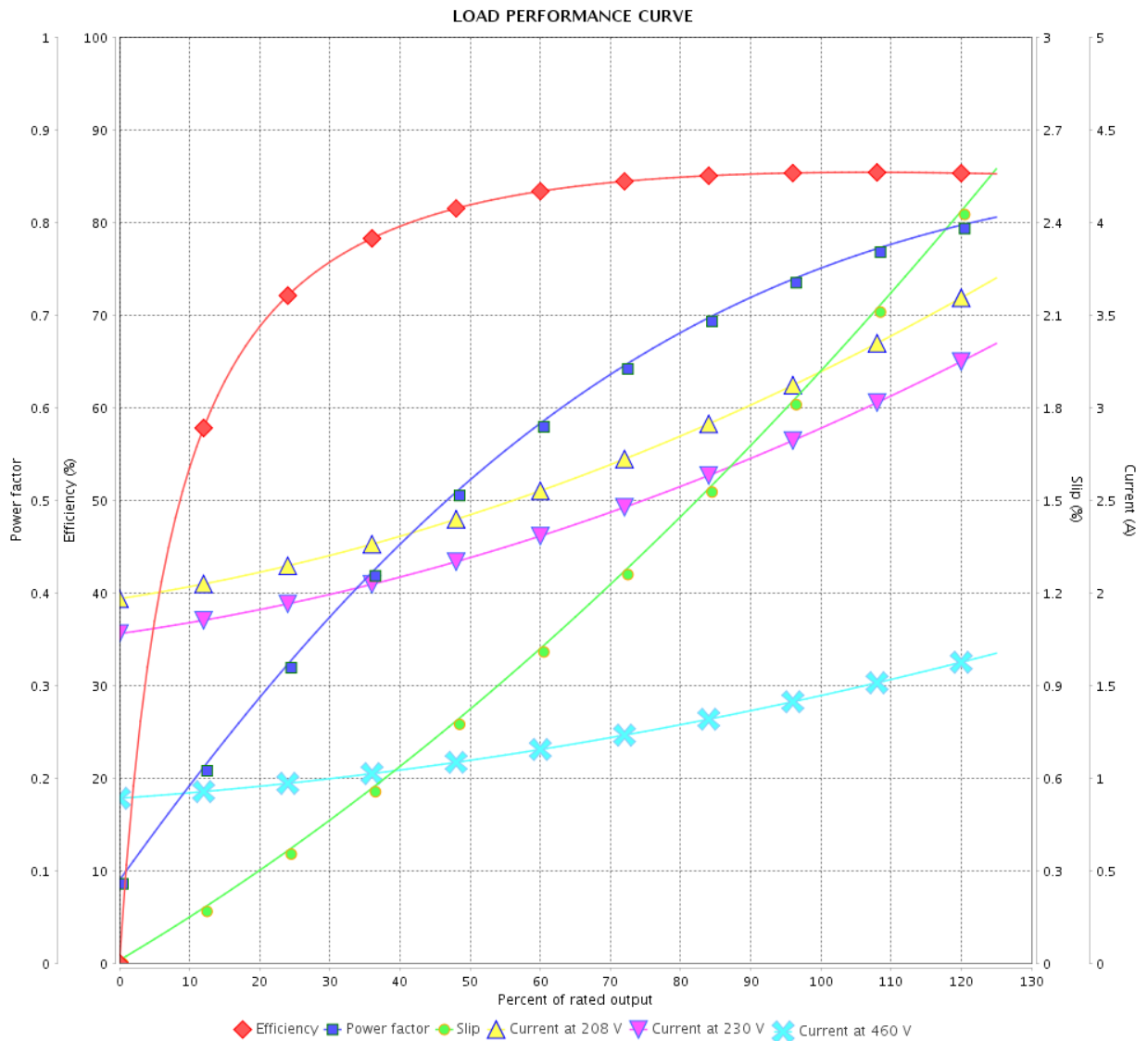


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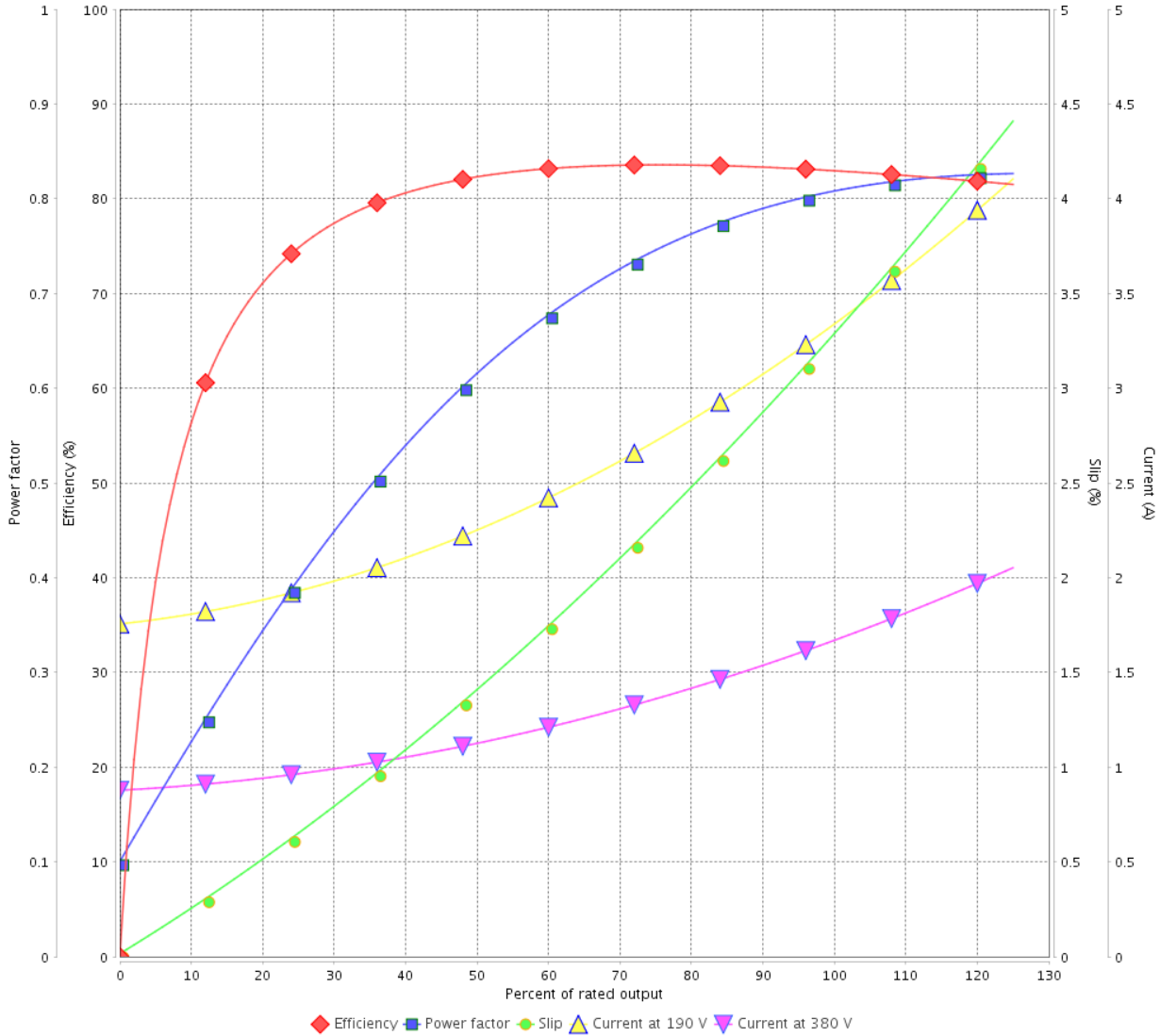
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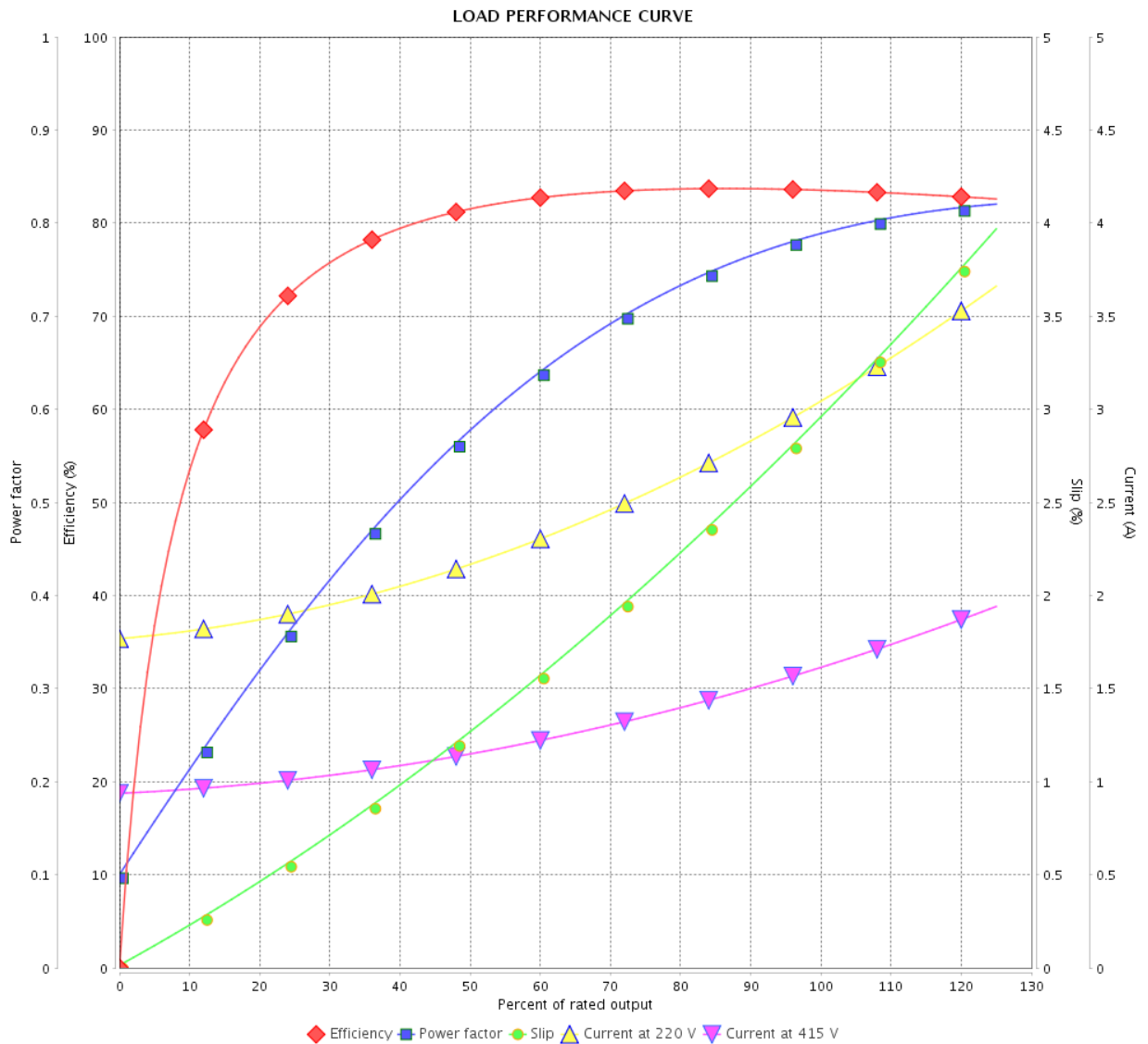


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THERMAL LIMIT CURVE



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Heating constant

Cooling constant

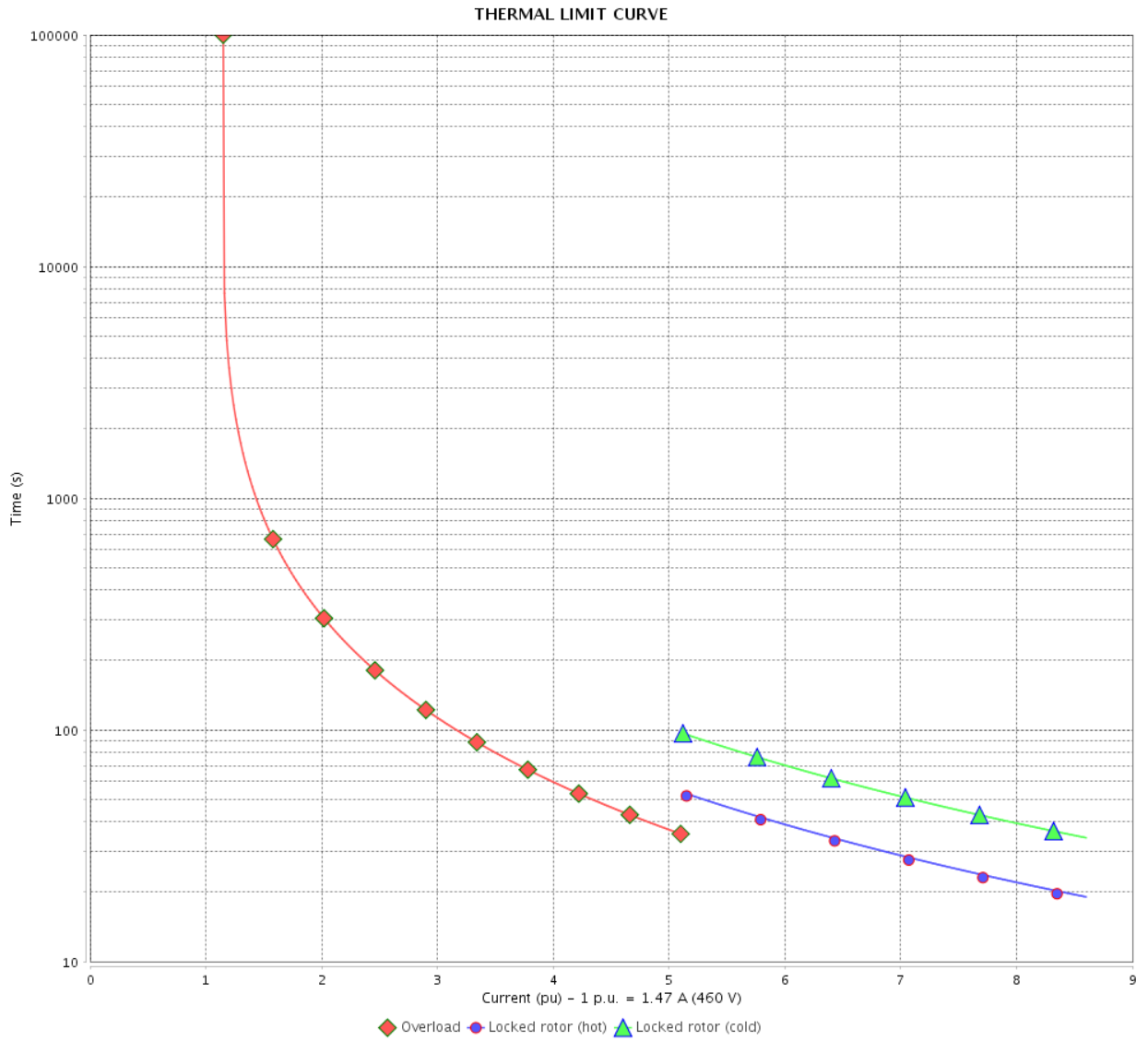
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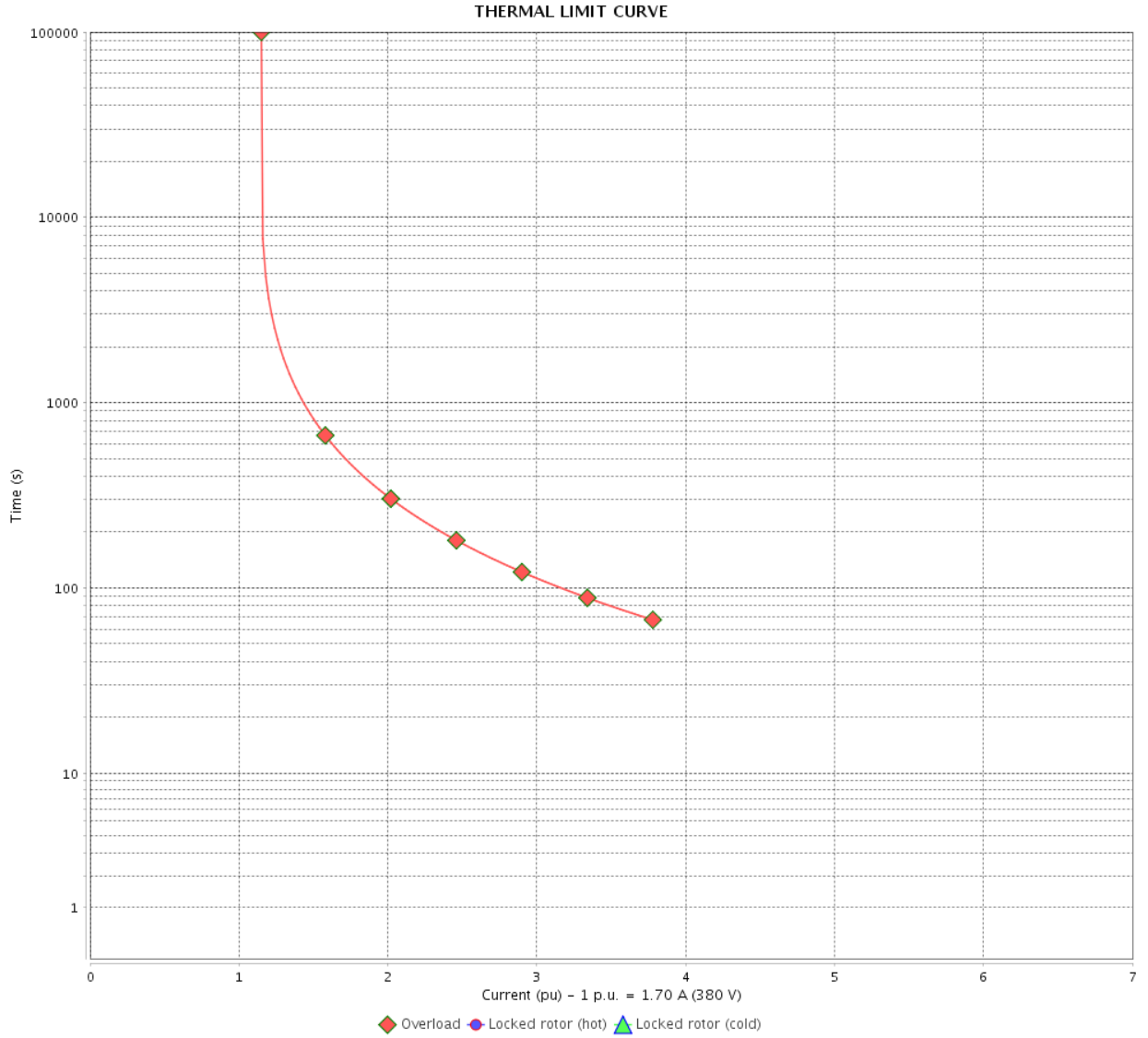
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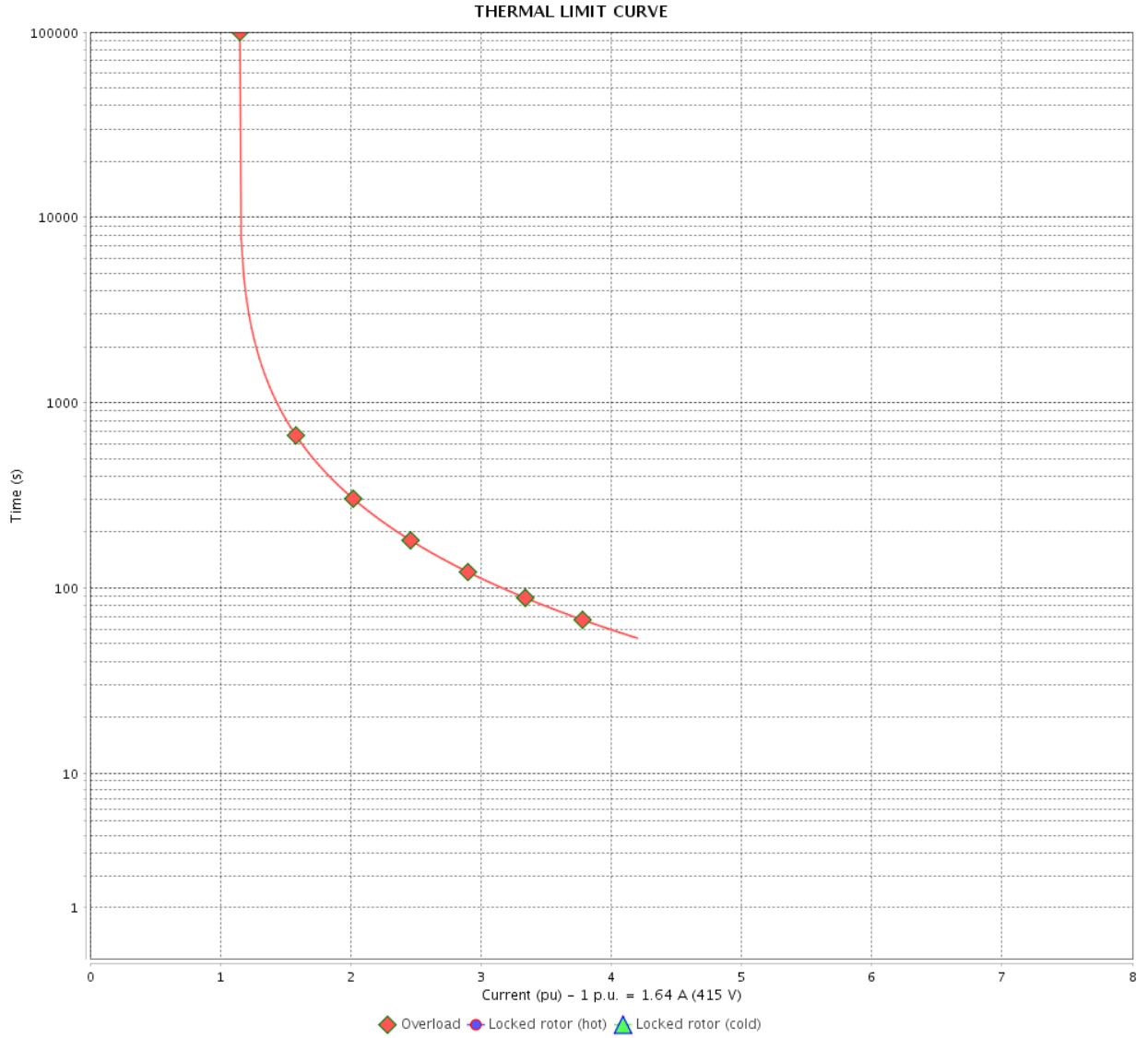
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VFD OPERATION CURVE

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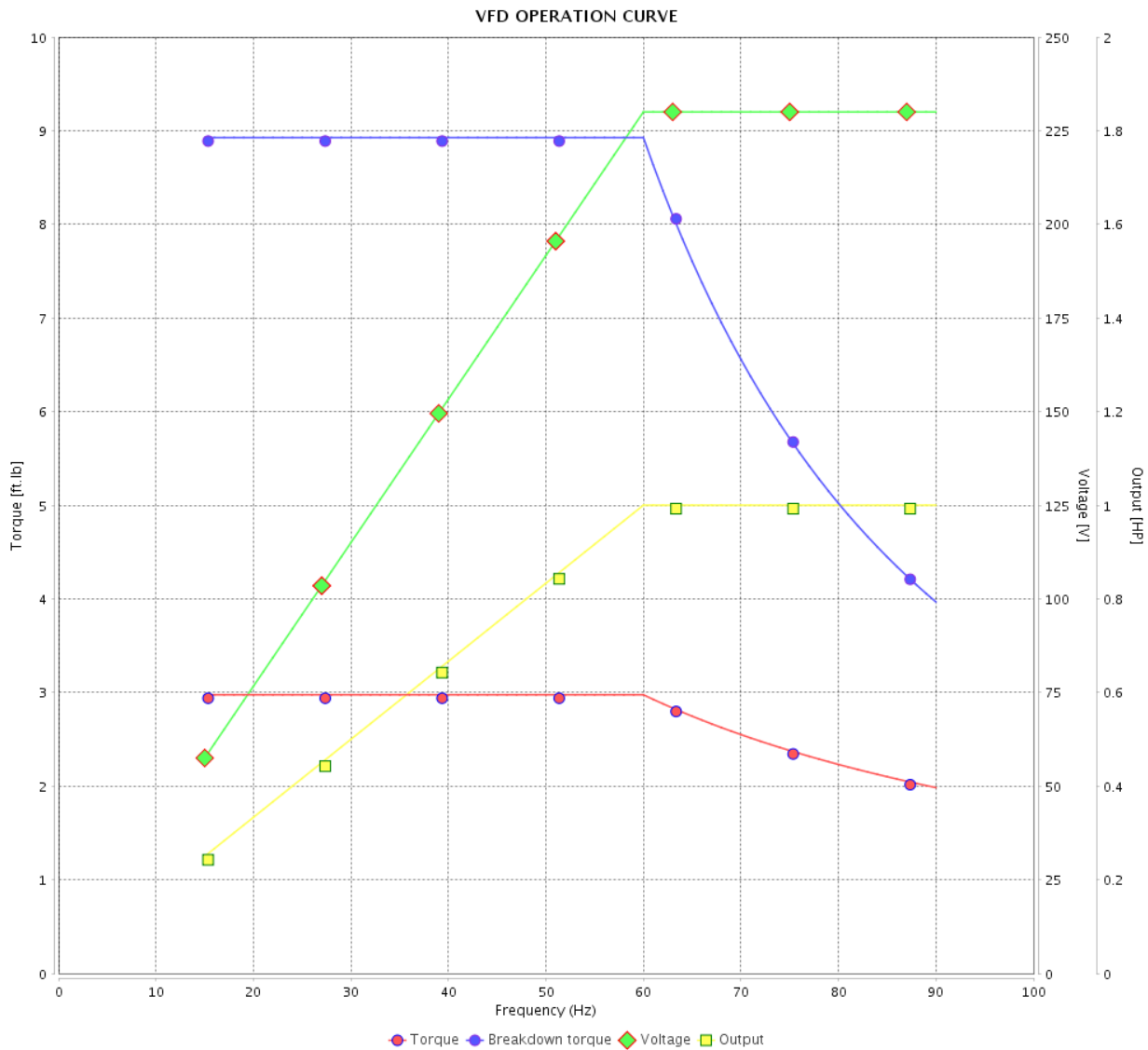


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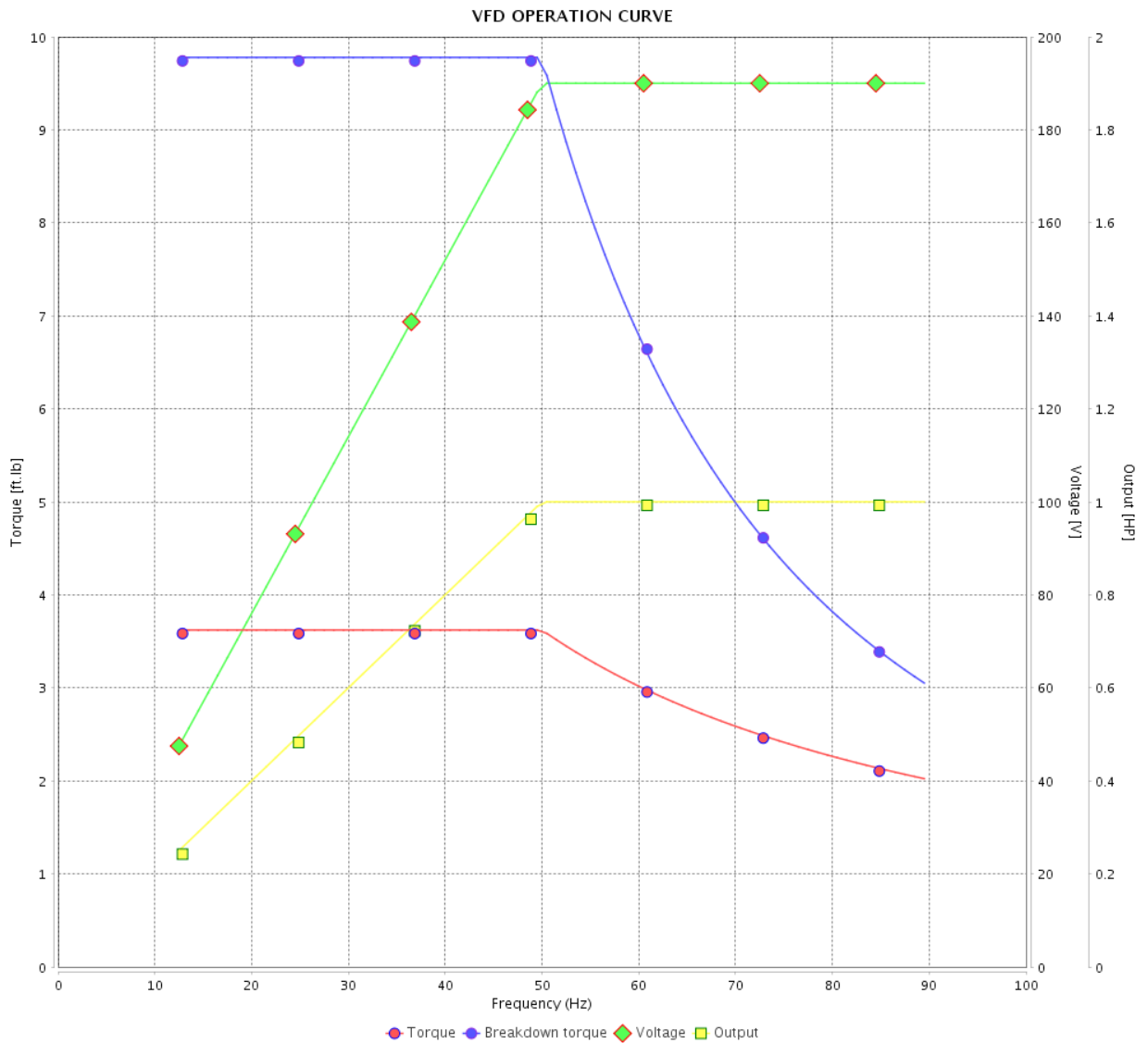


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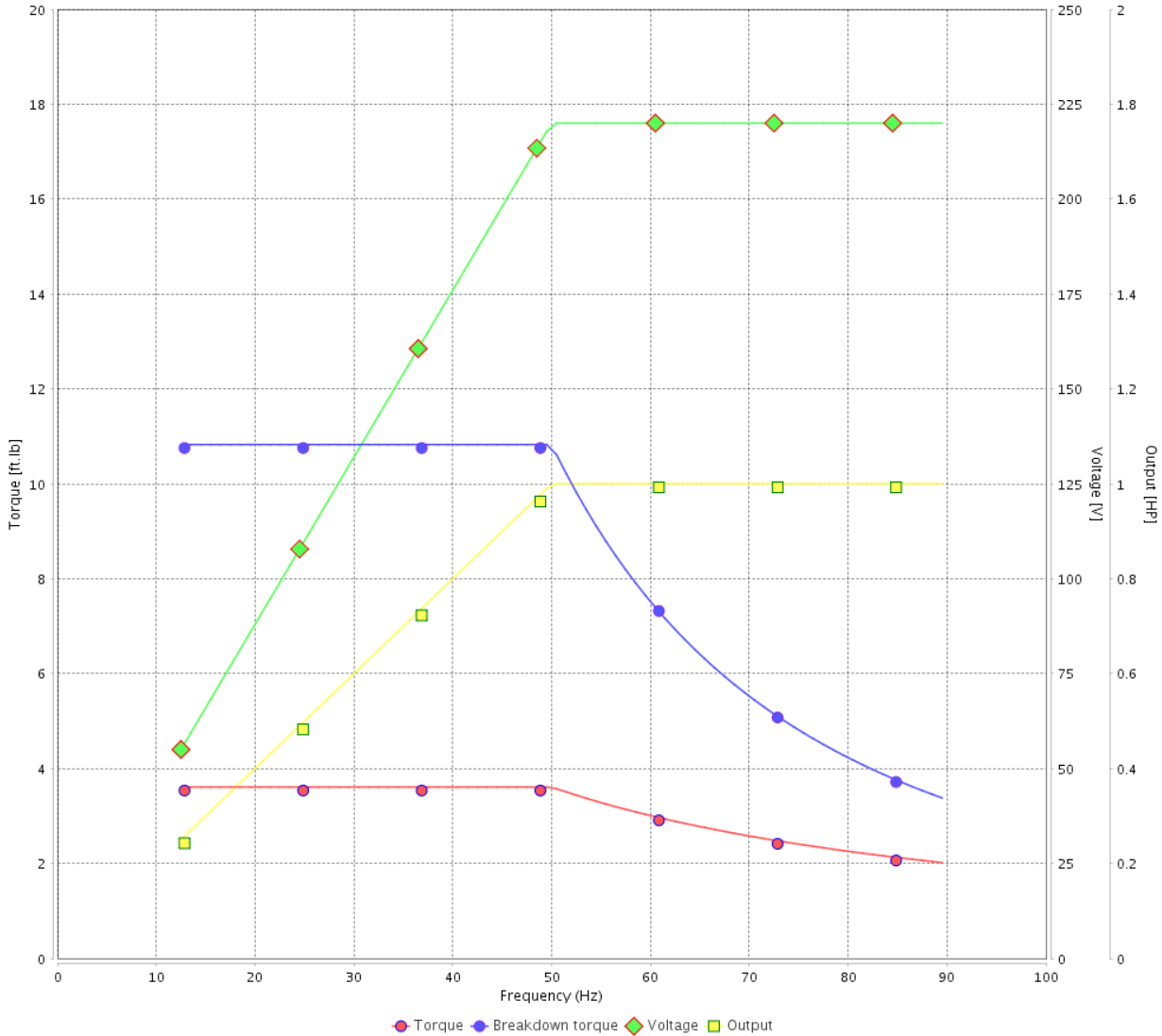
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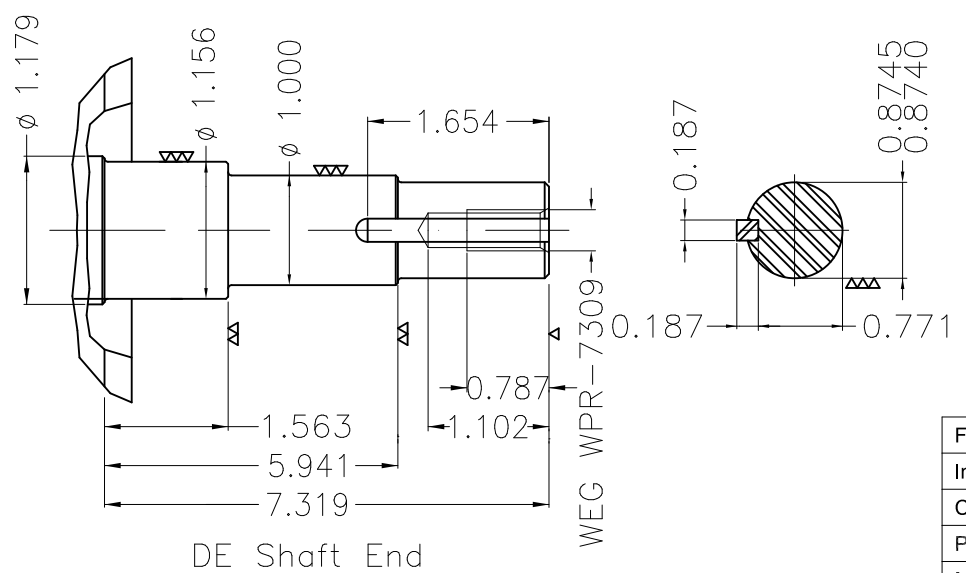
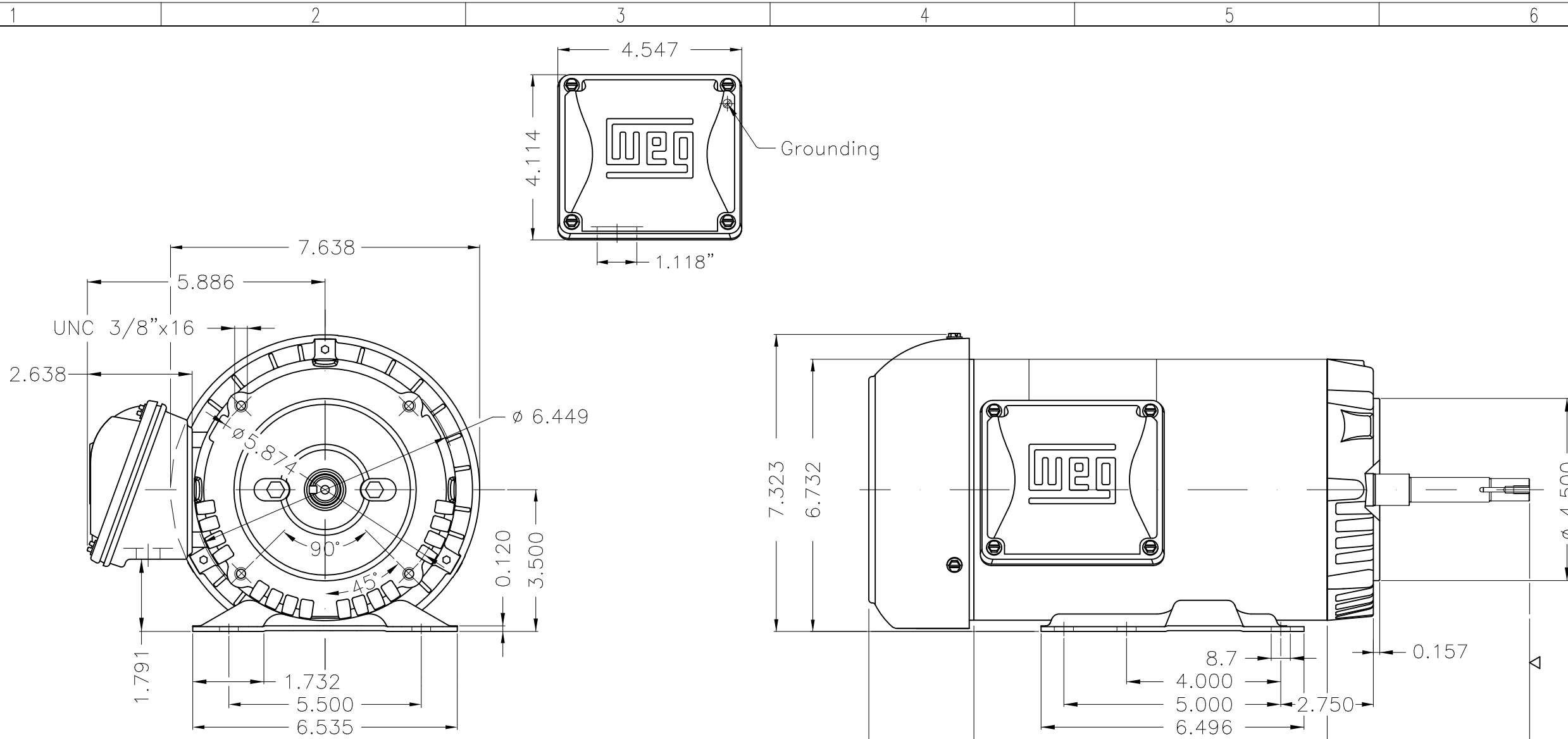


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EUNC 3/8" - 16 WEG WPR-7309

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 5/5 DE PREL ETX					
CHECKED		FRAME 143/5JP IP55 TEFC					
RELEASED							
REL DT.		WMO Jaragua do Sul	Product Engineering	WDD	SHEET	1 / 1	

1 HP 04 Poles 60 Hz

