

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :			
Product line	: JM Pump NEMA Premium Efficiency Three-Phase	Product code :	13221569
		Catalog # :	00736ET3E213JM-SG
Frame	: 213/5JM	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	: 144 lb
Protection degree	: IP55	Moment of inertia (J)	: 0.5496 sq.ft.lb
Design	: B		
Output [HP]	7.5	7.5	7.5
Poles	2	2	2
Frequency [Hz]	60	50	50
Rated voltage [V]	230/460	190/380	220/415
Rated current [A]	17.3/8.67	21.2/10.6	19.1/10.1
L. R. Amperes [A]	132/65.9	134/66.8	133/70.7
LRC [A]	7.6x(Code H)	6.3x(Code G)	7.0x(Code H)
No load current [A]	6.63/3.32	6.54/3.27	6.64/3.52
Rated speed [RPM]	3530	2905	2915
Slip [%]	1.94	3.17	2.83
Rated torque [ft.lb]	11.2	13.6	13.5
Locked rotor torque [%]	260	190	220
Breakdown torque [%]	300	240	270
Service factor	1.15	1.00	1.00
Temperature rise	80 K	105 K	80 K
Locked rotor time	27s (cold) 15s (hot)	0s (cold) 0s (hot)	0s (cold) 0s (hot)
Noise level ²	70.0 dB(A)	67.0 dB(A)	67.0 dB(A)
Efficiency (%)	25%	86.4	89.4
	50%	87.5	88.6
	75%	88.5	88.8
	100%	89.5	87.7
Power Factor	25%	0.49	0.51
	50%	0.76	0.78
	75%	0.85	0.87
	100%	0.89	0.90
Bearing type	: <u>Drive end</u> 6209 ZZ <u>Non drive end</u> 6206 ZZ	Foundation loads	
Sealing	: V'Ring Without Bearing Seal	Max. traction	: 133 lb
		Max. compression	: 278 lb
Lubrication interval	: -		
Lubricant amount	: -		
Lubricant type	: Mobil Polyrex EM		
Notes USABLE @208V 19.2A SF 1.00 SFA 19.2A			
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



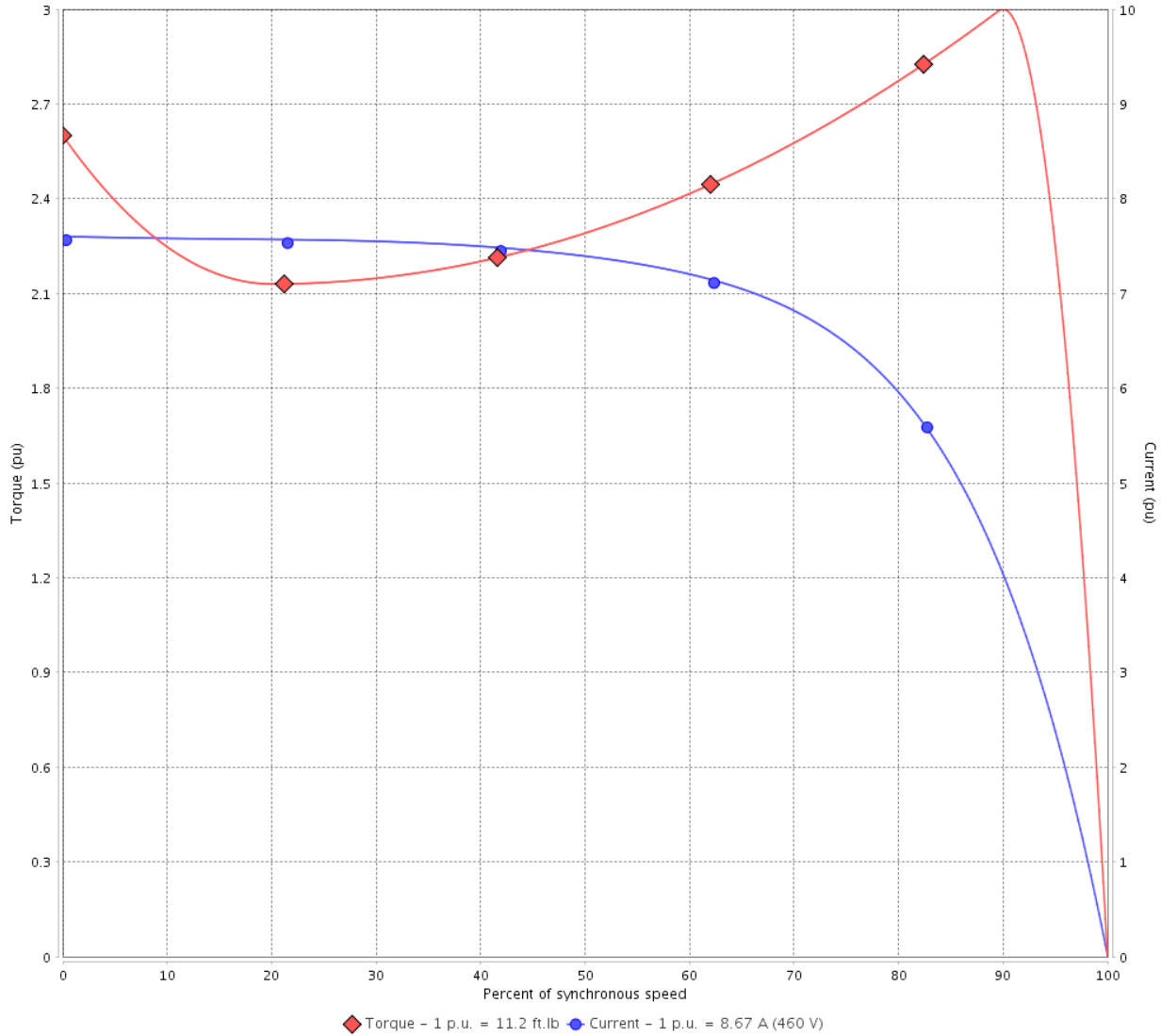
Customer :

Product line : JM Pump NEMA Premium
Efficiency Three-Phase

Product code : 13221569

Catalog # : 00736ET3E213JM-SG

TORQUE AND CURRENT VS SPEED CURVE



Performance : 230/460 V 60 Hz 2P

Rated current	: 17.3/8.67 A	Moment of inertia (J)	: 0.5496 sq.ft.lb
LRC	: 7.6	Duty cycle	: Cont.(S1)
Rated torque	: 11.2 ft.lb	Insulation class	: F
Locked rotor torque	: 260 %	Service factor	: 1.15
Breakdown torque	: 300 %	Temperature rise	: 80 K
Rated speed	: 3530 rpm	Design	: B

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

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TORQUE AND CURRENT VS SPEED CURVE



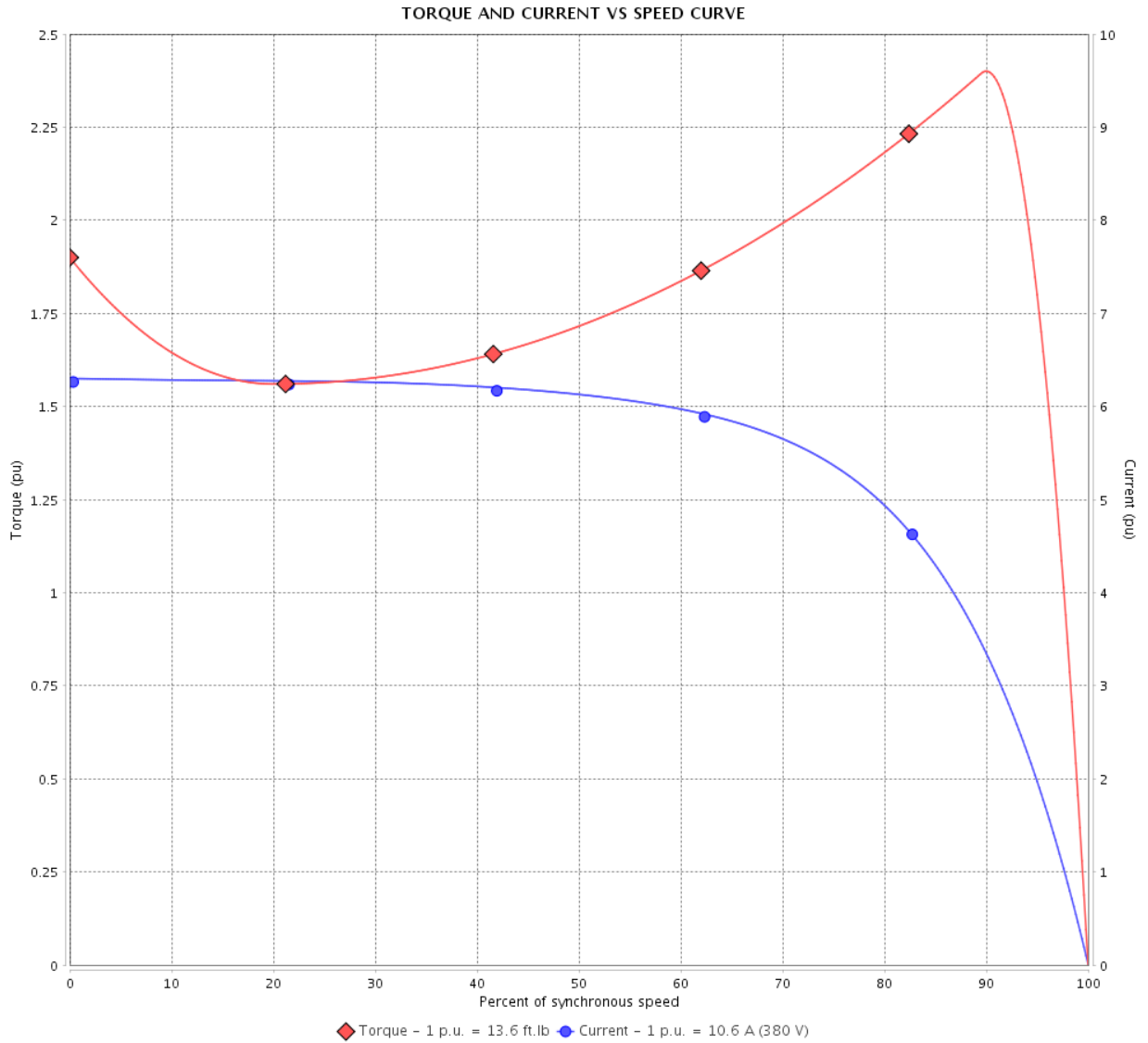
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Performance : 190/380 V 50 Hz 2P

Rated current : 21.2/10.6 A
 LRC : 6.3
 Rated torque : 13.6 ft.lb
 Locked rotor torque : 190 %
 Breakdown torque : 240 %
 Rated speed : 2905 rpm

Moment of inertia (J) : 0.5496 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 105 K
 Design : B

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

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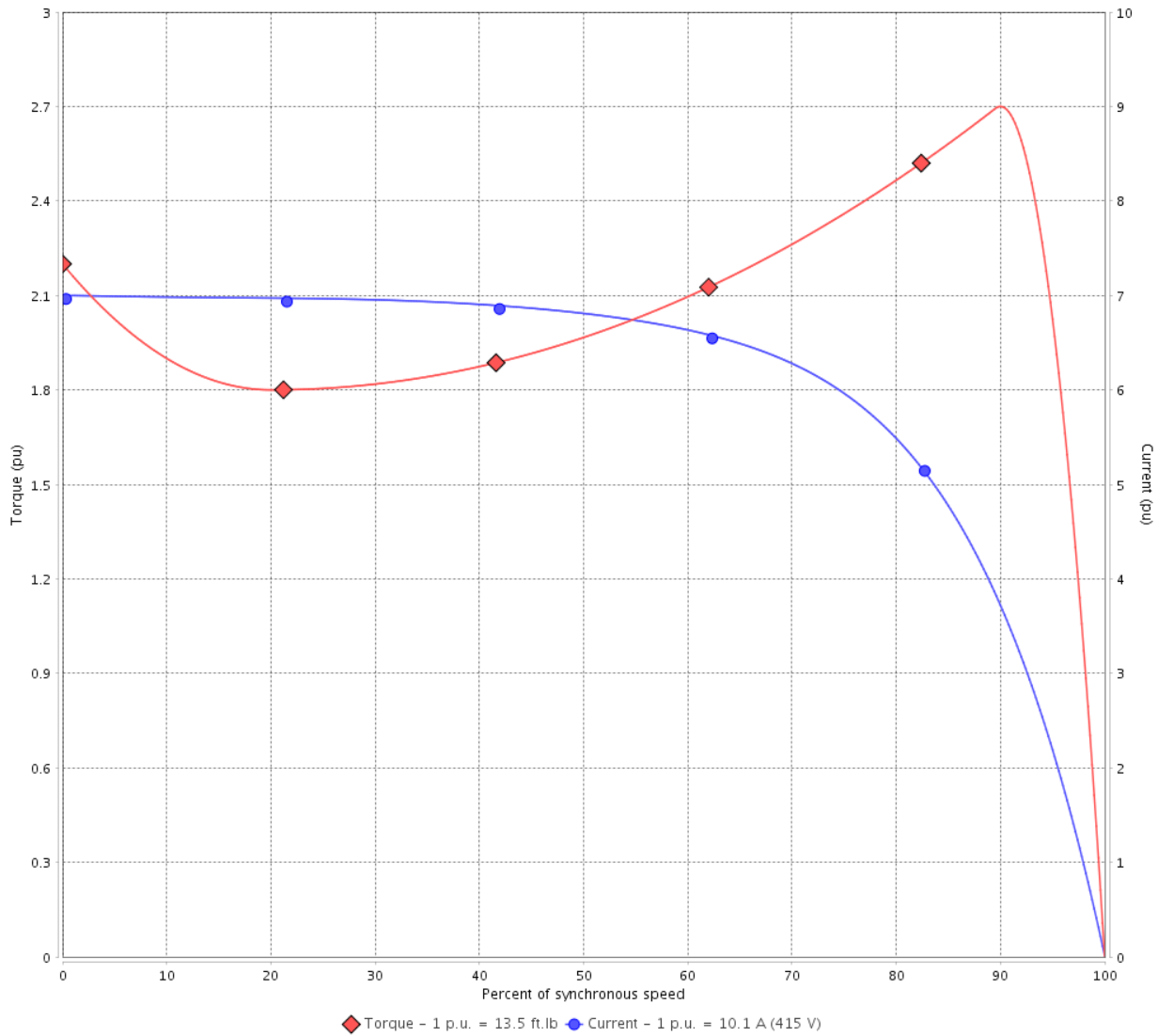
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TORQUE AND CURRENT VS SPEED CURVE



Performance : 220/415 V 50 Hz 2P

Rated current	: 19.1/10.1 A	Moment of inertia (J)	: 0.5496 sq.ft.lb
LRC	: 7.0	Duty cycle	: Cont.(S1)
Rated torque	: 13.5 ft.lb	Insulation class	: F
Locked rotor torque	: 220 %	Service factor	: 1.00
Breakdown torque	: 270 %	Temperature rise	: 80 K
Rated speed	: 2915 rpm	Design	: B

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

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LOAD PERFORMANCE CURVE

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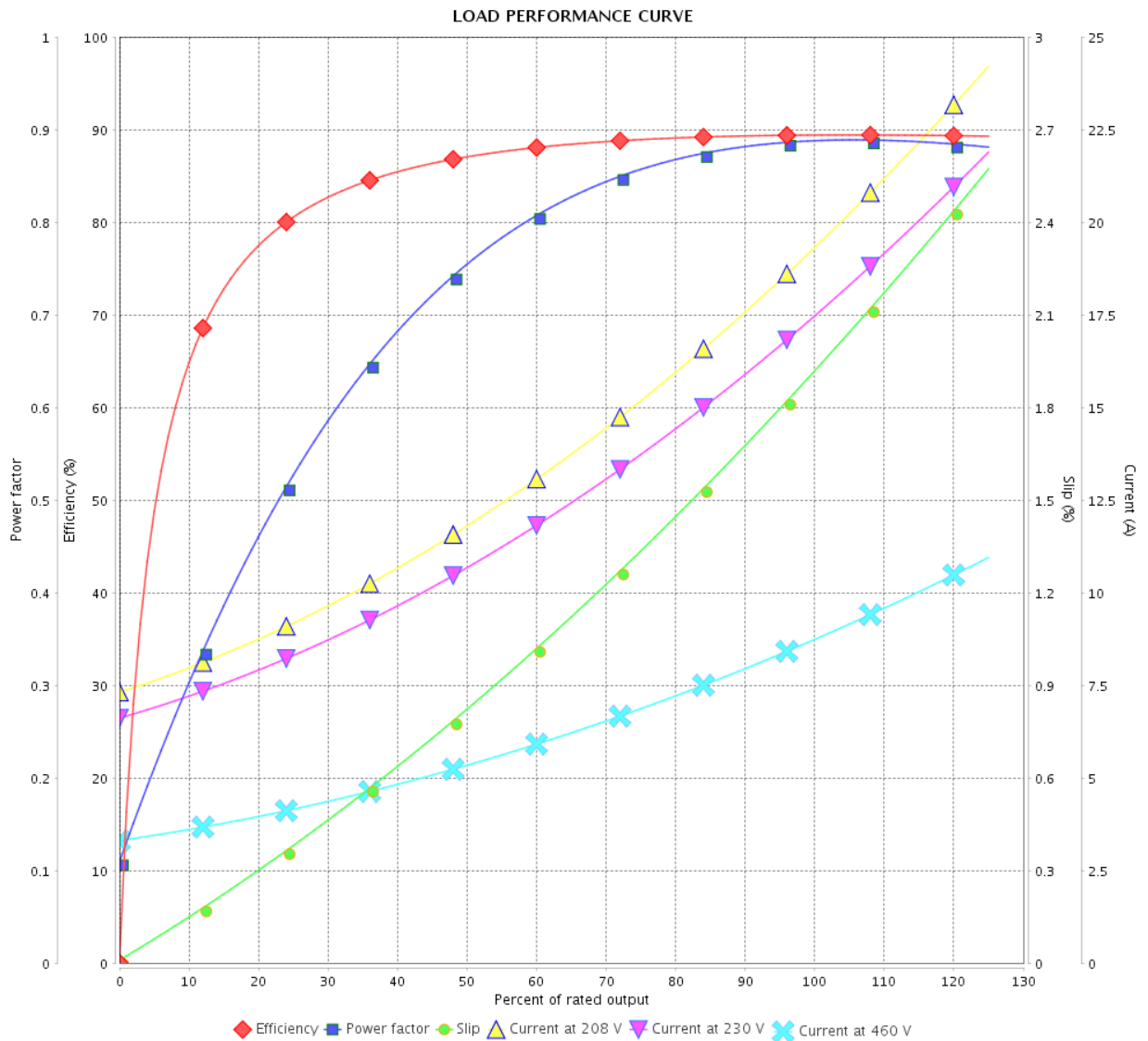


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 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
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 Design : B

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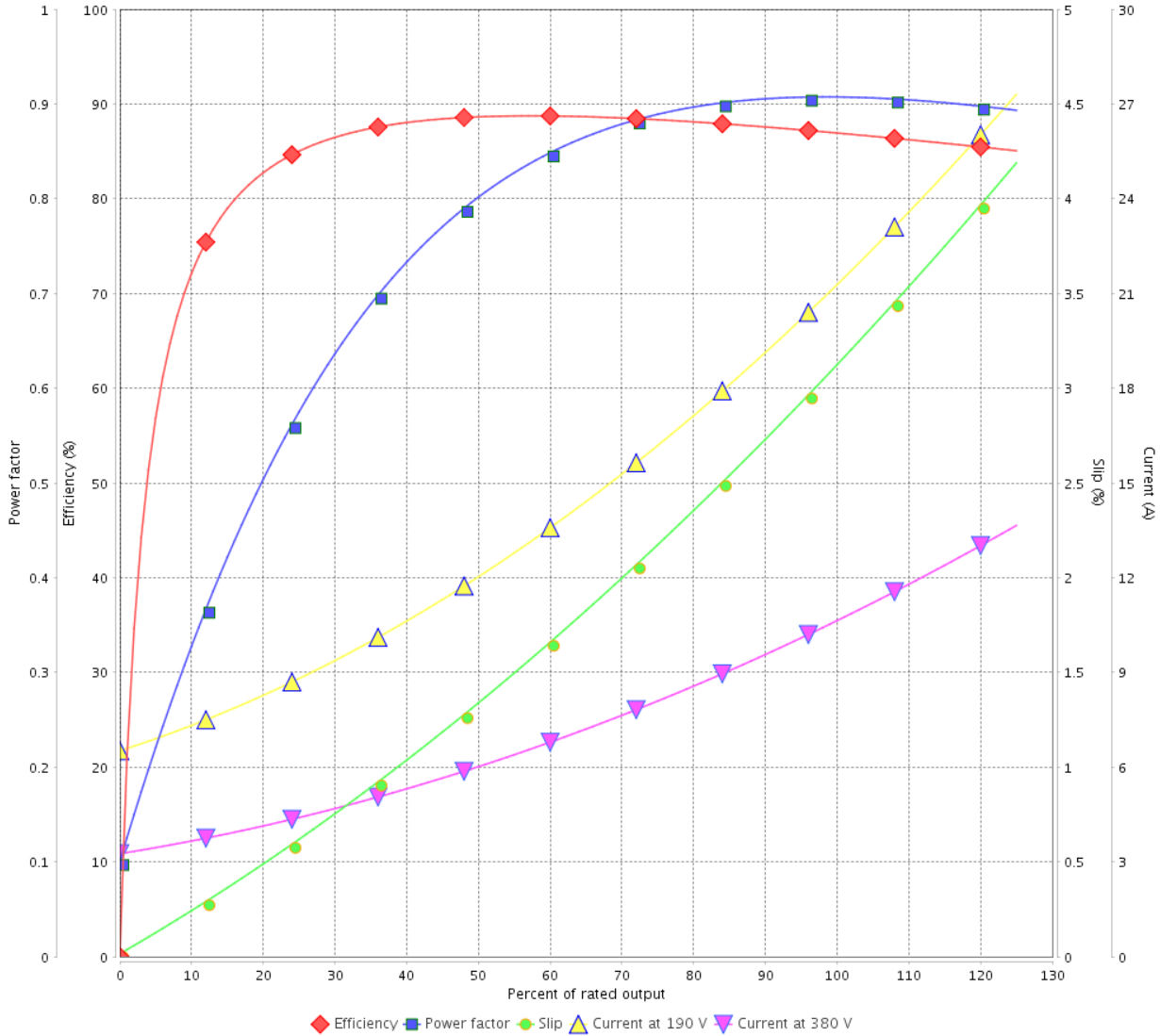
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 Breakdown torque : 240 %
 Rated speed : 2905 rpm

Moment of inertia (J) : 0.5496 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 105 K
 Design : B

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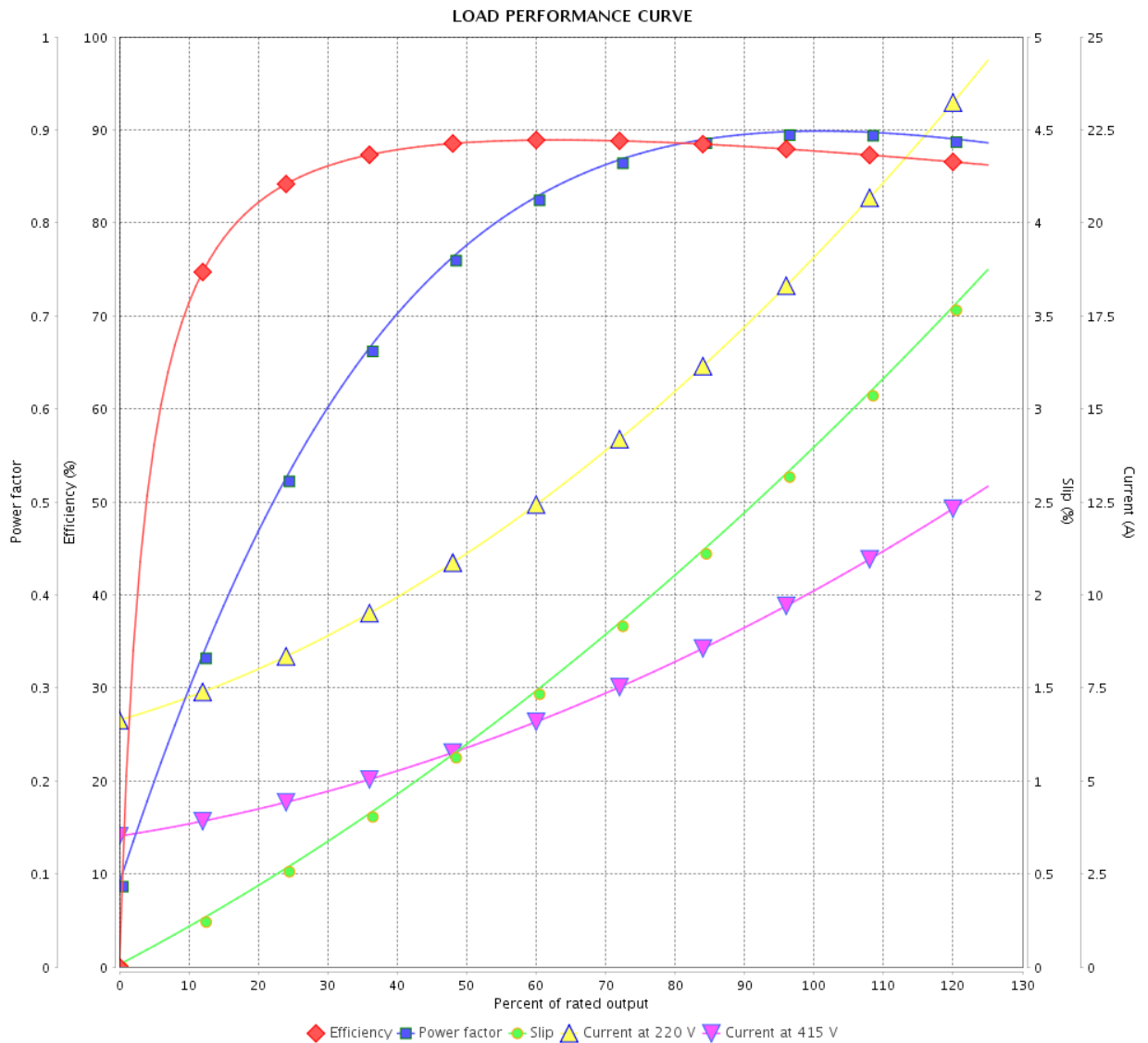


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THERMAL LIMIT CURVE



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Heating constant

Cooling constant

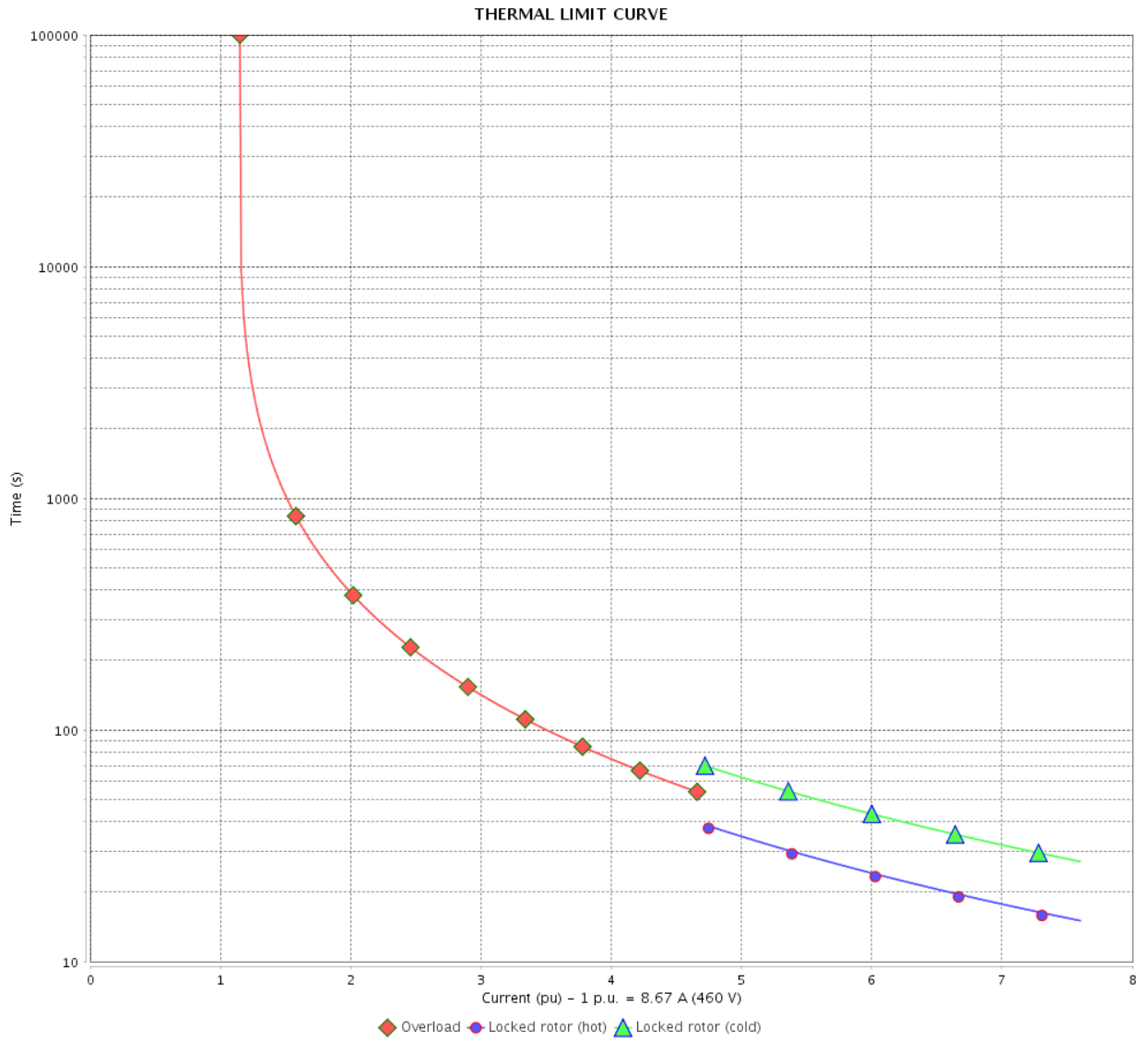
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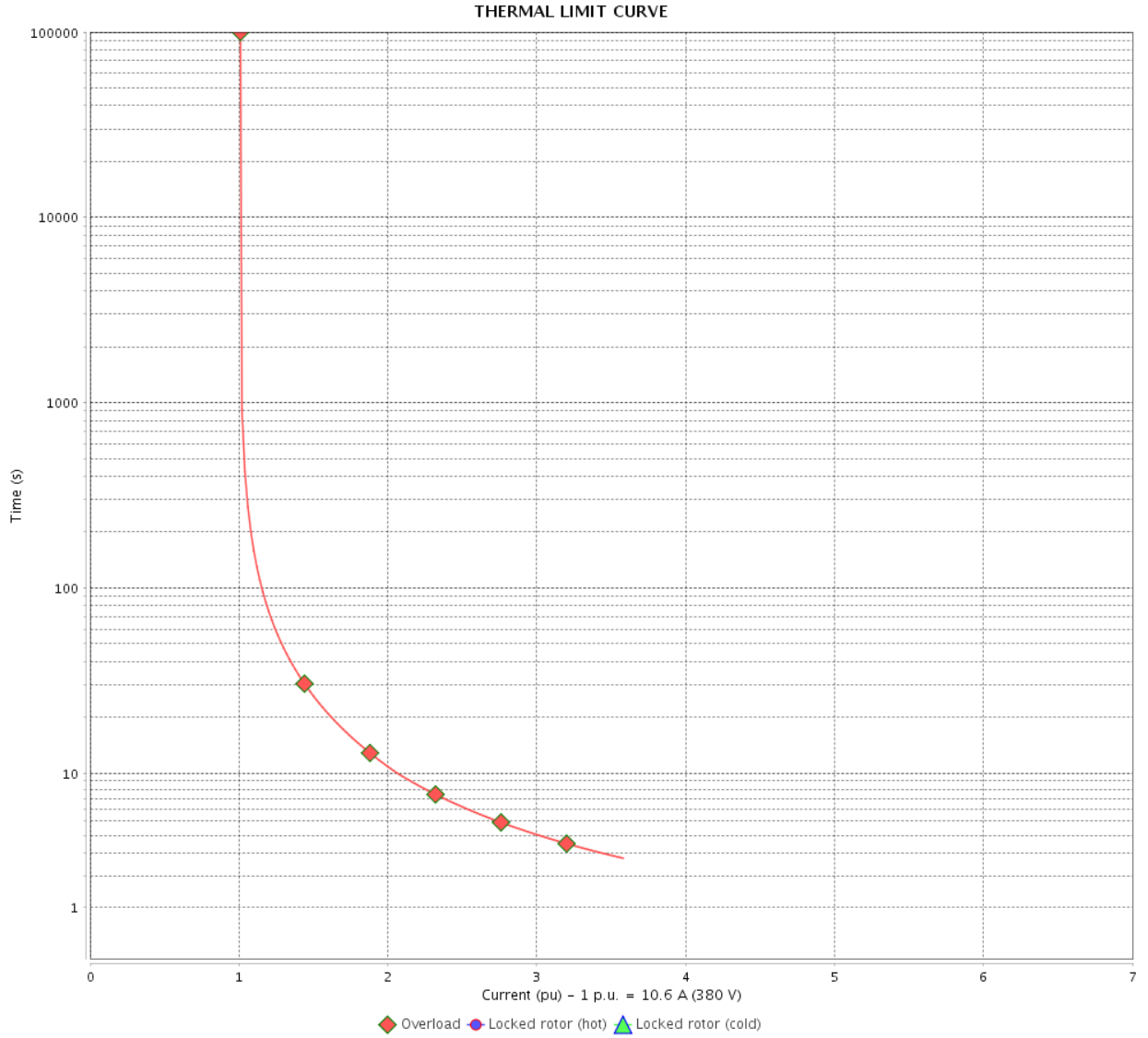
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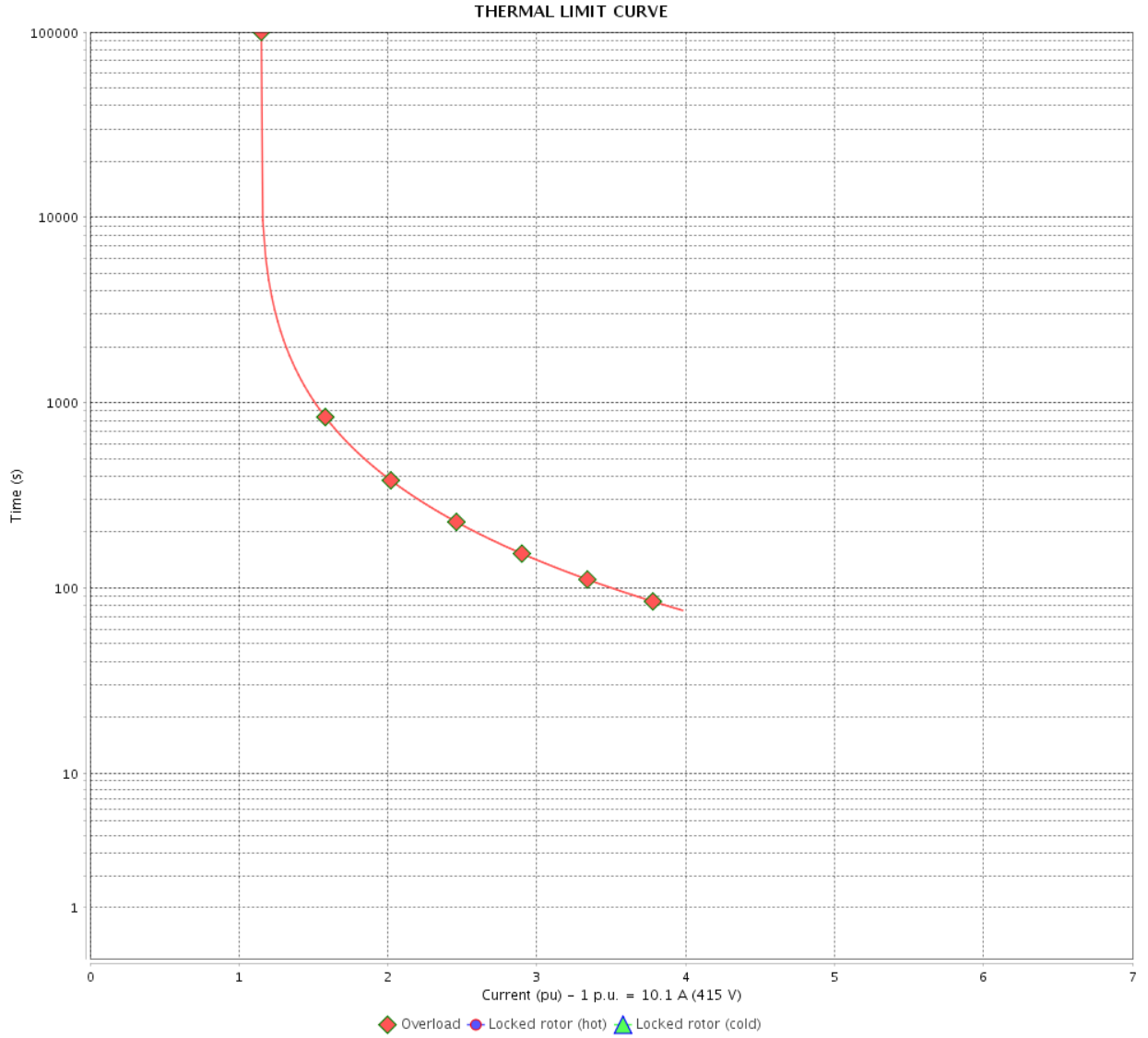
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VFD OPERATION CURVE

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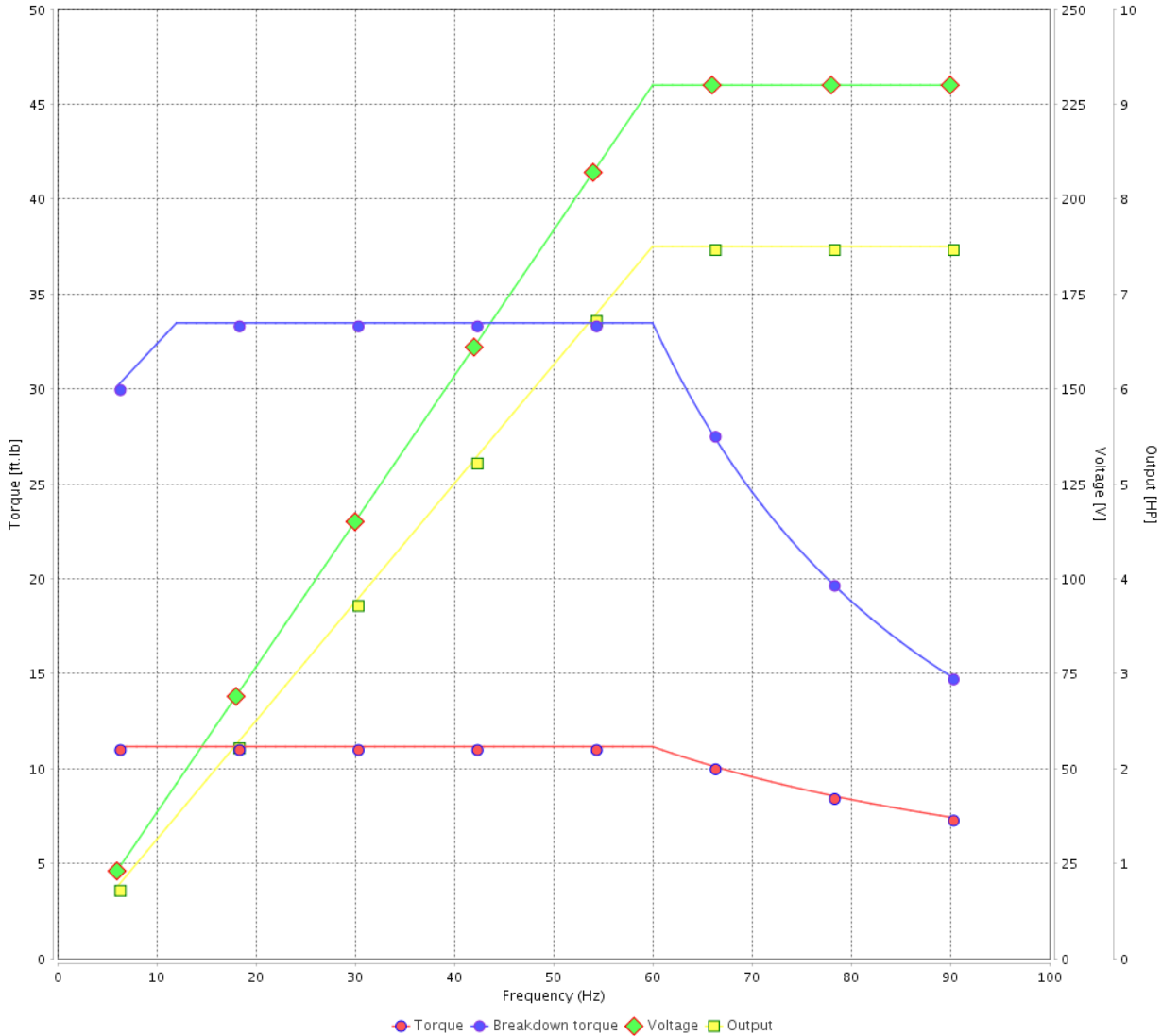
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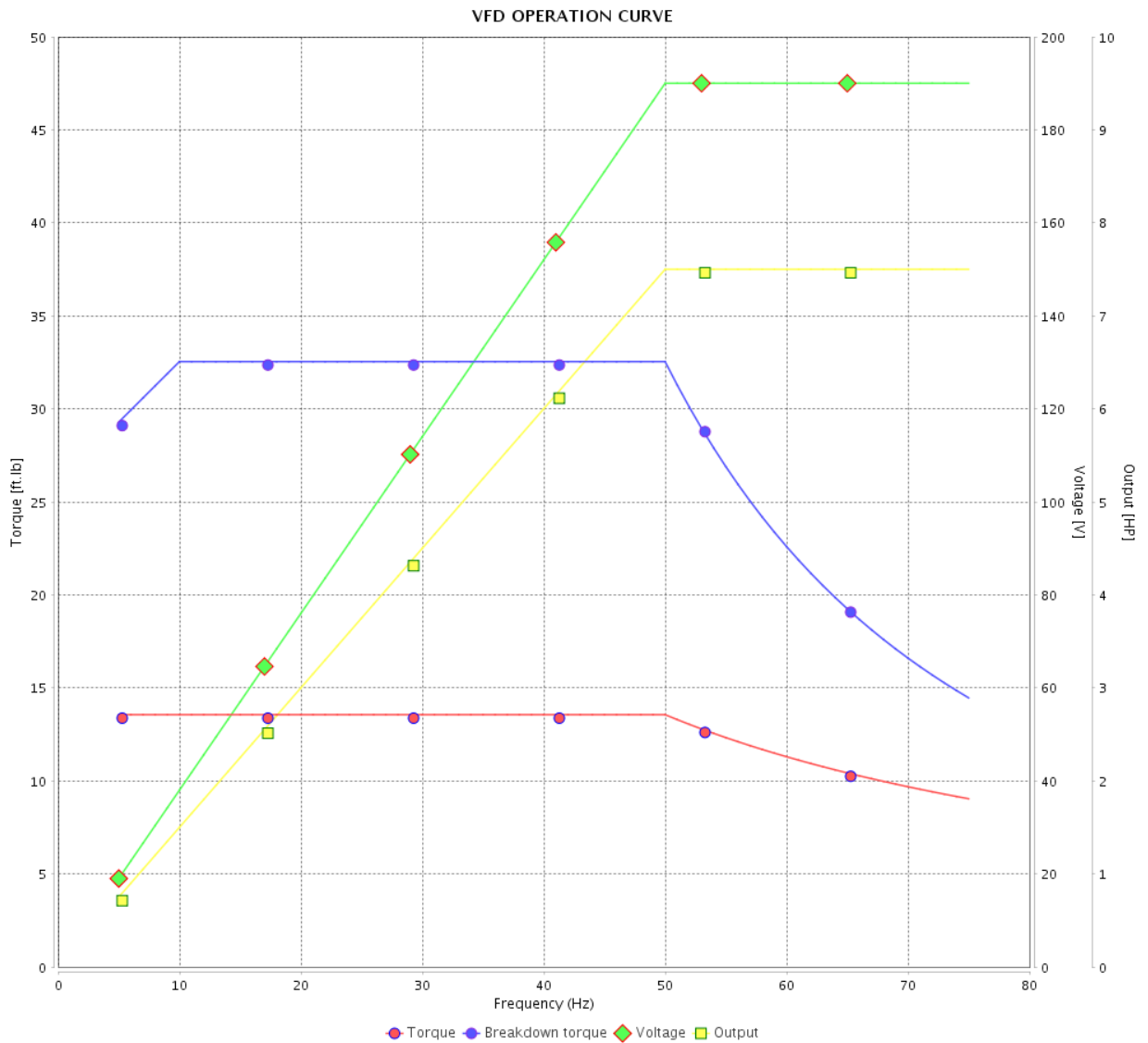


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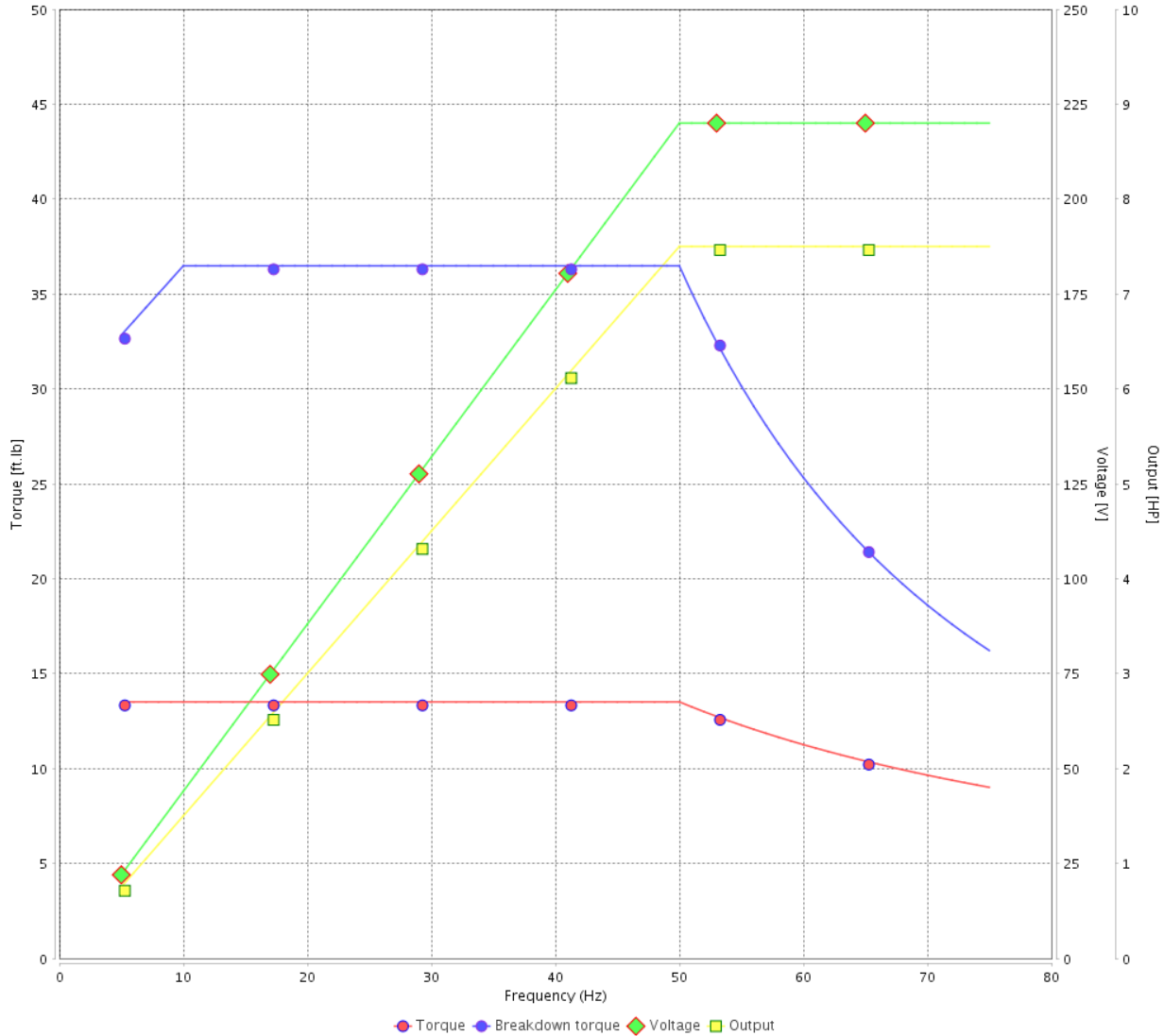
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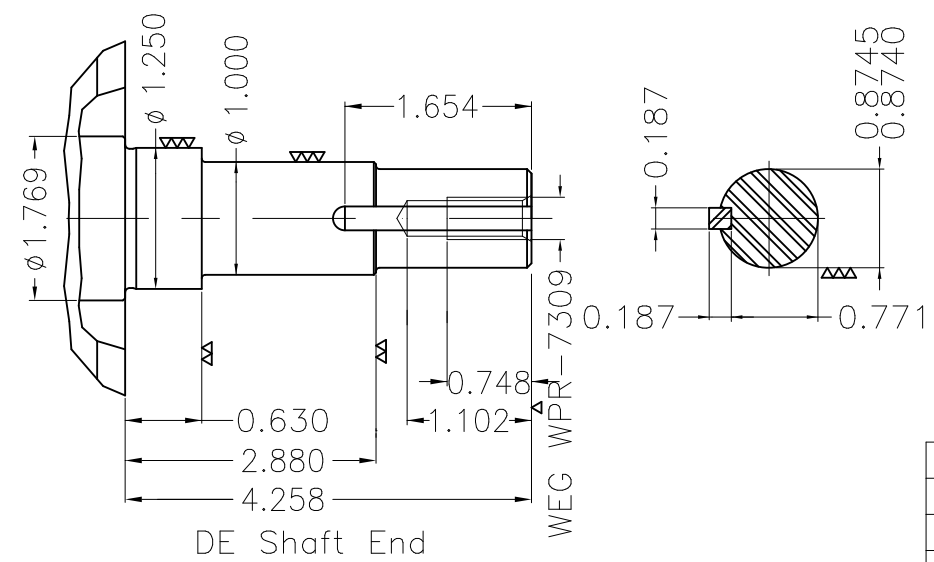
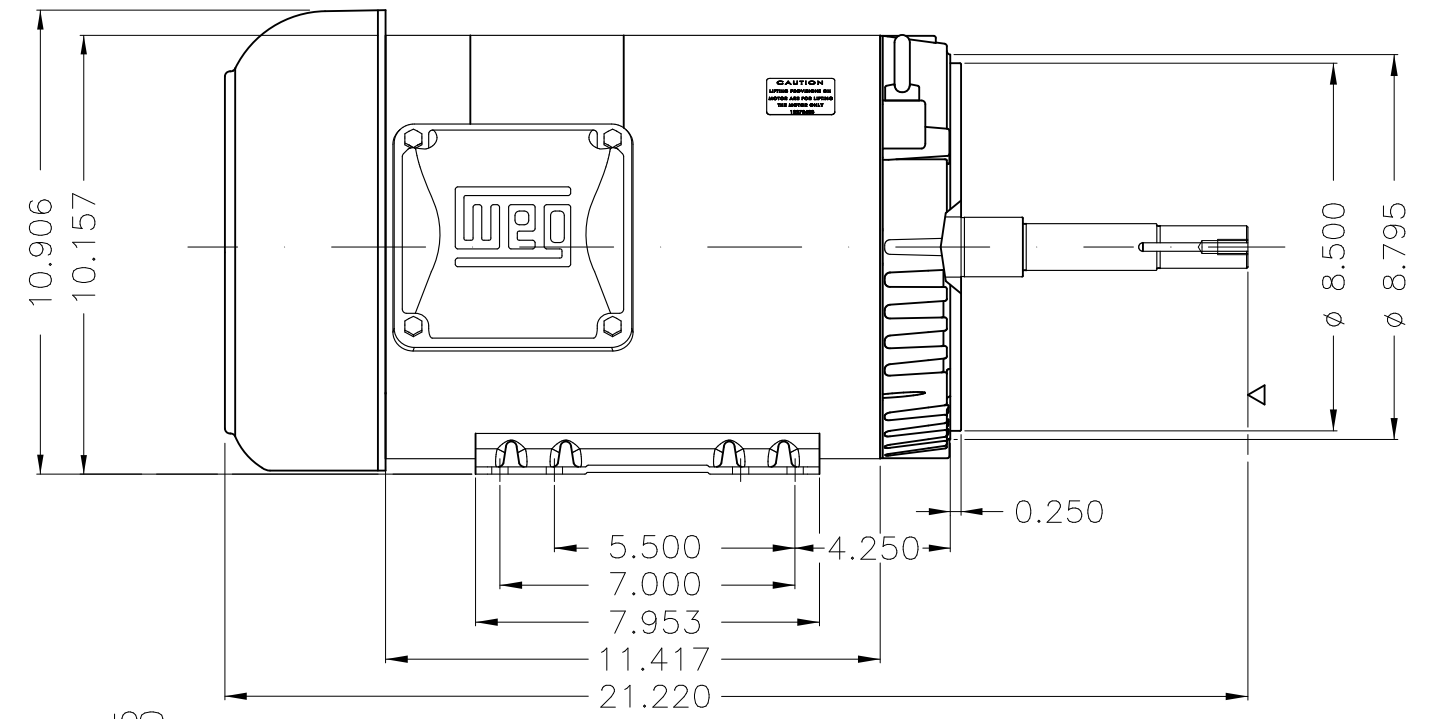
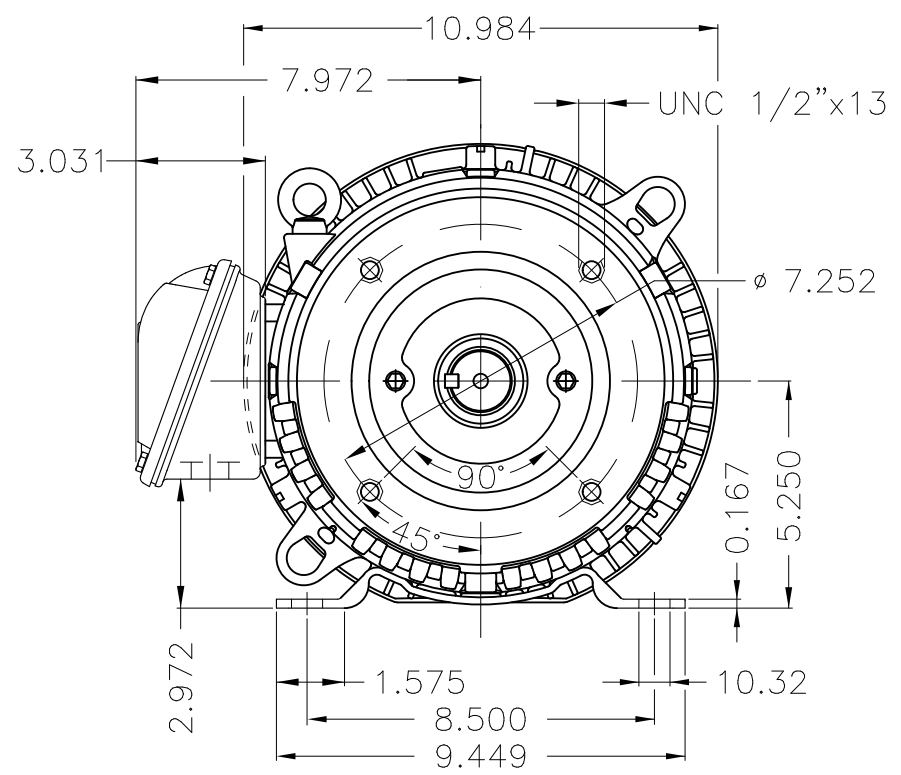
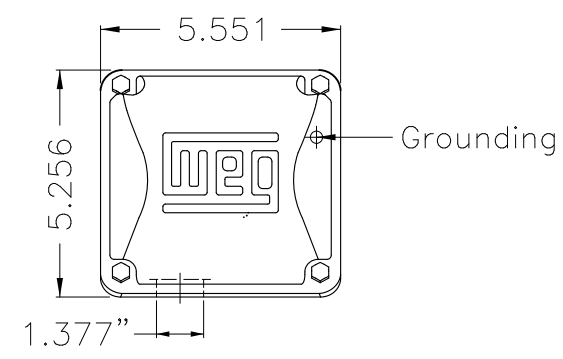
A

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	PIRWBUSER	THREE PH. MOTOR ROLLED STEEL CLOSE COUPLED PUMP JN TYPE PSEF 575					
CHECKED		FRAME 213/5JM IP55 TEFC					
RELEASED							
REL DT.	WMO	Jaragua do Sul	Product Engineering	WDD	SHEET	1 / 1	

7.5 HP 02 Poles 60 Hz



**NEMA**
Premium

3PT9



Energy Verified

MADE IN MEXICO

MAT: 13221569 CC029A**W01.TE0IC0X0N****JM007402NPW01GR****13JAN2022 S/N:**

PH 3	Hz 60	HP 7.5
FR 213/5JM		KW 5.5
DUTY CONT.		V 230/460
ALT 1000 m.a.s.l.		A 17.3/8.67
INS CL F AT 80K	IP55	SFA 19.9/9.97
AMB 40°C	DES B	SF 1.15
ENCL TEFC	CODE H	PF 0.89
USABLE @ 208V 19.2A		RPM 3530
SF1.00		NEMA NOM. EFF 89.5%

ALTERNATE RATING: 7.5HP 50Hz 190-220/380-415V SF1.00
21.2-18.4/10.8-7.5A 2905RPM EFF 86.9% (IE1) IEC 60034-1

Inverter duty motor For 60Hz use on VPWM 1000:1 VT, 10:1 CT

DE 6209-ZZ	ODE 6206-ZZ	MOBIL POLYREX EM
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T1-BLU T2-WHT
T3-ORG T4-YEL
T5-BLK T6-GRY
T7-PNK T8-RED
T9-BRK RED

INTERCHANGE ANY TWO LINE WIRES TO REVERSE THE ROTATION

WARNING: Motor must be grounded in accordance with local and national electrical codes to prevent serious electrical shocks. Disconnect power source before servicing unit.

**AVERTISSEMENT:** Le moteur doit être mis à la terre

conformément aux codes électriques locaux et nationaux afin d'éviter tout choc électrique grave. Déconnectez l'alimentation avant l'entretien de la machine.

