

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :			
Product line	: JM Pump NEMA Premium Efficiency Three-Phase	Product code :	12676987
		Catalog # :	00312OT3E213JM-S
Frame	: 213/5JM	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	: 115 lb
Design	: B	Moment of inertia (J)	: 0.8104 sq.ft.lb
Output [HP]	3	3	3
Poles	6	6	6
Frequency [Hz]	60	50	50
Rated voltage [V]	230/460	190/380	220/415
Rated current [A]	8.32/4.16	9.88/4.94	9.00/4.77
L. R. Amperes [A]	49.1/24.5	45.4/22.7	45.9/24.3
LRC [A]	5.9x(Code H)	4.6x(Code E)	5.1x(Code G)
No load current [A]	4.58/2.29	4.52/2.26	4.60/2.44
Rated speed [RPM]	1175	965	970
Slip [%]	2.08	3.50	3.00
Rated torque [ft.lb]	13.4	16.3	16.2
Locked rotor torque [%]	210	160	180
Breakdown torque [%]	260	190	220
Service factor	1.15	1.15	1.15
Temperature rise	80 K	80 K	80 K
Locked rotor time	70s (cold) 39s (hot)	0s (cold) 0s (hot)	0s (cold) 0s (hot)
Noise level ²	55.0 dB(A)	53.0 dB(A)	53.0 dB(A)
Efficiency (%)	25%	85.4	85.9
	50%	86.5	85.8
	75%	87.5	86.1
	100%	88.5	84.6
Power Factor	25%	0.33	0.35
	50%	0.56	0.59
	75%	0.68	0.72
	100%	0.75	0.80
Bearing type	: <u>Drive end</u> 6209 ZZ <u>Non drive end</u> 6206 ZZ	Foundation loads	
Sealing	: Without Without Bearing Seal Bearing Seal	Max. traction	: 143 lb
		Max. compression	: 259 lb
Lubrication interval	: - -		
Lubricant amount	: - -		
Lubricant type	: Mobil Polyrex EM		
Notes USABLE @208V 9.20A SF 1.00 SFA 9.20A			
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



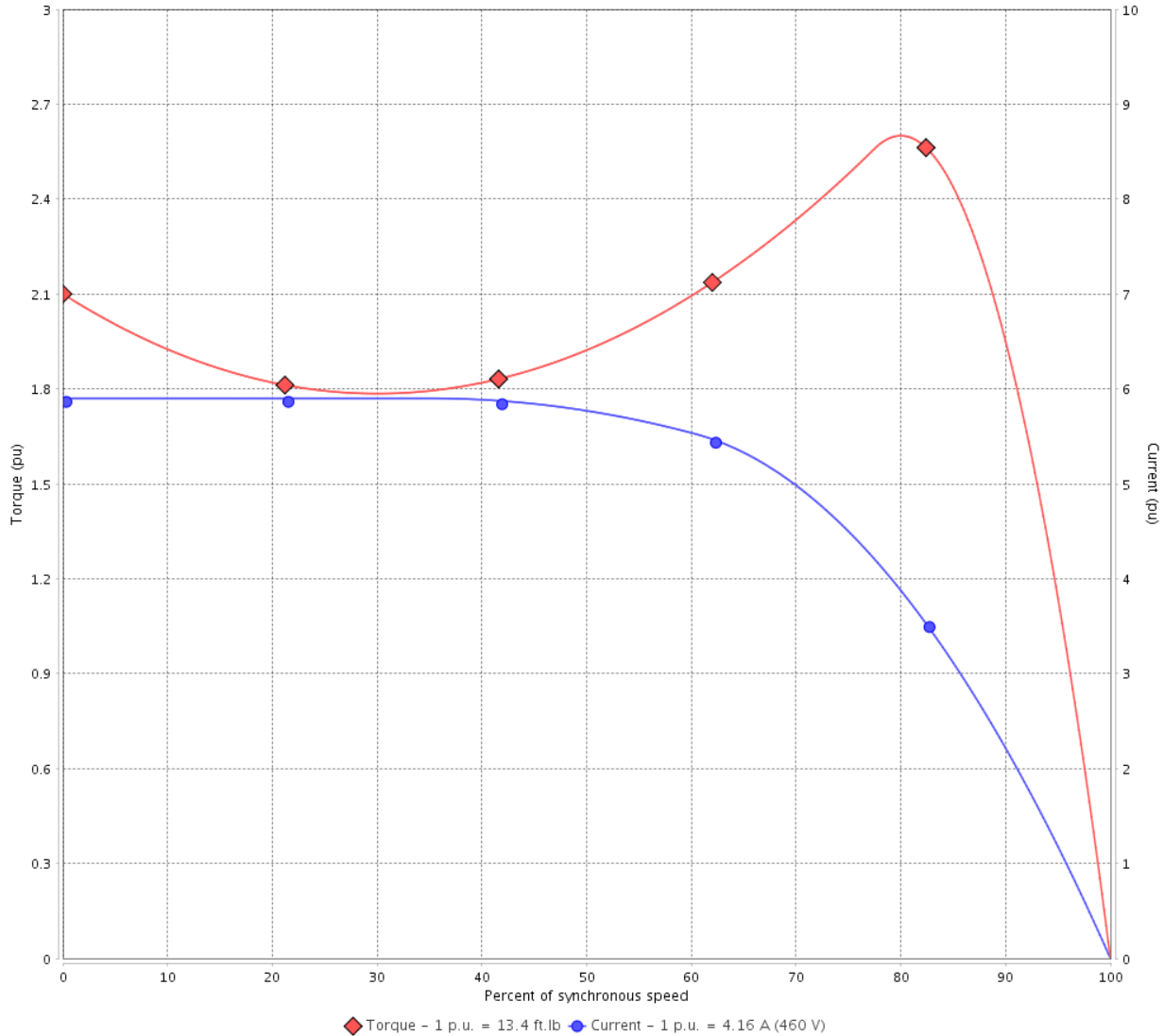
Customer :

Product line : JM Pump NEMA Premium
Efficiency Three-Phase

Product code : 12676987

Catalog # : 003120T3E213JM-S

TORQUE AND CURRENT VS SPEED CURVE



Performance : 230/460 V 60 Hz 6P

Rated current : 8.32/4.16 A
LRC : 5.9
Rated torque : 13.4 ft.lb
Locked rotor torque : 210 %
Breakdown torque : 260 %
Rated speed : 1175 rpm

Moment of inertia (J) : 0.8104 sq.ft.lb
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.15
Temperature rise : 80 K
Design : B

Locked rotor time : 70s (cold) 39s (hot)

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TORQUE AND CURRENT VS SPEED CURVE



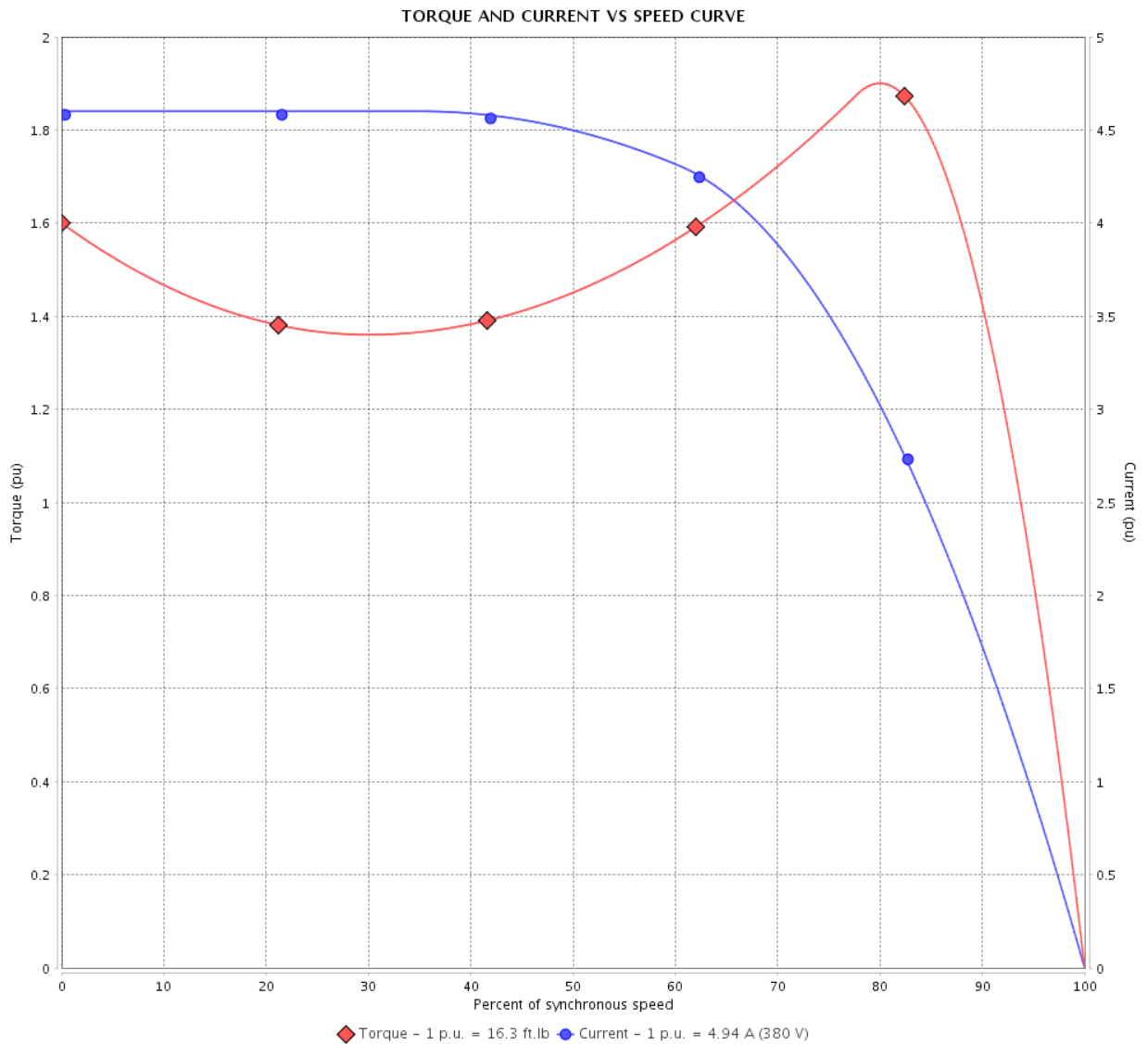
Three Phase Induction Motor - Squirrel Cage

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Performance : 190/380 V 50 Hz 6P

Rated current : 9.88/4.94 A
 LRC : 4.6
 Rated torque : 16.3 ft.lb
 Locked rotor torque : 160 %
 Breakdown torque : 190 %
 Rated speed : 965 rpm

Moment of inertia (J) : 0.8104 sq.ft.lb
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 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

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

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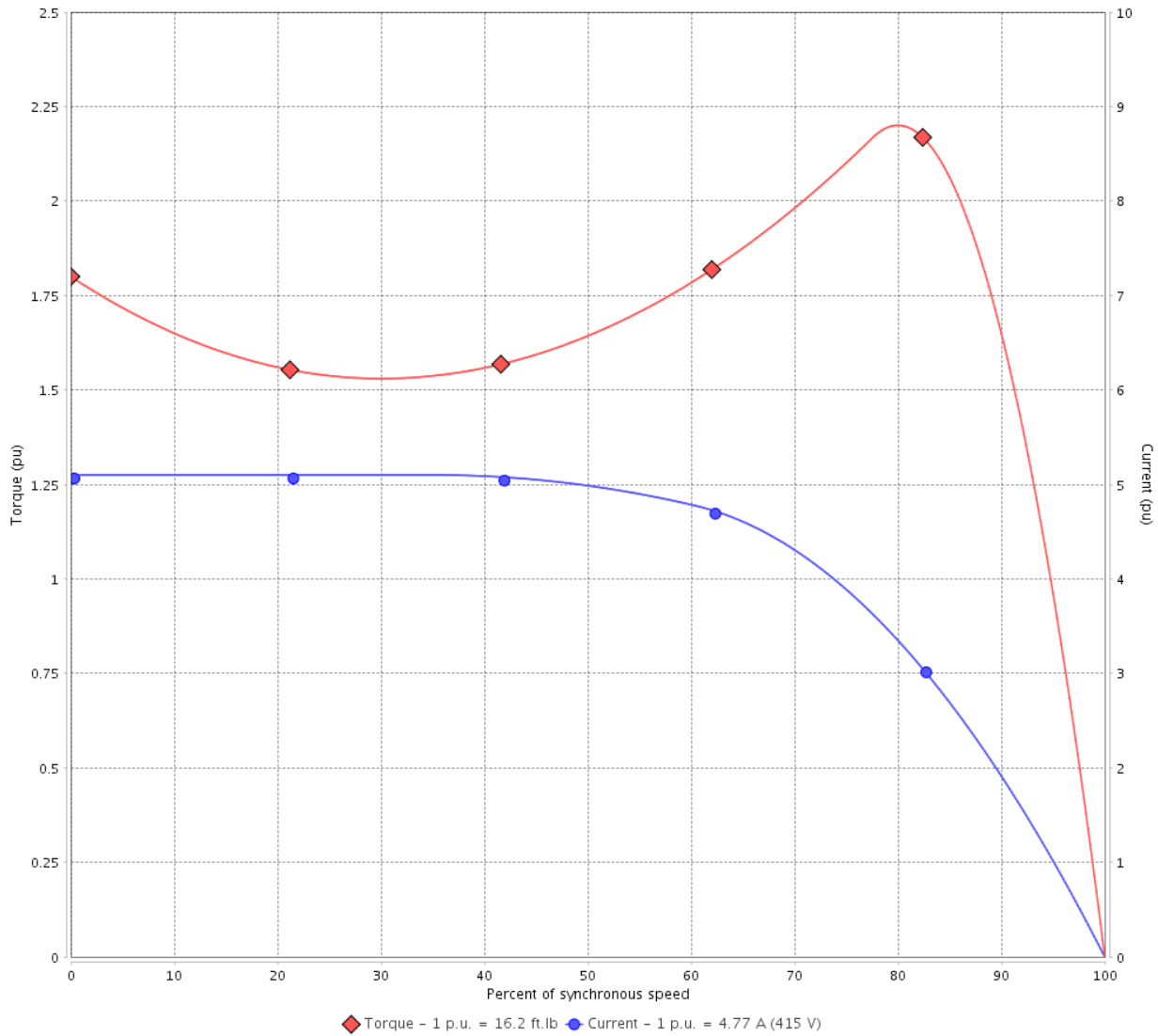
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TORQUE AND CURRENT VS SPEED CURVE



Performance : 220/415 V 50 Hz 6P

Rated current : 9.00/4.77 A
LRC : 5.1
Rated torque : 16.2 ft.lb
Locked rotor torque : 180 %
Breakdown torque : 220 %
Rated speed : 970 rpm

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Design : B

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

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LOAD PERFORMANCE CURVE

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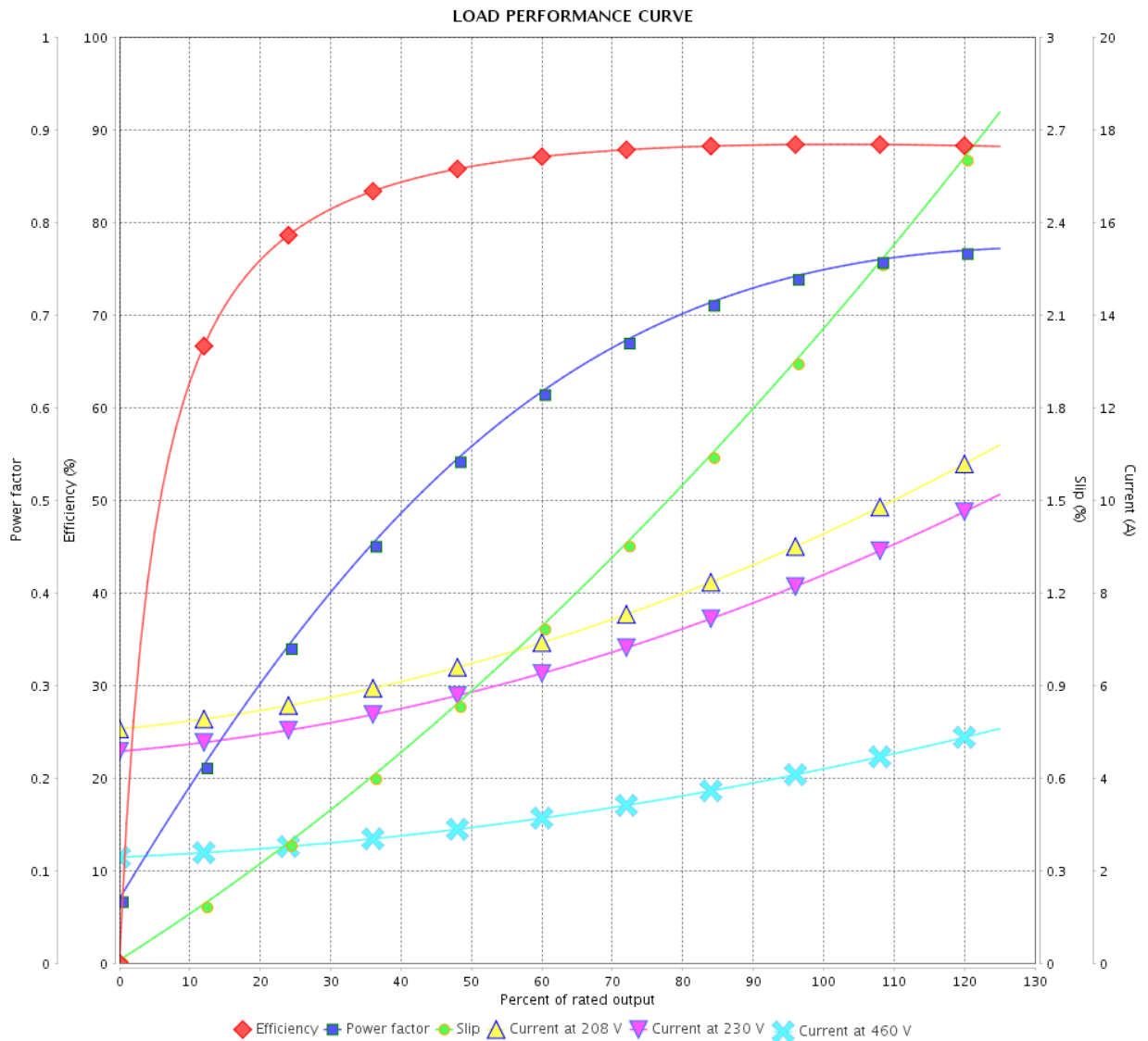


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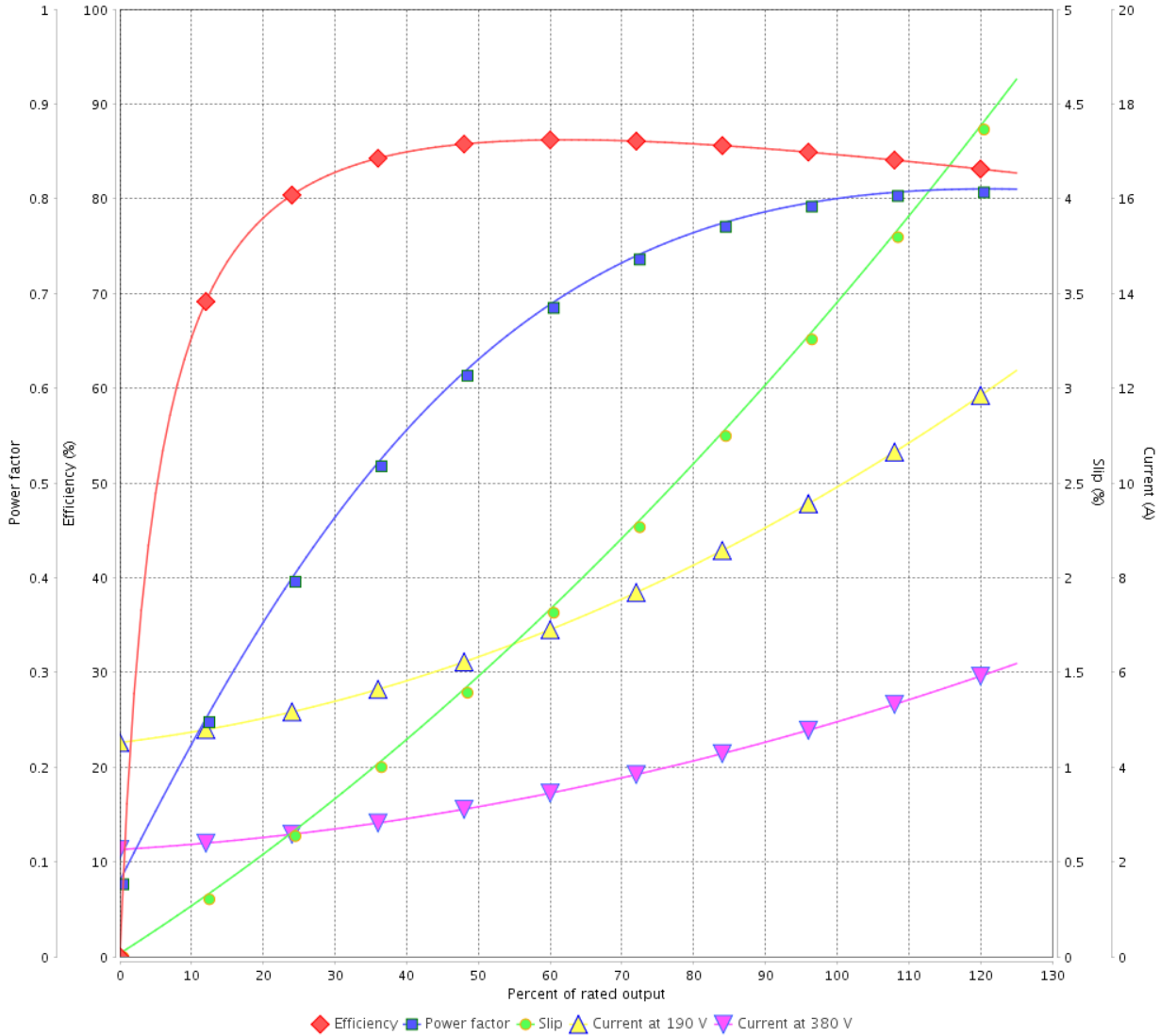
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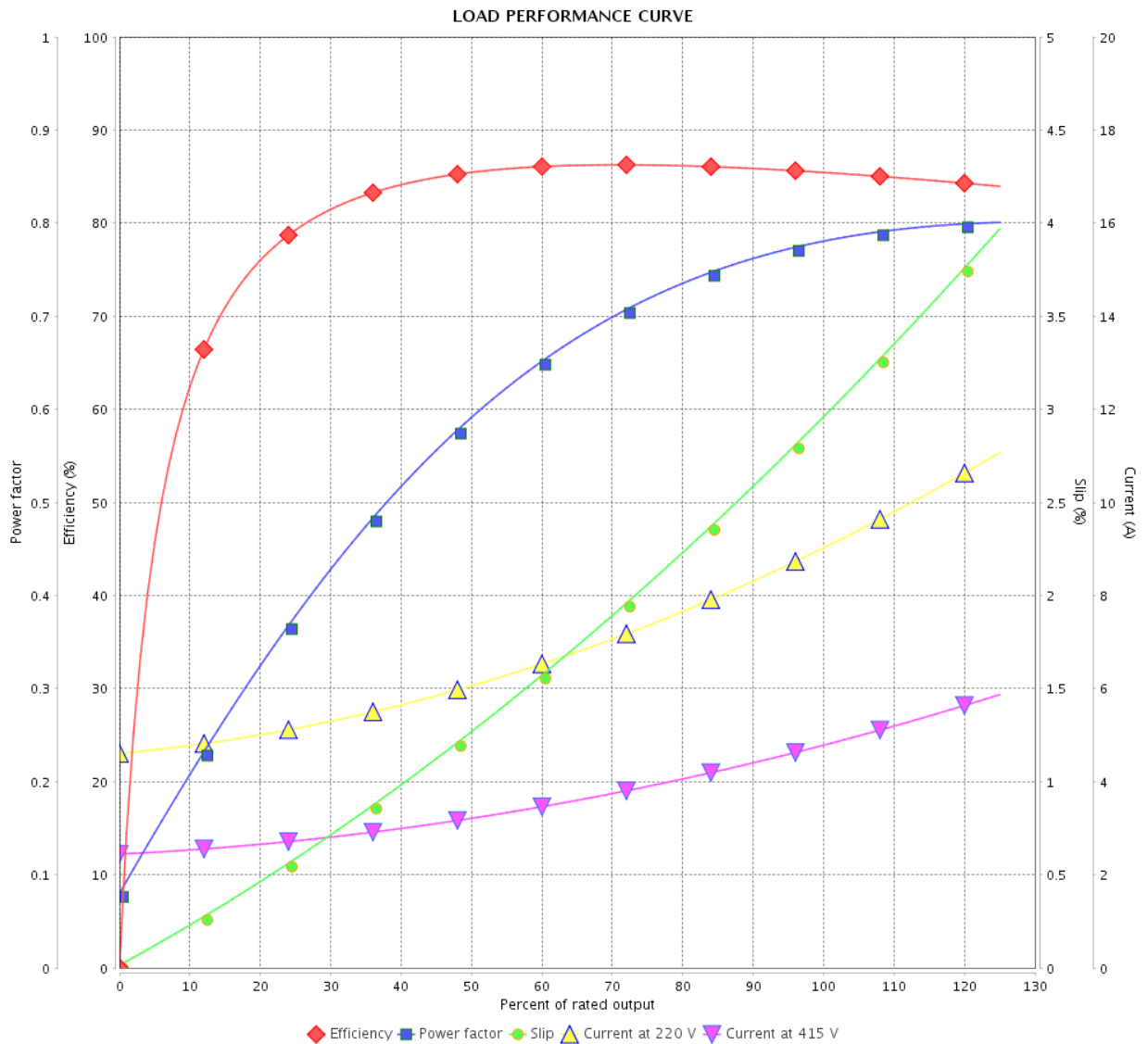


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THERMAL LIMIT CURVE



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Heating constant

Cooling constant

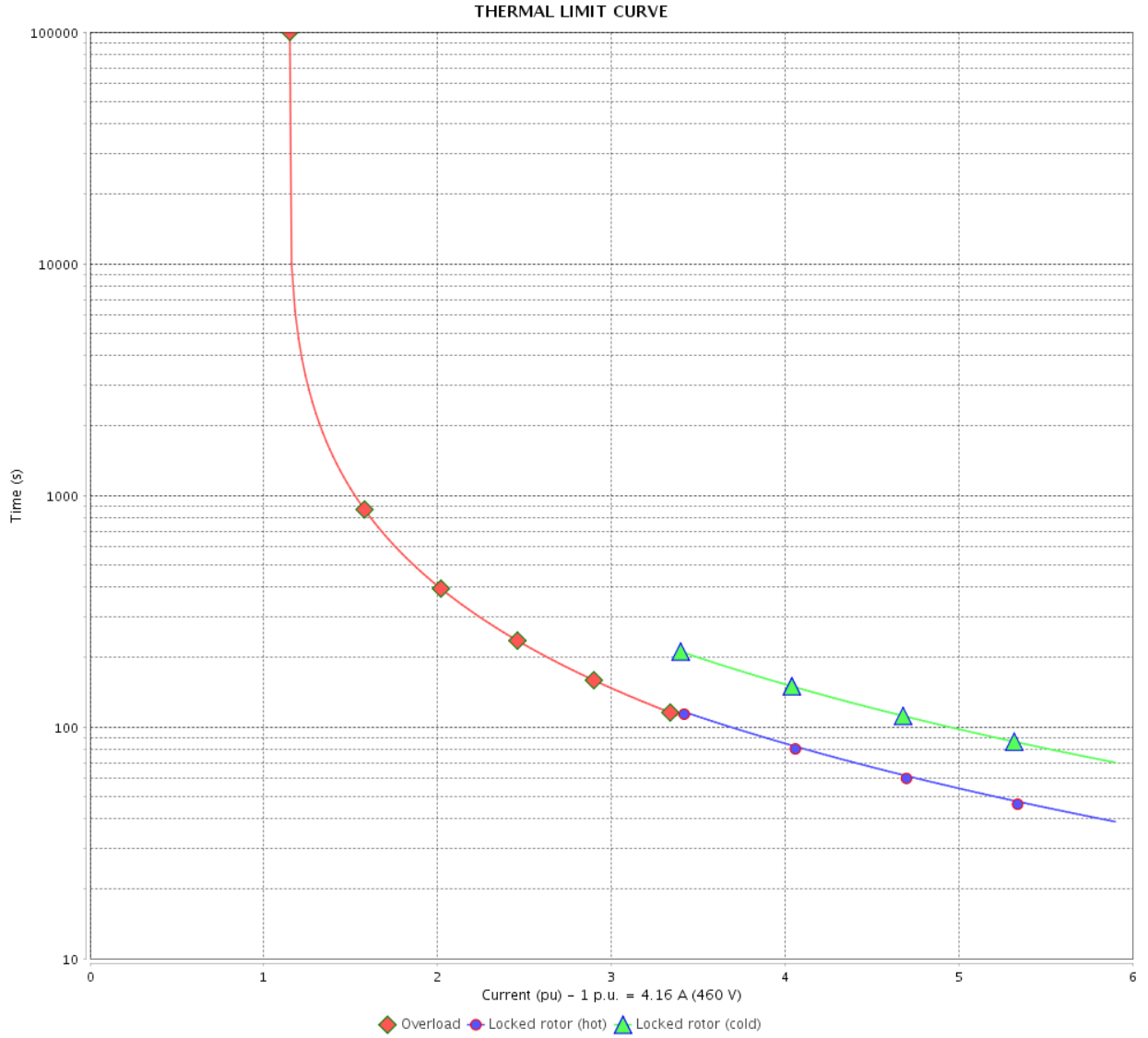
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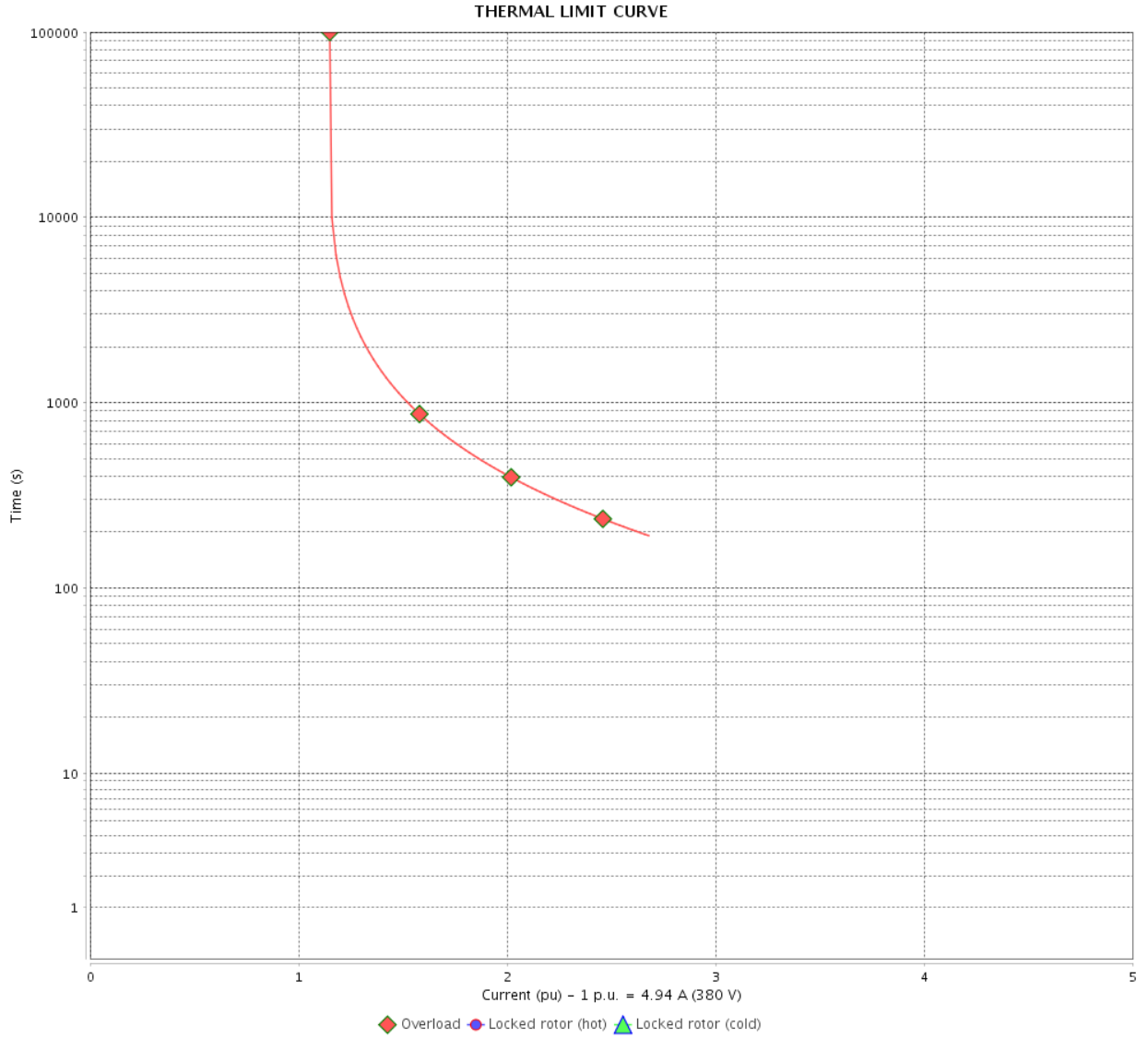
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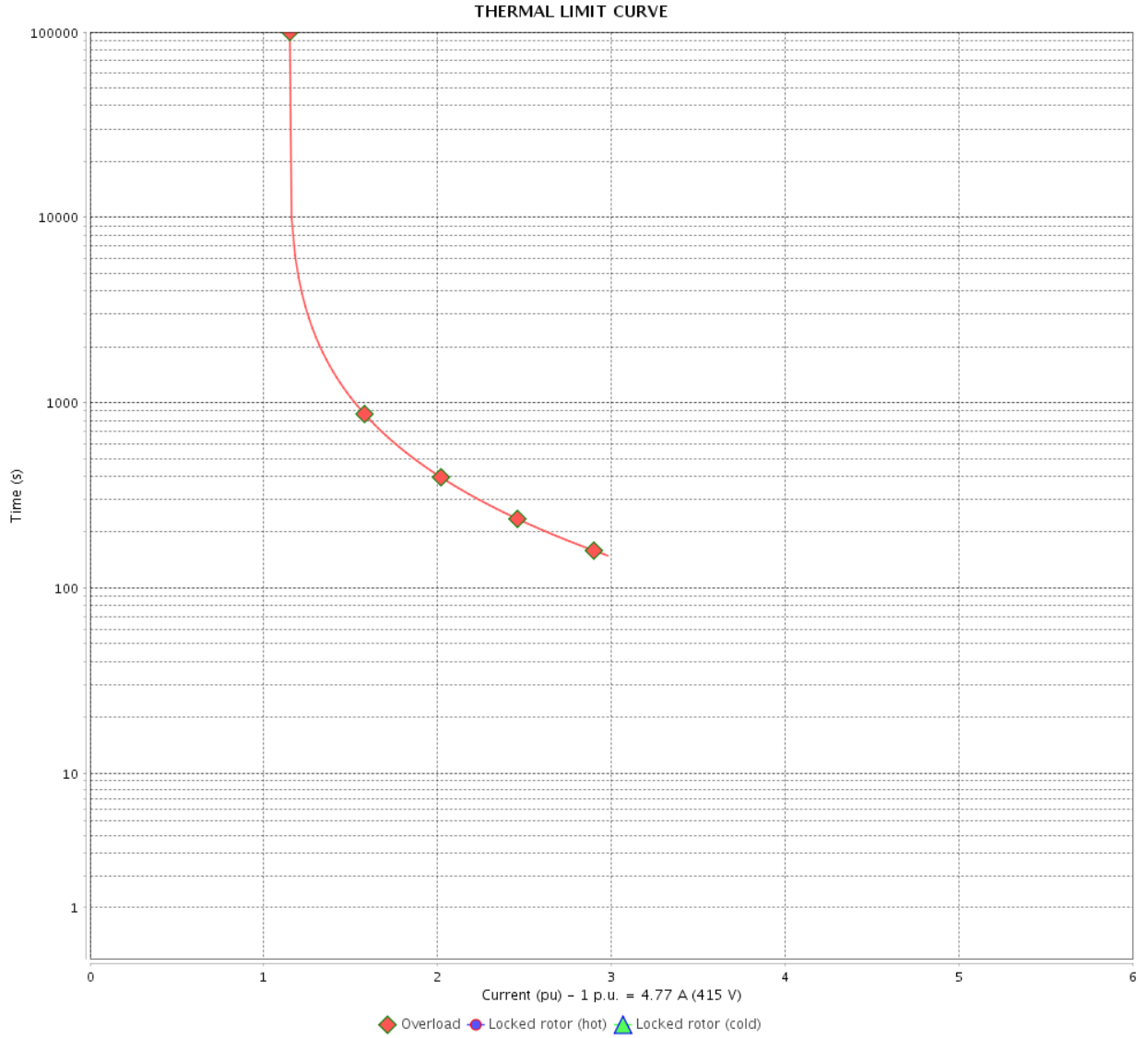
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VFD OPERATION CURVE

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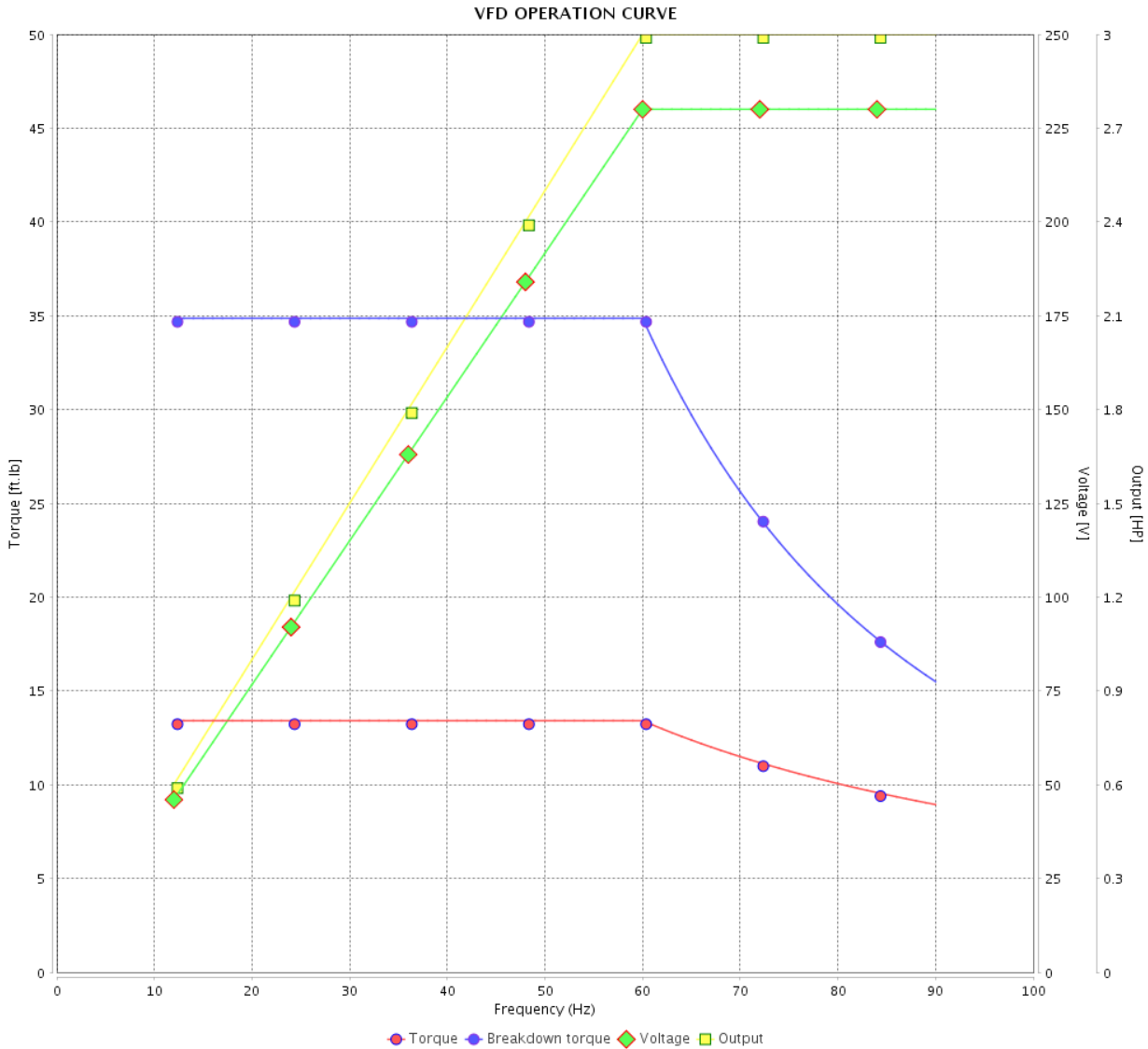


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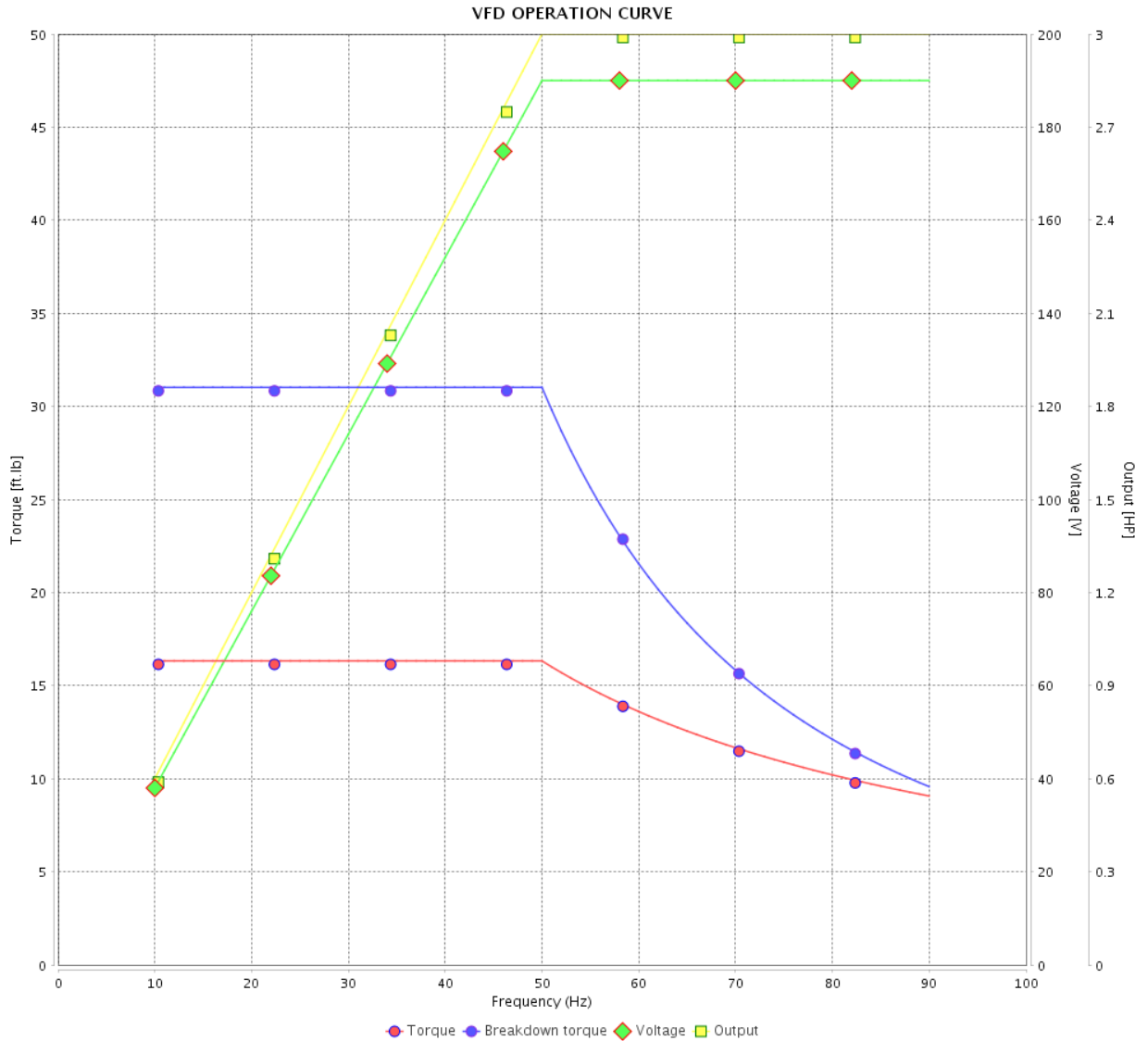


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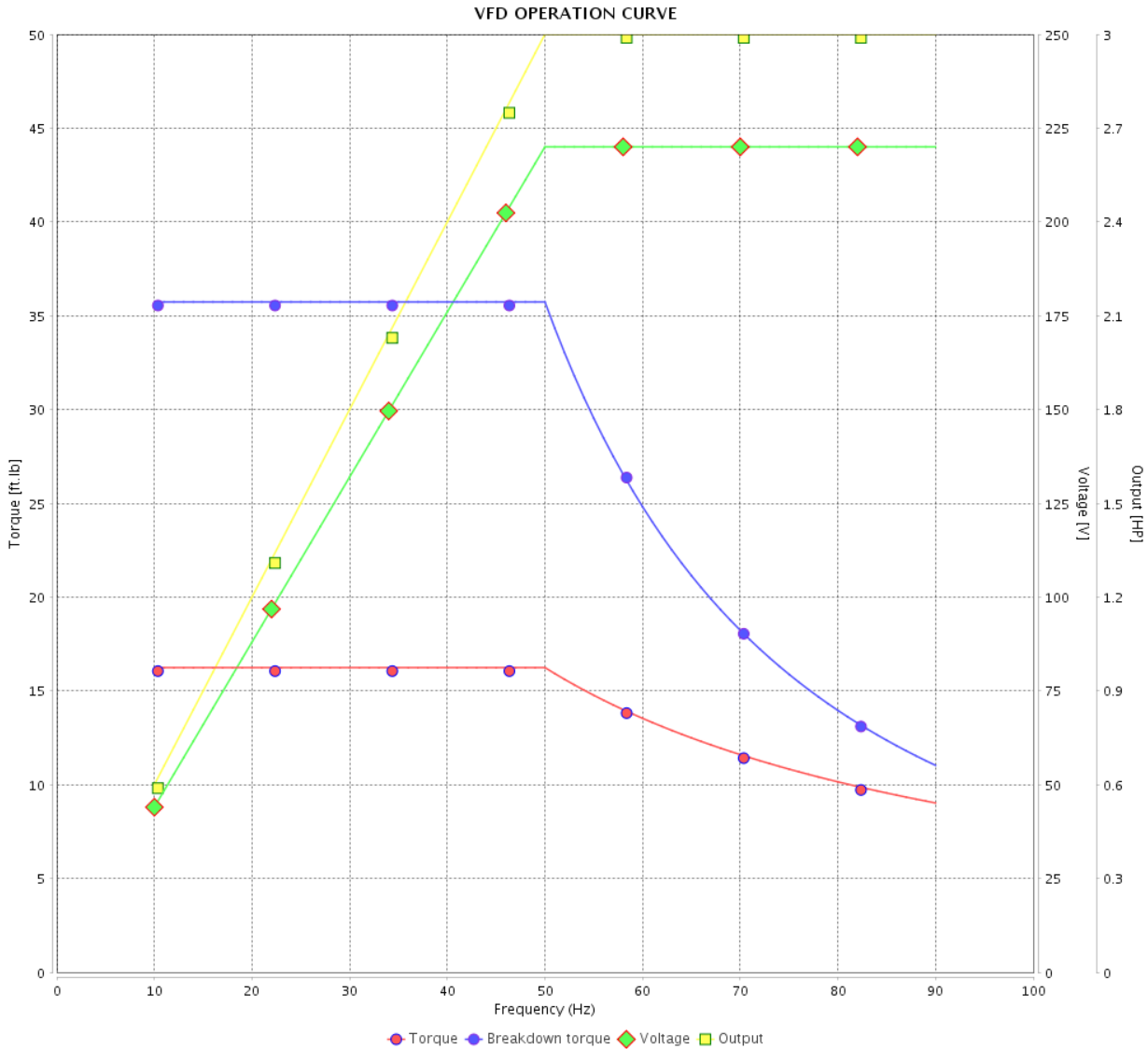


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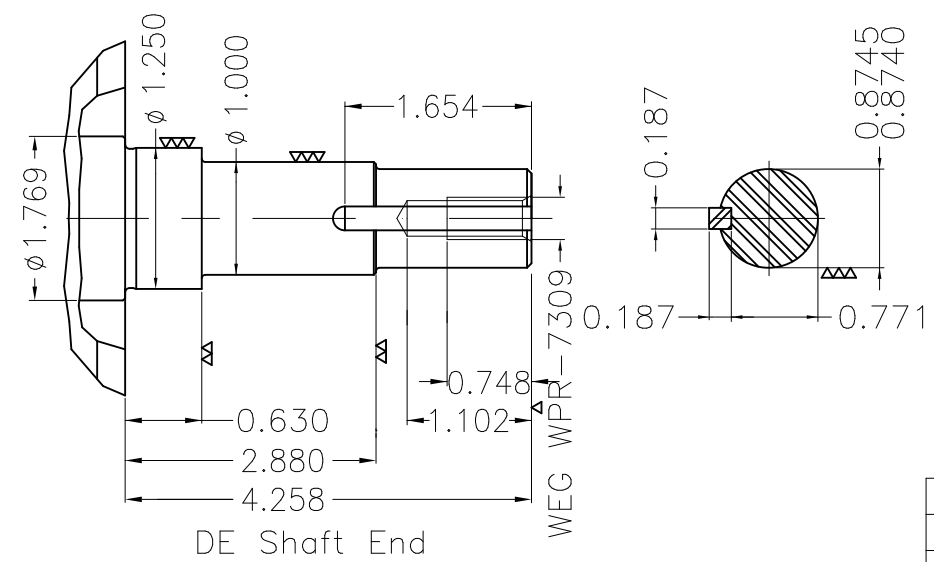
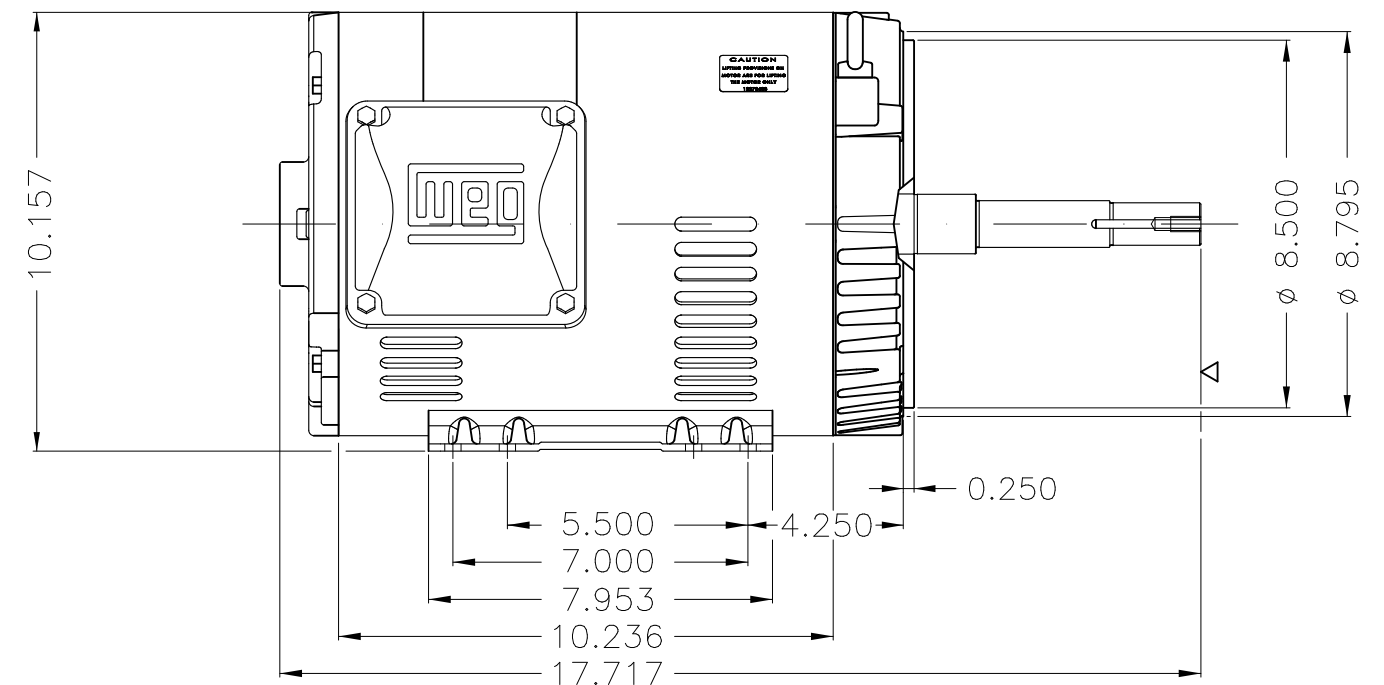
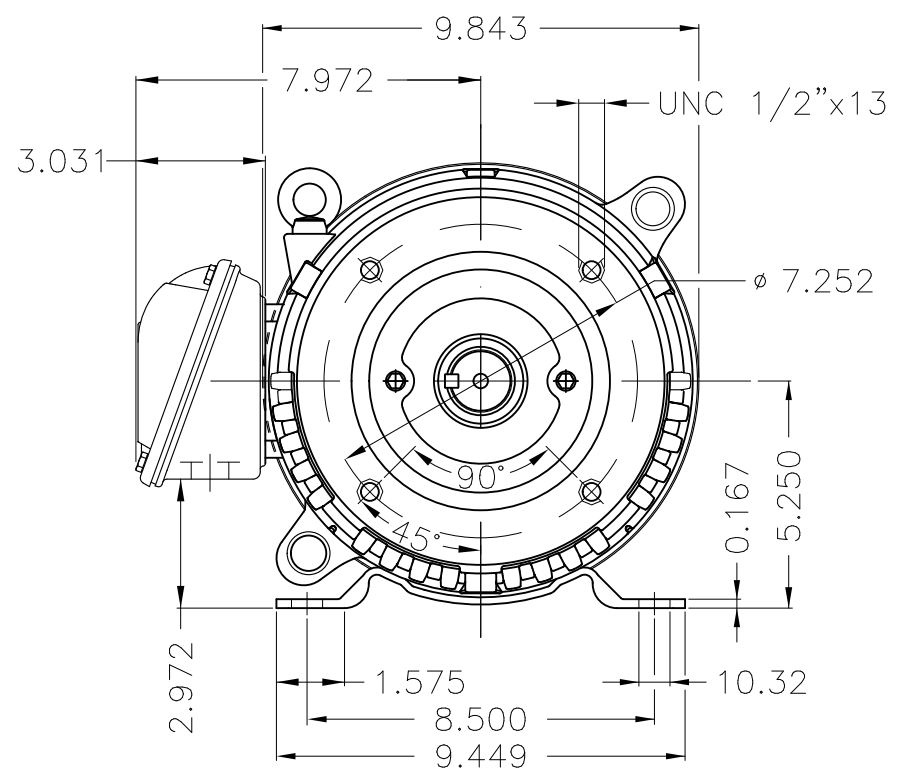
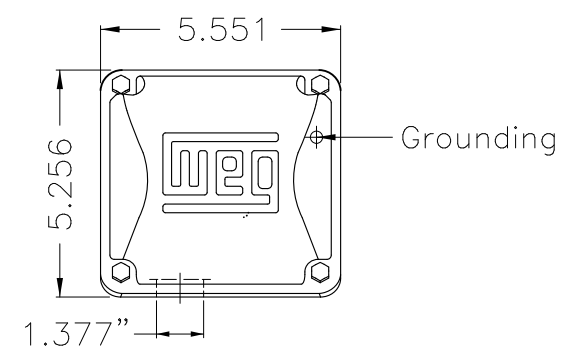
A

B

C

D

E



EUNC 3/8" - 16 WEG WPR-7309

DE Shaft End

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	PIRBUSER	THREE PH. MOTOR ROLLED STEEL CLOSE COUPLED PUMP JN TYPE PSE 1/2							
CHECKED		FRAME 213/5JM IP21 ODP							
RELEASED									
REL DT.		WMO	Jaragua do Sul	Product Engineering					

PREVIEW

WDD



3 HP 06 Poles 60 Hz

**NEMA**
Premium

3PT9



Energy Verified

MADE IN MEXICO

MAT: 12676987 CC029A**W01.T00IC0X0N****MODEL 003120T3E213JM-S****03NOV2021 S/N:**

PH 3	Hz 60	HP 3.0
FR 213/5JM		KW 2.2
DUTY CONT.		V 230/460
ALT 1000 m.a.s.l.		A 8.32/4.16
INS CL F AT 80K		SFA 9.57/4.78
AMB 40°C	DES B	SF 1.15
ENCL ODP	CODE H	PF 0.75
USABLE @ 208V 9.20A		RPM 1175
SF1.00		NEMA NOM. EFF 88.5%

ALTERNATE RATING: 3.0HP 50Hz 190-220/380-415V SF1.15
9.88-8.85/4.94-4.69A 965RPM EFF 84.6% (IE3) IEC 60034-1

Inverter duty motor For 80Hz use on VPWM 1000:1 VT, 5:1 CT

DE 6209-ZZ ODE 6206-ZZ MOBIL POLYREX EM



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.

