

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :				
Product line	: JM Pump NEMA Premium Efficiency Three-Phase	Product code :	13199370	
		Catalog # :	02036ET3E256JM-SG	
Frame	: 254/6JM	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	: 235 lb	
Protection degree	: IP55	Moment of inertia (J)	: 1.22 sq.ft.lb	
Design	: B			
Output [HP]	20	15	15	
Poles	2	2	2	
Frequency [Hz]	60	50	50	
Rated voltage [V]	230/460	190/380	220/415	
Rated current [A]	45.4/22.7	40.8/20.4	36.8/19.5	
L. R. Amperes [A]	300/150	302/151	298/158	
LRC [A]	6.6x(Code G)	7.4x(Code H)	8.1x(Code J)	
No load current [A]	13.8/6.88	13.6/6.79	13.7/7.26	
Rated speed [RPM]	3515	2925	2935	
Slip [%]	2.36	2.50	2.17	
Rated torque [ft.lb]	29.9	26.9	26.8	
Locked rotor torque [%]	200	210	240	
Breakdown torque [%]	290	310	340	
Service factor	1.15	1.00	1.00	
Temperature rise	80 K	105 K	80 K	
Locked rotor time	21s (cold) 12s (hot)	0s (cold) 0s (hot)	0s (cold) 0s (hot)	
Noise level ²	75.0 dB(A)	72.0 dB(A)	72.0 dB(A)	
Efficiency (%)	25%	89.7	91.8	
	50%	90.0	91.5	
	75%	91.0	92.0	
	100%	91.0	91.4	
Power Factor	25%	0.55	0.48	
	50%	0.81	0.75	
	75%	0.88	0.85	
	100%	0.91	0.89	
Bearing type	: <u>Drive end</u> 6309 Z C3 <u>Non drive end</u> 6208 Z C3	Foundation loads		
Sealing	: V'Ring Without Bearing Seal	Max. traction	: 320 lb	
Lubrication interval	: 15797 h 20000 h	Max. compression	: 555 lb	
Lubricant amount	: 13 g 8 g			
Lubricant type	: Mobil Polyrex EM			
Notes USABLE @208V 50.2A SF 1.00 SFA 50.2A				
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



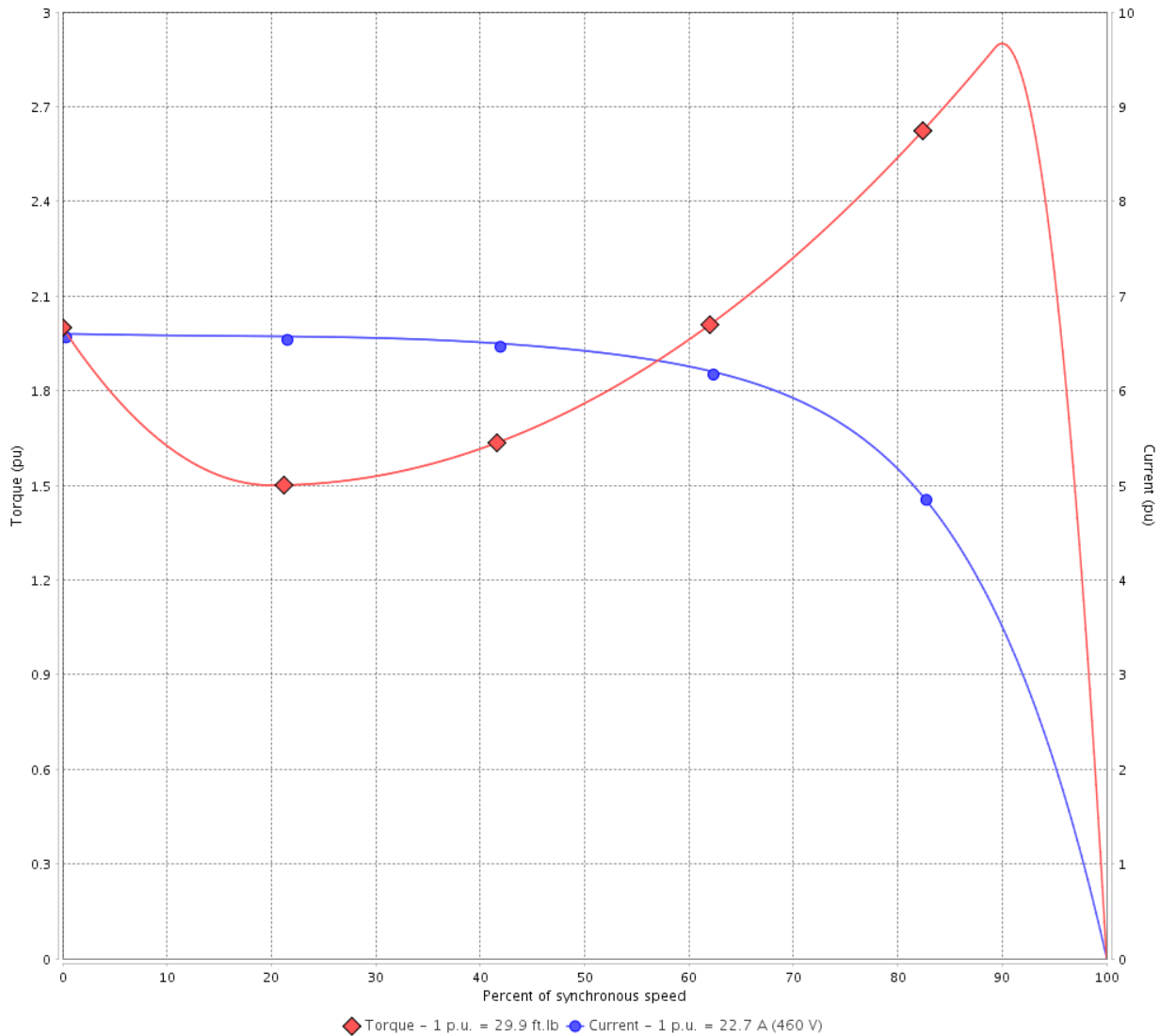
Customer :

Product line : JM Pump NEMA Premium
Efficiency Three-Phase

Product code : 13199370

Catalog # : 02036ET3E256JM-SG

TORQUE AND CURRENT VS SPEED CURVE



Performance : 230/460 V 60 Hz 2P

Rated current	: 45.4/22.7 A	Moment of inertia (J)	: 1.22 sq.ft.lb
LRC	: 6.6	Duty cycle	: Cont.(S1)
Rated torque	: 29.9 ft.lb	Insulation class	: F
Locked rotor torque	: 200 %	Service factor	: 1.15
Breakdown torque	: 290 %	Temperature rise	: 80 K
Rated speed	: 3515 rpm	Design	: B

Locked rotor time : 21s (cold) 12s (hot)

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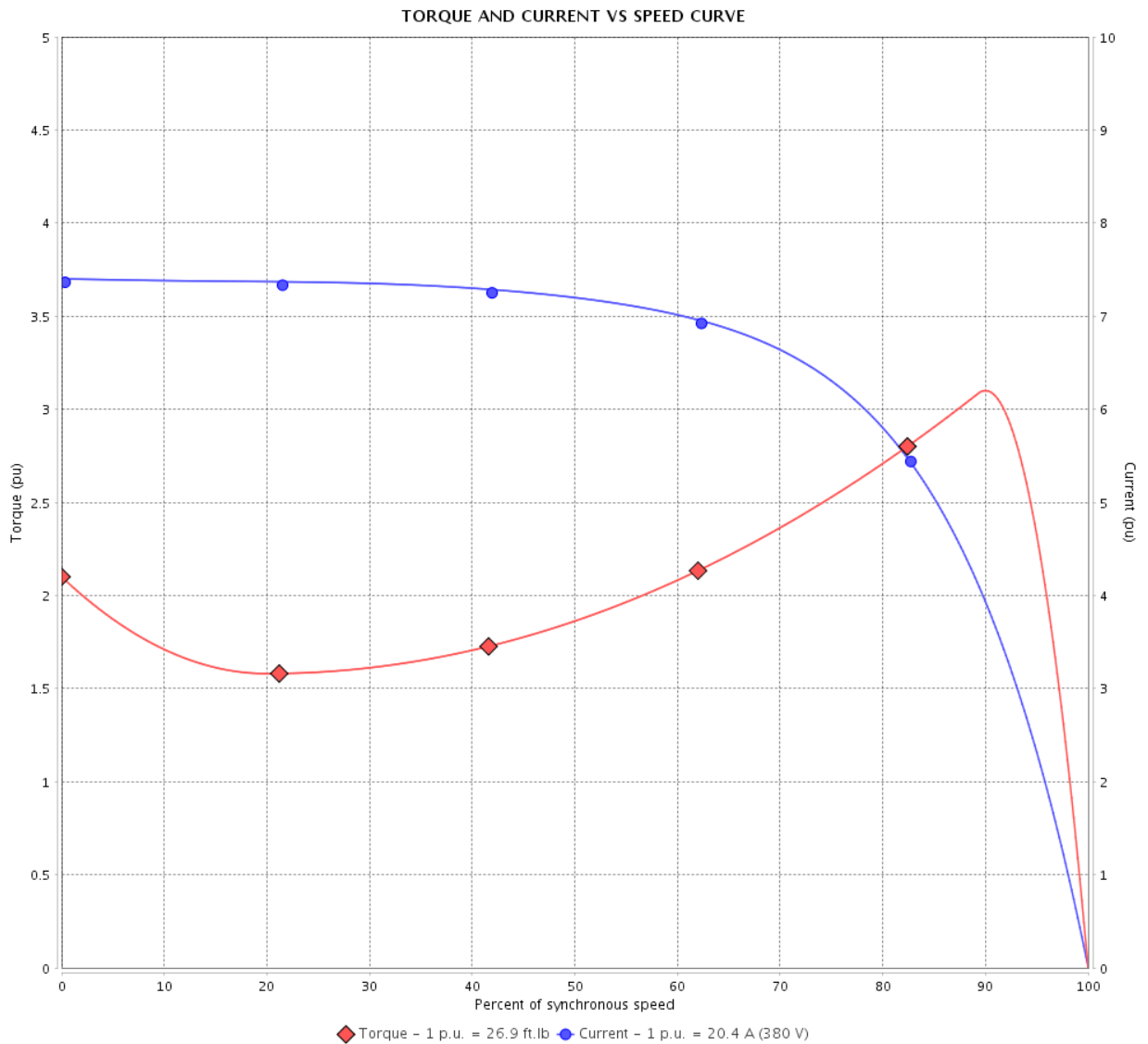
Three Phase Induction Motor - Squirrel Cage

Customer :

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Product code : 13199370

Catalog # : 02036ET3E256JM-SG



Performance : 190/380 V 50 Hz 2P

Rated current	: 40.8/20.4 A	Moment of inertia (J)	: 1.22 sq.ft.lb
LRC	: 7.4	Duty cycle	: Cont.(S1)
Rated torque	: 26.9 ft.lb	Insulation class	: F
Locked rotor torque	: 210 %	Service factor	: 1.00
Breakdown torque	: 310 %	Temperature rise	: 105 K
Rated speed	: 2925 rpm	Design	: B

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

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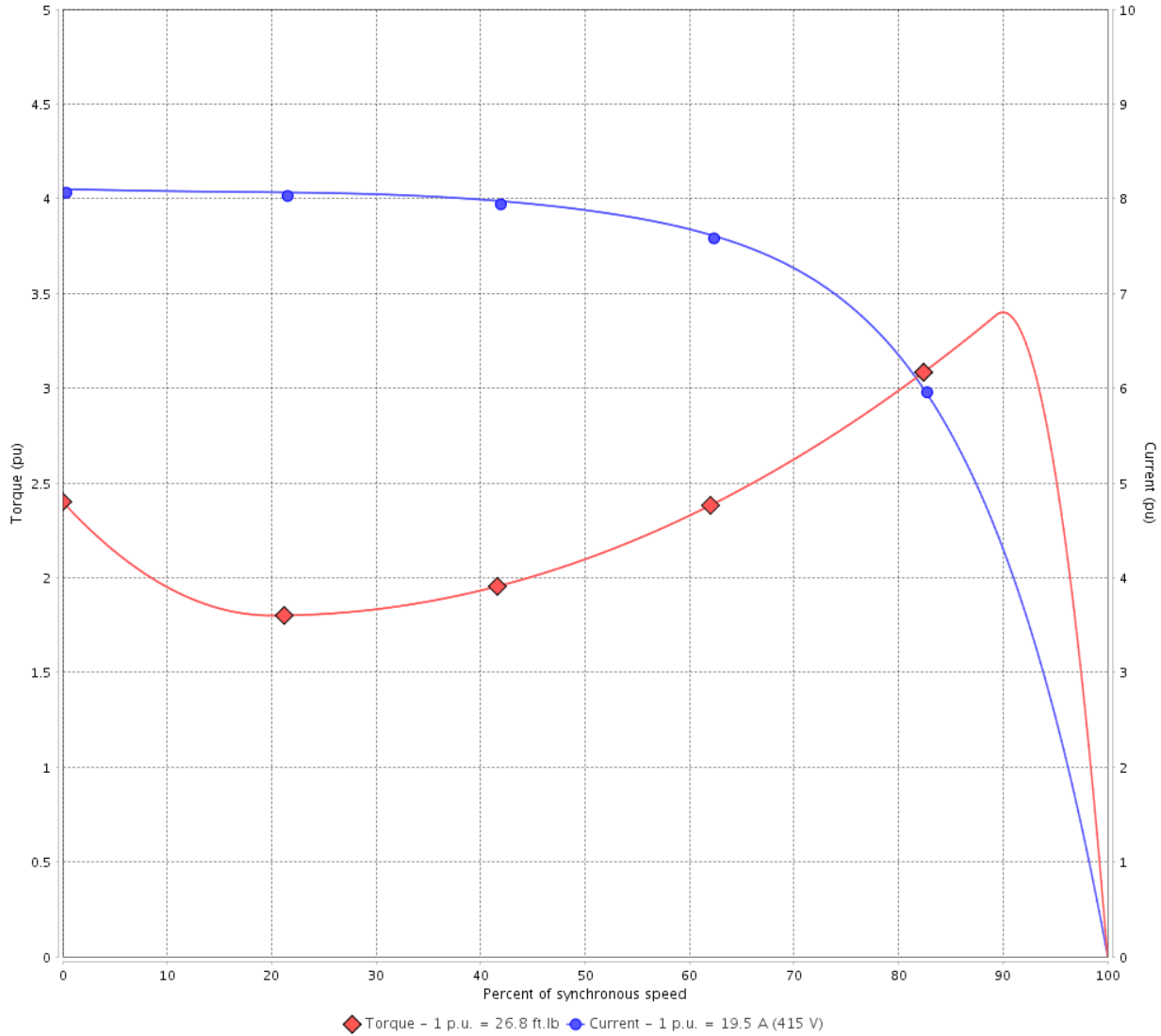
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TORQUE AND CURRENT VS SPEED CURVE



Performance : 220/415 V 50 Hz 2P

Rated current	: 36.8/19.5 A	Moment of inertia (J)	: 1.22 sq.ft.lb
LRC	: 8.1	Duty cycle	: Cont.(S1)
Rated torque	: 26.8 ft.lb	Insulation class	: F
Locked rotor torque	: 240 %	Service factor	: 1.00
Breakdown torque	: 340 %	Temperature rise	: 80 K
Rated speed	: 2935 rpm	Design	: B

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

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LOAD PERFORMANCE CURVE

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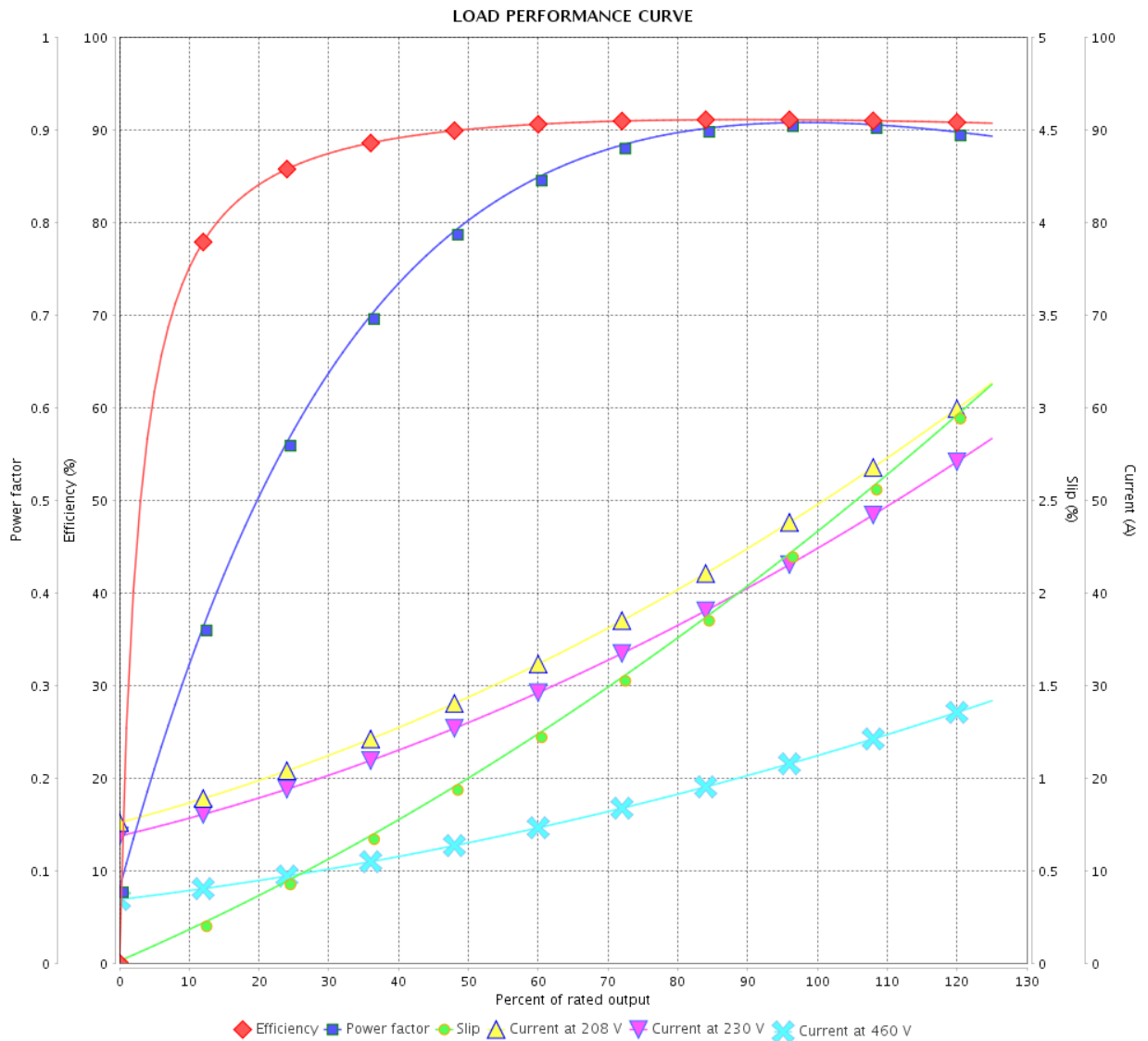


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Performance : 230/460 V 60 Hz 2P

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 Locked rotor torque : 200 %
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 Insulation class : F
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 Design : B

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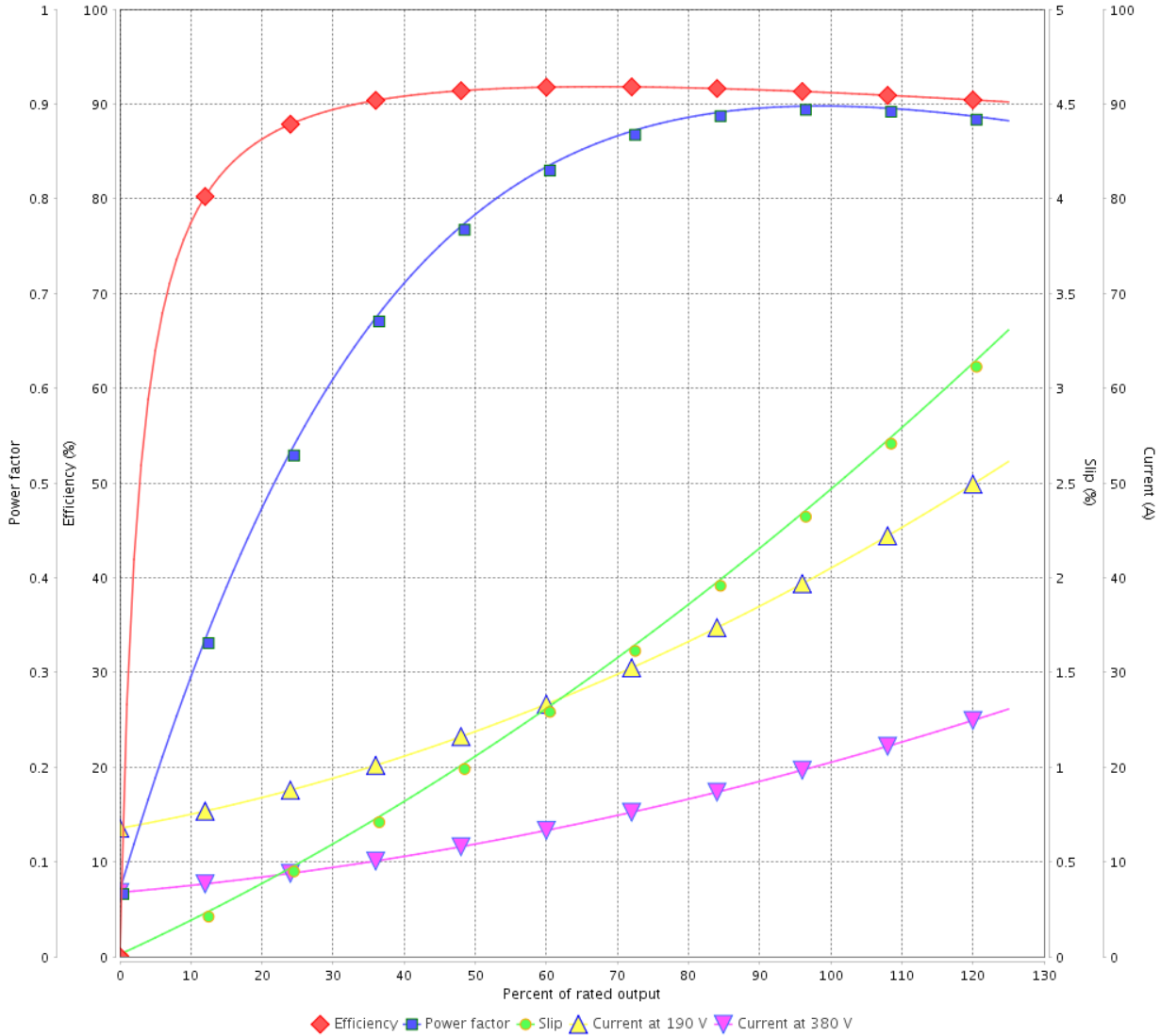
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Rated current : 40.8/20.4 A
 LRC : 7.4
 Rated torque : 26.9 ft.lb
 Locked rotor torque : 210 %
 Breakdown torque : 310 %
 Rated speed : 2925 rpm

Moment of inertia (J) : 1.22 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 105 K
 Design : B

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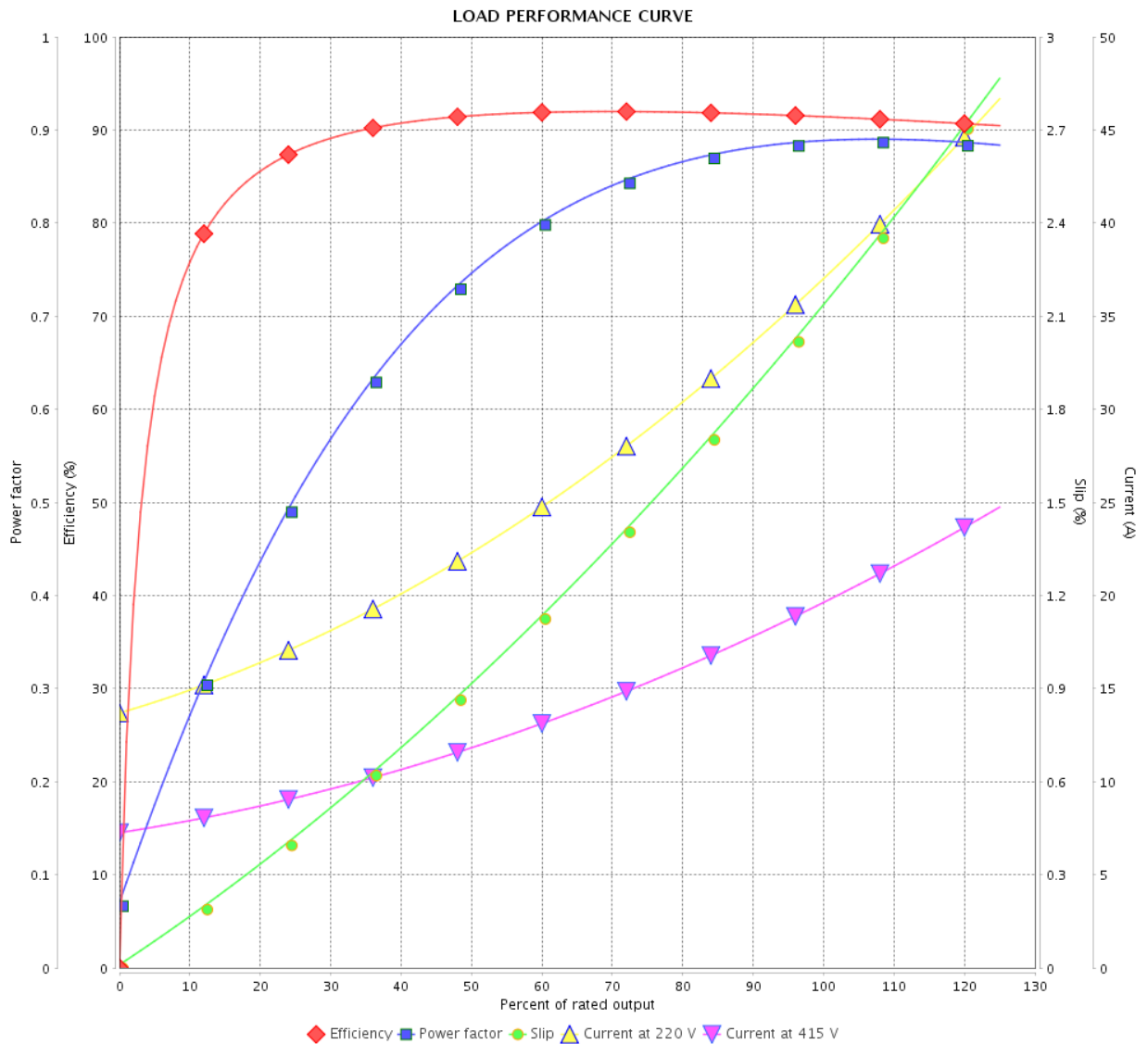


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Rated current : 36.8/19.5 A
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 Locked rotor torque : 240 %
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THERMAL LIMIT CURVE

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Temperature rise : 80 K
Design : B

Heating constant

Cooling constant

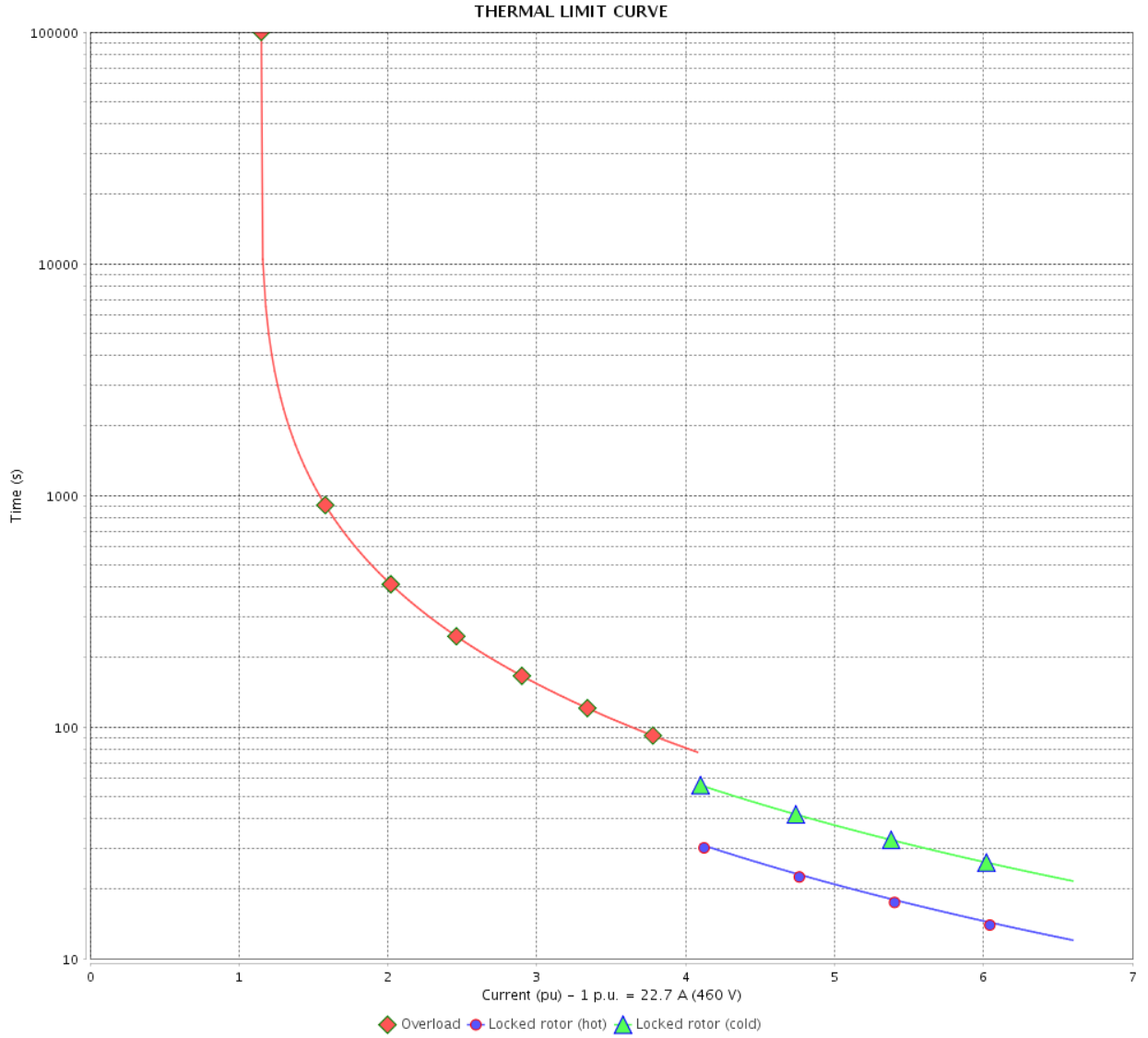
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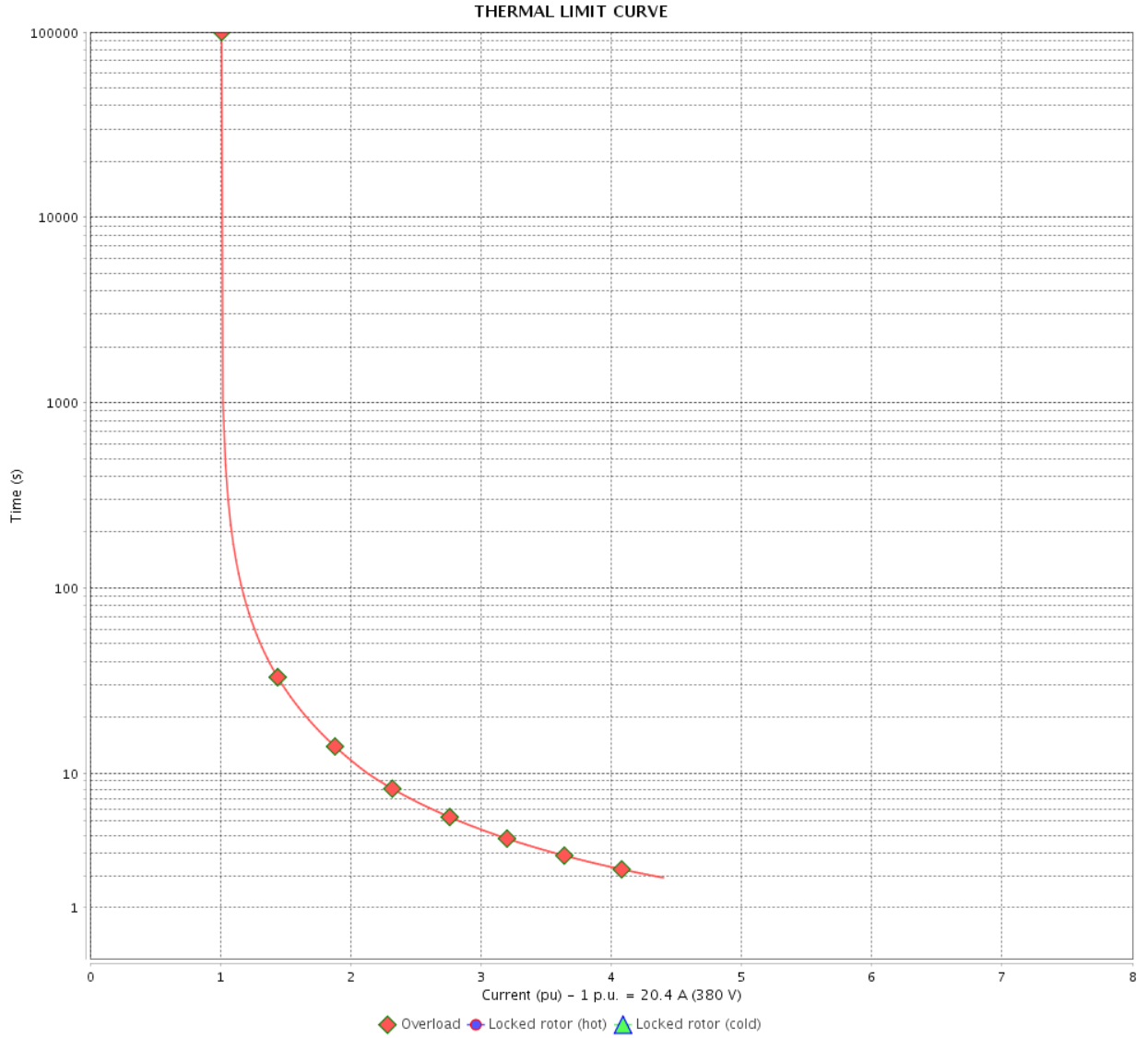
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Locked rotor torque : 240 %
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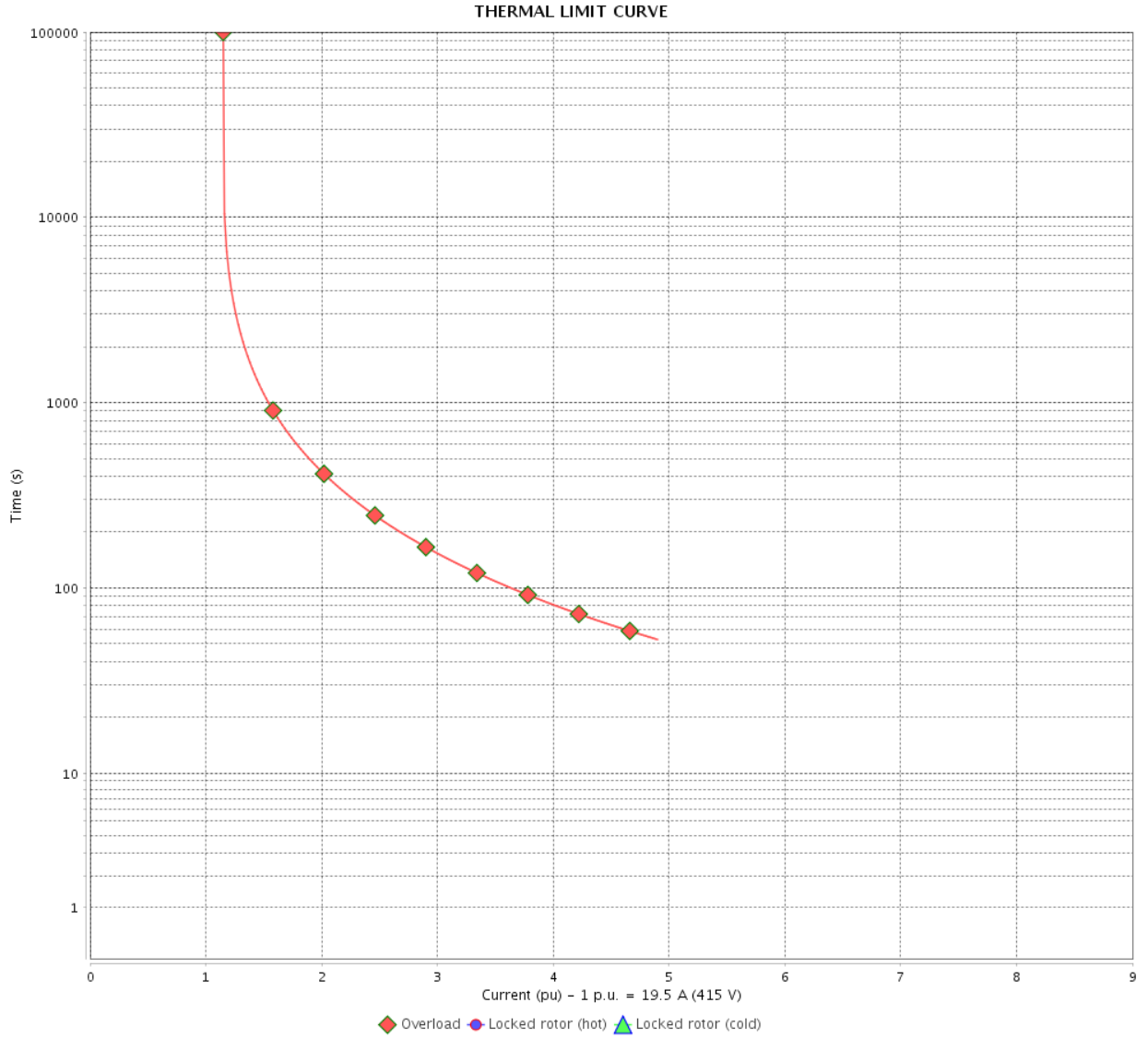
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VFD OPERATION CURVE

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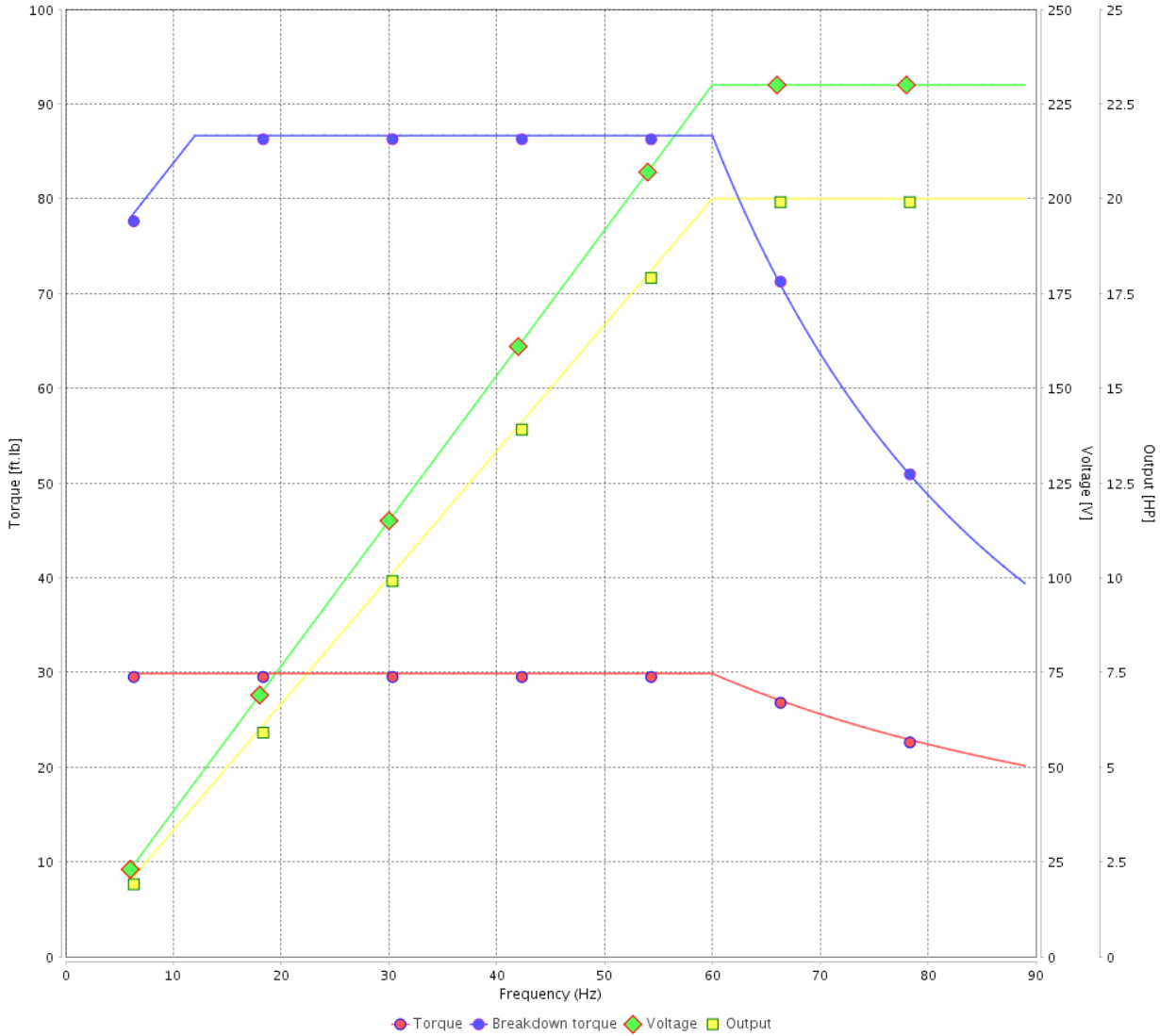
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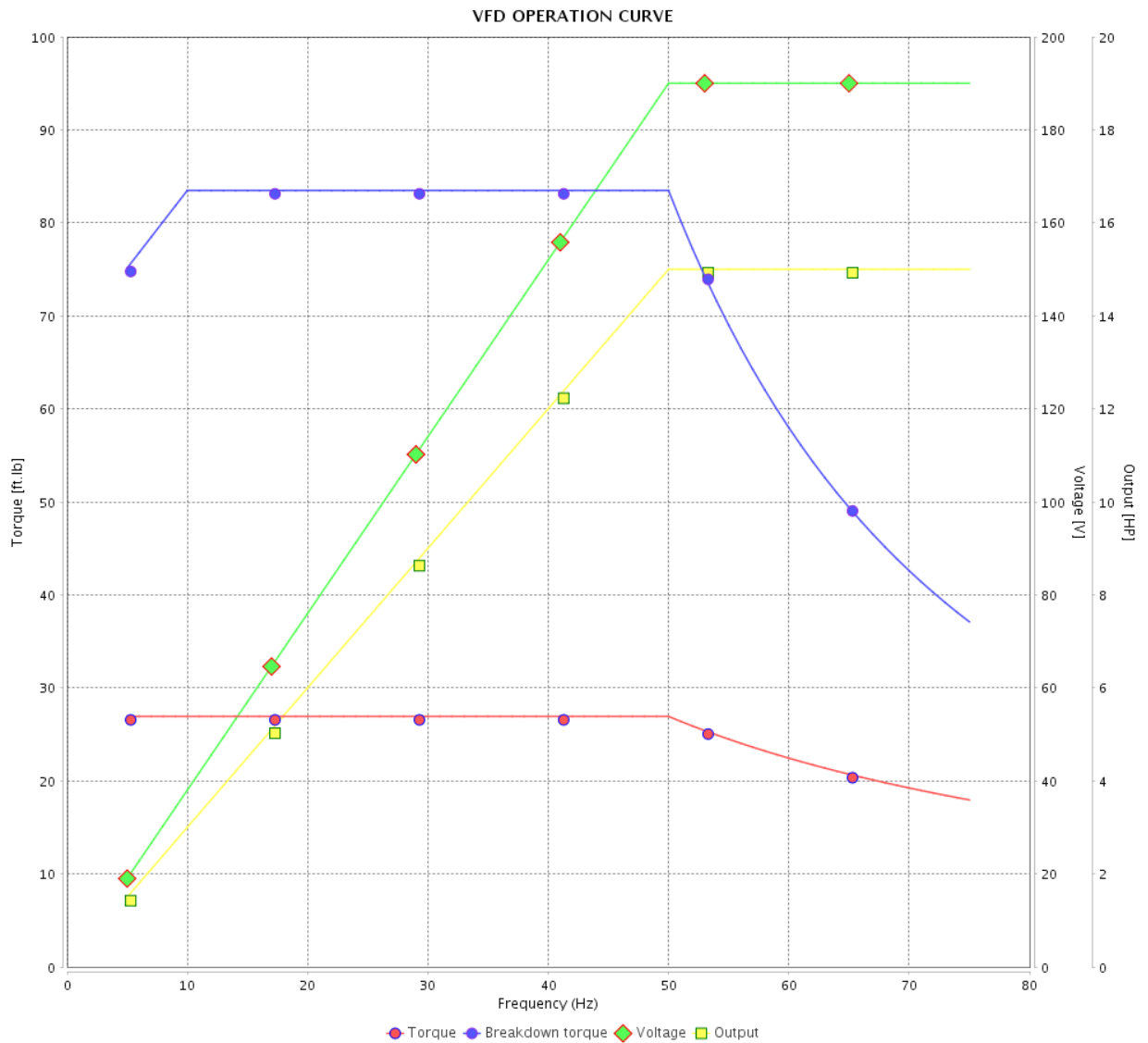


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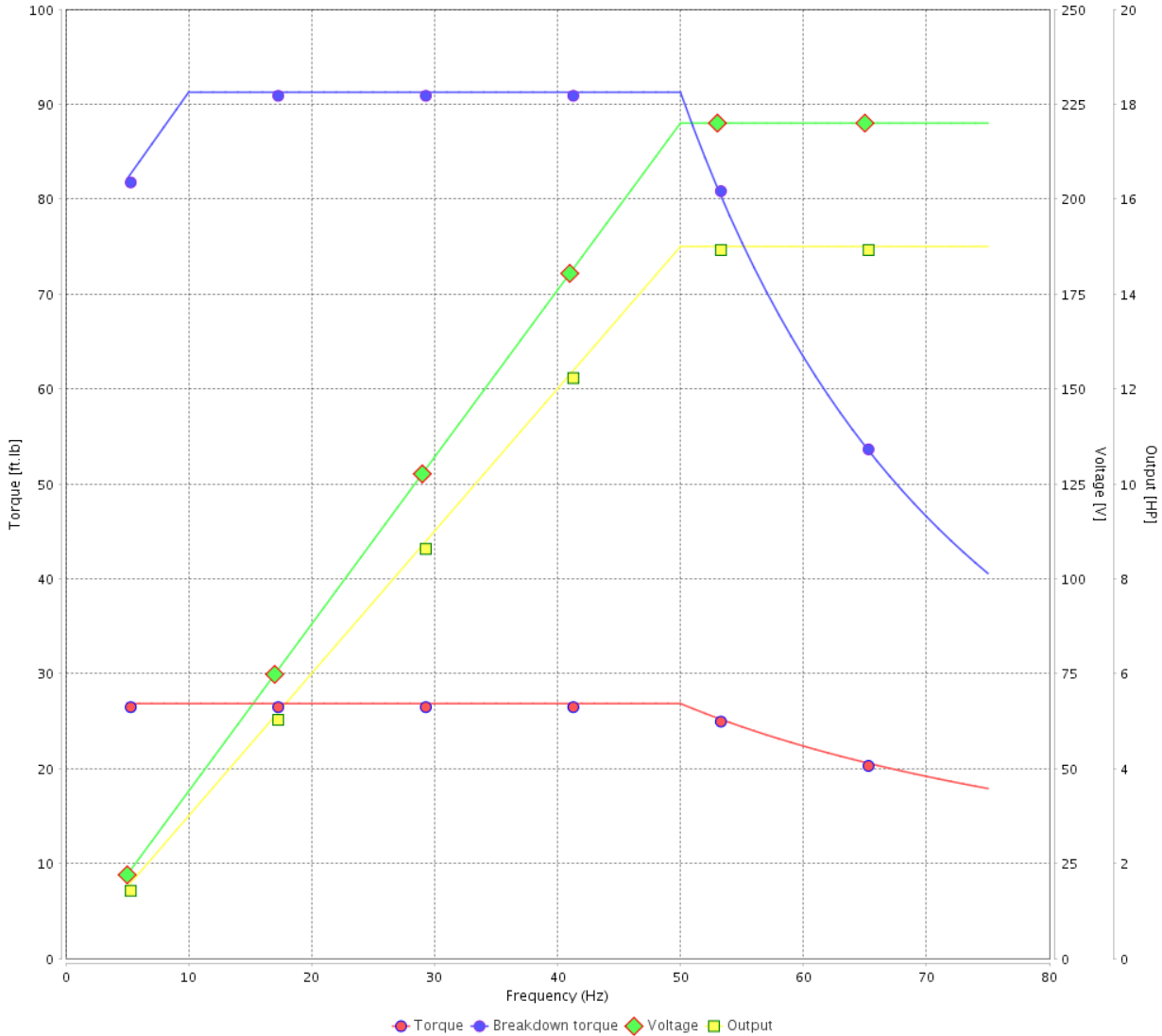
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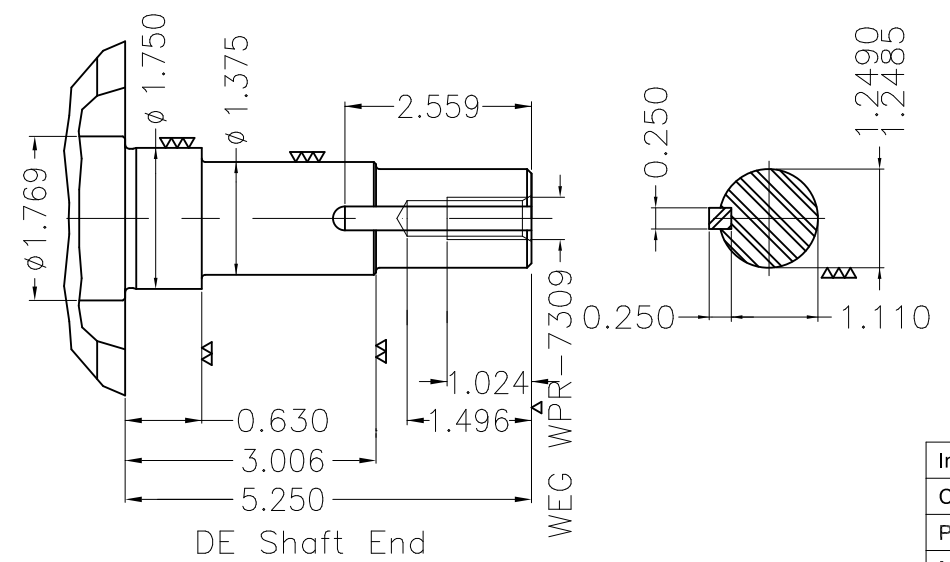
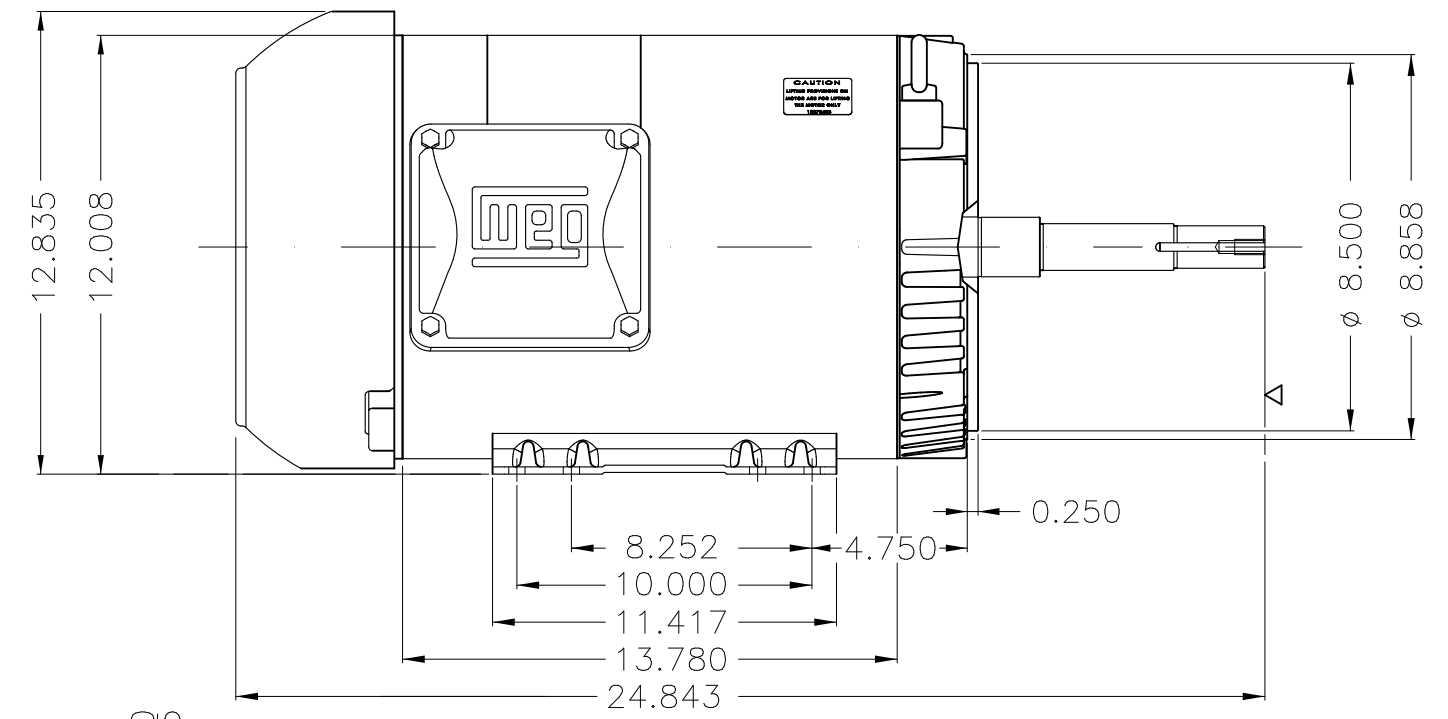
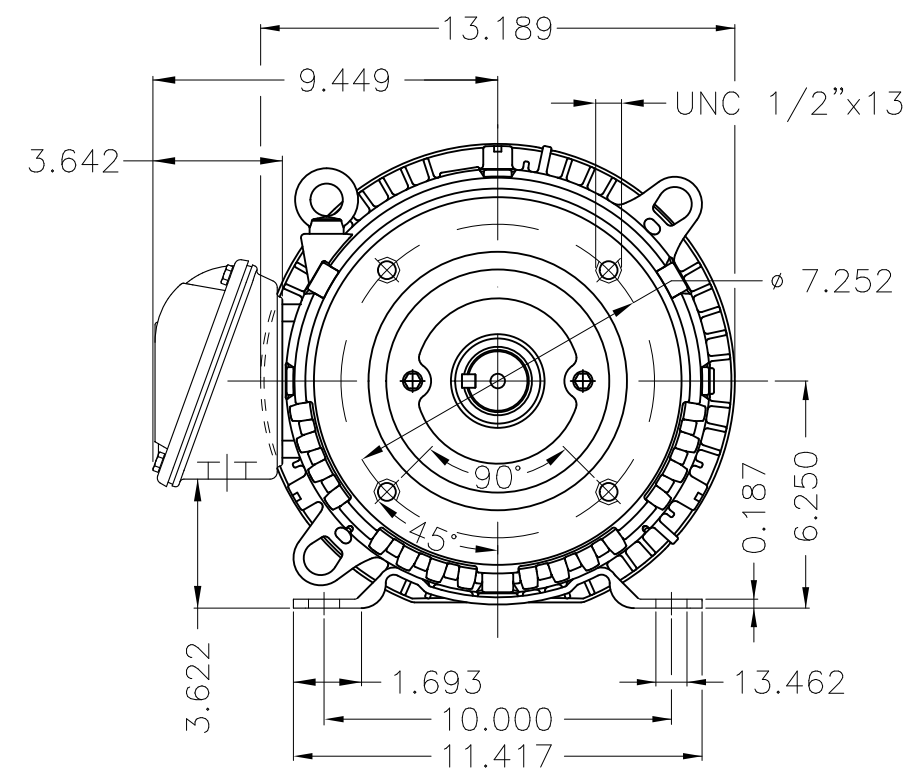
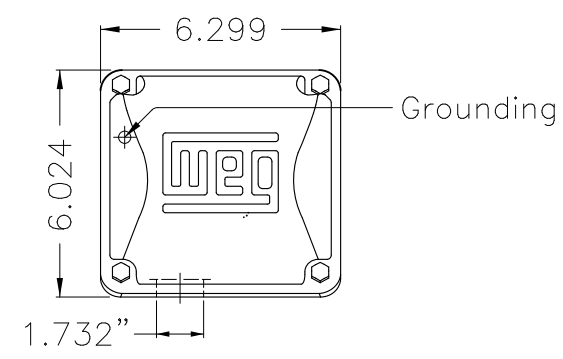
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A
B
C
D
E



EUNC 1/2"-13 WEG WPR-7309

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	PIRBUSER	THREE PH. MOTOR ROLLED STEEL CLOSE COUPLED PUMP JN TYPE PSE 1/2"					
CHECKED		FRAME 254/6JM IP55 TEFC					
RELEASED							
REL DT.		WMO Jaragua do Sul	Product Engineering	WDD	SHEET	1 / 1	

20 HP 02 Poles 60 Hz



Dimensions in inches XME A3

**NEMA
Premium**

3PT9



Energy Verified

MADE IN MEXICO

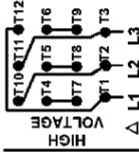
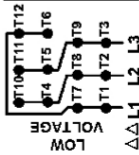
MAT: 13199370 CC029A**W01.TE0IC0X0N****MODEL 02036ET3E256JM-SG****10JAN2022 S/N:**

PH 3	Hz 60	HP 20
FR 254/6JM		KW 15
DUTY CONT.		V 230/460
ALT 1000 m.a.s.l.		A 45.4/22.7
INS CL F AT 80K	IP55	SFA 52.2/26.1
AMB 40°C	DES B	SF 1.15
ENCL TEFC	CODE G	PF 0.91
USABLE @ 208V 50.2A		RPM 3515
SF1.00		NEMA NOM. EFF 91.0%

ALTERNATE RATING: 15HP 50Hz 190-220/380-415V SF1.00
40.8-35.8/20.4-19.0A 2925RPM EFF 91.2% (IE3) IEC 60034-1

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

DE 6309-Z-C3 ODE 6208-Z-C3 MOBIL POLYREX EM 15797h



T1-BLU T2-WHT
 T3-ORG T4-YEL
 T5-BLK T6-GRY
 T7-PNK T8-RED
 T9-BRK RED
 T10-CURRY
 T11-GRN T12-VLT

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.

