

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :				
Product line	: JM Pump NEMA Premium Efficiency Three-Phase	Product code :	13224056	
		Catalog # :	01536ET3E215JM-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	: 168 lb	
Protection degree	: IP55	Moment of inertia (J)	: 0.6341 sq.ft.lb	
Design	: A			
Output [HP]	15	10	10	
Poles	2	2	2	
Frequency [Hz]	60	50	50	
Rated voltage [V]	230/460	190/380	220/415	
Rated current [A]	34.0/17.0	28.8/14.4	26.2/13.9	
L. R. Amperes [A]	279/139	251/125	244/129	
LRC [A]	8.2x(Code J)	8.7x(Code K)	9.3x(Code K)	
No load current [A]	12.4/6.22	12.2/6.11	12.8/6.77	
Rated speed [RPM]	3520	2935	2940	
Slip [%]	2.22	2.17	2.00	
Rated torque [ft.lb]	22.4	17.9	17.9	
Locked rotor torque [%]	280	320	350	
Breakdown torque [%]	330	370	420	
Service factor	1.15	1.15	1.15	
Temperature rise	80 K	80 K	80 K	
Locked rotor time	19s (cold) 11s (hot)	25s (cold) 14s (hot)	23s (cold) 13s (hot)	
Noise level ²	70.0 dB(A)	67.0 dB(A)	67.0 dB(A)	
Efficiency (%)	25%	90.0	89.9	
	50%	90.2	90.1	
	75%	91.0	91.3	
	100%	91.0	91.3	
Power Factor	25%	0.49	0.39	
	50%	0.76	0.66	
	75%	0.85	0.78	
	100%	0.89	0.85	
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	: 339 lb	
		Max. compression	: 507 lb	
Lubrication interval	: -			
Lubricant amount	: -			
Lubricant type	: Mobil Polyrex EM			
Notes USABLE @208V 37.6A SF 1.00 SFA 37.6A				
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



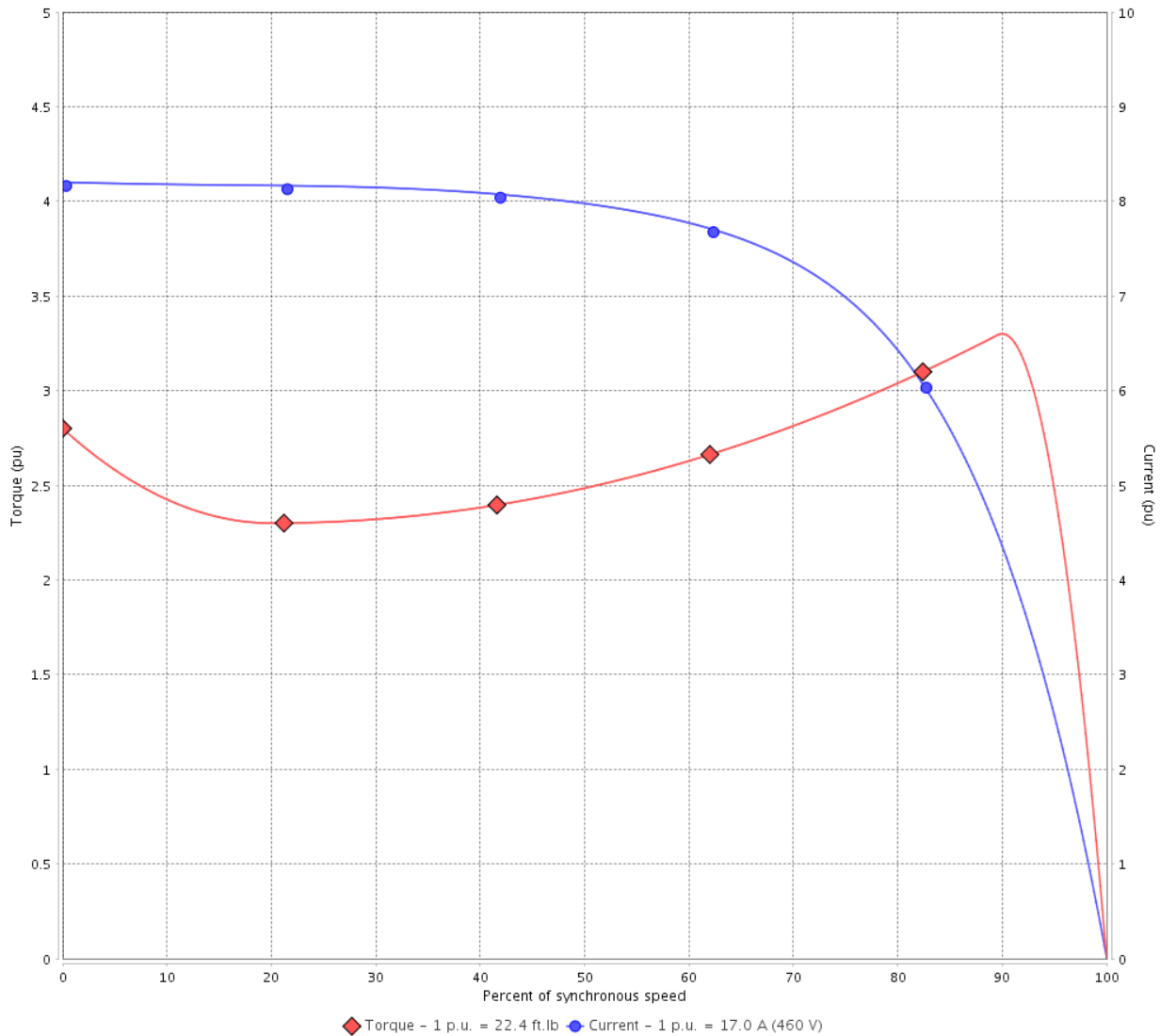
Customer :

Product line : JM Pump NEMA Premium
Efficiency Three-Phase

Product code : 13224056

Catalog # : 01536ET3E215JM-SG

TORQUE AND CURRENT VS SPEED CURVE



Performance : 230/460 V 60 Hz 2P

Rated current	: 34.0/17.0 A	Moment of inertia (J)	: 0.6341 sq.ft.lb
LRC	: 8.2	Duty cycle	: Cont.(S1)
Rated torque	: 22.4 ft.lb	Insulation class	: F
Locked rotor torque	: 280 %	Service factor	: 1.15
Breakdown torque	: 330 %	Temperature rise	: 80 K
Rated speed	: 3520 rpm	Design	: A

Locked rotor time : 19s (cold) 11s (hot)

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TORQUE AND CURRENT VS SPEED CURVE



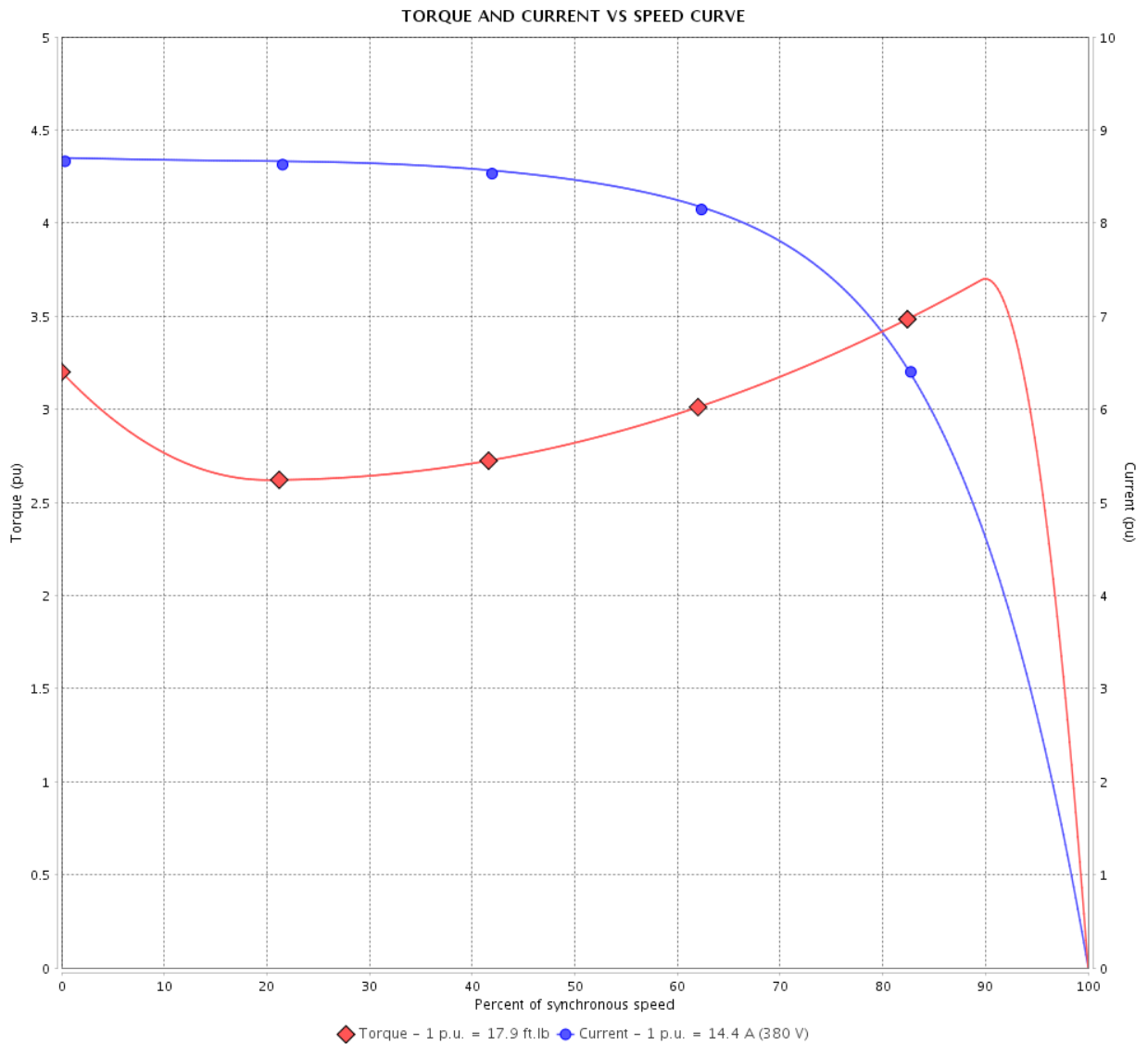
Three Phase Induction Motor - Squirrel Cage

Customer :

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Product code : 13224056

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Performance : 190/380 V 50 Hz 2P

Rated current : 28.8/14.4 A
 LRC : 8.7
 Rated torque : 17.9 ft.lb
 Locked rotor torque : 320 %
 Breakdown torque : 370 %
 Rated speed : 2935 rpm

Moment of inertia (J) : 0.6341 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : A

Locked rotor time : 25s (cold) 14s (hot)

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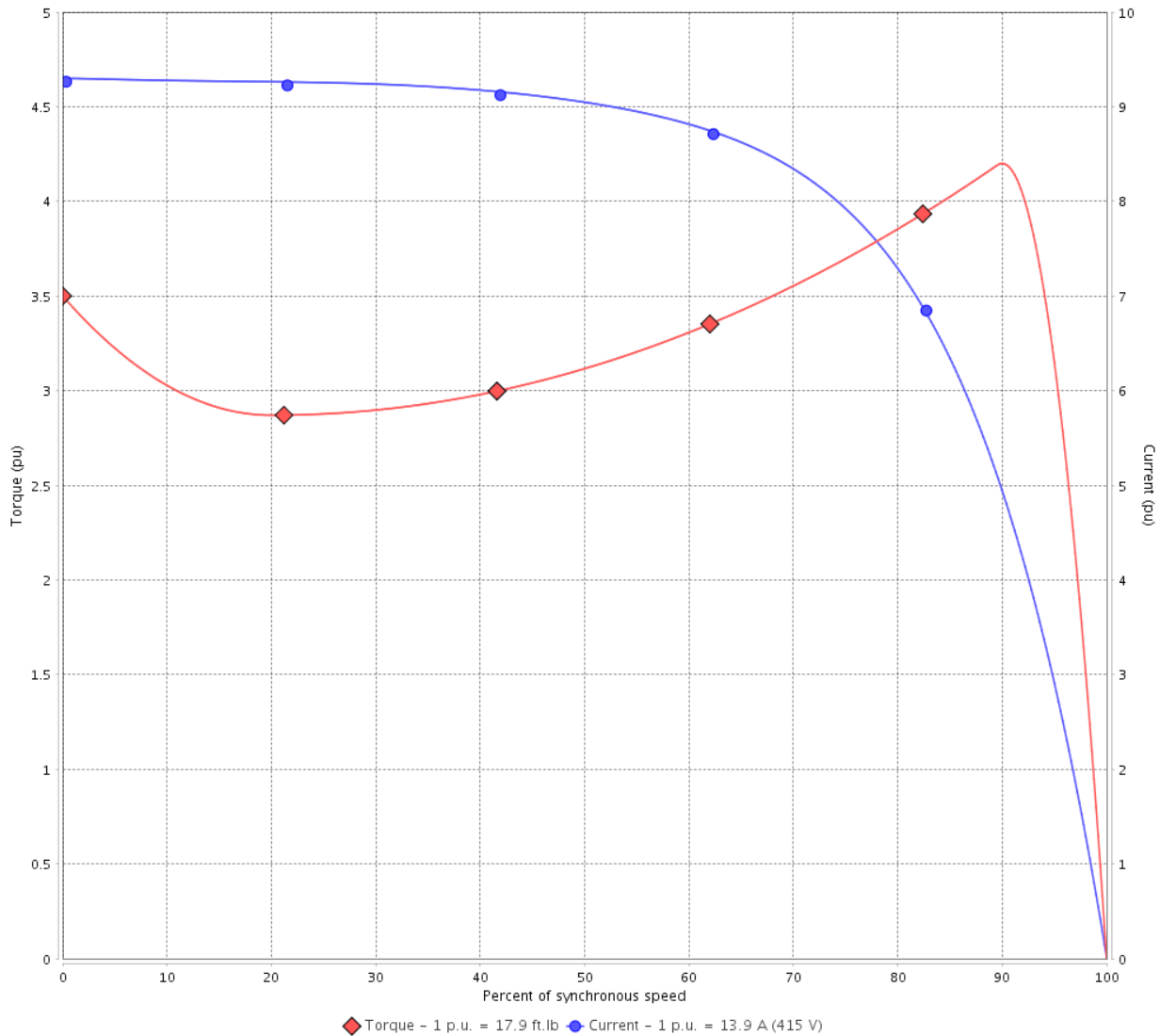
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TORQUE AND CURRENT VS SPEED CURVE



Performance : 220/415 V 50 Hz 2P

Rated current	: 26.2/13.9 A	Moment of inertia (J)	: 0.6341 sq.ft.lb
LRC	: 9.3	Duty cycle	: Cont.(S1)
Rated torque	: 17.9 ft.lb	Insulation class	: F
Locked rotor torque	: 350 %	Service factor	: 1.15
Breakdown torque	: 420 %	Temperature rise	: 80 K
Rated speed	: 2940 rpm	Design	: A

Locked rotor time : 23s (cold) 13s (hot)

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LOAD PERFORMANCE CURVE

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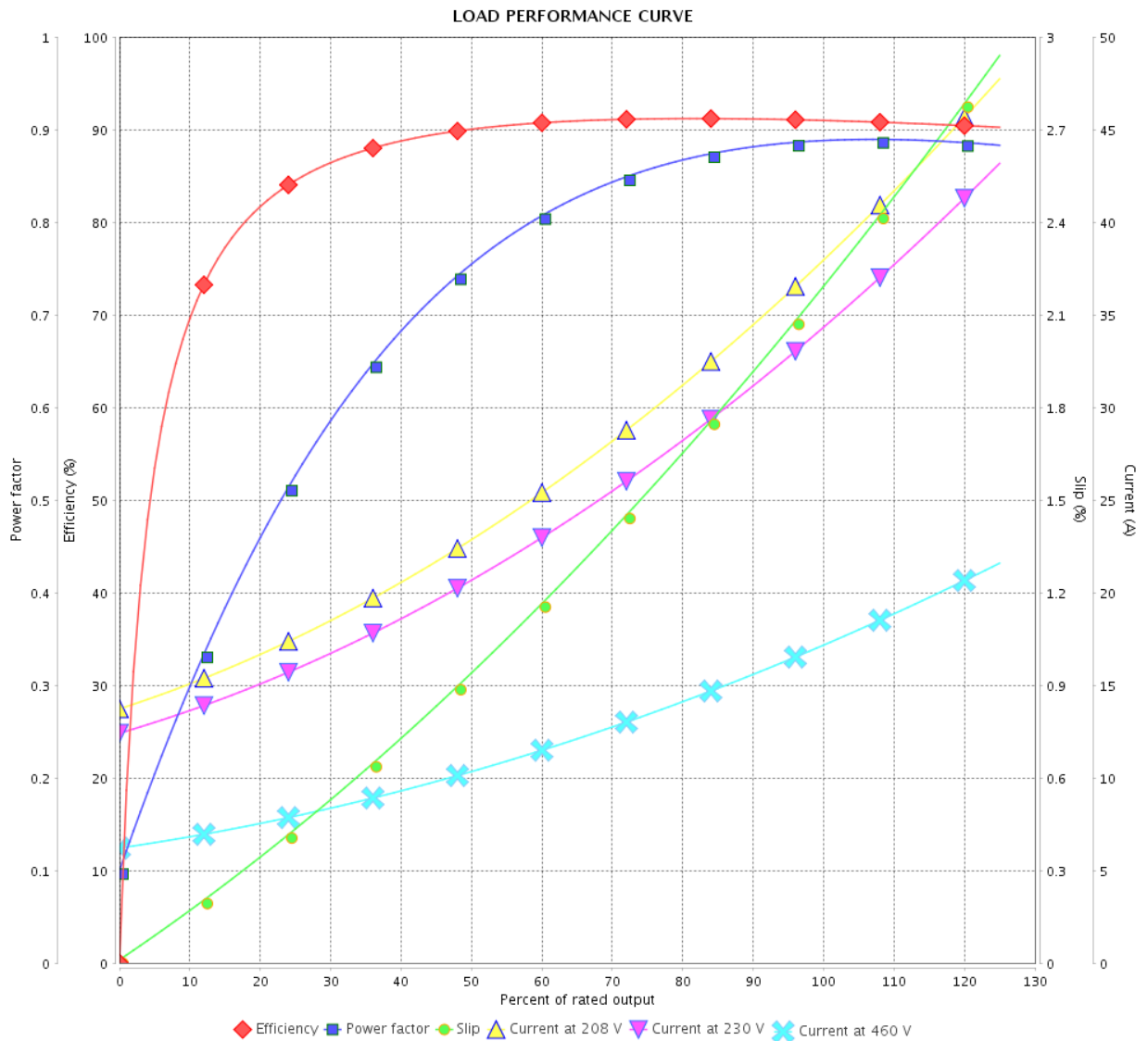


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Performance : 230/460 V 60 Hz 2P

Rated current : 34.0/17.0 A
 LRC : 8.2
 Rated torque : 22.4 ft.lb
 Locked rotor torque : 280 %
 Breakdown torque : 330 %
 Rated speed : 3520 rpm

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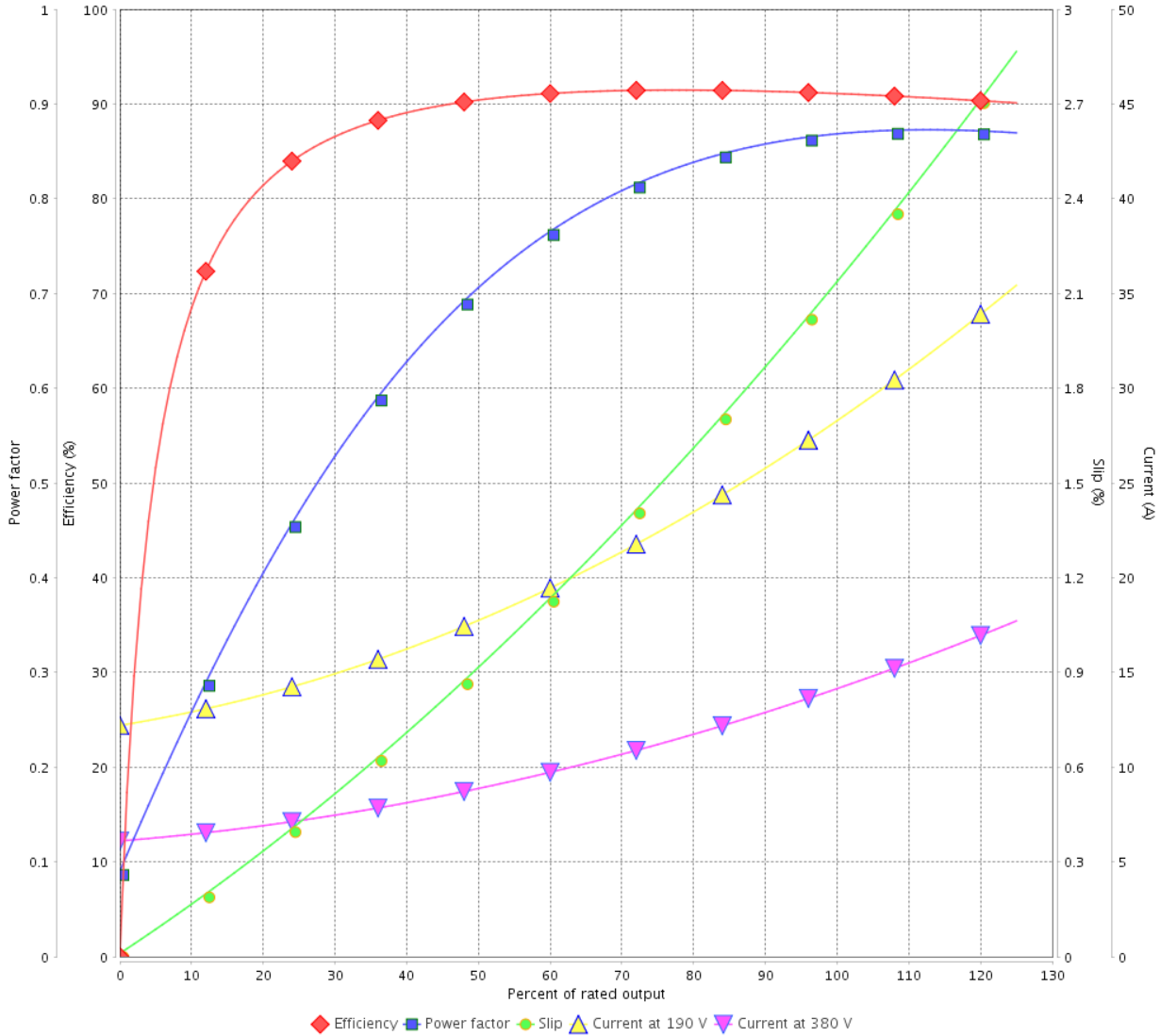
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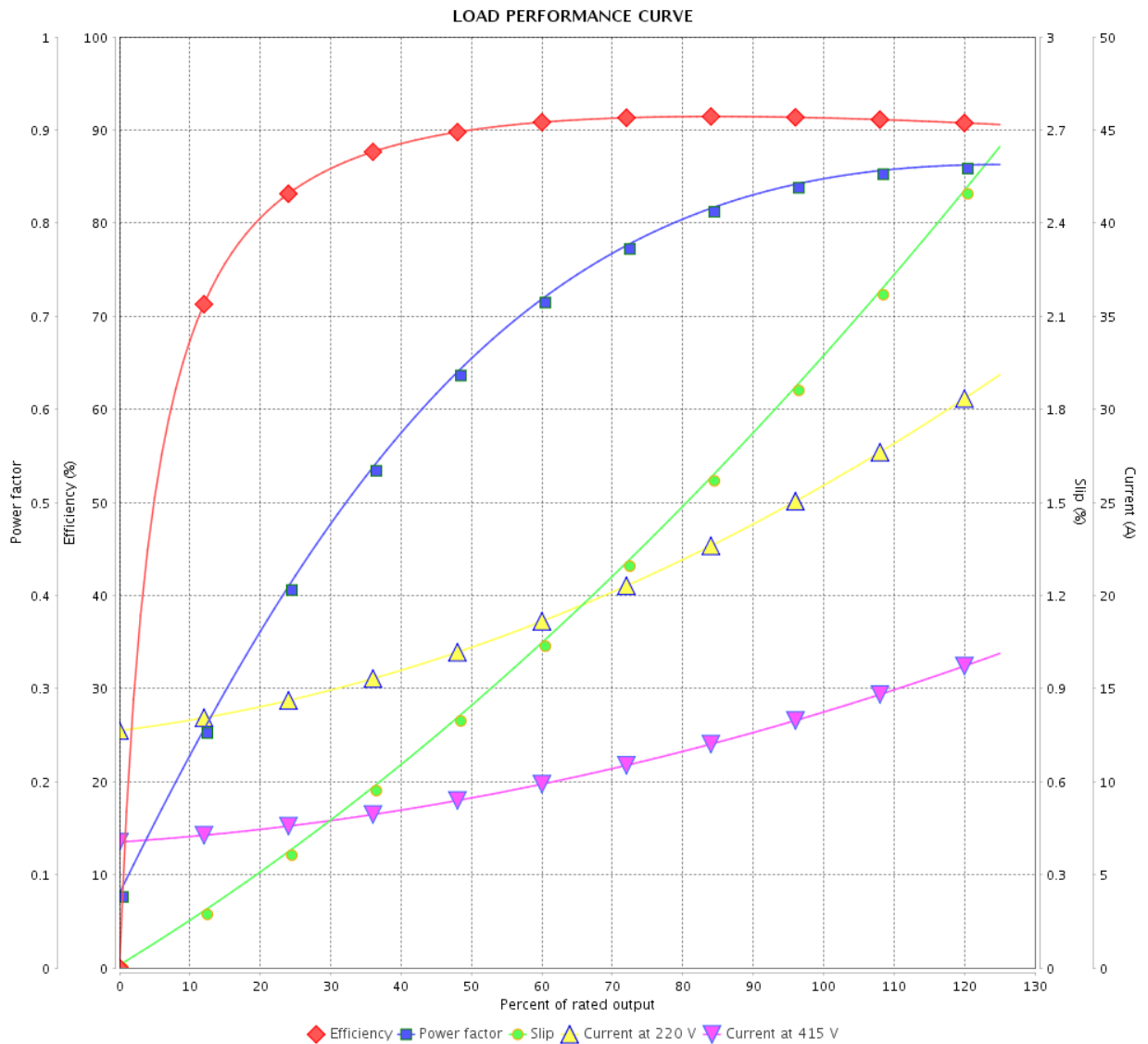


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THERMAL LIMIT CURVE



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Design : A

Heating constant

Cooling constant

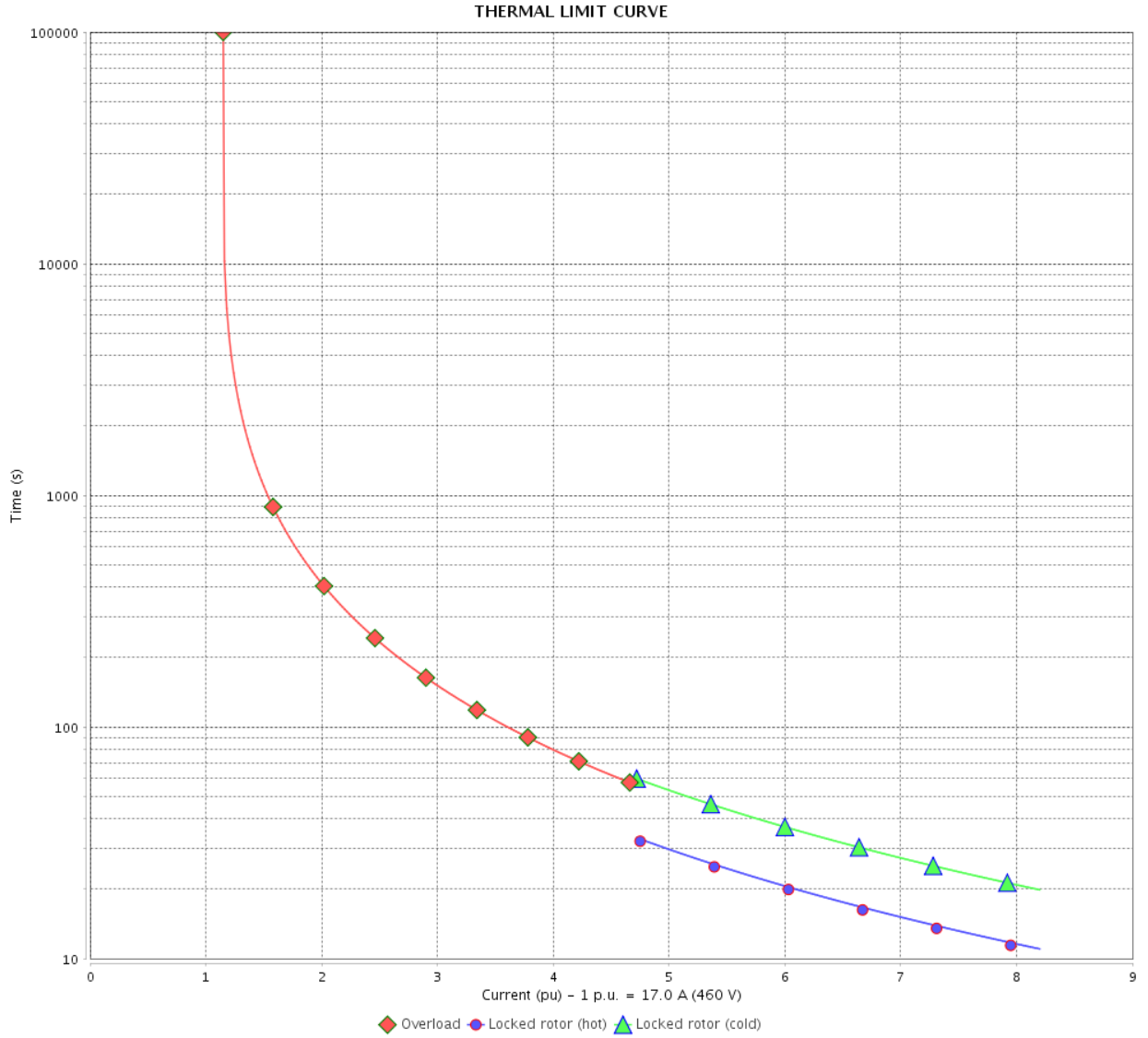
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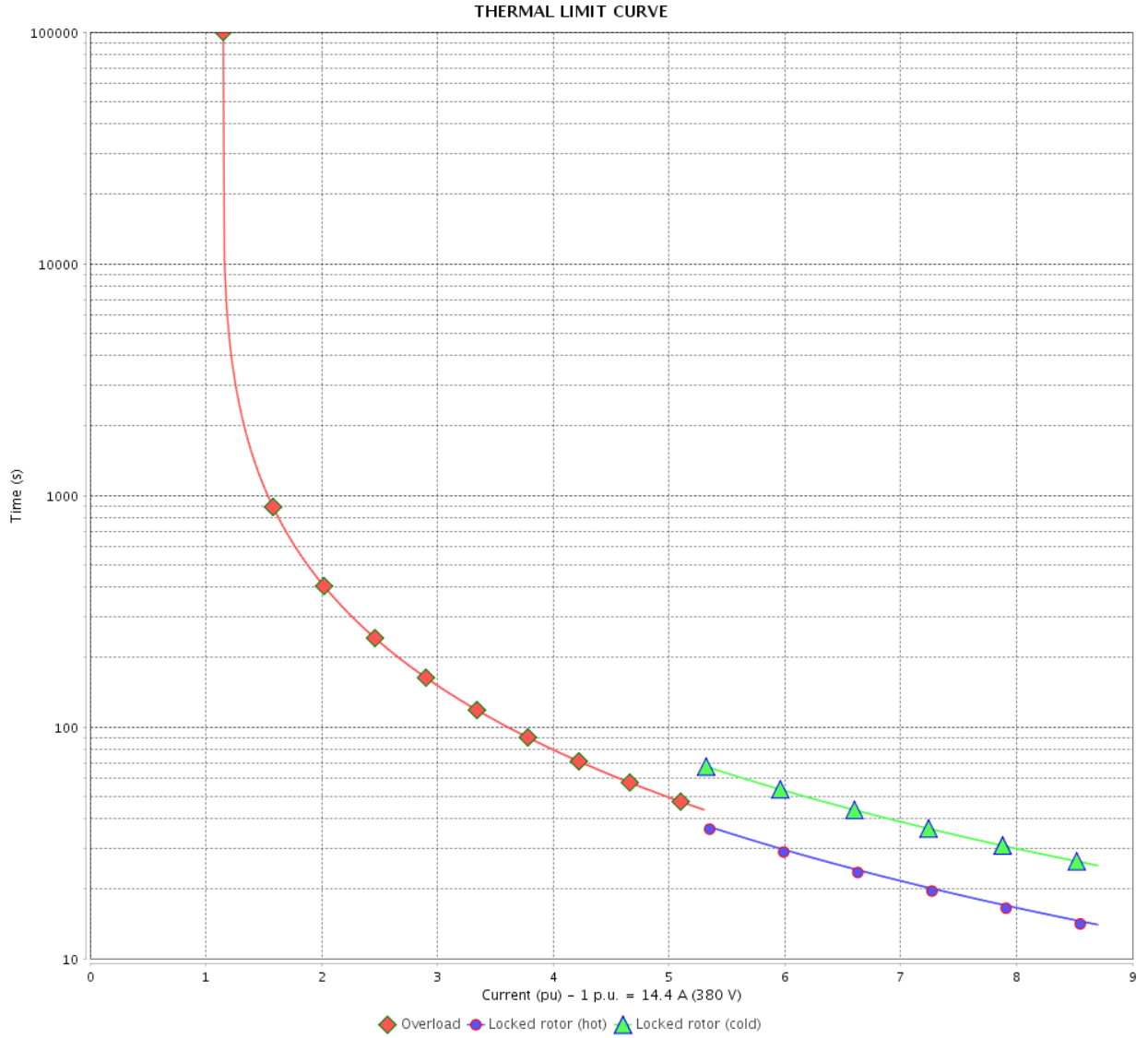
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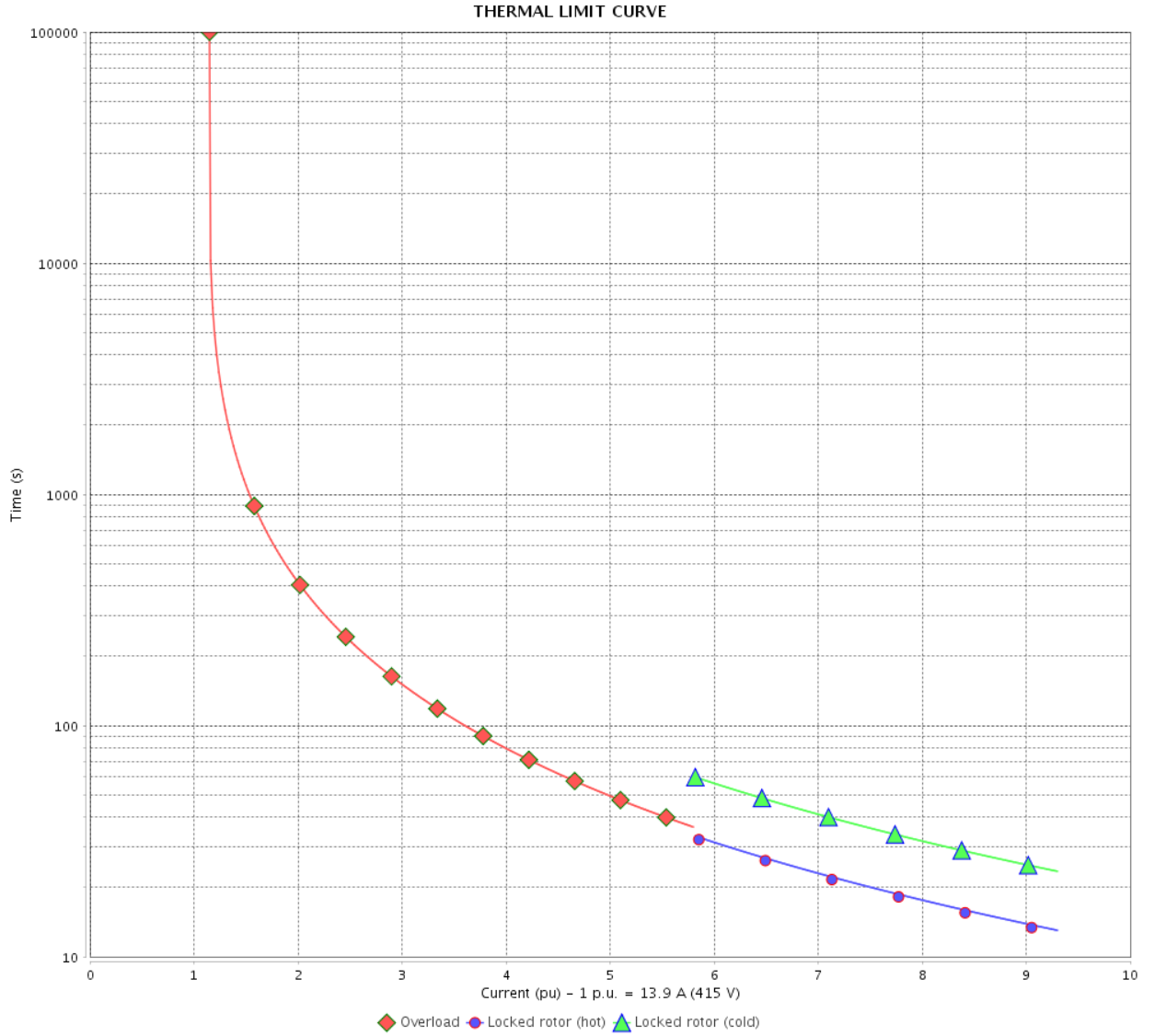
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VFD OPERATION CURVE

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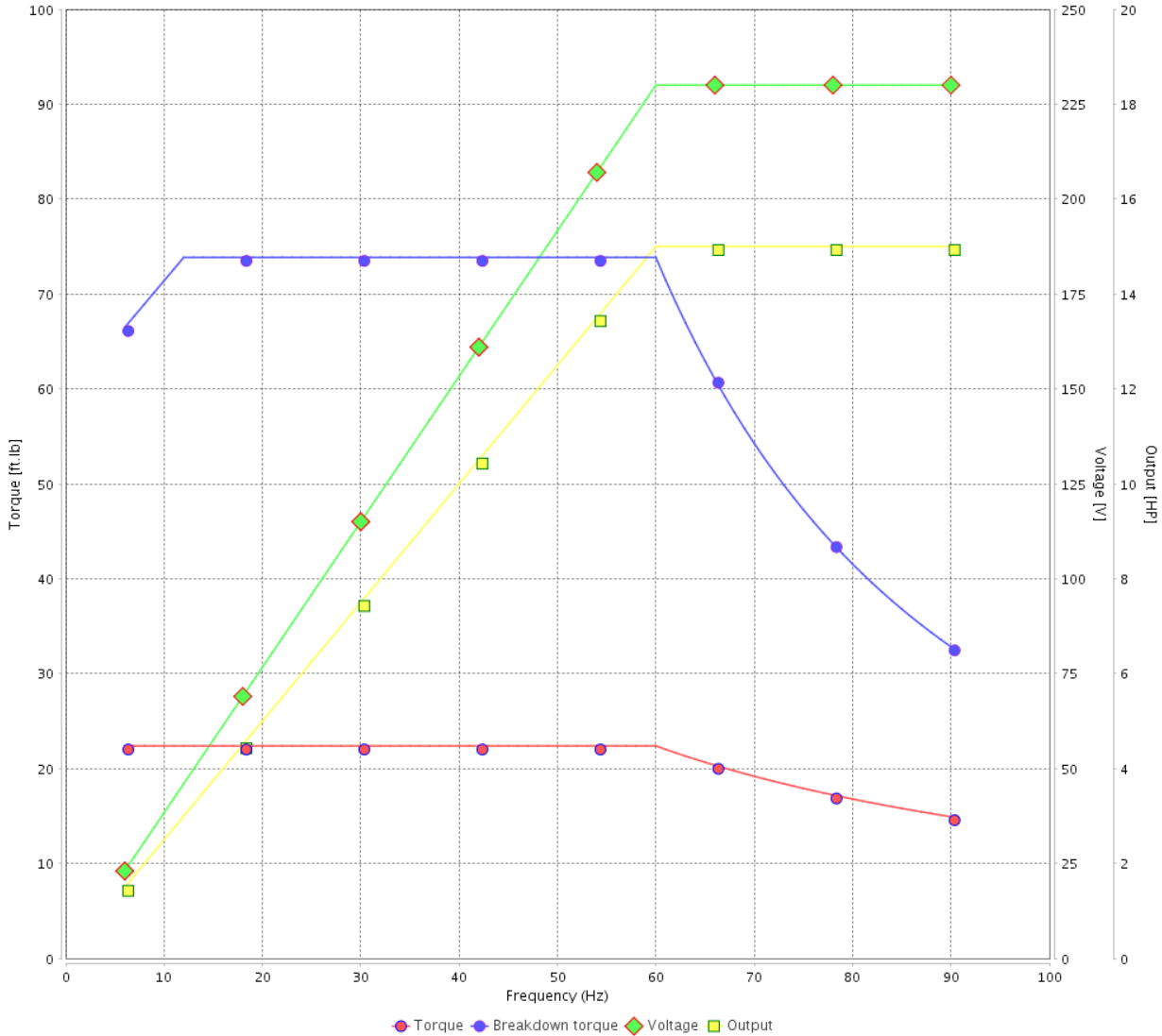
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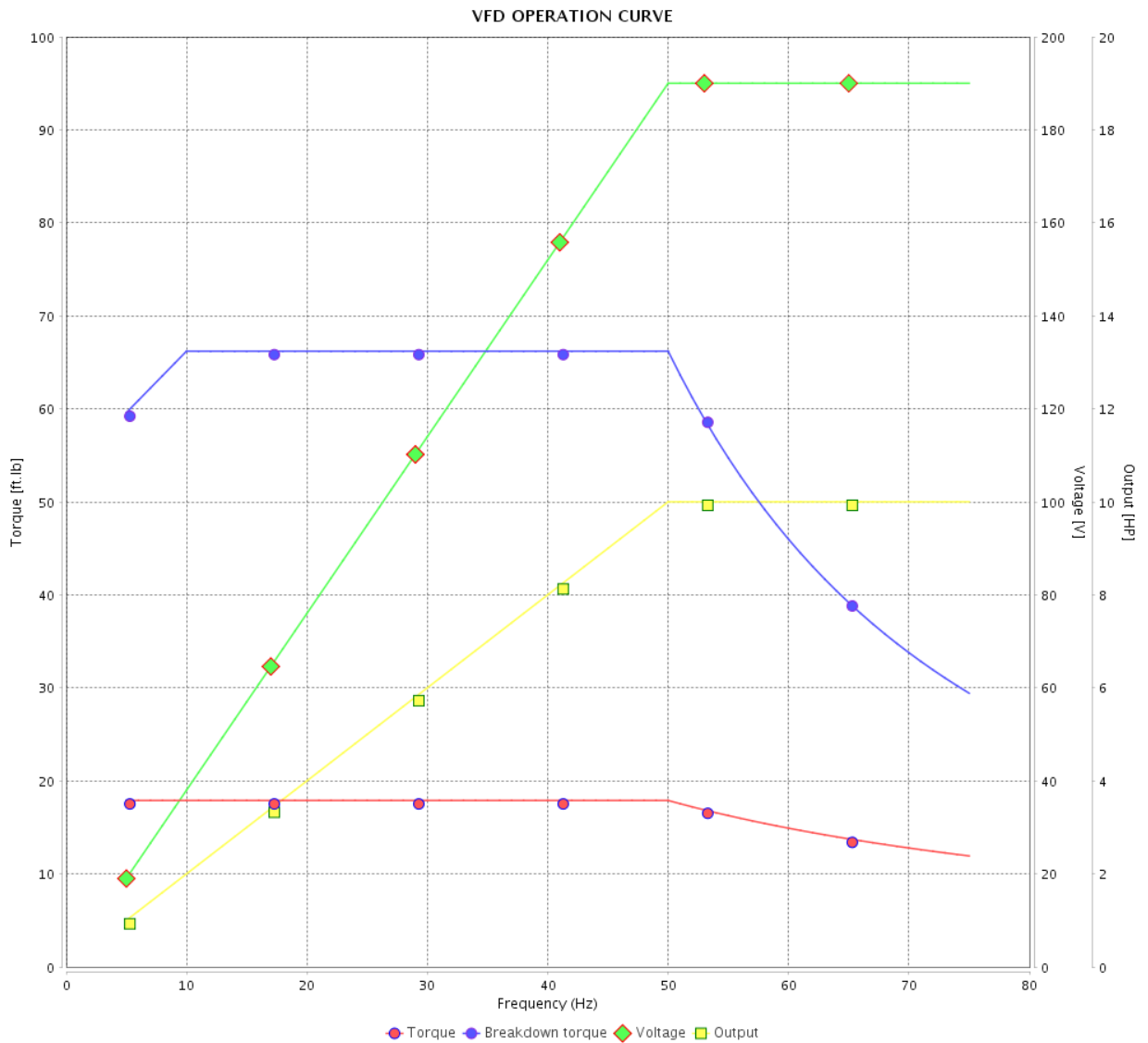


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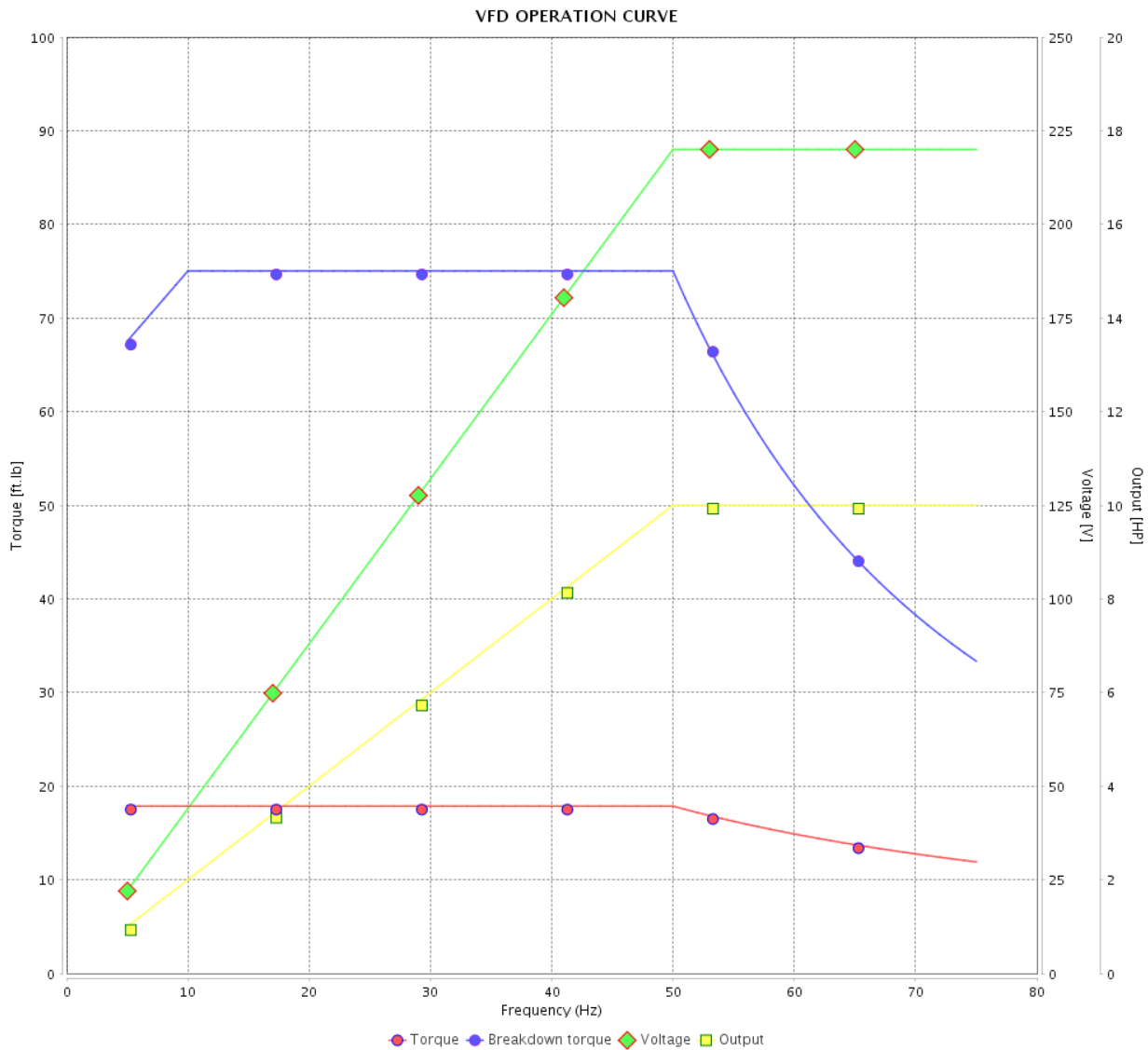


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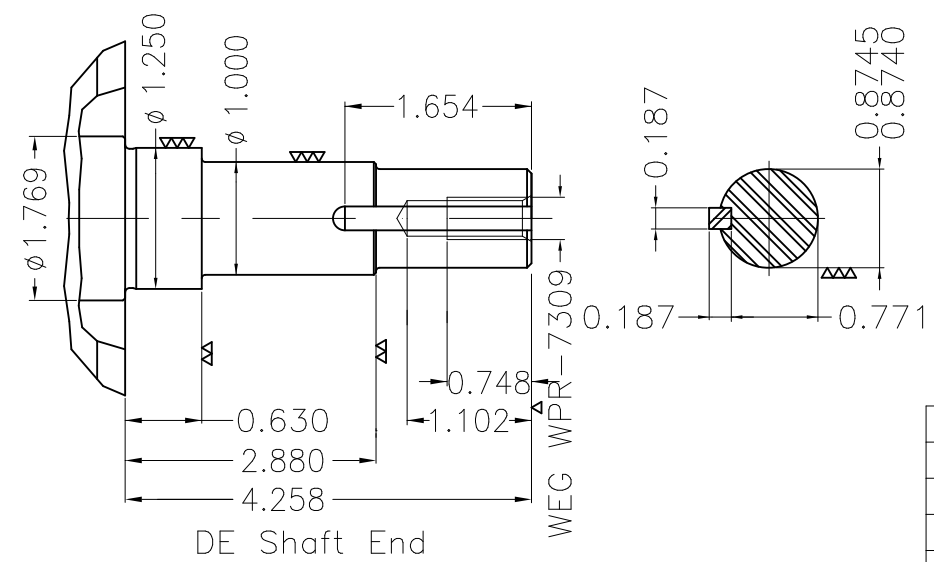
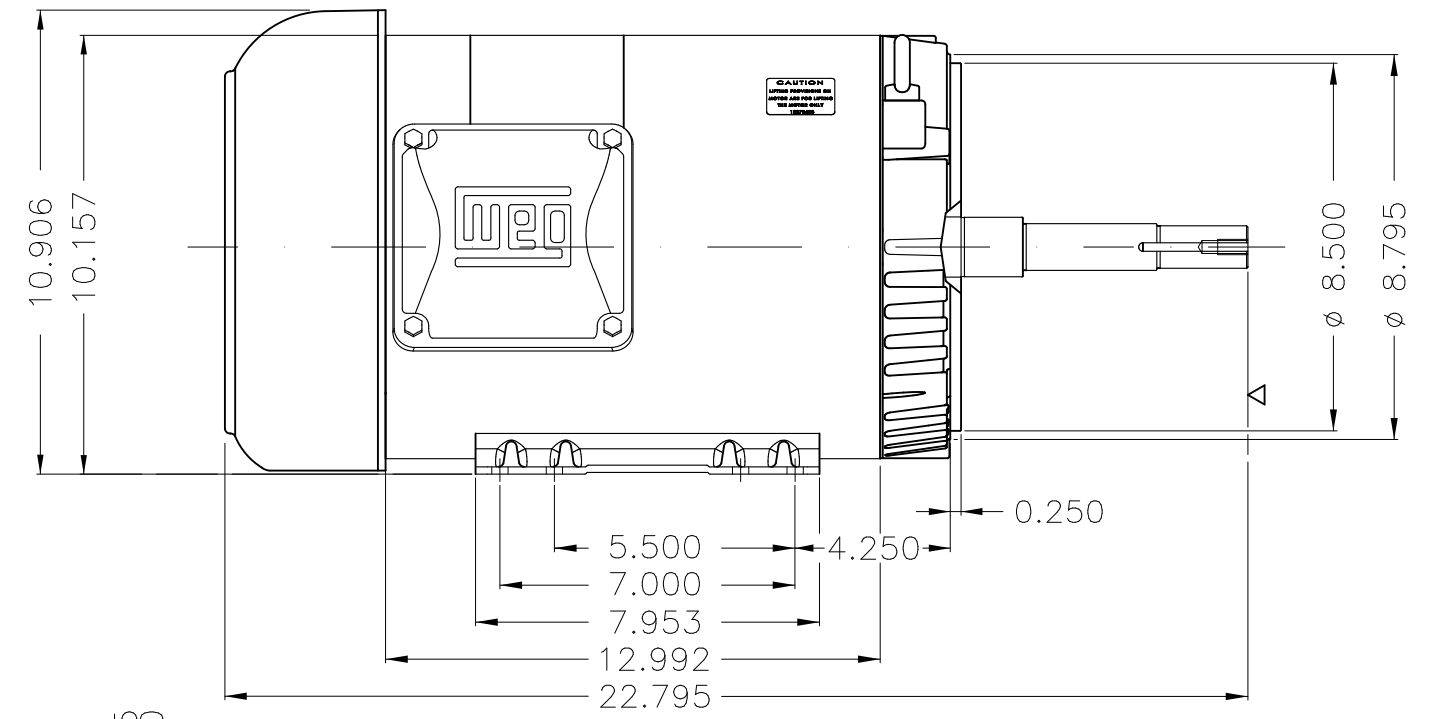
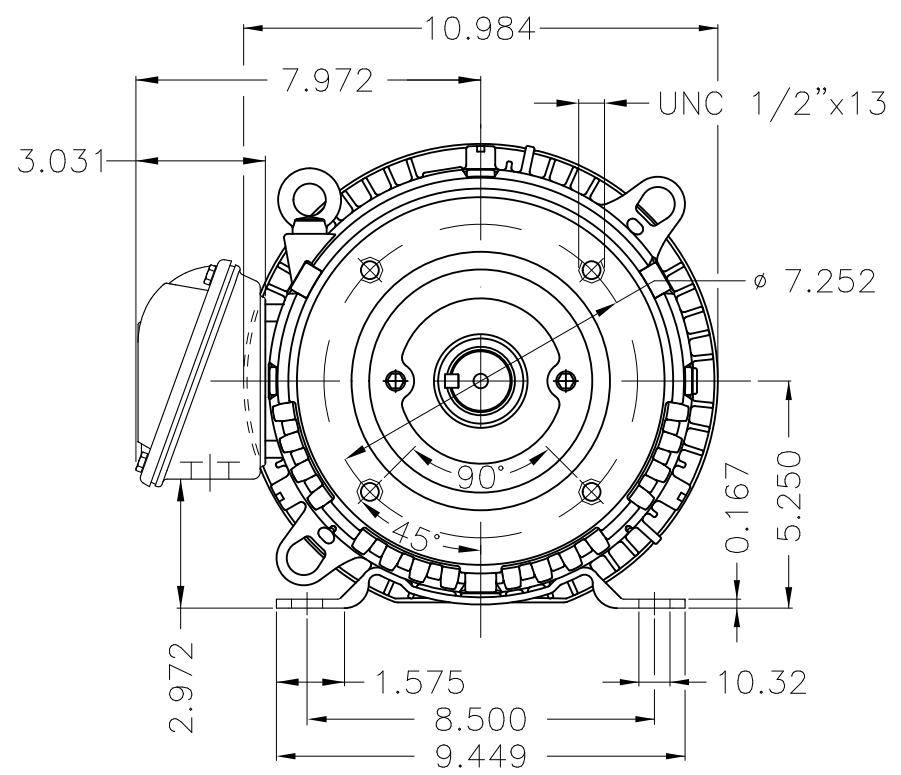
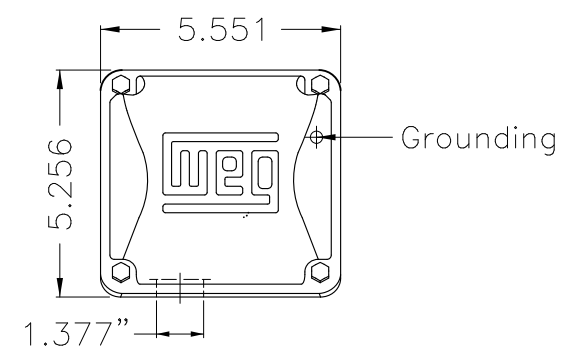
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1 2 3 4 5 6

A
B
C
D
E



EUNC 3/8" - 16 WEG WPR-7309

DE Shaft End

Design A
 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			

15 HP 02 Poles 60 Hz





NEMA
Premium



3PT9



MADE IN MEXICO

MAT: 13224056 CC029A

W01.TE0IC0X0N

MODEL 01536ET3E215JM-SG

21APR2022 S/N:



PH 3	Hz 60	HP 15
FR 213/5JM		KW 11
DUTY CONT.		V 230/460
ALT 1000 m.a.s.l.		A 34.0/17.0
INS CL F AT 80K	IP55	SFA 39.1/19.5
AMB 40°C	DES A	SF 1.15
ENCL TEFC	CODE J	PF 0.89
USABLE @ 208V 37.6A		RPM 3520
SF1.00		NEMA NOM. EFF 91.0%

ALTERNATE RATING: 10HP 50Hz 190-220/380-415V SF1.15
 28.8-28.2/14.4-13.9A 2935RPM EFF 91.1% (IE3) 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



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.

