

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer	:		
Product line	: Premium Efficiency Three-Phase	Product code :	14799268
		Catalog # :	00236ET3E56-S
Frame	: 56H	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 ³	: 39.9 lb
Protection degree	: IP55	Moment of inertia (J)	: 0.1279 sq.ft.lb
Design	: B		
Output [HP]	2	2	2
Poles	2	2	2
Frequency [Hz]	60	50	50
Rated voltage [V]	230/460	190/380	220/415
Rated current [A]	4.94/2.47	5.94/2.97	5.39/2.86
L. R. Amperes [A]	48.9/24.5	44.0/22.0	44.2/23.5
LRC [A]	9.9x(Code L)	7.4x(Code J)	8.2x(Code K)
No load current [A]	2.13/1.06	2.10/1.05	2.14/1.13
Rated speed [RPM]	3520	2875	2890
Slip [%]	2.22	4.17	3.67
Rated torque [ft.lb]	2.98	3.65	3.63
Locked rotor torque [%]	250	229	260
Breakdown torque [%]	300	280	310
Service factor		1.15	1.15
Temperature rise	80 K	80 K	80 K
Locked rotor time	23s (cold) 13s (hot)	21s (cold) 12s (hot)	19s (cold) 11s (hot)
Noise level ²	68.0 dB(A)	65.0 dB(A)	65.0 dB(A)
Efficiency (%)	25%	82.1	84.0
	50%	82.5	83.7
	75%	85.5	84.9
	100%	85.5	84.1
Power Factor	25%	0.45	0.48
	50%	0.73	0.76
	75%	0.83	0.86
	100%	0.89	0.90
Bearing type	: <u>Drive end</u> 6204 ZZ	<u>Non drive end</u> 6202 ZZ	Foundation loads
Sealing	: V'Ring	Without Bearing Seal	Max. traction : 90 lb
			Max. compression : 130 lb
Lubrication interval	: -	-	
Lubricant amount	: -	-	
Lubricant type	: Mobil Polyrex EM		
Notes			
USABLE @208V 5.46A SF 1.00 SFA 5.46A			
This revision replaces and cancel the previous one, which must be eliminated.		These are average values based on tests with sinusoidal power supply, subject to the tolerances stipulated in NEMA MG-1.	
(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.			
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Performed by			
Checked by			
Date	13/04/2022		
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TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



Customer :

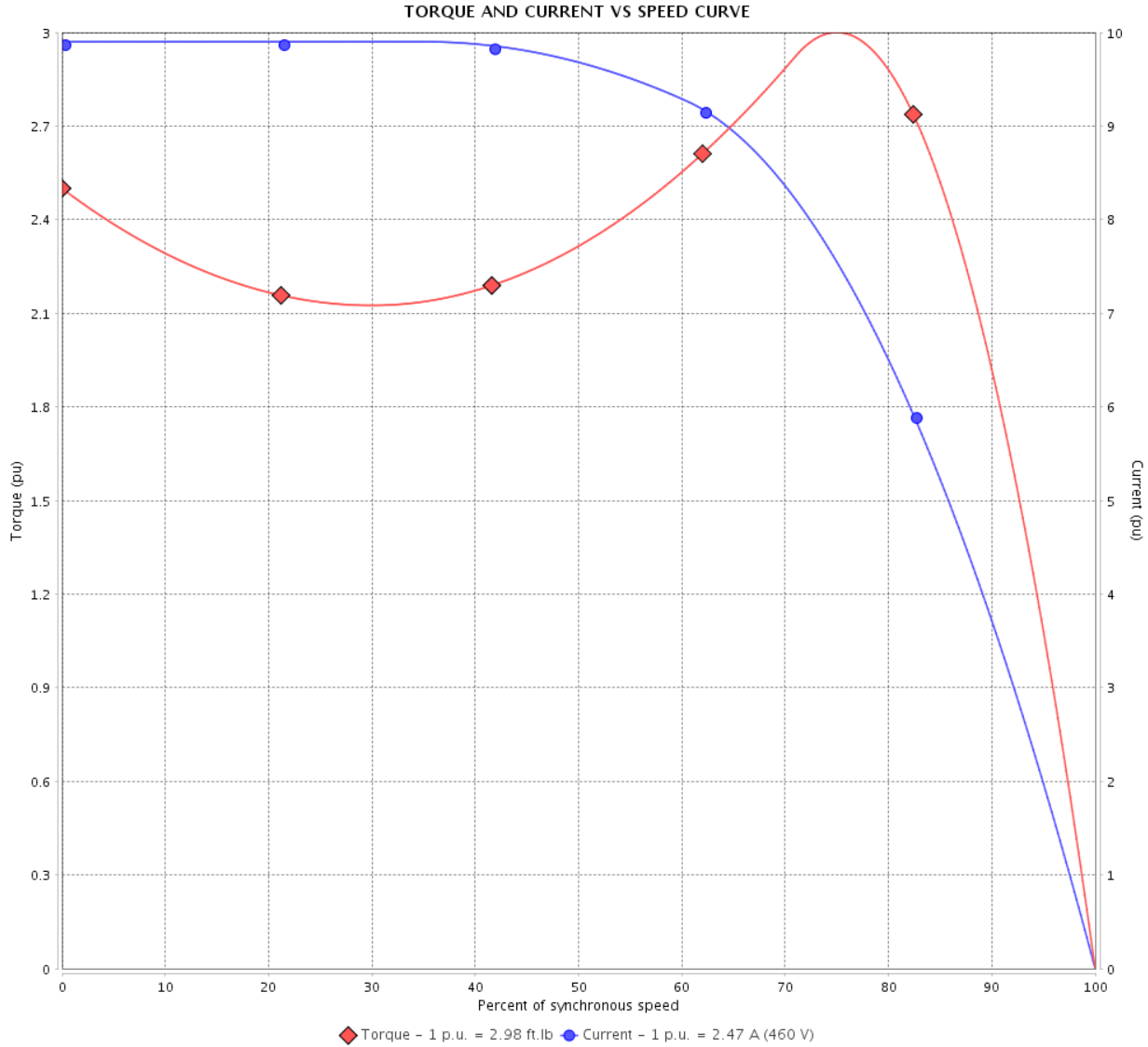
Product line : Premium Efficiency Three-Phase

Product code :

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Catalog # :

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Performance : 230/460 V 60 Hz 2P

Rated current : 4.94/2.47 A
 LRC : 9.9
 Rated torque : 2.98 ft.lb
 Locked rotor torque : 250 %
 Breakdown torque : 300 %
 Rated speed : 3520 rpm

Moment of inertia (J) : 0.1279 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor :
 Temperature rise : 80 K
 Design : B

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

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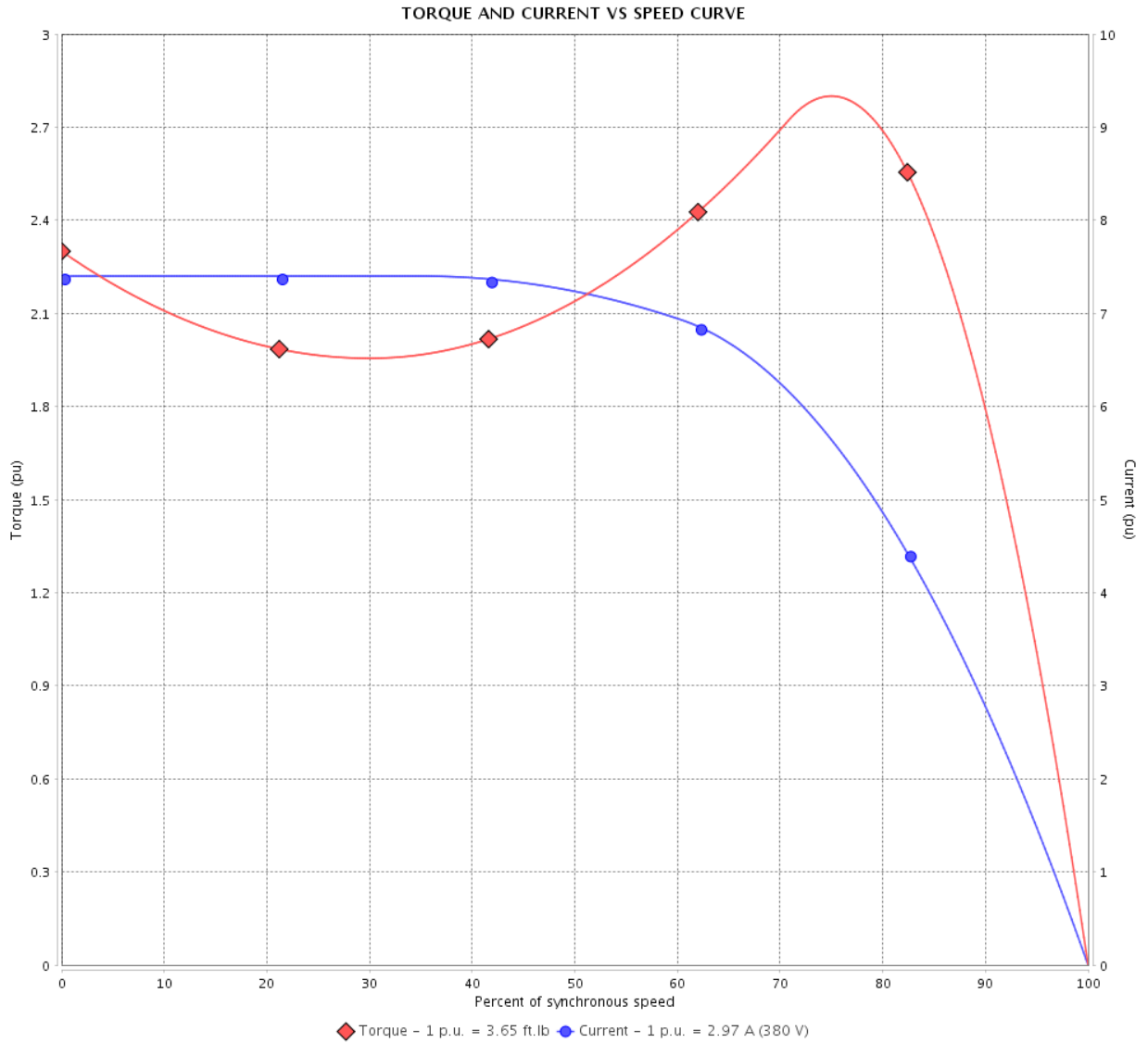
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Performance : 190/380 V 50 Hz 2P

Rated current : 5.94/2.97 A
 LRC : 7.4
 Rated torque : 3.65 ft.lb
 Locked rotor torque : 229 %
 Breakdown torque : 280 %
 Rated speed : 2875 rpm

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 Temperature rise : 80 K
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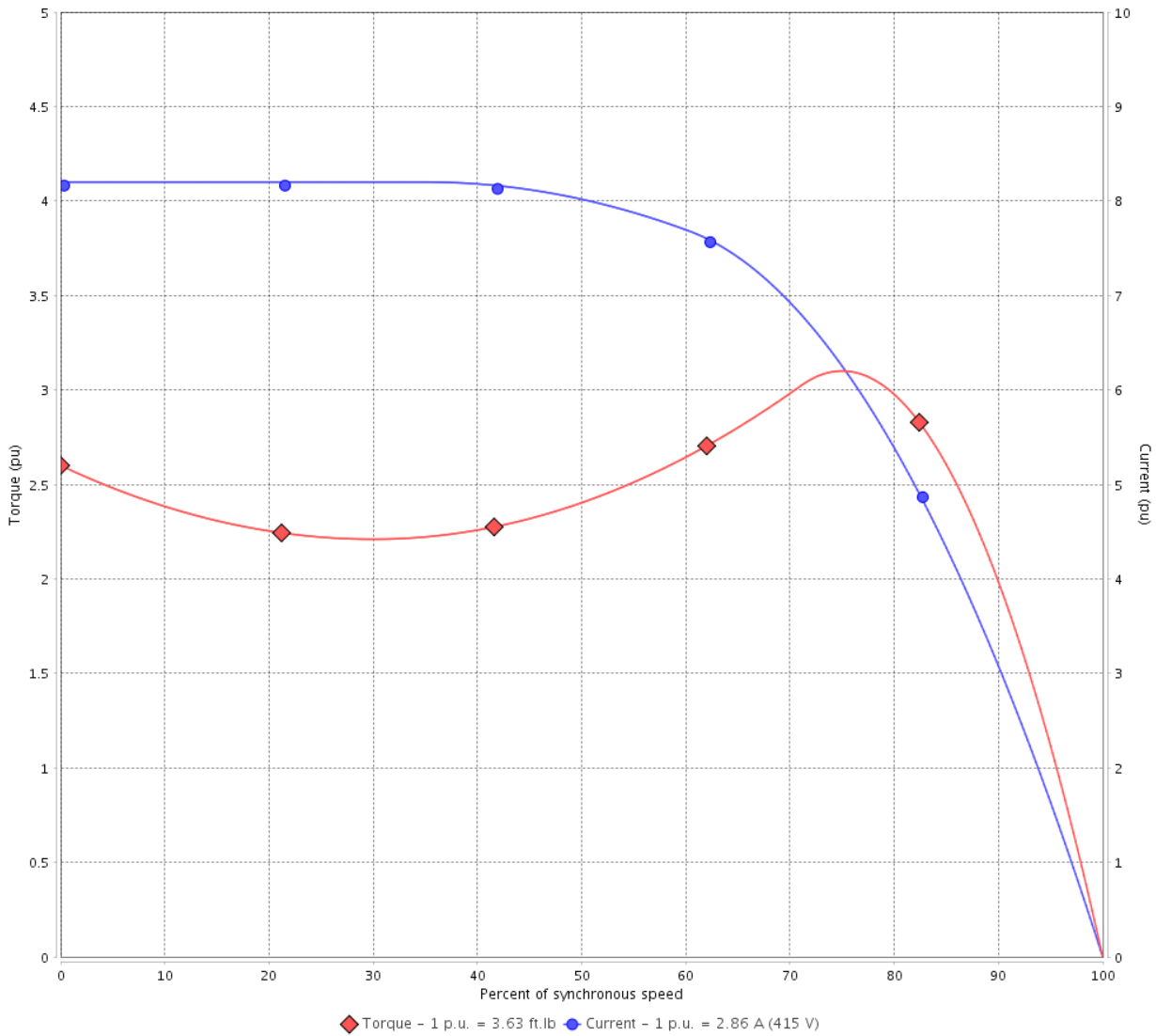
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TORQUE AND CURRENT VS SPEED CURVE



Performance : 220/415 V 50 Hz 2P

Rated current : 5.39/2.86 A
 LRC : 8.2
 Rated torque : 3.63 ft.lb
 Locked rotor torque : 260 %
 Breakdown torque : 310 %
 Rated speed : 2890 rpm

Moment of inertia (J) : 0.1279 sq.ft.lb
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 Temperature rise : 80 K
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Locked rotor time : 19s (cold) 11s (hot)

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LOAD PERFORMANCE CURVE

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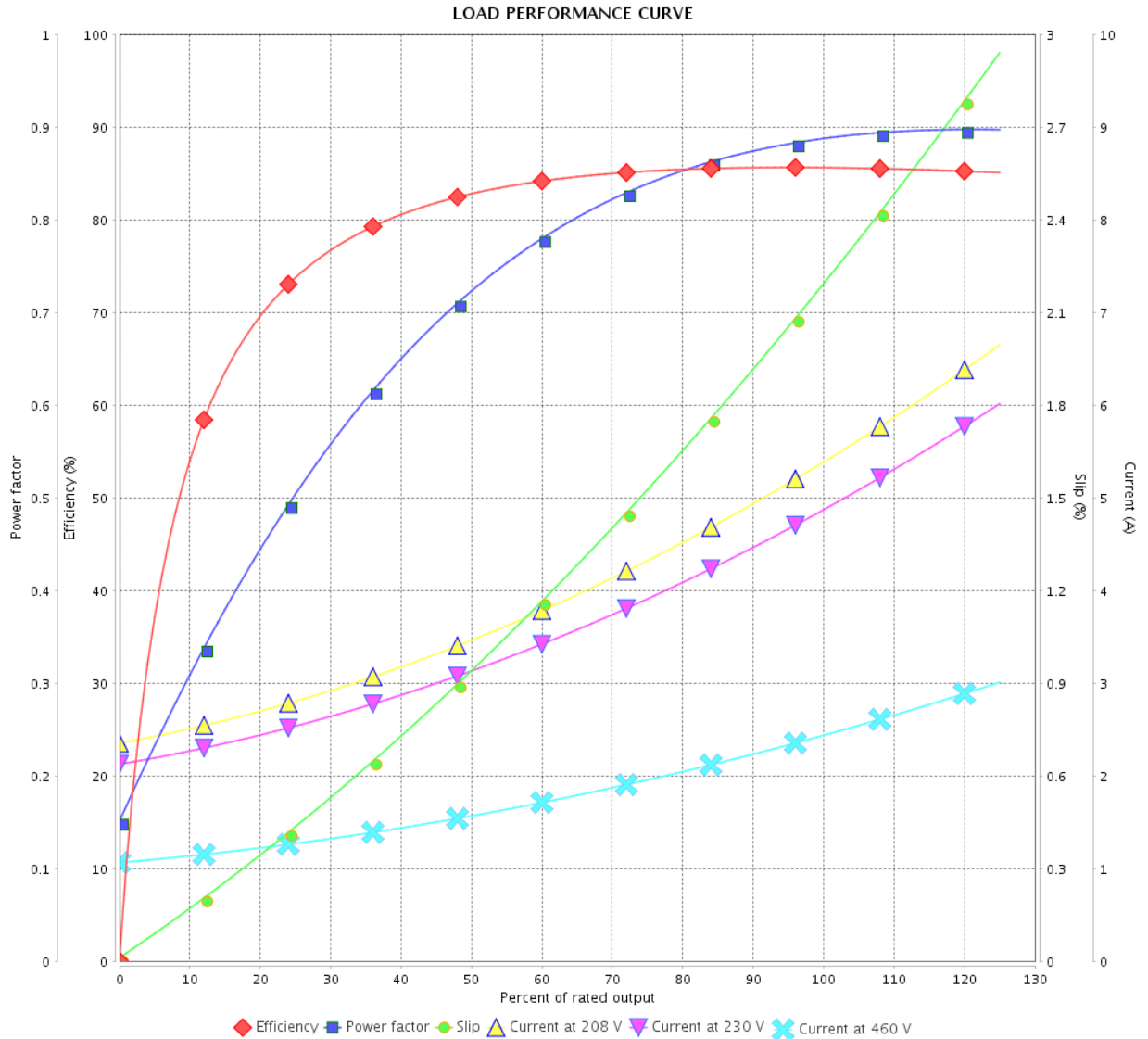
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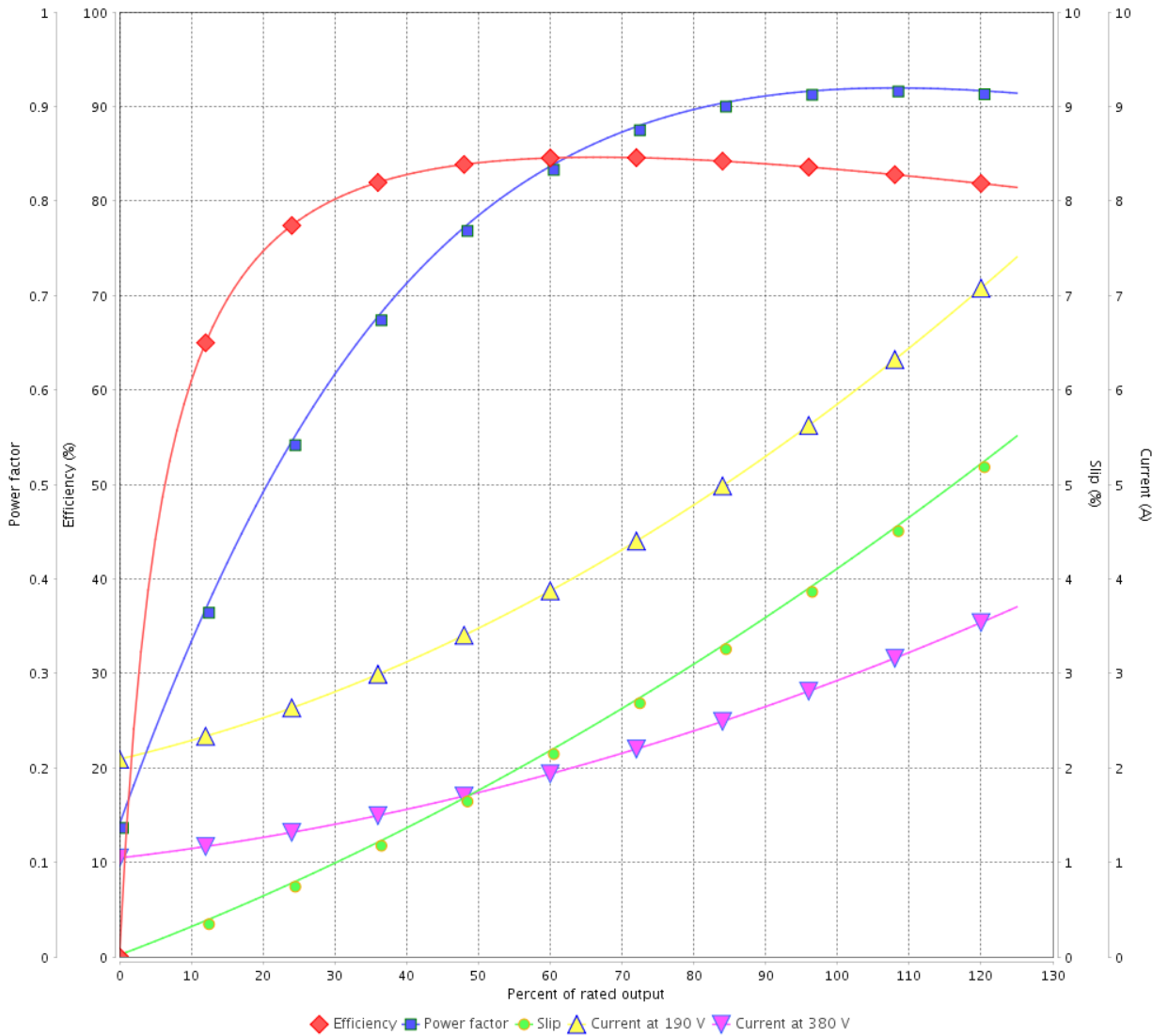
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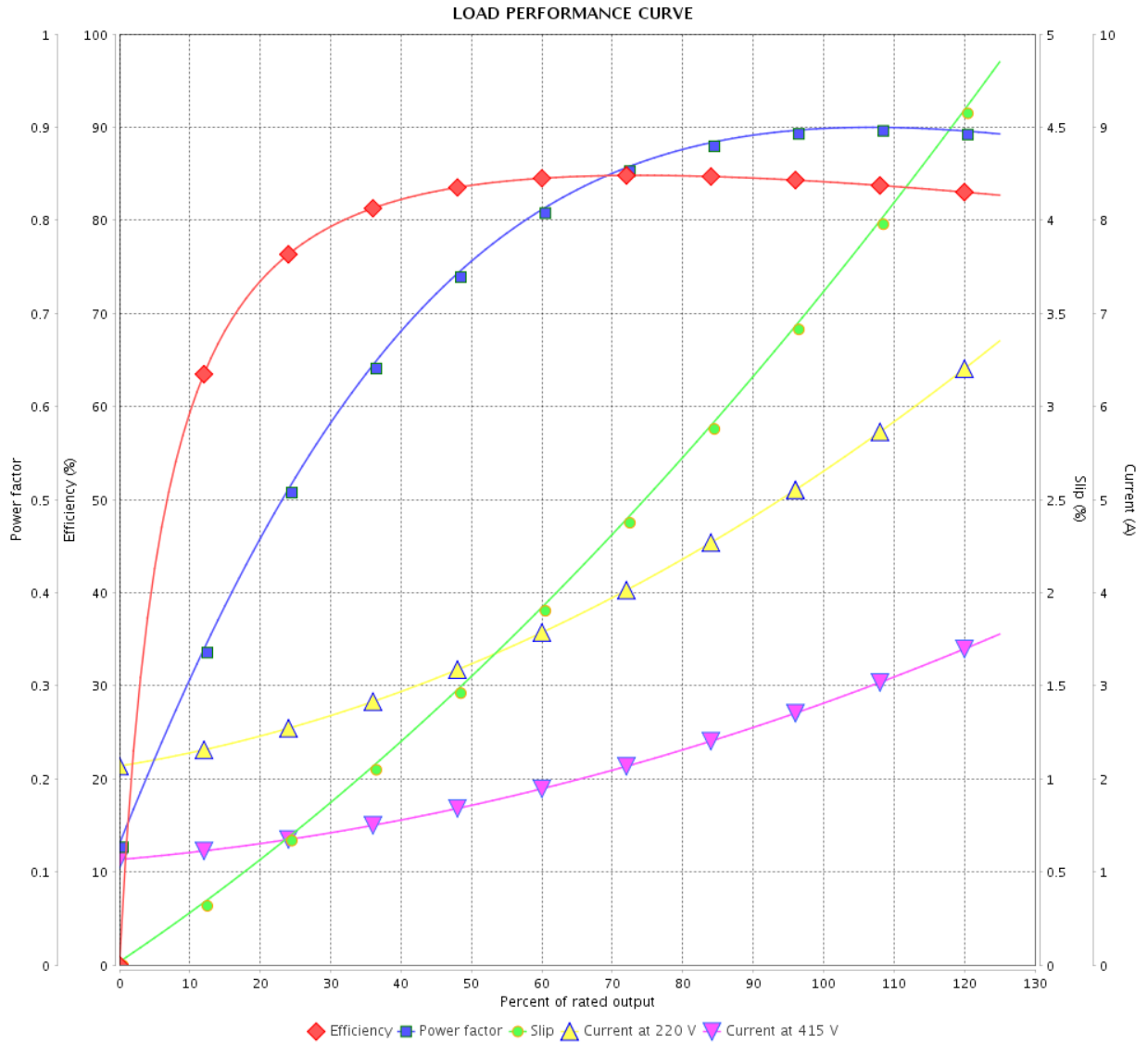
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THERMAL LIMIT CURVE

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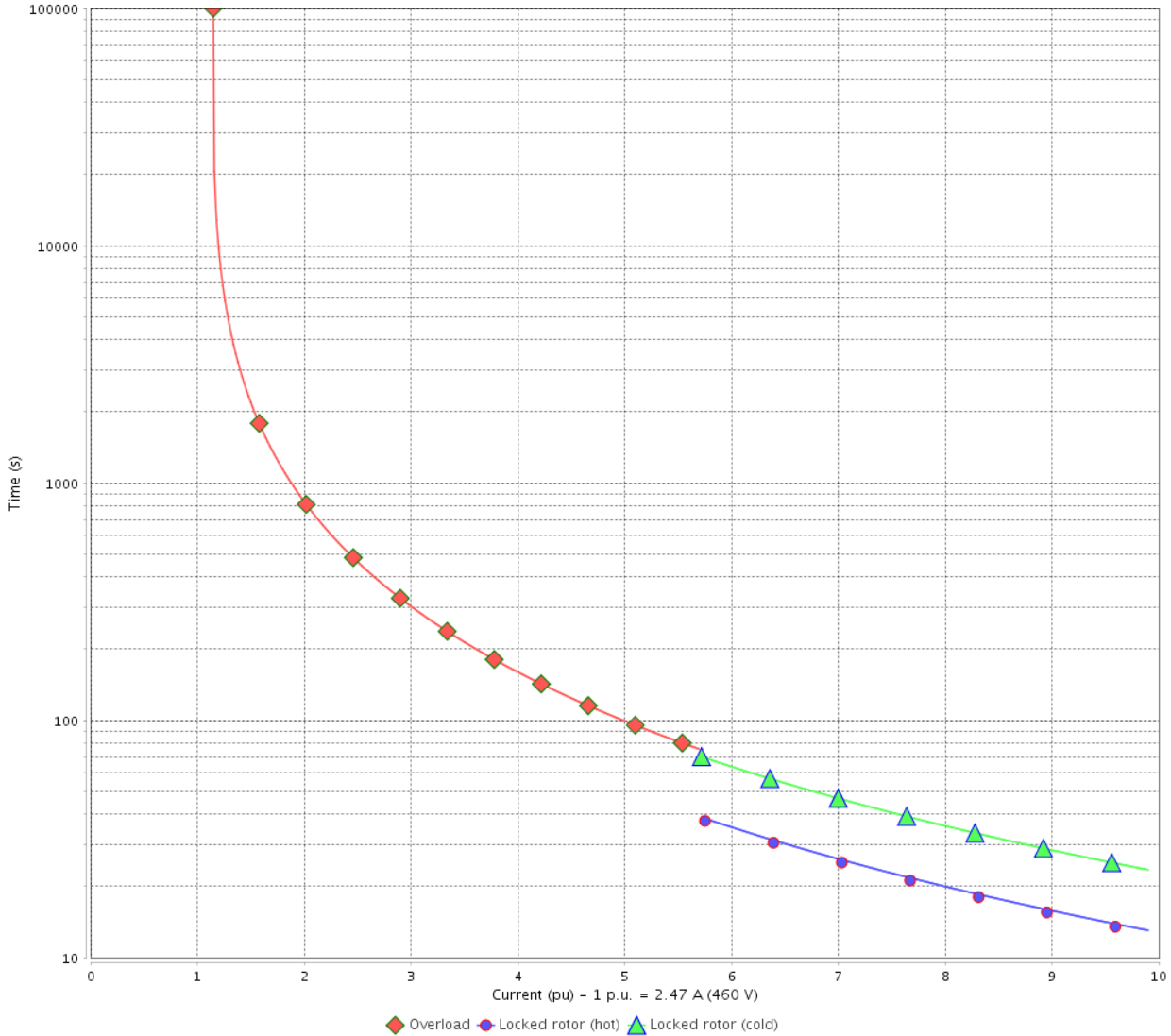
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Heating constant

Cooling constant

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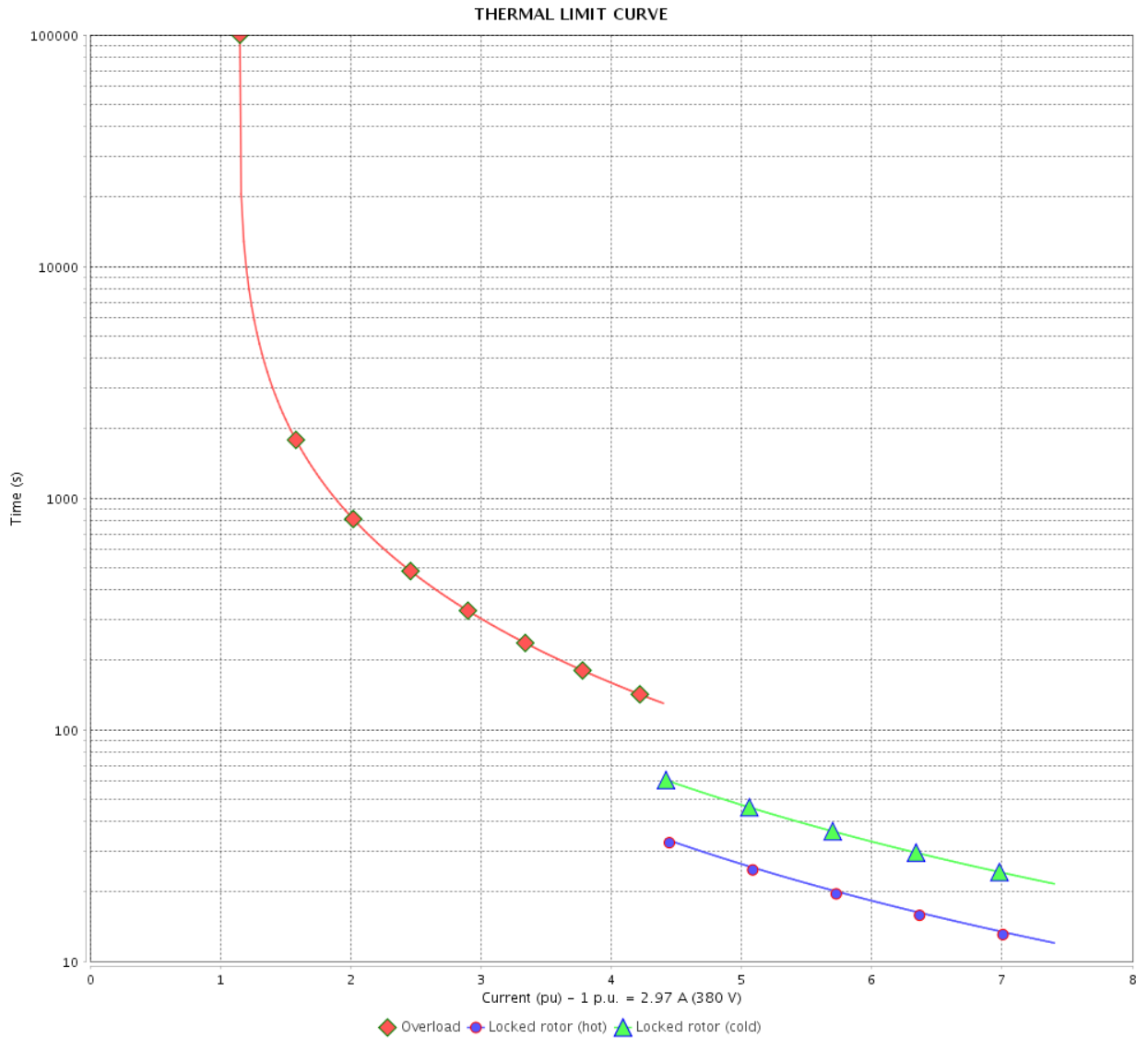
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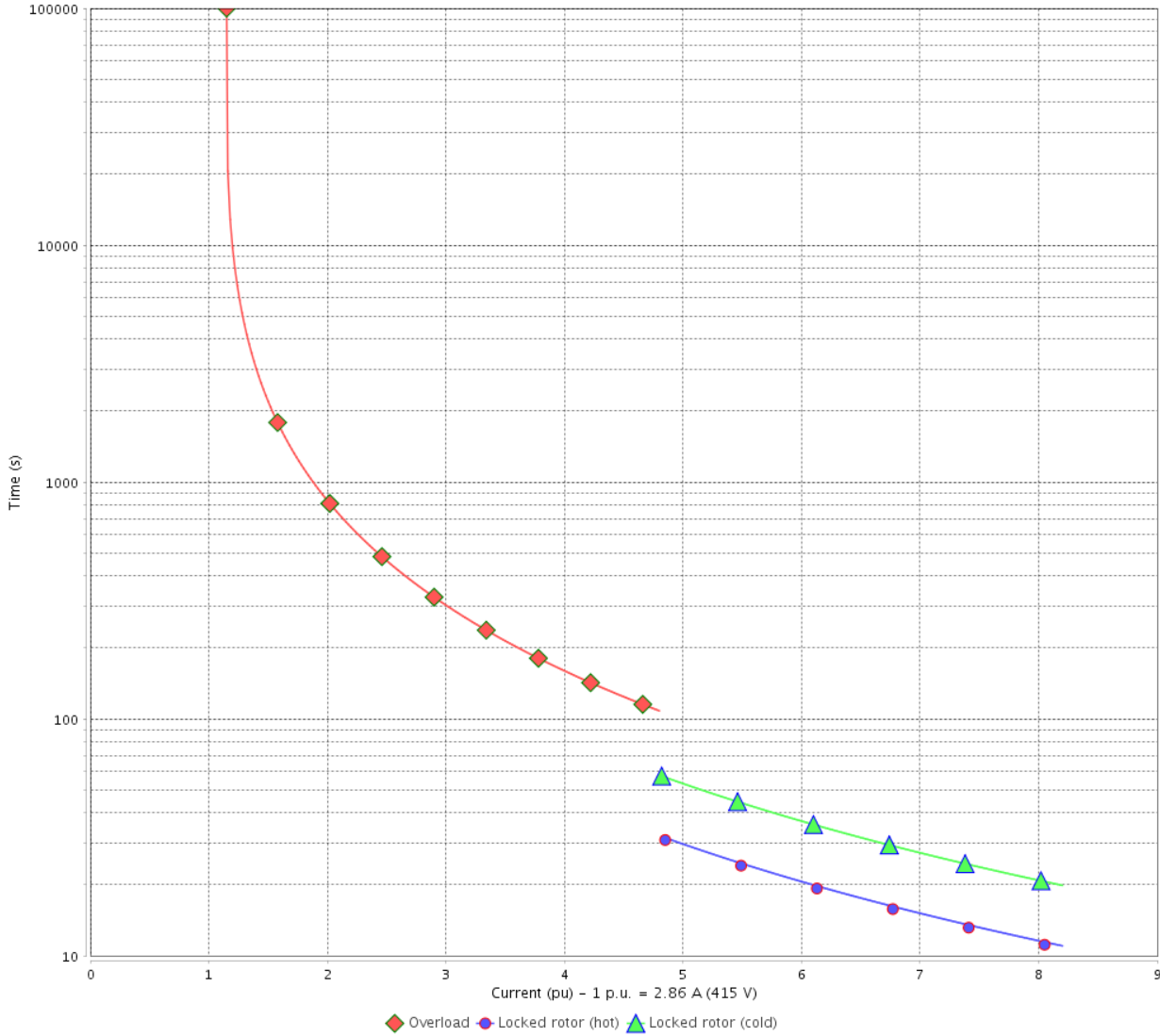
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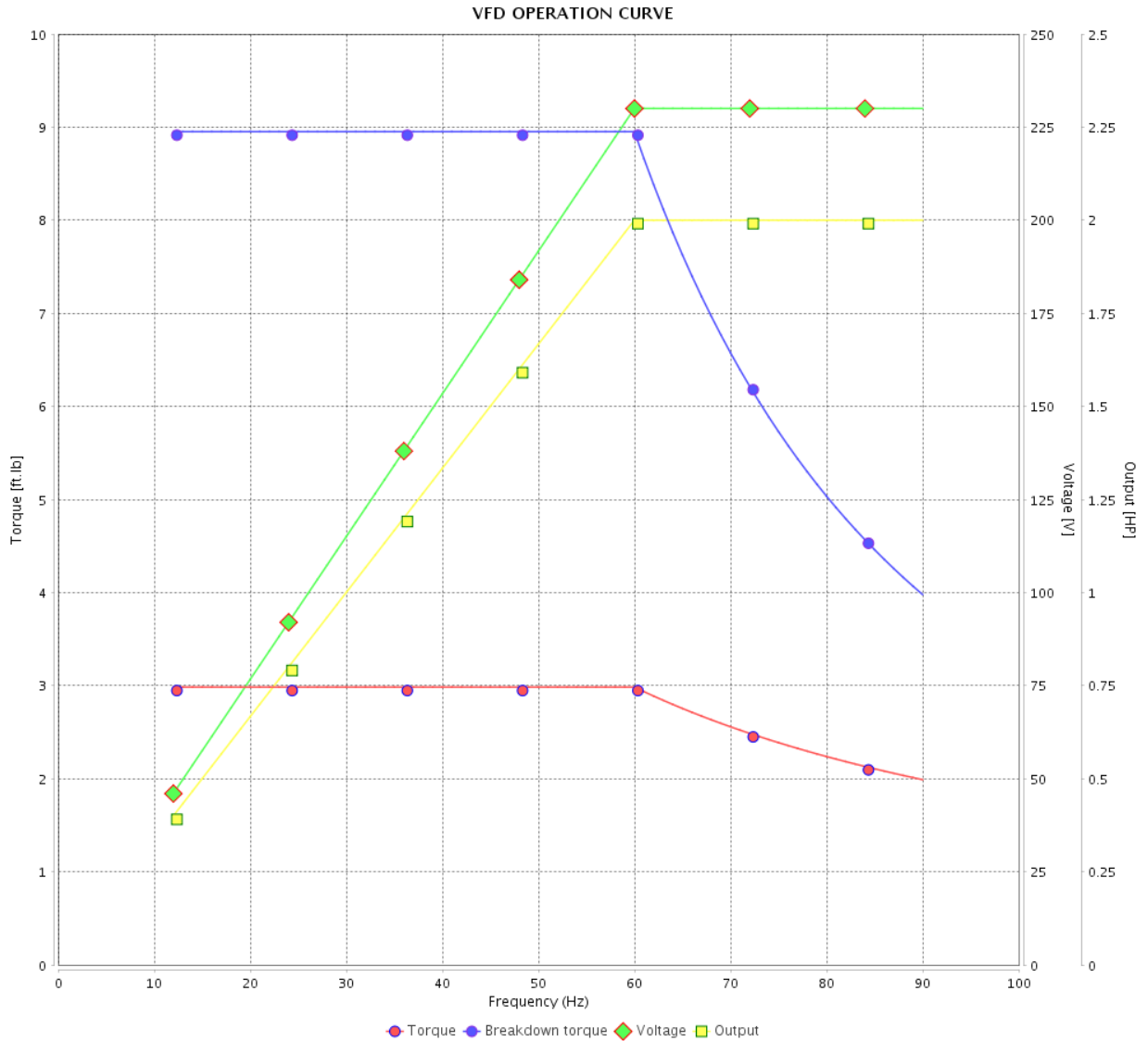
VFD OPERATION CURVE

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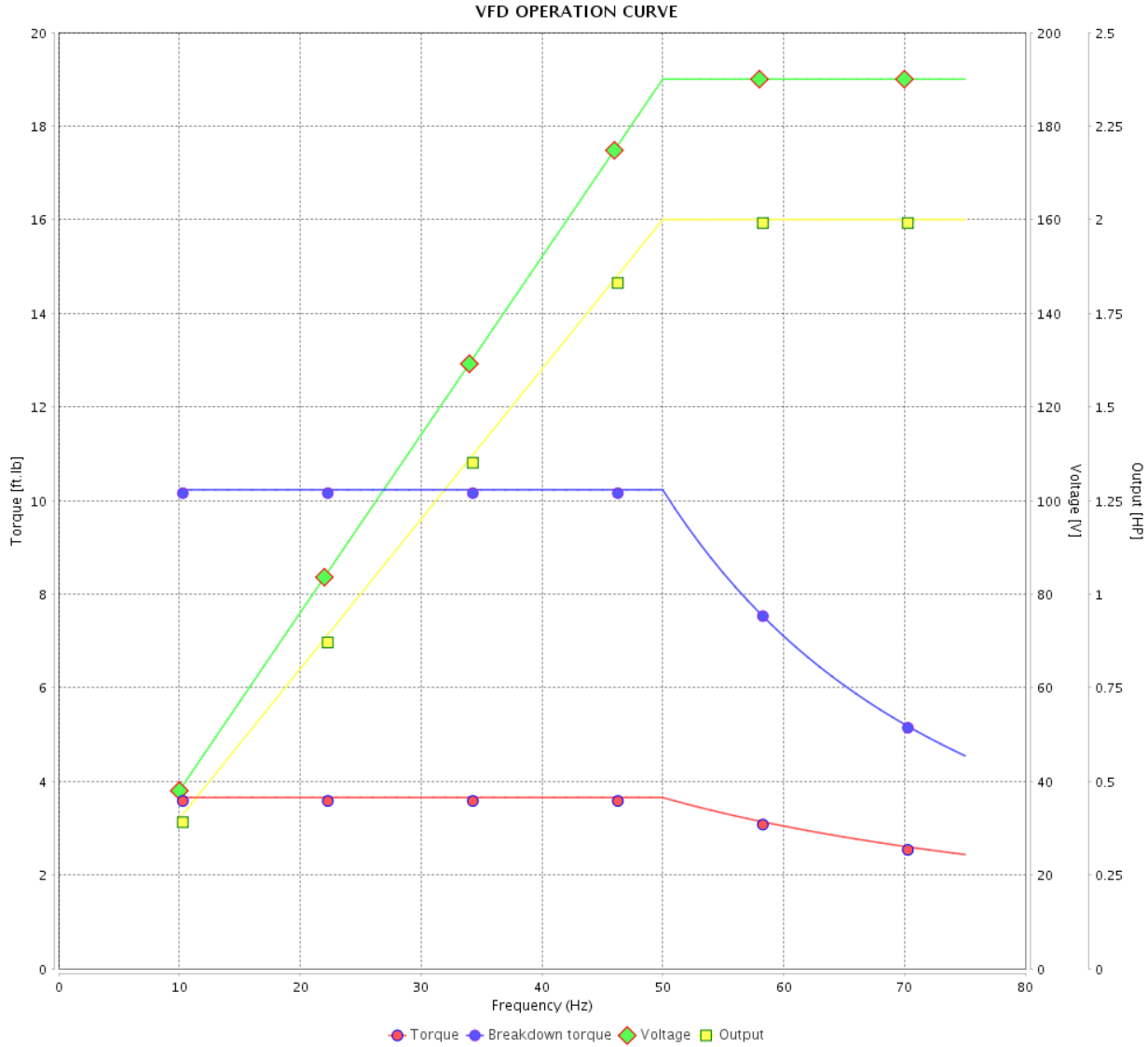
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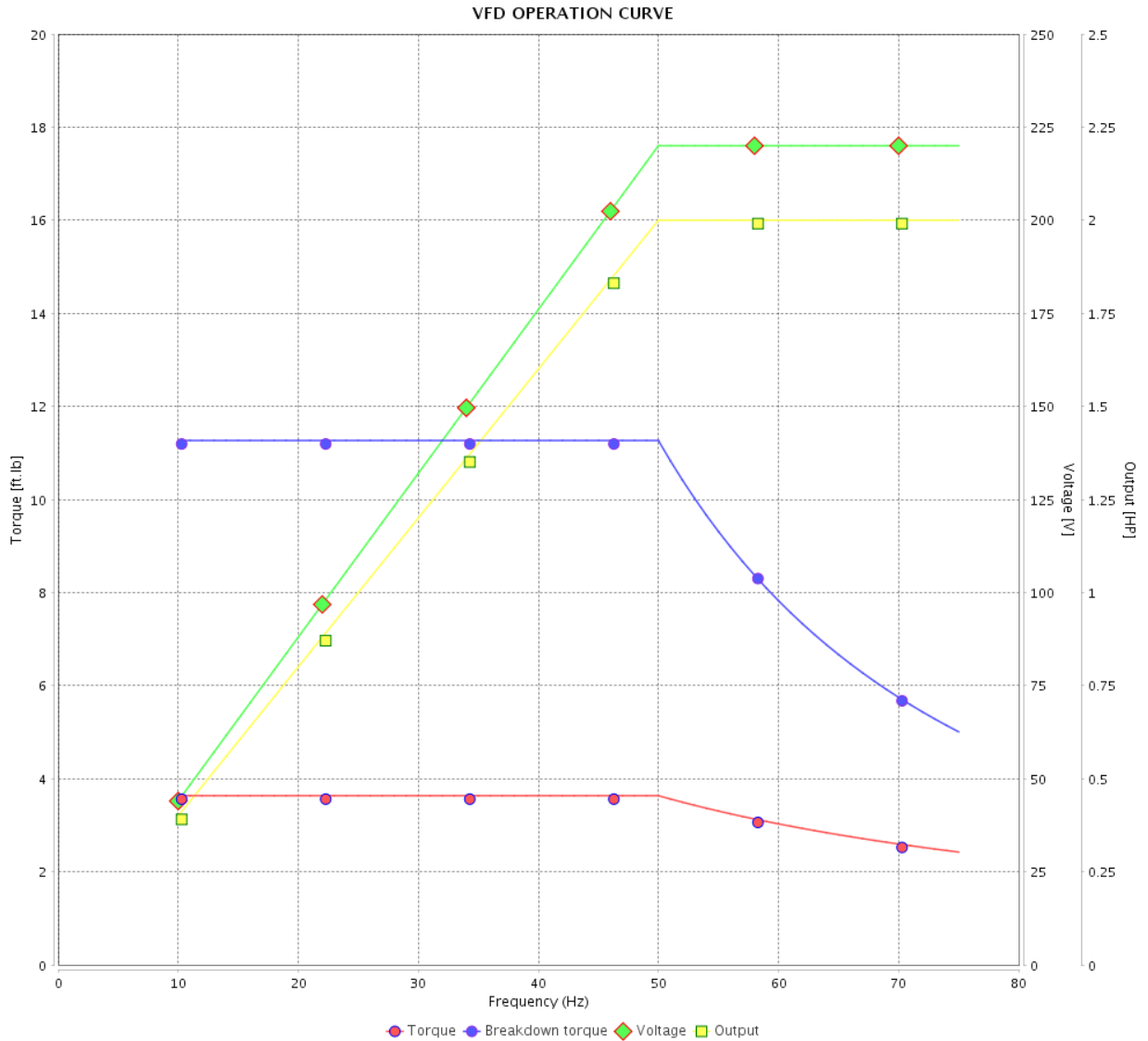
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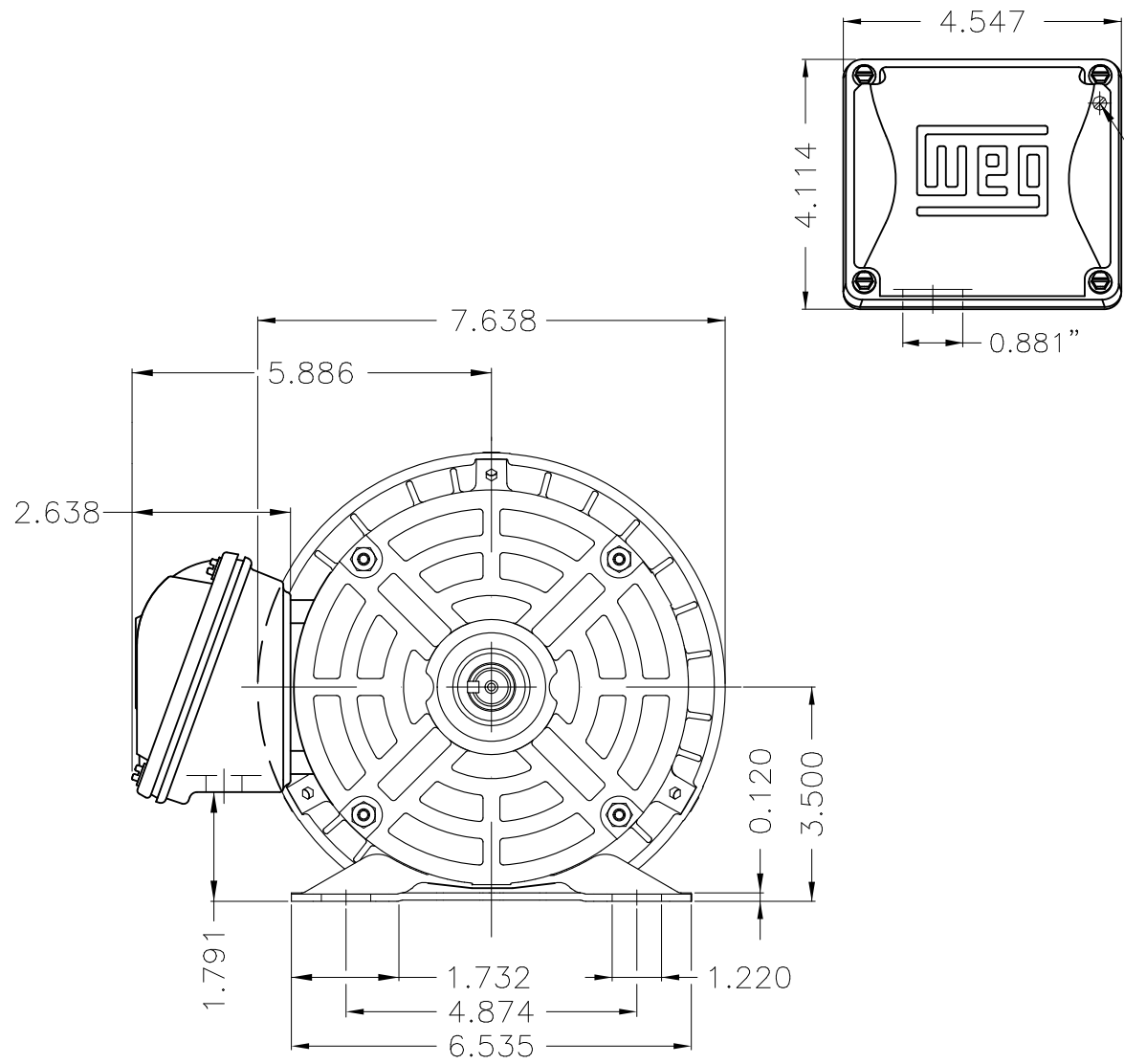
A

B

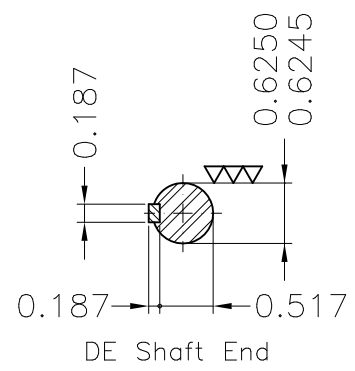
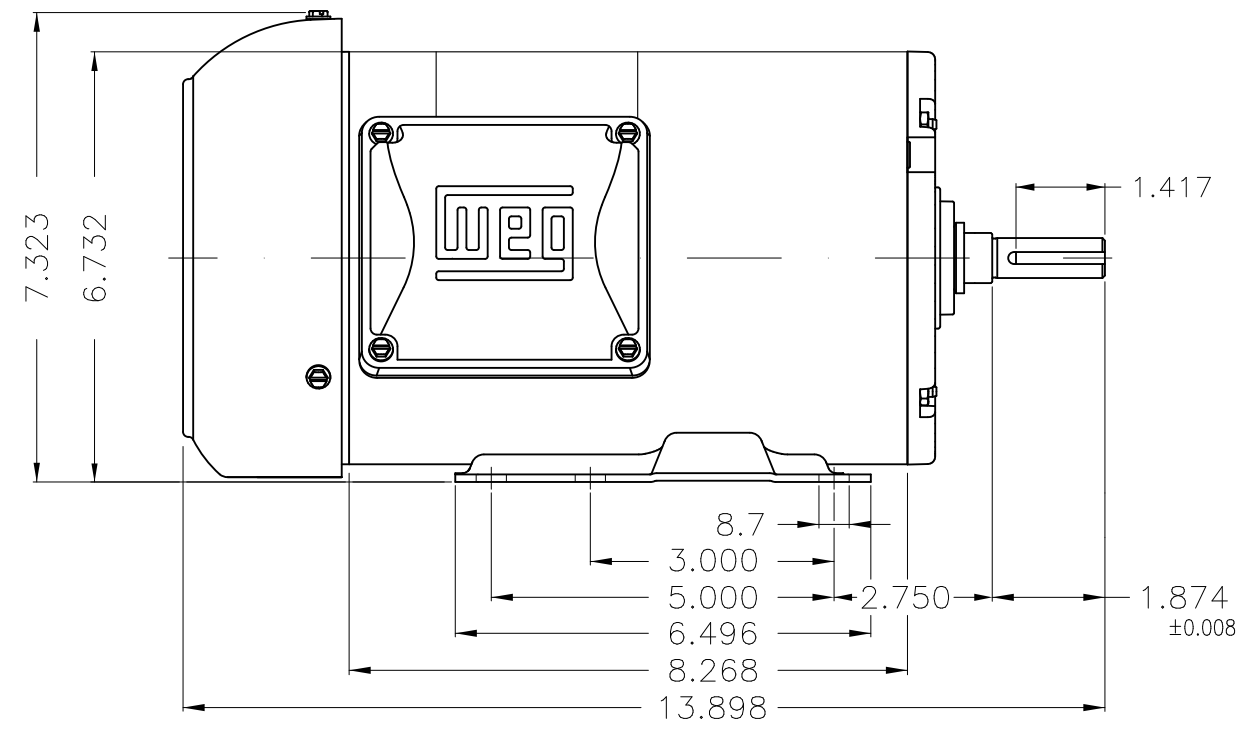
C

D

E



Grounding



Dimensions in inches

Fan cover - steel plate											
Without coating											
Mounting F-1/B3R(D)											
ECM	LOC	SUMMARY OF MODIFICATIONS					EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	PIRWBUSER	THREE PH. MOTOR ROLLED STEEL PREM. EFF.						PREVIEW WDD			
CHECKED		FRAME 56H IP55 TEFC									
RELEASED											
REL DT.	WMO	Jaragua do Sul	Product Engineering			SHEET	1 / 1				

2 HP 02 Poles 60 Hz



NEMA
Premium



MADE IN MEXICO

MAT: 14799268 CC029A

W01.TE0IC0X0X

MODEL 00236ET3E56-S

07DEC2021 B/N:

**For 60Hz: Class I, Zone 2, IIC
Class I, Div.2, Gr. A,B,C,D - T3
Div 2 Inverter Duty (SF1.00)**

CT 2:1/VT 1000:1

PH 3	Hz 60	HP 2.0
FR 56H		KW 1.5
DUTY CONT.		V 230/460
ALT 1000 m.a.s.l.		A 4.94/2.47
INS CL F AT 80K	IP55	SFA 5.68/2.84
AMB 40°C	DES B	SF 1.15
ENCL TEFC	CODE L	PF 0.89
USABLE @ 208V 5.46A		RPM 3520
SF1.00		NEMA NOM. EFF 85.5%

ALTERNATE RATING: 2.0HP 50Hz 190-220/380-415V SF1.15
5.94-5.23/2.97-2.77A 2875RPM EFF 83.3% (IE2) IEC 60034-1

For safe area-inverter duty motor For 60Hz use on VPWM 1000:1 VT, 5:1 CT

DE 6204-ZZ	ODE 6202-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.

