

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer	:		
Product line	: Premium Efficiency Three-Phase	Product code :	14799100
		Catalog # :	00218ET3E56-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 ²	: 42.3 lb
Protection degree	: IP55	Moment of inertia (J)	: 0.1296 sq.ft.lb
Design	: B		
Output [HP]	2	2	2
Poles	4	4	4
Frequency [Hz]	60	50	50
Rated voltage [V]	230/460	190/380	220/415
Rated current [A]	5.44/2.72	6.50/3.25	5.89/3.12
L. R. Amperes [A]	44.6/22.3	39.0/19.5	39.4/20.9
LRC [A]	8.2x(Code K)	6.0x(Code H)	6.7x(Code J)
No load current [A]	2.80/1.40	2.75/1.37	2.87/1.52
Rated speed [RPM]	1745	1415	1425
Slip [%]	3.06	5.67	5.00
Rated torque [ft.lb]	6.02	7.42	7.37
Locked rotor torque [%]	270	210	240
Breakdown torque [%]	300	240	270
Service factor		1.15	1.15
Temperature rise	80 K	80 K	80 K
Locked rotor time	27s (cold) 15s (hot)	25s (cold) 14s (hot)	23s (cold) 13s (hot)
Noise level ²	52.0 dB(A)	49.0 dB(A)	49.0 dB(A)
Efficiency (%)	25%	86.0	86.0
	50%	85.5	84.9
	75%	87.5	85.2
	100%	86.5	83.6
Power Factor	25%	0.35	0.38
	50%	0.60	0.64
	75%	0.73	0.76
	100%	0.80	0.83
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 : 174 lb
Lubrication interval	: -	-	Max. compression : 217 lb
Lubricant amount	: -	-	
Lubricant type	: Mobil Polyrex EM		
Notes USABLE @208V 6.02A SF 1.00 SFA 6.02A			
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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Checked by			Page
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TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : Premium Efficiency Three-Phase

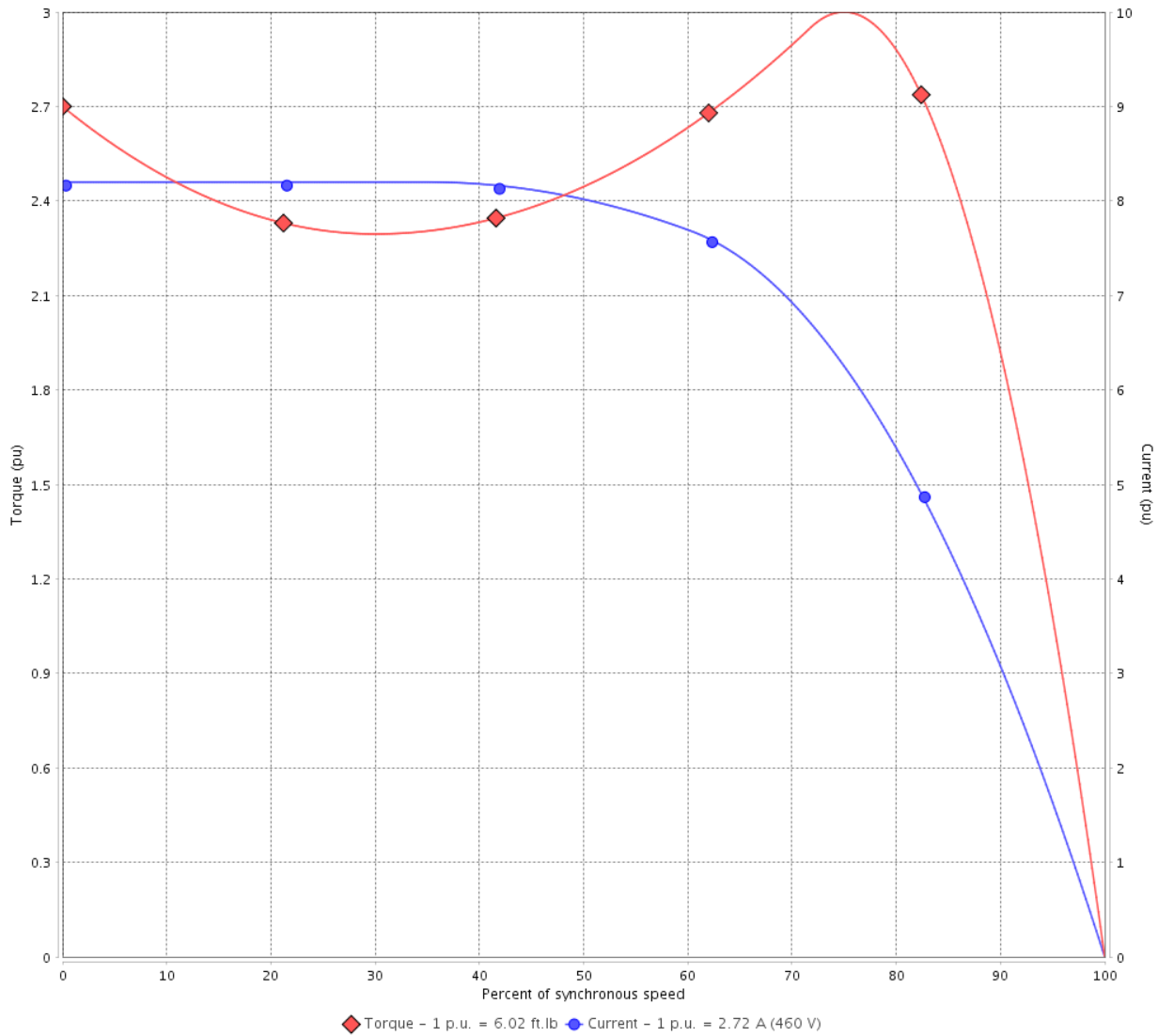
Product code :

14799100

Catalog # :

00218ET3E56-S

TORQUE AND CURRENT VS SPEED CURVE



Performance : 230/460 V 60 Hz 4P

Rated current : 5.44/2.72 A
 LRC : 8.2
 Rated torque : 6.02 ft.lb
 Locked rotor torque : 270 %
 Breakdown torque : 300 %
 Rated speed : 1745 rpm

Moment of inertia (J) : 0.1296 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor :
 Temperature rise : 80 K
 Design : B

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

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TORQUE AND CURRENT VS SPEED CURVE



Three Phase Induction Motor - Squirrel Cage

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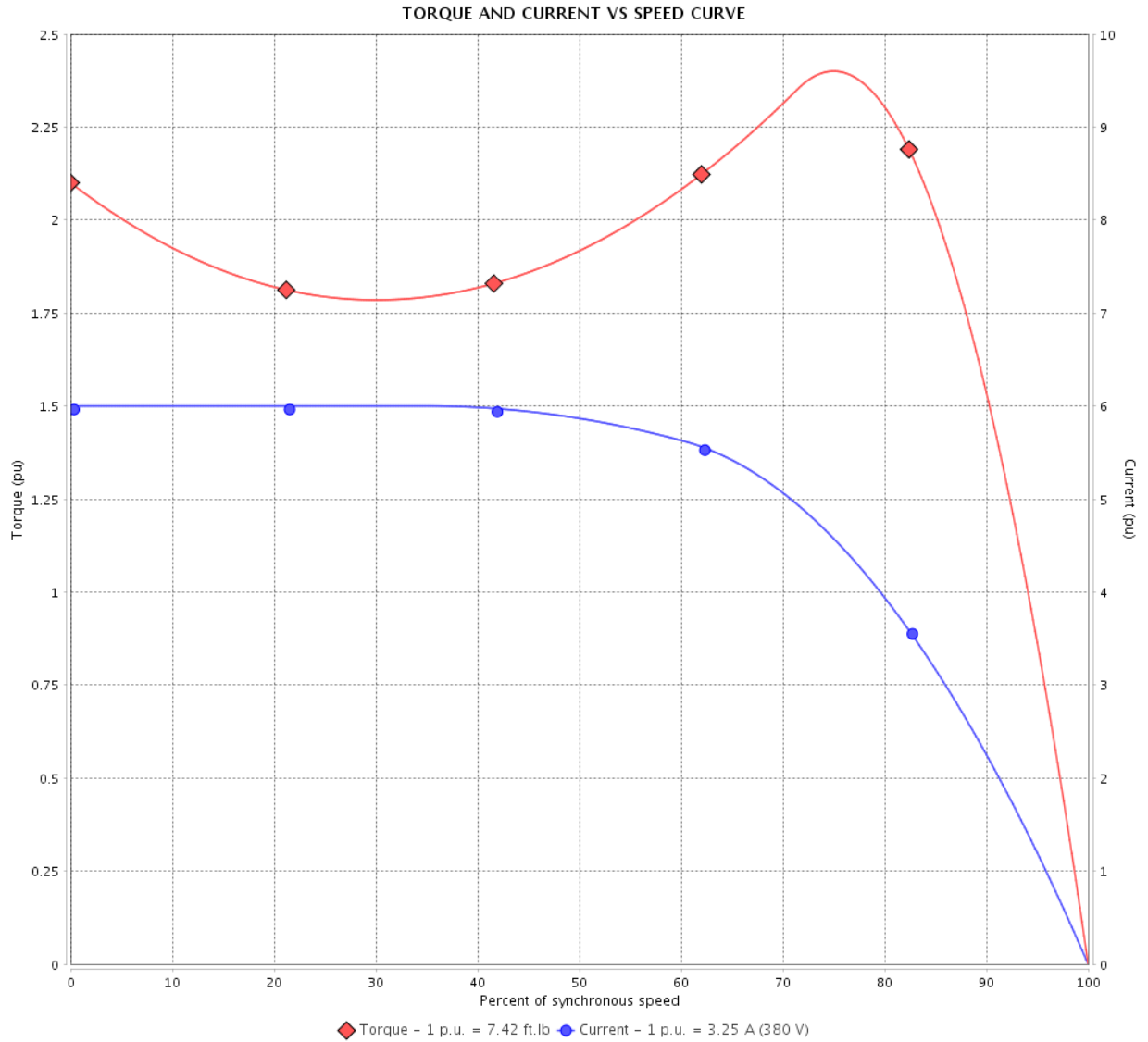
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Performance : 190/380 V 50 Hz 4P

Rated current : 6.50/3.25 A
 LRC : 6.0
 Rated torque : 7.42 ft.lb
 Locked rotor torque : 210 %
 Breakdown torque : 240 %
 Rated speed : 1415 rpm

Moment of inertia (J) : 0.1296 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

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

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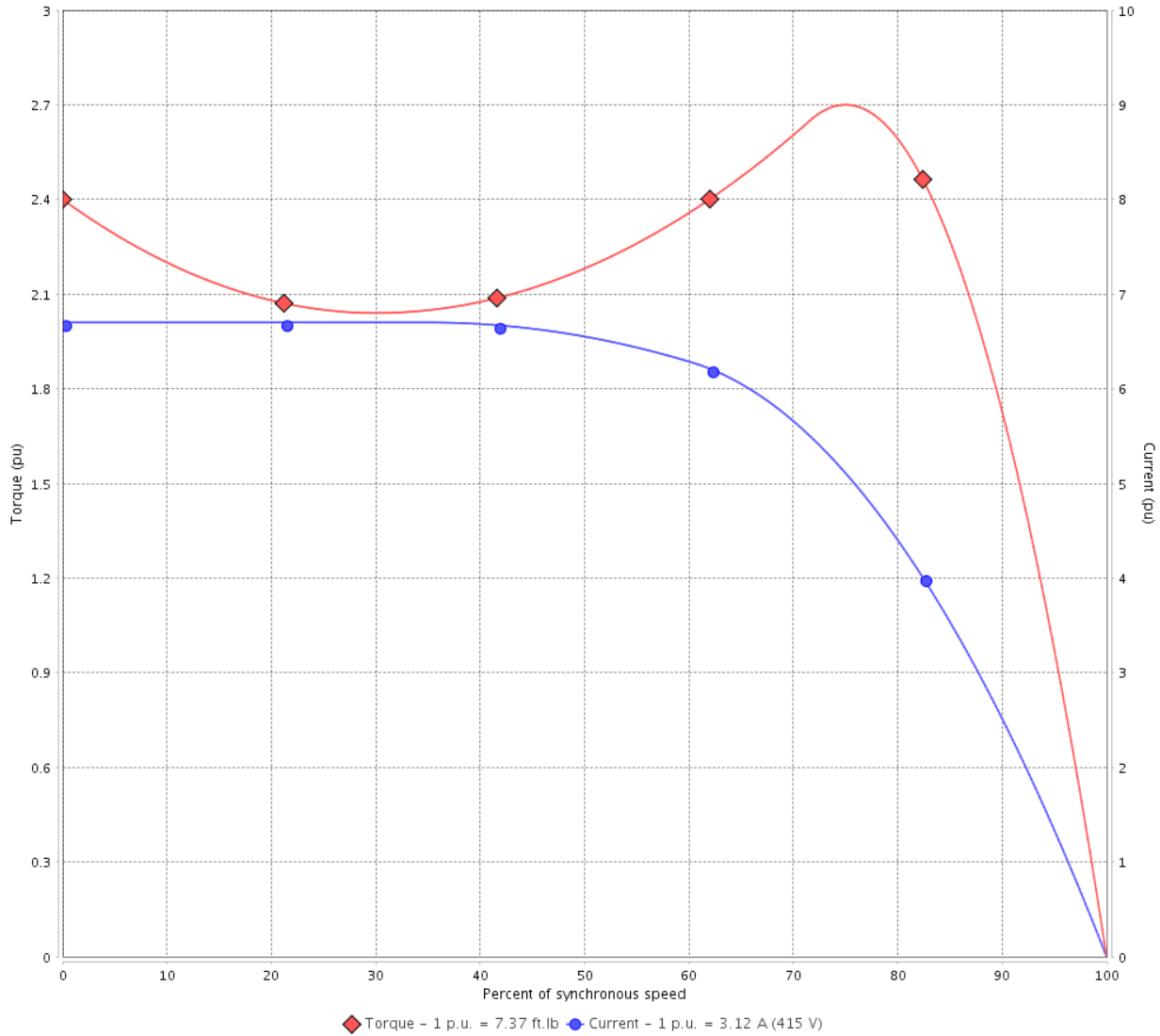
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TORQUE AND CURRENT VS SPEED CURVE



Performance : 220/415 V 50 Hz 4P

Rated current : 5.89/3.12 A
 LRC : 6.7
 Rated torque : 7.37 ft.lb
 Locked rotor torque : 240 %
 Breakdown torque : 270 %
 Rated speed : 1425 rpm

Moment of inertia (J) : 0.1296 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

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

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LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage



Customer :

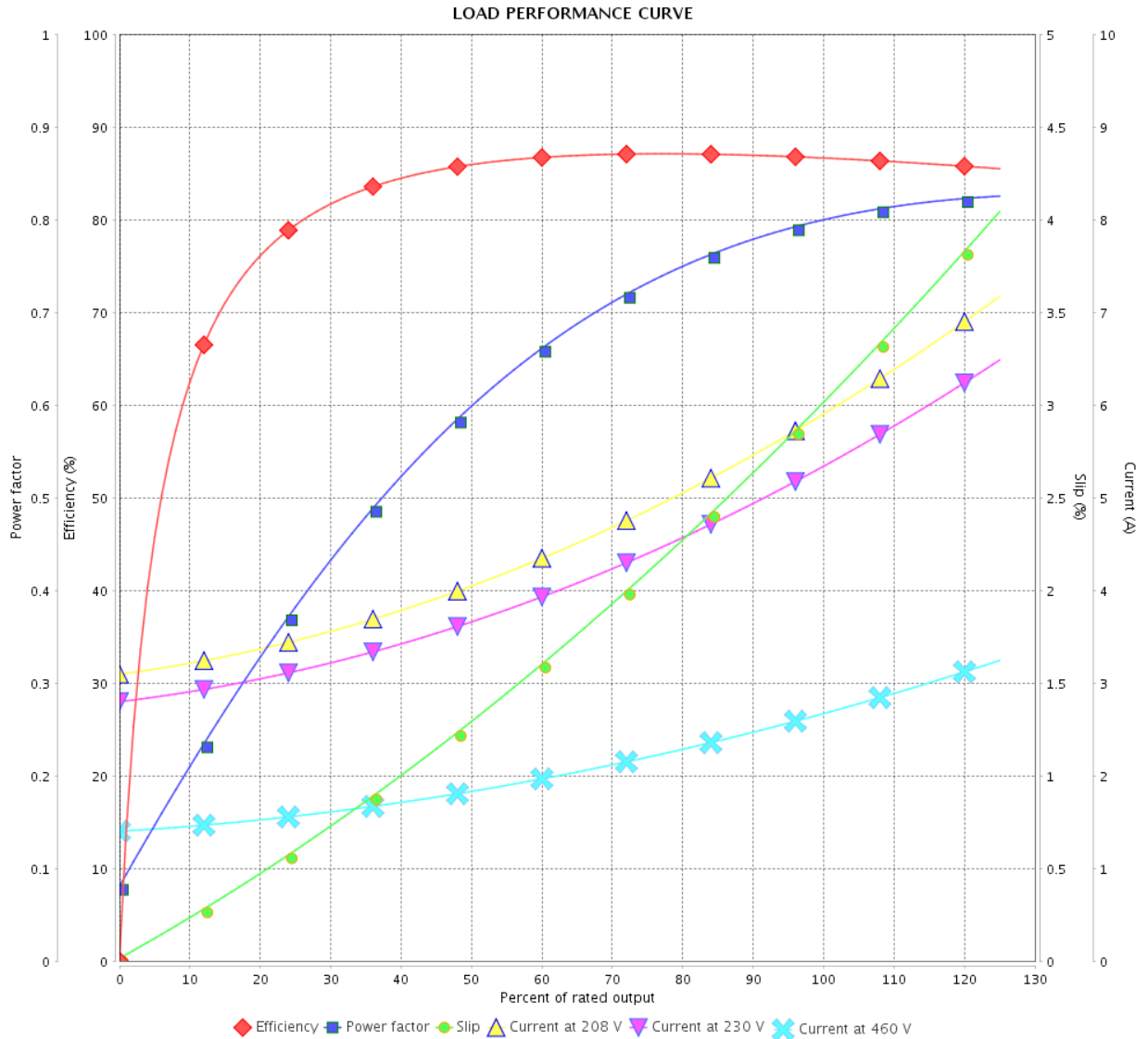
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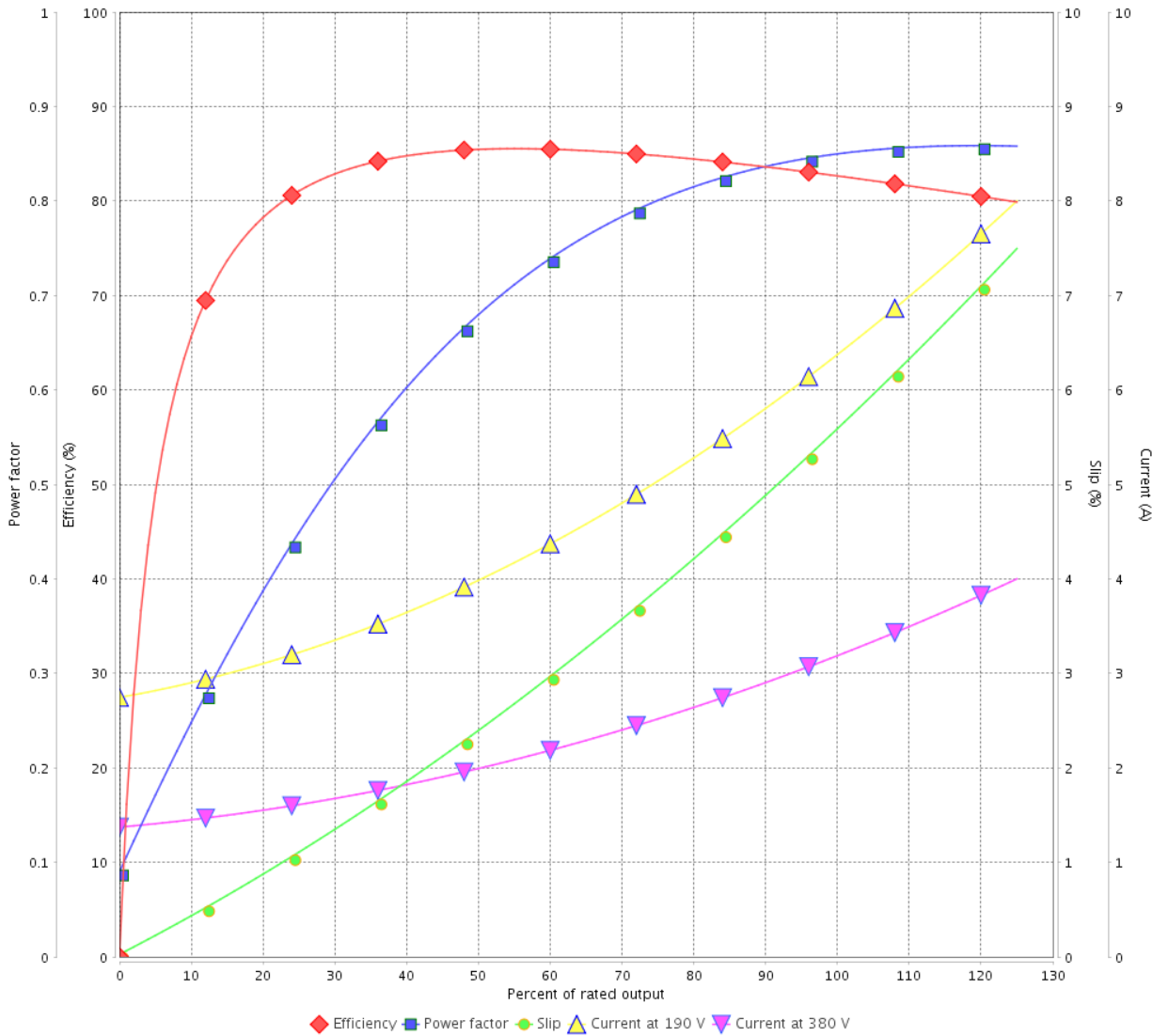
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LOAD PERFORMANCE CURVE



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Rated current : 6.50/3.25 A
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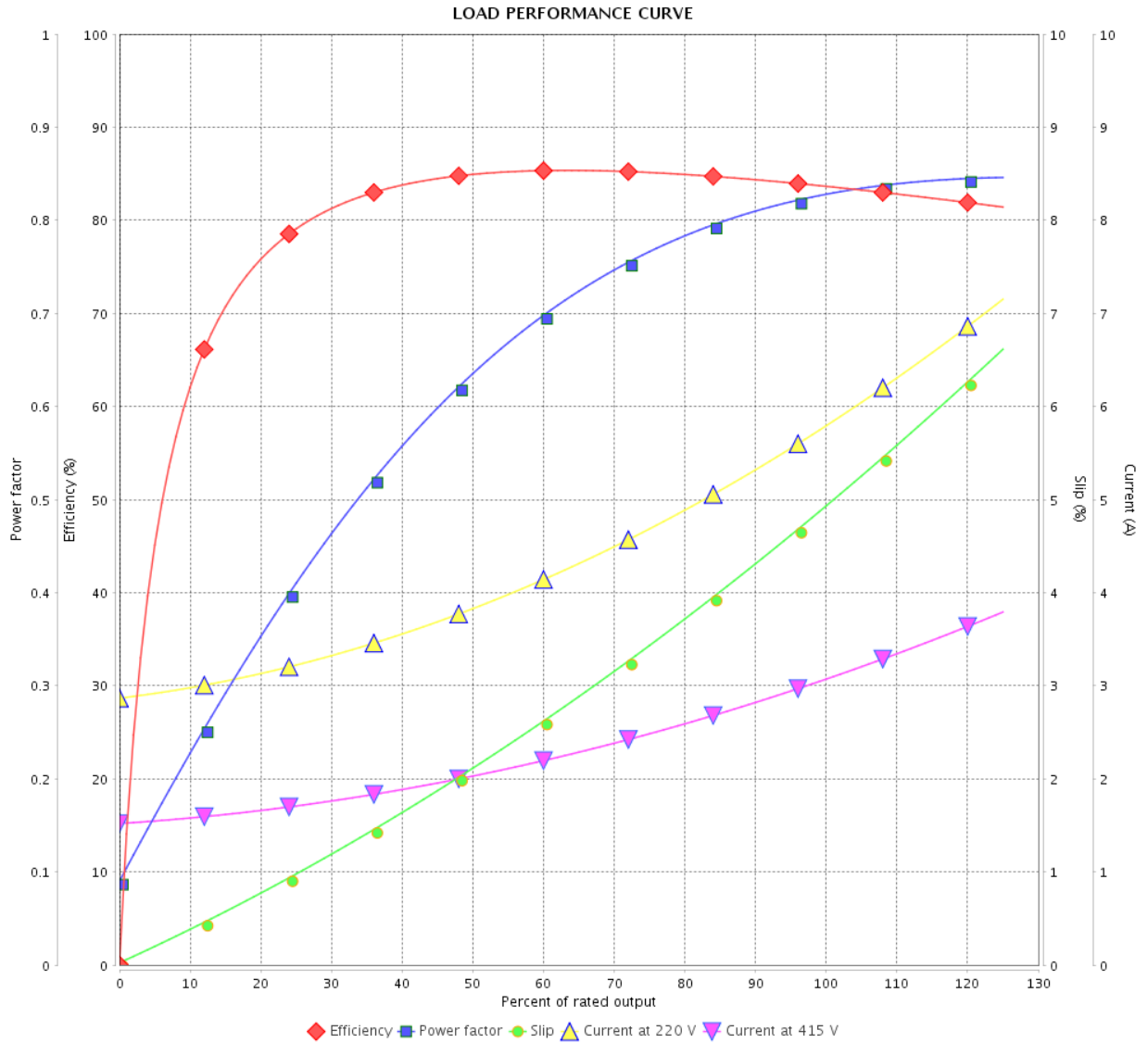
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THERMAL LIMIT CURVE

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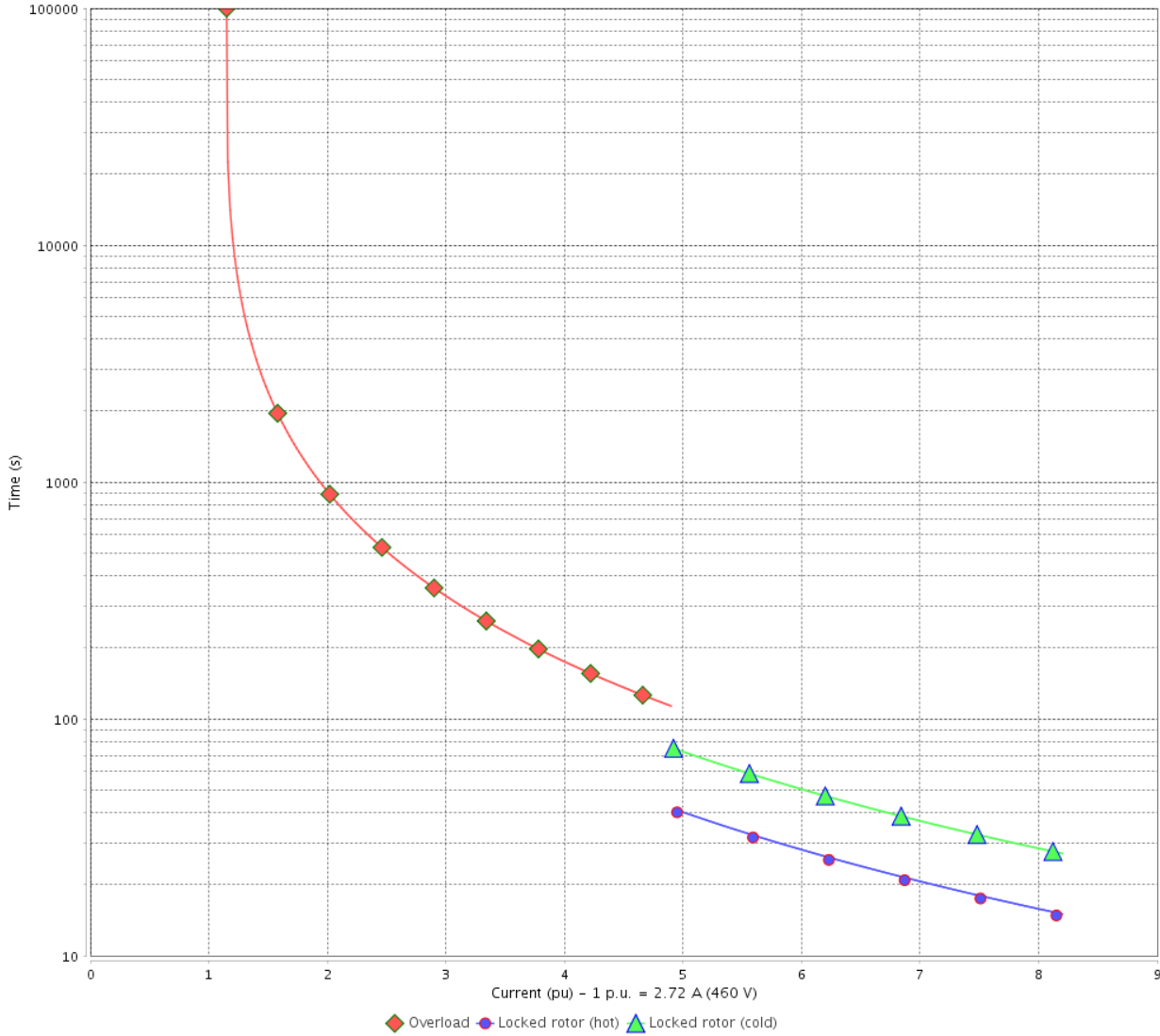
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Heating constant

Cooling constant

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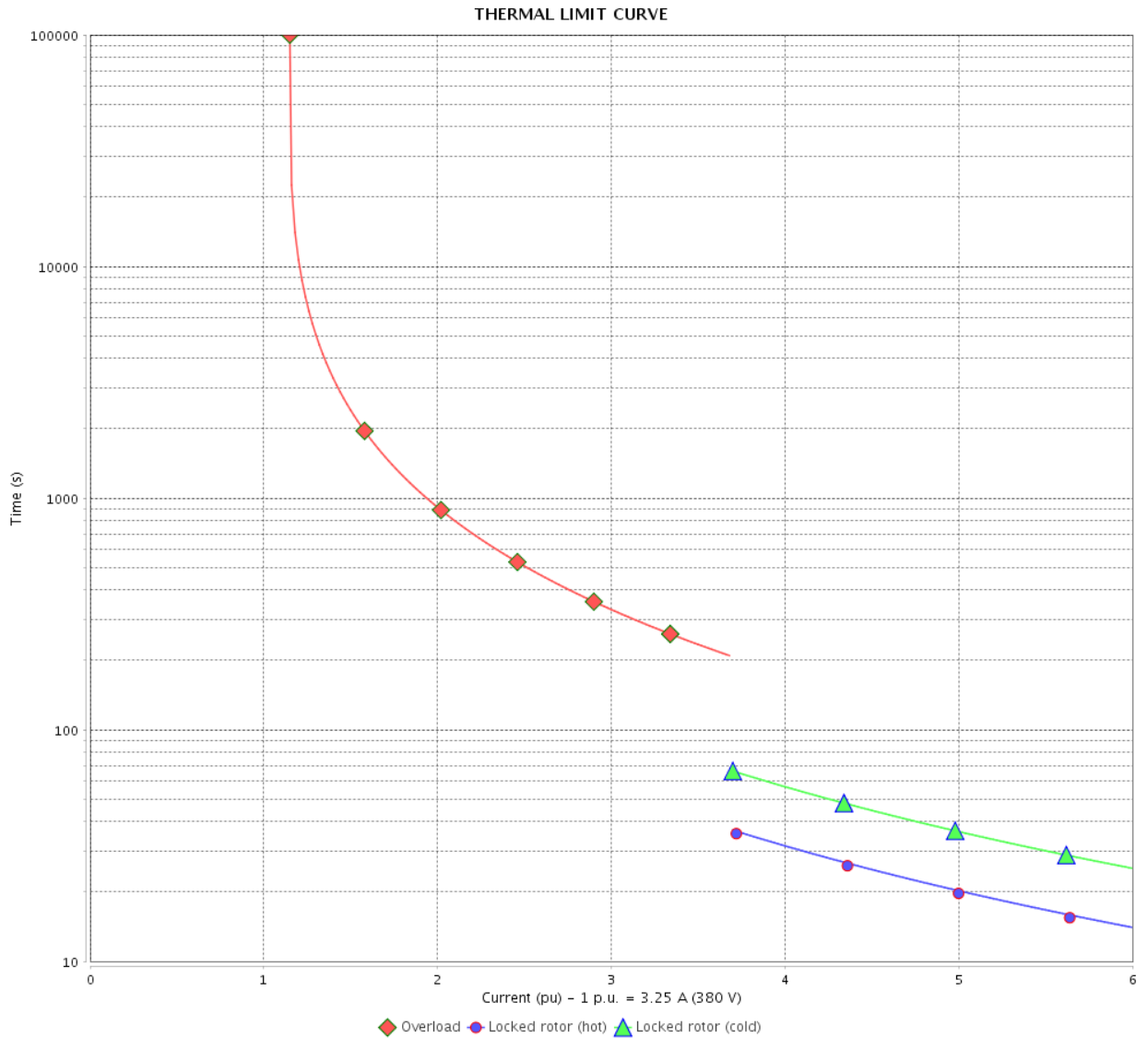
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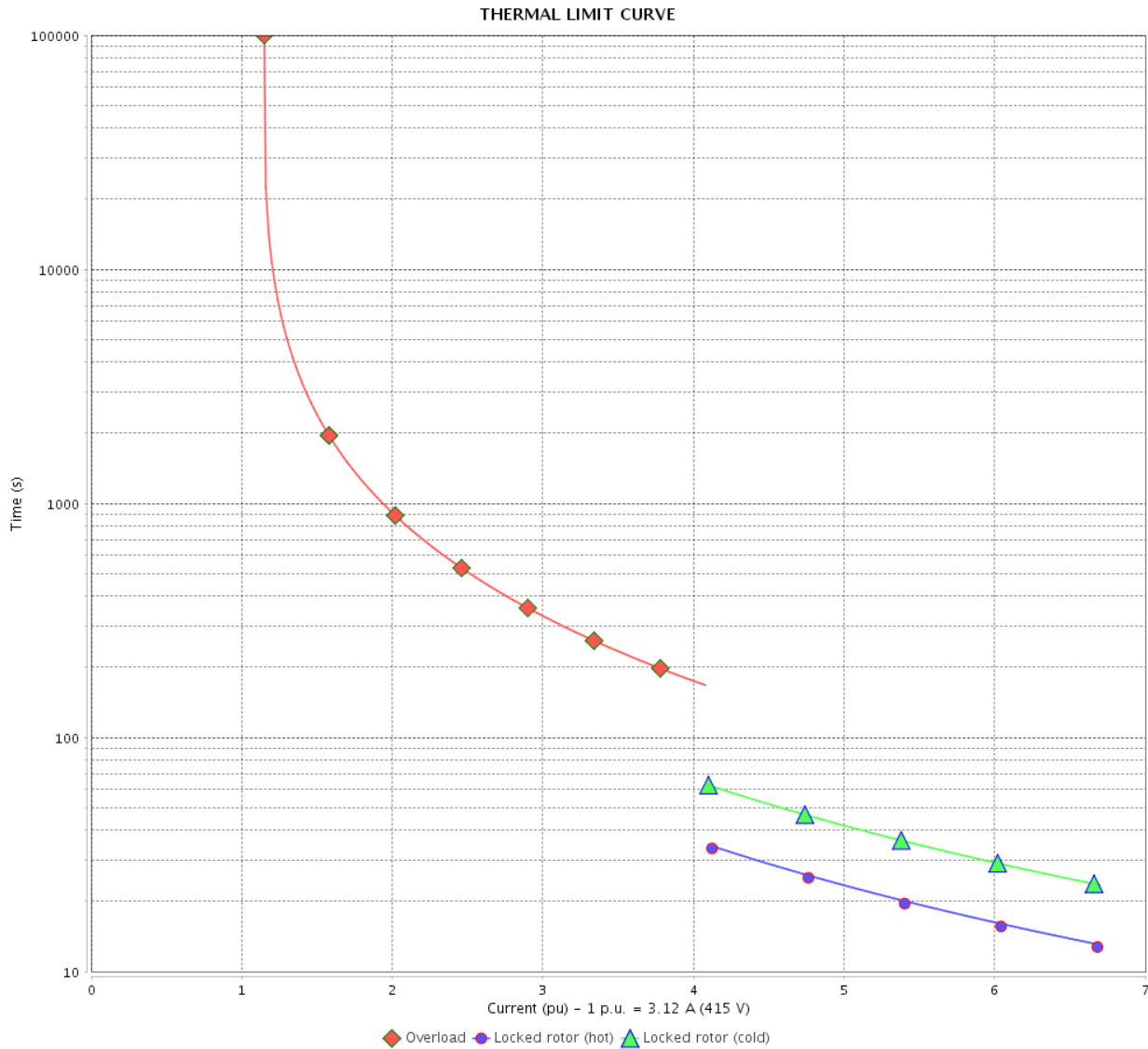
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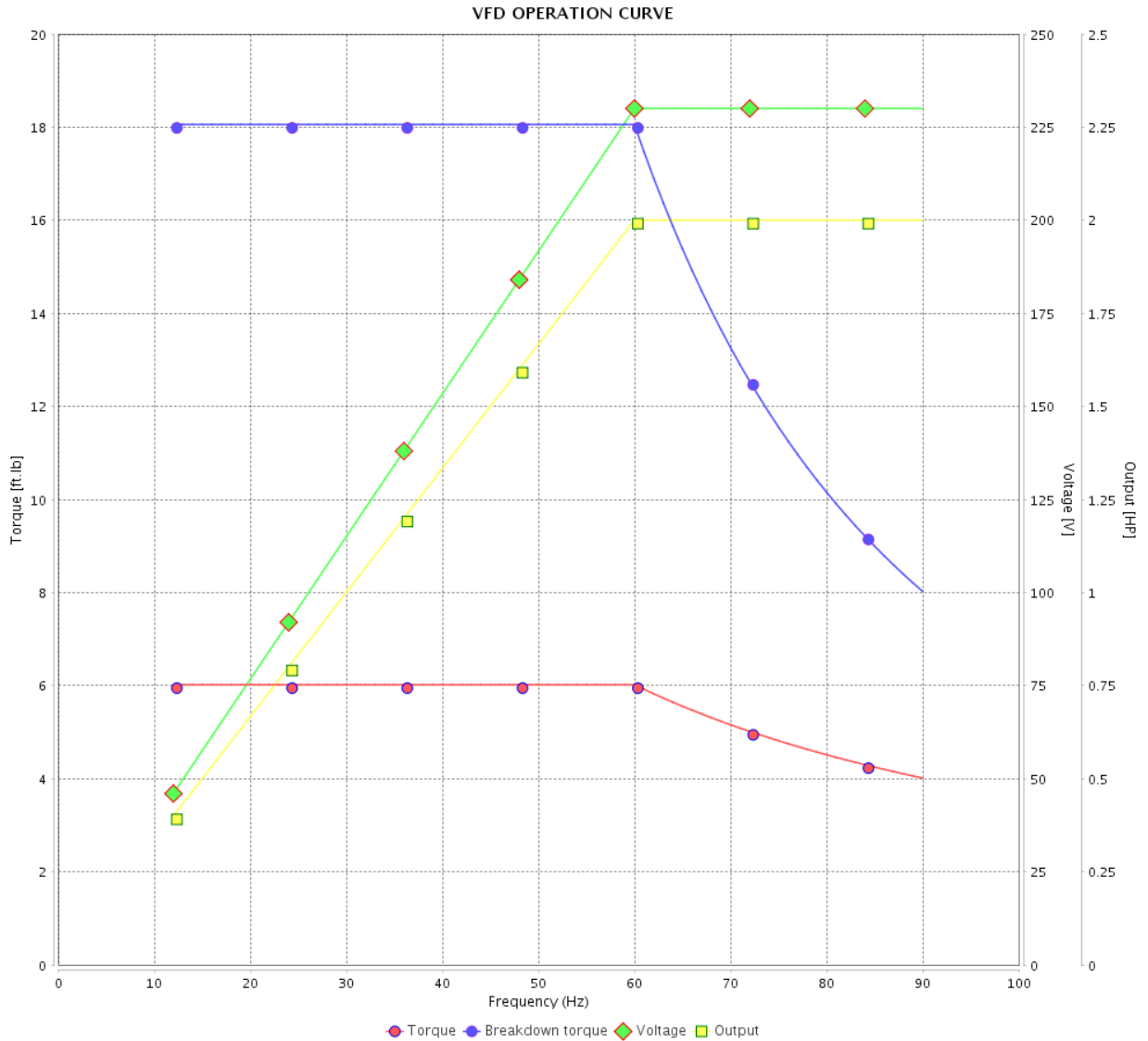
VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



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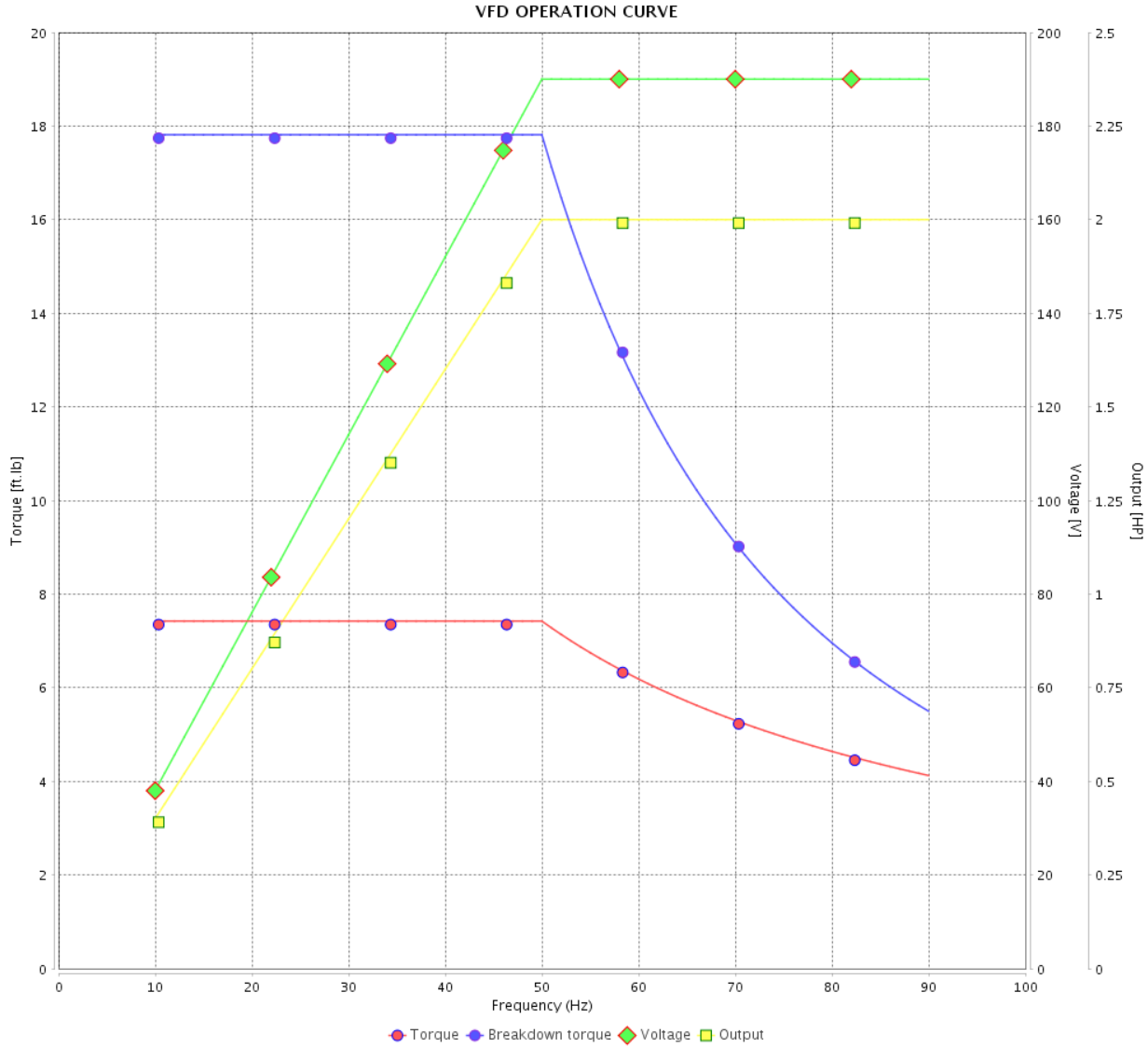
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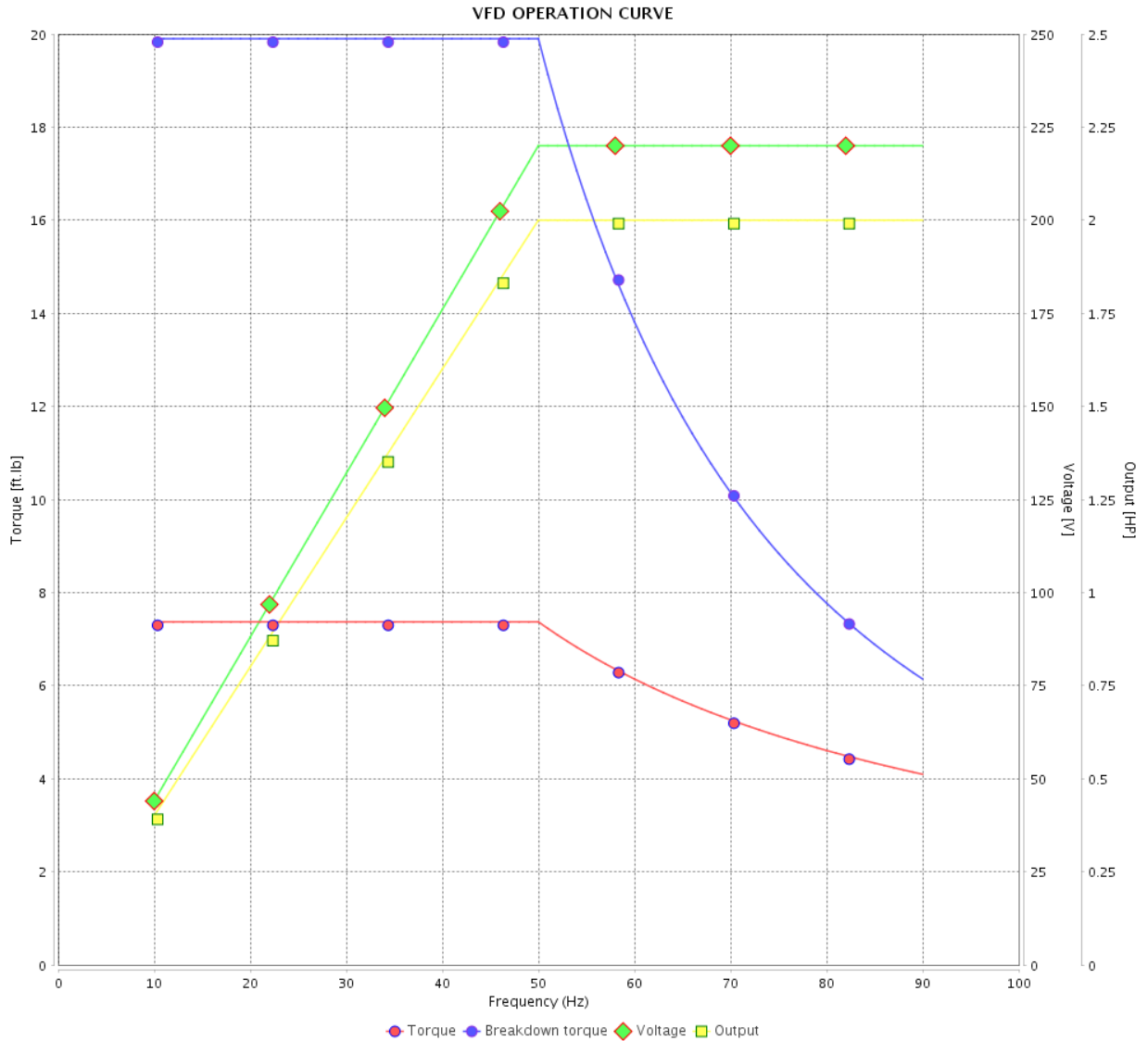


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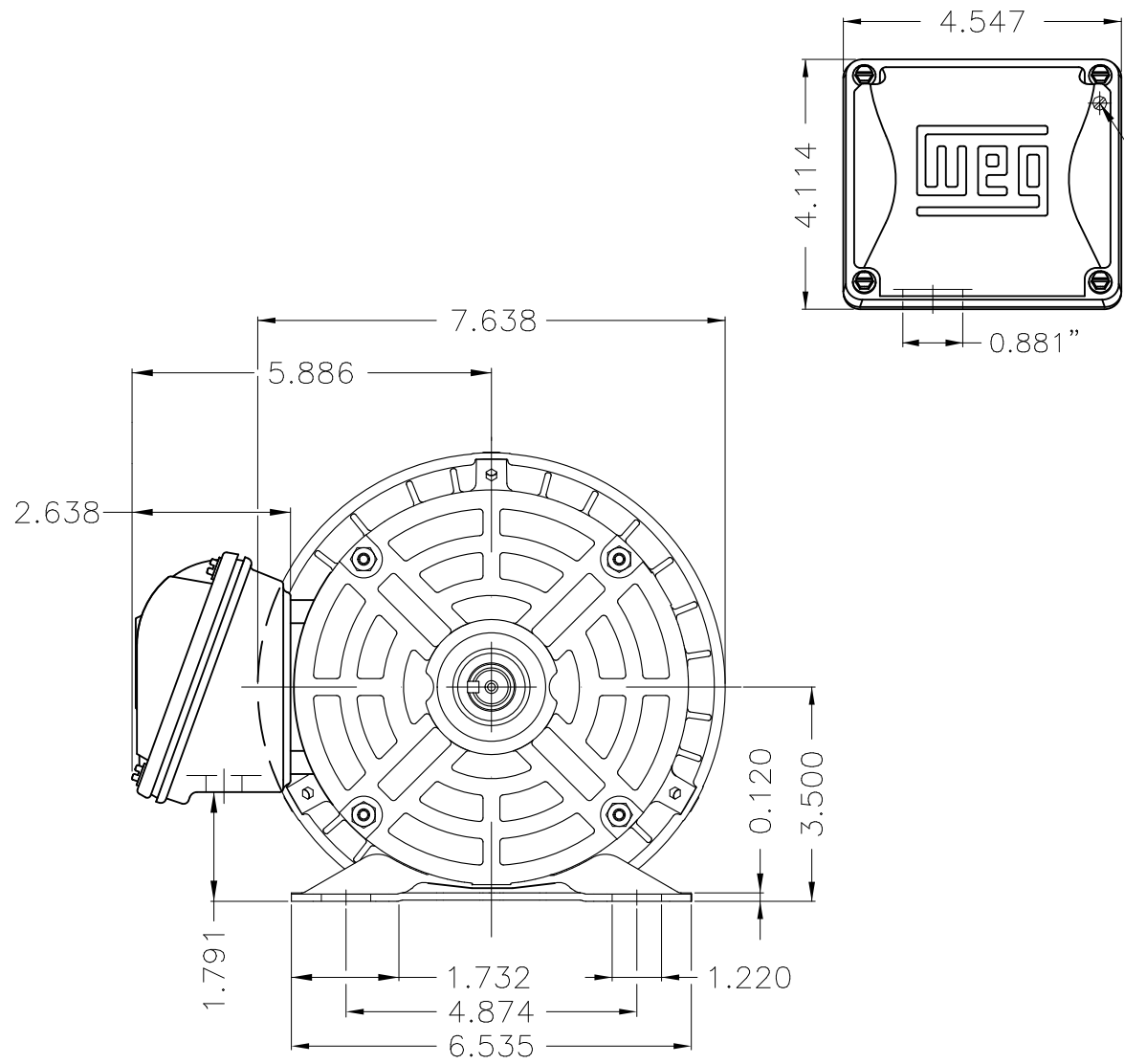
A

B

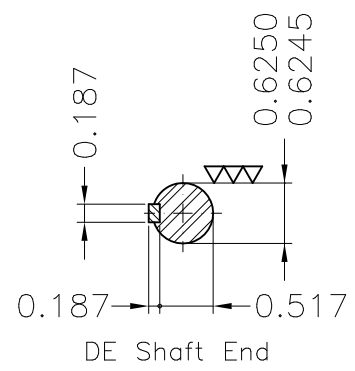
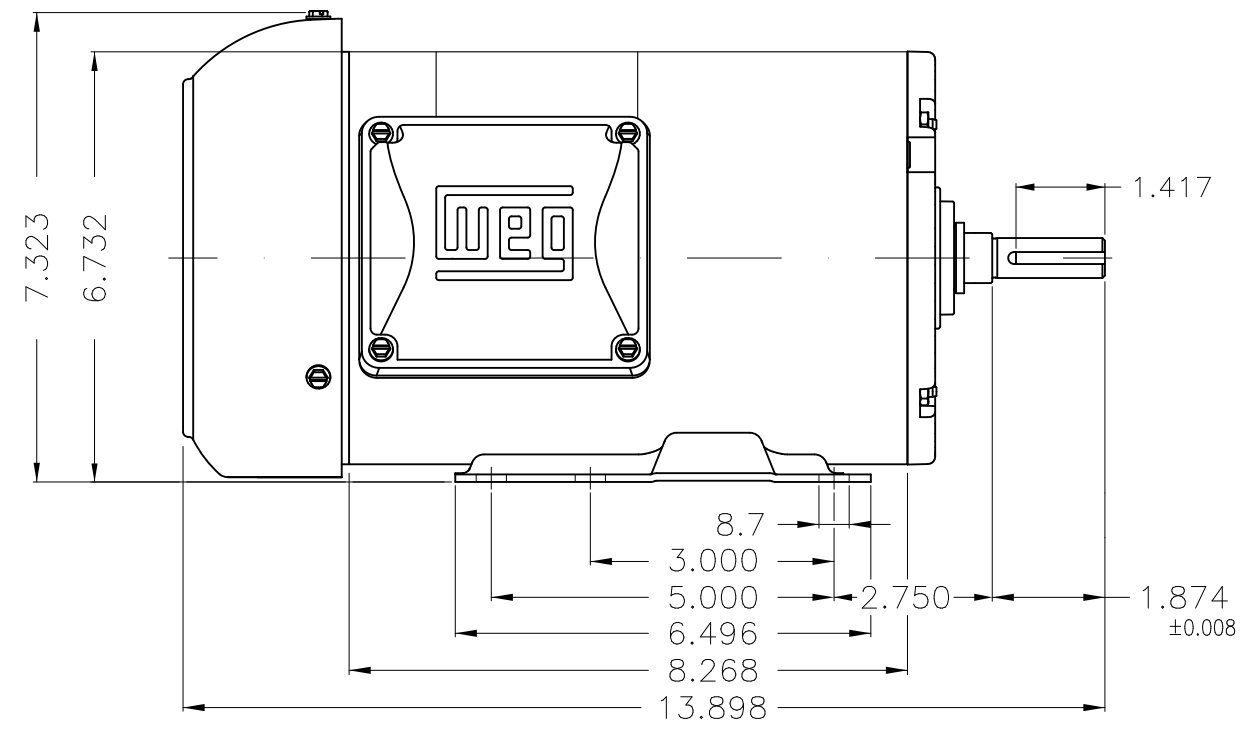
C

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	SHEET	1 / 1	
CHECKED		FRAME 56H IP55 TEFC									
RELEASED											
REL DT.	WMO	Jaragua do Sul	Product Engineering								

2 HP 04 Poles 60 Hz

A

XME A3

**NEMA
Premium**3PT9
UL US LISTED
FOR SAFE AREA

Energy Verified

MADE IN MEXICO

MAT: 14799100 CC029A
W01.TE0IC0X0X
MODEL 00218ET3E56-S
02DEC2021 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 5.44/2.72
INS CL F AT 80K	IP55	SFA 6.26/3.13
AMB 40°C	DES B	SF 1.15
ENCL TEFC	CODE K	PF 0.80
USABLE @ 208V 6.02A		RPM 1745
SF1.00		NEMA NOM. EFF 86.5%

ALTERNATE RATING: 2.0HP 50Hz 190-220/380-415V SF1.15
6.50-5.79/3.25-3.07A 1415RPM EFF 82.6% (IE1) 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 EMT1-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.**