

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer	:		
Product line	: Premium Efficiency Three-Phase	Product code :	12809607
		Catalog # :	001120T3E56-S
Frame	: 56H	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 ³	: 40.1 lb
Design	: A	Moment of inertia (J)	: 0.1951 sq.ft.lb
Output [HP]	1	1	1
Poles	6	6	6
Frequency [Hz]	60	50	50
Rated voltage [V]	230/460	190/380	220/415
Rated current [A]	3.36/1.68	3.82/1.91	3.55/1.88
L. R. Amperes [A]	20.8/10.4	18.3/9.17	18.8/9.96
LRC [A]	6.2x(Code K)	4.8x(Code G)	5.3x(Code H)
No load current [A]	2.40/1.20	2.34/1.17	2.36/1.25
Rated speed [RPM]	1160	940	945
Slip [%]	3.33	6.00	5.50
Rated torque [ft.lb]	4.53	5.59	5.56
Locked rotor torque [%]	240	190	210
Breakdown torque [%]	300	229	260
Service factor		1.15	1.15
Temperature rise	80 K	80 K	80 K
Locked rotor time	46s (cold) 26s (hot)	46s (cold) 26s (hot)	41s (cold) 23s (hot)
Noise level ²	50.0 dB(A)	48.0 dB(A)	48.0 dB(A)
Efficiency (%)	25%	75.7	77.0
	50%	77.0	77.1
	75%	81.5	79.5
	100%	82.5	79.0
Power Factor	25%	0.25	0.28
	50%	0.45	0.50
	75%	0.58	0.63
	100%	0.68	0.73
Bearing type	: Drive end 6204 ZZ Non drive end 6202 ZZ	Foundation loads	
Sealing	: Without Without Bearing Seal Bearing Seal	Max. traction	: 122 lb
		Max. compression	: 162 lb
Lubrication interval	: - -		
Lubricant amount	: - -		
Lubricant type	: Mobil Polyrex EM		
Notes			
USABLE @208V 3.71A SF 1.00 SFA 3.71A			
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 : Premium Efficiency Three-Phase

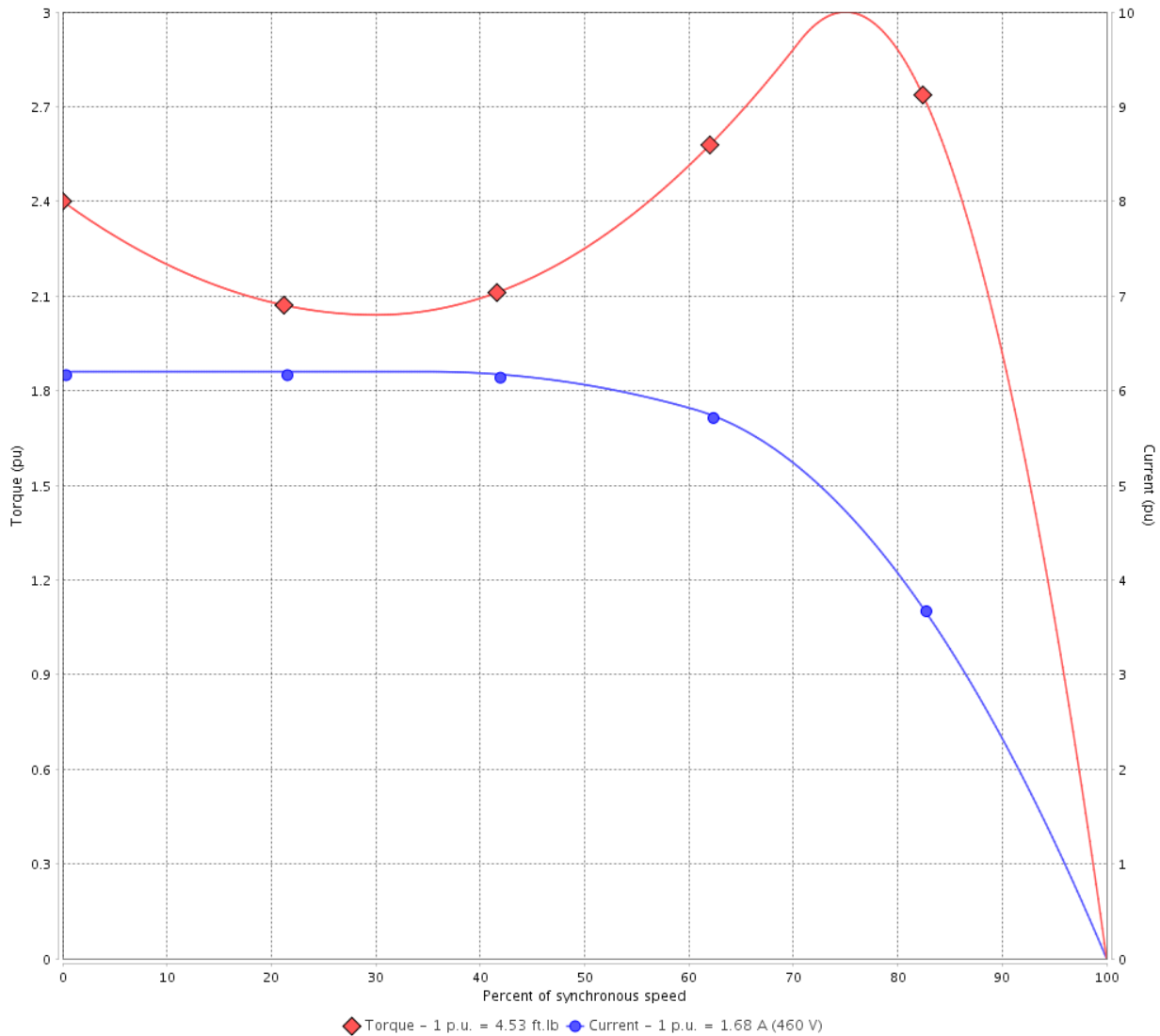
Product code :

12809607

Catalog # :

001120T3E56-S

TORQUE AND CURRENT VS SPEED CURVE



Performance : 230/460 V 60 Hz 6P

Rated current : 3.36/1.68 A
 LRC : 6.2
 Rated torque : 4.53 ft.lb
 Locked rotor torque : 240 %
 Breakdown torque : 300 %
 Rated speed : 1160 rpm

Moment of inertia (J) : 0.1951 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor :
 Temperature rise : 80 K
 Design : A

Locked rotor time : 46s (cold) 26s (hot)

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TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



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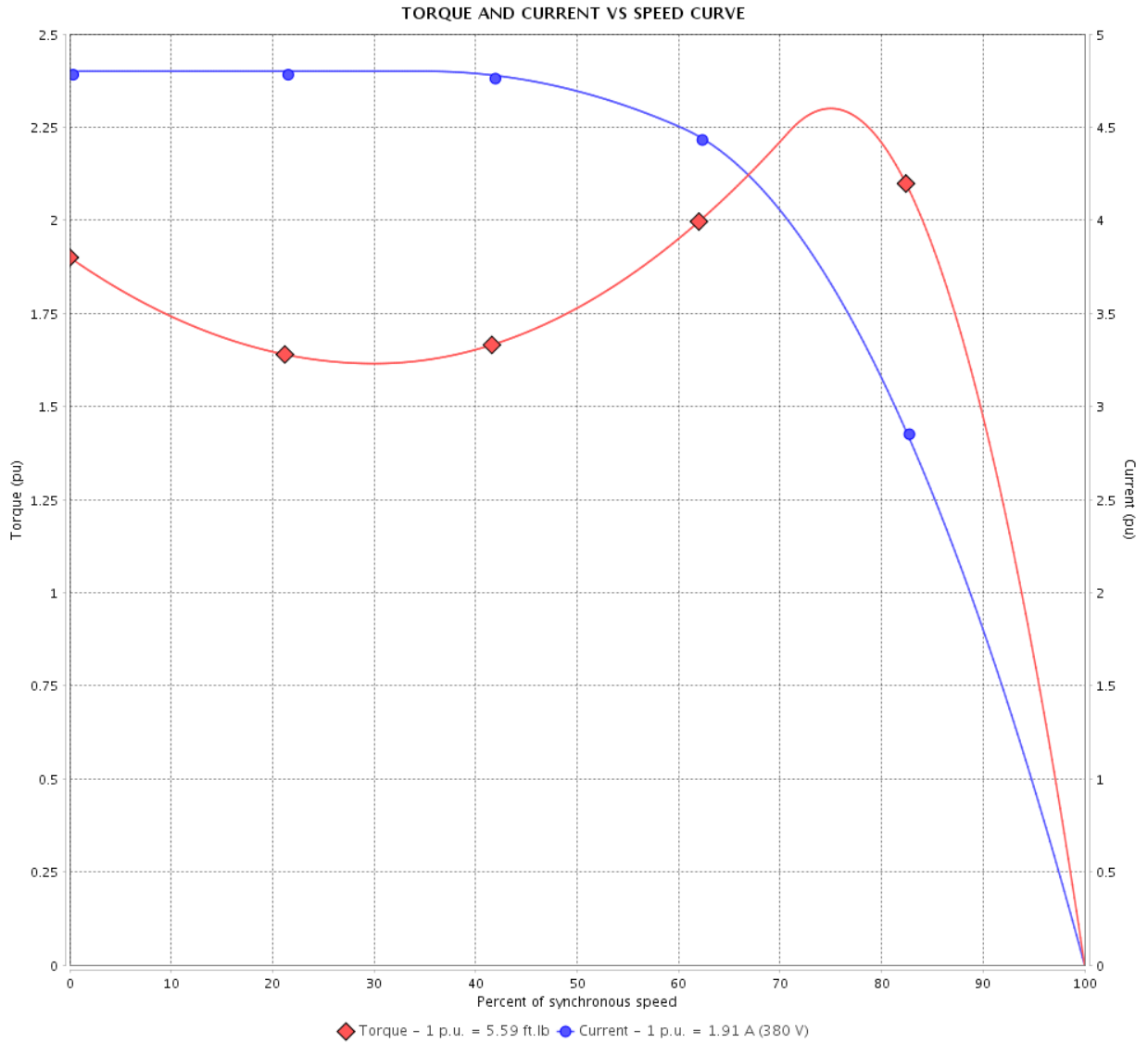
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Performance : 190/380 V 50 Hz 6P

Rated current : 3.82/1.91 A
 LRC : 4.8
 Rated torque : 5.59 ft.lb
 Locked rotor torque : 190 %
 Breakdown torque : 229 %
 Rated speed : 940 rpm

Moment of inertia (J) : 0.1951 sq.ft.lb
 Duty cycle : Cont.(S1)
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 Service factor : 1.15
 Temperature rise : 80 K
 Design : A

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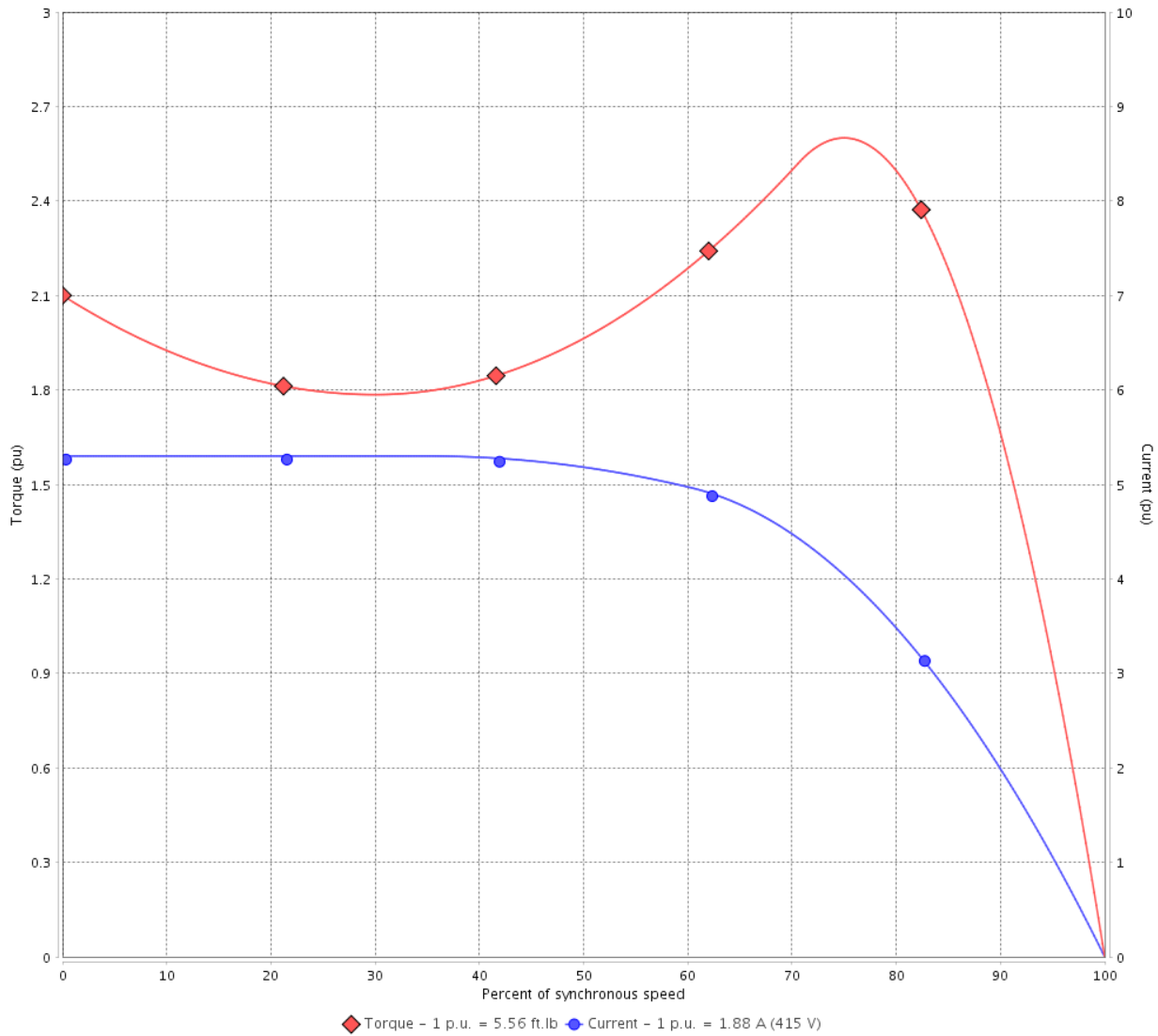
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TORQUE AND CURRENT VS SPEED CURVE



Performance : 220/415 V 50 Hz 6P

Rated current : 3.55/1.88 A
 LRC : 5.3
 Rated torque : 5.56 ft.lb
 Locked rotor torque : 210 %
 Breakdown torque : 260 %
 Rated speed : 945 rpm

Moment of inertia (J) : 0.1951 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : A

Locked rotor time : 41s (cold) 23s (hot)

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LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage



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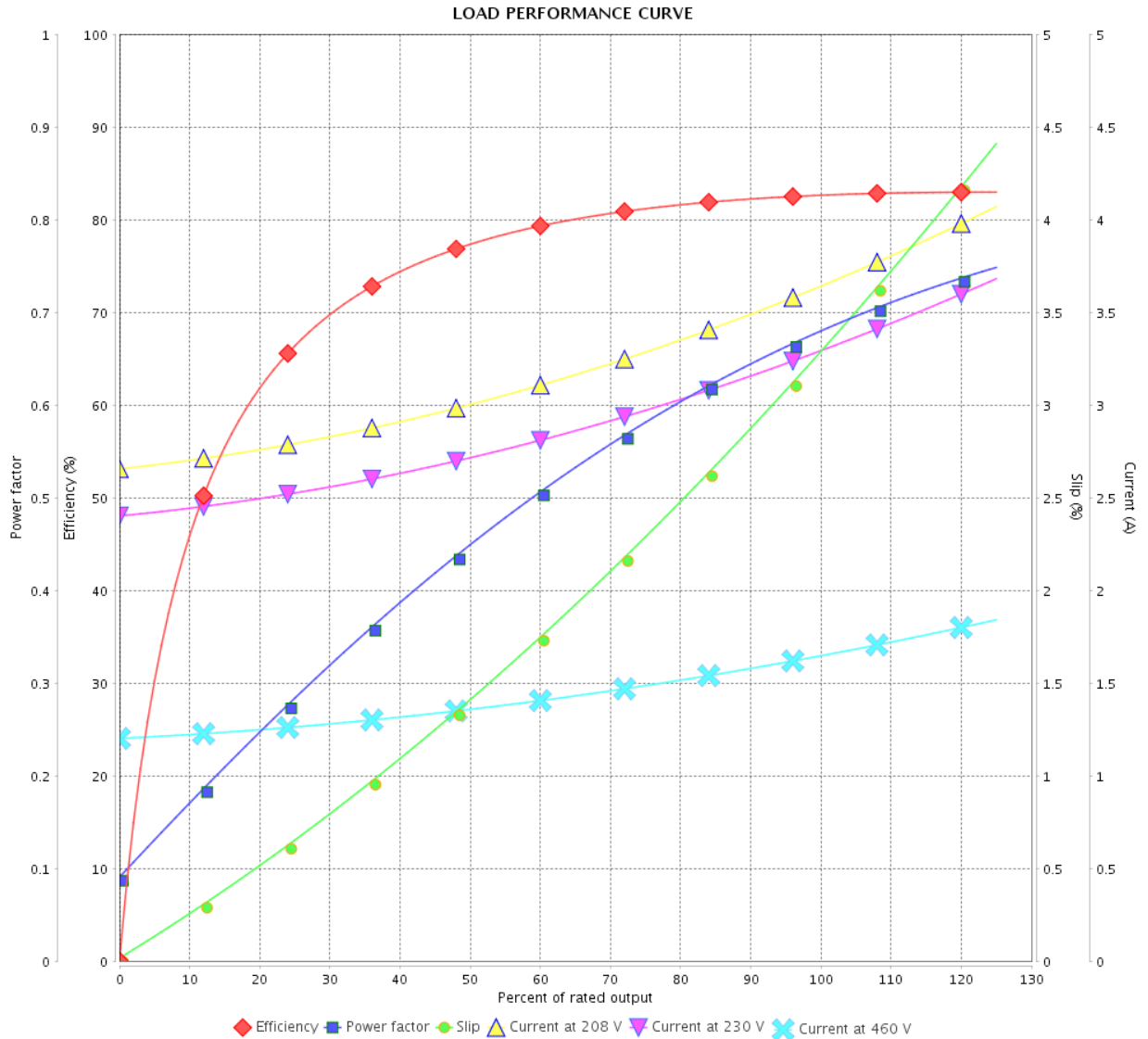
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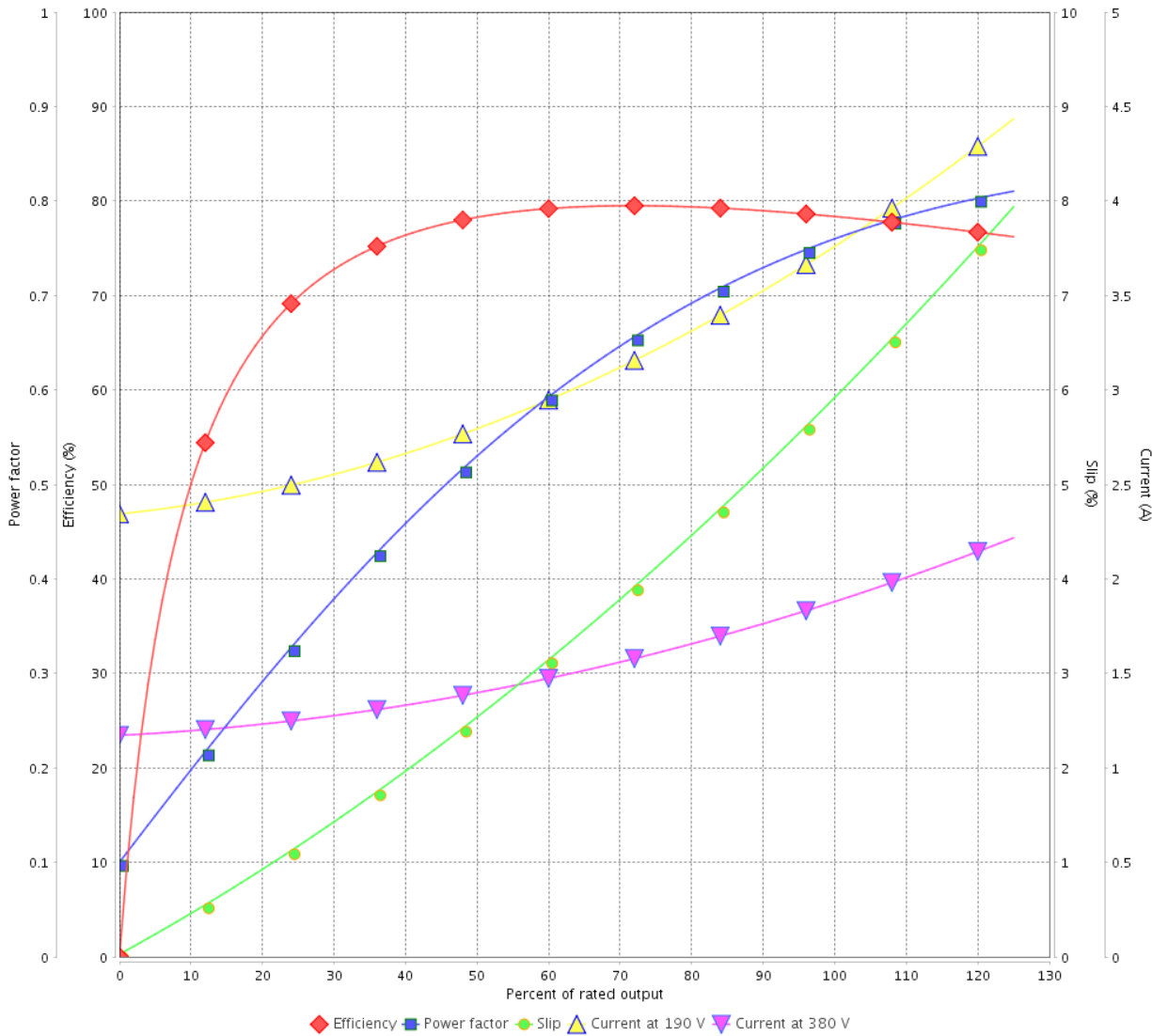
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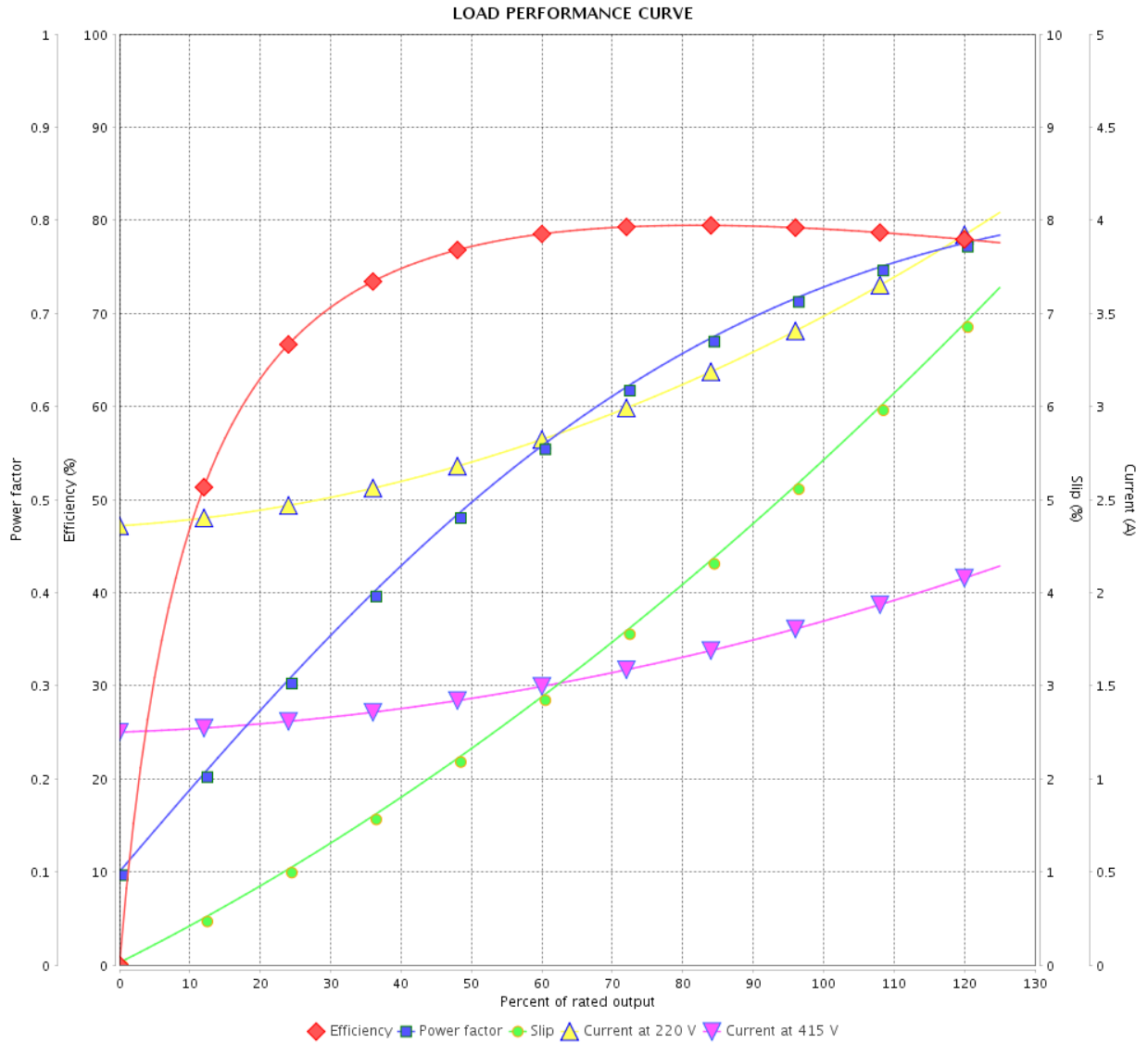
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THERMAL LIMIT CURVE

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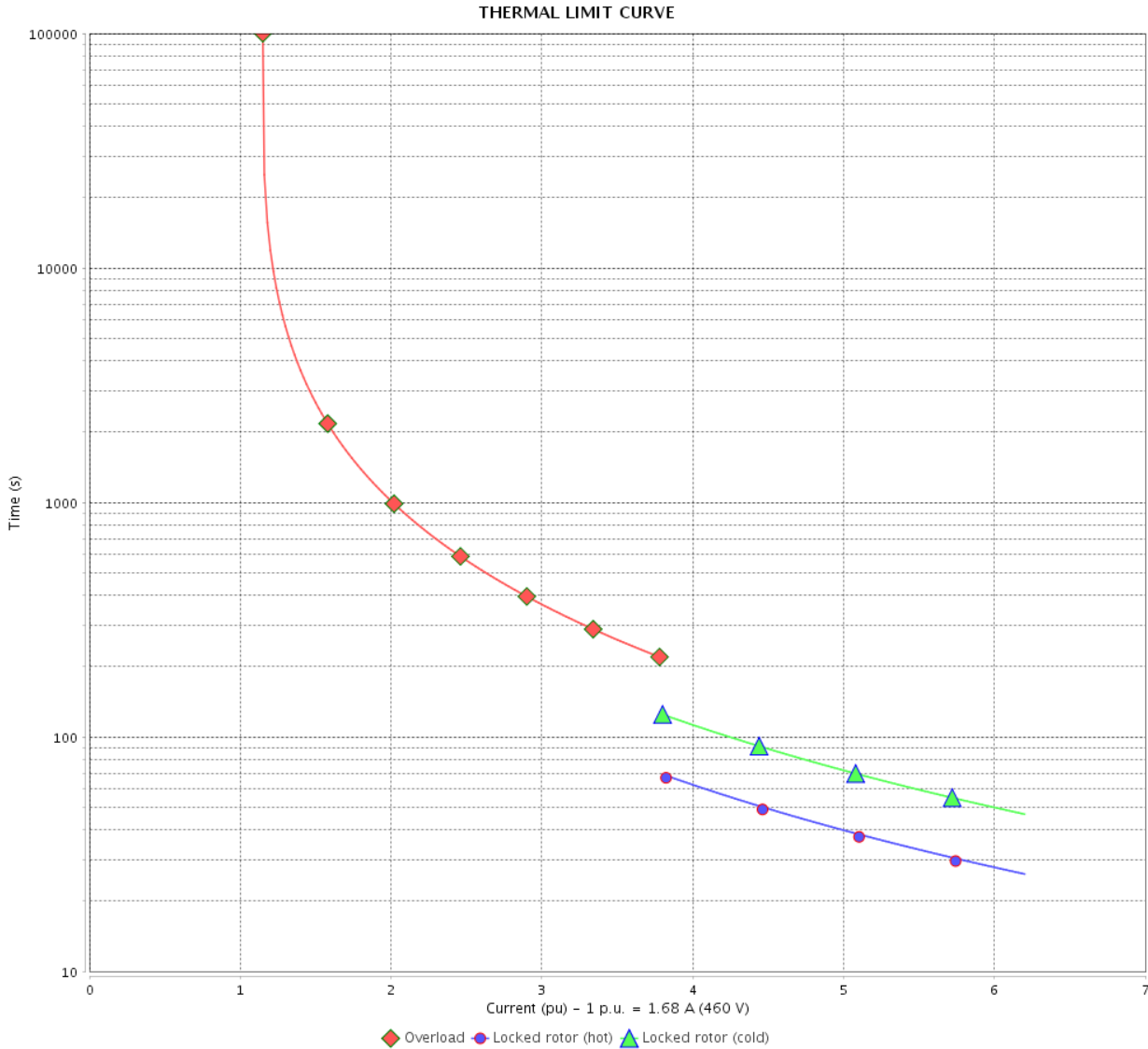
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Heating constant

Cooling constant

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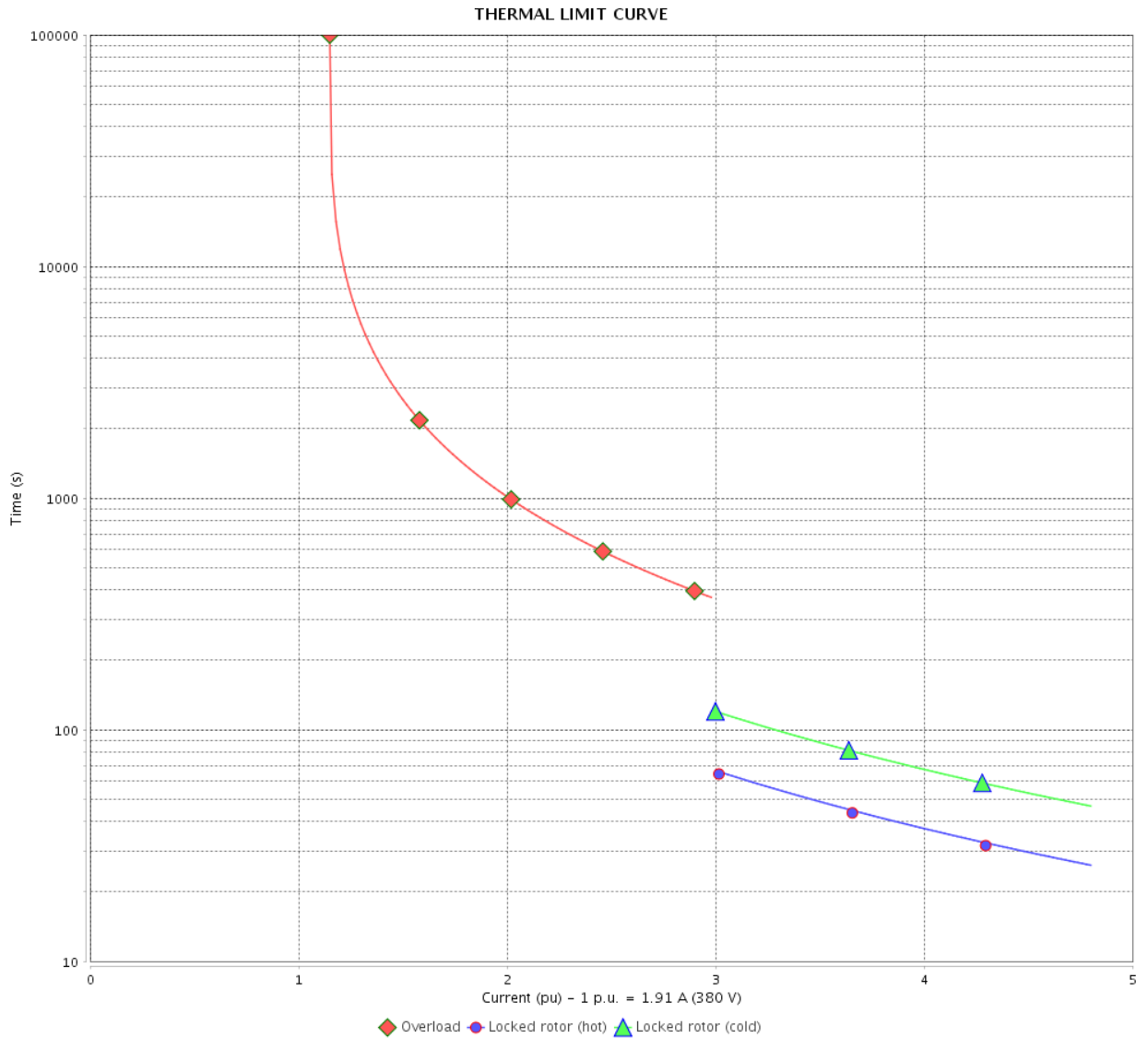
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THERMAL LIMIT CURVE

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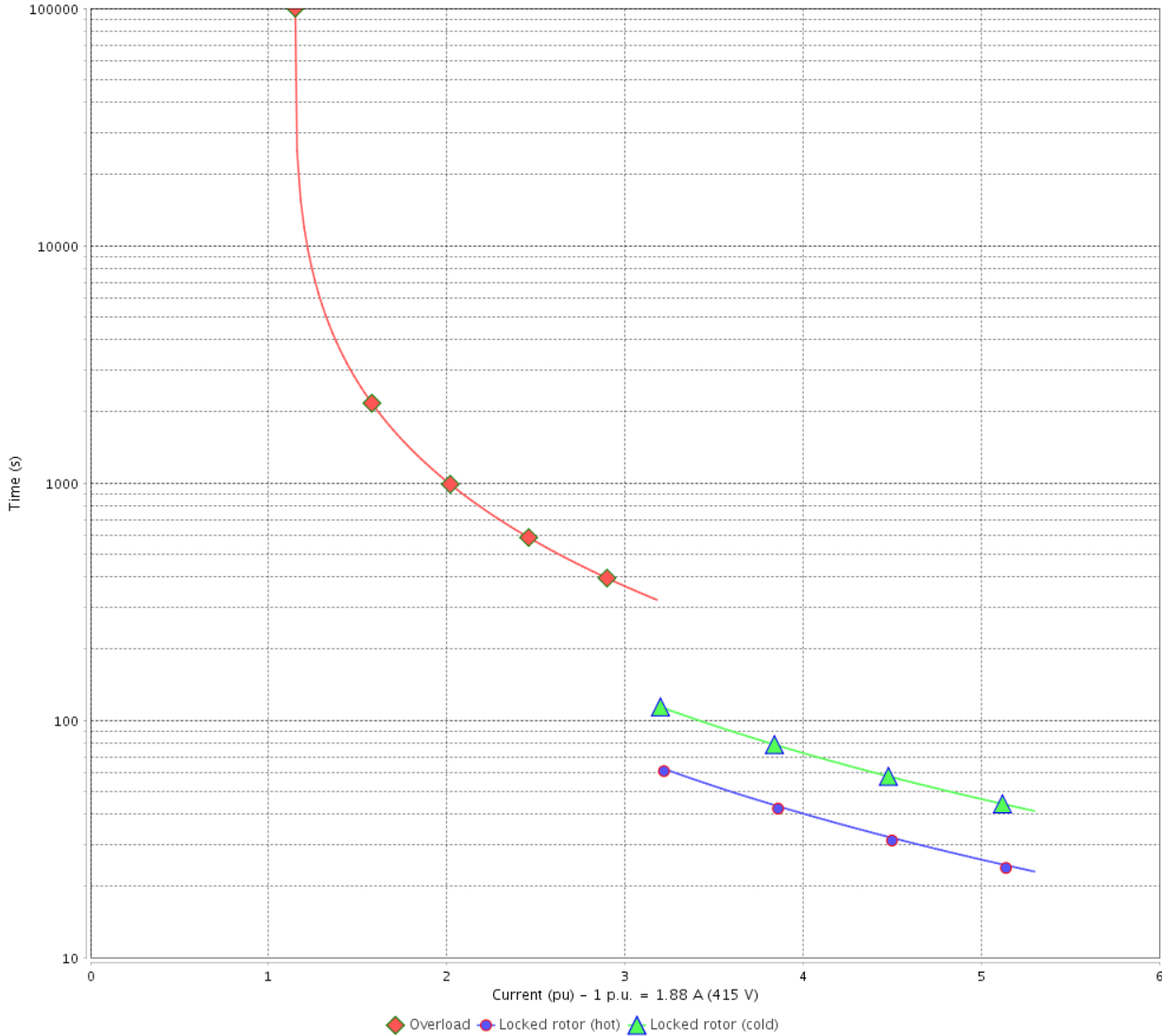
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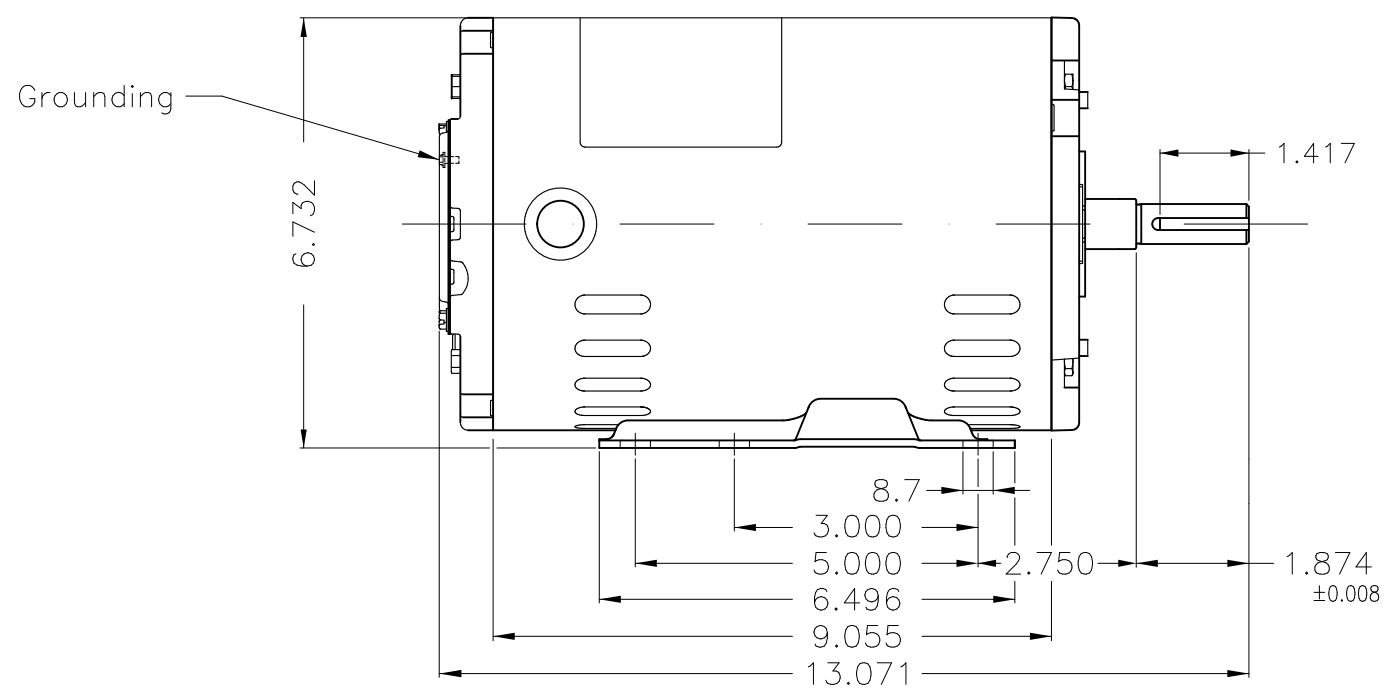
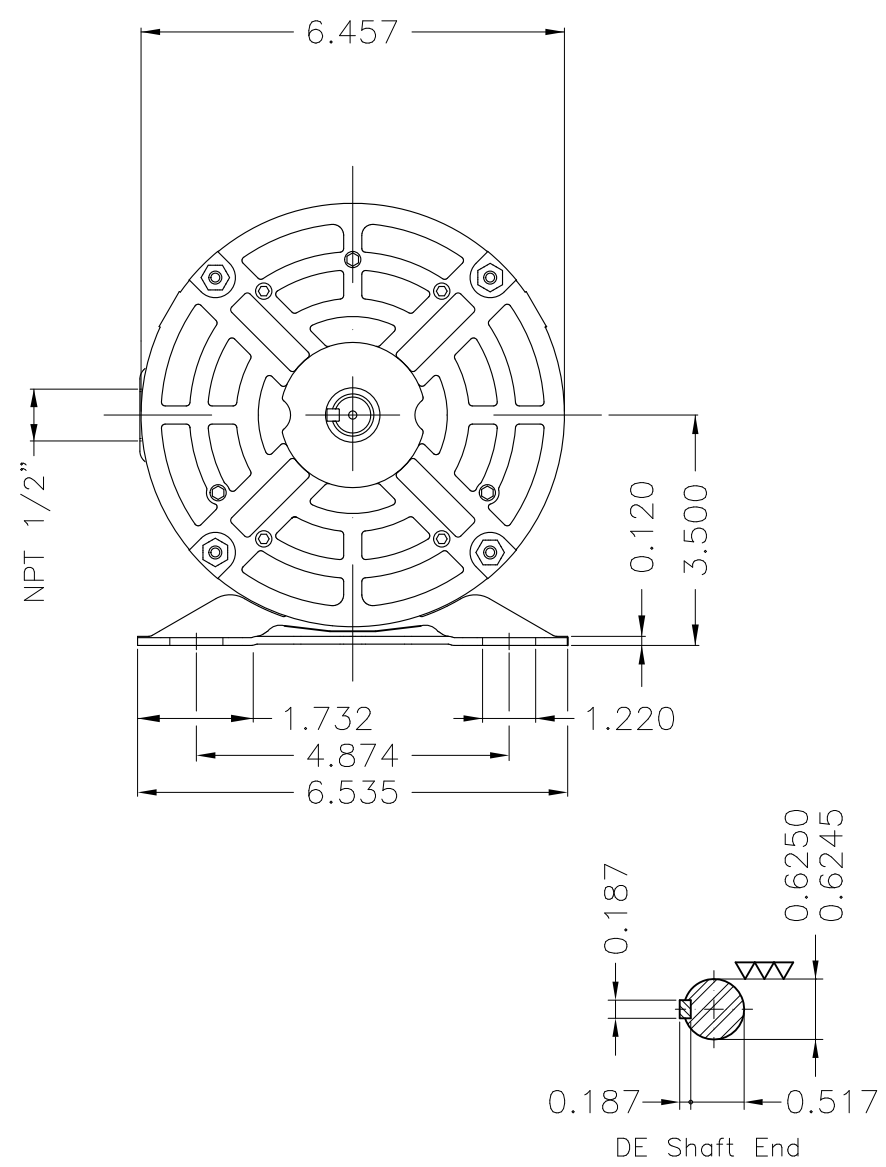
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1 2 3 4 5 6

A
B
C
D
E



Dimensions in inches

Without coating									
Mounting F-1/B3R(D)									
ECM	LOC	SUMMARY OF MODIFICATIONS			EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	PIRWUSER	THREE PH. MOTOR ROLLED STEEL PREM. EFF.				PREVIEW WDD			
CHECKED		FRAME 56H IP21 ODP							
RELEASED									
REL DT.		WMO	Jaragua do Sul	Product Engineering	SHEET	1 / 1			

1 HP 06 Poles 60 Hz

A

XME A3

**NEMA**
Premium

MADE IN MEXICO

MAT: 12809607**W01.T00IC0X0X****MODEL 001120T3E56-S****17MAR2022 B/N:**

PH 3	Hz 60	HP 1.0
FR 56H		KW 0.75
DUTY CONT.		V 230/460
ALT 1000 m.a.s.l.		A 3.36/1.68
INS CL F AT 80K		SFA 3.86/1.93
AMB 40°C	DES A	SF 1.15
ENCL ODP	CODE K	PF 0.68
USABLE @ 208V 3.72A		RPM 1160
SF1.00		NEMA NOM. EFF 82.5%

ALTERNATE RATING: 1.0HP 50Hz 190-220/380-415V SF1.15
3.82-3.55/1.91-1.88A 940RPM EFF 78.3% (IE2) IEC 60034-1

Inverter duty motor For 80Hz 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.

