

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :		
Product line	: JM Pump NEMA Premium Efficiency Three-Phase	
Product code :	12676960	
Catalog # :	00158OT3E145JM-S	
Frame	: 143/5JM	
Insulation class	: F	
Duty cycle	: Cont.(S1)	
Ambient temperature	: -20°C to +40°C	
Altitude	: 1000 m.a.s.l.	
Design	: B	
Cooling method	: IC01 - ODP	
Mounting	: F-1	
Rotation ¹	: Both (CW and CCW)	
Starting method	: Direct On Line	
Approx. weight ²	: 43.9 lb	
Moment of inertia (J)	: 0.1426 sq.ft.lb	
Output [HP]	1.5	
Poles	4	
Frequency [Hz]	60	
Rated voltage [V]	230/460	
Rated current [A]	4.14/2.07	
L. R. Amperes [A]	36.0/18.0	
LRC [A]	8.7x(Code L)	
No load current [A]	2.40/1.20	
Rated speed [RPM]	1760	
Slip [%]	2.22	
Rated torque [ft.lb]	4.48	
Locked rotor torque [%]	280	
Breakdown torque [%]	330	
Service factor	1.15	
Temperature rise	80 K	
Locked rotor time	27s (cold) 15s (hot)	
Noise level ²	52.0 dB(A)	
Efficiency (%)	25%	83.6
	50%	84.0
	75%	86.5
	100%	86.5
Power Factor	25%	0.32
	50%	0.56
	75%	0.69
	100%	0.77
Bearing type	: <u>Drive end</u> 6206 ZZ <u>Non drive end</u> 6203 ZZ	
Sealing	: Without Without Bearing Seal Bearing Seal	
Lubrication interval	: - -	
Lubricant amount	: - -	
Lubricant type	: Mobil Polyrex EM	
Foundation loads	Max. traction : 111 lb Max. compression : 155 lb	
Notes USABLE @208V 4.58A SF 1.00 SFA 4.58A		
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



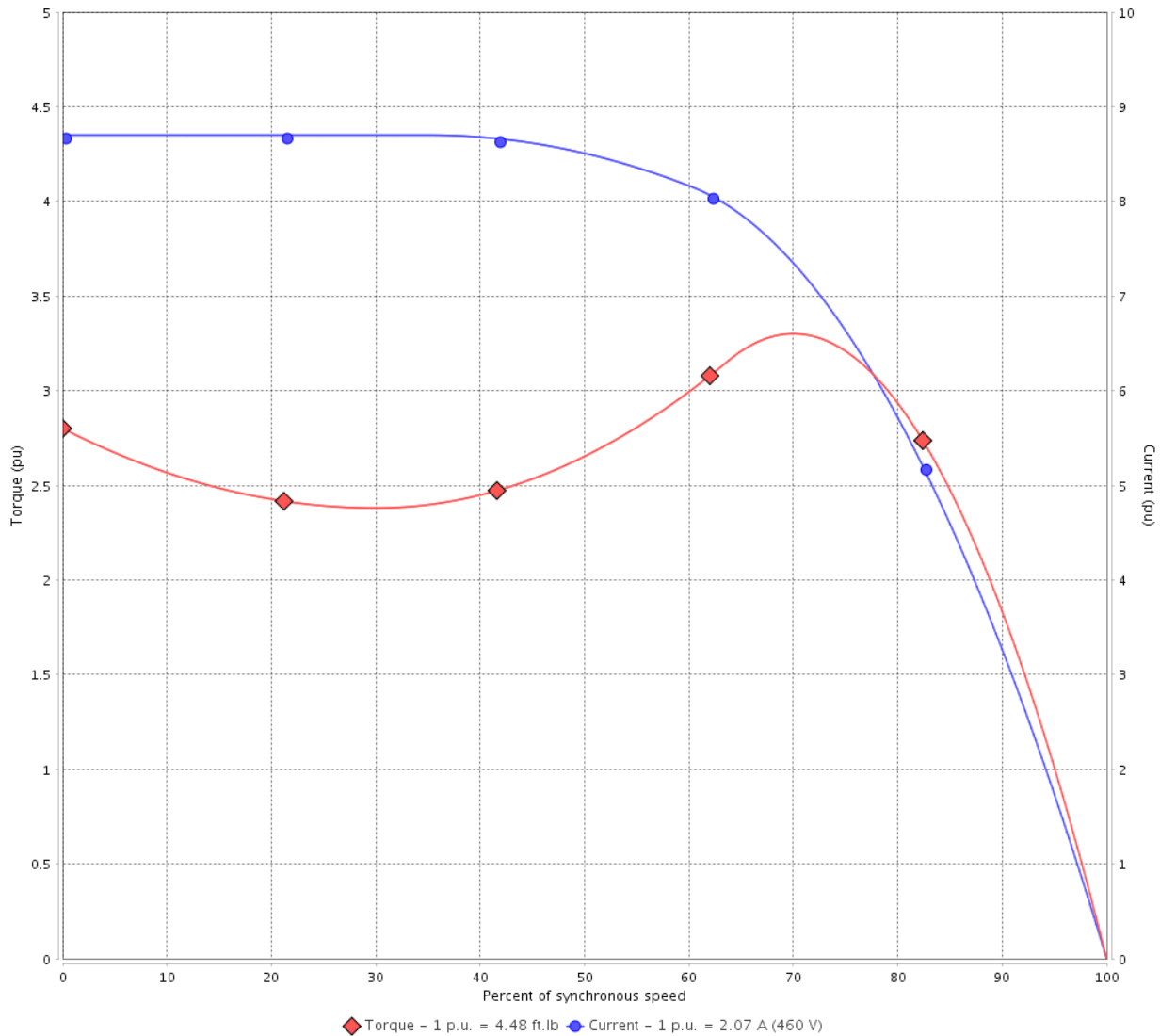
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Efficiency Three-Phase

Product code : 12676960

Catalog # : 00158OT3E145JM-S

TORQUE AND CURRENT VS SPEED CURVE



Performance : 230/460 V 60 Hz 4P

Rated current : 4.14/2.07 A
LRC : 8.7
Rated torque : 4.48 ft.lb
Locked rotor torque : 280 %
Breakdown torque : 330 %
Rated speed : 1760 rpm

Moment of inertia (J) : 0.1426 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



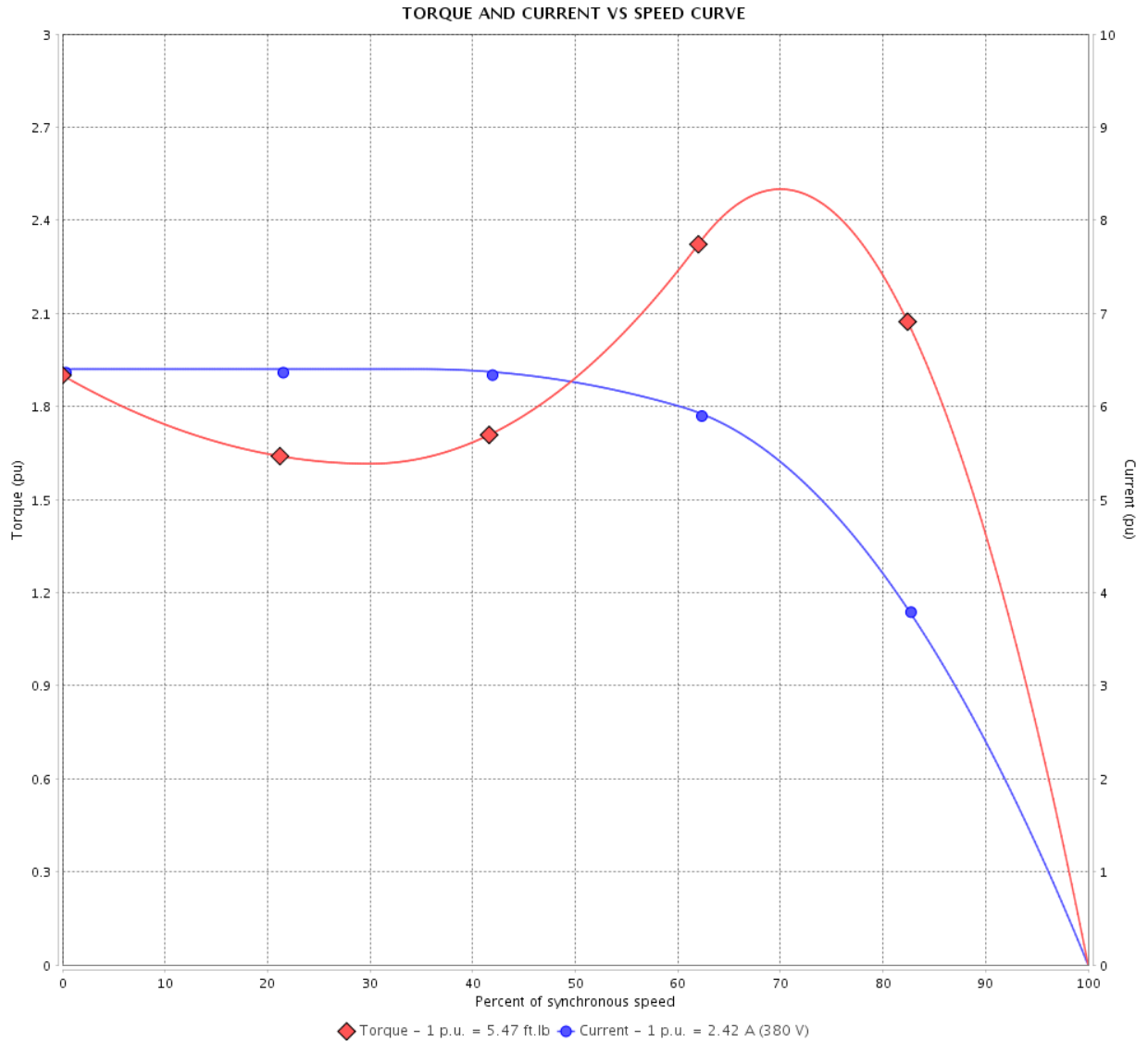
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Performance : 190/380 V 50 Hz 4P

Rated current : 4.84/2.42 A
 LRC : 6.4
 Rated torque : 5.47 ft.lb
 Locked rotor torque : 190 %
 Breakdown torque : 250 %
 Rated speed : 1440 rpm

Moment of inertia (J) : 0.1426 sq.ft.lb
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 Temperature rise : 80 K
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Locked rotor time : 0s (cold) 0s (hot)

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TORQUE AND CURRENT VS SPEED CURVE

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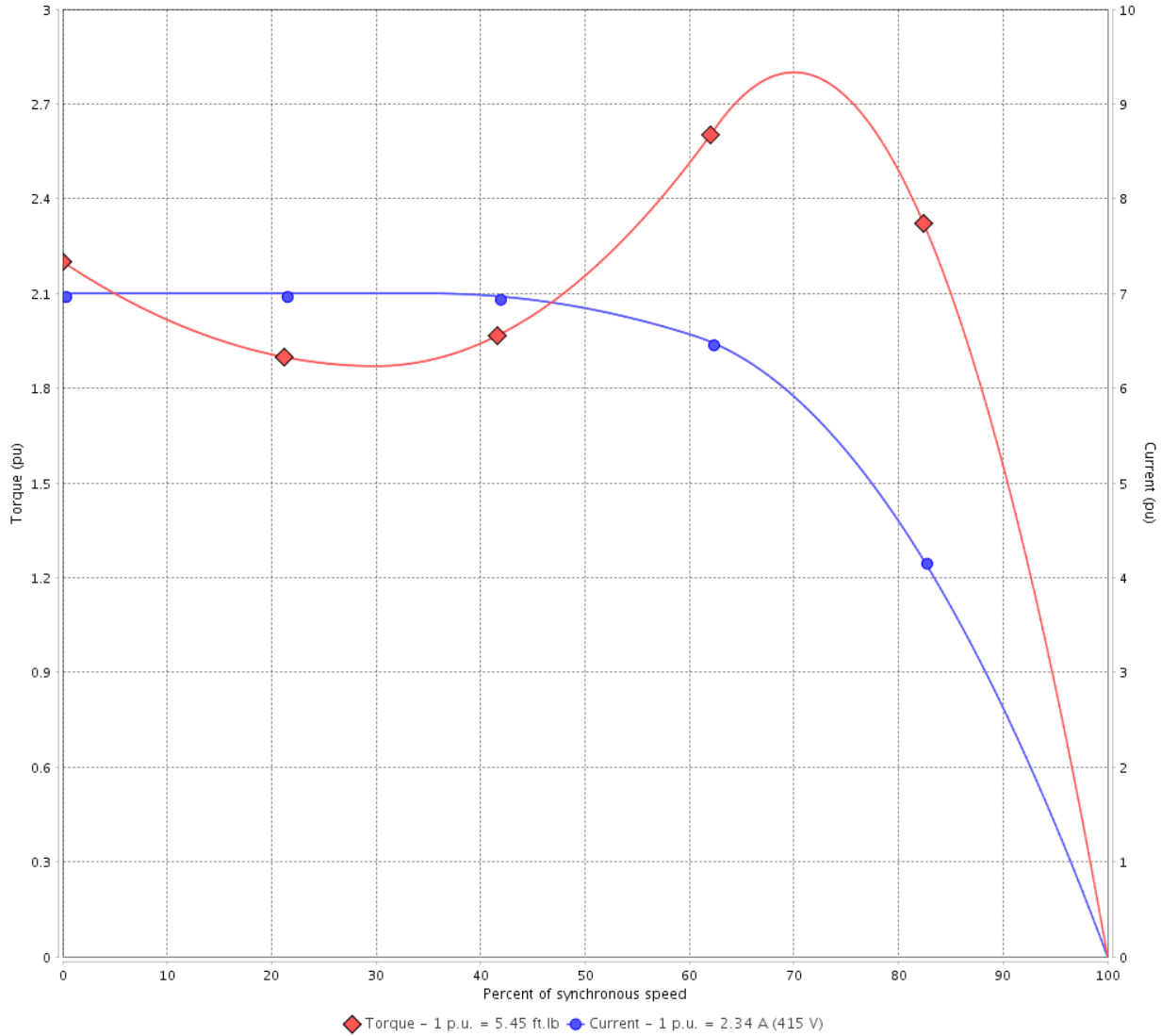
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TORQUE AND CURRENT VS SPEED CURVE



Performance : 220/415 V 50 Hz 4P

Rated current : 4.41/2.34 A
LRC : 7.0
Rated torque : 5.45 ft.lb
Locked rotor torque : 220 %
Breakdown torque : 280 %
Rated speed : 1445 rpm

Moment of inertia (J) : 0.1426 sq.ft.lb
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Insulation class : F
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LOAD PERFORMANCE CURVE

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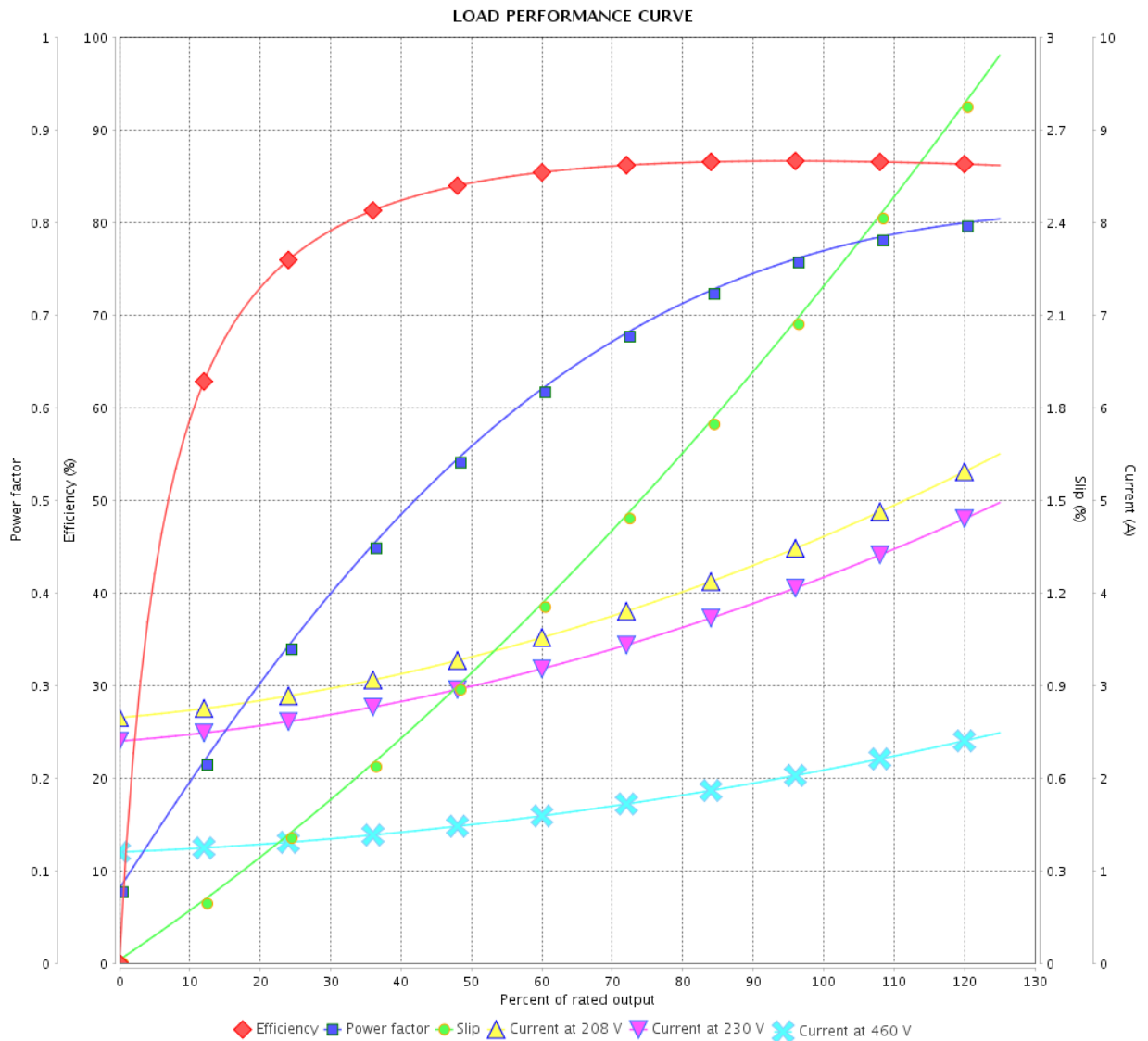


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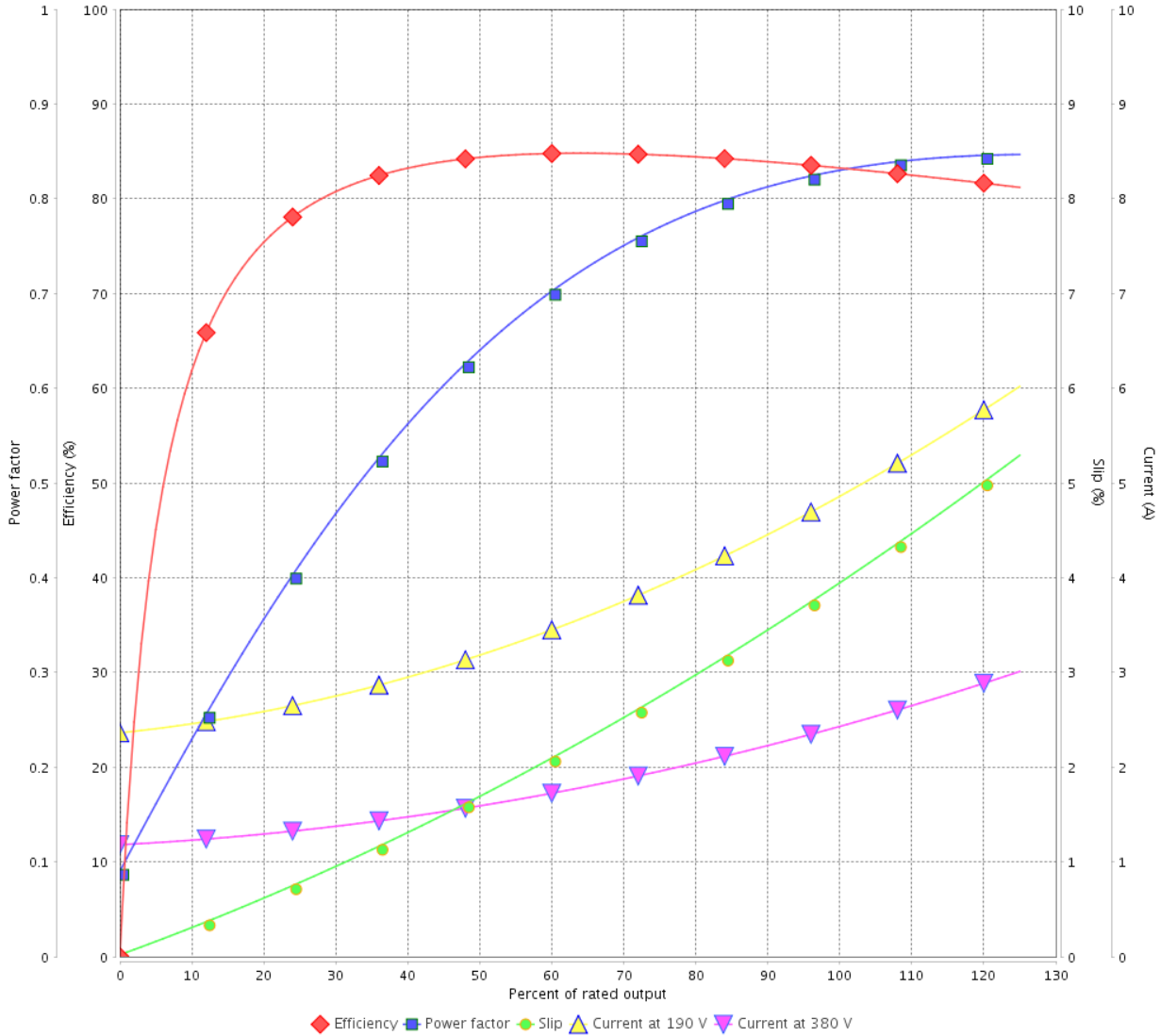
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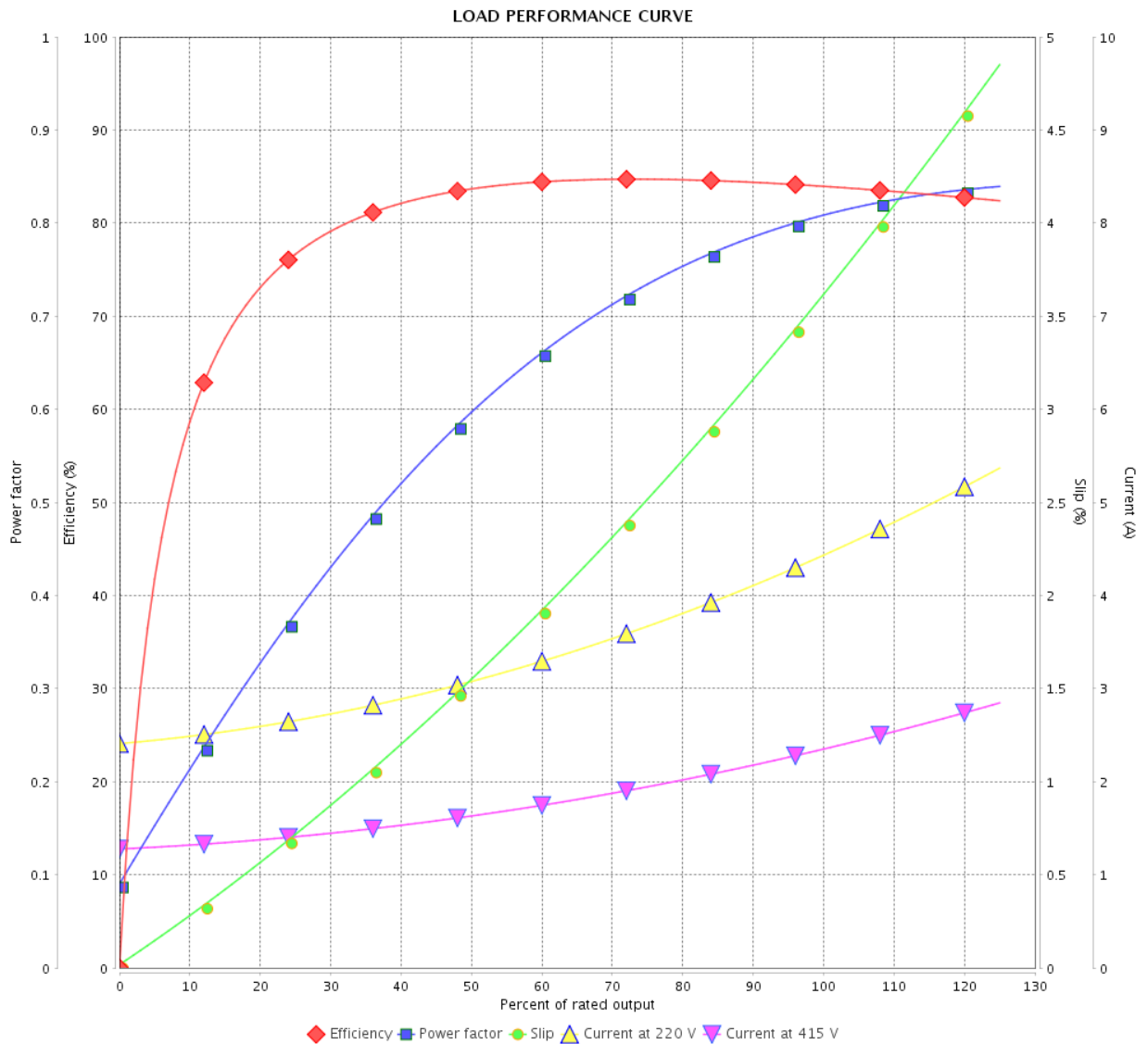


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THERMAL LIMIT CURVE



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Heating constant

Cooling constant

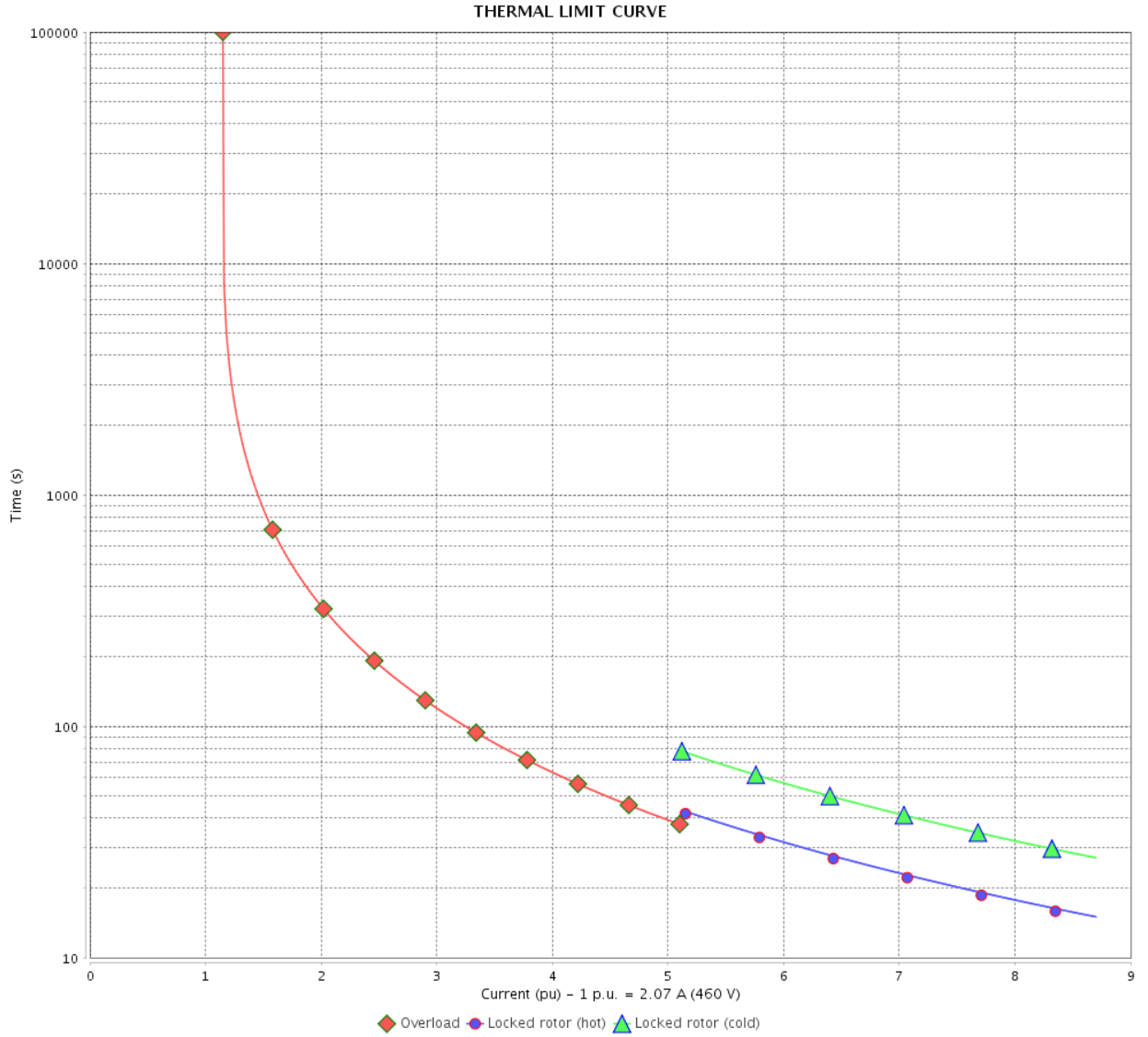
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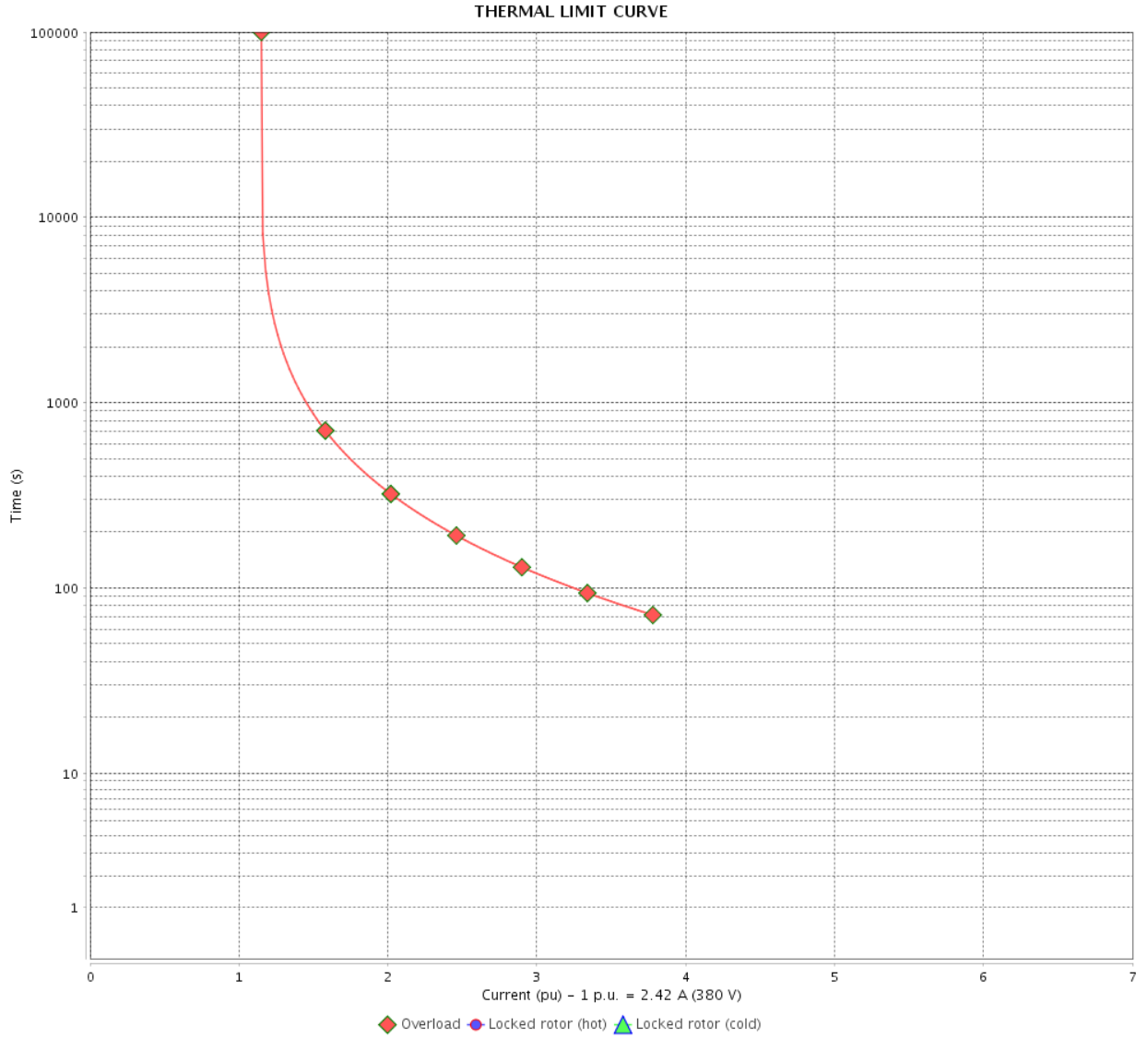
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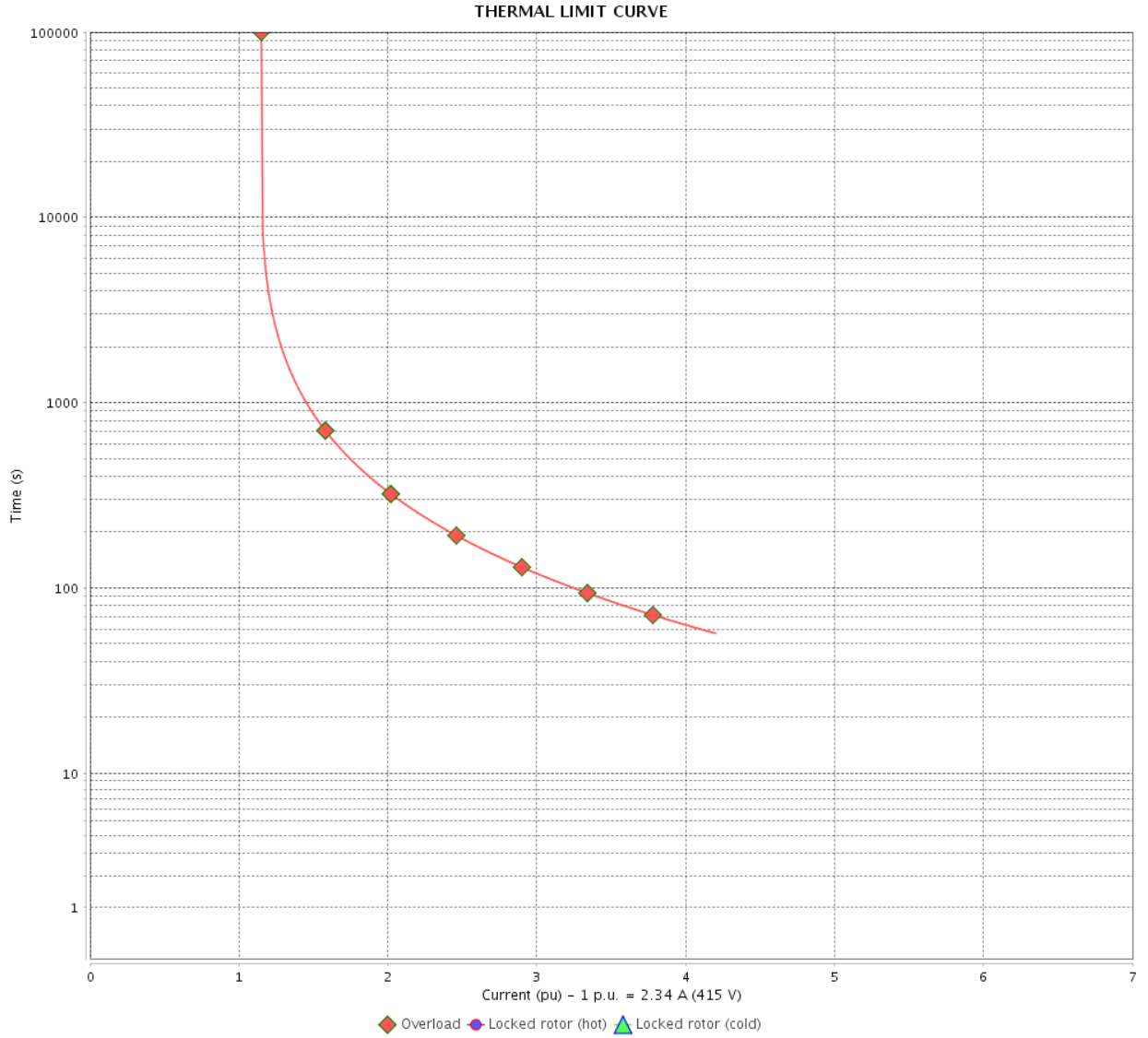
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VFD OPERATION CURVE

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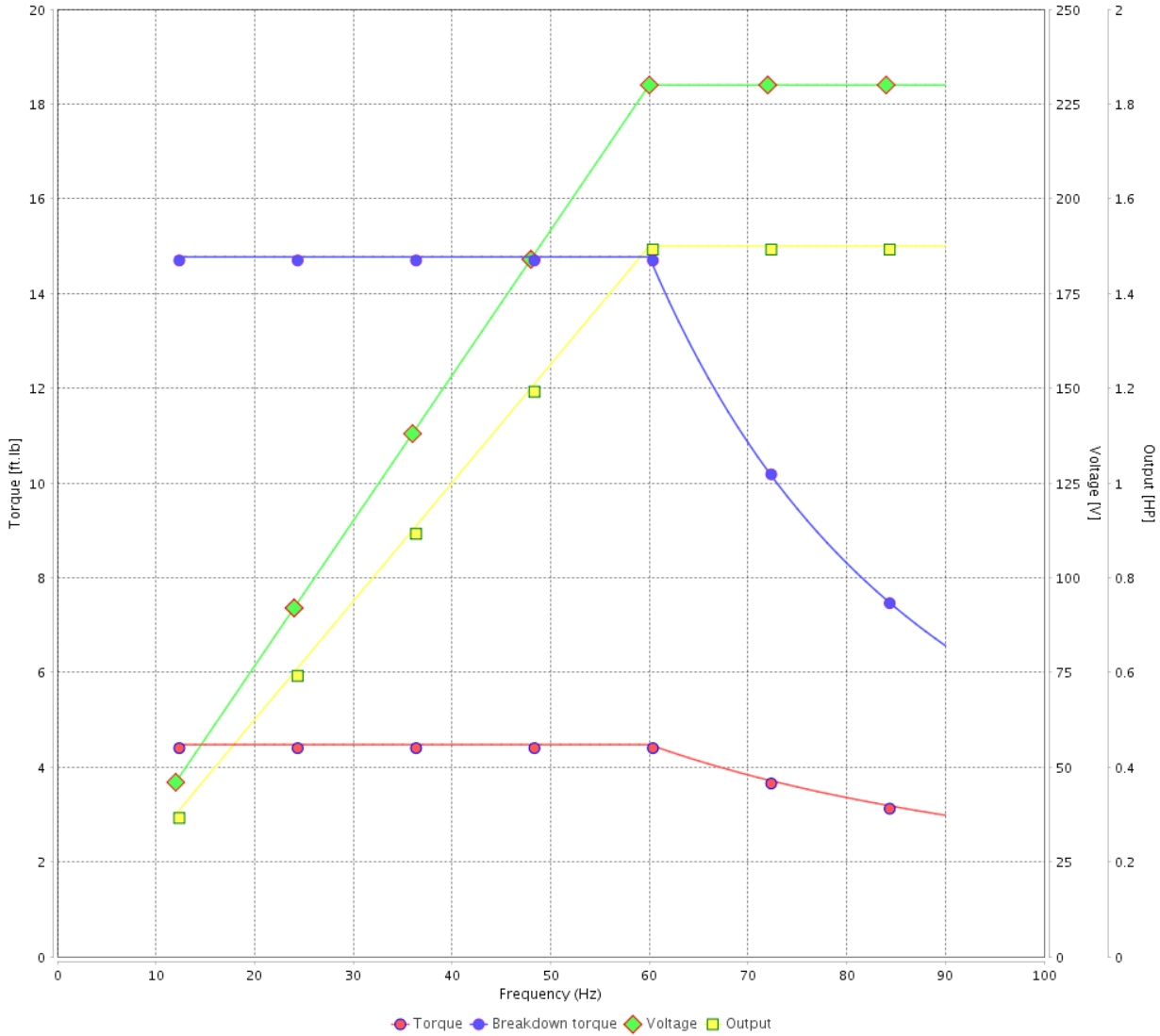
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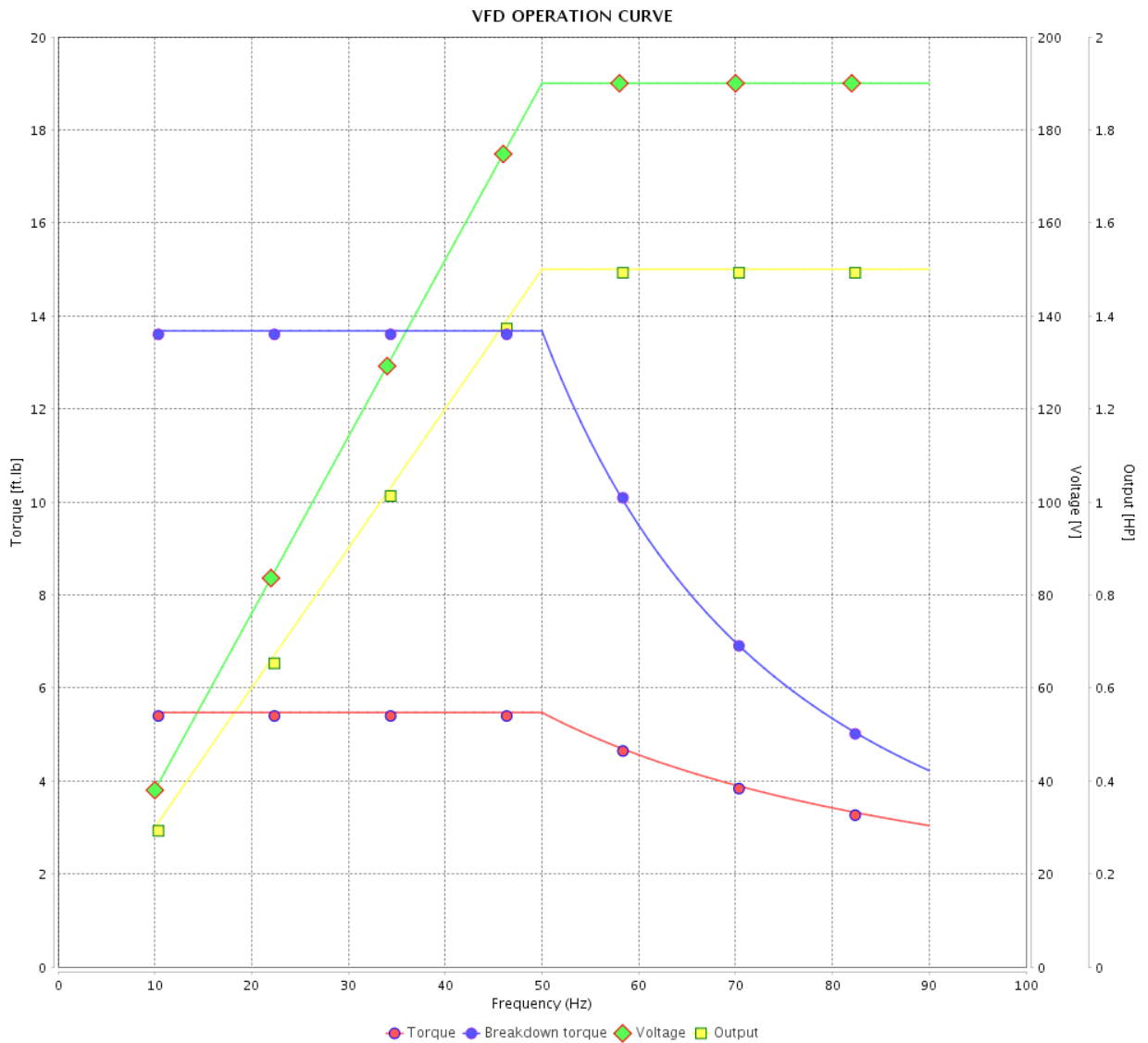


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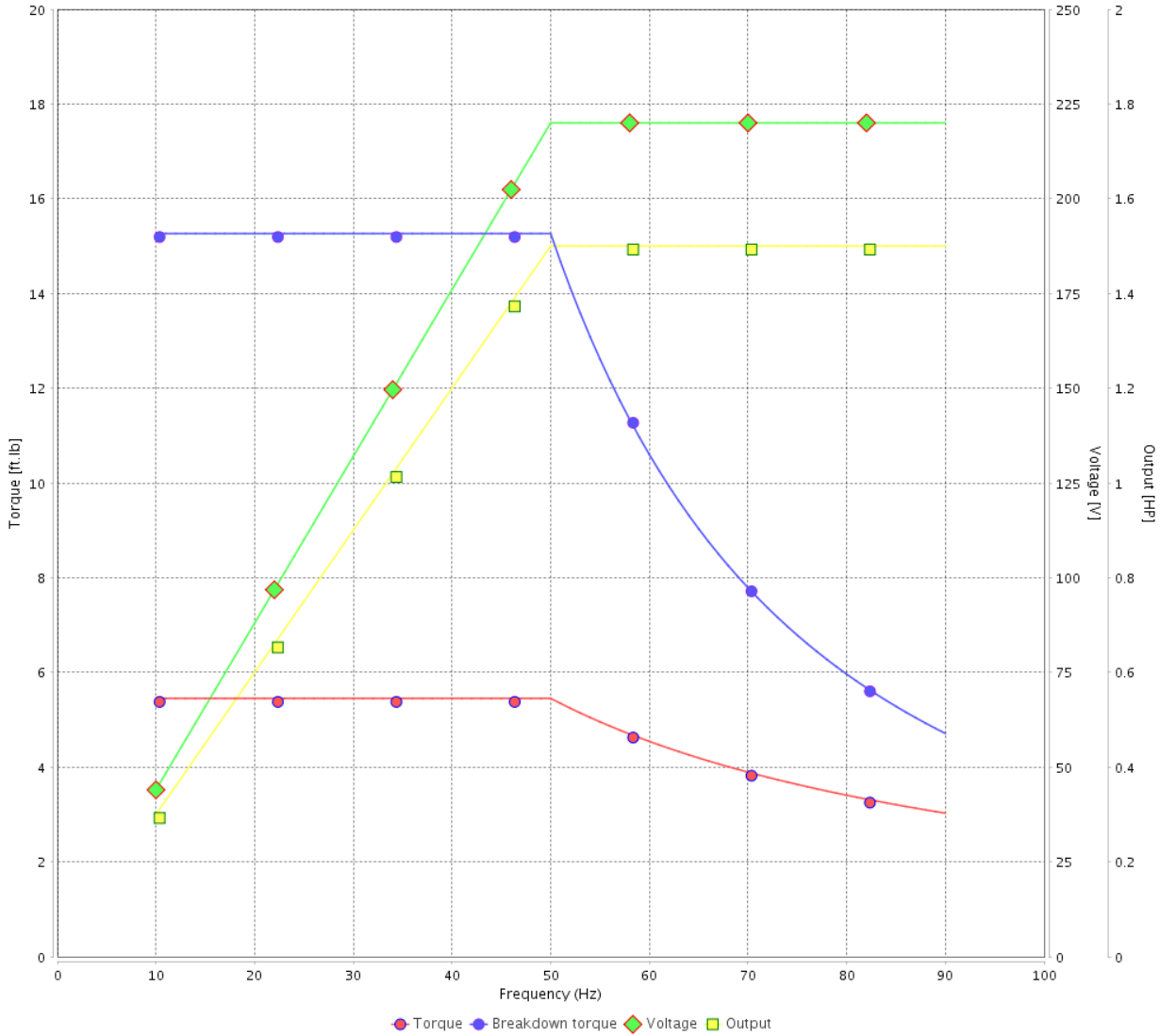
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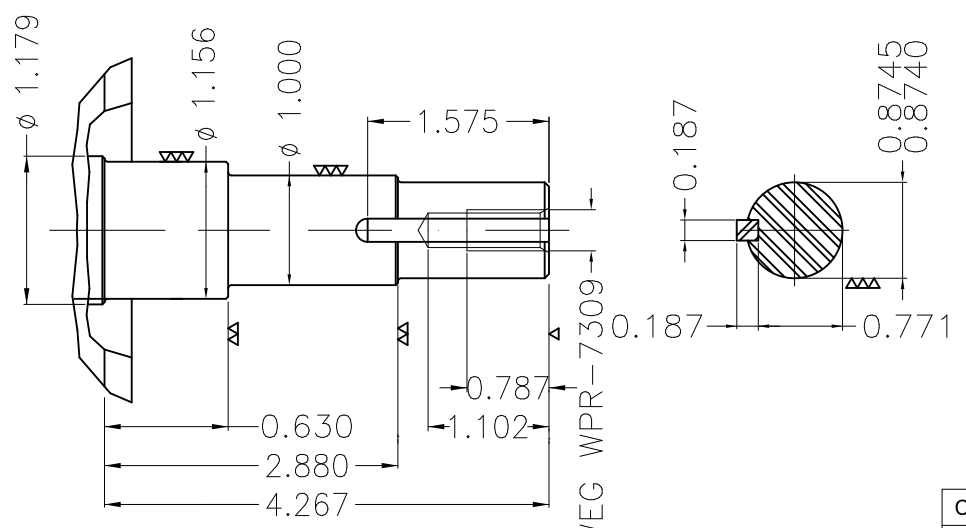
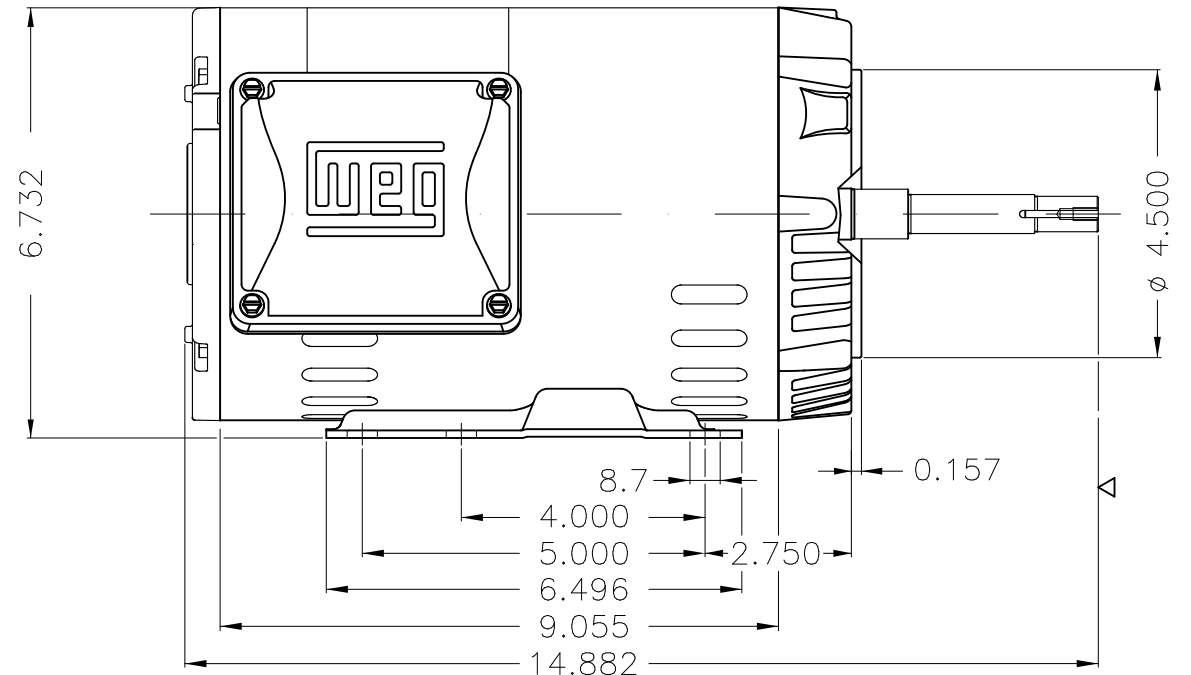
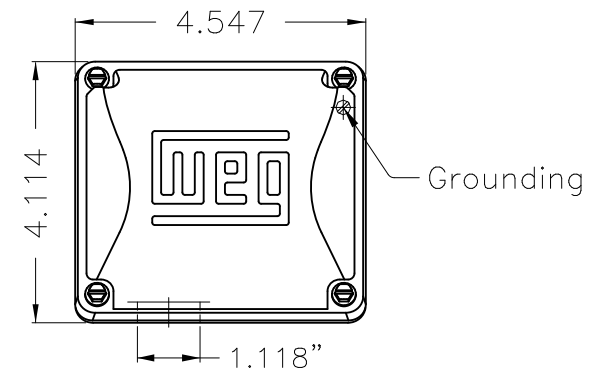
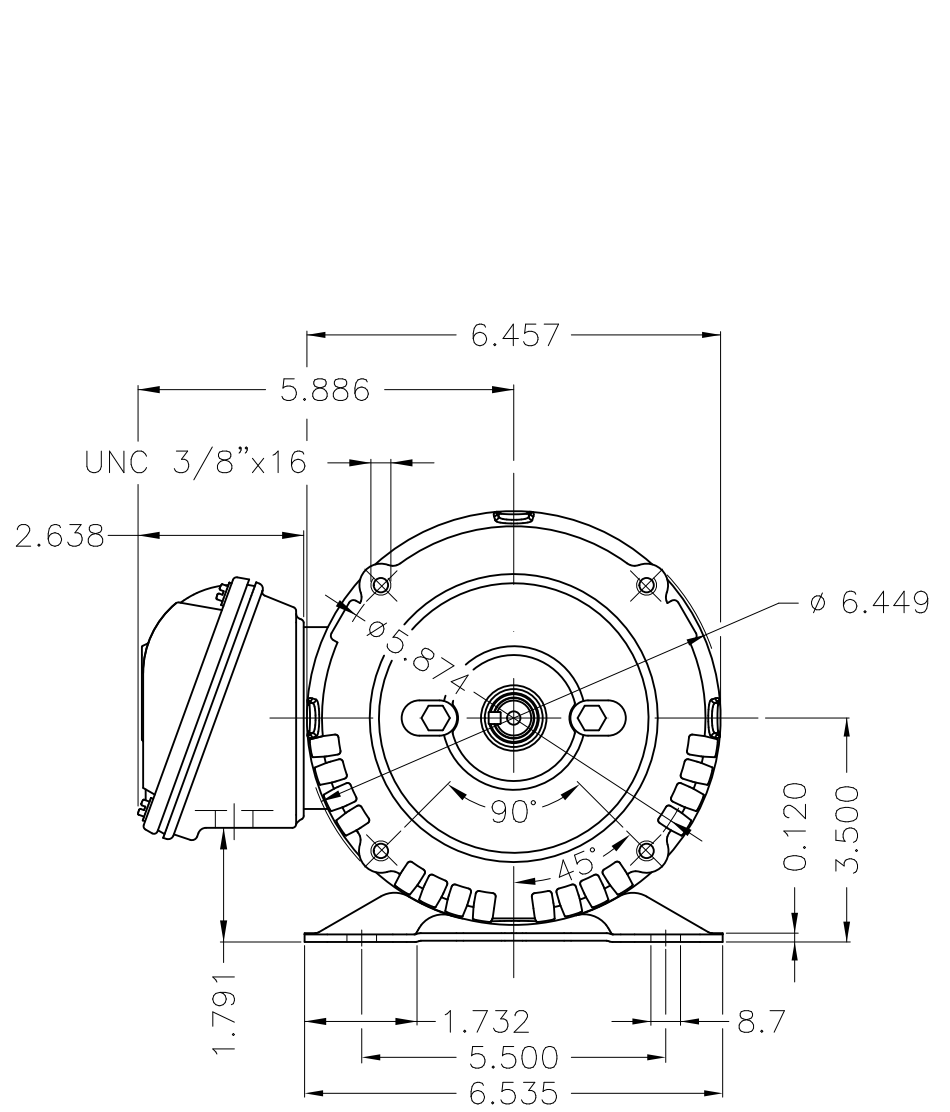
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1 2 3 4 5 6

A
B
C
D
E



EUNC 3/8" - 16 WEG WPR-7309

DE Shaft End

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	PIRWUSER	THREE PH. MOTOR ROLLED STEEL CLOSE COUPLED PUMP JN TYPE PSE 143							
CHECKED		FRAME 143/5JM IP21 ODP							
RELEASED									
REL DT.		WMO	Jaragua do Sul	Product Engineering					

1.5 HP 04 Poles 60 Hz

**NEMA
Premium**

MADE IN MEXICO

MAT: 12676960 CC029A**W01.T00IC0X0N****MODEL 001580T3E145JM-S****25MAR2022 B/N:**

PH 3	Hz 60	HP 1.5
FR 143/5JM		KW 1.1
DUTY CONT.		V 230/460
ALT 1000 m.a.s.l.		A 4.14/2.07
INS CL F AT 80K		SFA 4.76/2.38
AMB 40°C	DES B	SF 1.15
ENCL ODP	CODE L	PF 0.77
USABLE @ 208V 4.58A		RPM 1760
SF1.00		NEMA NOM. EFF 86.5%

ALTERNATE RATING: 1.5HP 50Hz 190-220/380-415V SF1.15
4.84-4.34/2.42-2.30A 1440RPM EFF 83.2% (IE2) IEC 60034-1

Inverter duty motor For 80Hz use on VPWM 1000:1 VT, 5:1 CT

DE 6206-ZZ	ODE 6203-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.

