

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :		
Product line	: JM Pump NEMA Premium Efficiency Three-Phase	
Product code :	12676986	
Catalog # :	002120T3E184JM-S	
Frame	: 182/4JM	
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	: 74.7 lb	
Moment of inertia (J)	: 0.2800 sq.ft.lb	
Output [HP]	2	
Poles	6	
Frequency [Hz]	60	
Rated voltage [V]	230/460	
Rated current [A]	5.90/2.95	
L. R. Amperes [A]	38.9/19.5	
LRC [A]	6.6x(Code J)	
No load current [A]	3.42/1.71	
Rated speed [RPM]	1165	
Slip [%]	2.92	
Rated torque [ft.lb]	9.02	
Locked rotor torque [%]	200	
Breakdown torque [%]	300	
Service factor	1.15	
Temperature rise	80 K	
Locked rotor time	59s (cold) 33s (hot)	
Noise level ²	52.0 dB(A)	
Efficiency (%)	25%	84.4
	50%	85.5
	75%	86.5
	100%	87.5
Power Factor	25%	0.30
	50%	0.53
	75%	0.66
	100%	0.73
Bearing type	: <u>Drive end</u> 6207 ZZ <u>Non drive end</u> 6205 ZZ	
Sealing	: Without Without Bearing Seal Bearing Seal	
Lubrication interval	: - -	
Lubricant amount	: - -	
Lubricant type	: Mobil Polyrex EM	
Foundation loads	Max. traction : 139 lb Max. compression : 214 lb	
Notes USABLE @208V 6.52A SF 1.00 SFA 6.52A		
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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14/04/2022		
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TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage

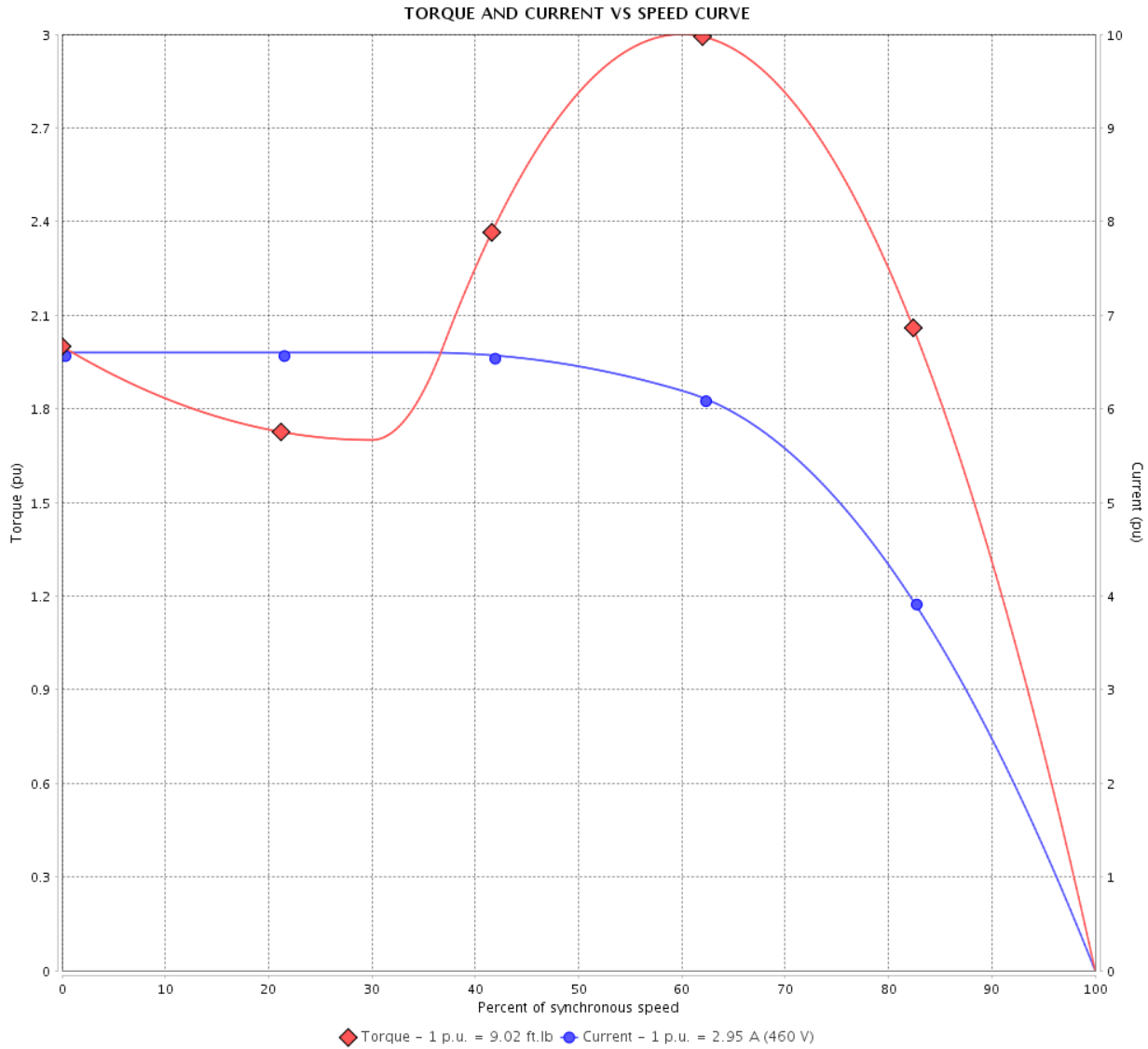


Customer :

Product line : JM Pump NEMA Premium Efficiency Three-Phase

Product code : 12676986

Catalog # : 002120T3E184JM-S



Performance : 230/460 V 60 Hz 6P

Rated current	: 5.90/2.95 A	Moment of inertia (J)	: 0.2800 sq.ft.lb
LRC	: 6.6	Duty cycle	: Cont.(S1)
Rated torque	: 9.02 ft.lb	Insulation class	: F
Locked rotor torque	: 200 %	Service factor	: 1.15
Breakdown torque	: 300 %	Temperature rise	: 80 K
Rated speed	: 1165 rpm	Design	: B

Locked rotor time : 59s (cold) 33s (hot)

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TORQUE AND CURRENT VS SPEED CURVE



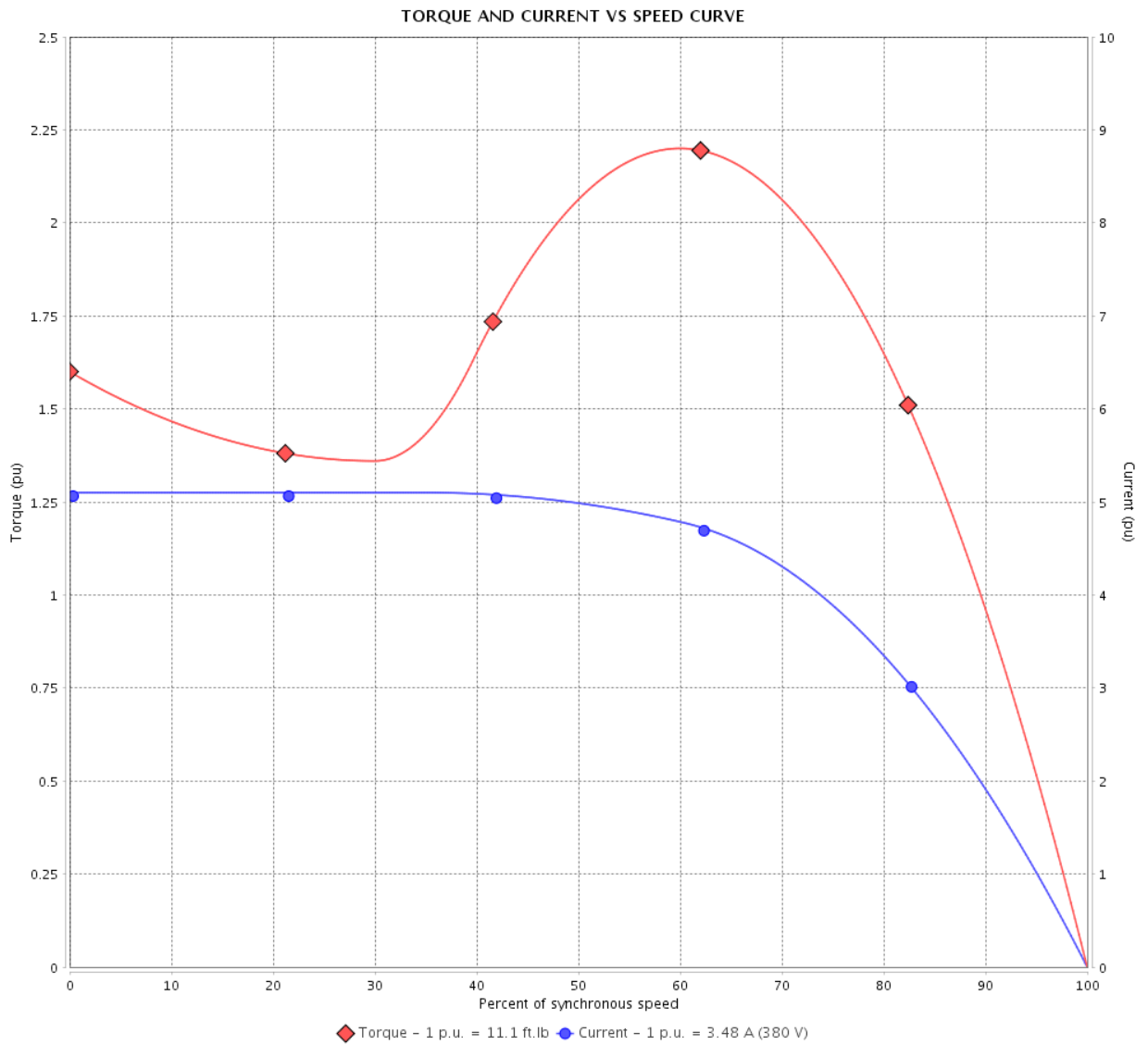
Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : JM Pump NEMA Premium Efficiency Three-Phase

Product code : 12676986

Catalog # : 00212OT3E184JM-S



Performance : 190/380 V 50 Hz 6P

Rated current : 6.96/3.48 A
 LRC : 5.1
 Rated torque : 11.1 ft.lb
 Locked rotor torque : 160 %
 Breakdown torque : 220 %
 Rated speed : 945 rpm

Moment of inertia (J) : 0.2800 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 105 K
 Design : B

Locked rotor time : 0s (cold) 0s (hot)

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TORQUE AND CURRENT VS SPEED CURVE

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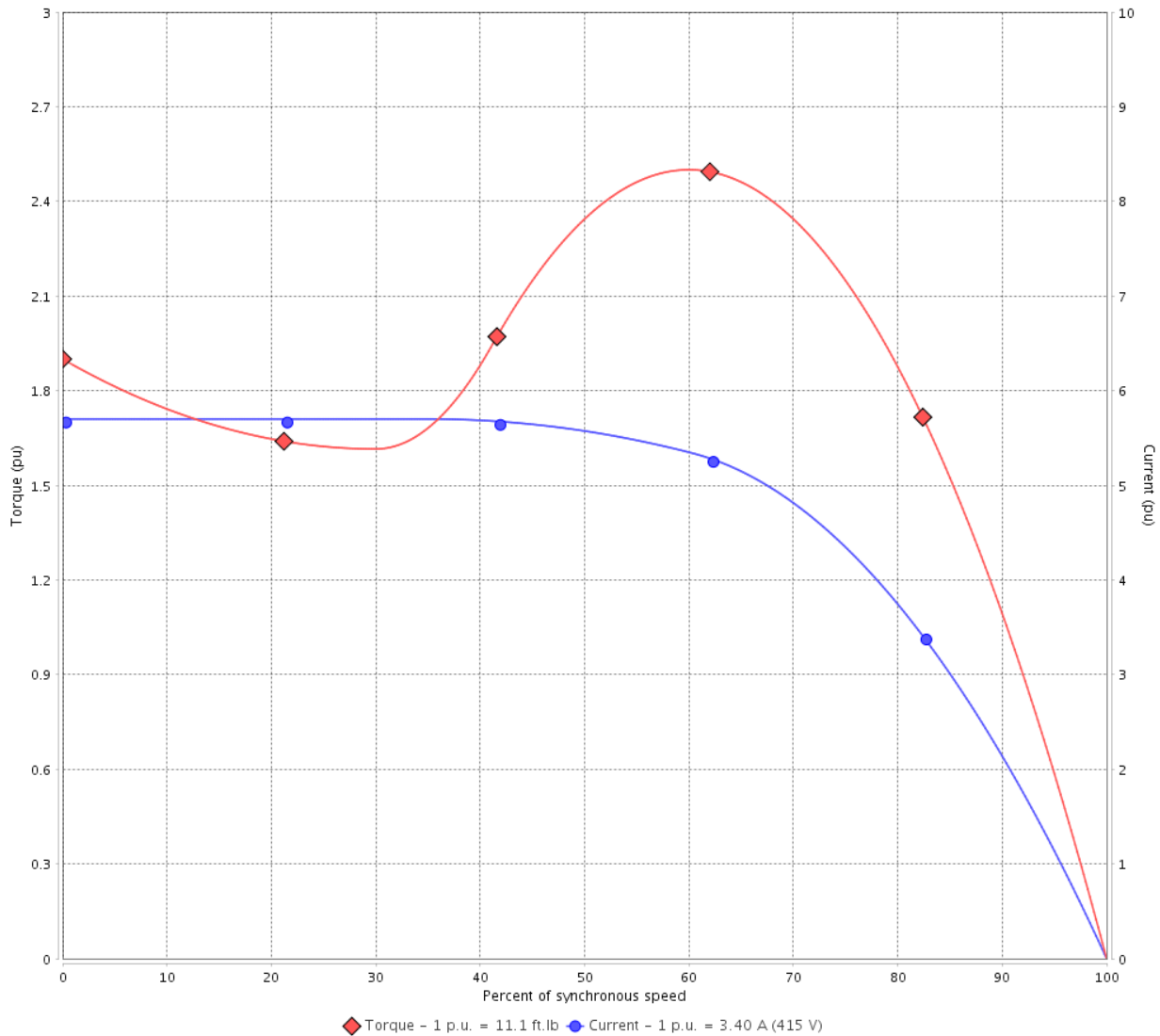
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Efficiency Three-Phase

Product code : 12676986

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TORQUE AND CURRENT VS SPEED CURVE



Performance : 220/415 V 50 Hz 6P

Rated current : 6.41/3.40 A
LRC : 5.7
Rated torque : 11.1 ft.lb
Locked rotor torque : 190 %
Breakdown torque : 250 %
Rated speed : 950 rpm

Moment of inertia (J) : 0.2800 sq.ft.lb
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.00
Temperature rise : 80 K
Design : B

Locked rotor time : 0s (cold) 0s (hot)

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LOAD PERFORMANCE CURVE

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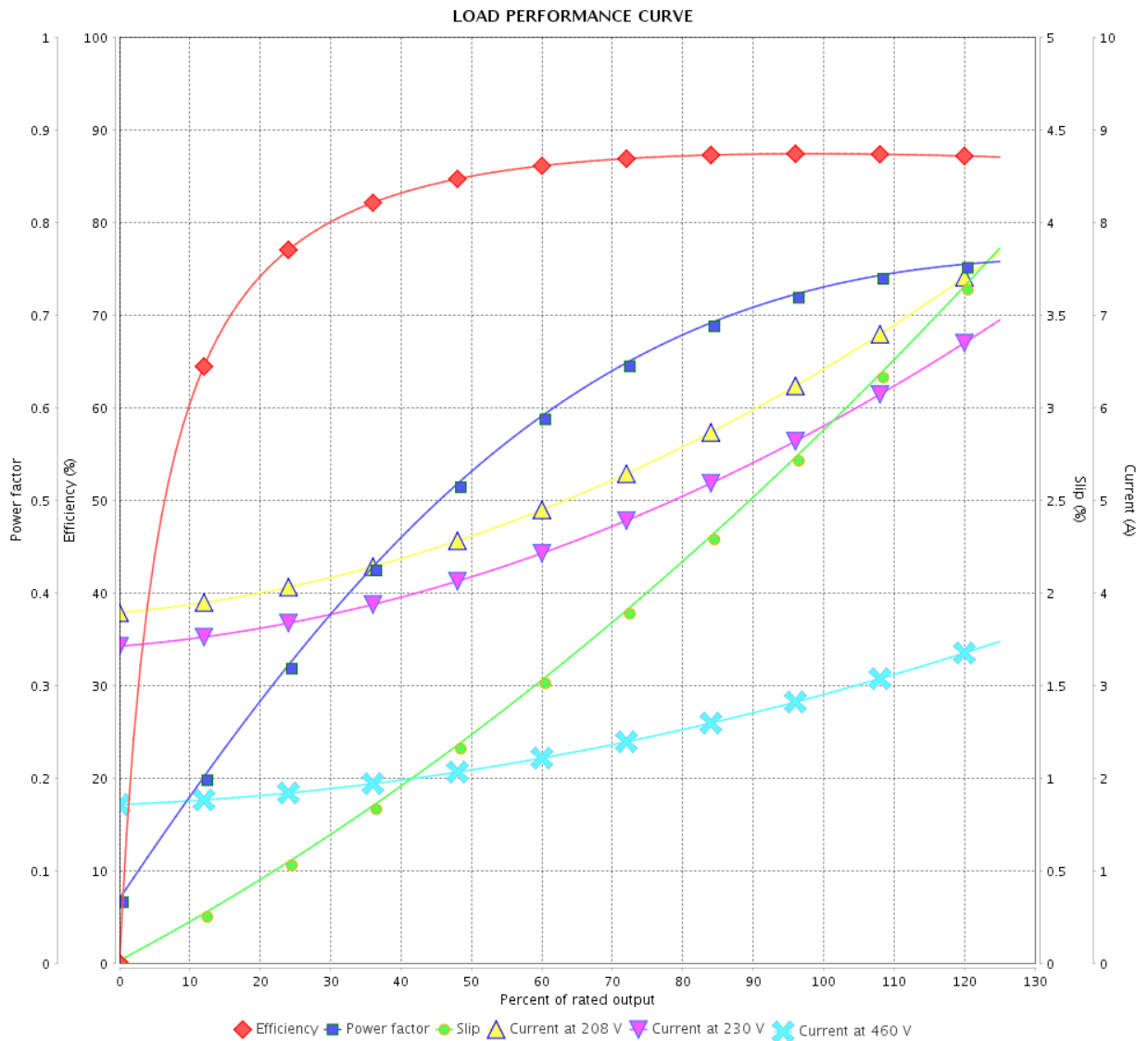


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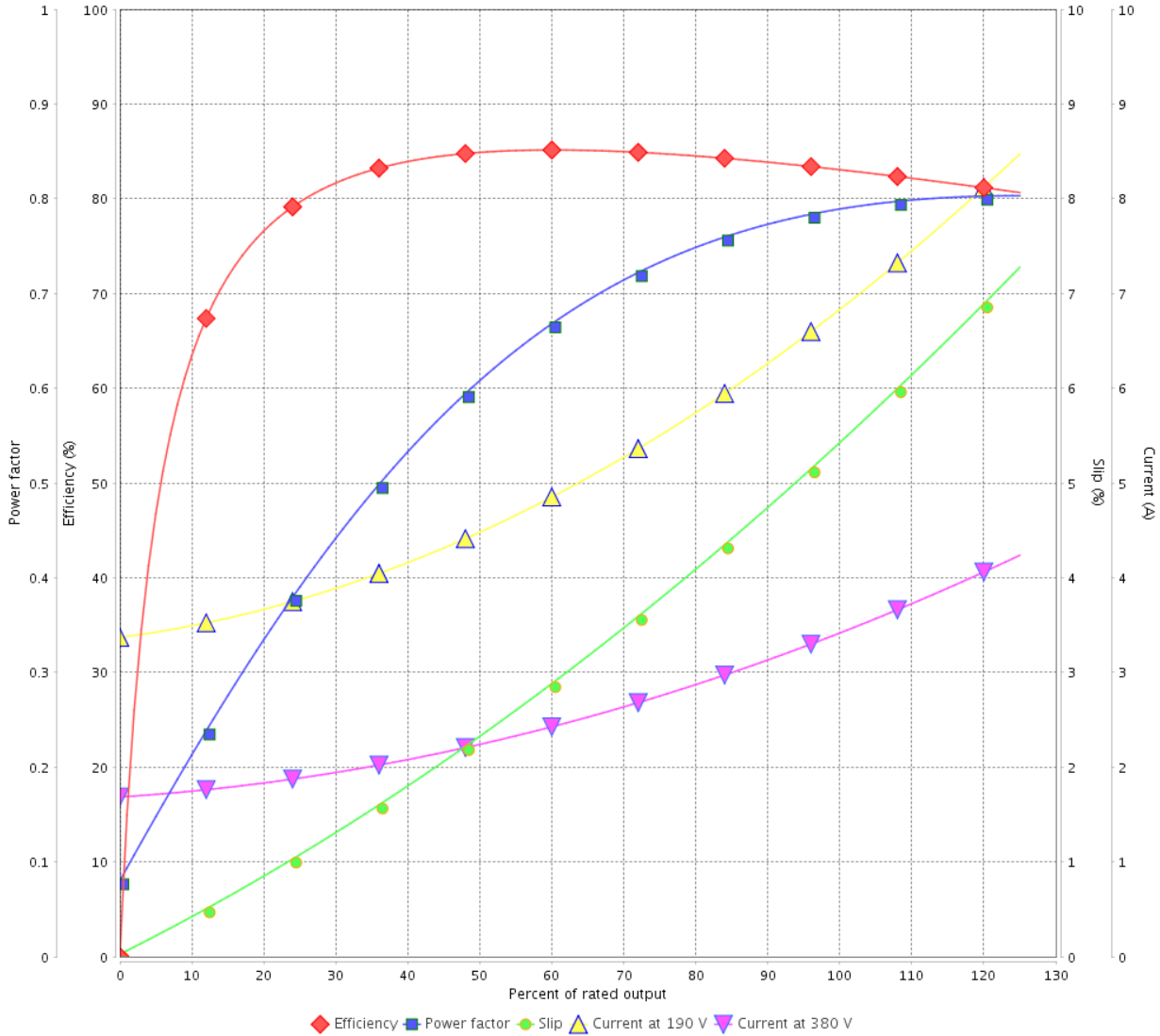
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Moment of inertia (J) : 0.2800 sq.ft.lb
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.00
Temperature rise : 105 K
Design : B

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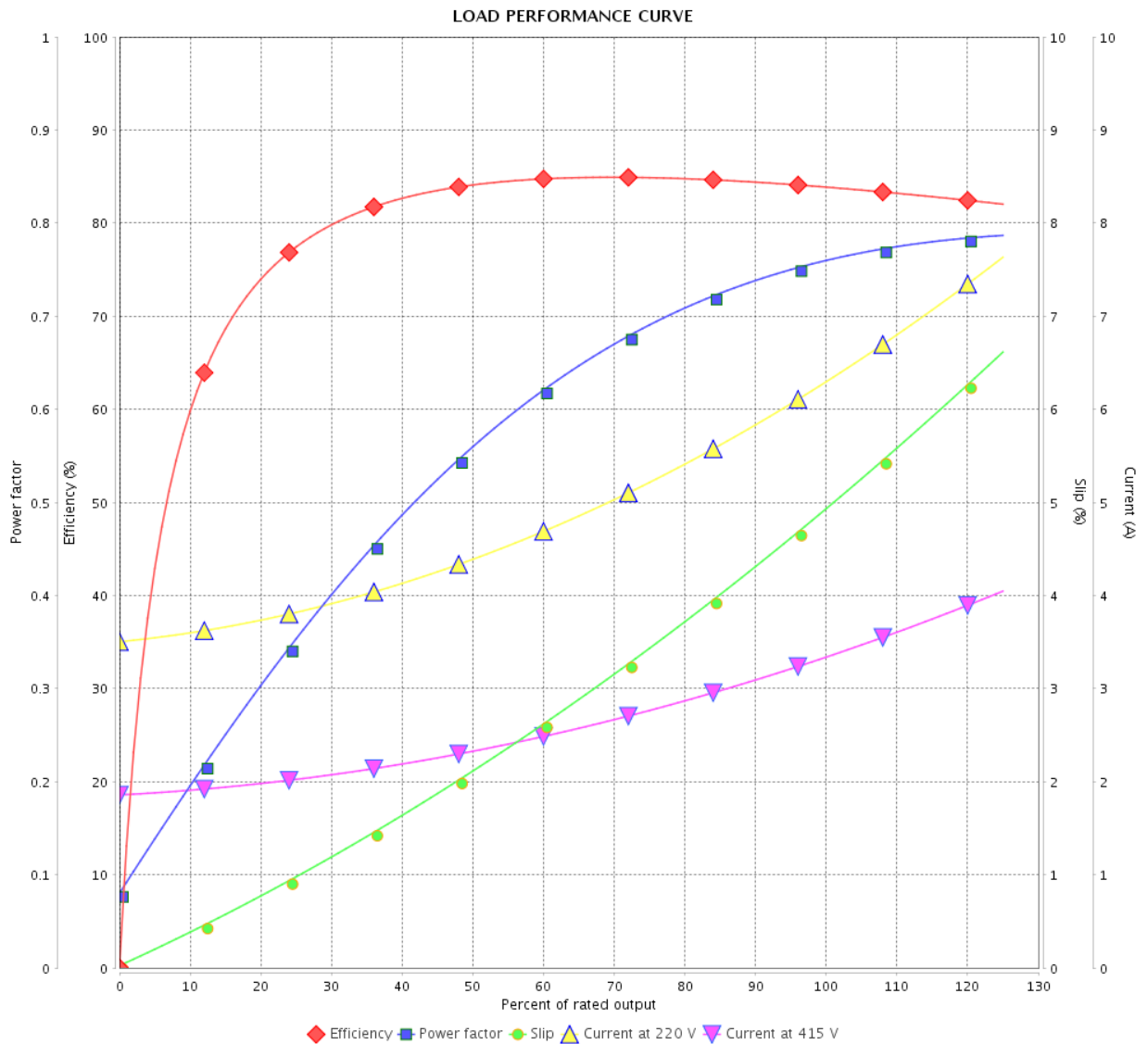


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THERMAL LIMIT CURVE



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Design : B

Heating constant

Cooling constant

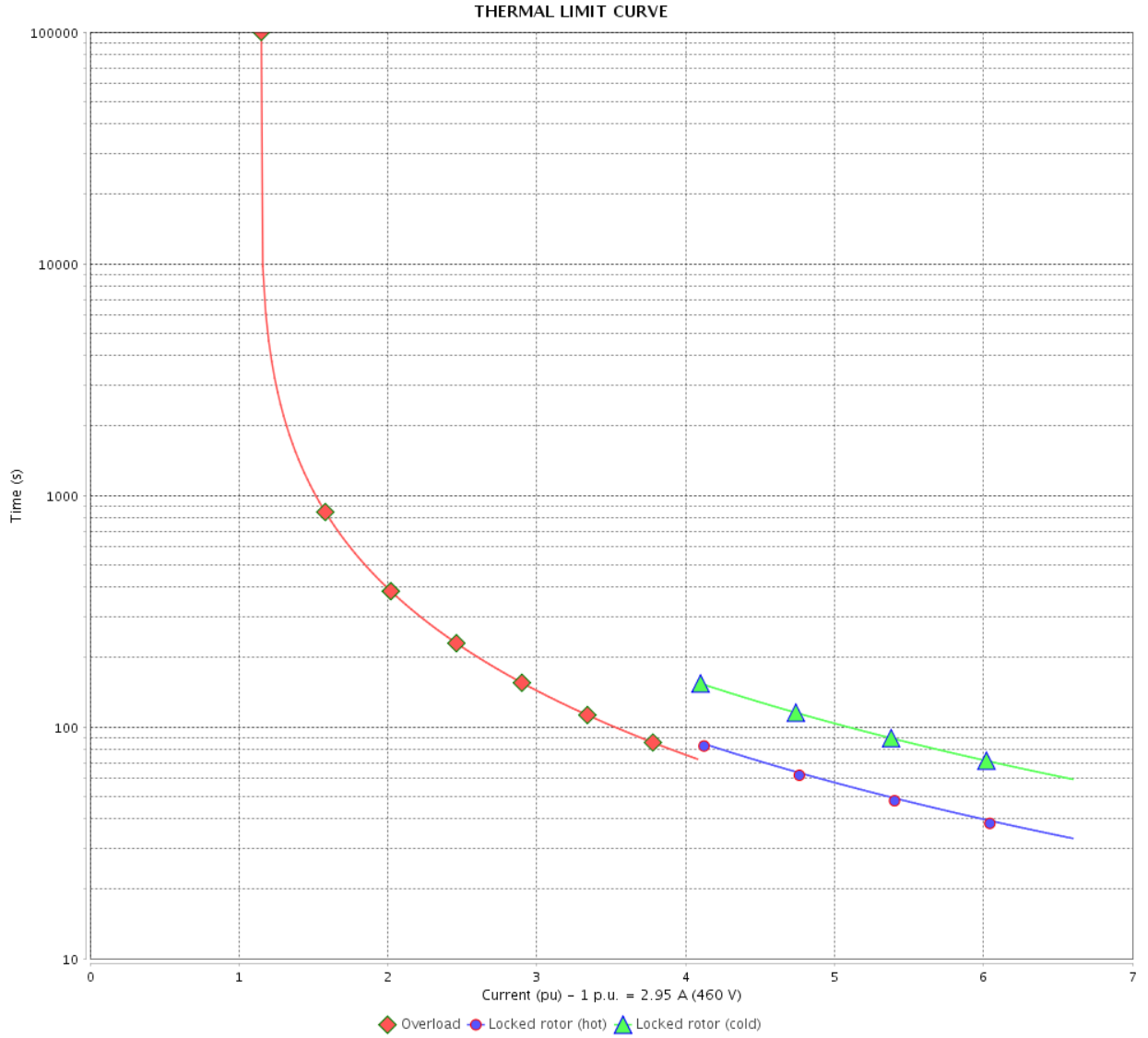
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Temperature rise : 105 K
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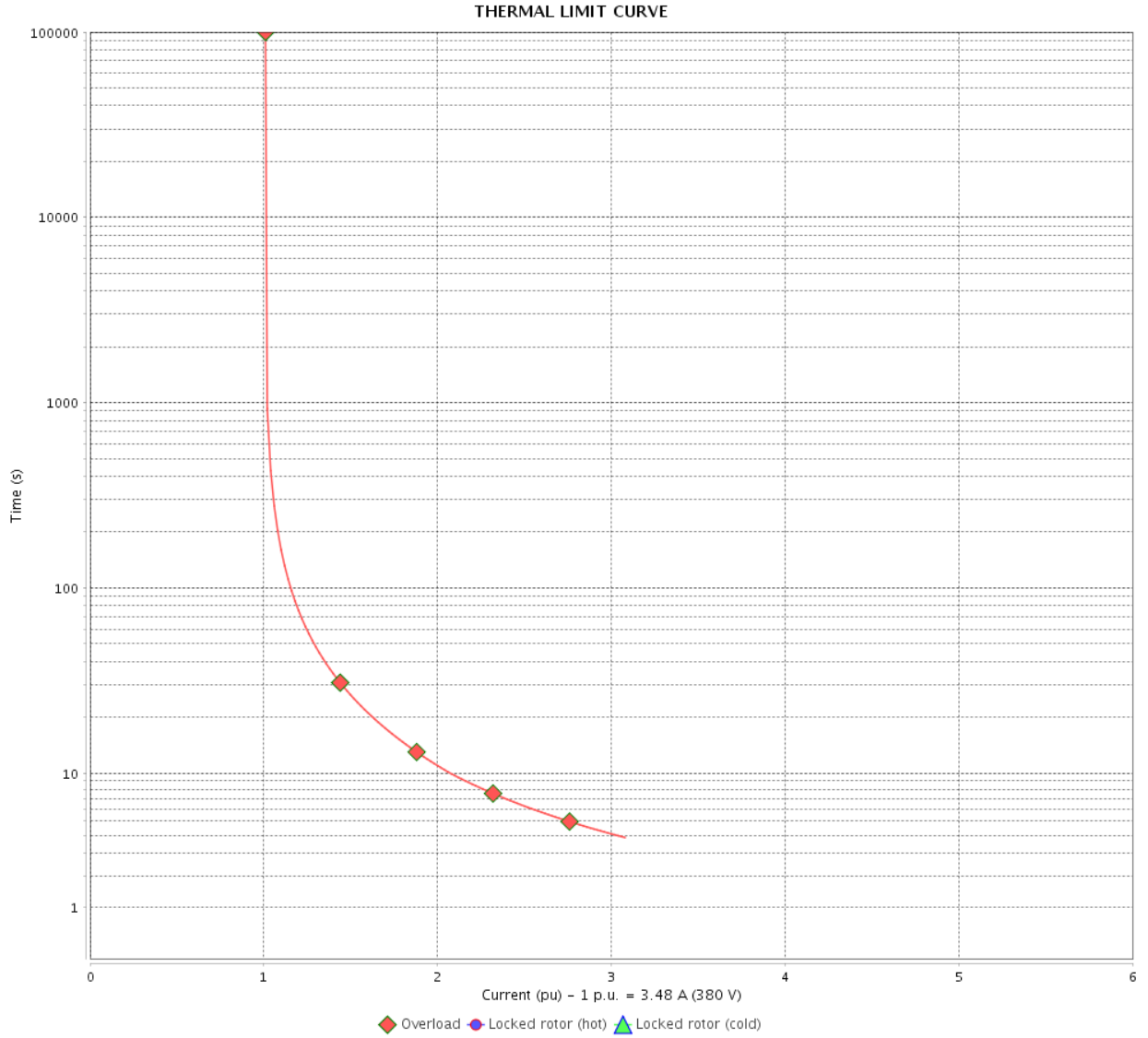
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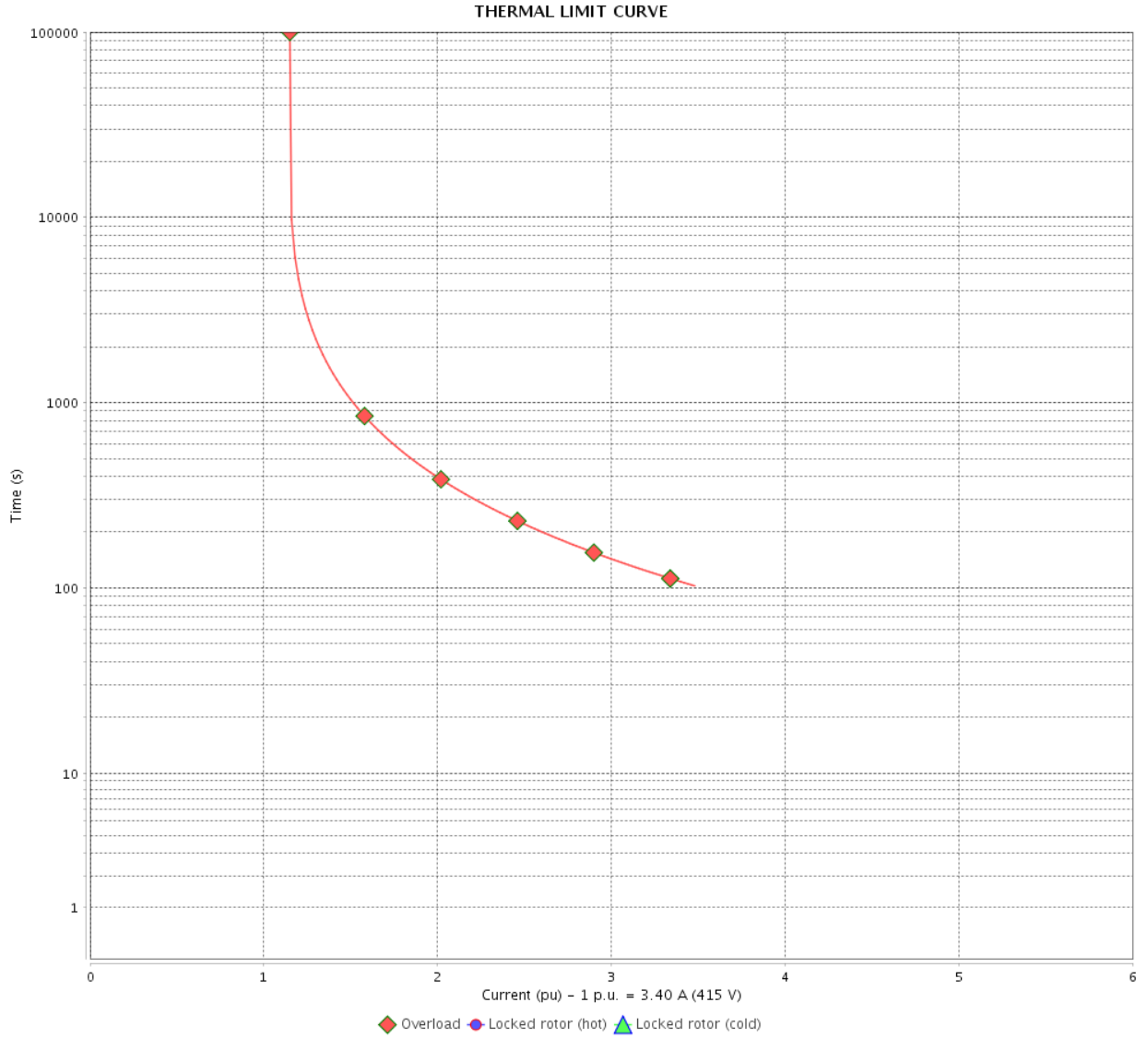
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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



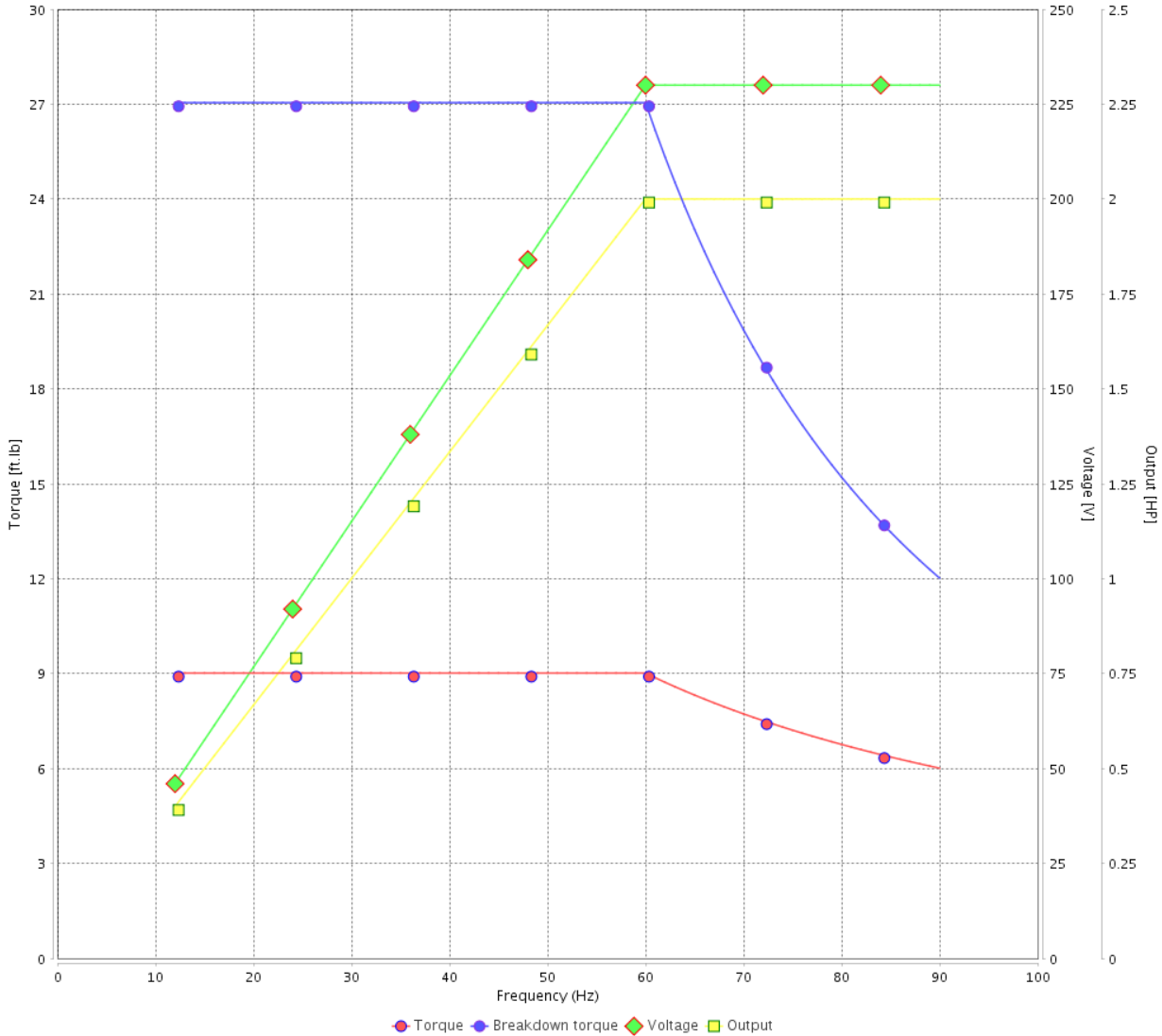
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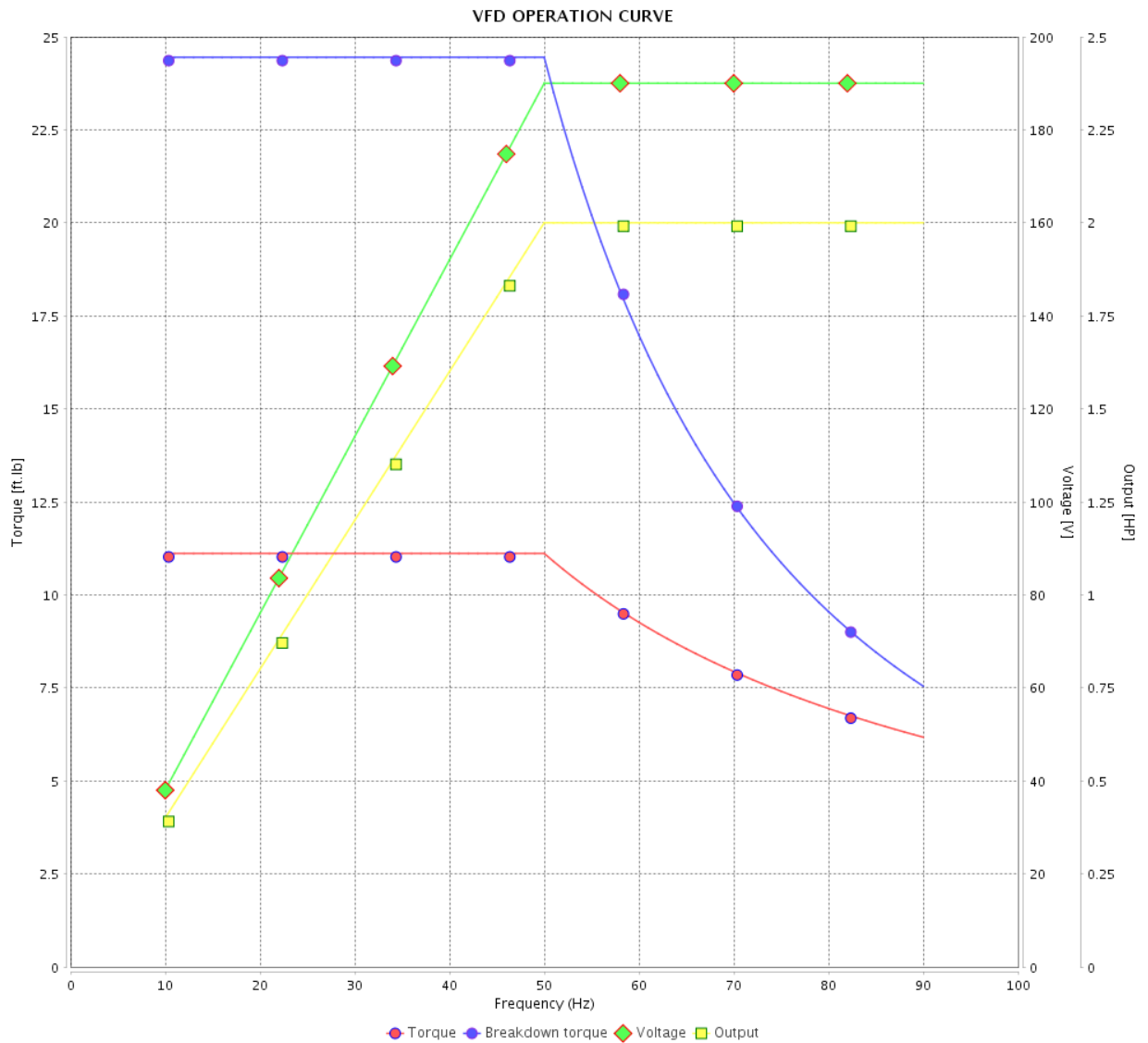


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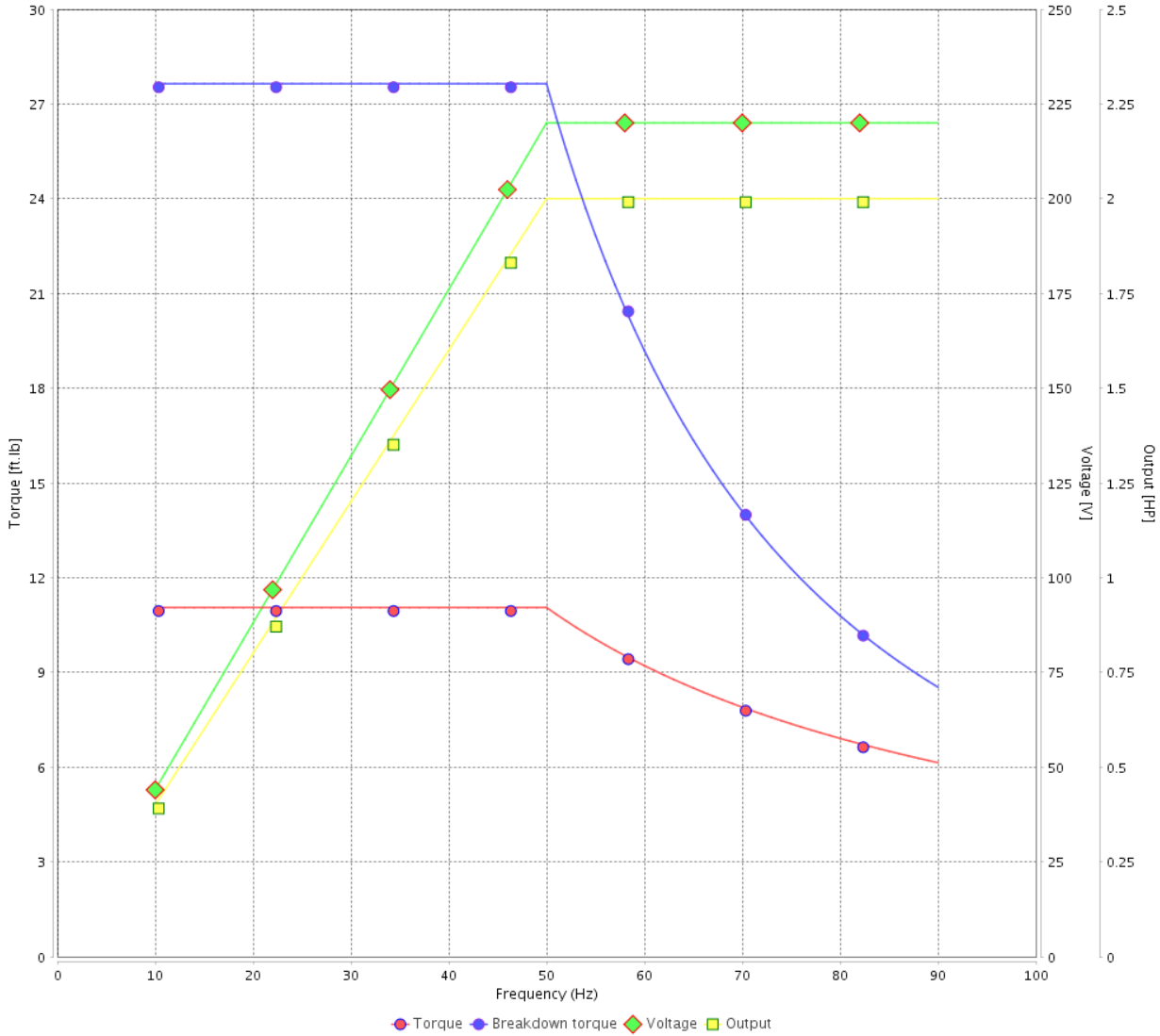
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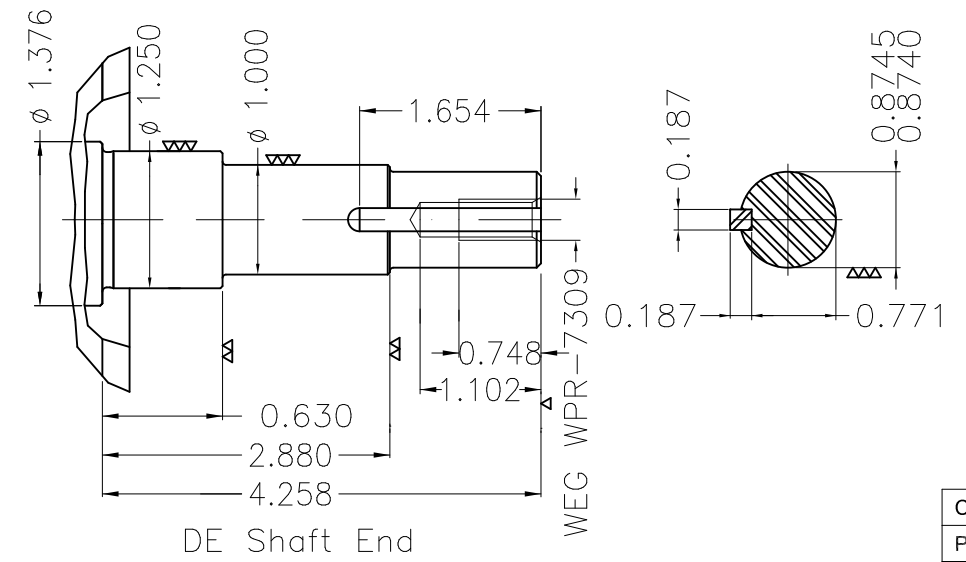
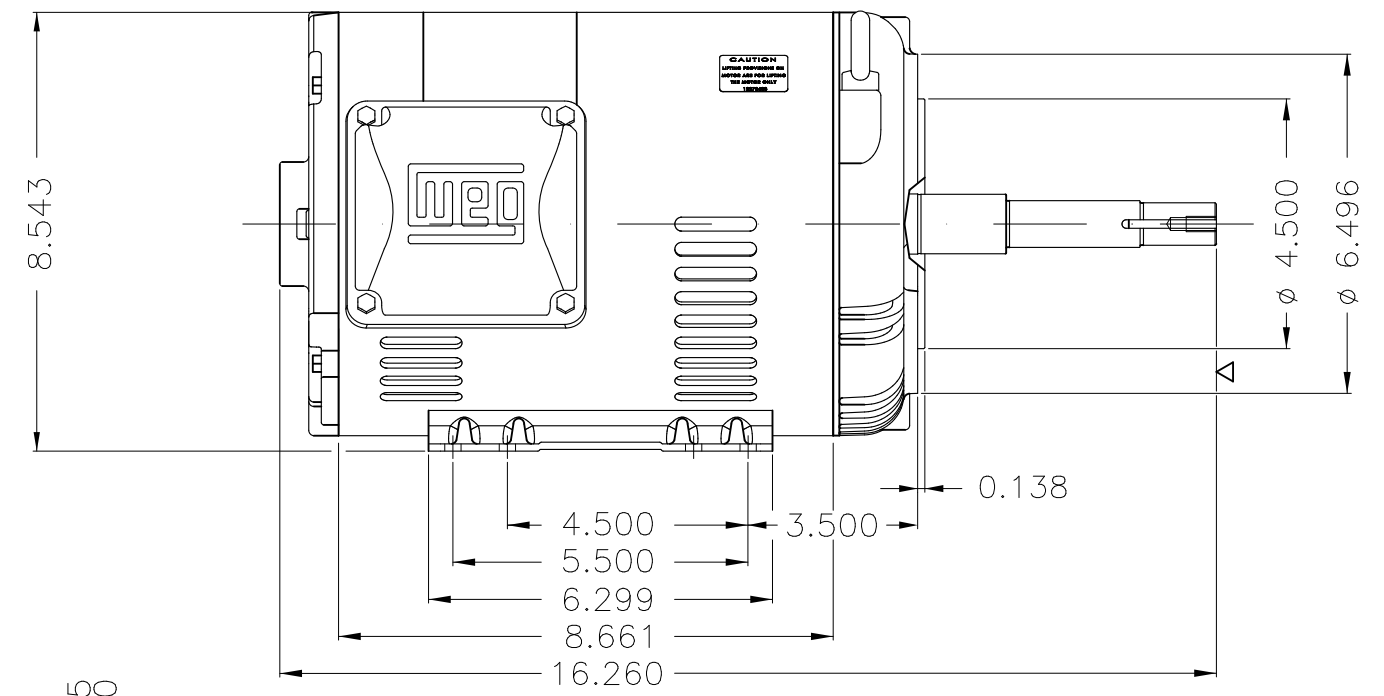
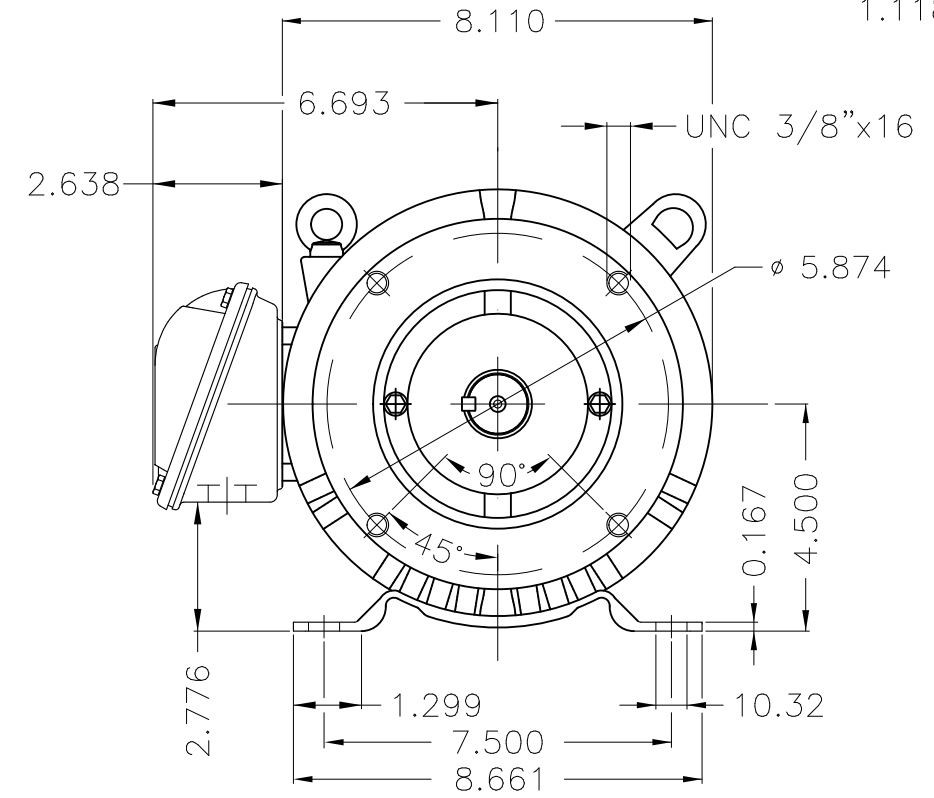
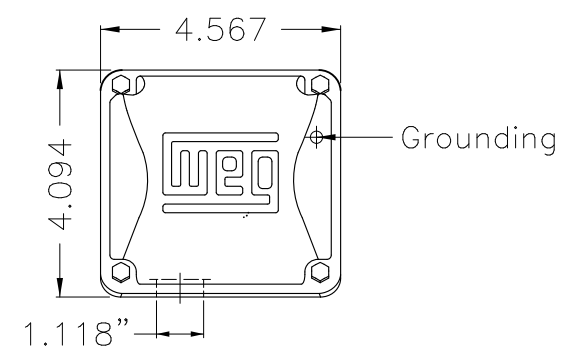
A

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	PIRWBUSER	THREE PH. MOTOR ROLLED STEEL CLOSE COUPLED PUMP JN TYPE PSEF 1177					
CHECKED		FRAME 182/4JM IP21 ODP					
RELEASED							
REL DT.	WMO	Jaragua do Sul	Product Engineering	WDD	SHEET	1 / 1	

2 HP 06 Poles 60 Hz



**NEMA**
Premium

MADE IN MEXICO

MAT: 12676986 CC029A

W01.T00IC0X0N

MODEL 002120T3E184JM-S

07JAN2022 S/N:

PH 3	Hz 60	HP 2.0
FR 182/4JM		KW 1.5
DUTY CONT.		V 230/460
ALT 1000 m.a.s.l		A 5.90/2.95
INS CL F AT 80K		SFA 6.79/3.39
AMB 40°C	DES B	SF 1.15
ENCL ODP	CODE J	PF 0.73
USABLE @ 208V 6.52A		RPM 1165
SF1.00		NEMA NOM. EFF 87.5%

ALTERNATE RATING: 2.0HP 50Hz 190-220/380-415V SF1.00
 6.96-6.34/3.48-3.36A 945RPM EFF 83.0% (IE3) IEC 60034-1

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

DE 6207-ZZ ODE 6205-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.

