

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :				
Product line	: JM Pump NEMA Premium Efficiency Three-Phase	Product code :	13500417	
		Catalog # :	00336OT3E145JMV-S	
Frame	: 143/5JM	Cooling method	: IC01 - ODP	
Insulation class	: F	Mounting	: W-6	
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	: 40.9 lb	
Design	: B	Moment of inertia (J)	: 0.1279 sq.ft.lb	
Output [HP]	3	3	3	
Poles	2	2	2	
Frequency [Hz]	60	50	50	
Rated voltage [V]	230/460	190/380	220/415	
Rated current [A]	7.18/3.59	8.78/4.39	7.83/4.15	
L. R. Amperes [A]	57.4/28.7	53.6/26.8	53.2/28.2	
LRC [A]	8.0x(Code J)	6.1x(Code G)	6.8x(Code H)	
No load current [A]	2.60/1.30	2.60/1.30	2.71/1.44	
Rated speed [RPM]	3480	2825	2840	
Slip [%]	3.33	5.83	5.33	
Rated torque [ft.lb]	4.53	5.58	5.55	
Locked rotor torque [%]	229	190	220	
Breakdown torque [%]	300	229	250	
Service factor		1.00	1.00	
Temperature rise	80 K	105 K	105 K	
Locked rotor time	16s (cold) 9s (hot)	0s (cold) 0s (hot)	0s (cold) 0s (hot)	
Noise level ²	62.0 dB(A)	60.0 dB(A)	60.0 dB(A)	
Efficiency (%)	25%	83.7	88.4	
	50%	84.0	86.6	
	75%	85.5	85.6	
	100%	85.5	83.2	
Power Factor	25%	0.50	0.51	
	50%	0.76	0.79	
	75%	0.86	0.88	
	100%	0.90	0.92	
Bearing type	: <u>Drive end</u> 6206 ZZ <u>Non drive end</u> 6203 ZZ	Foundation loads		
Sealing	: Without Without Bearing Seal Bearing Seal	Max. traction	: 100 lb	
		Max. compression	: 141 lb	
Lubrication interval	: - -			
Lubricant amount	: - -			
Lubricant type	: Mobil Polyrex EM			
Notes USABLE @208V 7.94A SF 1.00 SFA 7.94A				
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

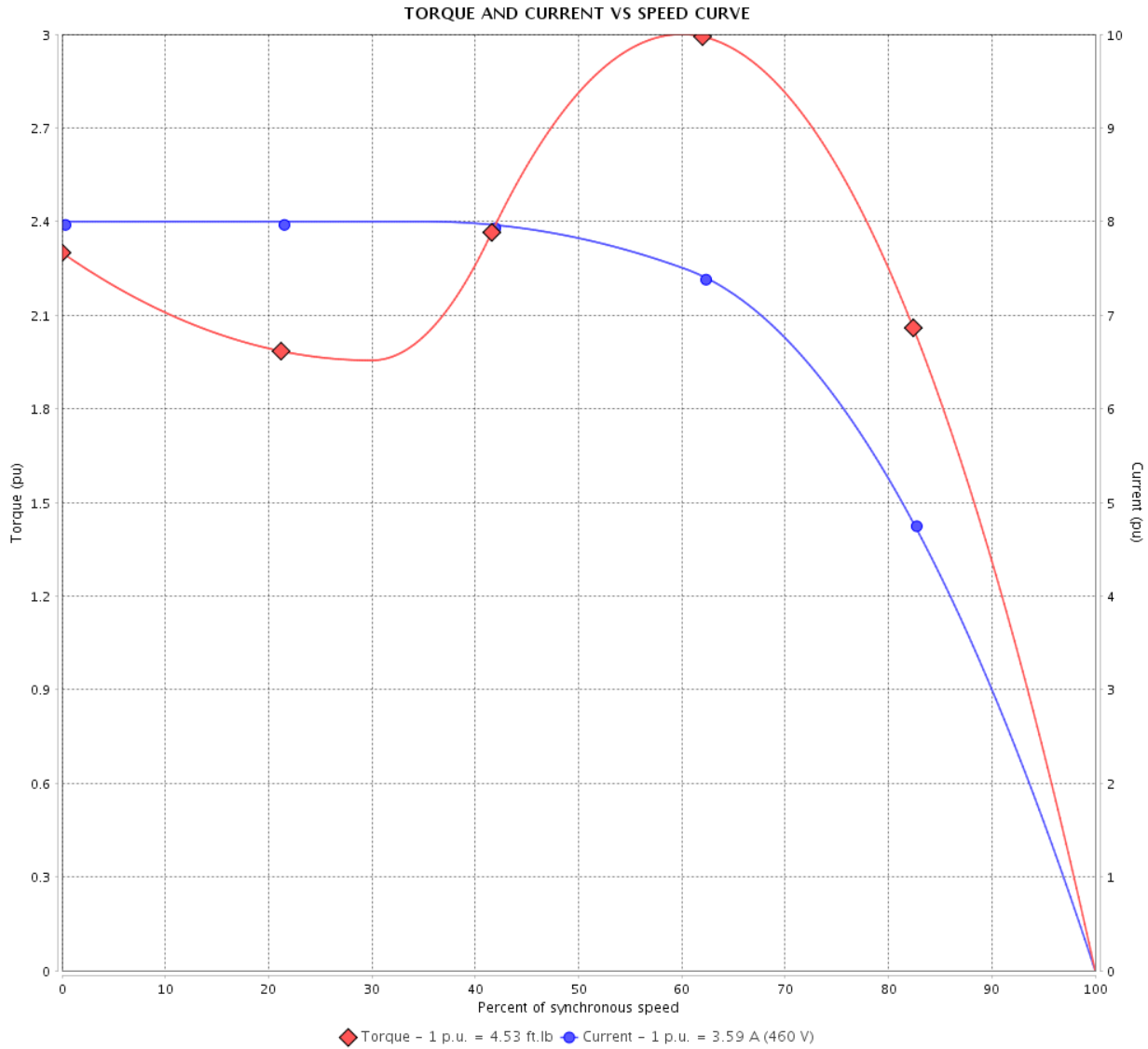


Customer :

Product line : JM Pump NEMA Premium
Efficiency Three-Phase

Product code : 13500417

Catalog # : 00336OT3E145JMV-S



Performance : 230/460 V 60 Hz 2P

Rated current	: 7.18/3.59 A	Moment of inertia (J)	: 0.1279 sq.ft.lb
LRC	: 8.0	Duty cycle	: Cont.(S1)
Rated torque	: 4.53 ft.lb	Insulation class	: F
Locked rotor torque	: 229 %	Service factor	:
Breakdown torque	: 300 %	Temperature rise	: 80 K
Rated speed	: 3480 rpm	Design	: B

Locked rotor time : 16s (cold) 9s (hot)

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TORQUE AND CURRENT VS SPEED CURVE



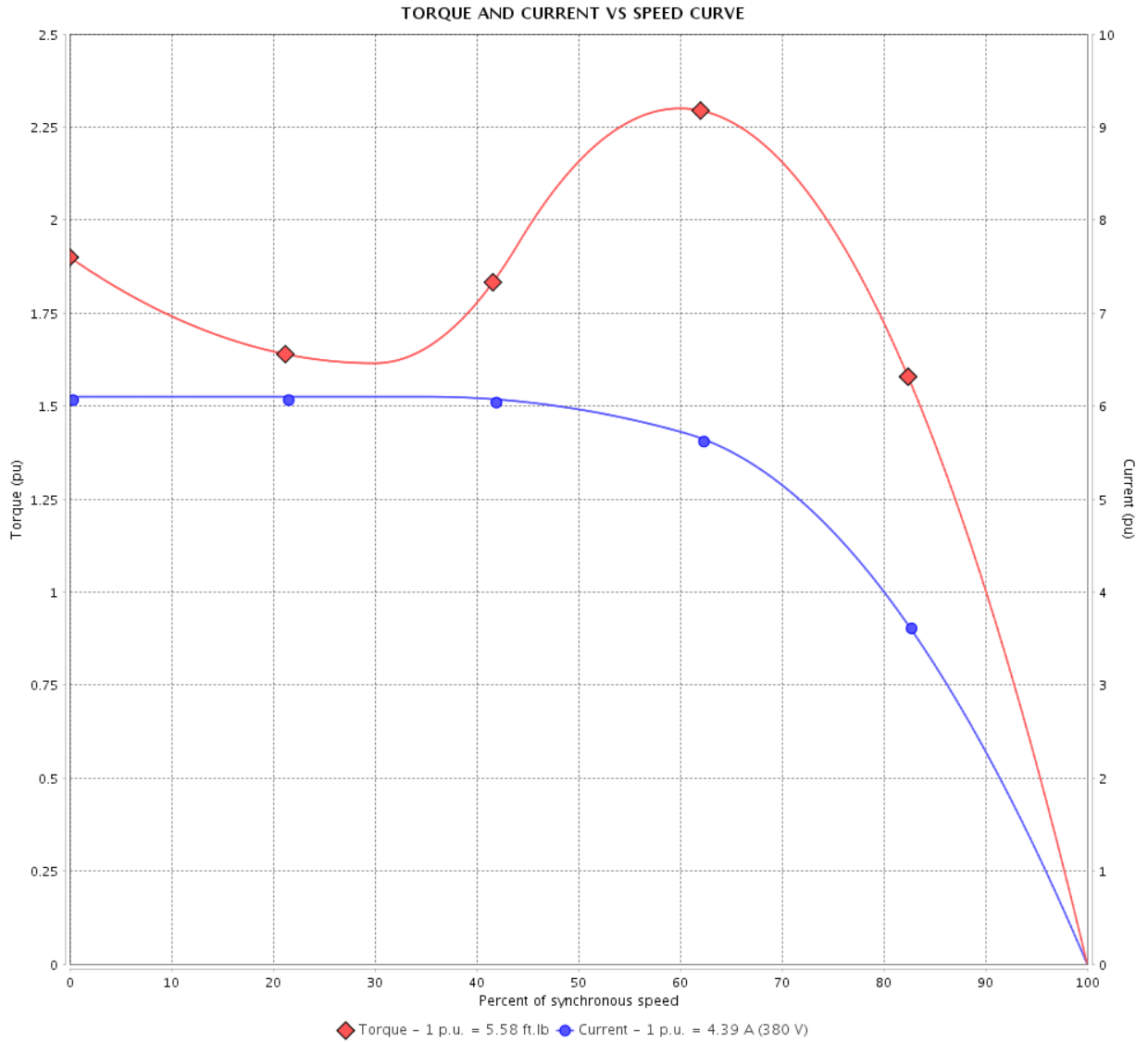
Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : JM Pump NEMA Premium Efficiency Three-Phase

Product code : 13500417

Catalog # : 00336OT3E145JMV-S



Performance : 190/380 V 50 Hz 2P

Rated current : 8.78/4.39 A
 LRC : 6.1
 Rated torque : 5.58 ft.lb
 Locked rotor torque : 190 %
 Breakdown torque : 229 %
 Rated speed : 2825 rpm

Moment of inertia (J) : 0.1279 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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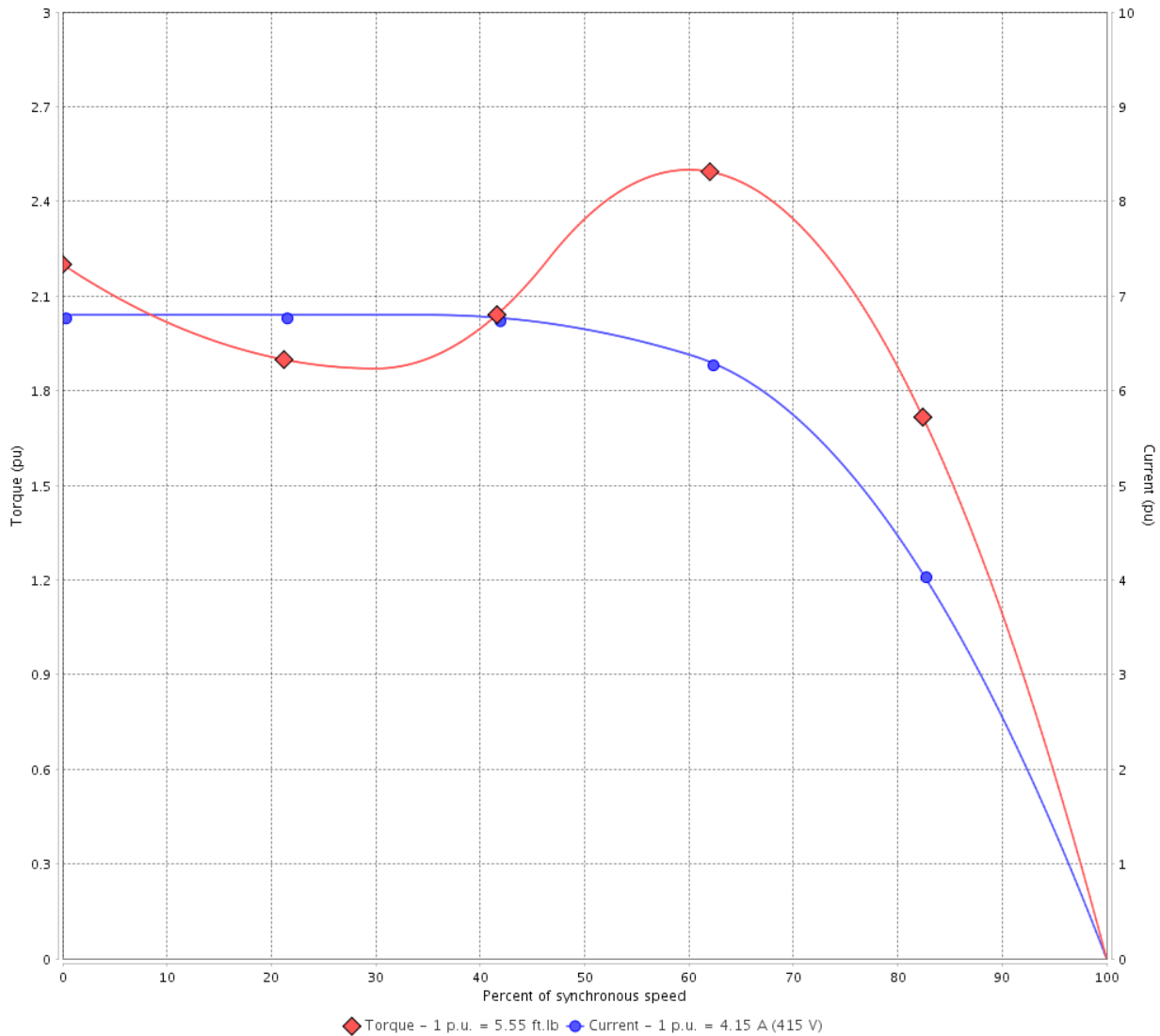
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Product code : 13500417

Catalog # : 00336OT3E145JMV-S

TORQUE AND CURRENT VS SPEED CURVE



Performance : 220/415 V 50 Hz 2P

Rated current	: 7.83/4.15 A	Moment of inertia (J)	: 0.1279 sq.ft.lb
LRC	: 6.8	Duty cycle	: Cont.(S1)
Rated torque	: 5.55 ft.lb	Insulation class	: F
Locked rotor torque	: 220 %	Service factor	: 1.00
Breakdown torque	: 250 %	Temperature rise	: 105 K
Rated speed	: 2840 rpm	Design	: B

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

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LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

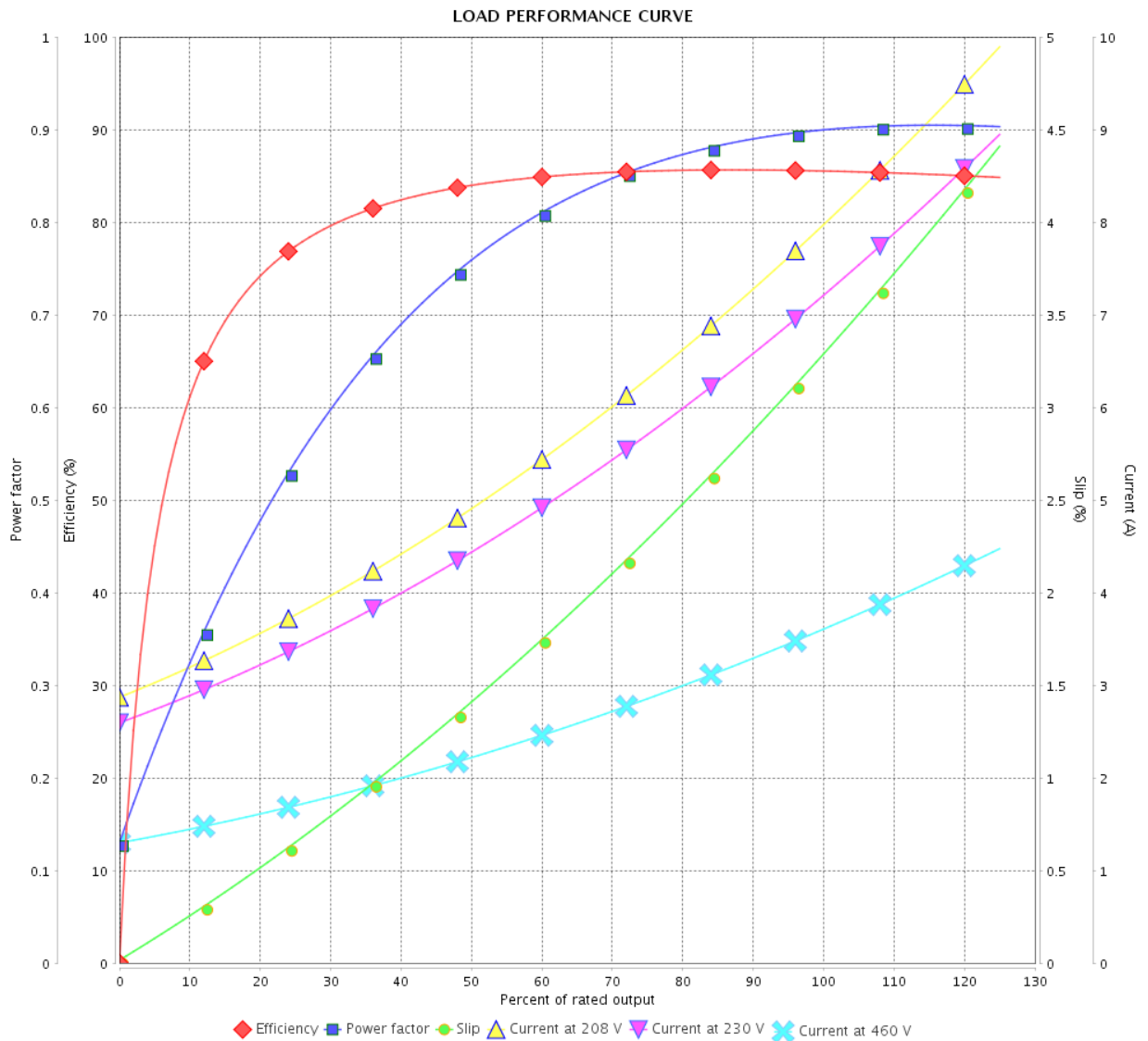


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Performance : 230/460 V 60 Hz 2P

Rated current : 7.18/3.59 A
 LRC : 8.0
 Rated torque : 4.53 ft.lb
 Locked rotor torque : 229 %
 Breakdown torque : 300 %
 Rated speed : 3480 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

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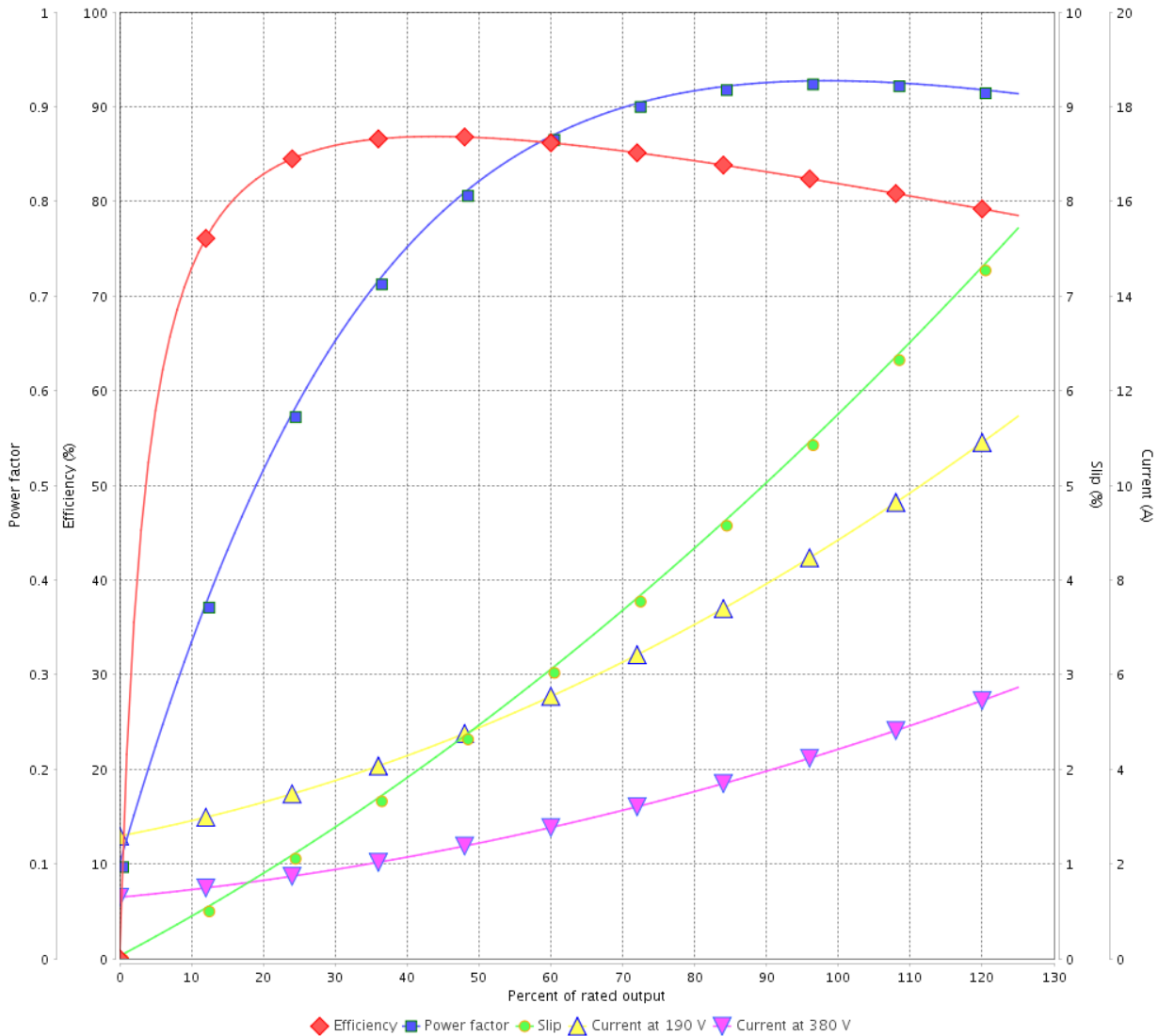
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 Breakdown torque : 229 %
 Rated speed : 2825 rpm

Moment of inertia (J) : 0.1279 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 105 K
 Design : B

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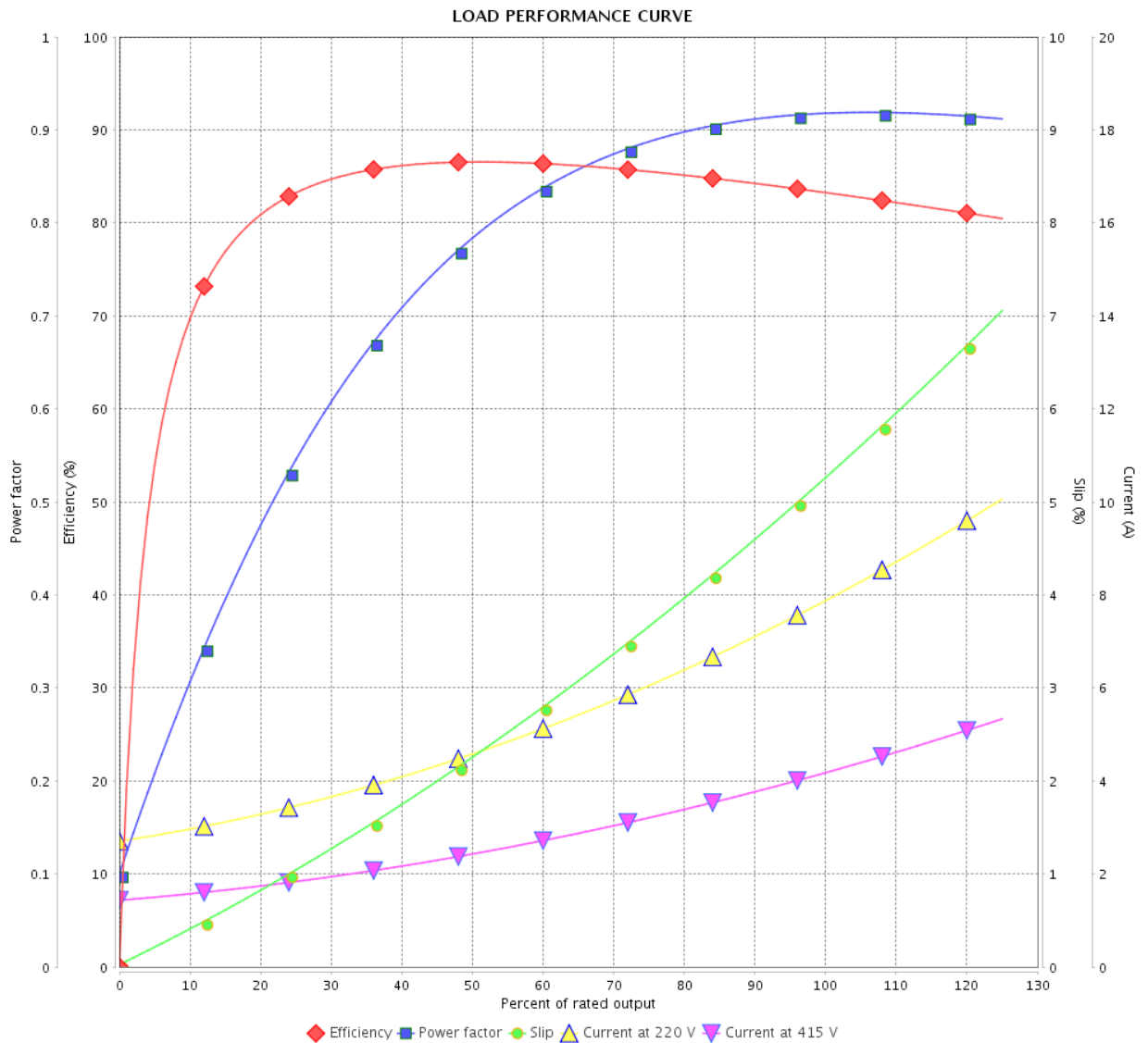


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Performance : 220/415 V 50 Hz 2P

Rated current : 7.83/4.15 A
 LRC : 6.8
 Rated torque : 5.55 ft.lb
 Locked rotor torque : 220 %
 Breakdown torque : 250 %
 Rated speed : 2840 rpm

Moment of inertia (J) : 0.1279 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
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 Temperature rise : 105 K
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THERMAL LIMIT CURVE



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

Heating constant

Cooling constant

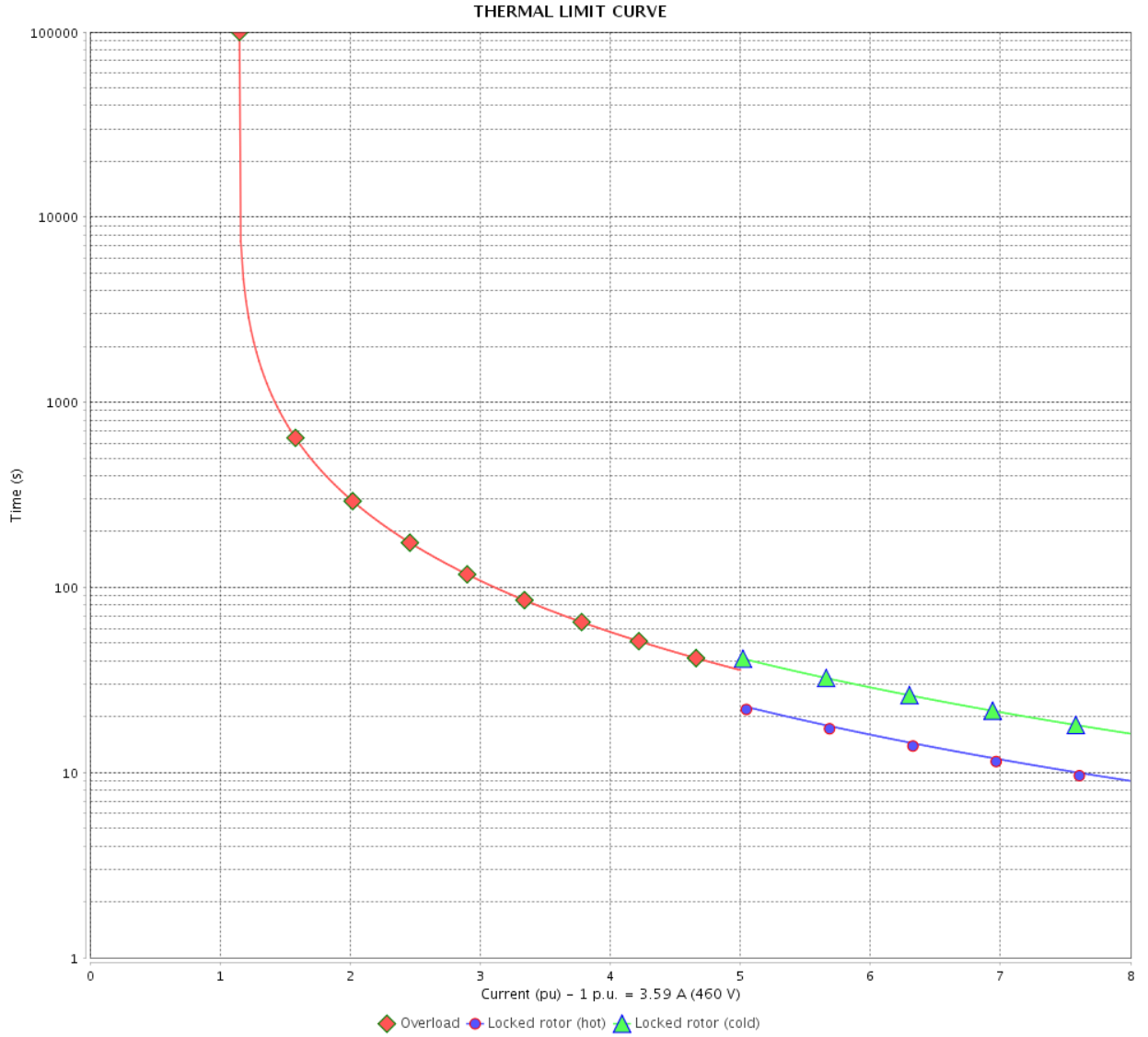
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THERMAL LIMIT CURVE

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Insulation class : F
Service factor : 1.00
Temperature rise : 105 K
Design : B

Heating constant

Cooling constant

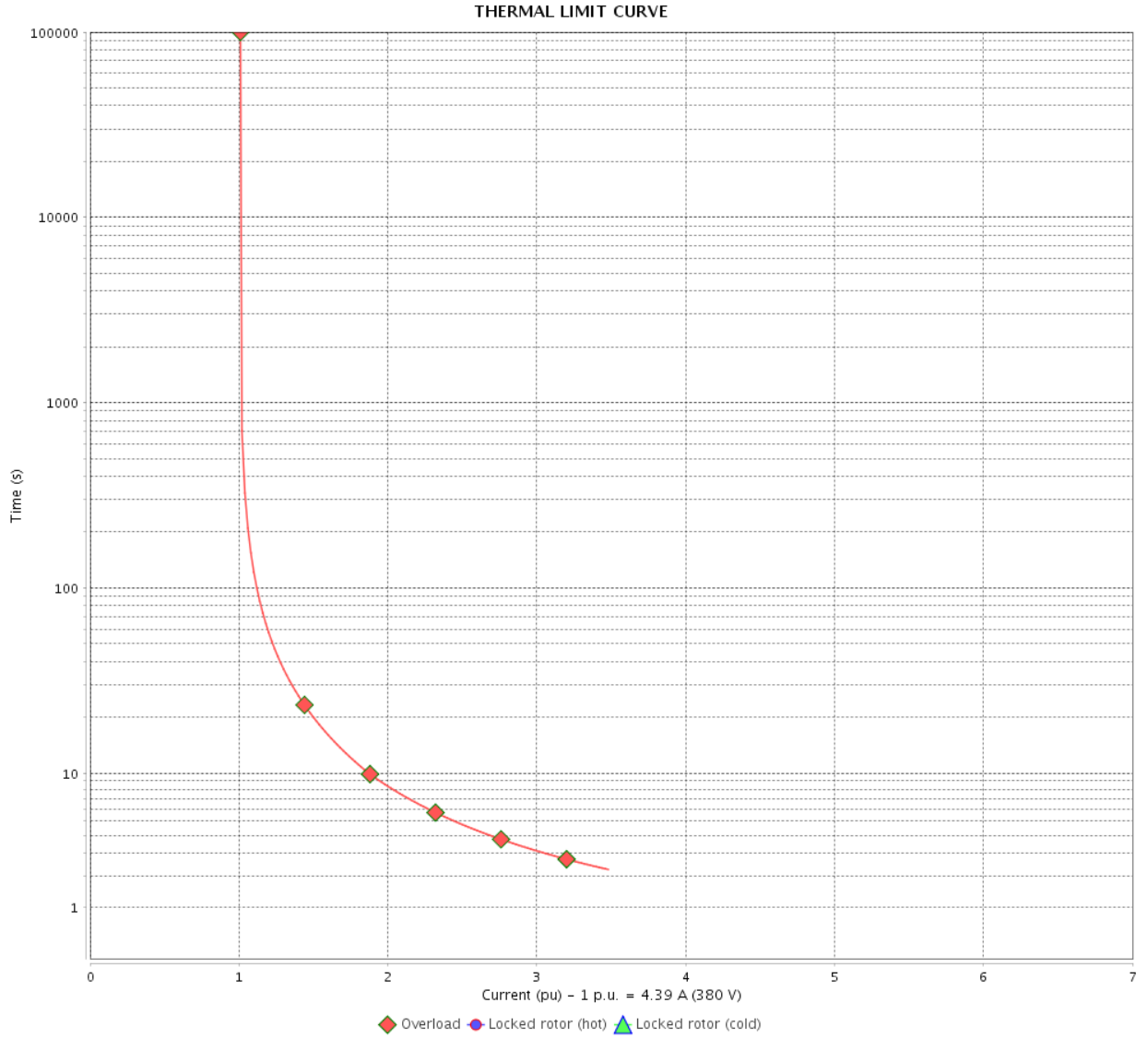
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Service factor : 1.00
Temperature rise : 105 K
Design : B

Heating constant

Cooling constant

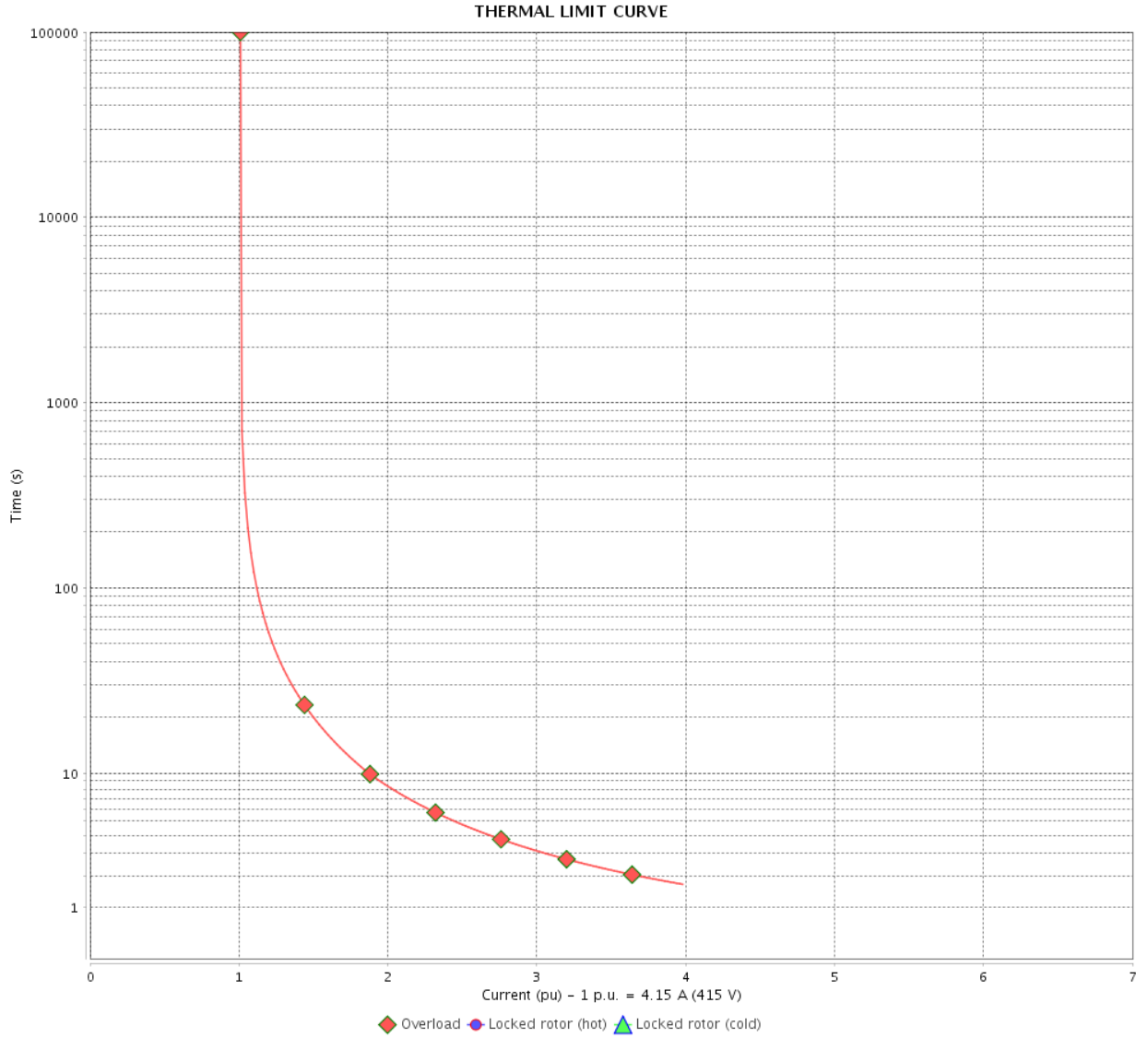
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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

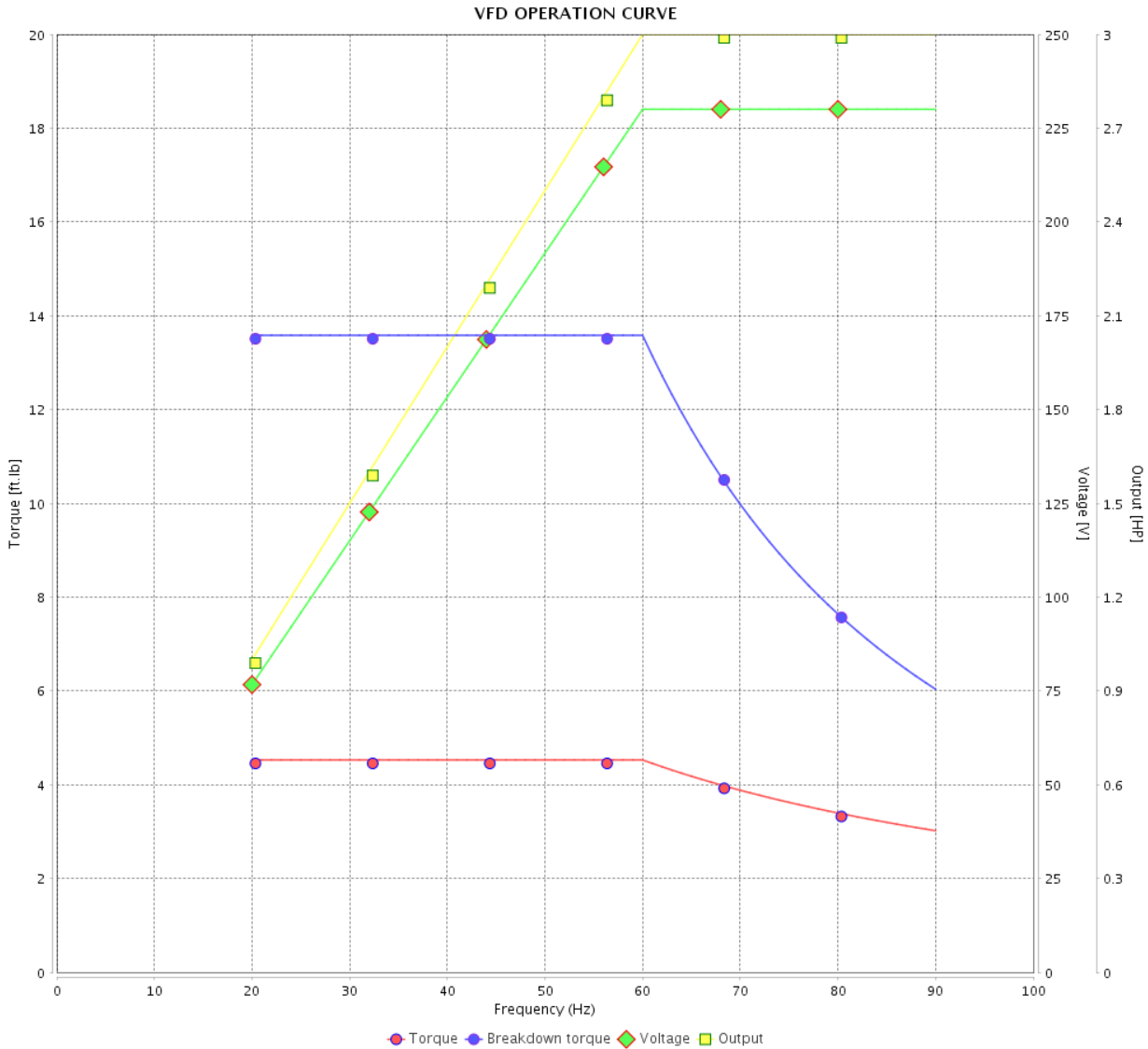


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 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor :
 Temperature rise : 80 K
 Design : B

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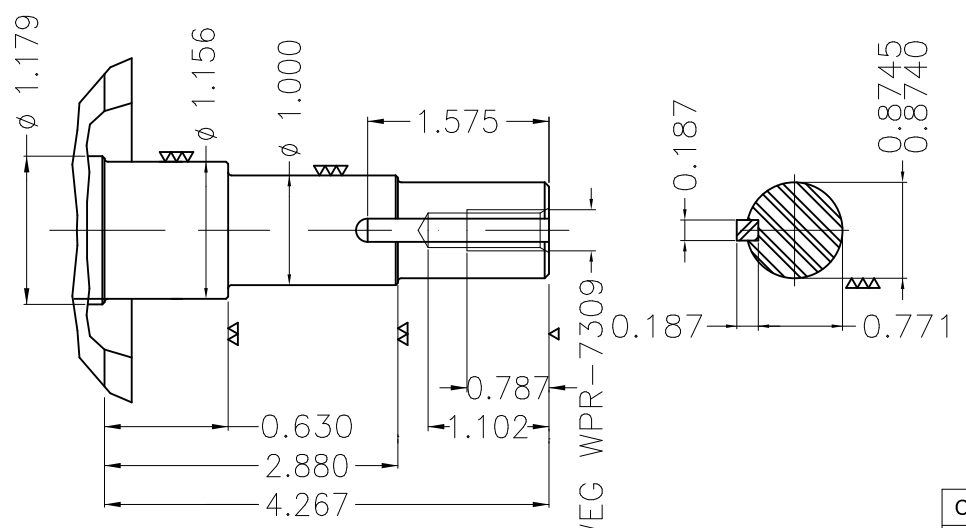
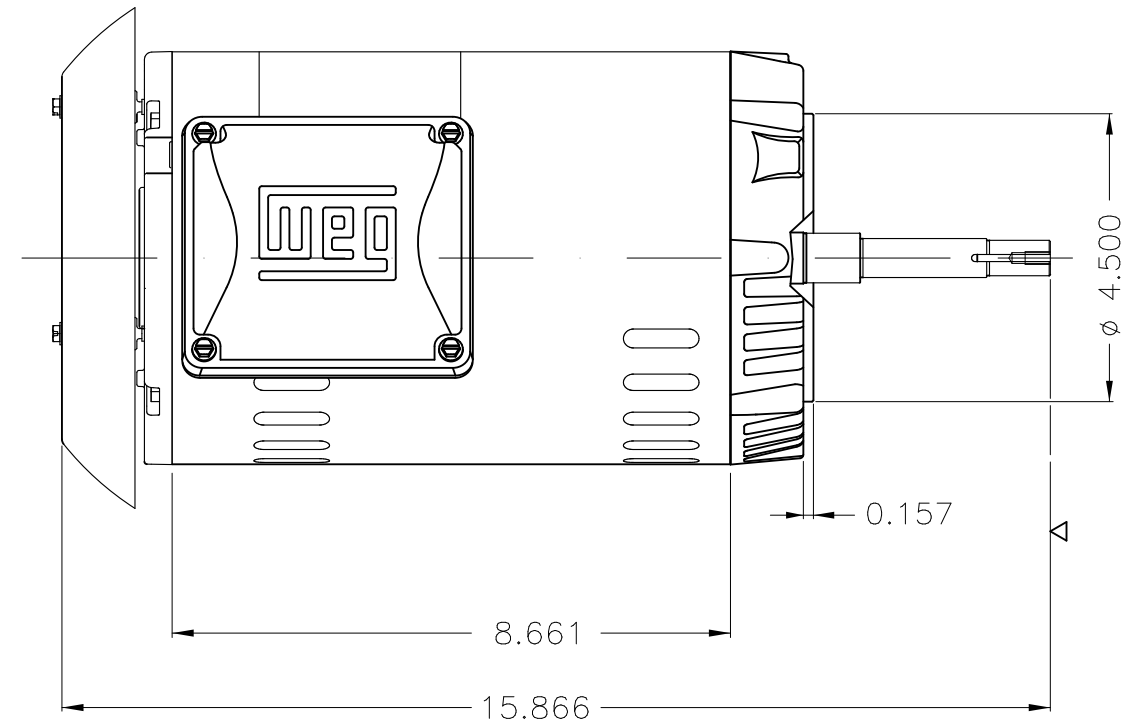
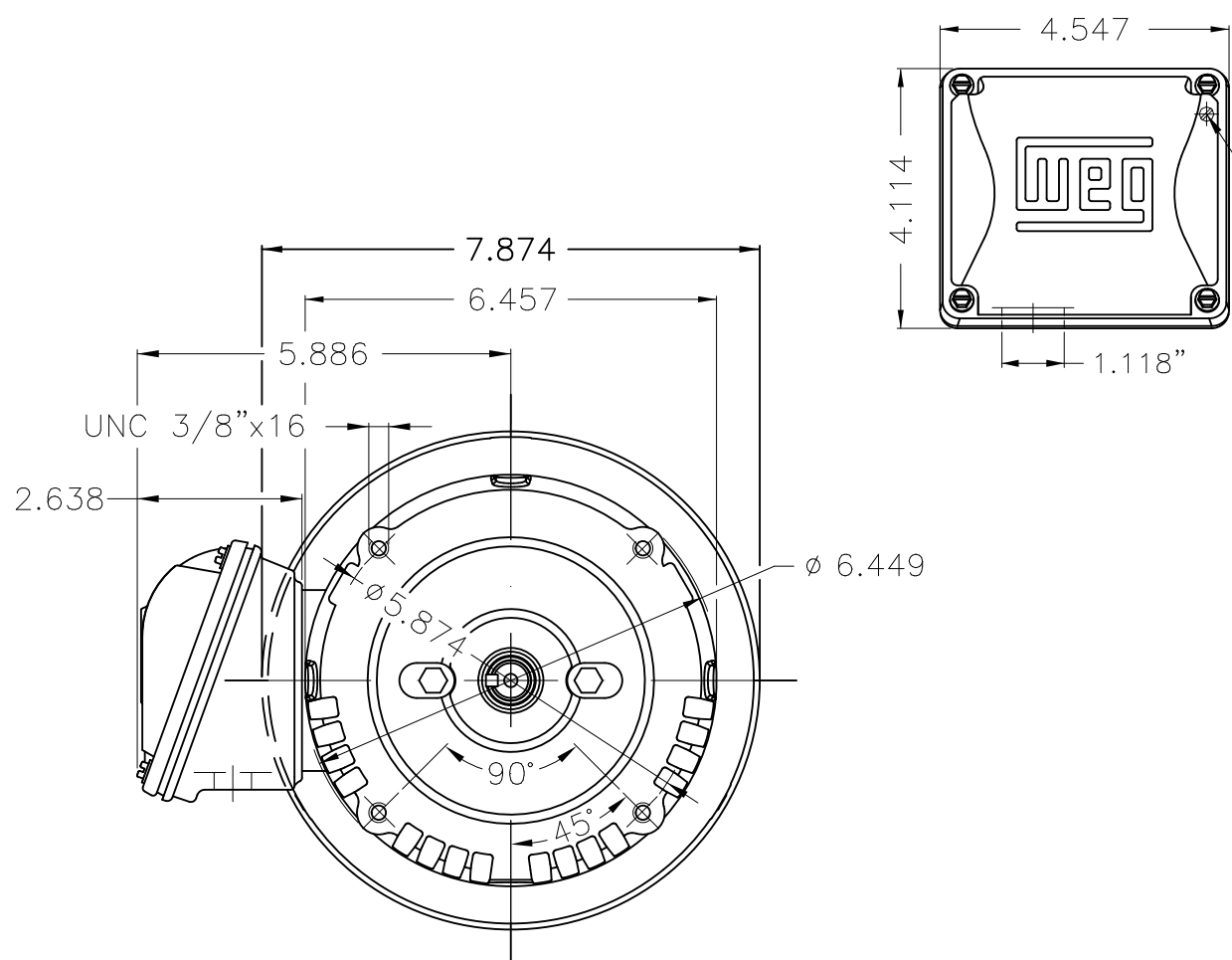
A

B

C

D

E



EUNC 3/8"-16 WEG WPR-7309

DE Shaft End

Color Munsell N 1 matte black									
Painting plan 207N									
Mounting W-6/V18R(D)									
ECM	LOC	SUMMARY OF MODIFICATIONS			EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	PIRBUSER	THREE PH. MOTOR ROLLED STEEL CLOSE COUPLED PUMP JN TYPE PSE 187							
CHECKED		FRAME 143/5JM IP21 ODP							
RELEASED									
REL DT.		WMO	Jaragua do Sul	Product Engineering					

PREVIEW



3 HP 02 Poles 60 Hz

Dimensions in inches XME A3

**NEMA
Premium**

MADE IN MEXICO

MAT: 13500417 CC029A**W01.T00IC0X0N****MODEL 003360T3E145JMV-S****29MAR2022 B/N:**

PH 3	Hz 60	HP 3.0
FR 143/5JM		KW 2.2
DUTY CONT.		V 230/460
ALT 1000 m.a.s.l.		A 7.18/3.59
INS CL F AT 80K		SFA 8.26/4.13
AMB 40°C	DES B	SF 1.15
ENCL ODP	CODE J	PF 0.90
USABLE @ 208V 7.94A		RPM 3480
SF1.00		NEMA NOM. EFF 85.5%

ALTERNATE RATING: 3.0HP 50Hz 190-220/380-415V SF1.00
8.78-7.56/4.39-4.01A 2825RPM EFF 81.8% (IE1) IEC 60034-1

Inverter duty motor For 80Hz use on VPWM 1000:1 VT, 3:1 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.

