

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :		
Product line	: JP Pump NEMA Premium Efficiency Three-Phase	
Product code :	14329712	
Catalog # :	00336ET3E182JP-SG	
Frame	: 182/4JP	
Insulation class	: F	
Duty cycle	: Cont.(S1)	
Ambient temperature	: -20°C to +40°C	
Altitude	: 1000 m.a.s.l.	
Protection degree	: IP55	
Design	: B	
Cooling method	: IC411 - TEFC	
Mounting	: F-1	
Rotation <sup>1</sup>	: Both (CW and CCW)	
Starting method	: Direct On Line	
Approx. weight <sup>2</sup>	: 63.5 lb	
Moment of inertia (J)	: 0.1564 sq.ft.lb	
Output [HP]	3	
Poles	2	
Frequency [Hz]	60	
Rated voltage [V]	230/460	
Rated current [A]	7.34/3.67	
L. R. Amperes [A]	64.6/32.3	
LRC [A]	8.8x(Code K)	
No load current [A]	3.22/1.61	
Rated speed [RPM]	3515	
Slip [%]	2.36	
Rated torque [ft.lb]	4.48	
Locked rotor torque [%]	220	
Breakdown torque [%]	300	
Service factor	1.15	
Temperature rise	80 K	
Locked rotor time	39s (cold) 22s (hot)	
Noise level <sup>2</sup>	68.0 dB(A)	
Efficiency (%)	25%	83.6
	50%	84.0
	75%	86.5
	100%	86.5
Power Factor	25%	0.44
	50%	0.71
	75%	0.82
	100%	0.87
Bearing type	: <u>Drive end</u> 6207 ZZ <u>Non drive end</u> 6205 ZZ	
Sealing	: V'Ring V'Ring	
Lubrication interval	: - -	
Lubricant amount	: - -	
Lubricant type	: Mobil Polyrex EM	
Foundation loads	Max. traction : 75 lb	
	Max. compression : 139 lb	
Notes USABLE @208V 8.12A SF 1.00 SFA 8.12A		
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



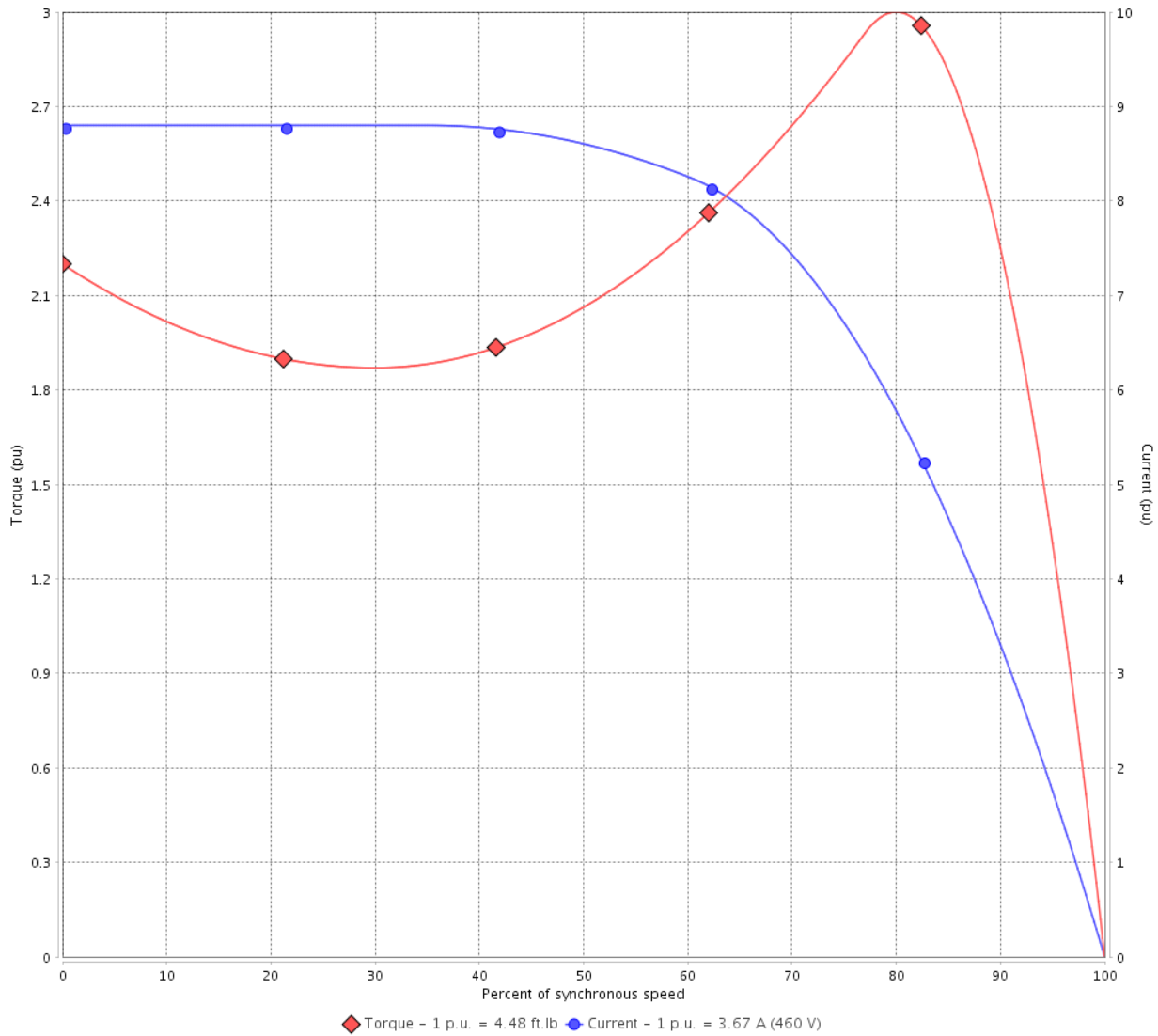
Customer :

Product line : JP Pump NEMA Premium Efficiency Three-Phase

Product code : 14329712

Catalog # : 00336ET3E182JP-SG

TORQUE AND CURRENT VS SPEED CURVE



Performance : 230/460 V 60 Hz 2P

Rated current	: 7.34/3.67 A	Moment of inertia (J)	: 0.1564 sq.ft.lb
LRC	: 8.8	Duty cycle	: Cont.(S1)
Rated torque	: 4.48 ft.lb	Insulation class	: F
Locked rotor torque	: 220 %	Service factor	: 1.15
Breakdown torque	: 300 %	Temperature rise	: 80 K
Rated speed	: 3515 rpm	Design	: B

Locked rotor time : 39s (cold) 22s (hot)

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# TORQUE AND CURRENT VS SPEED CURVE



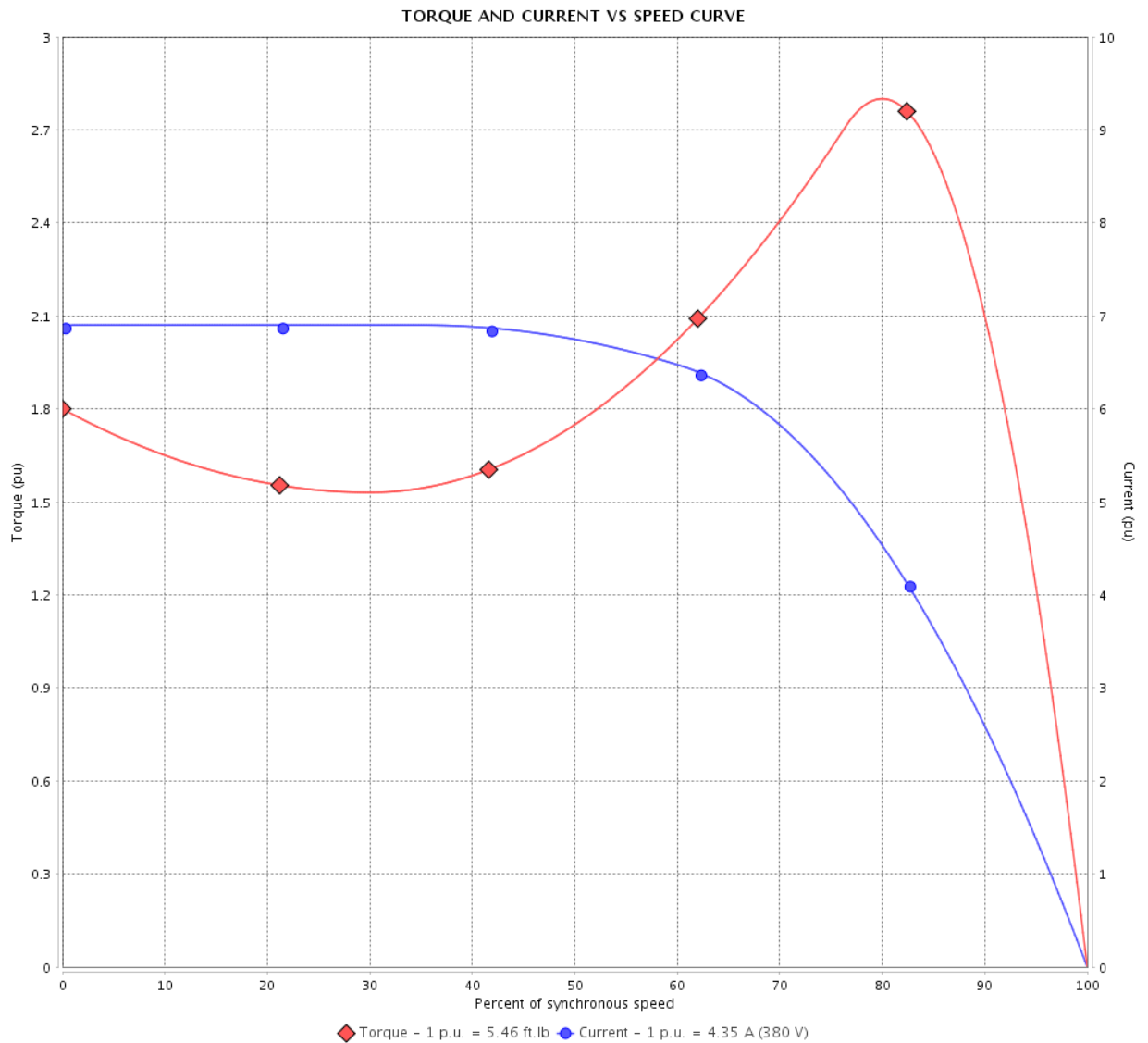
## Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : JP Pump NEMA Premium Efficiency Three-Phase

Product code : 14329712

Catalog # : 00336ET3E182JP-SG



Performance : 190/380 V 50 Hz 2P

Rated current : 8.70/4.35 A  
 LRC : 6.9  
 Rated torque : 5.46 ft.lb  
 Locked rotor torque : 180 %  
 Breakdown torque : 280 %  
 Rated speed : 2885 rpm

Moment of inertia (J) : 0.1564 sq.ft.lb  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.15  
 Temperature rise : 80 K  
 Design : B

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

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# TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



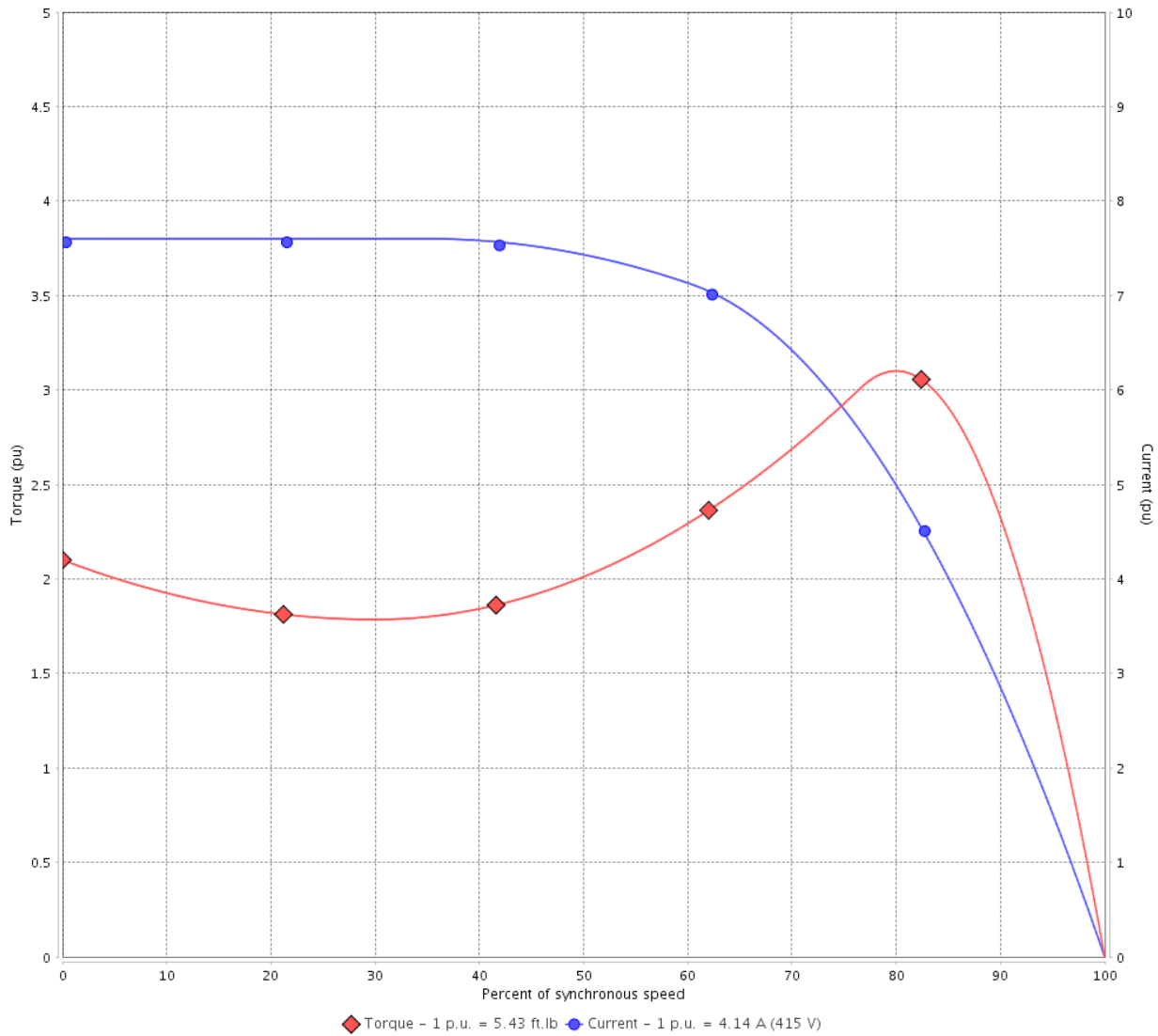
Customer :

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Efficiency Three-Phase

Product code : 14329712

Catalog # : 00336ET3E182JP-SG

TORQUE AND CURRENT VS SPEED CURVE



Performance : 220/415 V 50 Hz 2P

Rated current	: 7.81/4.14 A	Moment of inertia (J)	: 0.1564 sq.ft.lb
LRC	: 7.6	Duty cycle	: Cont.(S1)
Rated torque	: 5.43 ft.lb	Insulation class	: F
Locked rotor torque	: 210 %	Service factor	: 1.15
Breakdown torque	: 310 %	Temperature rise	: 80 K
Rated speed	: 2900 rpm	Design	: B

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

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# LOAD PERFORMANCE CURVE

## Three Phase Induction Motor - Squirrel Cage

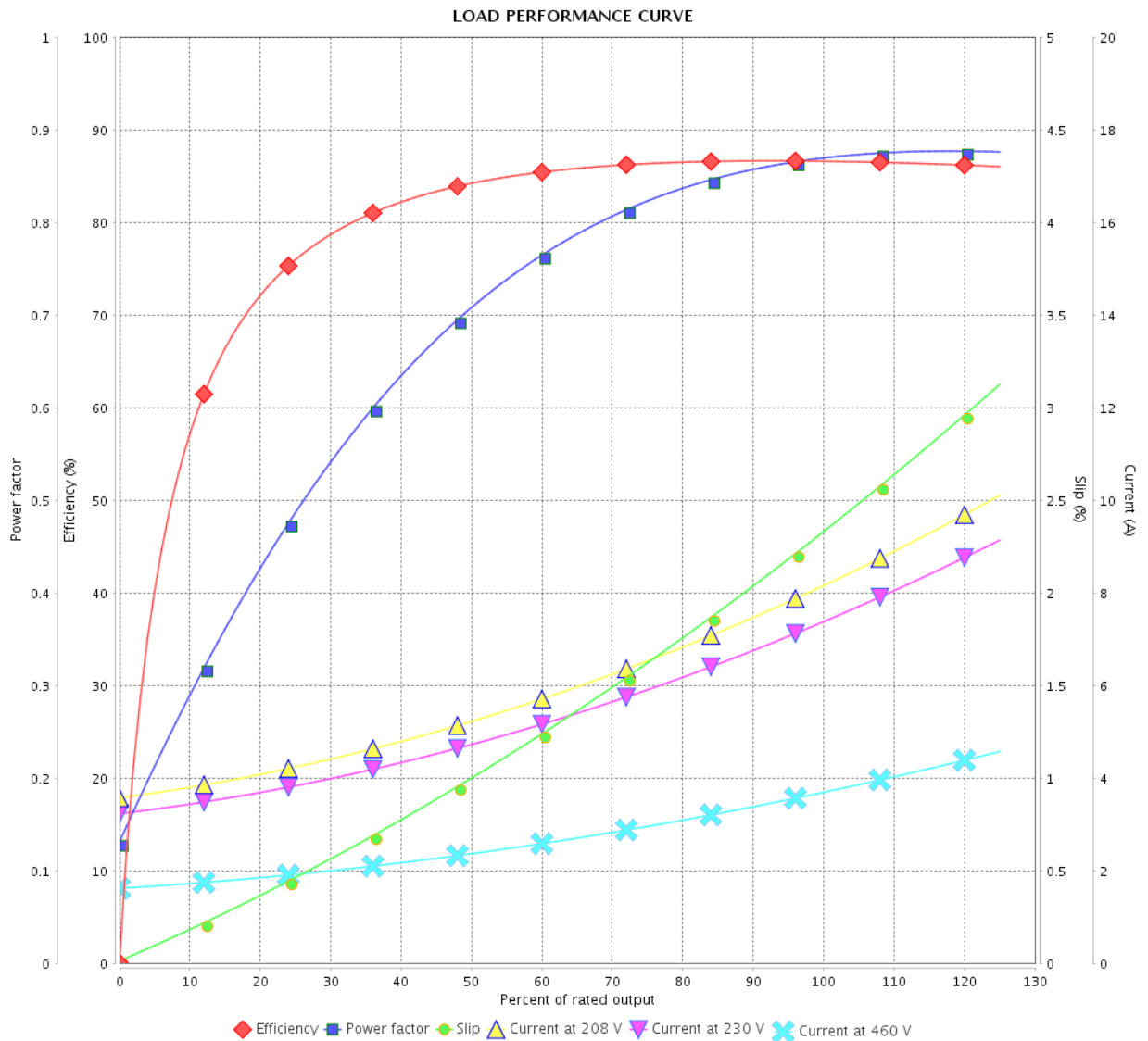


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Performance : 230/460 V 60 Hz 2P

Rated current : 7.34/3.67 A  
 LRC : 8.8  
 Rated torque : 4.48 ft.lb  
 Locked rotor torque : 220 %  
 Breakdown torque : 300 %  
 Rated speed : 3515 rpm

Moment of inertia (J) : 0.1564 sq.ft.lb  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.15  
 Temperature rise : 80 K  
 Design : B

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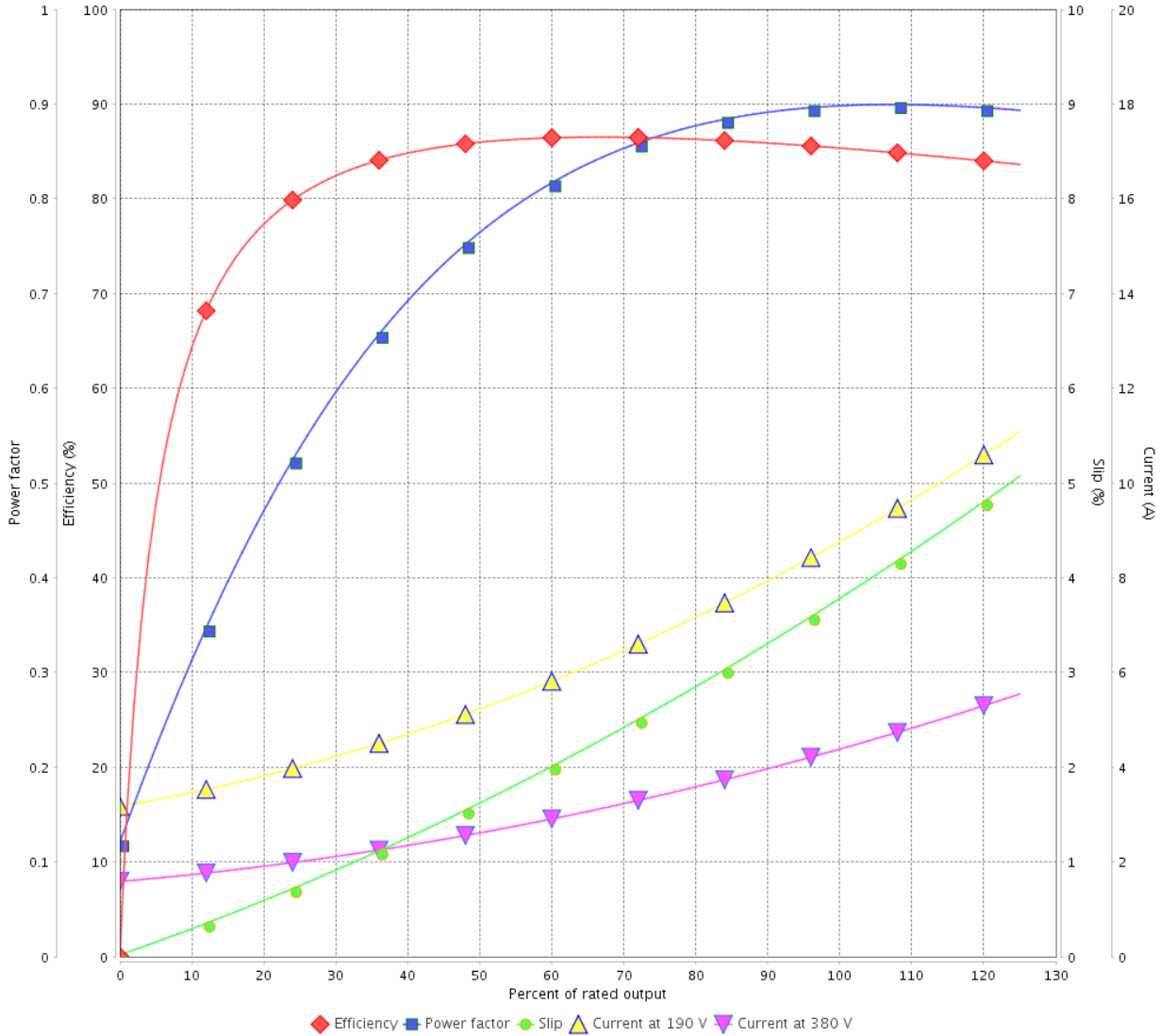
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Product code : 14329712

Catalog # : 00336ET3E182JP-SG

LOAD PERFORMANCE CURVE



Performance : 190/380 V 50 Hz 2P

Rated current : 8.70/4.35 A  
LRC : 6.9  
Rated torque : 5.46 ft.lb  
Locked rotor torque : 180 %  
Breakdown torque : 280 %  
Rated speed : 2885 rpm

Moment of inertia (J) : 0.1564 sq.ft.lb  
Duty cycle : Cont.(S1)  
Insulation class : F  
Service factor : 1.15  
Temperature rise : 80 K  
Design : B

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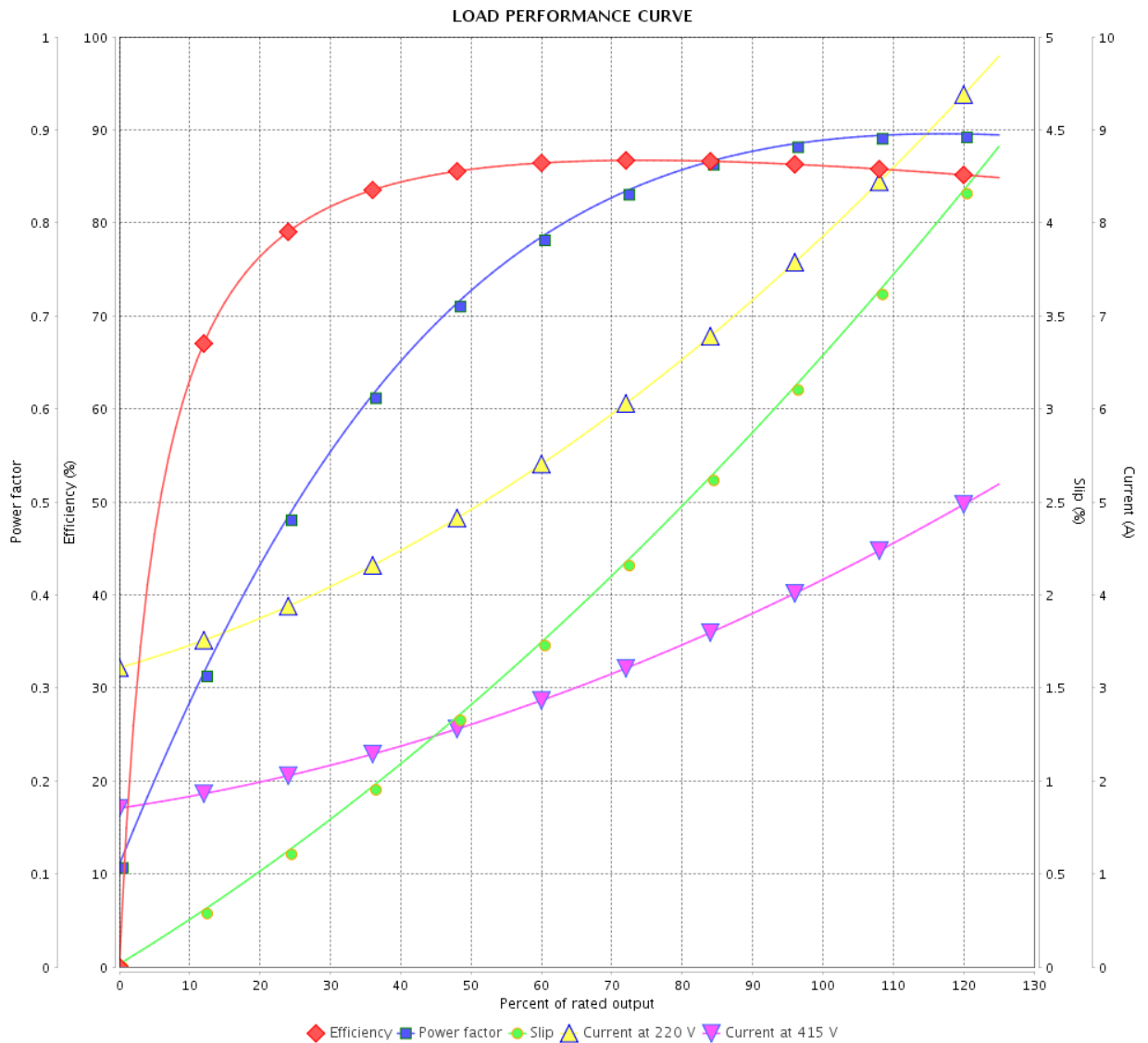


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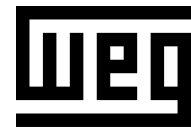
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# THERMAL LIMIT CURVE



## Three Phase Induction Motor - Squirrel Cage

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Performance : 230/460 V 60 Hz 2P

Rated current : 7.34/3.67 A  
LRC : 8.8  
Rated torque : 4.48 ft.lb  
Locked rotor torque : 220 %  
Breakdown torque : 300 %  
Rated speed : 3515 rpm

Moment of inertia (J) : 0.1564 sq.ft.lb  
Duty cycle : Cont.(S1)  
Insulation class : F  
Service factor : 1.15  
Temperature rise : 80 K  
Design : B

Heating constant

Cooling constant

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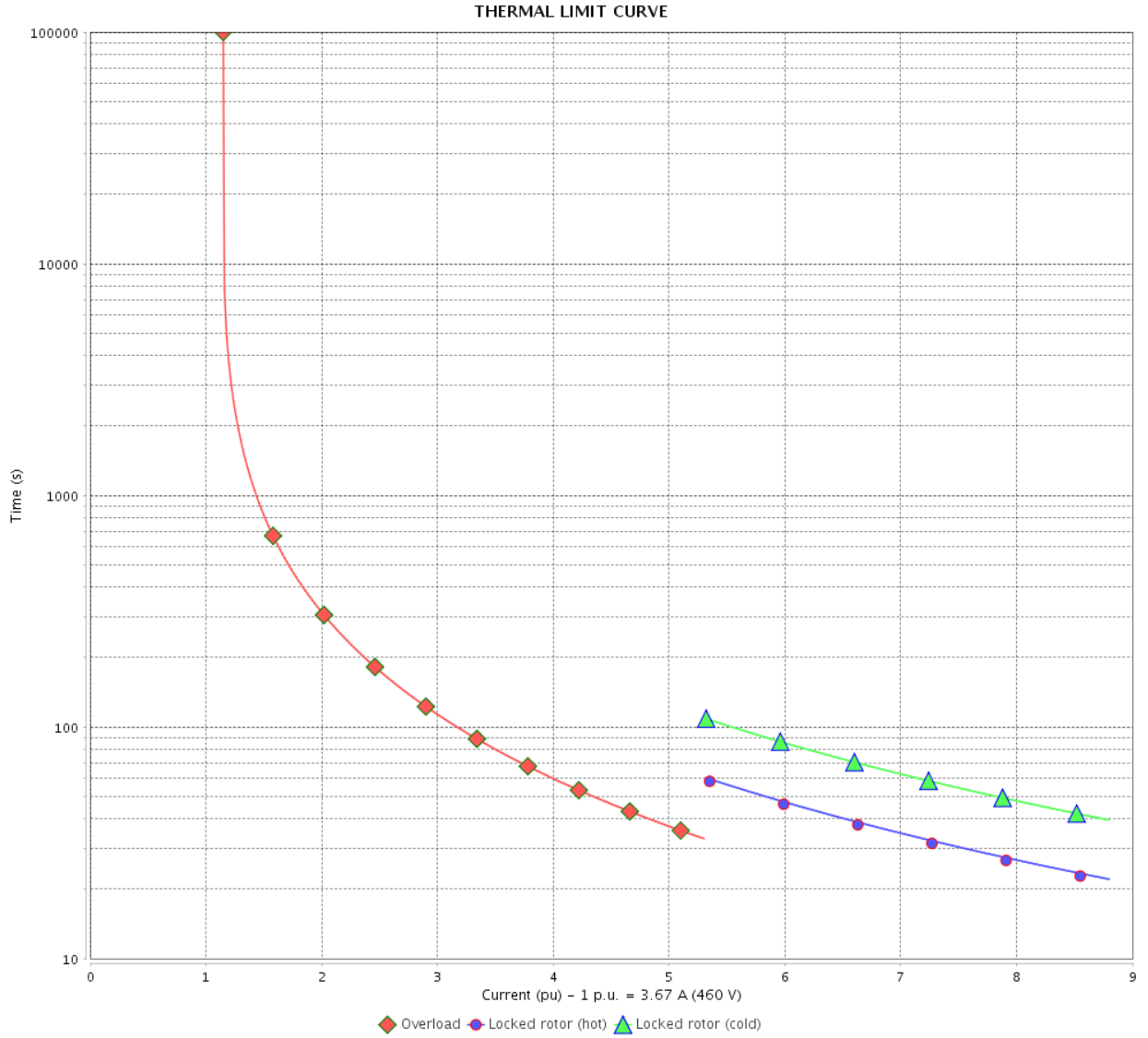


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Three Phase Induction Motor - Squirrel Cage



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Cooling constant

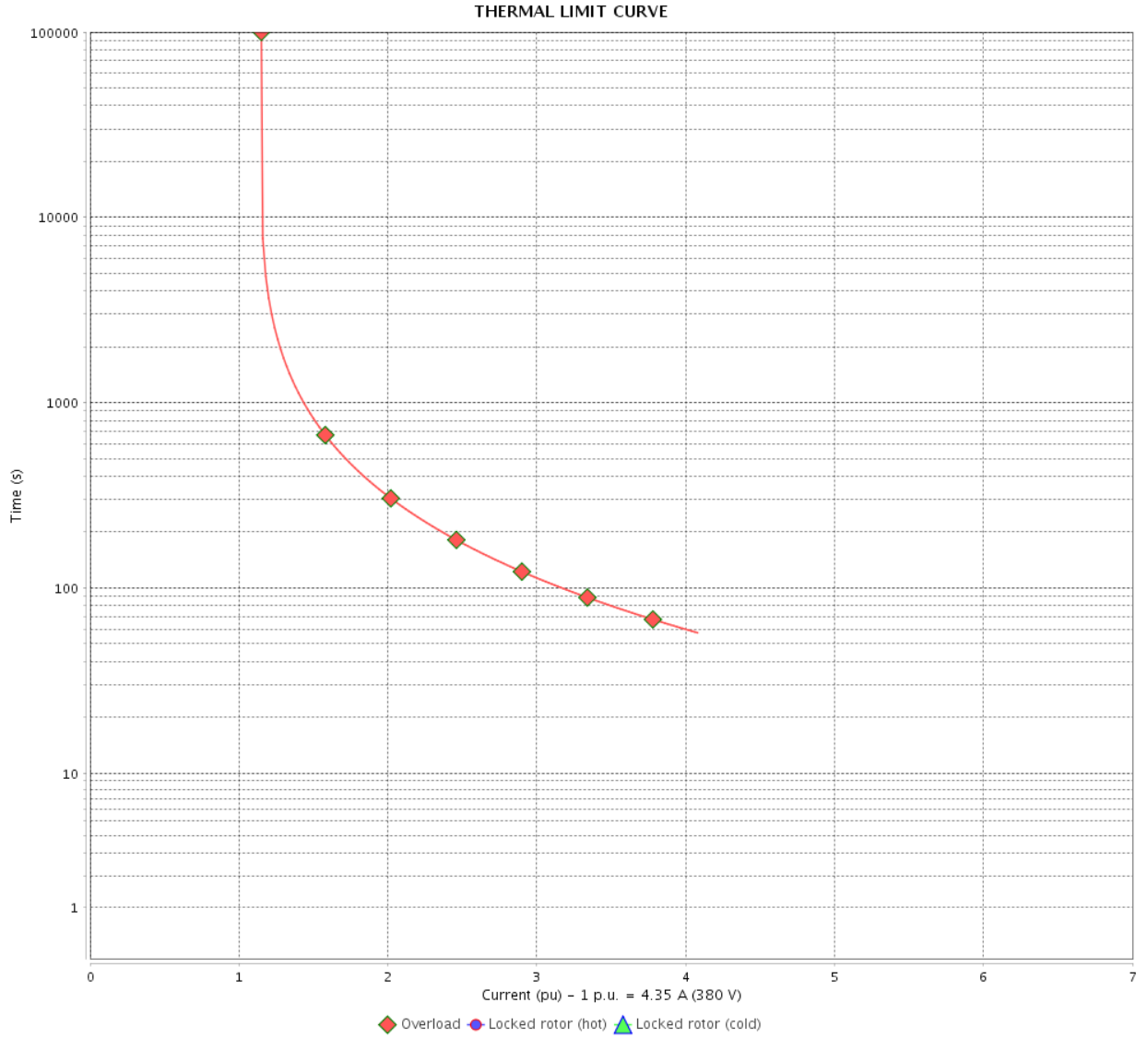
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Heating constant

Cooling constant

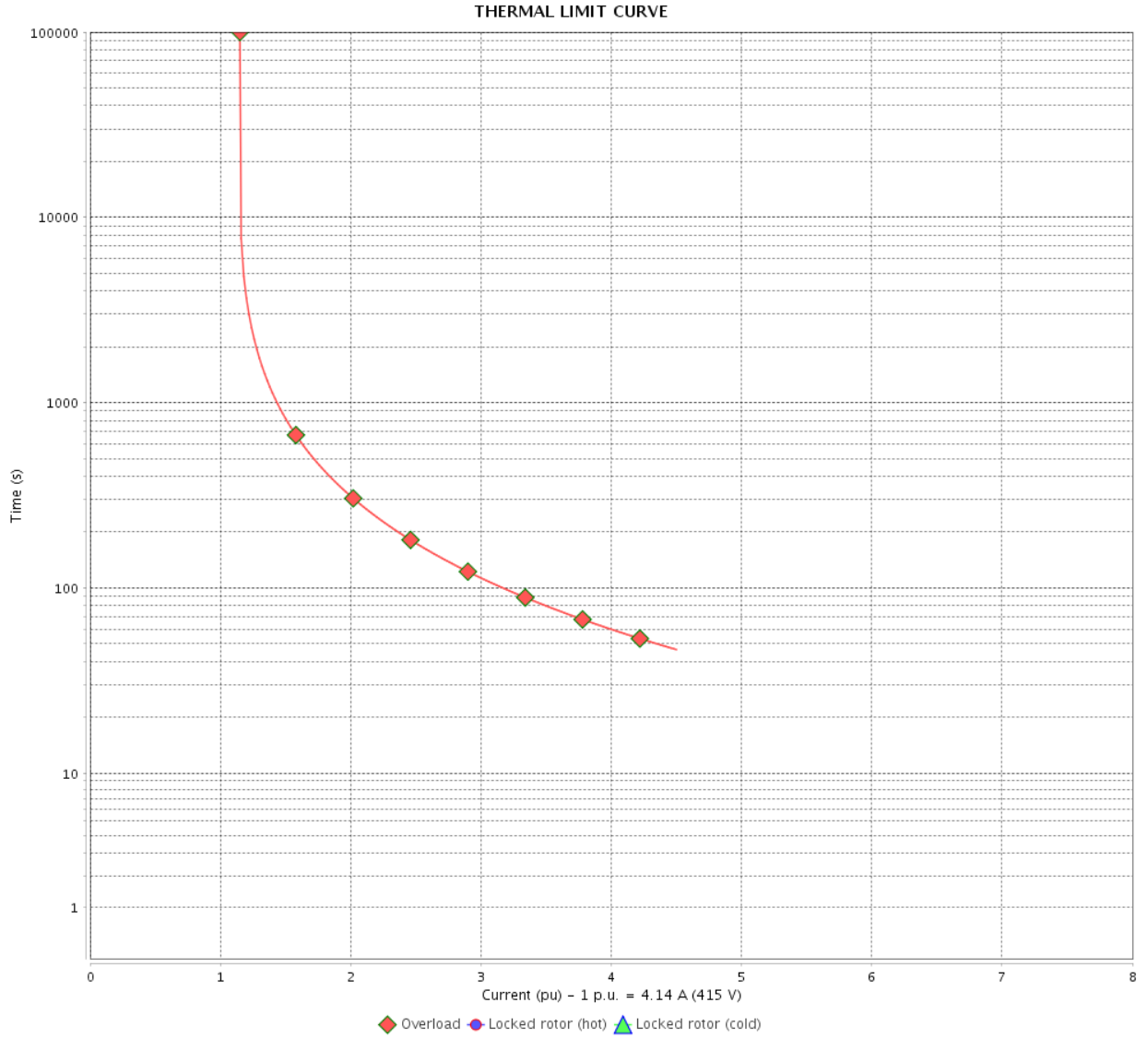
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# VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

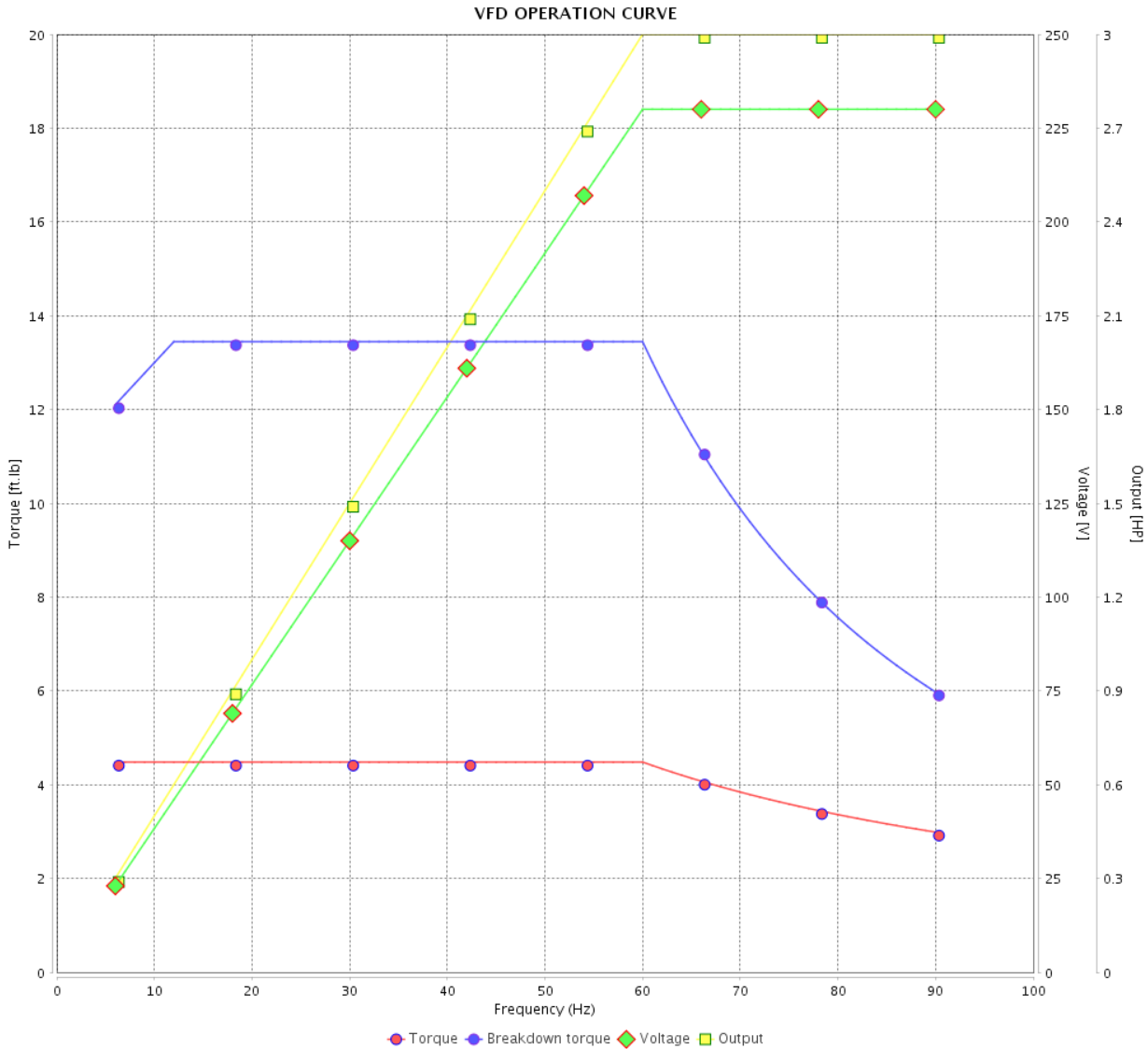


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Moment of inertia (J) : 0.1564 sq.ft.lb  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.15  
 Temperature rise : 80 K  
 Design : B

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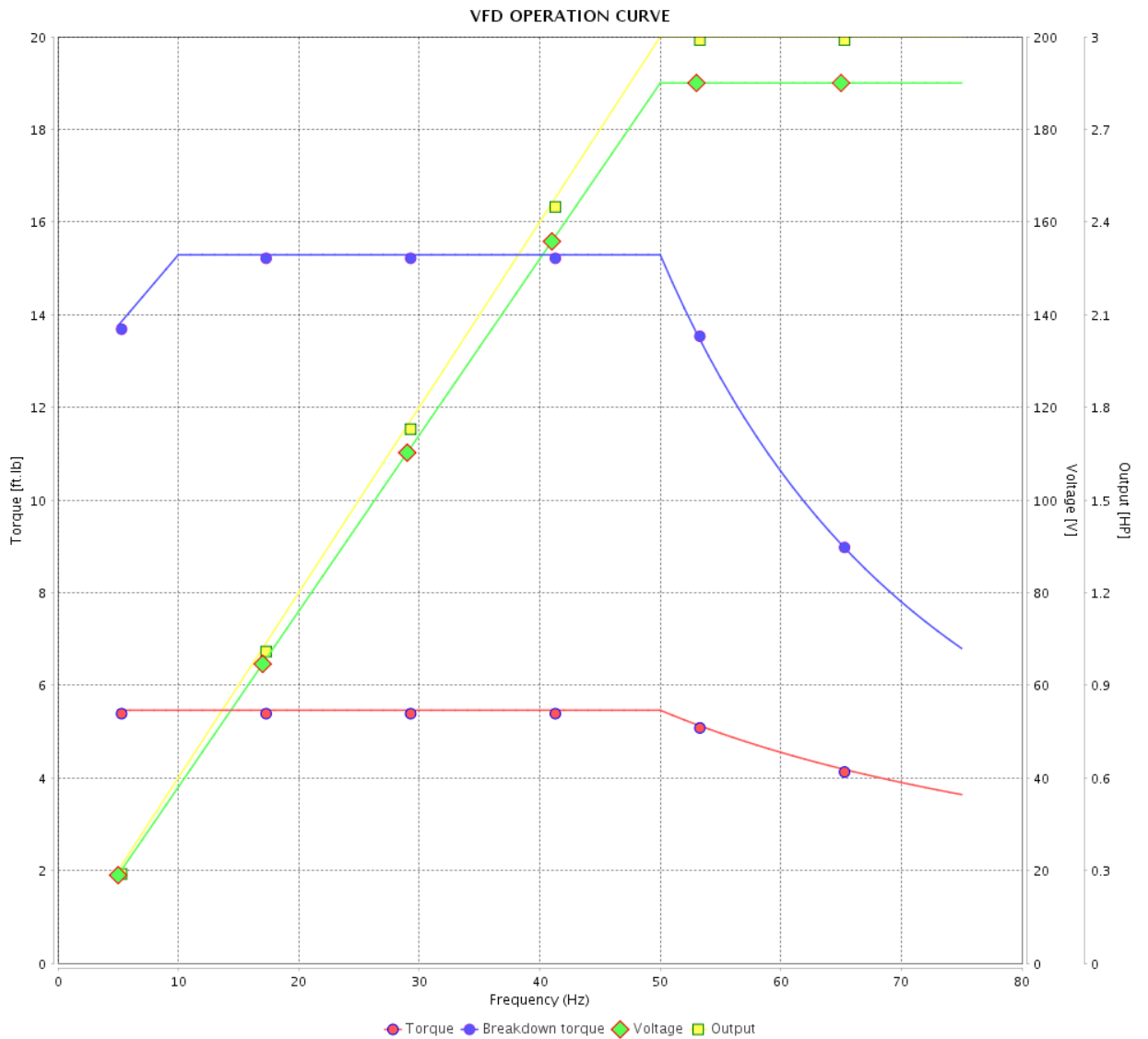


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 Service factor : 1.15  
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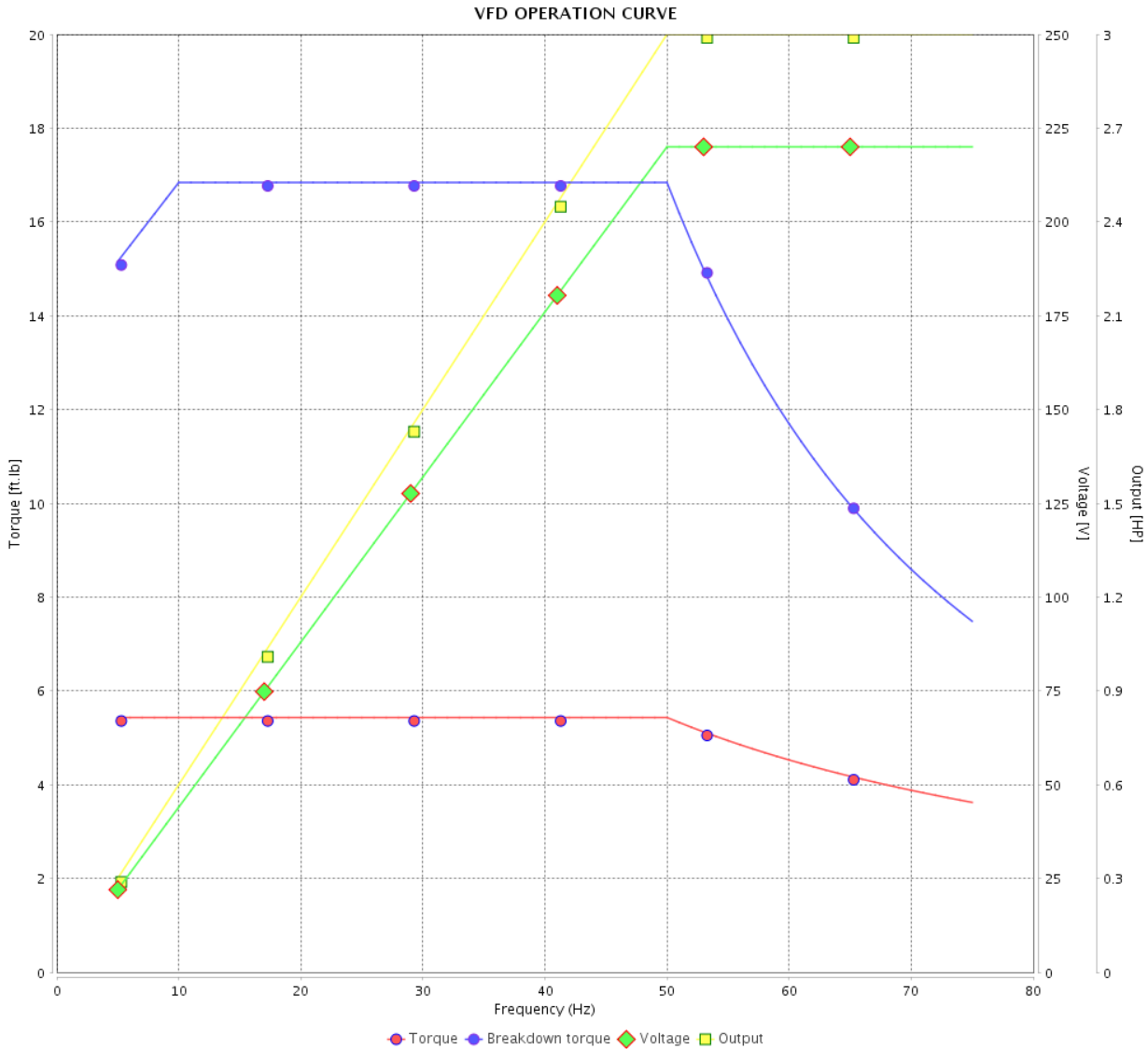


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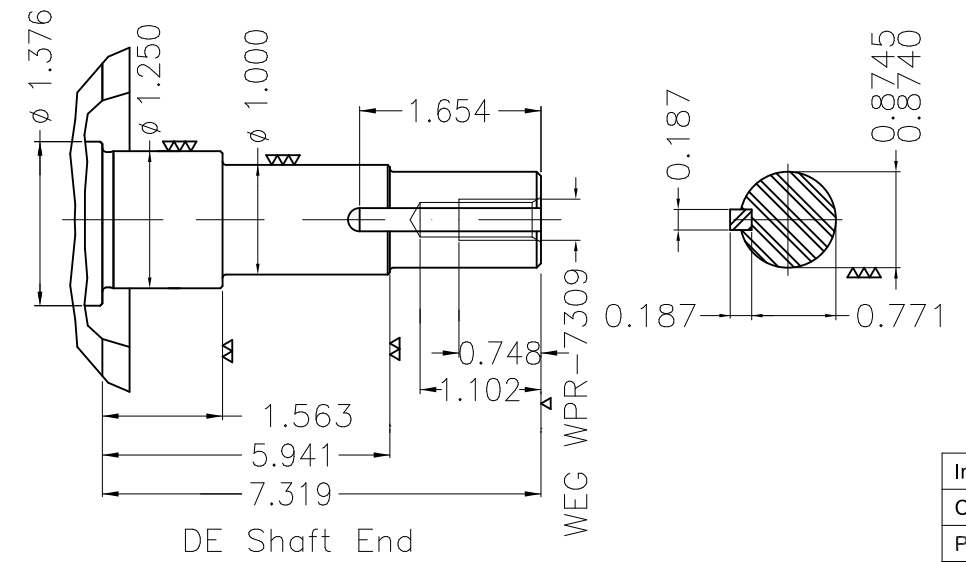
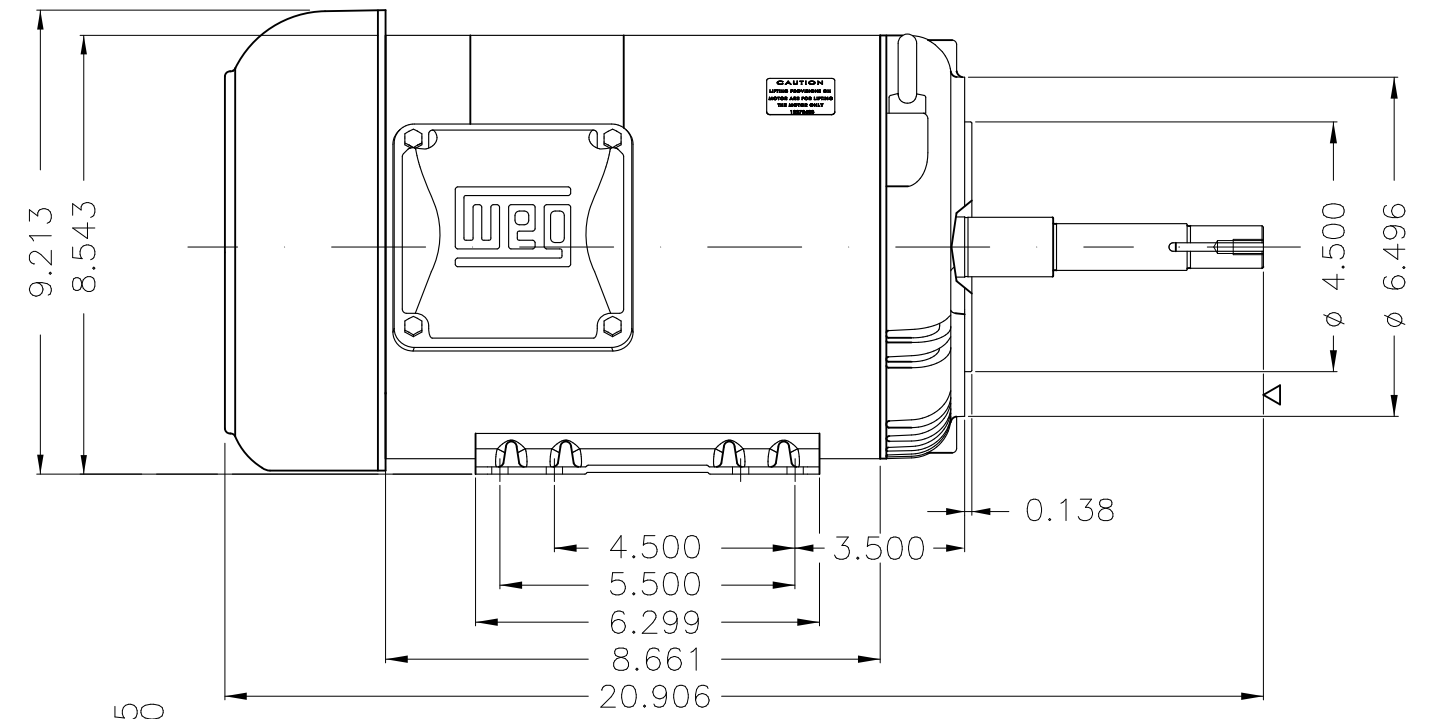
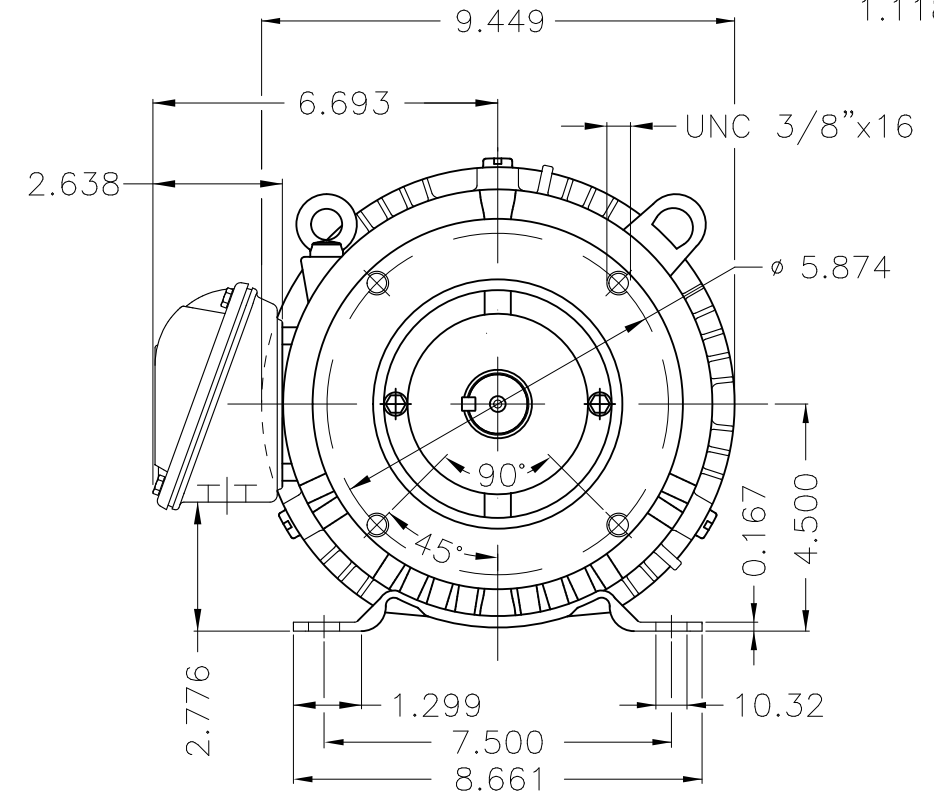
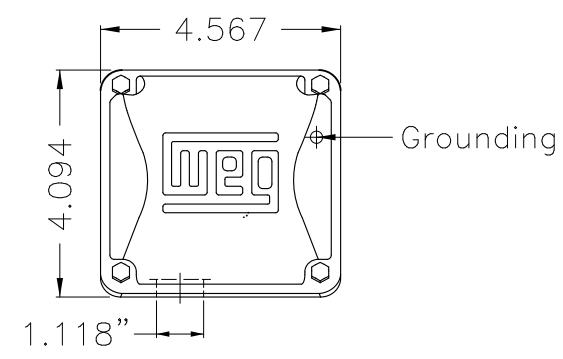
A

B

C

D

E



EUNC 3/8"-16 WEG WPR-7309

Internal AEGIS ground ring on the DE  
 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 JP 3/4 HP PRELIMINARY					
CHECKED		FRAME 182/4JP IP55 TEFC					
RELEASED							
REL DT.	WMO	Jaragua do Sul	Product Engineering	WDD	SHEET	1 / 1	

3 HP 02 Poles 60 Hz

