

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :		
Product line	: NEMA Premium Efficiency Three-Phase	
Product code :	14331136	
Catalog # :	00152OT3E182T-SG	
Frame	: 182/4T	
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	: 57.4 lb	
Moment of inertia (J)	: 0.2178 sq.ft.lb	
Output [HP]	1.5	
Poles	6	
Frequency [Hz]	60	
Rated voltage [V]	230/460	
Rated current [A]	4.50/2.25	
L. R. Amperes [A]	29.3/14.6	
LRC [A]	6.5x(Code J)	
No load current [A]	2.74/1.37	
Rated speed [RPM]	1165	
Slip [%]	2.92	
Rated torque [ft.lb]	6.76	
Locked rotor torque [%]	200	
Breakdown torque [%]	310	
Service factor	1.15	
Temperature rise	80 K	
Locked rotor time	82s (cold) 46s (hot)	
Noise level ²	52.0 dB(A)	
Efficiency (%)	25%	82.8
	50%	84.0
	75%	85.5
	100%	86.5
Power Factor	25%	0.29
	50%	0.51
	75%	0.63
	100%	0.71
Bearing type	: <u>Drive end</u> 6206 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 : 108 lb Max. compression : 165 lb	
Notes USABLE @208V 4.98A SF 1.00 SFA 4.98A		
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



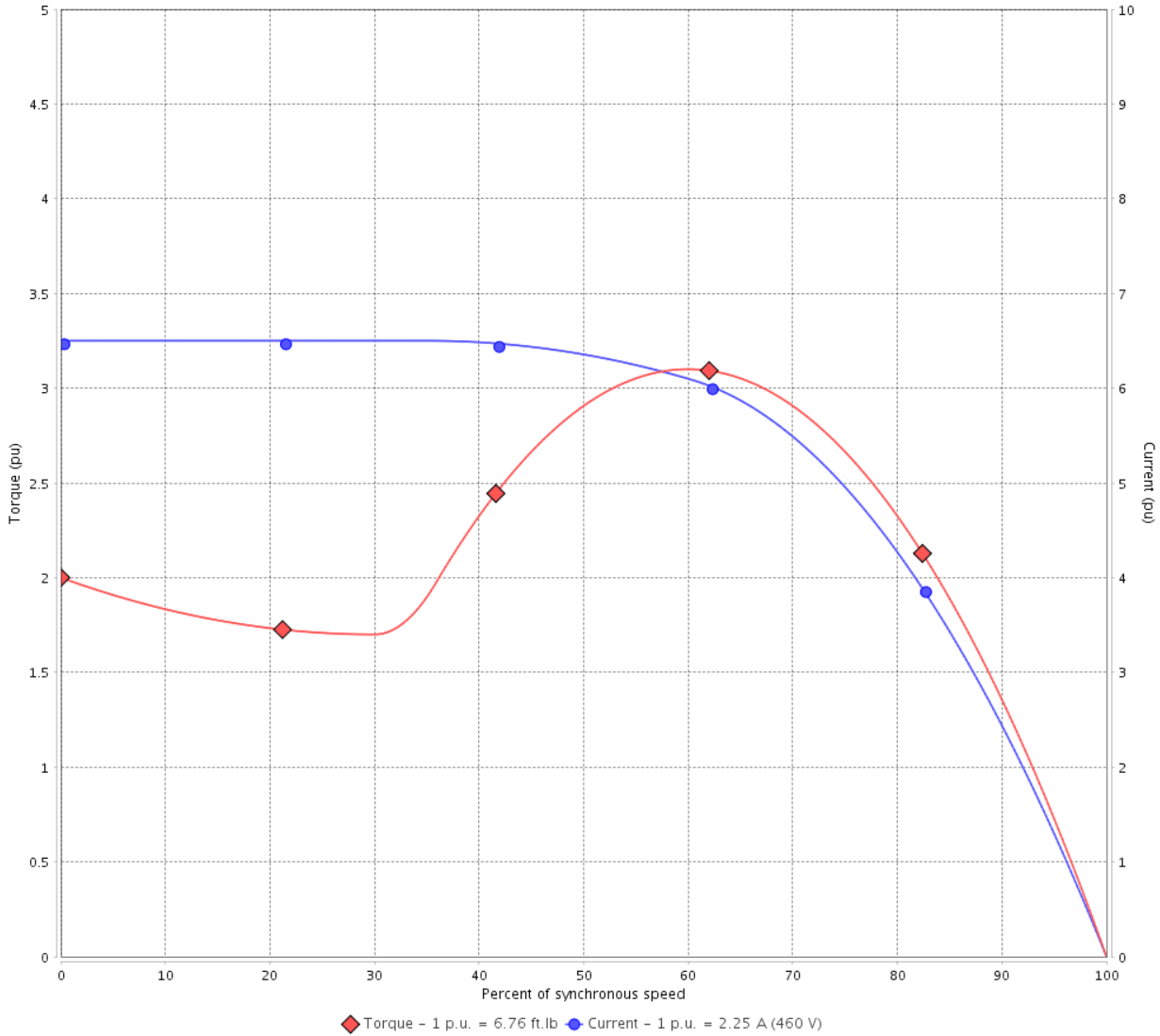
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 14331136

Catalog # : 001520T3E182T-SG

TORQUE AND CURRENT VS SPEED CURVE



Performance : 230/460 V 60 Hz 6P

Rated current : 4.50/2.25 A
 LRC : 6.5
 Rated torque : 6.76 ft.lb
 Locked rotor torque : 200 %
 Breakdown torque : 310 %
 Rated speed : 1165 rpm

Moment of inertia (J) : 0.2178 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

Locked rotor time : 82s (cold) 46s (hot)

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TORQUE AND CURRENT VS SPEED CURVE



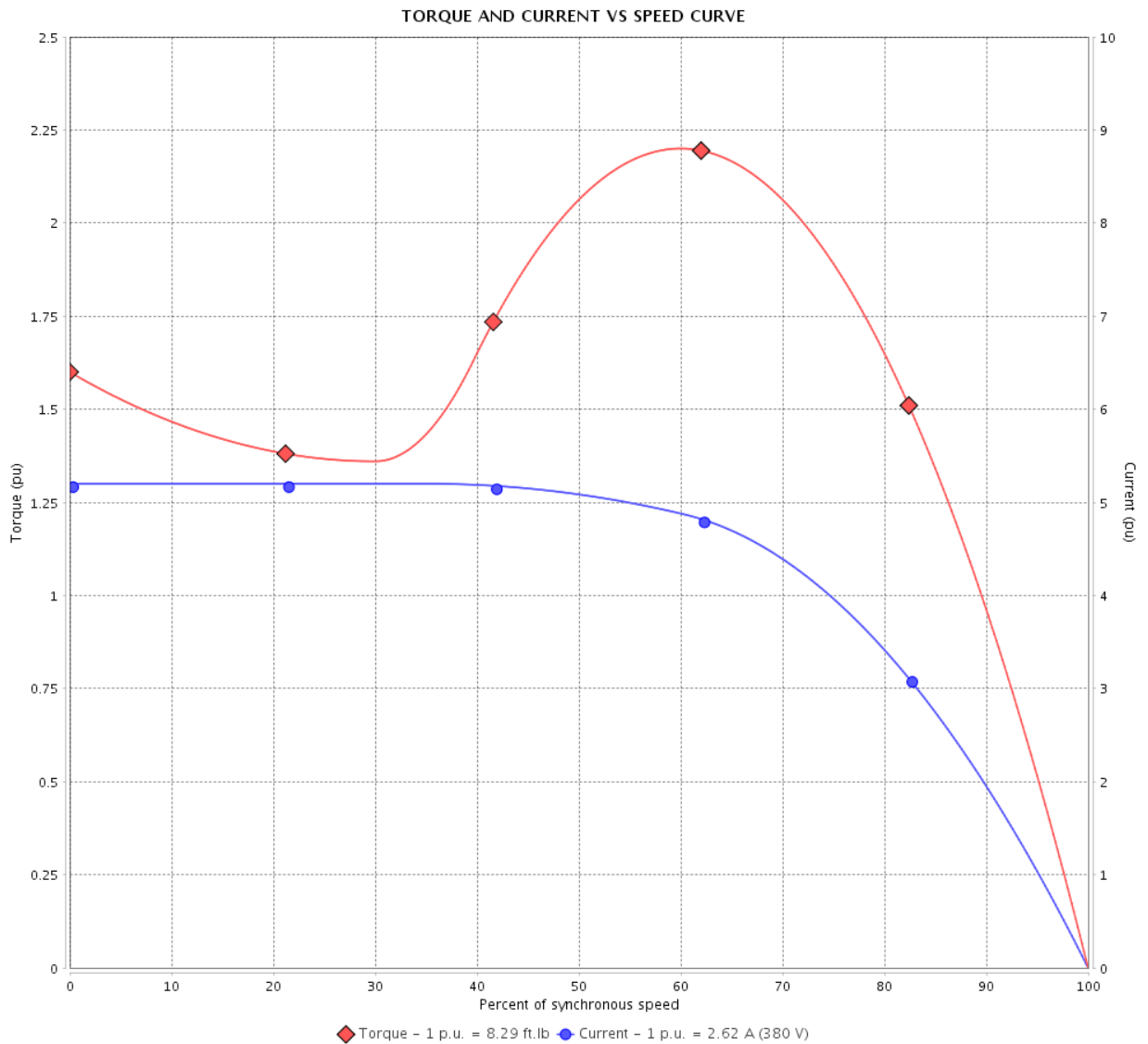
Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 14331136

Catalog # : 001520T3E182T-SG



Performance : 190/380 V 50 Hz 6P

Rated current : 5.24/2.62 A
 LRC : 5.2
 Rated torque : 8.29 ft.lb
 Locked rotor torque : 160 %
 Breakdown torque : 220 %
 Rated speed : 950 rpm

Moment of inertia (J) : 0.2178 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



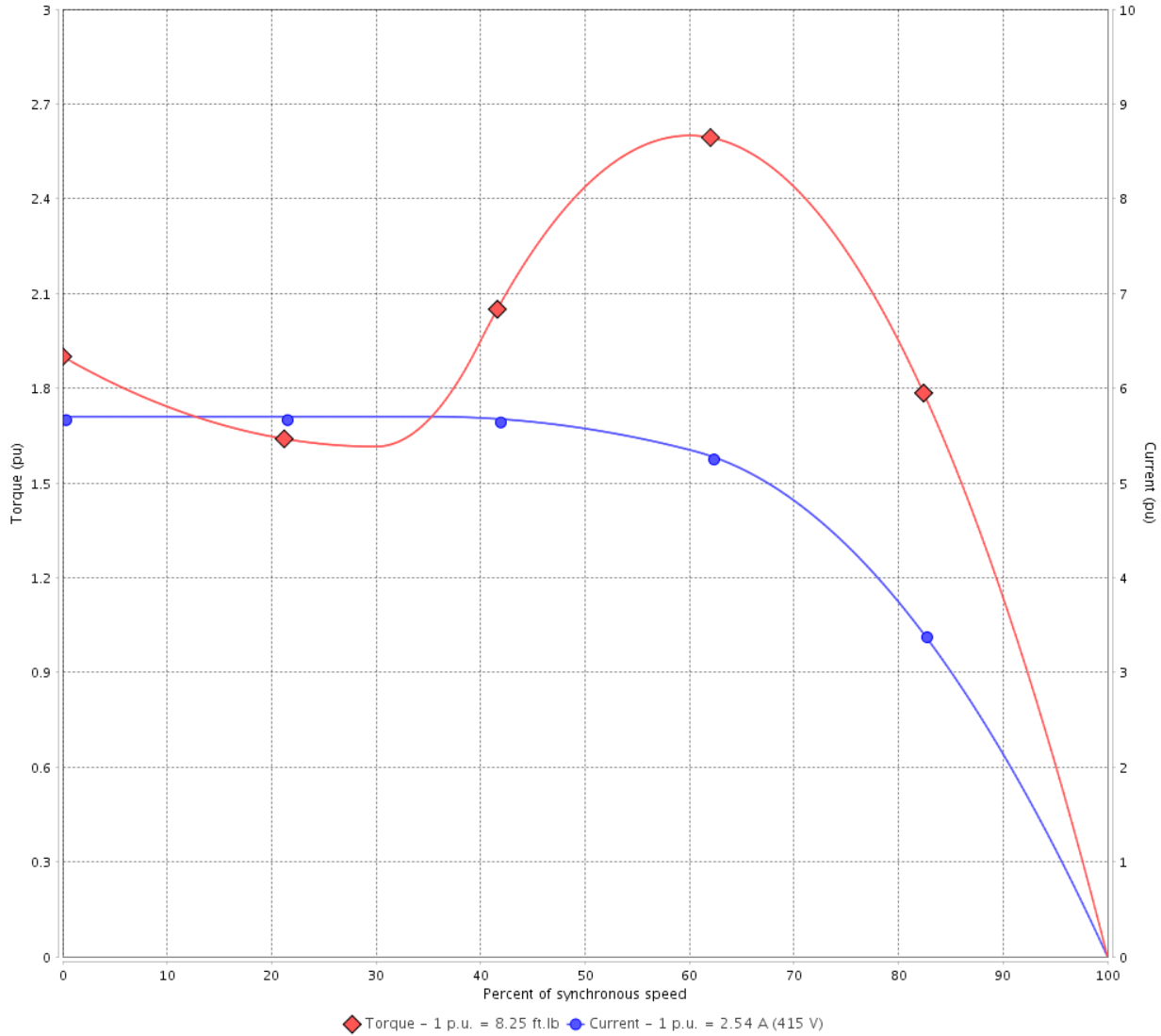
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TORQUE AND CURRENT VS SPEED CURVE



Performance : 220/415 V 50 Hz 6P

Rated current : 4.79/2.54 A
 LRC : 5.7
 Rated torque : 8.25 ft.lb
 Locked rotor torque : 190 %
 Breakdown torque : 260 %
 Rated speed : 955 rpm

Moment of inertia (J) : 0.2178 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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LOAD PERFORMANCE CURVE

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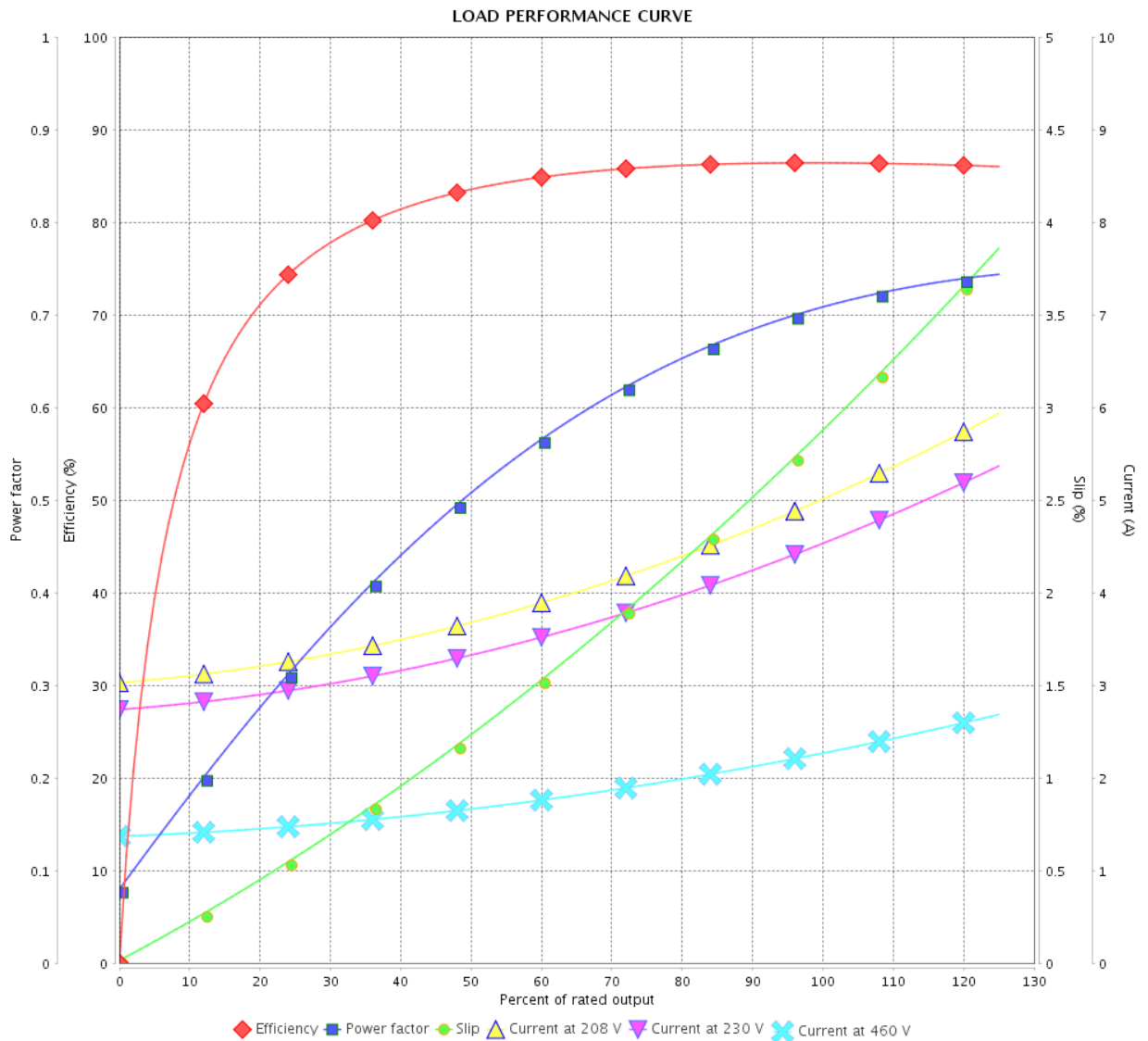


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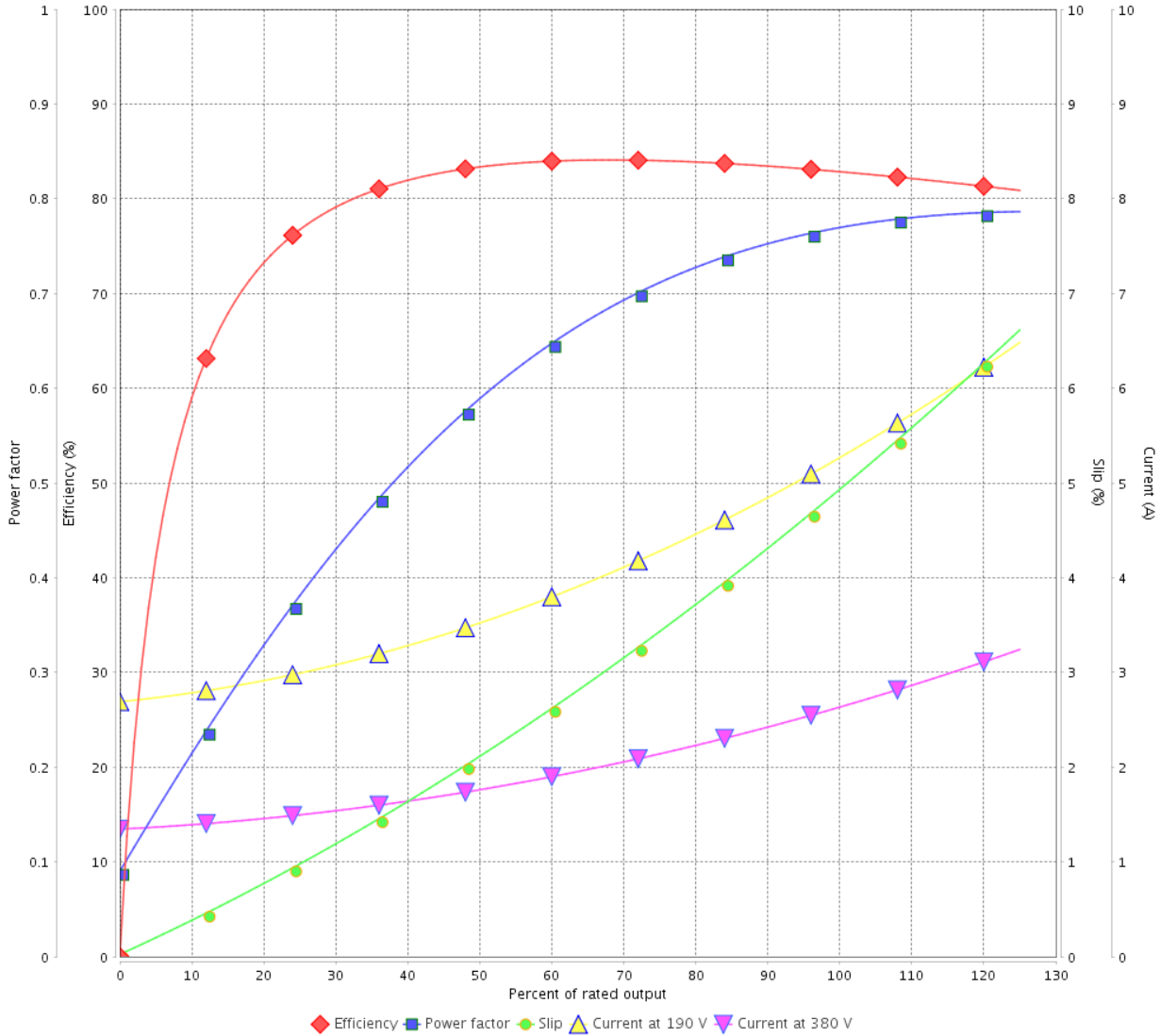
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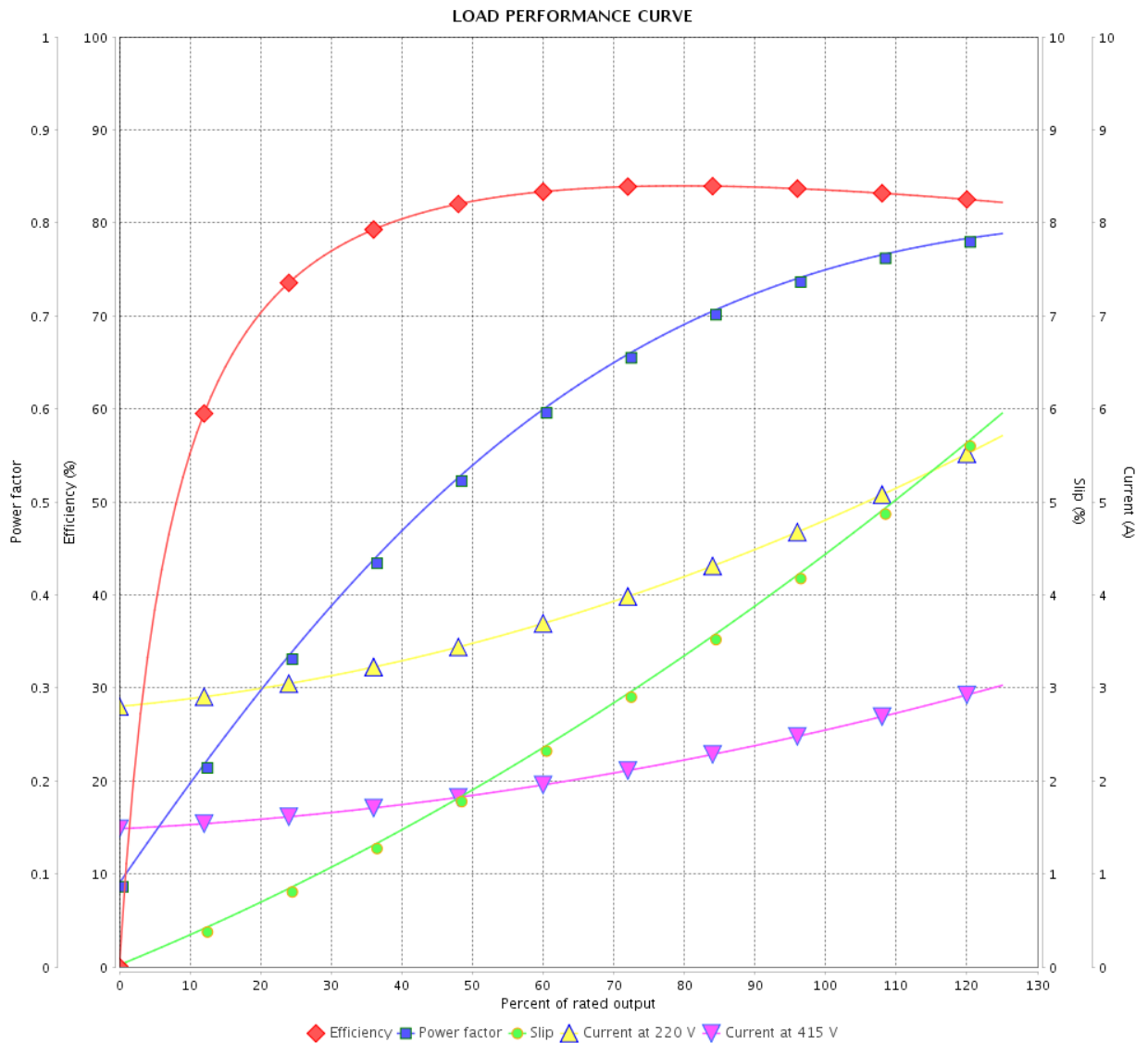


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THERMAL LIMIT CURVE



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Rated speed	: 1165 rpm	Design	: B

Heating constant

Cooling constant

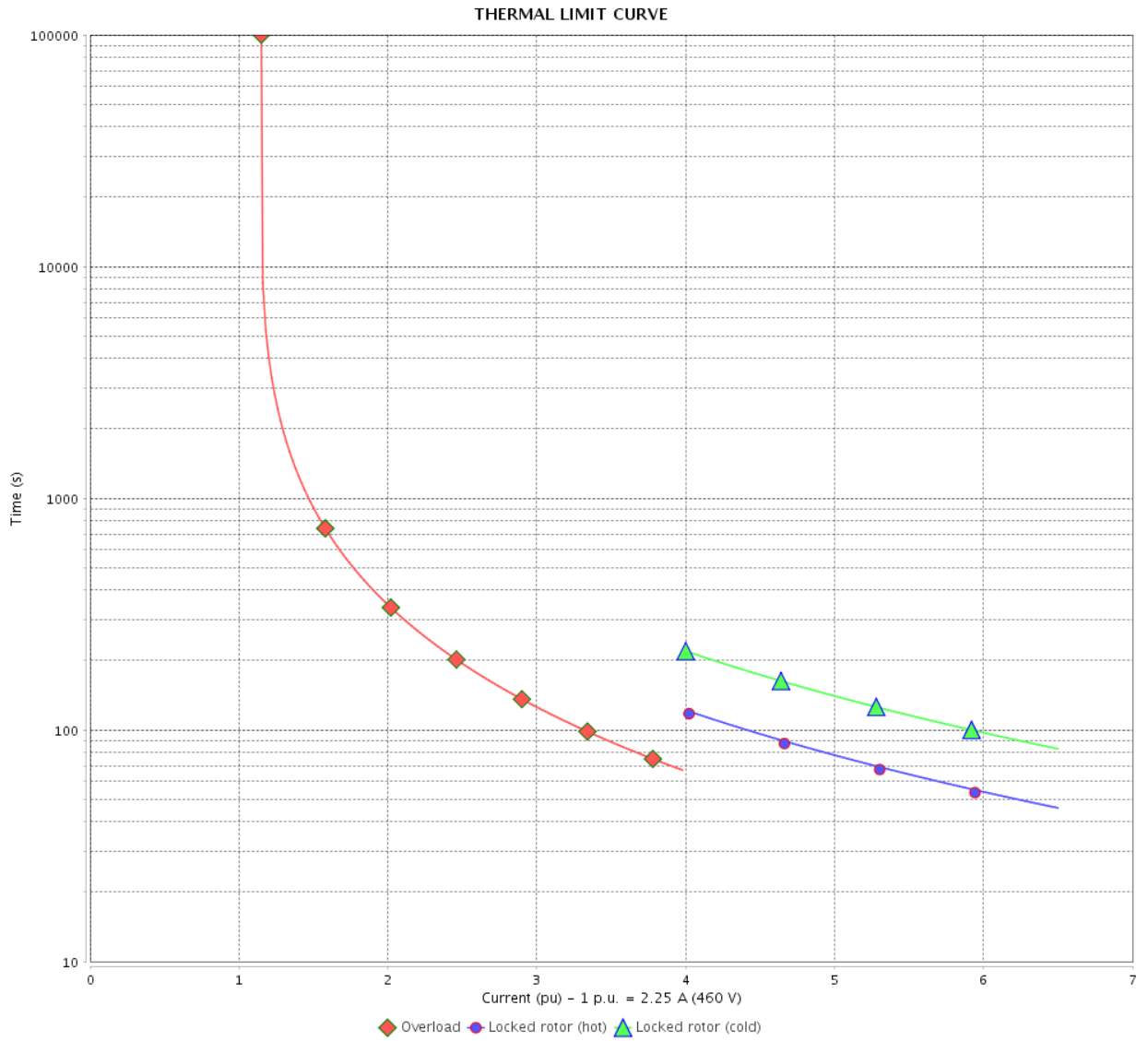
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Rated torque : 8.29 ft.lb	Insulation class : F
Locked rotor torque : 160 %	Service factor : 1.15
Breakdown torque : 220 %	Temperature rise : 80 K
Rated speed : 950 rpm	Design : B

Heating constant

Cooling constant

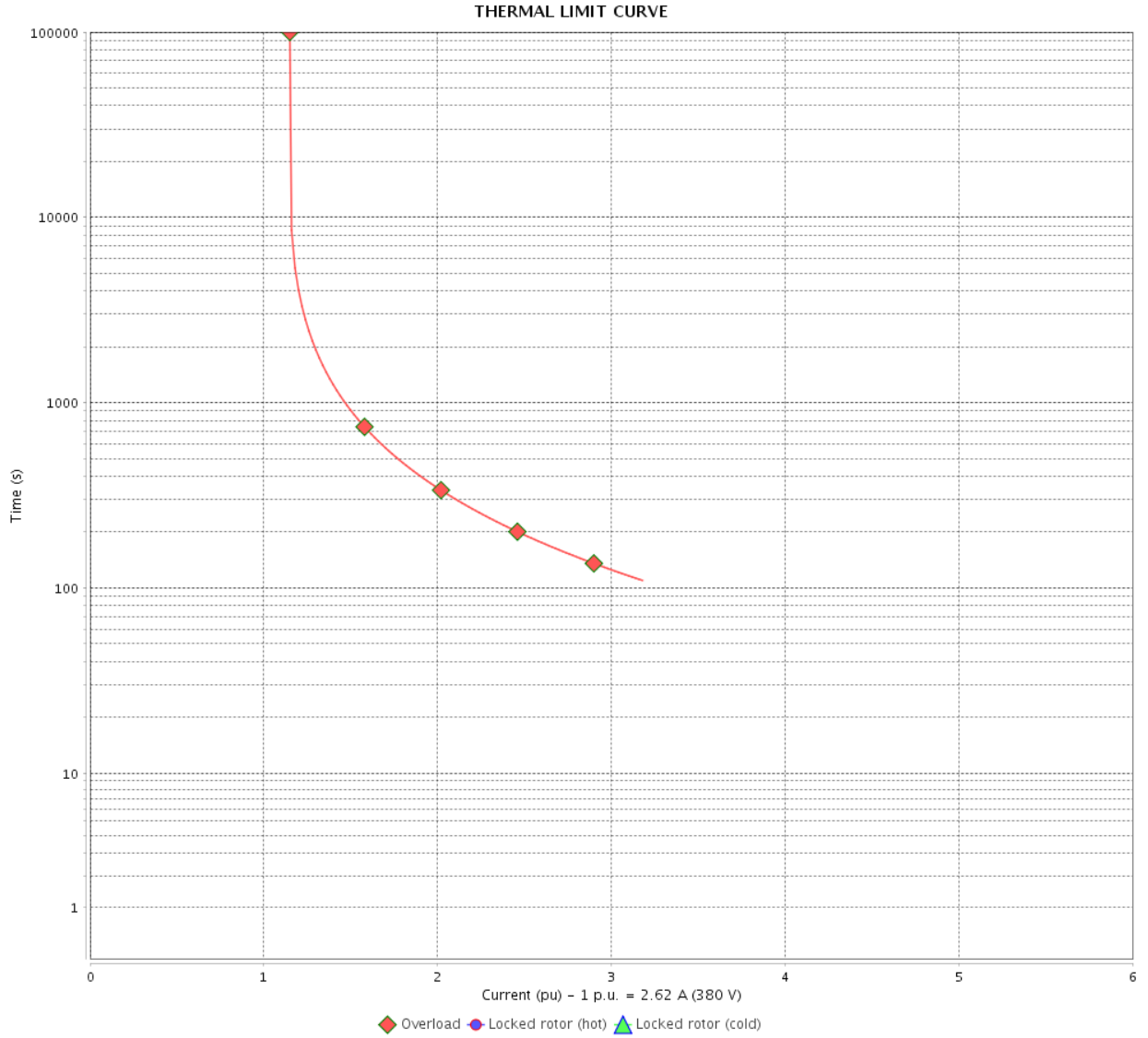
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Cooling constant

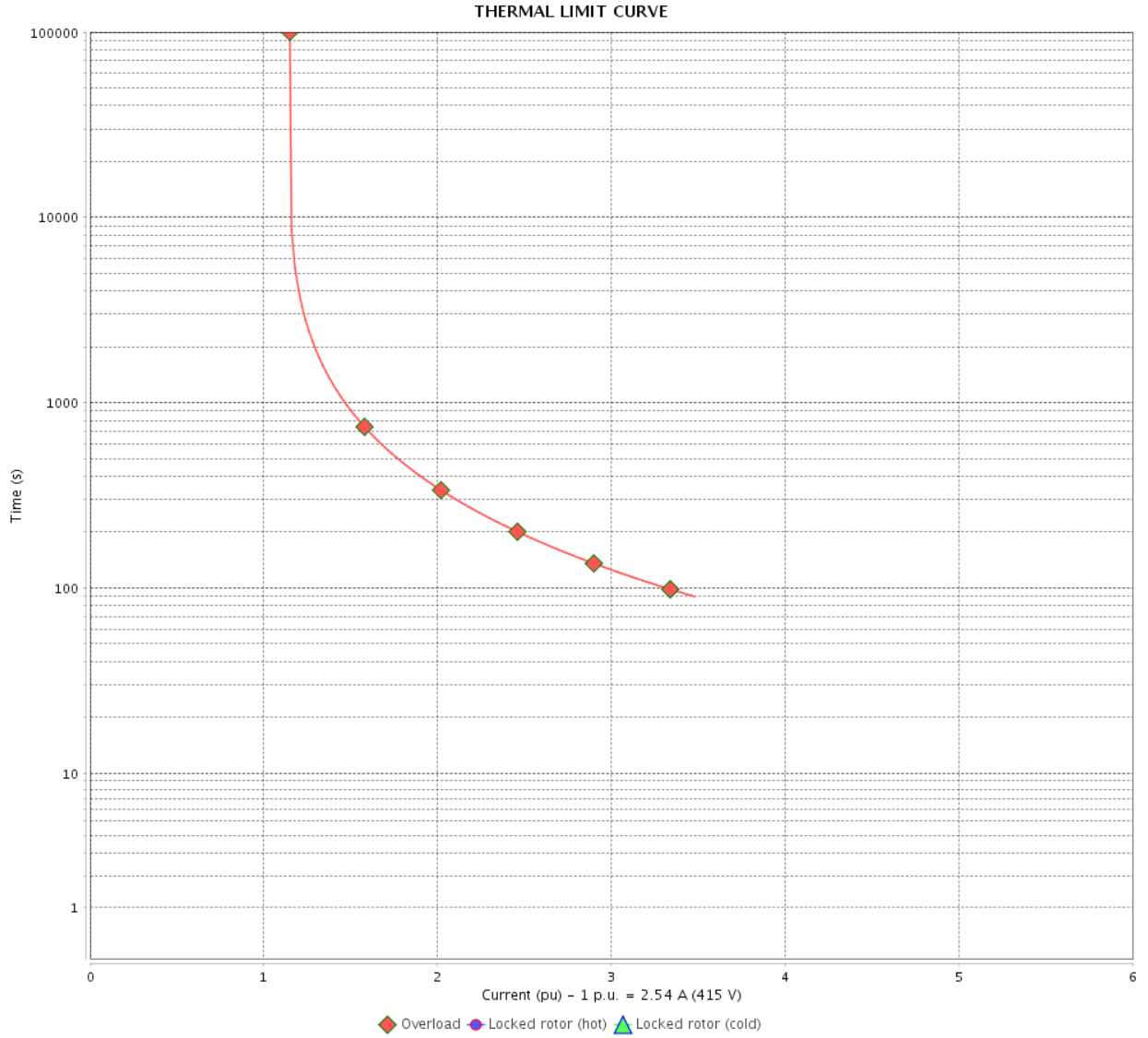
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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

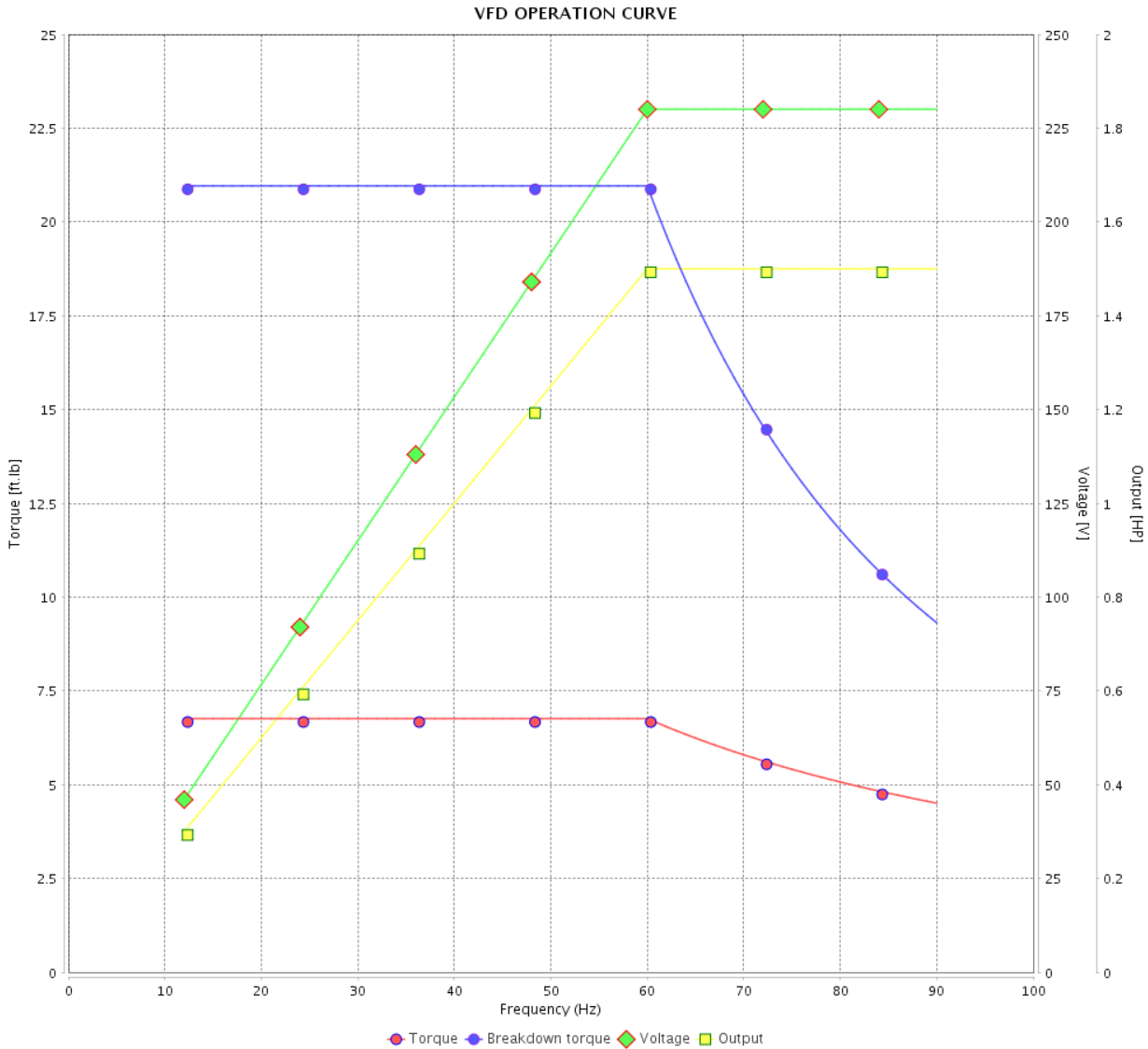


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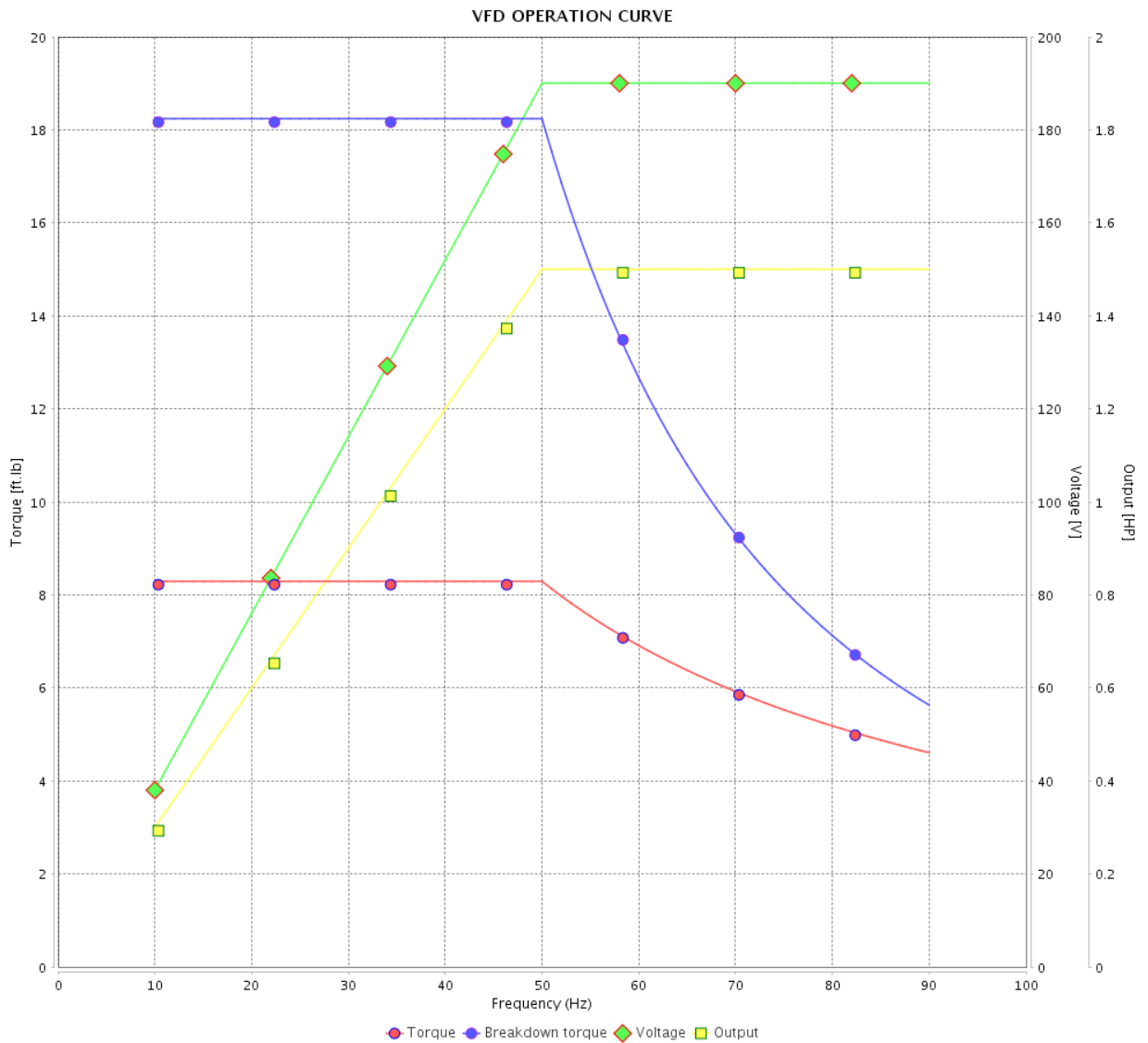


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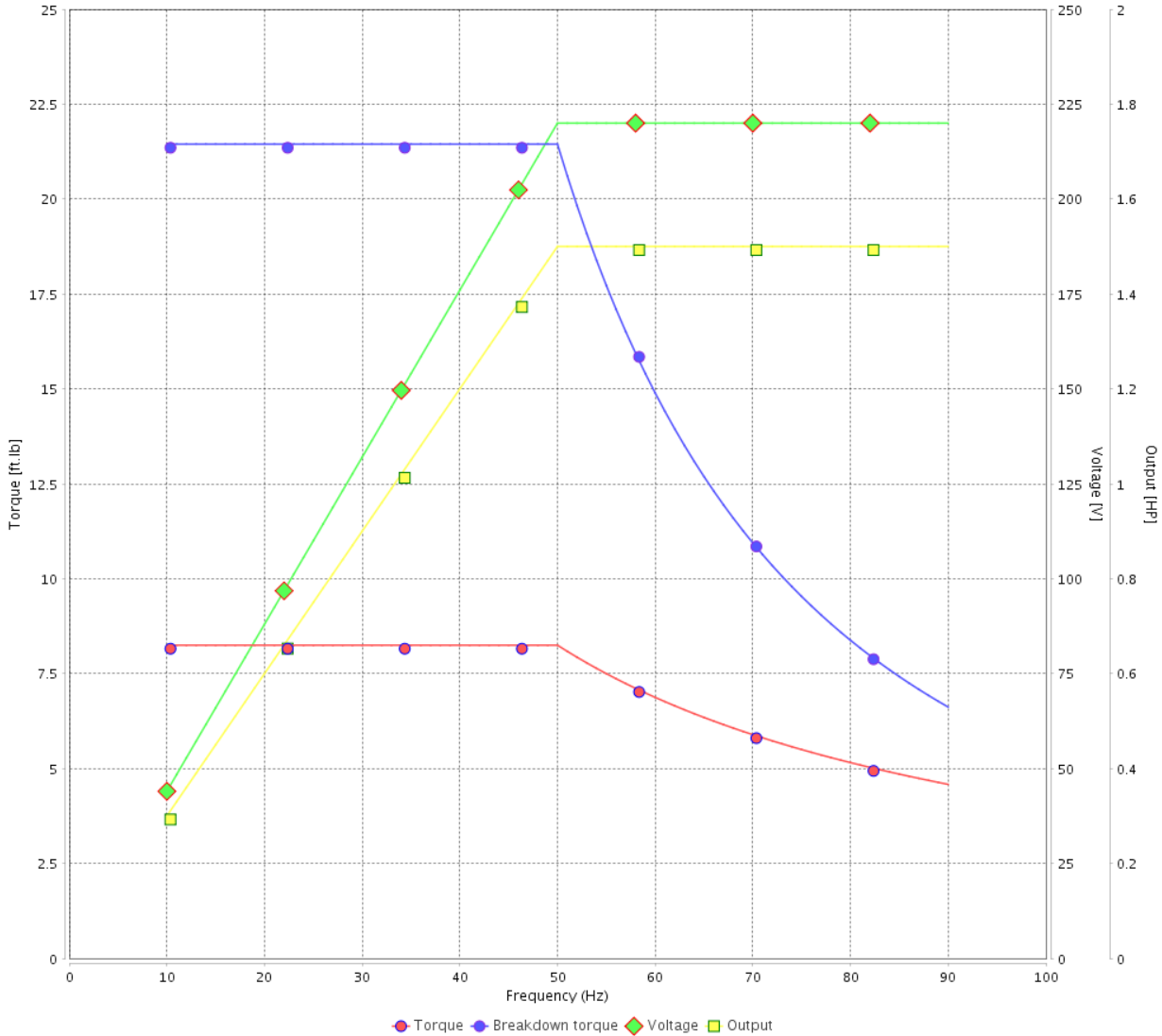
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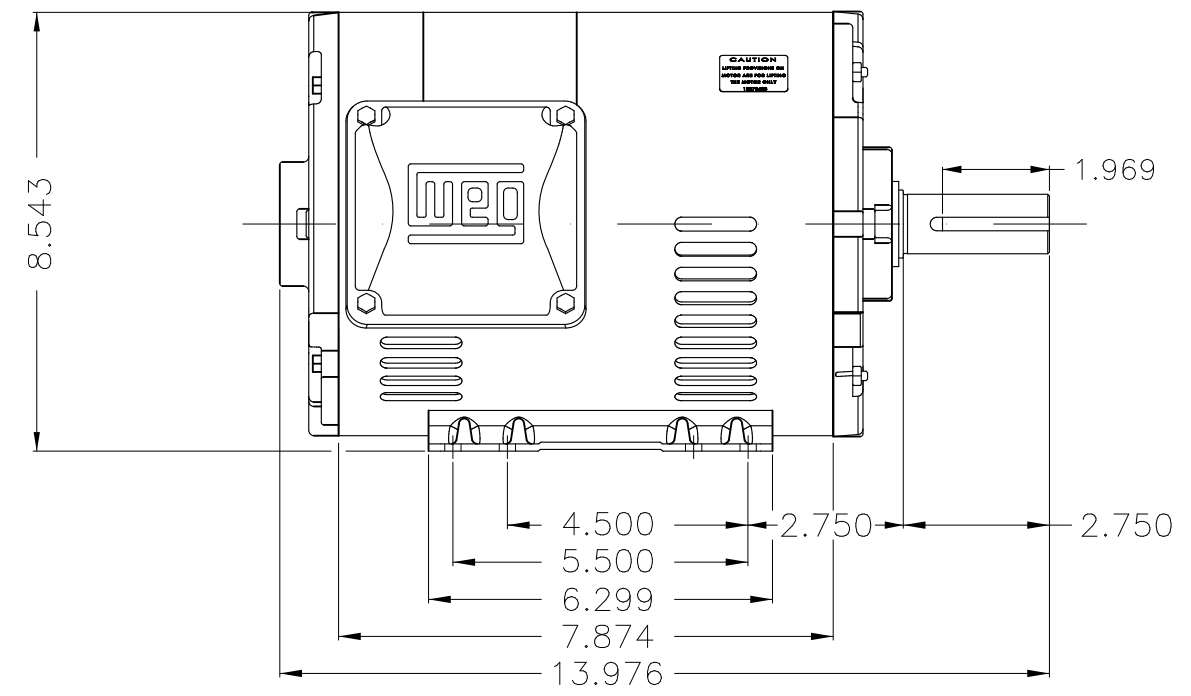
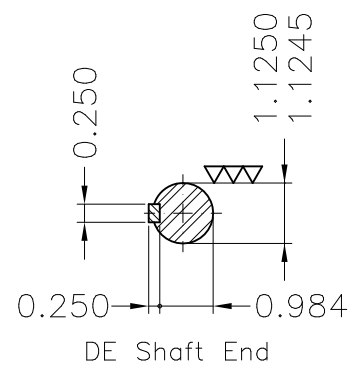
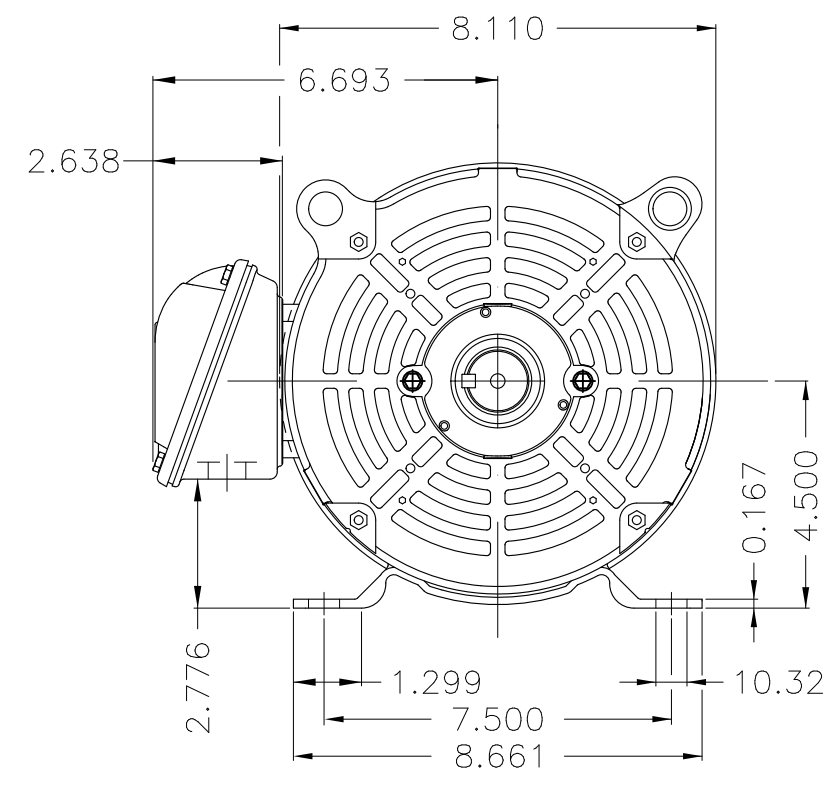
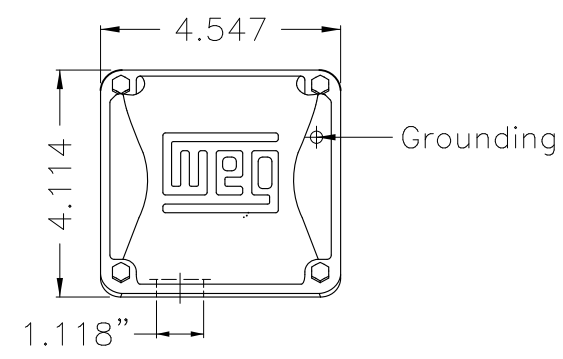
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B

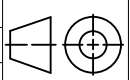
C

D

E



Bearing cap
 Internal AEGIS ground ring on the DE
 Color Munsell N 1 matte black
 Painting plan 207N
 Mounting F-1/B3R(D)

ECM	LOC	SUMMARY OF MODIFICATIONS	EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	PIRWBUSER	 THREE PH. MOTOR ROLLED STEEL PREM. EFF. FRAME 182/4T IP21 ODP					
CHECKED							
RELEASED							
REL DT.	WMO	Jaragua do Sul	Product Engineering	SHEET		1 / 1	

1.5 HP 06 Poles 60 Hz

A

PREVIEW
WDD

