

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :				
Product line	: NEMA Premium Efficiency Three-Phase	Product code :	12866861	
		Catalog # :	00112OT3E145T-SG	
Frame	: 143/5T	Cooling method	: IC01 - ODP	
Insulation class	: F	Mounting	: F-1	
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	: 35.3 lb	
Design	: B	Moment of inertia (J)	: 0.1419 sq.ft.lb	
Output [HP]	1	1	1	
Poles	6	6	6	
Frequency [Hz]	60	50	50	
Rated voltage [V]	230/460	190/380	220/415	
Rated current [A]	3.30/1.65	3.82/1.91	3.53/1.87	
L. R. Amperes [A]	20.1/10.1	17.6/8.79	18.0/9.54	
LRC [A]	6.1x(Code K)	4.6x(Code G)	5.1x(Code H)	
No load current [A]	2.26/1.13	2.22/1.11	2.27/1.20	
Rated speed [RPM]	1150	920	930	
Slip [%]	4.17	8.00	7.00	
Rated torque [ft.lb]	4.57	5.71	5.65	
Locked rotor torque [%]	250	190	220	
Breakdown torque [%]	300	210	240	
Service factor		1.00	1.00	
Temperature rise	80 K	105 K	105 K	
Locked rotor time	43s (cold) 24s (hot)	0s (cold) 0s (hot)	0s (cold) 0s (hot)	
Noise level ²	50.0 dB(A)	47.0 dB(A)	47.0 dB(A)	
Efficiency (%)	25%	77.2	78.1	
	50%	78.5	77.7	
	75%	81.5	79.4	
	100%	82.5	78.2	
Power Factor	25%	0.26	0.28	
	50%	0.47	0.51	
	75%	0.60	0.65	
	100%	0.69	0.74	
Bearing type	: <u>Drive end</u> 6205 ZZ <u>Non drive end</u> 6203 ZZ	Foundation loads		
Sealing	: Without Without Bearing Seal Bearing Seal	Max. traction	: 100 lb	
		Max. compression	: 135 lb	
Lubrication interval	: - -			
Lubricant amount	: - -			
Lubricant type	: Mobil Polyrex EM			
Notes USABLE @208V 3.65A SF 1.00 SFA 3.65A				
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



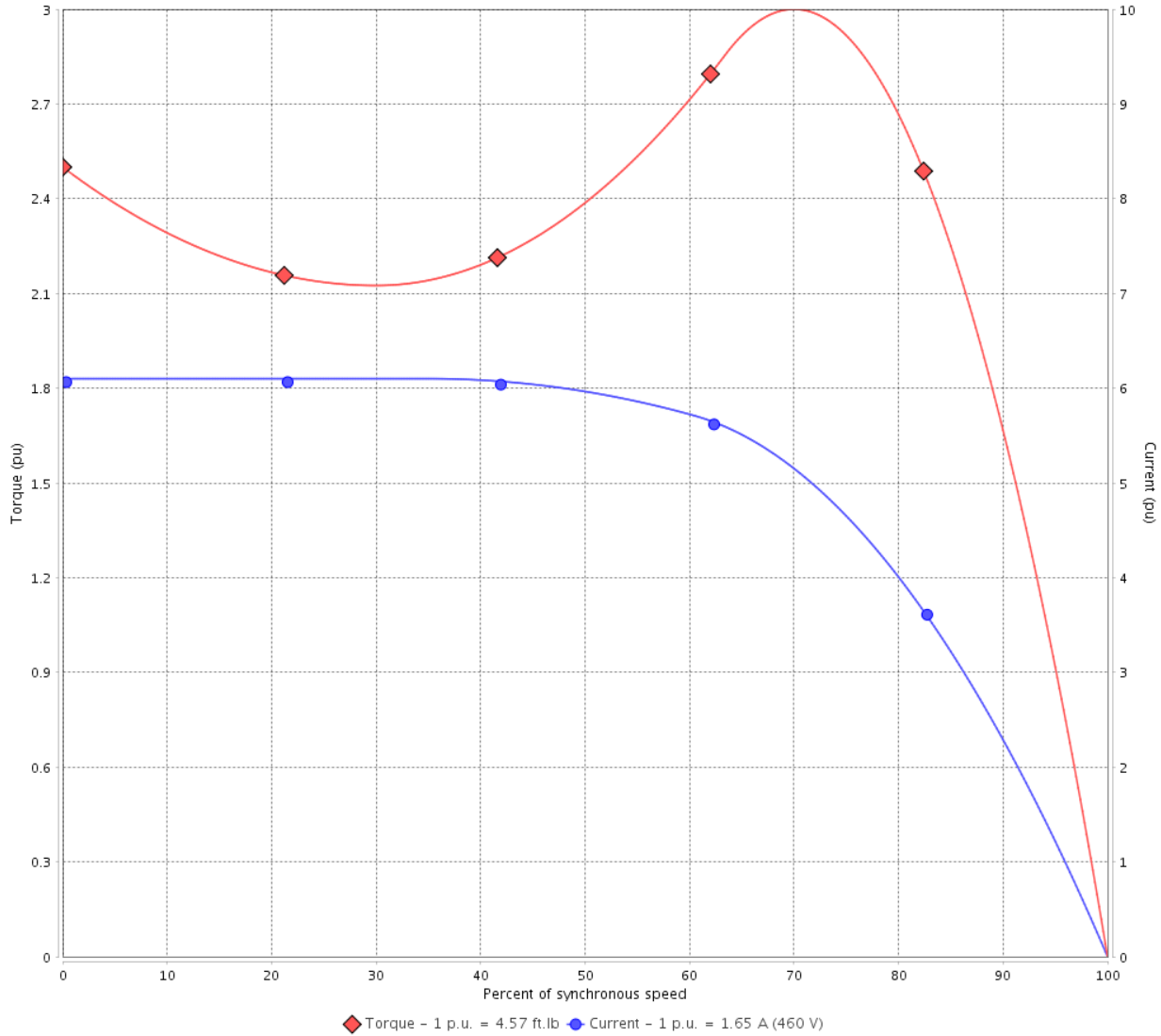
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12866861

Catalog # : 001120T3E145T-SG

TORQUE AND CURRENT VS SPEED CURVE



Performance : 230/460 V 60 Hz 6P

Rated current : 3.30/1.65 A
 LRC : 6.1
 Rated torque : 4.57 ft.lb
 Locked rotor torque : 250 %
 Breakdown torque : 300 %
 Rated speed : 1150 rpm

Moment of inertia (J) : 0.1419 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor :
 Temperature rise : 80 K
 Design : B

Locked rotor time : 43s (cold) 24s (hot)

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TORQUE AND CURRENT VS SPEED CURVE



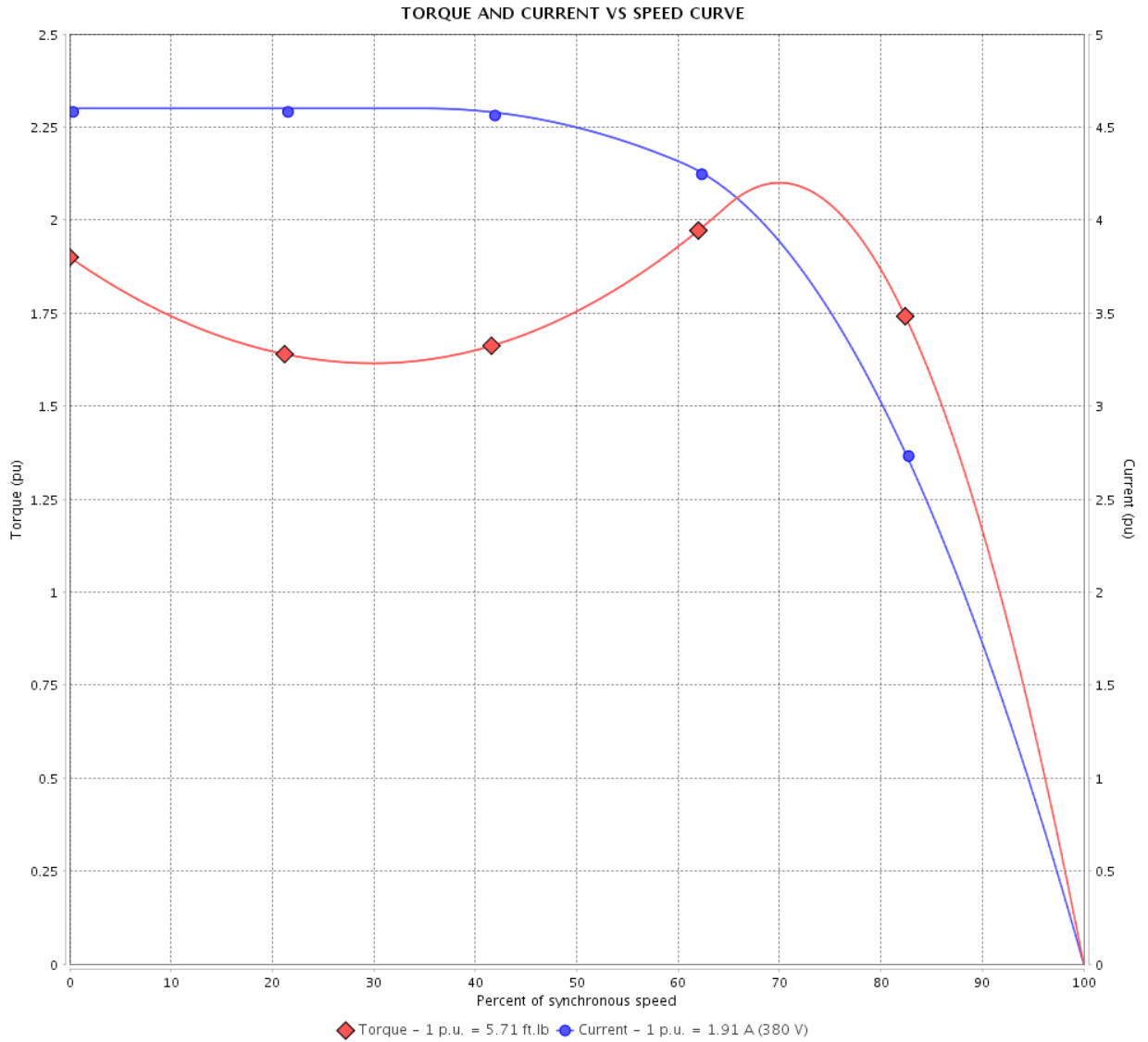
Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12866861

Catalog # : 00112OT3E145T-SG



Performance : 190/380 V 50 Hz 6P

Rated current	: 3.82/1.91 A	Moment of inertia (J)	: 0.1419 sq.ft.lb
LRC	: 4.6	Duty cycle	: Cont.(S1)
Rated torque	: 5.71 ft.lb	Insulation class	: F
Locked rotor torque	: 190 %	Service factor	: 1.00
Breakdown torque	: 210 %	Temperature rise	: 105 K
Rated speed	: 920 rpm	Design	: B

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

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TORQUE AND CURRENT VS SPEED CURVE

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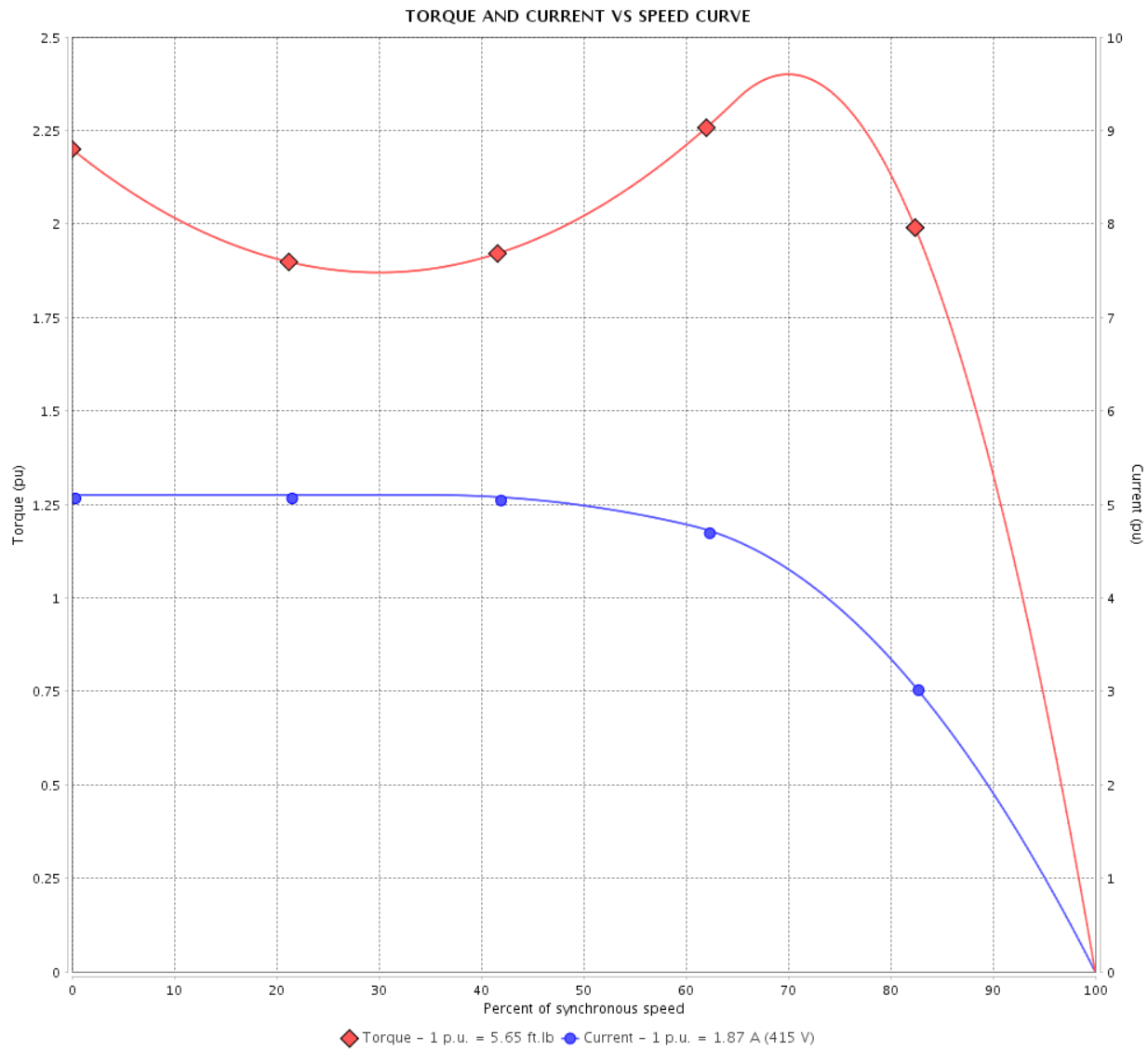


Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12866861

Catalog # : 001120T3E145T-SG



Performance : 220/415 V 50 Hz 6P

Rated current	: 3.53/1.87 A	Moment of inertia (J)	: 0.1419 sq.ft.lb
LRC	: 5.1	Duty cycle	: Cont.(S1)
Rated torque	: 5.65 ft.lb	Insulation class	: F
Locked rotor torque	: 220 %	Service factor	: 1.00
Breakdown torque	: 240 %	Temperature rise	: 105 K
Rated speed	: 930 rpm	Design	: B

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

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LOAD PERFORMANCE CURVE

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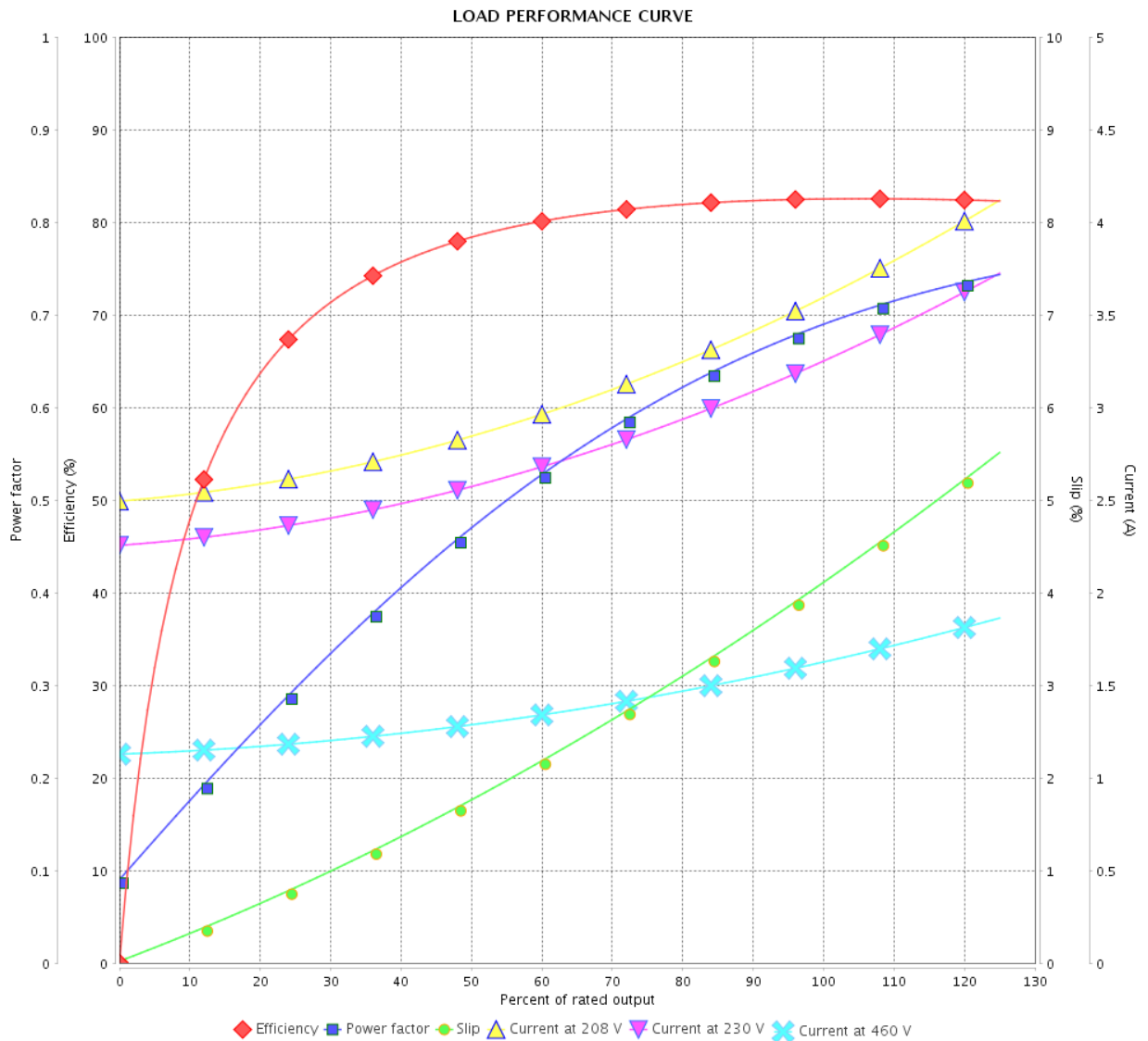


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Performance : 230/460 V 60 Hz 6P

Rated current : 3.30/1.65 A
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 Locked rotor torque : 250 %
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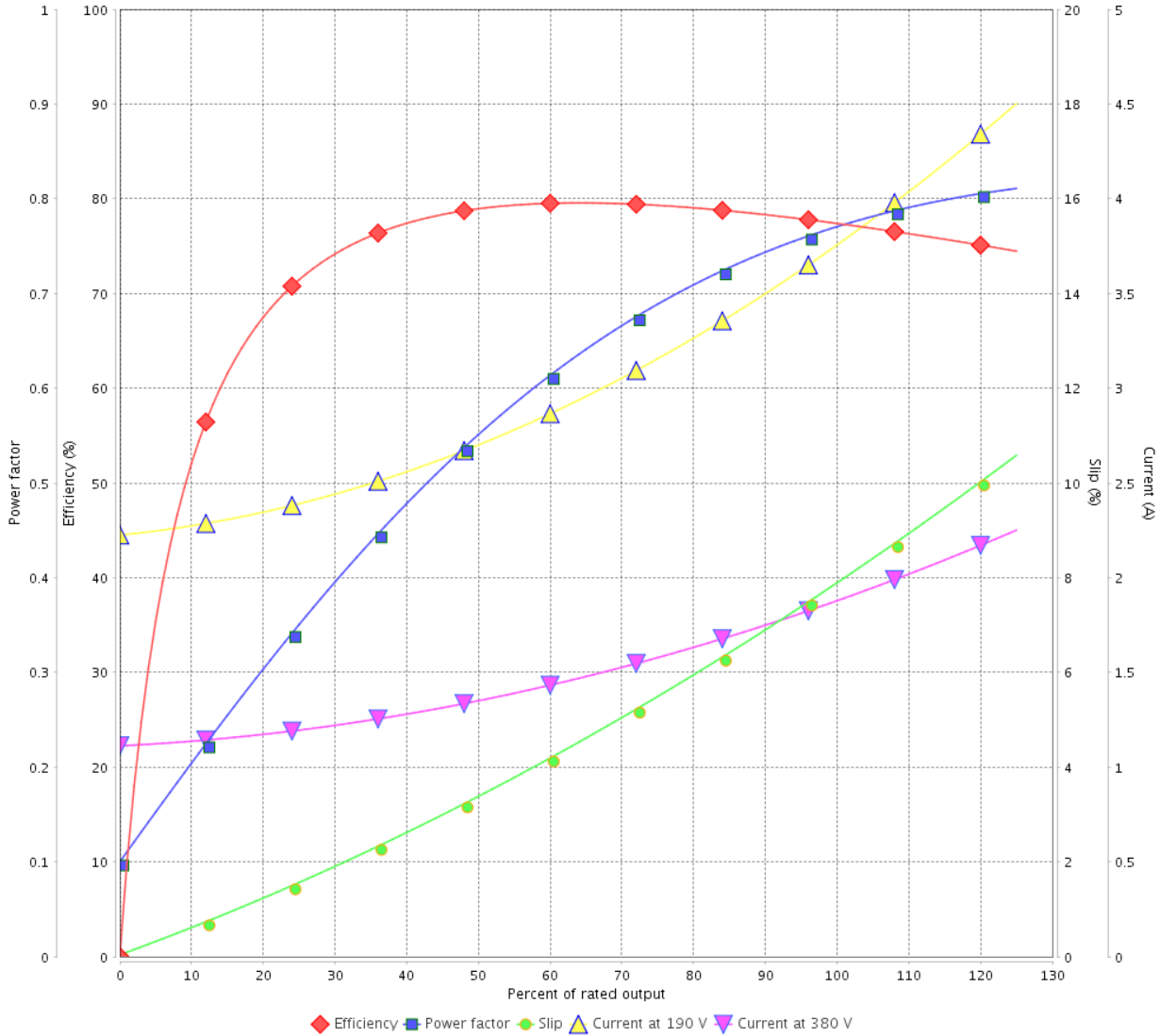
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Performance : 190/380 V 50 Hz 6P

Rated current : 3.82/1.91 A
 LRC : 4.6
 Rated torque : 5.71 ft.lb
 Locked rotor torque : 190 %
 Breakdown torque : 210 %
 Rated speed : 920 rpm

Moment of inertia (J) : 0.1419 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 105 K
 Design : B

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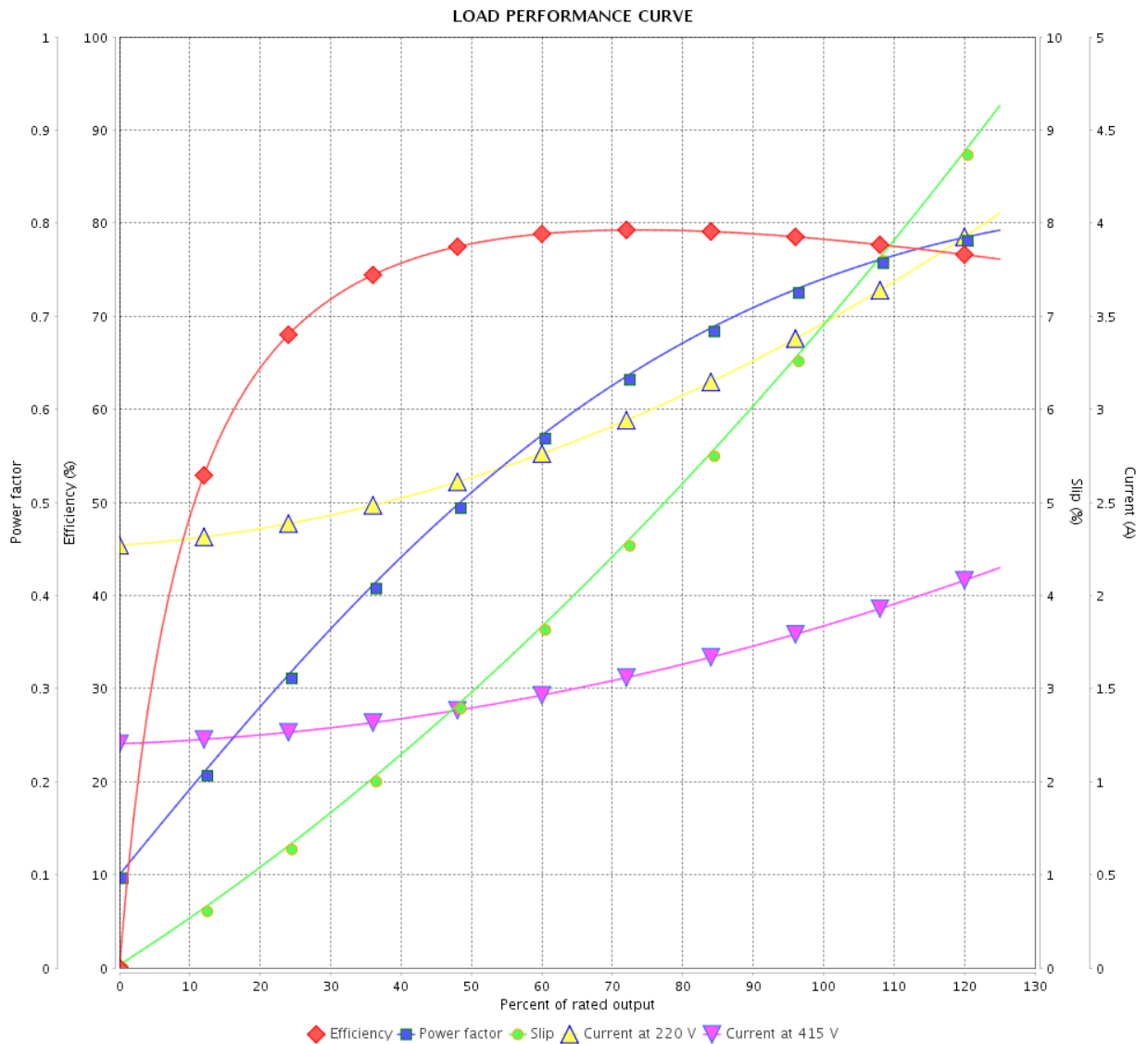


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THERMAL LIMIT CURVE



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LRC	: 6.1	Duty cycle	: Cont.(S1)
Rated torque	: 4.57 ft.lb	Insulation class	: F
Locked rotor torque	: 250 %	Service factor	:
Breakdown torque	: 300 %	Temperature rise	: 80 K
Rated speed	: 1150 rpm	Design	: B

Heating constant

Cooling constant

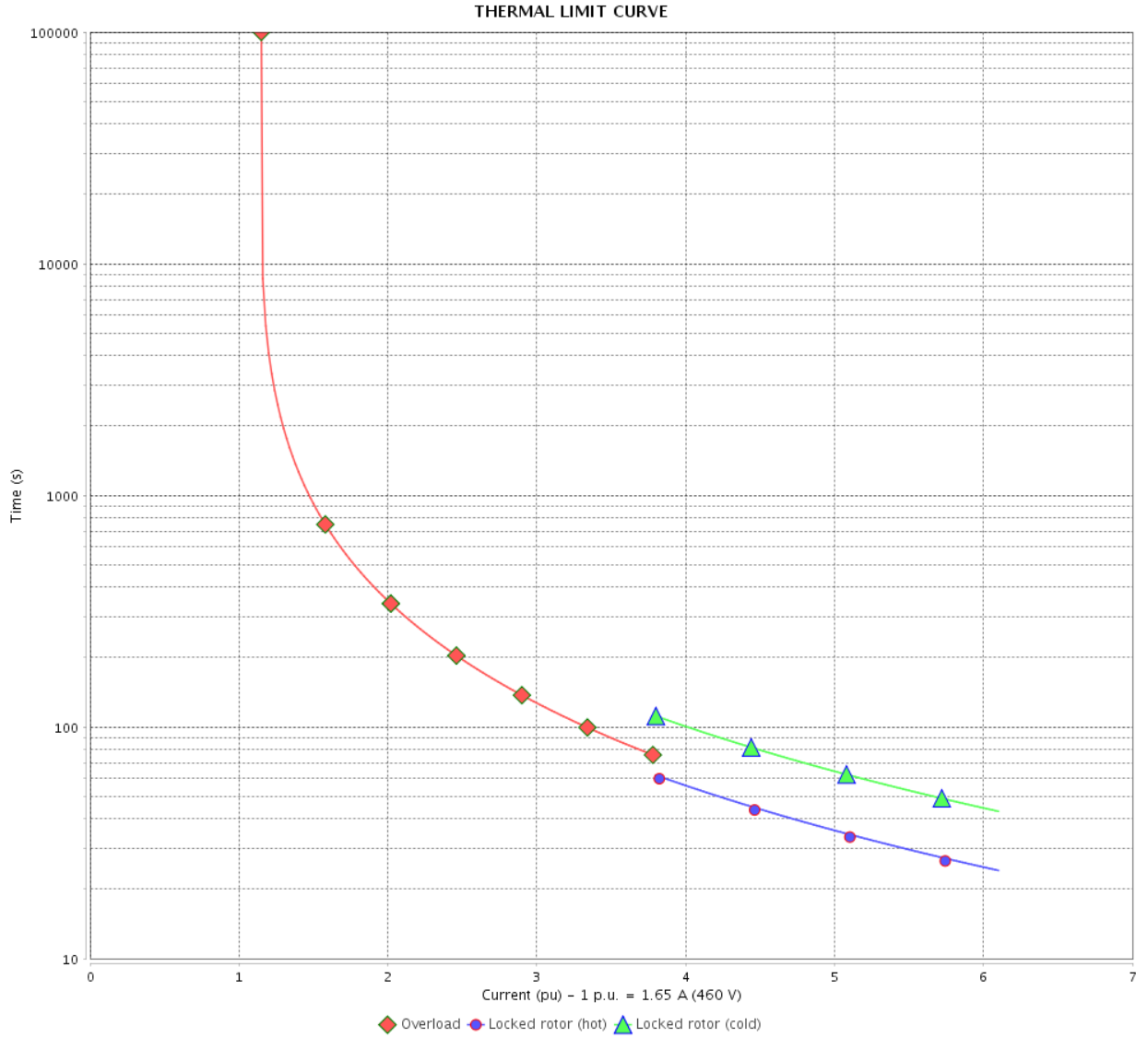
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Three Phase Induction Motor - Squirrel Cage



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LRC	: 4.6	Duty cycle	: Cont.(S1)
Rated torque	: 5.71 ft.lb	Insulation class	: F
Locked rotor torque	: 190 %	Service factor	: 1.00
Breakdown torque	: 210 %	Temperature rise	: 105 K
Rated speed	: 920 rpm	Design	: B

Heating constant

Cooling constant

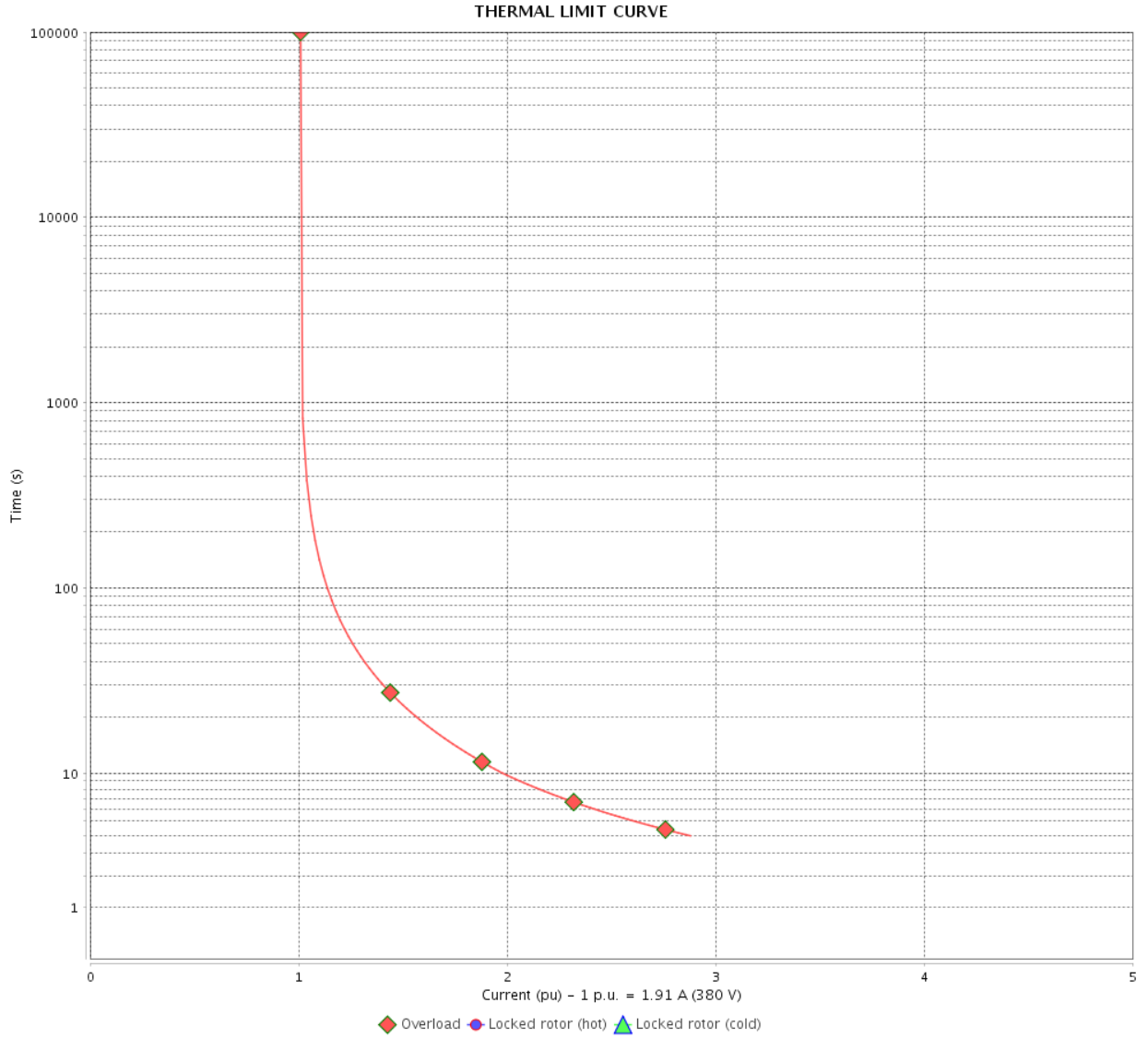
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Rated torque : 5.65 ft.lb	Insulation class : F
Locked rotor torque : 220 %	Service factor : 1.00
Breakdown torque : 240 %	Temperature rise : 105 K
Rated speed : 930 rpm	Design : B

Heating constant

Cooling constant

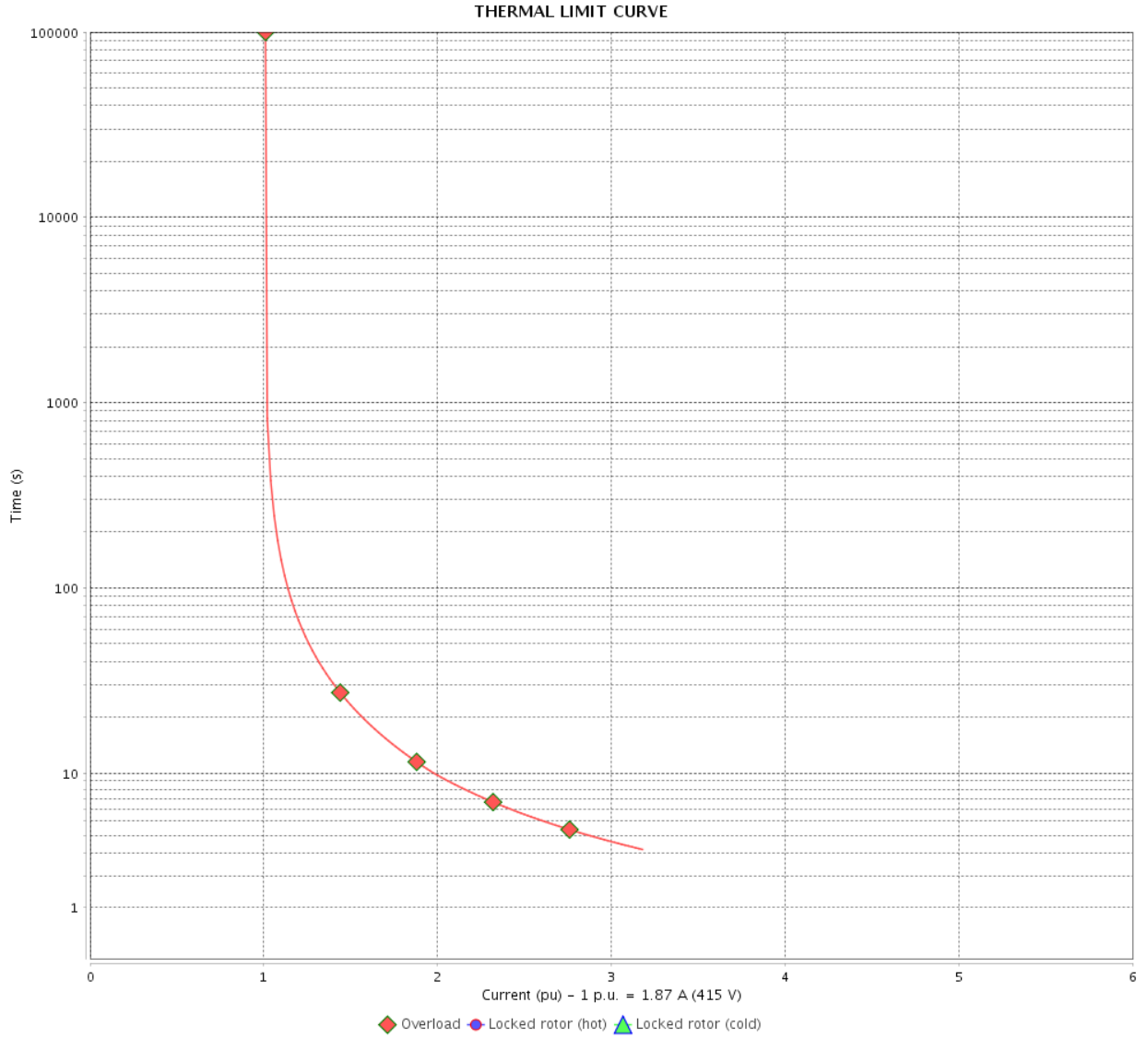
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VFD OPERATION CURVE

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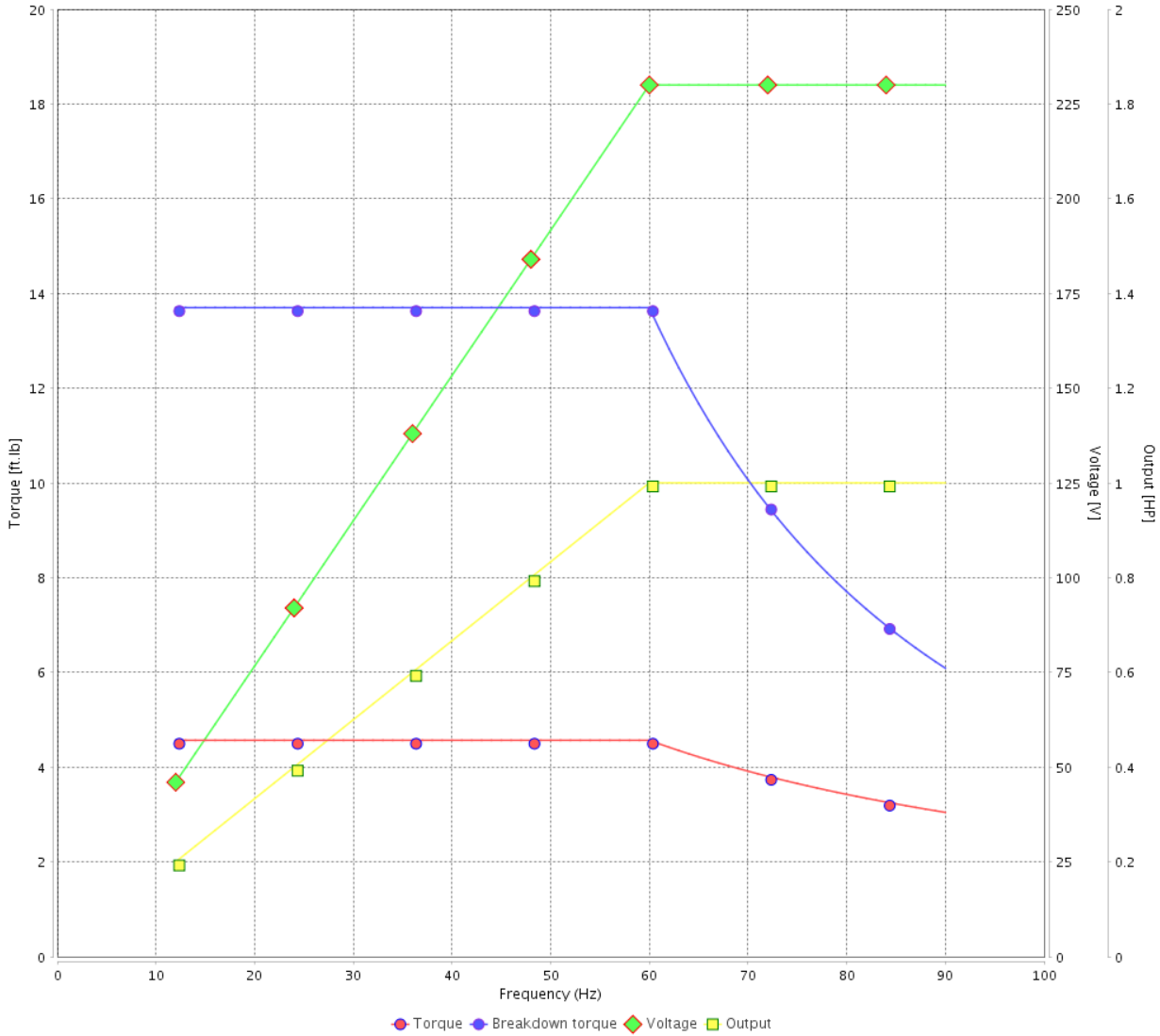
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 Duty cycle : Cont.(S1)
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 Service factor :
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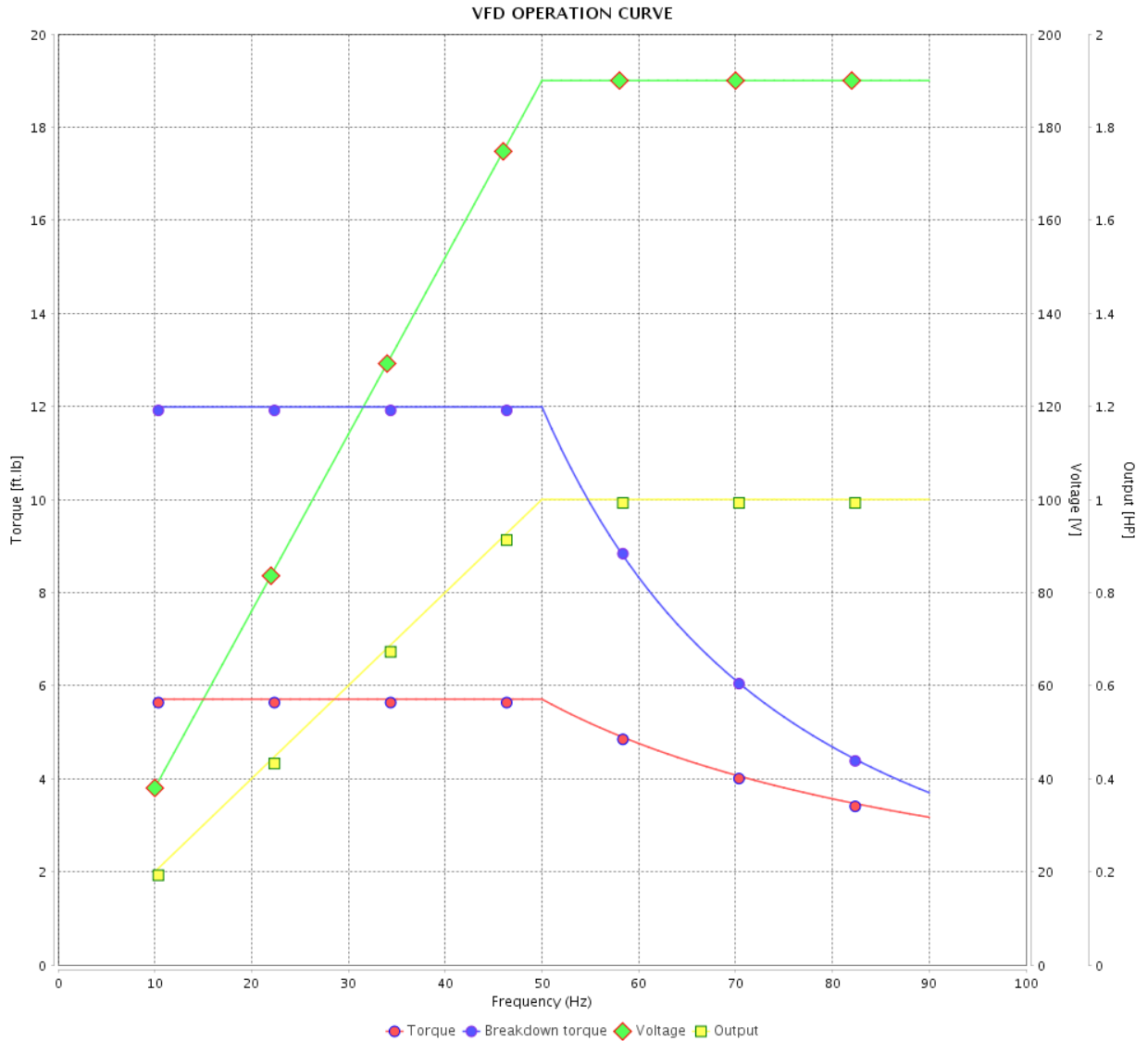


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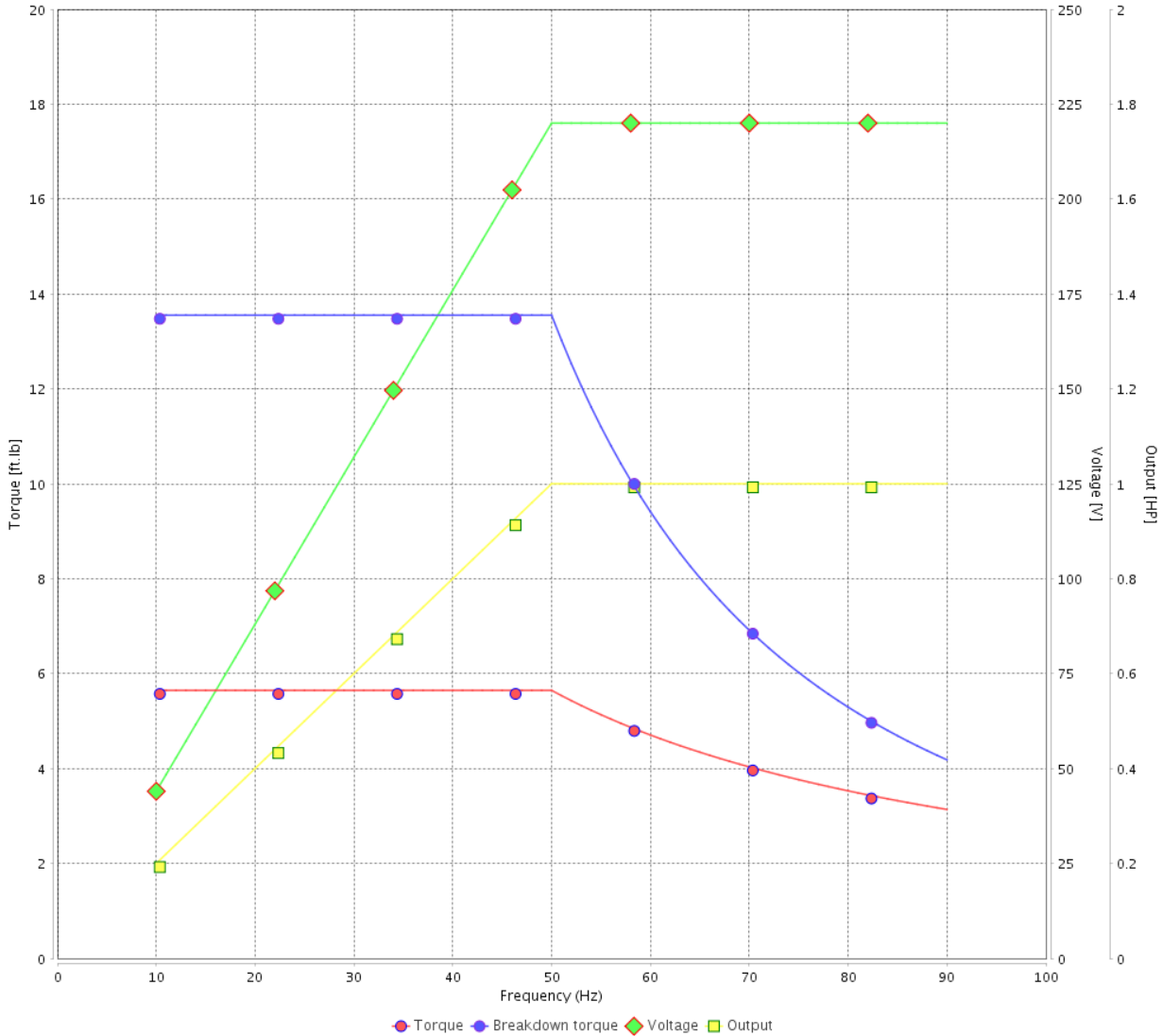
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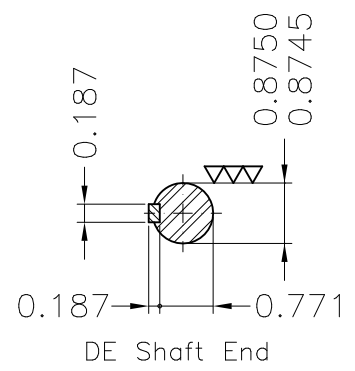
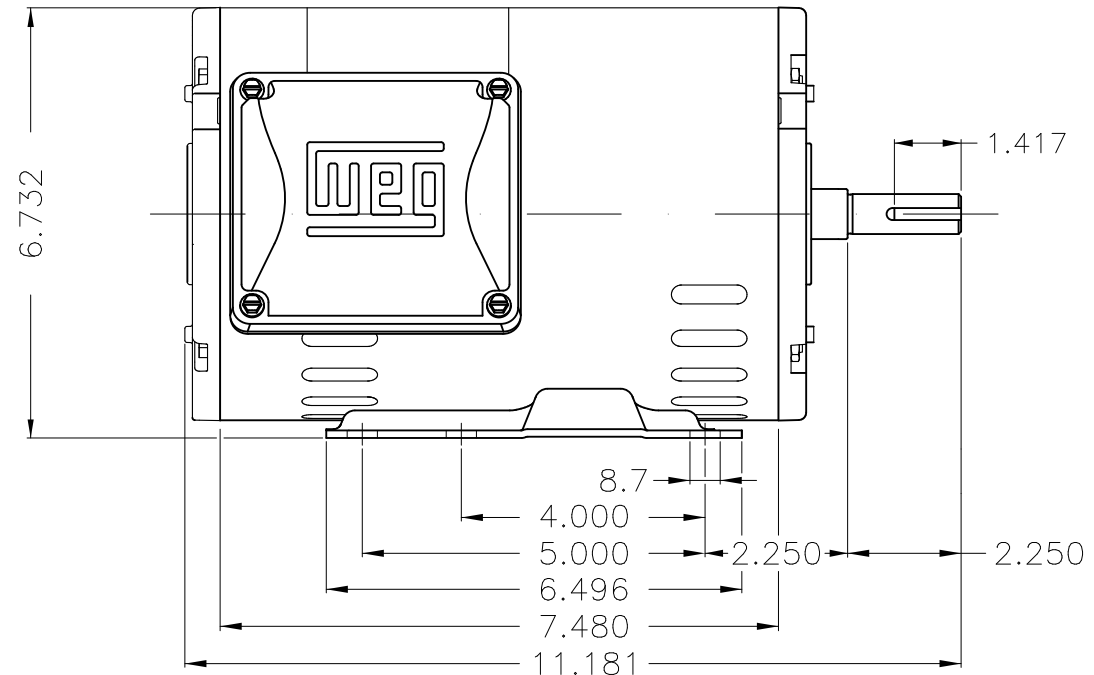
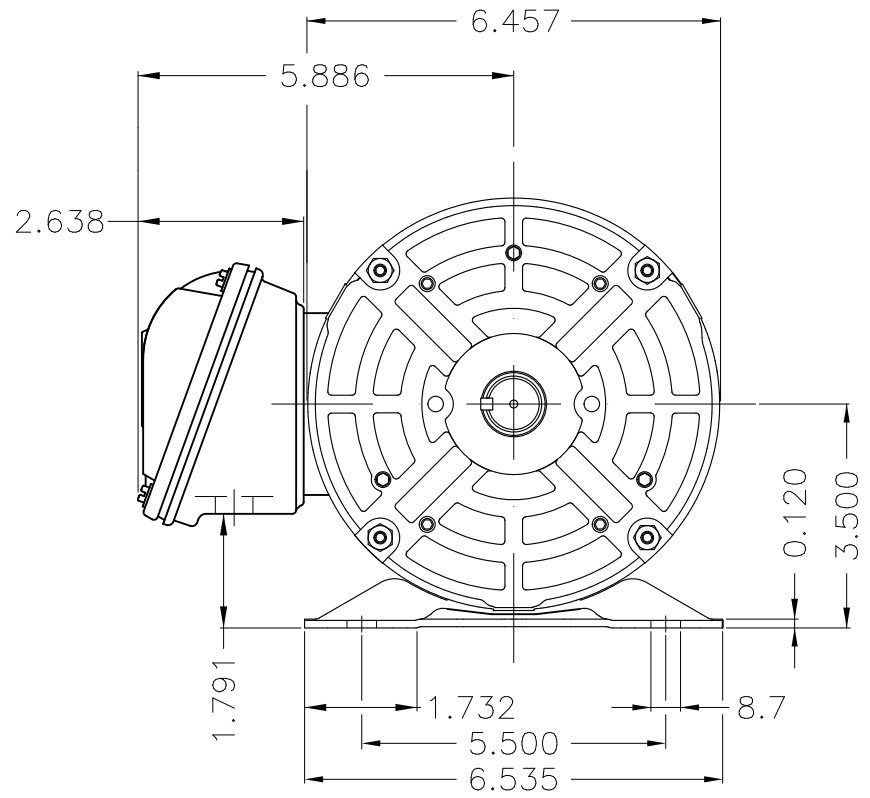
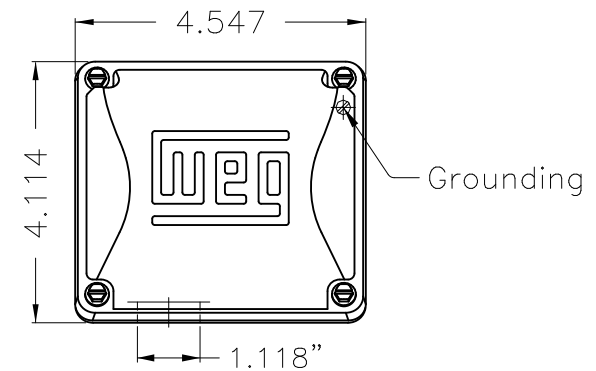
A

B

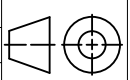

C

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 143/5T IP21 ODP					
CHECKED							
RELEASED							
REL DT.	WMO	Jaragua do Sul	Product Engineering	SHEET 1 / 1		PREVIEW WDD 	

1 HP 06 Poles 60 Hz

A