

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :					
Product line	: NEMA Premium Efficiency Three-Phase	Product code :	12598384		
		Catalog # :	00118ET3E143JP-W22		
Frame	: 143/5JP	Cooling method	: IC411 - TEFC		
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	: 51.0 lb		
Protection degree	: IP55	Moment of inertia (J)	: 0.1172 sq.ft.lb		
Design	: B				
Output [HP]	1	1	1	1	
Poles	4	4	4	4	
Frequency [Hz]	60	50	50	50	
Rated voltage [V]	230/460	380	400	415	
Rated current [A]	2.94/1.47	1.71	1.65	1.63	
L. R. Amperes [A]	25.3/12.6	10.9	11.5	12.1	
LRC [A]	8.6x(Code M)	6.4x(Code J)	7.0x(Code K)	7.4x(Code K)	
No load current [A]	1.88/0.940	0.930	1.00	1.08	
Rated speed [RPM]	1760	1450	1455	1455	
Slip [%]	2.22	3.33	3.00	3.00	
Rated torque [ft.lb]	2.98	3.62	3.61	3.61	
Locked rotor torque [%]	290	220	240	260	
Breakdown torque [%]	350	250	290	310	
Service factor	1.25	1.25	1.25	1.25	
Temperature rise	80 K	80 K	80 K	80 K	
Locked rotor time	32s (cold) 18s (hot)	32s (cold) 18s (hot)	32s (cold) 18s (hot)	32s (cold) 18s (hot)	
Noise level ²	51.0 dB(A)	49.0 dB(A)	49.0 dB(A)	49.0 dB(A)	
Efficiency (%)	25%	78.4	79.6	78.4	78.4
	50%	80.0	80.0	80.0	80.0
	75%	84.0	82.5	82.5	82.5
	100%	85.5	82.5	84.0	84.0
Power Factor	25%	0.31	0.36	0.33	0.31
	50%	0.55	0.62	0.58	0.55
	75%	0.68	0.74	0.71	0.69
	100%	0.75	0.81	0.78	0.76
Bearing type	: Drive end : 6206 ZZ Non drive end : 6204 ZZ	Foundation loads			
Sealing	: V'Ring V'Ring	Max. traction	: 72 lb		
Lubrication interval	: - -	Max. compression	: 123 lb		
Lubricant amount	: - -				
Lubricant type	: Mobil Polyrex EM				
Notes					
USABLE @208V 3.07A SF 1.15 SFA 3.54A					
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



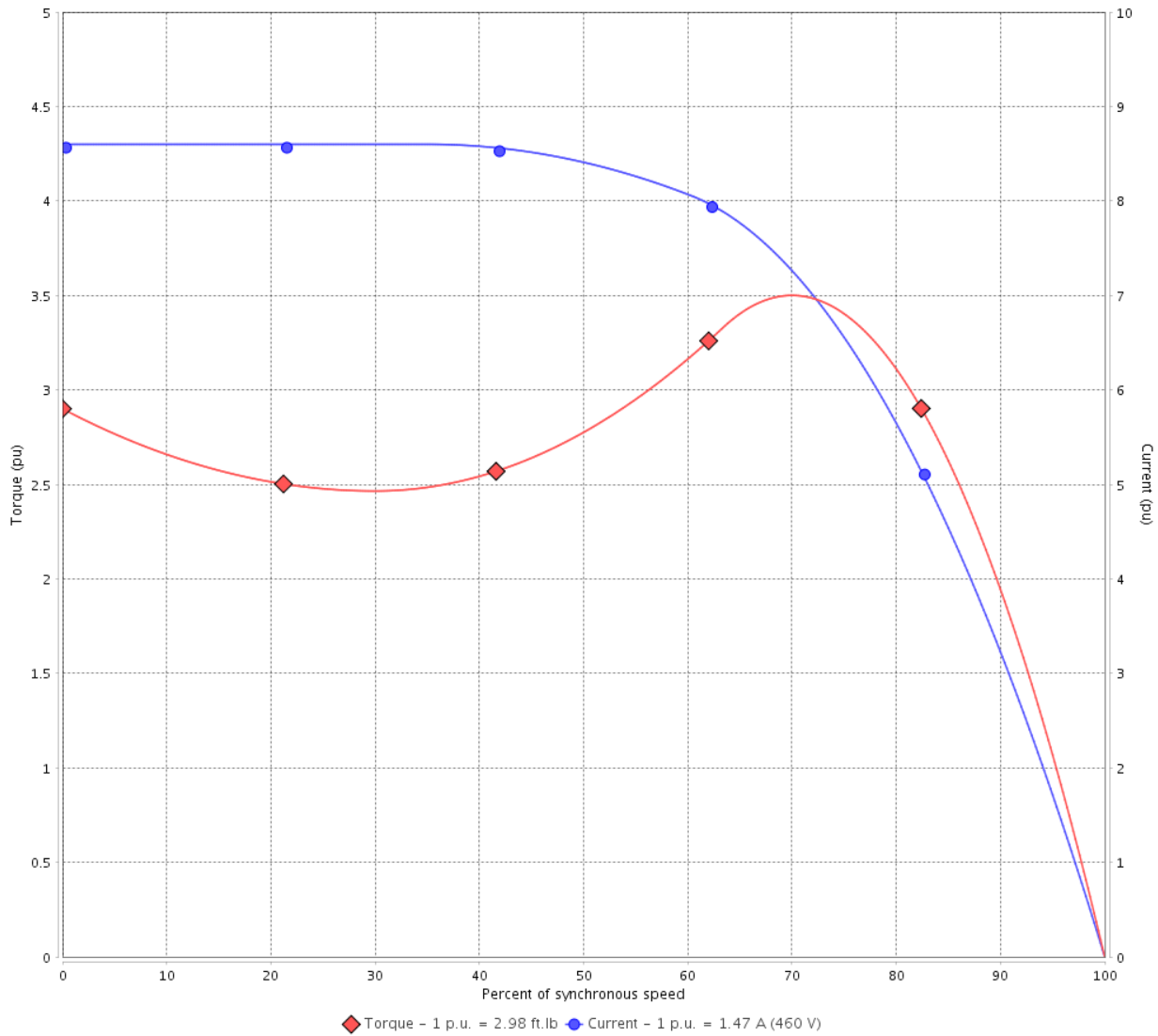
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12598384

Catalog # : 00118ET3E143JP-W22

TORQUE AND CURRENT VS SPEED CURVE



Performance : 230/460 V 60 Hz 4P

Rated current	: 2.94/1.47 A	Moment of inertia (J)	: 0.1172 sq.ft.lb
LRC	: 8.6	Duty cycle	: Cont.(S1)
Rated torque	: 2.98 ft.lb	Insulation class	: F
Locked rotor torque	: 290 %	Service factor	: 1.25
Breakdown torque	: 350 %	Temperature rise	: 80 K
Rated speed	: 1760 rpm	Design	: B

Locked rotor time : 32s (cold) 18s (hot)

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TORQUE AND CURRENT VS SPEED CURVE



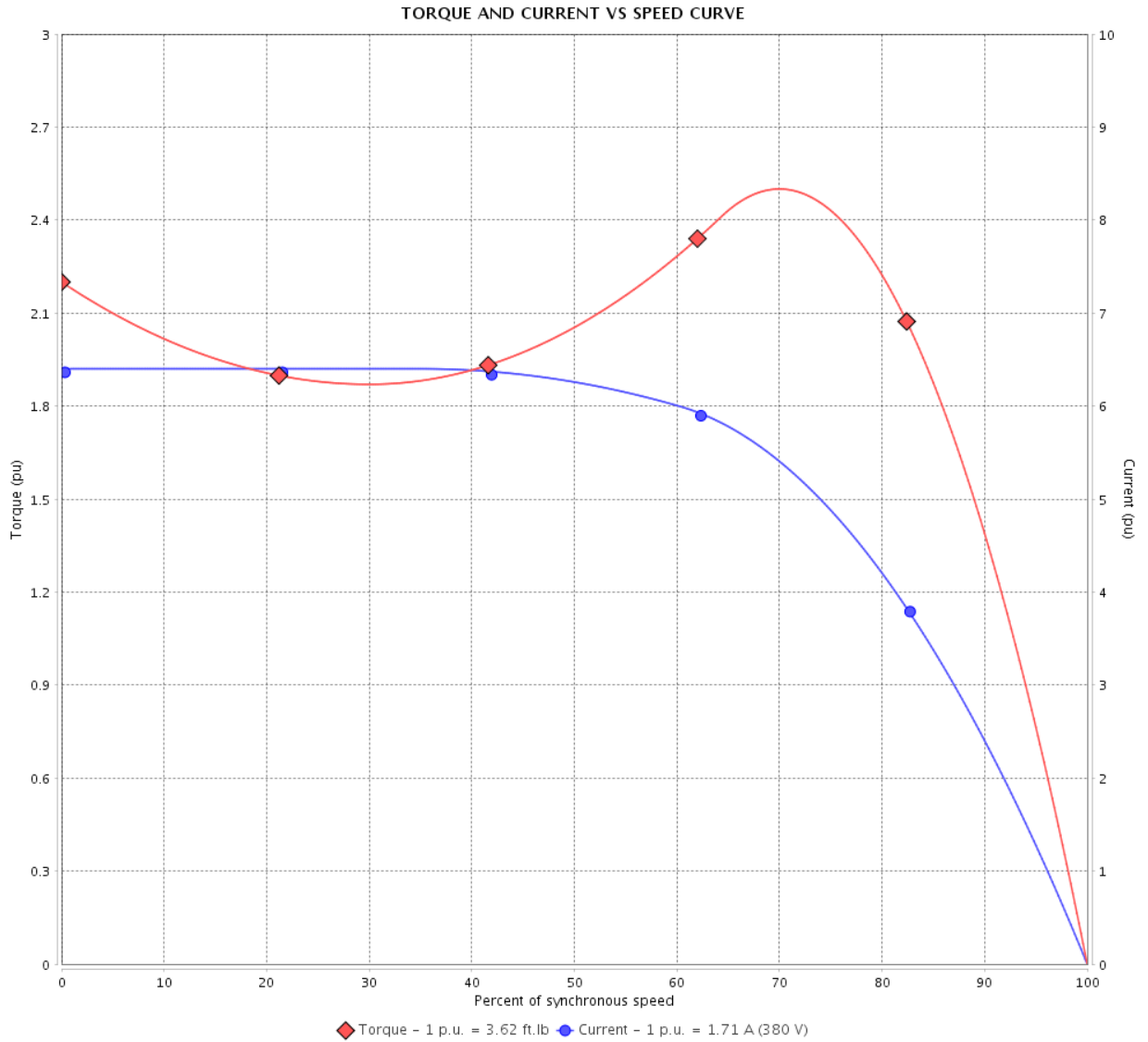
Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12598384

Catalog # : 00118ET3E143JP-W22



Performance : 380 V 50 Hz 4P IE3

Rated current : 1.71 A
 LRC : 6.4
 Rated torque : 3.62 ft.lb
 Locked rotor torque : 220 %
 Breakdown torque : 250 %
 Rated speed : 1450 rpm

Moment of inertia (J) : 0.1172 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.25
 Temperature rise : 80 K
 Design : B

Locked rotor time : 32s (cold) 18s (hot)

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TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



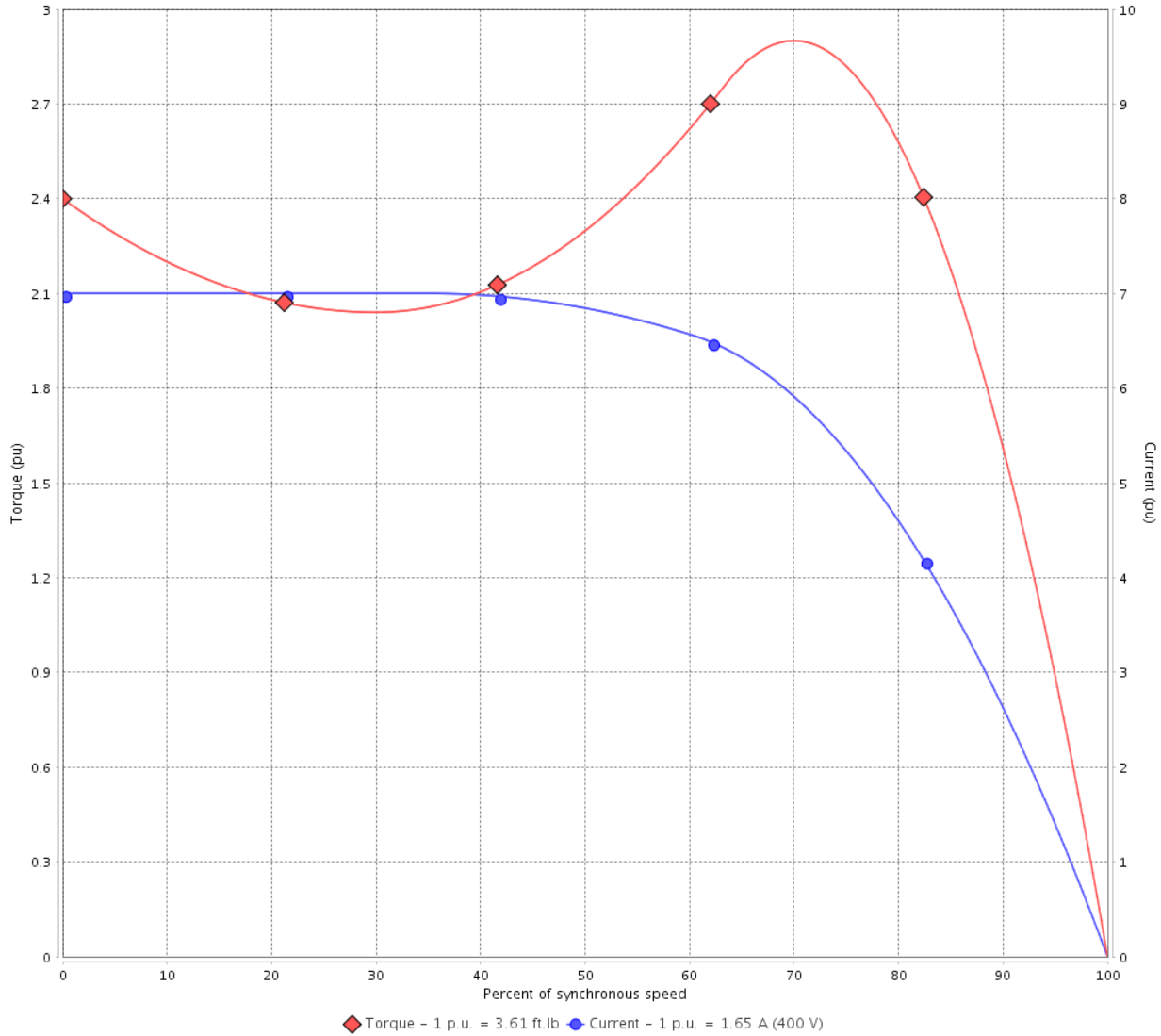
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12598384

Catalog # : 00118ET3E143JP-W22

TORQUE AND CURRENT VS SPEED CURVE



Performance : 400 V 50 Hz 4P IE3

Rated current	: 1.65 A	Moment of inertia (J)	: 0.1172 sq.ft.lb
LRC	: 7.0	Duty cycle	: Cont.(S1)
Rated torque	: 3.61 ft.lb	Insulation class	: F
Locked rotor torque	: 240 %	Service factor	: 1.25
Breakdown torque	: 290 %	Temperature rise	: 80 K
Rated speed	: 1455 rpm	Design	: B

Locked rotor time : 32s (cold) 18s (hot)

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TORQUE AND CURRENT VS SPEED CURVE



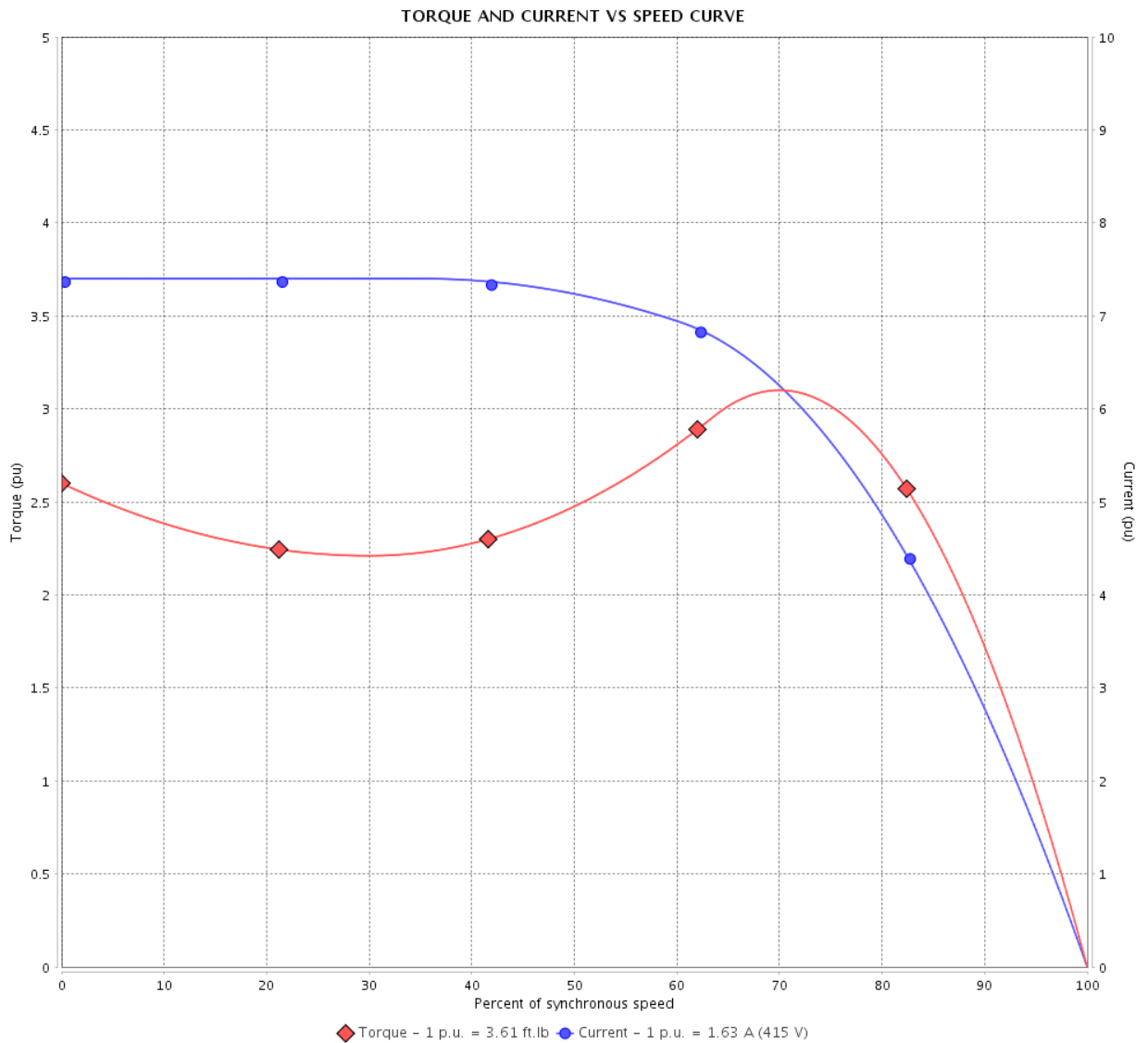
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Rated torque	: 3.61 ft.lb	Insulation class	: F
Locked rotor torque	: 260 %	Service factor	: 1.25
Breakdown torque	: 310 %	Temperature rise	: 80 K
Rated speed	: 1455 rpm	Design	: B

Locked rotor time : 32s (cold) 18s (hot)

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LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage



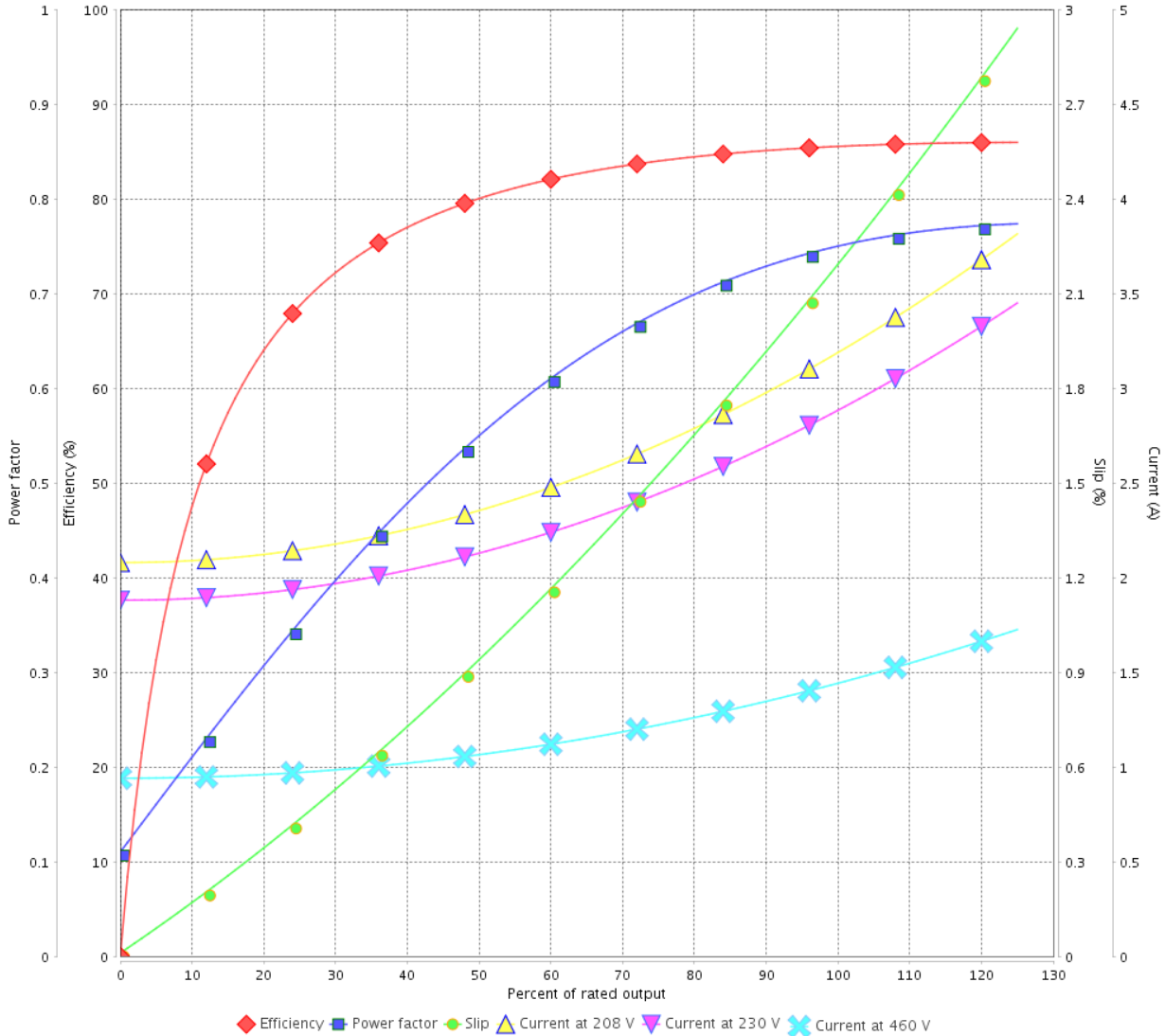
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Performance : 230/460 V 60 Hz 4P

Rated current : 2.94/1.47 A
 LRC : 8.6
 Rated torque : 2.98 ft.lb
 Locked rotor torque : 290 %
 Breakdown torque : 350 %
 Rated speed : 1760 rpm

Moment of inertia (J) : 0.1172 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.25
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Three Phase Induction Motor - Squirrel Cage

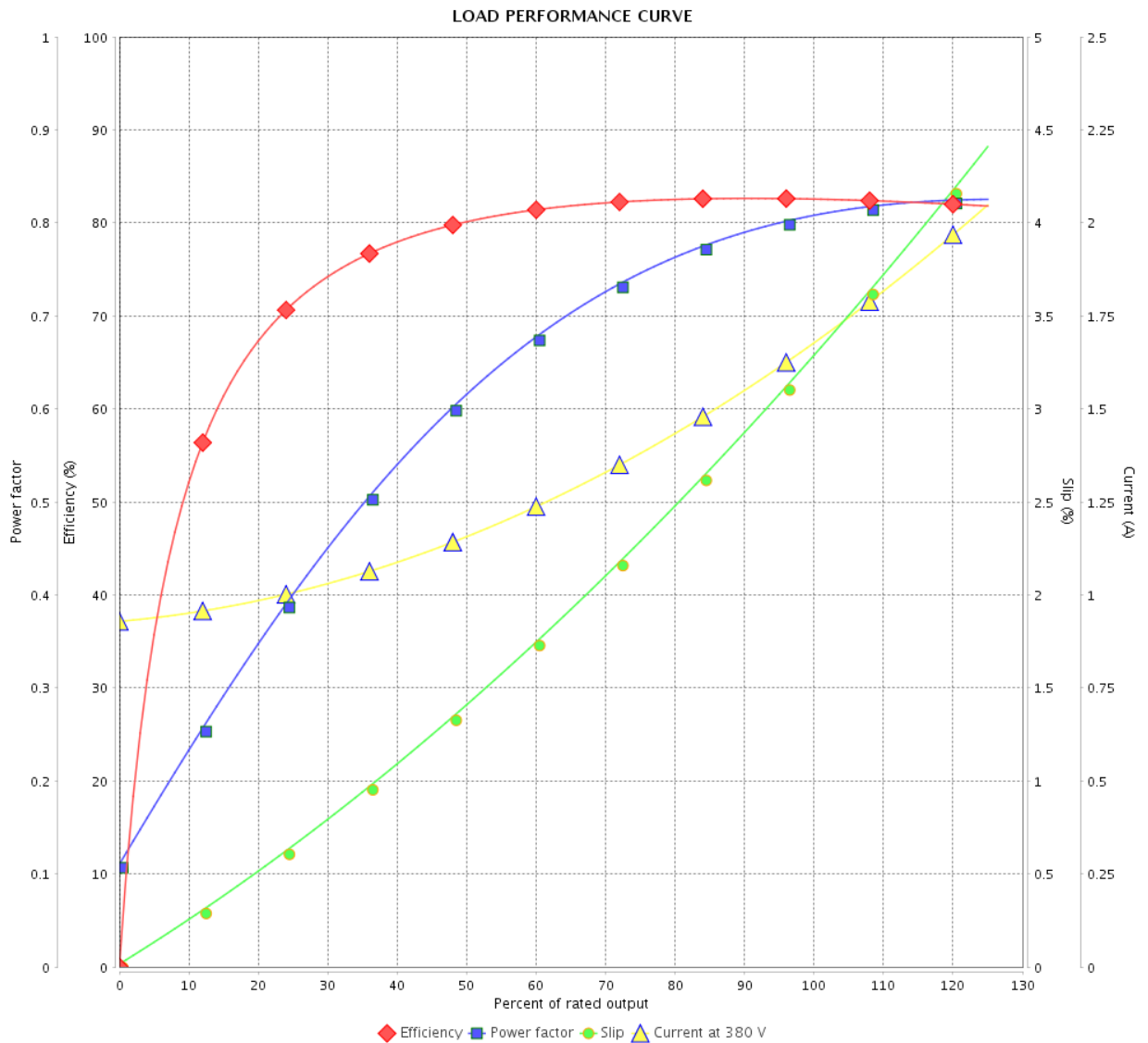


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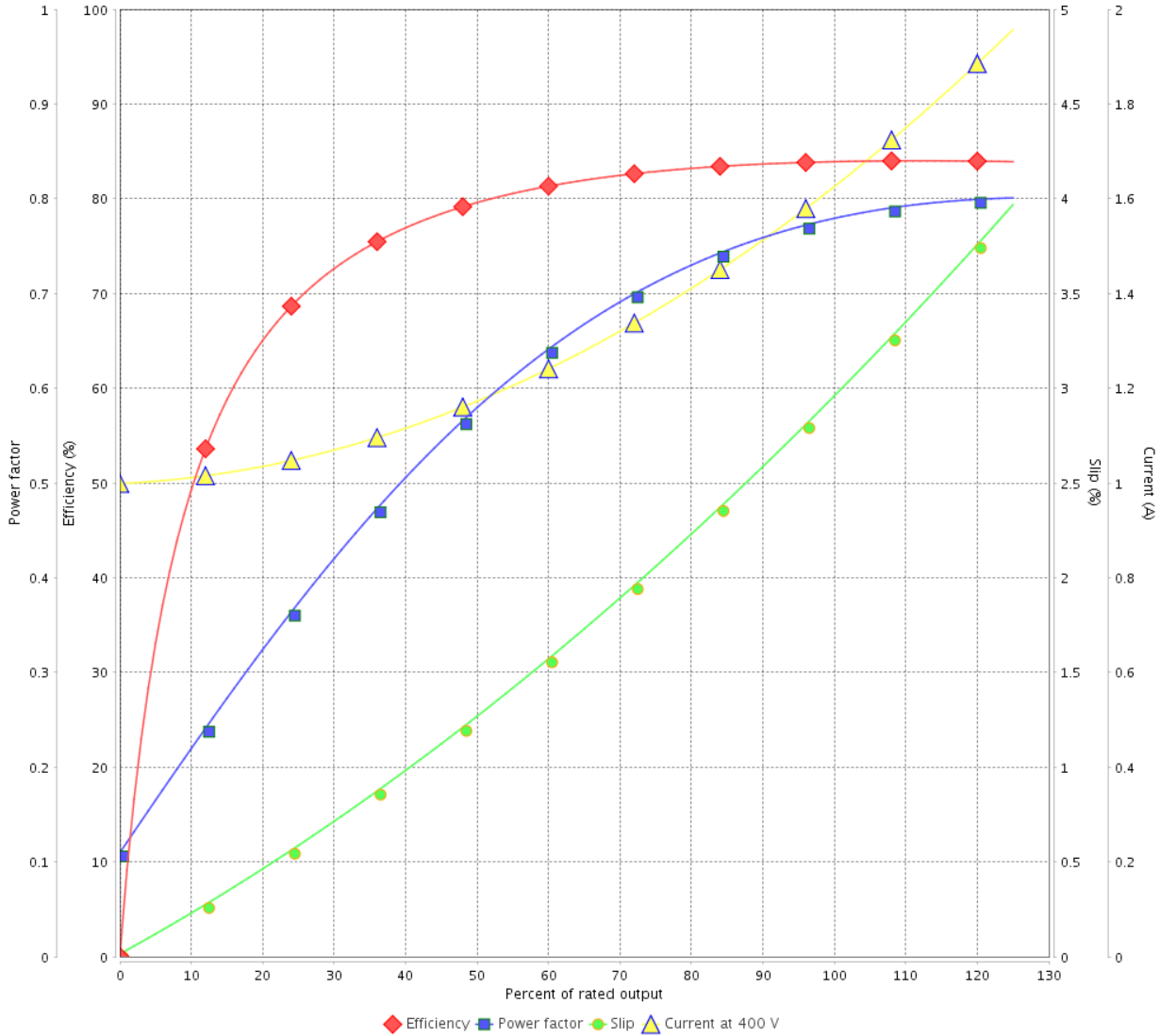
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 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.25
 Temperature rise : 80 K
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Three Phase Induction Motor - Squirrel Cage

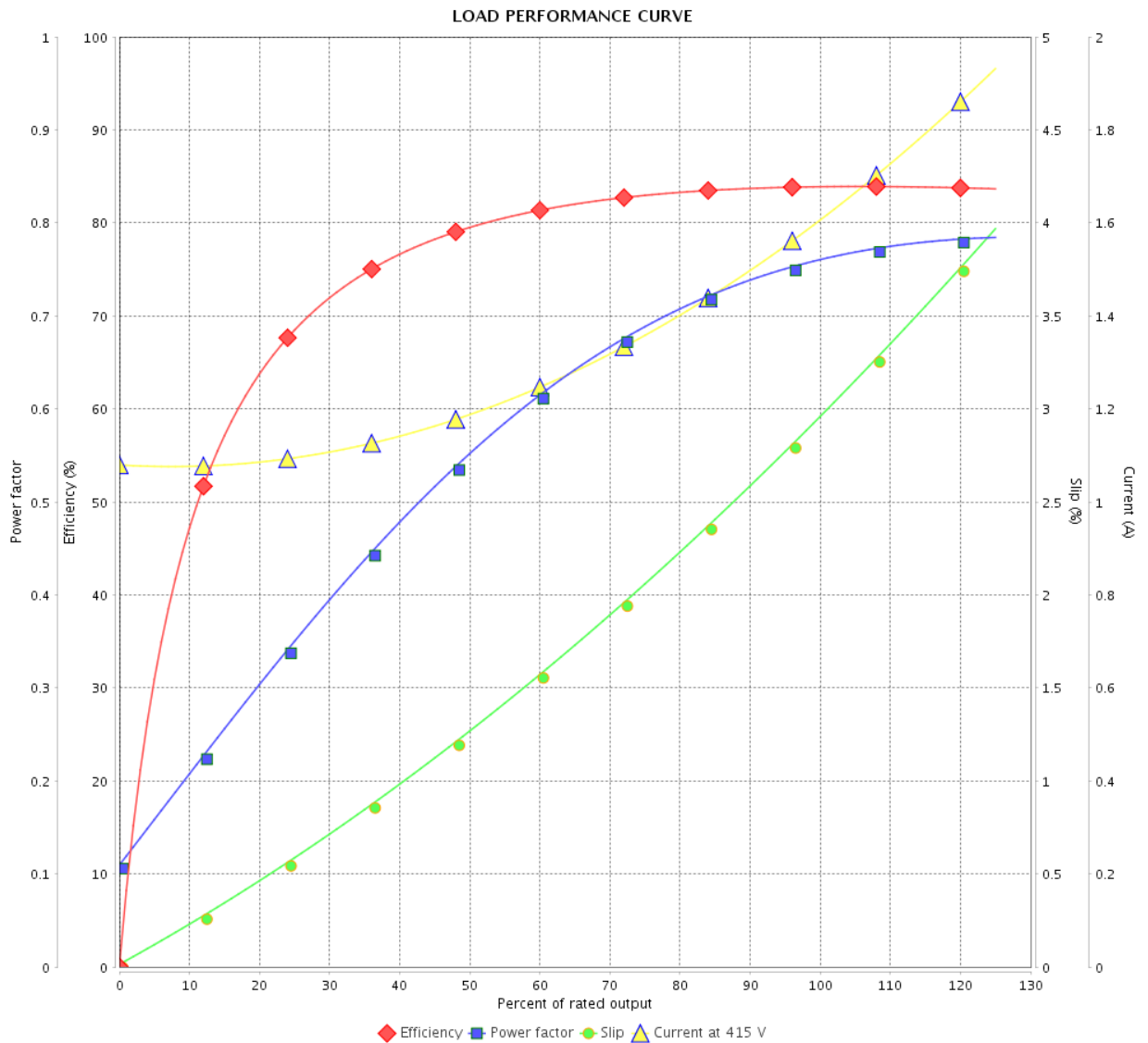


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THERMAL LIMIT CURVE



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Heating constant

Cooling constant

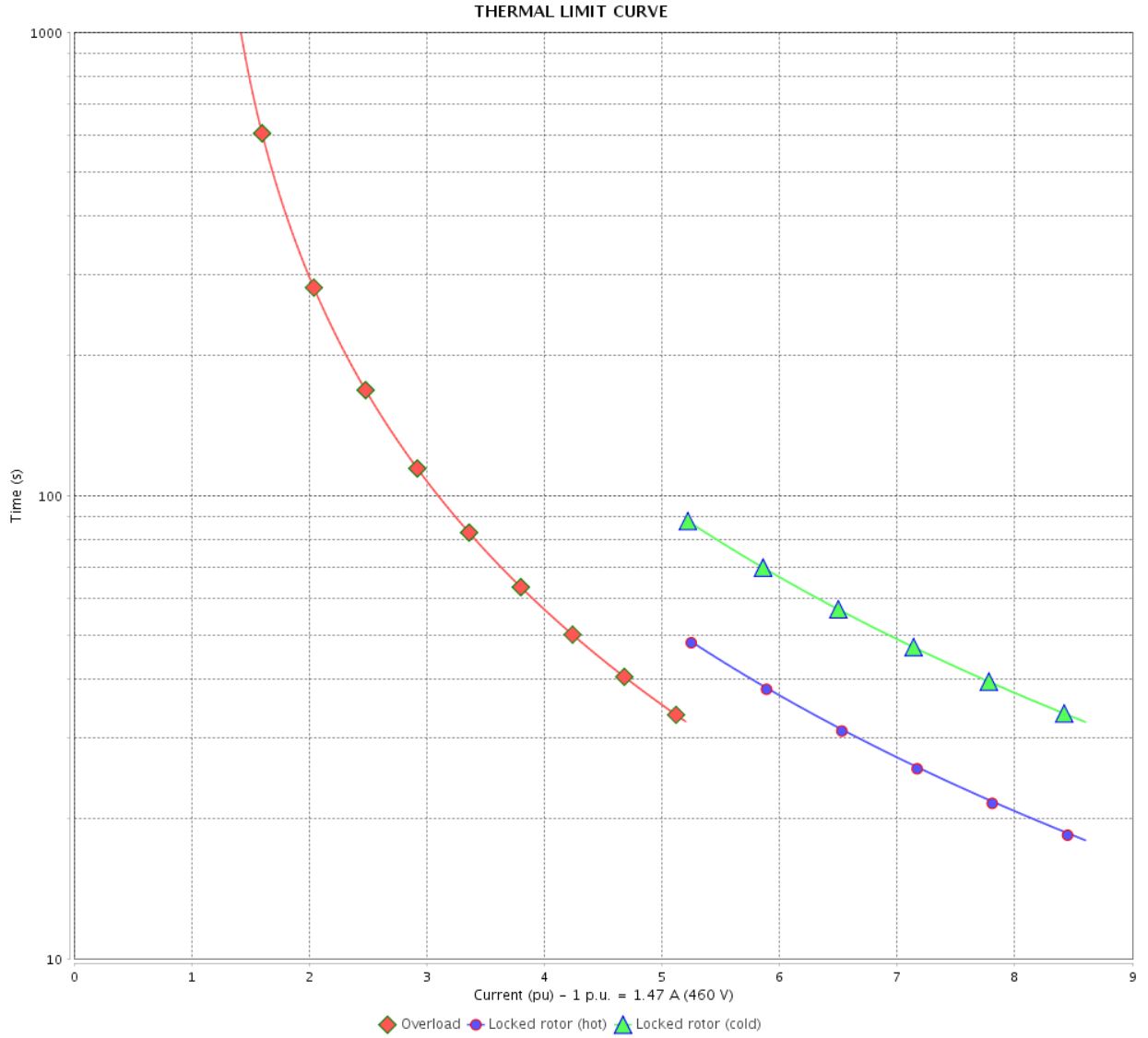
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Cooling constant

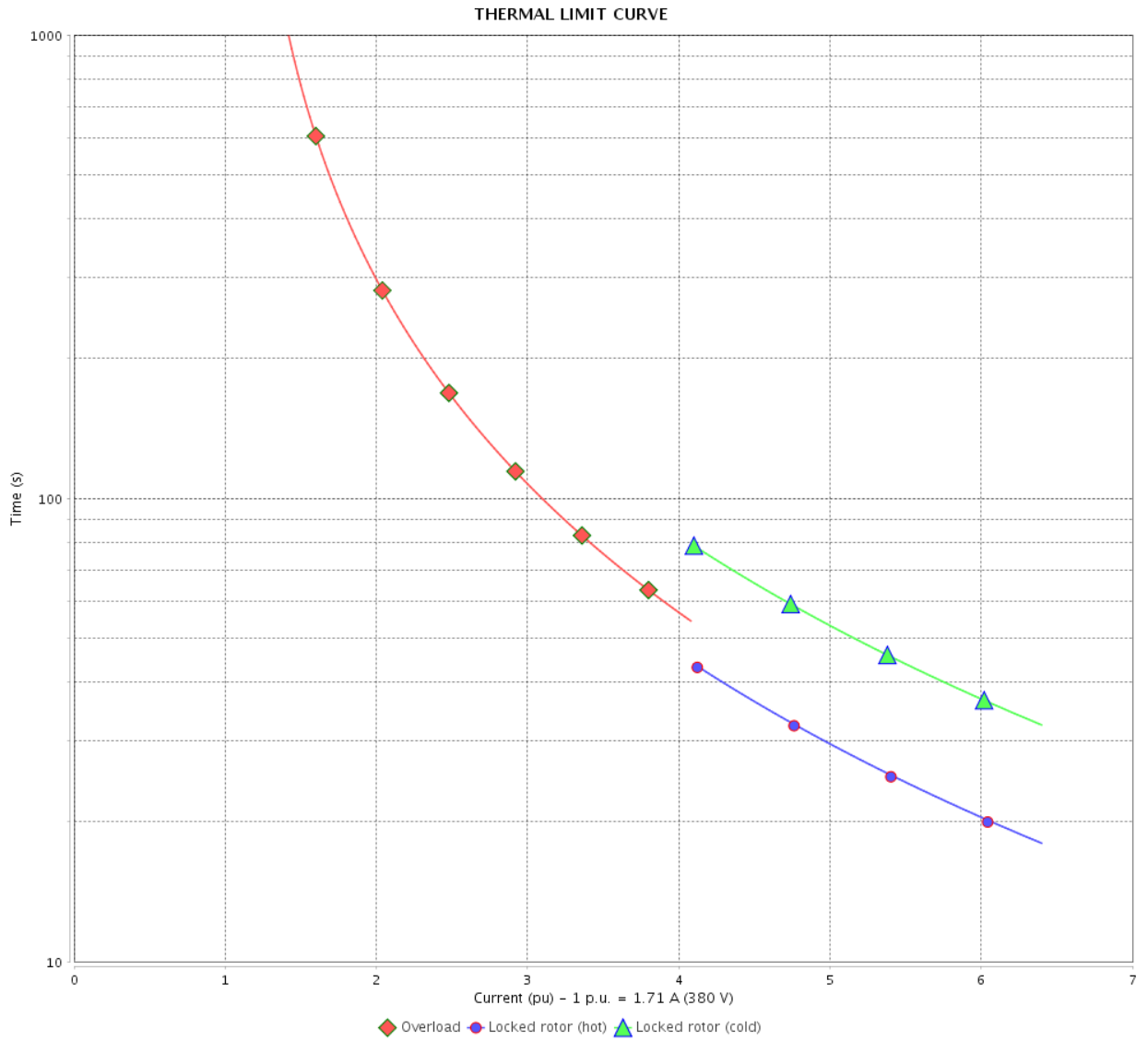
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Rated torque	: 3.61 ft.lb	Insulation class	: F
Locked rotor torque	: 240 %	Service factor	: 1.25
Breakdown torque	: 290 %	Temperature rise	: 80 K
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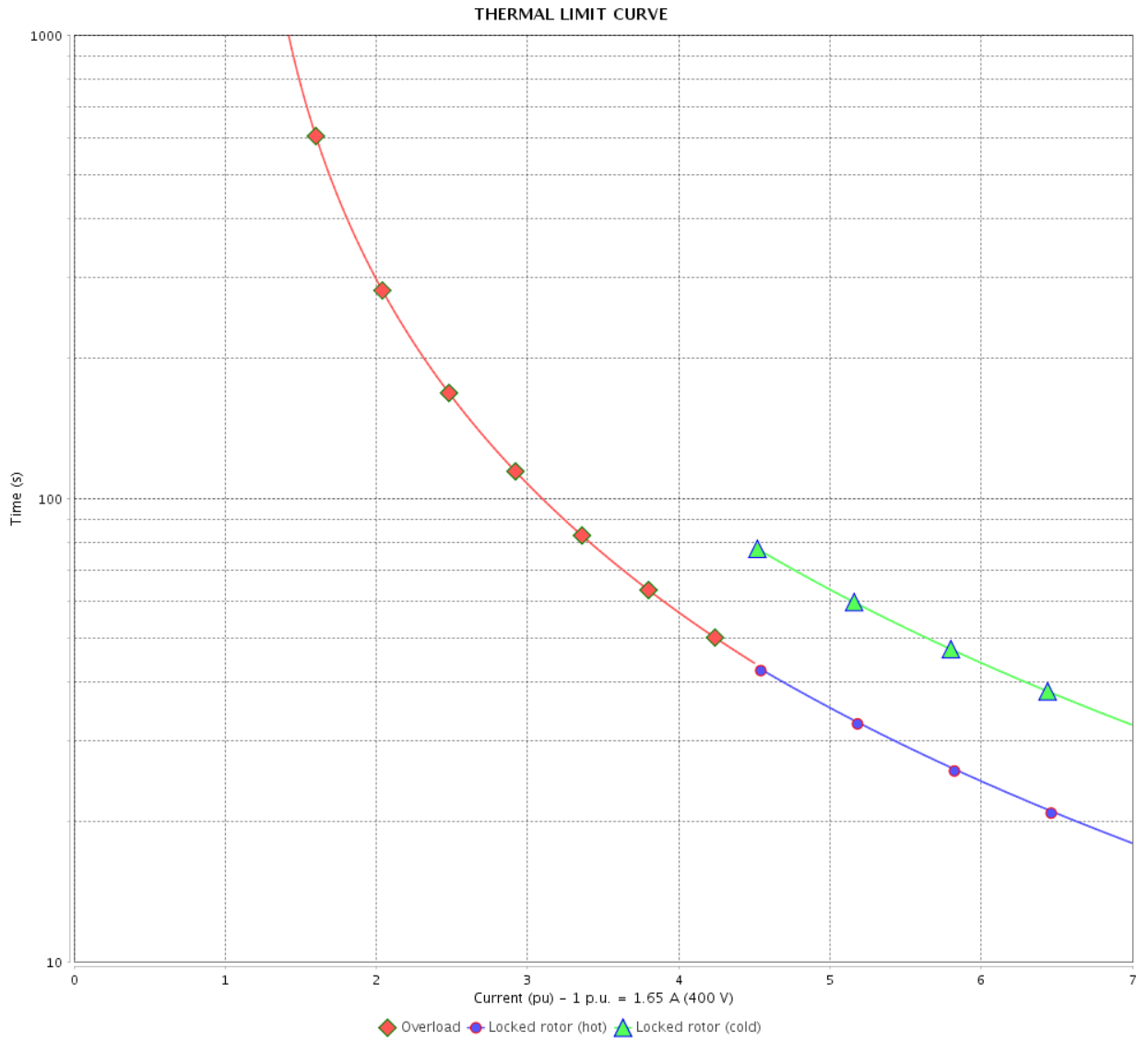
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Three Phase Induction Motor - Squirrel Cage



Customer : _____



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THERMAL LIMIT CURVE



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Cooling constant

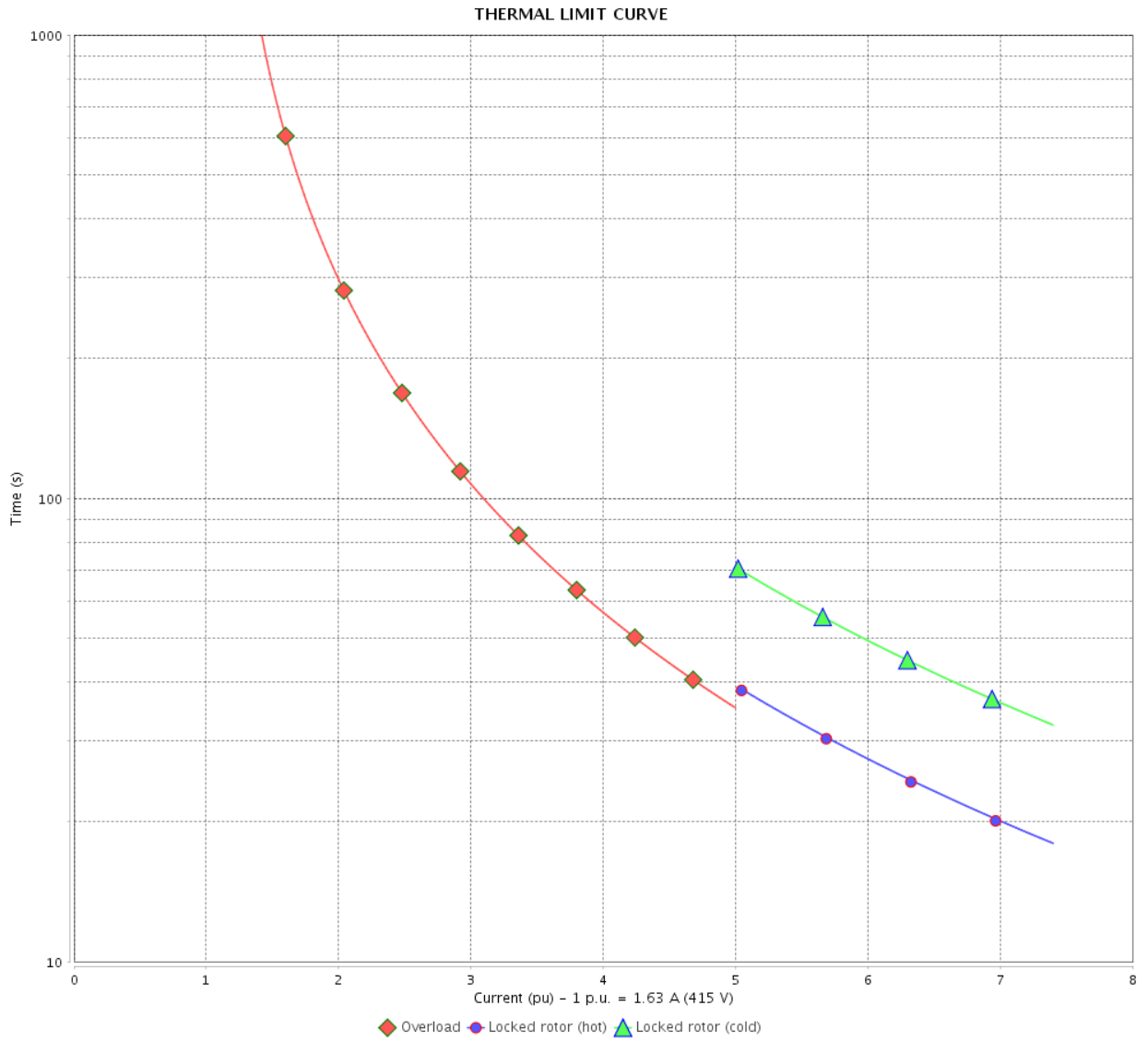
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Three Phase Induction Motor - Squirrel Cage



Customer : _____



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Date				

VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



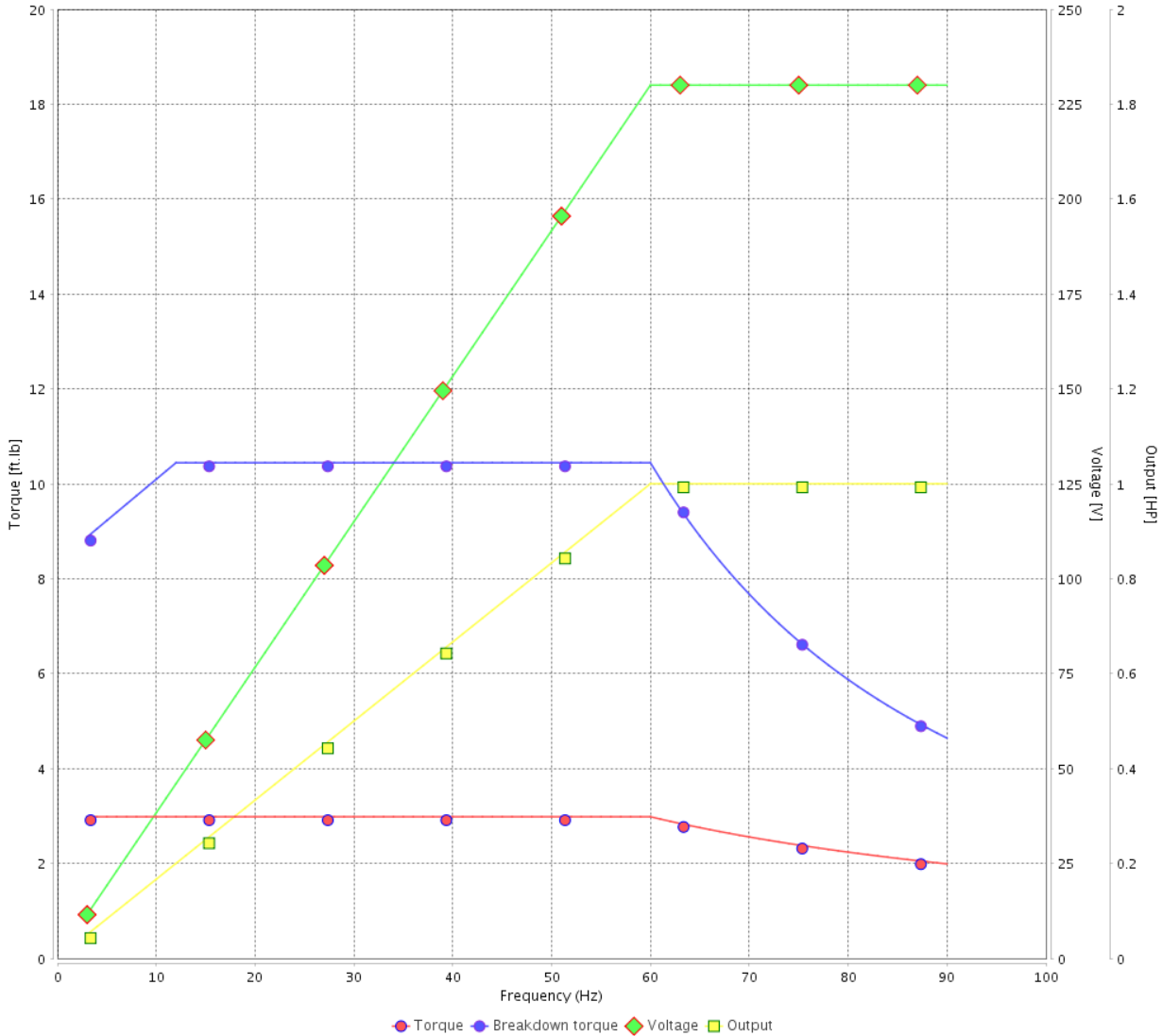
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VFD OPERATION CURVE



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Rated current : 2.94/1.47 A
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Date				

VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

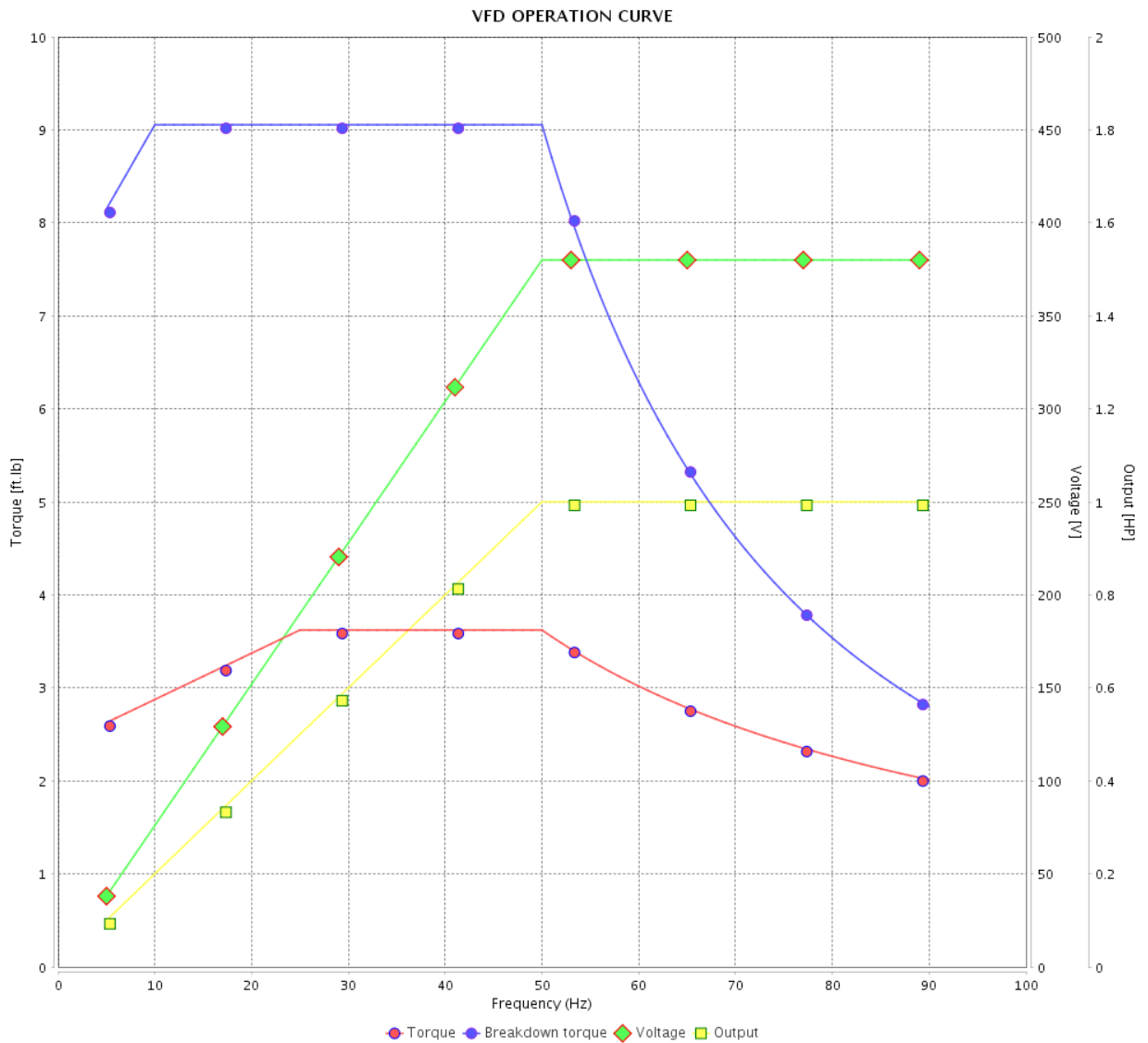


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Three Phase Induction Motor - Squirrel Cage



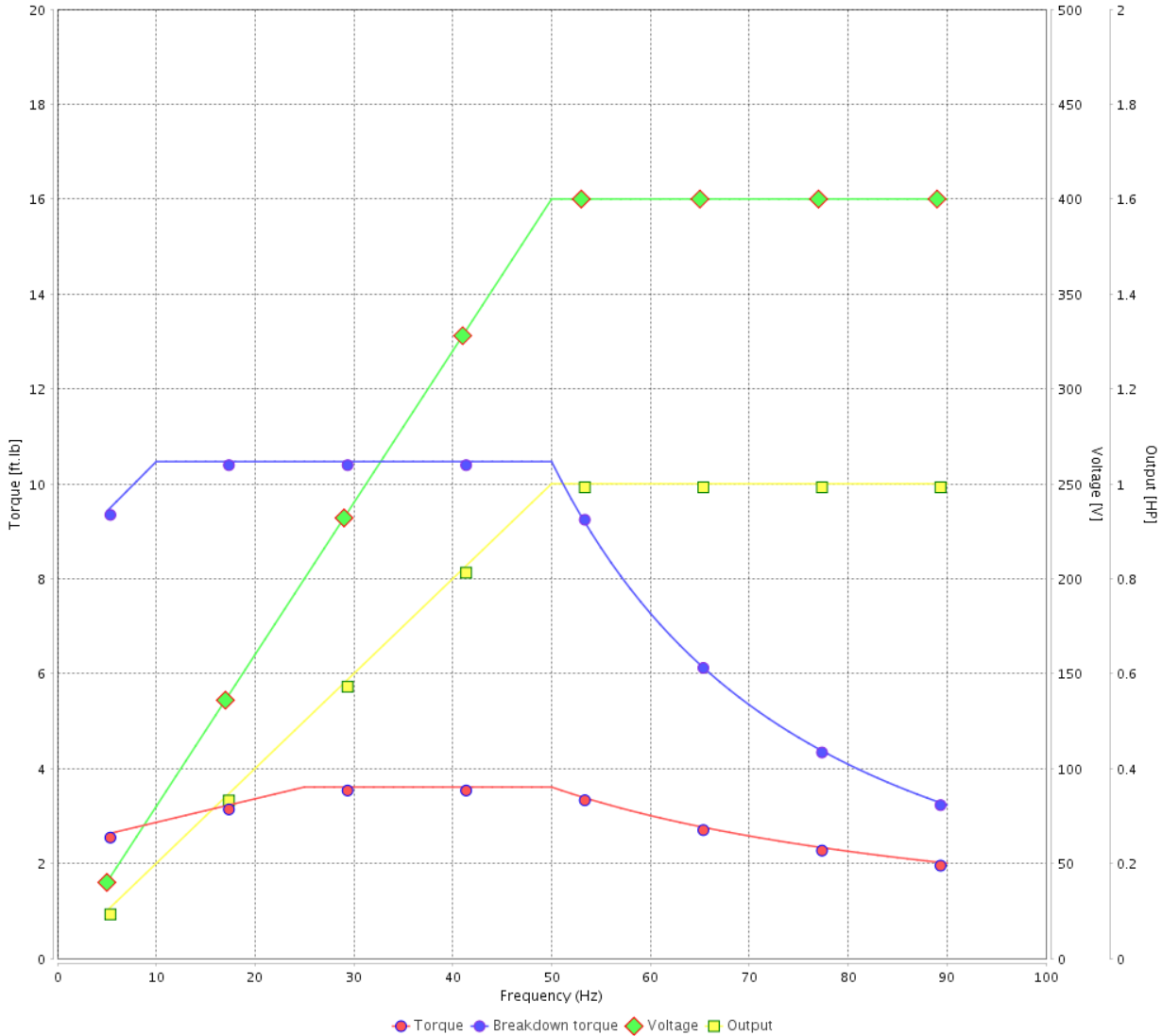
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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

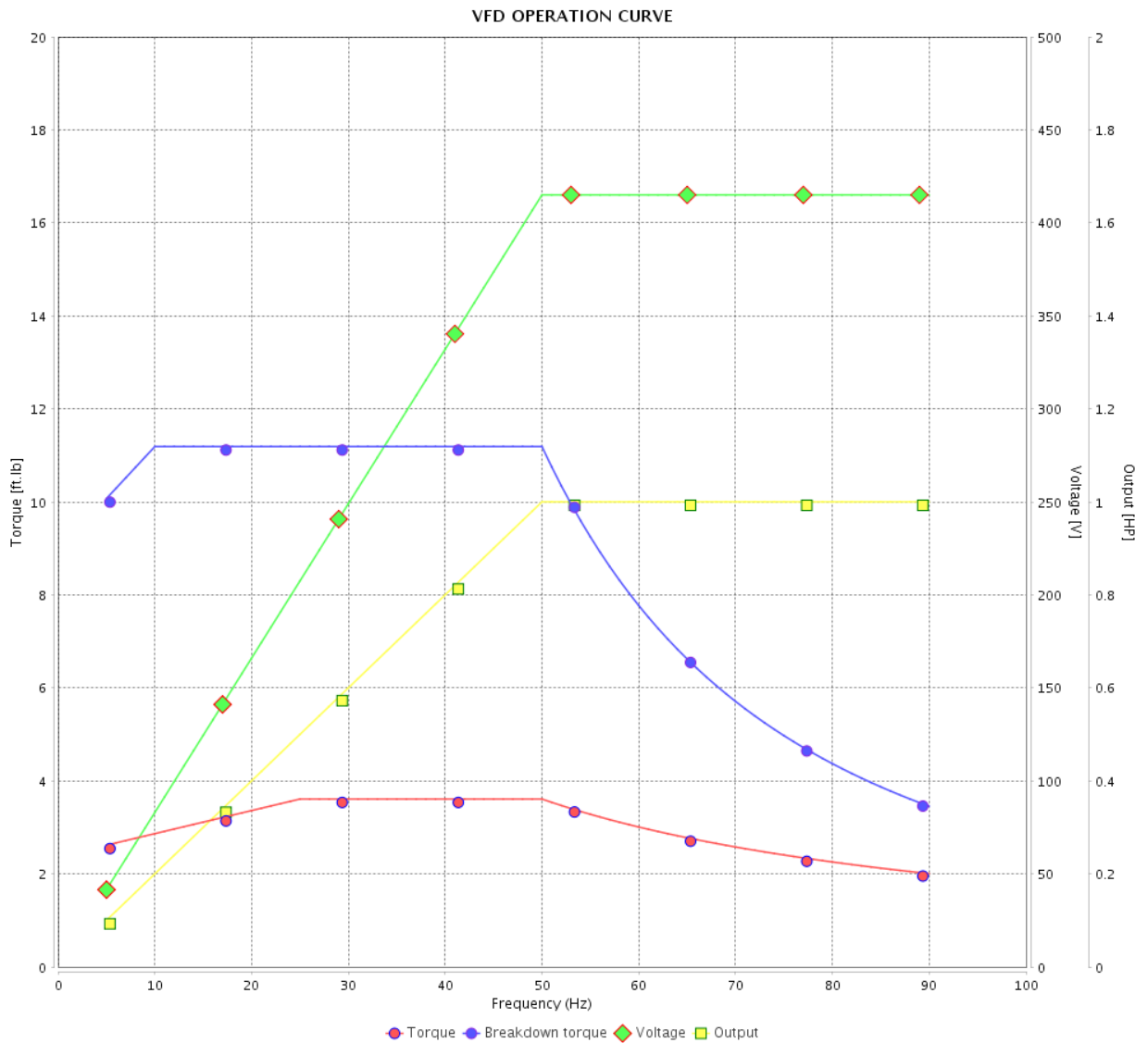


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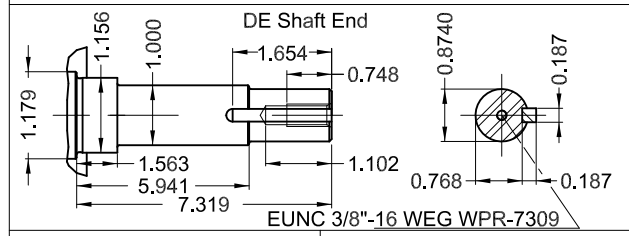
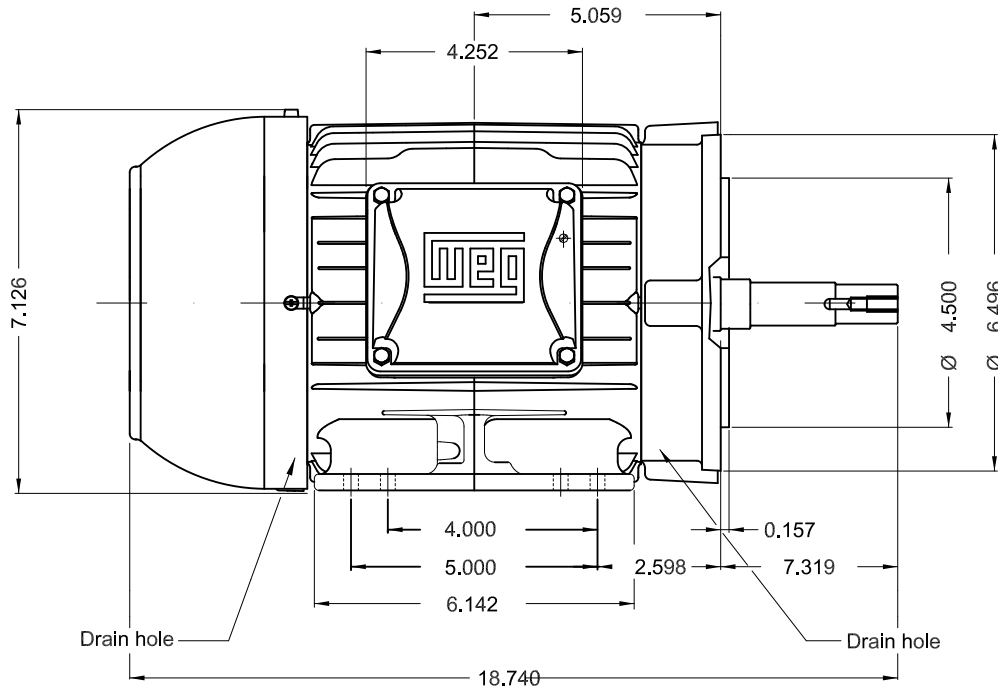
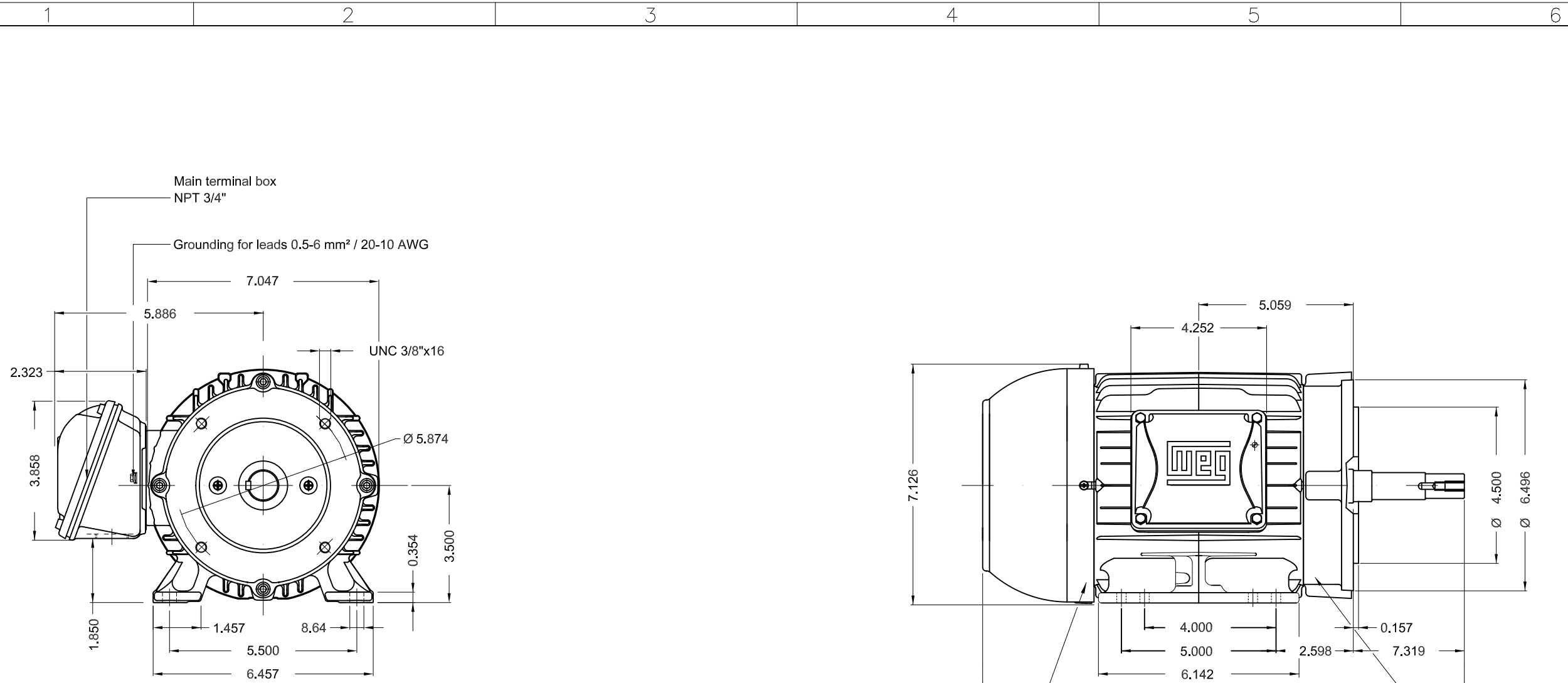


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1 HP 04 Poles 60 Hz A

Color RAL 5009
 Painting plan 207A
 Mounting NEMA F-1
 Mounting B34R(D)

ECM	LOC	SUMMARY OF MODIFICATIONS	EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	PIRWBUSER	THREE PH. MOTOR JM/JP/JET PUMP W22 PREM. EFF. FRAME 143/5JP IP55 TEFC					
CHECKED							
RELEASED							
REL DT.	WMO		Jaragua do Sul	Product Engineering	SHEET	1 / 1	

PREVIEW
WDD

**W22**

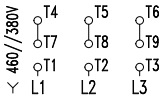
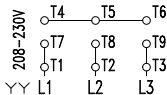
CC029A

® Inverter Duty Motor
Severe Duty

12598384

MADE IN MEXICO MODEL 00118ET3E143JP-W22

PH 3	FR 143/5JP	HP(kw) 1.0(0.75)	Hz 60	SF 1.25	PF 0.75
V 230/460	A 2.94/1.47	RPM 1760	INS. CL. F	ΔT 80 K	IP55
NEMA NOM EFF 85.5 %			DES B DUTY CONT.		AMB 40°C
ENCL TEFC		SFA 3.67/1.84	USABLE @208V 3.07 A	SF 1.15	SFA 3.53
1.0HP 0.75kW 50Hz 380V 1.71A 1450RPM SF1.25 EFF 82.5% (IE3)					CODE M



→6206-ZZ

→6204-ZZ

MOBIL POLYREX EM

ALT 1000 m.a.s.l. 49 Lbs

For 60Hz: Class I, Div 2, Gr. A, B, C and D - T3
 Class I, Zone 2, IIC - T3
 Class II, Div 2, Gr. F and G - T5
 For use on PWM, Gr. A, B, C, D, F and G
 VT1000:1, CT20:1, 1.0SF, T4A

FOR SAFE AREA
MOD.TE1BFOXON