

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :					
Product line	: NEMA Premium Efficiency Three-Phase	Product code :	14275902		
		Catalog # :	00152XT3E182T		
Frame	: 182/4T	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	: 124 lb		
Protection degree	: IP55	Moment of inertia (J)	: 0.4212 sq.ft.lb		
Design	: B				
Output [HP]	1.5	1.5	1.5	1.5	
Poles	6	6	6	6	
Frequency [Hz]	60	50	50	50	
Rated voltage [V]	230/460	380	400	415	
Rated current [A]	4.64/2.32	2.68	2.62	2.64	
L. R. Amperes [A]	30.6/15.3	13.9	14.4	15.6	
LRC [A]	6.6x(Code K)	5.2x(Code G)	5.5x(Code H)	5.9x(Code J)	
No load current [A]	2.80/1.40	1.40	1.50	1.60	
Rated speed [RPM]	1165	950	960	960	
Slip [%]	2.92	5.00	4.00	4.00	
Rated torque [ft.lb]	6.76	8.29	8.21	8.21	
Locked rotor torque [%]	229	190	220	250	
Breakdown torque [%]	330	240	250	290	
Service factor	1.15	1.00	1.00	1.00	
Temperature rise	80 K	80 K	80 K	80 K	
Locked rotor time	63s (cold) 35s (hot)	25s (cold) 14s (hot)	25s (cold) 14s (hot)	25s (cold) 14s (hot)	
Noise level ²	52.0 dB(A)	49.0 dB(A)	49.0 dB(A)	49.0 dB(A)	
Efficiency (%)	25%	83.3	85.9	84.1	82.8
	50%	84.5	85.5	84.5	84.0
	75%	86.5	86.5	86.5	85.5
	100%	87.5	85.5	86.5	86.5
Power Factor	25%	0.27	0.31	0.28	0.26
	50%	0.47	0.52	0.48	0.45
	75%	0.59	0.63	0.60	0.57
	100%	0.68	0.73	0.70	0.67
Bearing type	: <u>Drive end</u> 6307 2RS <u>Non drive end</u> 6206 2RS	Foundation loads			
Sealing	: Oil Seal Lip Seal	Max. traction	: 90 lb		
Lubrication interval	: - -	Max. compression	: 214 lb		
Lubricant amount	: - -				
Lubricant type	: Mobil Polyrex EM				
Notes USABLE @208V 5.13A SF 1.15 SFA 5.90A					
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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Thermal protection

ID	Application	Type	Quantity	Sensing Temperature
1	Winding	Thermostat - 2 wires	1 x Phase	155 °C

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TORQUE AND CURRENT VS SPEED CURVE



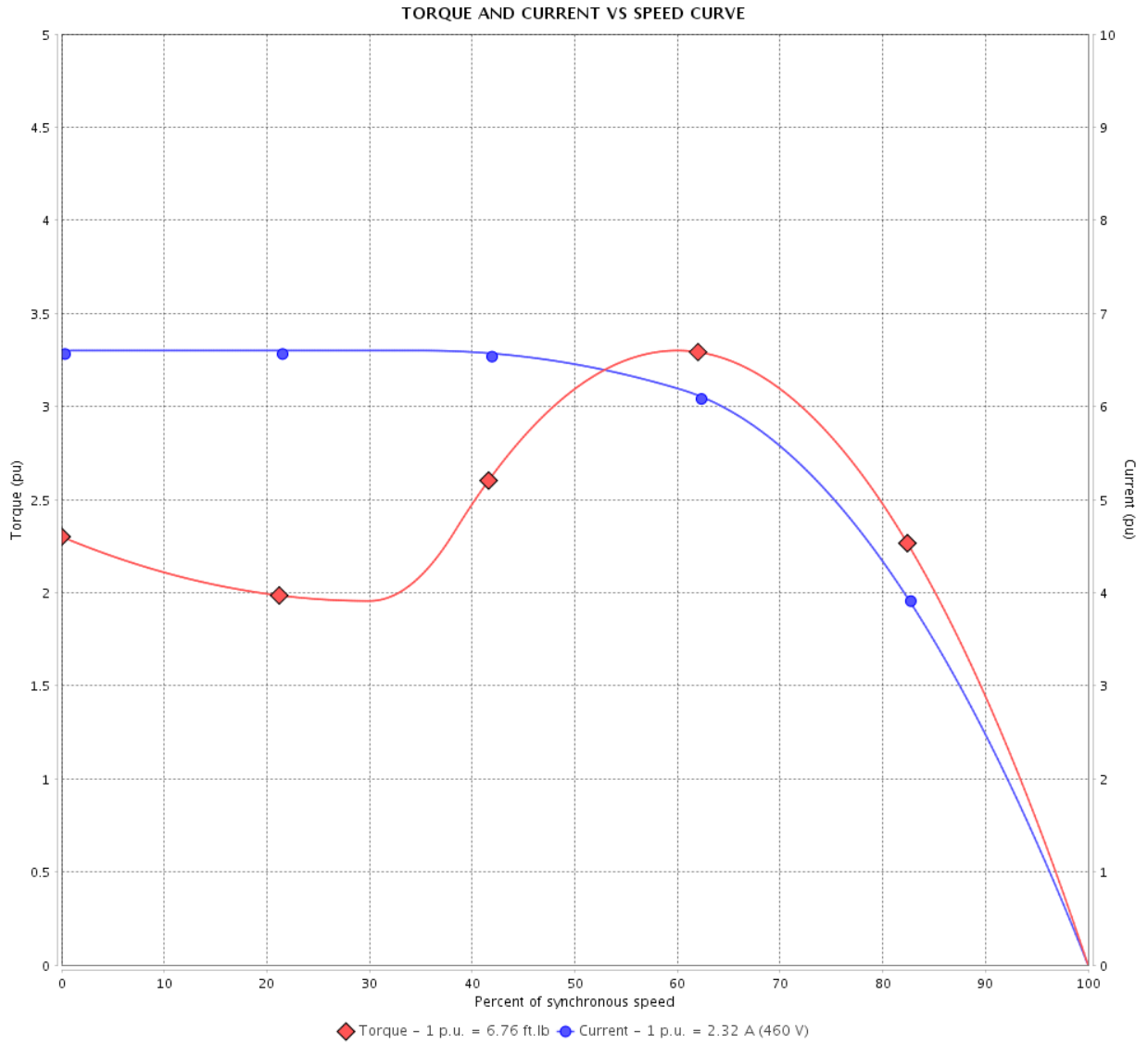
Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 14275902

Catalog # : 00152XT3E182T



Performance : 230/460 V 60 Hz 6P

Rated current : 4.64/2.32 A
 LRC : 6.6
 Rated torque : 6.76 ft.lb
 Locked rotor torque : 229 %
 Breakdown torque : 330 %
 Rated speed : 1165 rpm

Moment of inertia (J) : 0.4212 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

Locked rotor time : 63s (cold) 35s (hot)

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TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



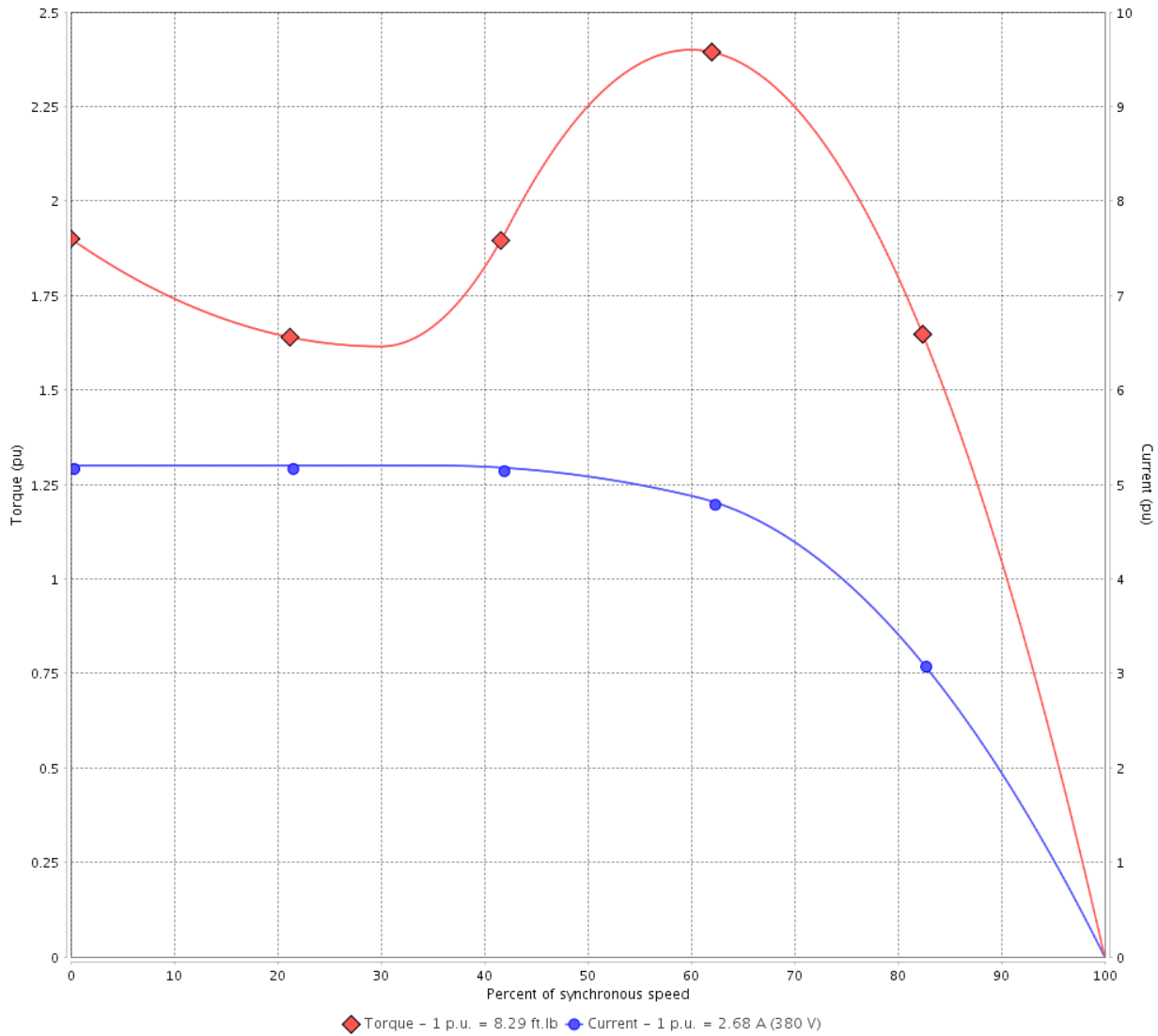
Customer :

Product line : NEMA Premium Efficiency Three-Phase

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TORQUE AND CURRENT VS SPEED CURVE



Performance : 380 V 50 Hz 6P IE4

Rated current	: 2.68 A	Moment of inertia (J)	: 0.4212 sq.ft.lb
LRC	: 5.2	Duty cycle	: Cont.(S1)
Rated torque	: 8.29 ft.lb	Insulation class	: F
Locked rotor torque	: 190 %	Service factor	: 1.00
Breakdown torque	: 240 %	Temperature rise	: 80 K
Rated speed	: 950 rpm	Design	: B

Locked rotor time : 25s (cold) 14s (hot)

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TORQUE AND CURRENT VS SPEED CURVE



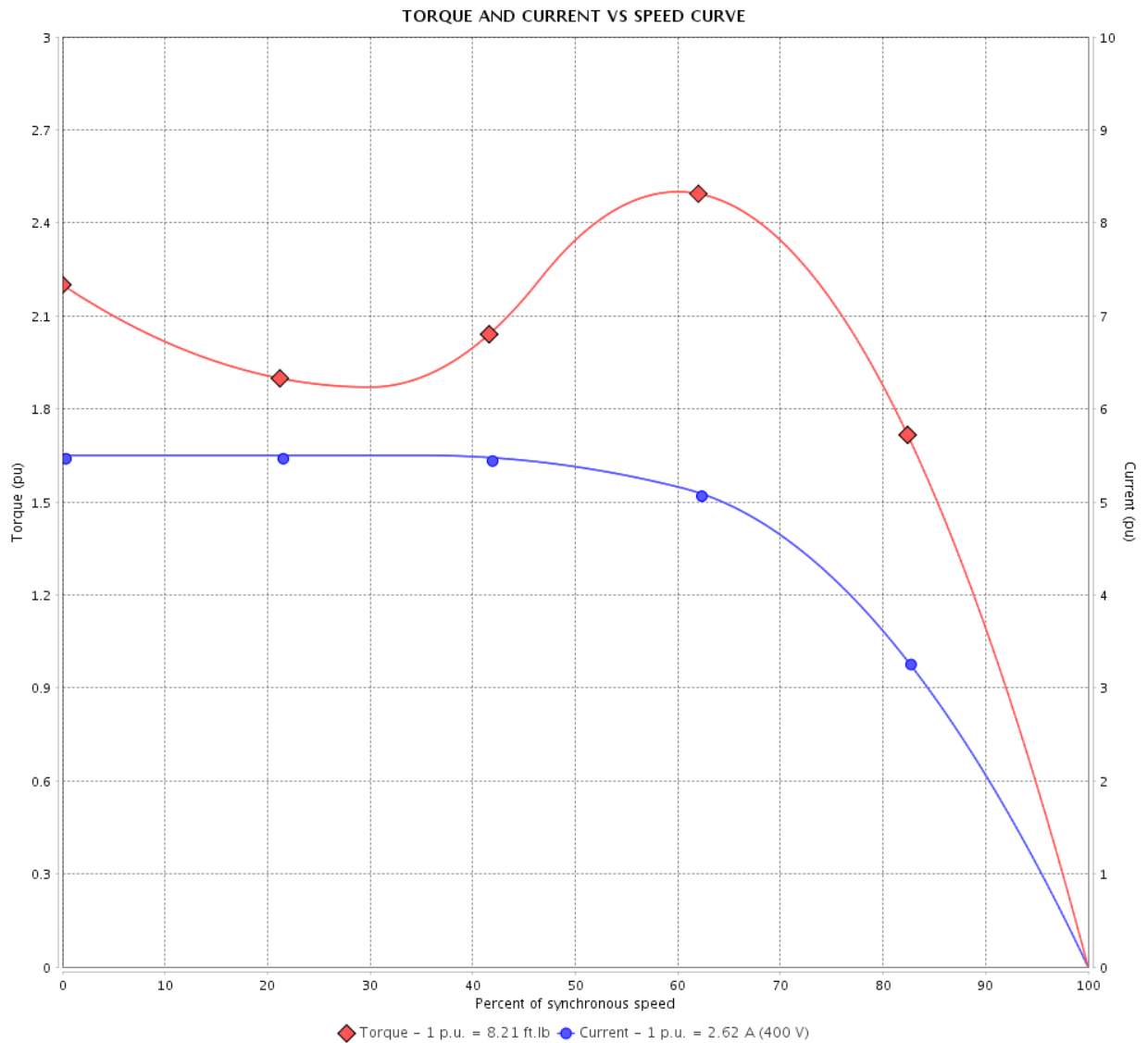
Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 14275902

Catalog # : 00152XT3E182T



Performance : 400 V 50 Hz 6P IE4

Rated current	: 2.62 A	Moment of inertia (J)	: 0.4212 sq.ft.lb
LRC	: 5.5	Duty cycle	: Cont.(S1)
Rated torque	: 8.21 ft.lb	Insulation class	: F
Locked rotor torque	: 220 %	Service factor	: 1.00
Breakdown torque	: 250 %	Temperature rise	: 80 K
Rated speed	: 960 rpm	Design	: B

Locked rotor time : 25s (cold) 14s (hot)

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TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



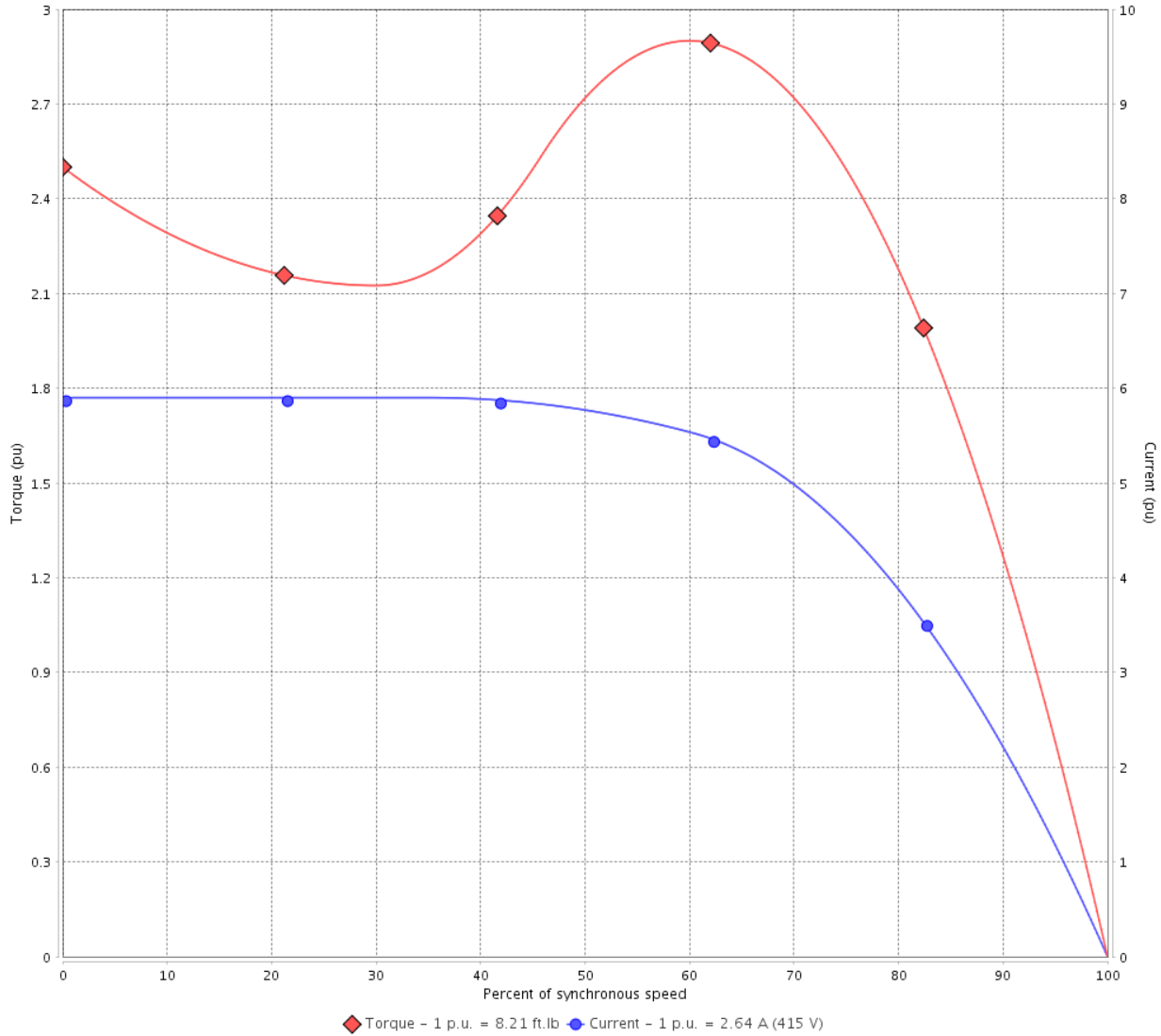
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Rated torque	: 8.21 ft.lb	Insulation class	: F
Locked rotor torque	: 250 %	Service factor	: 1.00
Breakdown torque	: 290 %	Temperature rise	: 80 K
Rated speed	: 960 rpm	Design	: B

Locked rotor time : 25s (cold) 14s (hot)

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LOAD PERFORMANCE CURVE

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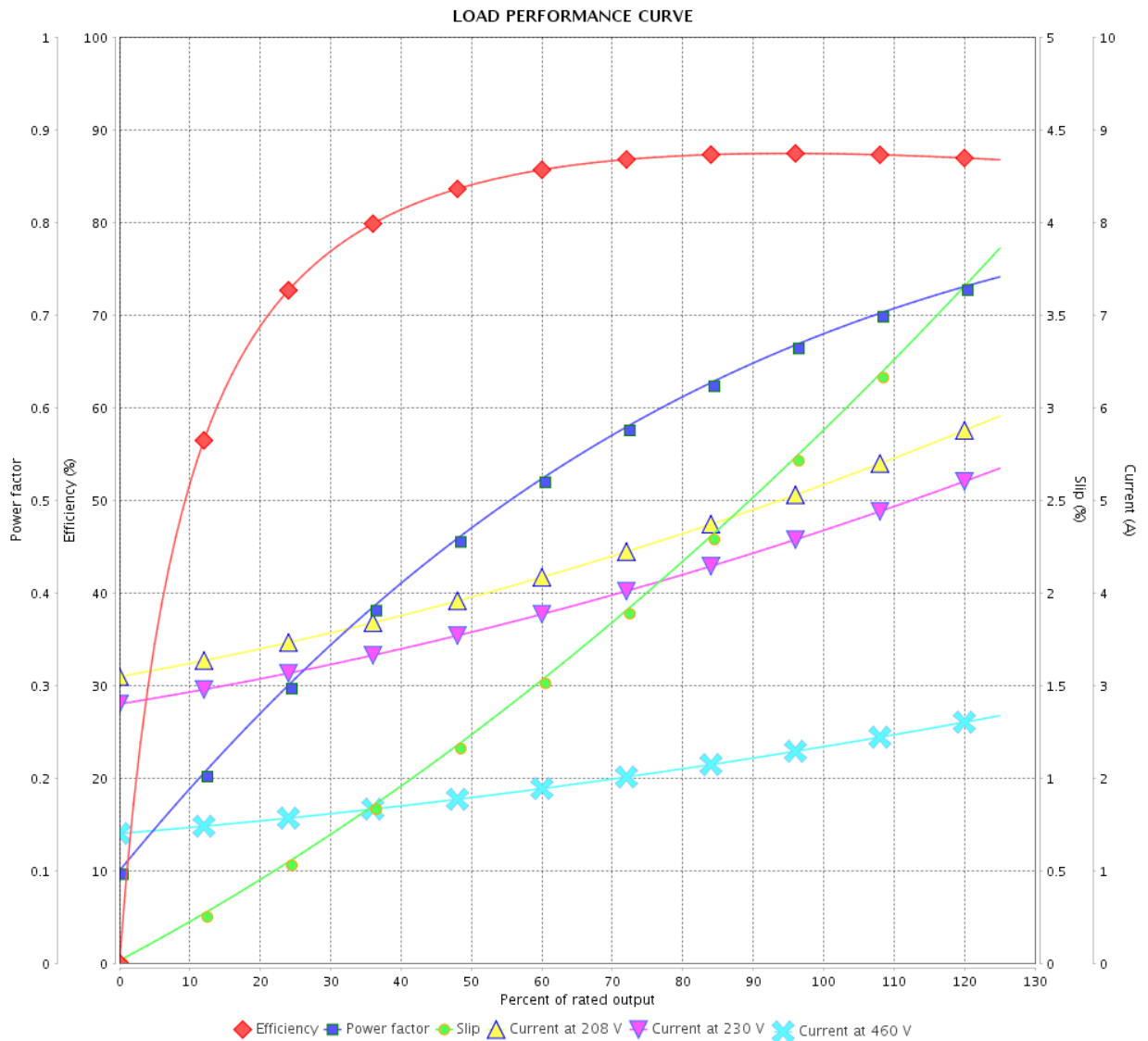


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Performance : 230/460 V 60 Hz 6P

Rated current : 4.64/2.32 A
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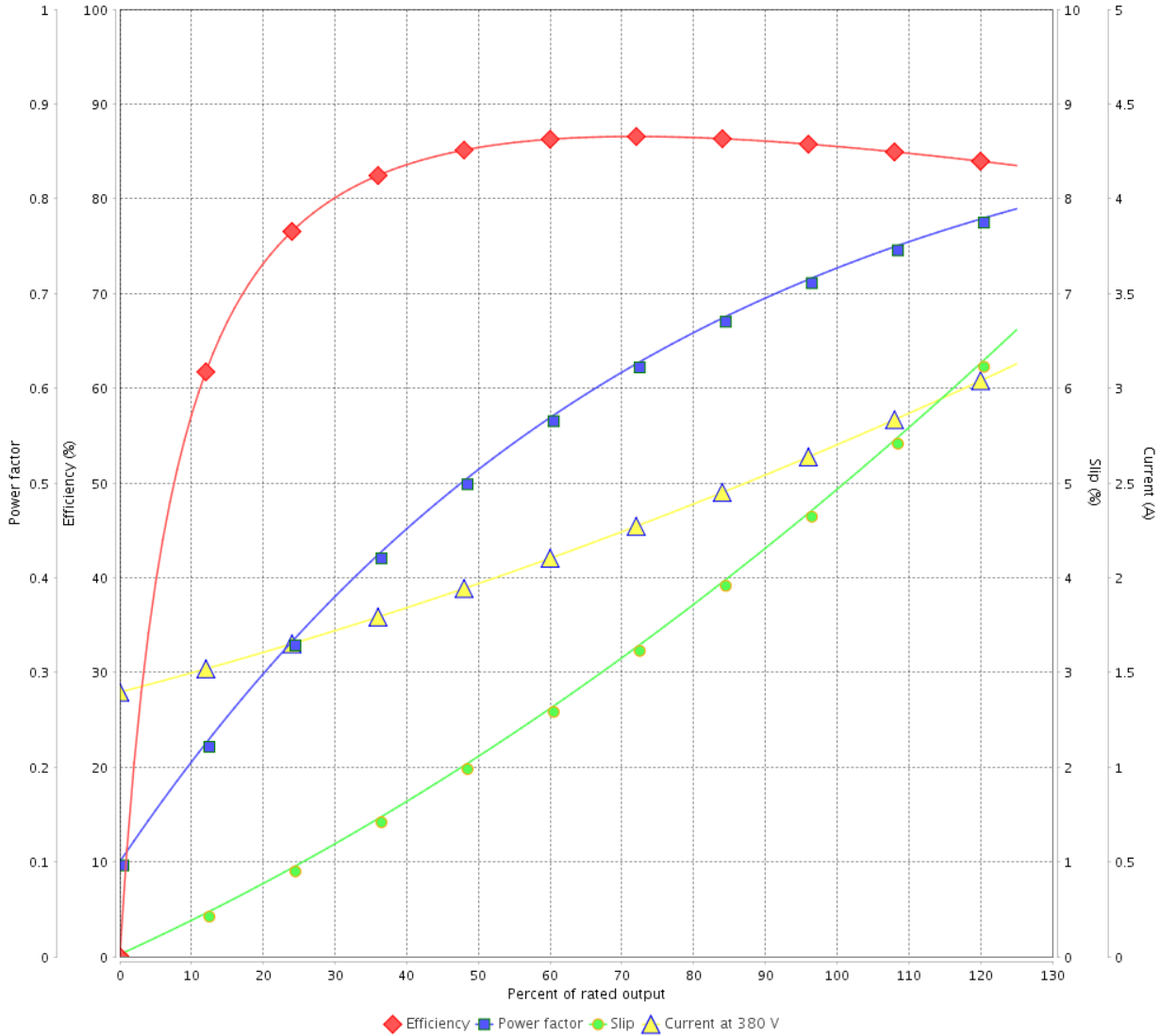
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Performance : 380 V 50 Hz 6P IE4

Rated current : 2.68 A
 LRC : 5.2
 Rated torque : 8.29 ft.lb
 Locked rotor torque : 190 %
 Breakdown torque : 240 %
 Rated speed : 950 rpm

Moment of inertia (J) : 0.4212 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : B

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Three Phase Induction Motor - Squirrel Cage

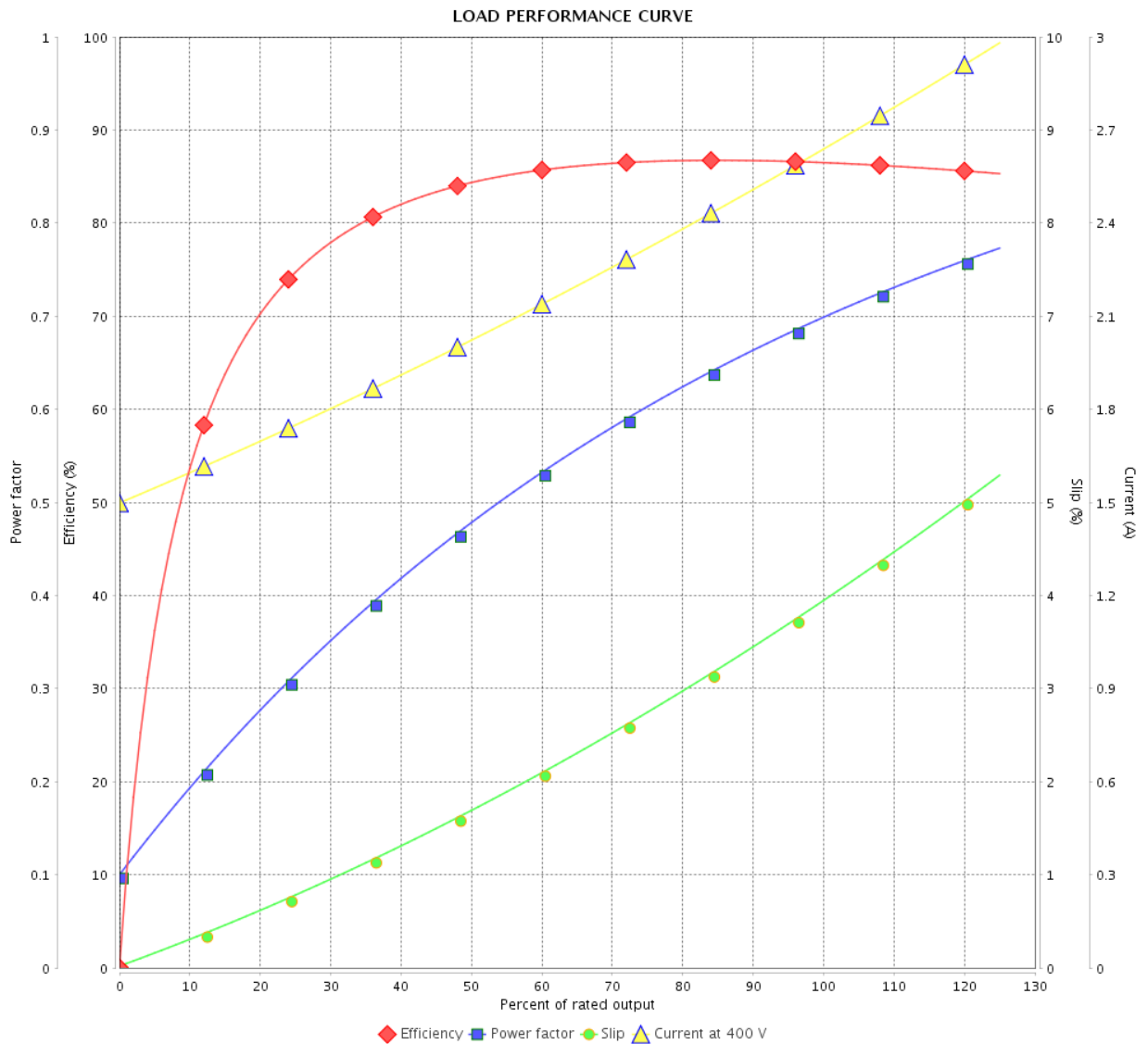


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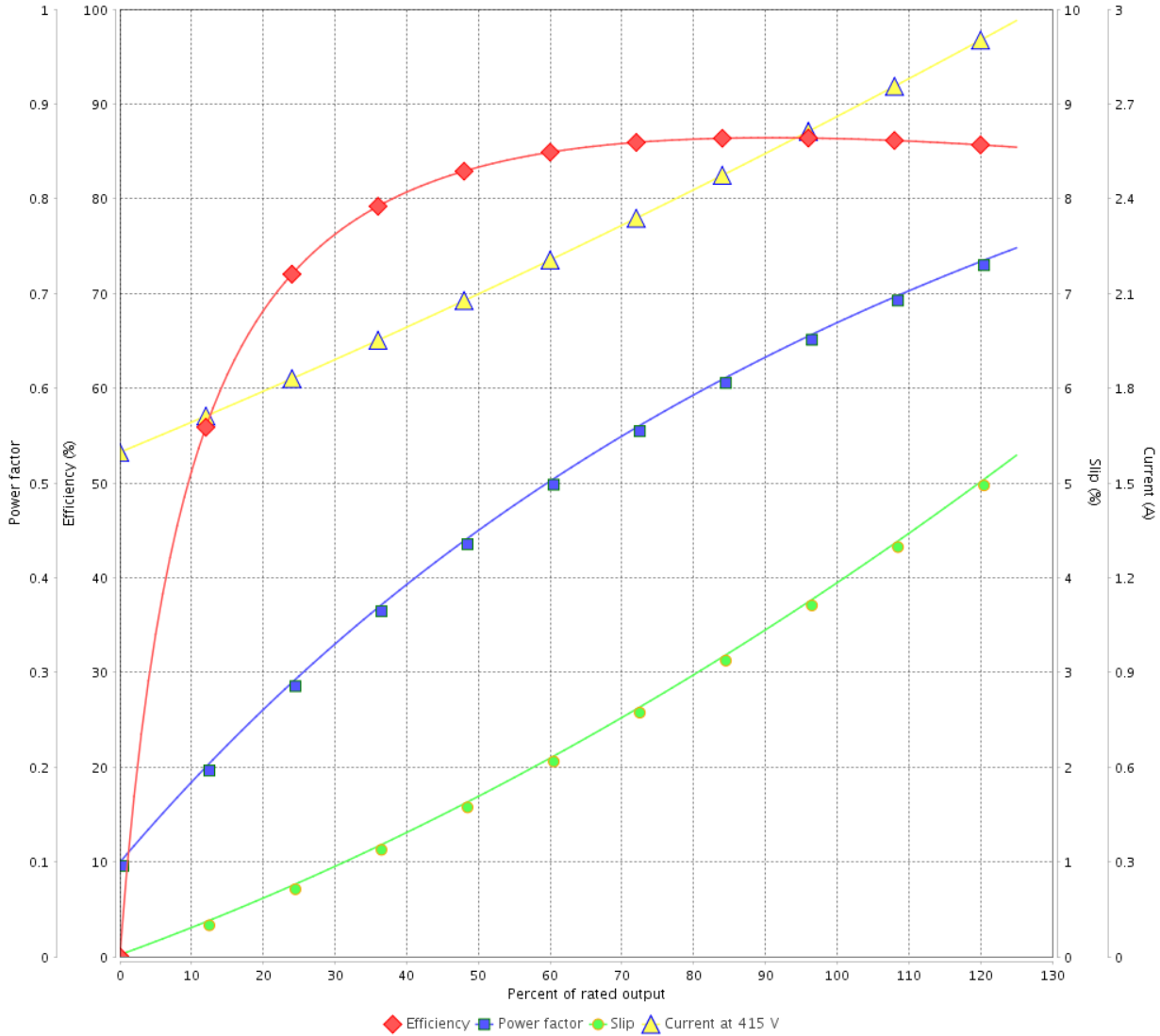
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THERMAL LIMIT CURVE



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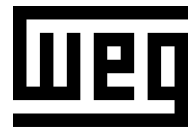
Heating constant

Cooling constant

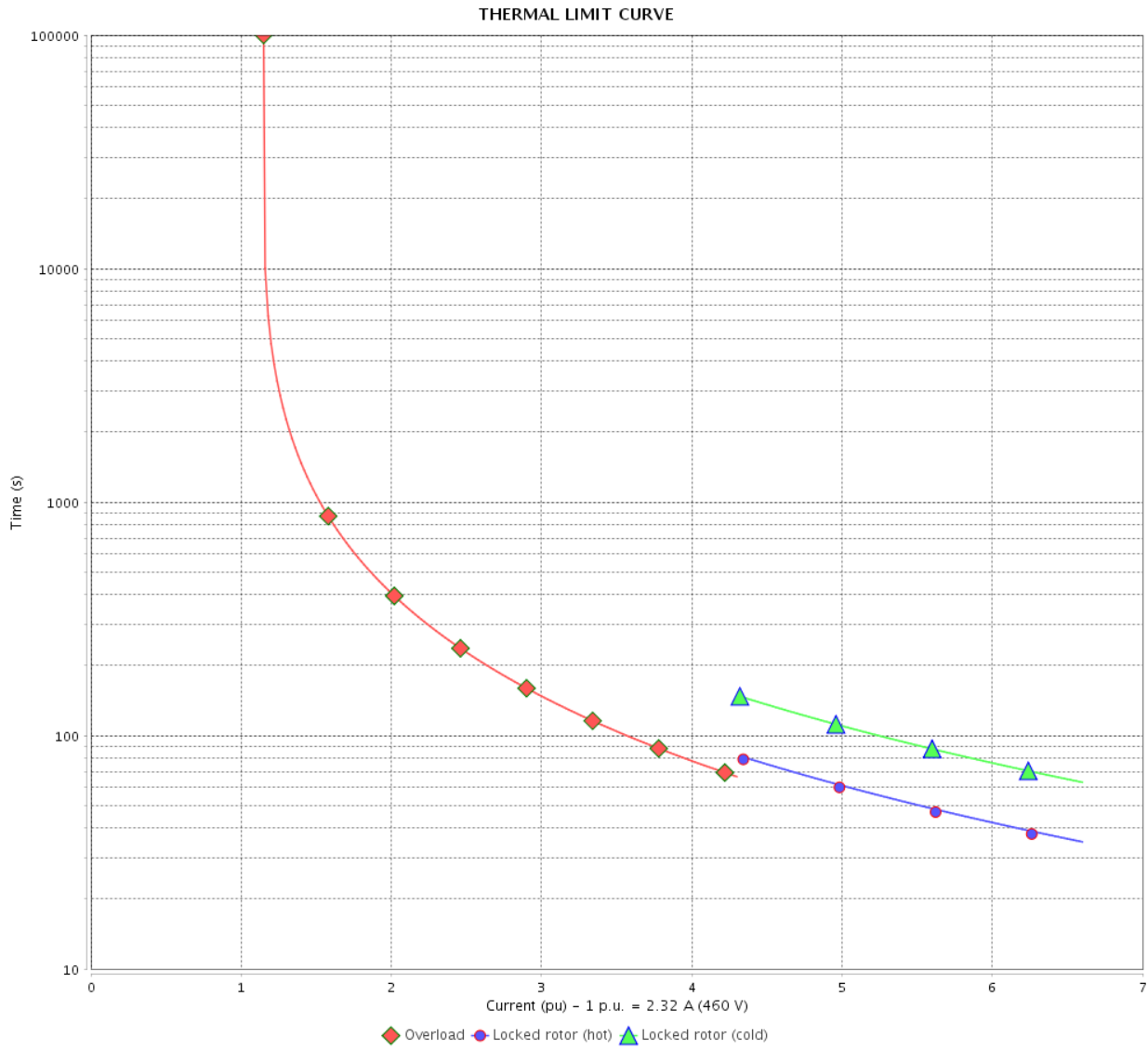
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Rated torque : 8.29 ft.lb	Insulation class : F
Locked rotor torque : 190 %	Service factor : 1.00
Breakdown torque : 240 %	Temperature rise : 80 K
Rated speed : 950 rpm	Design : B

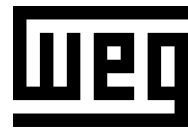
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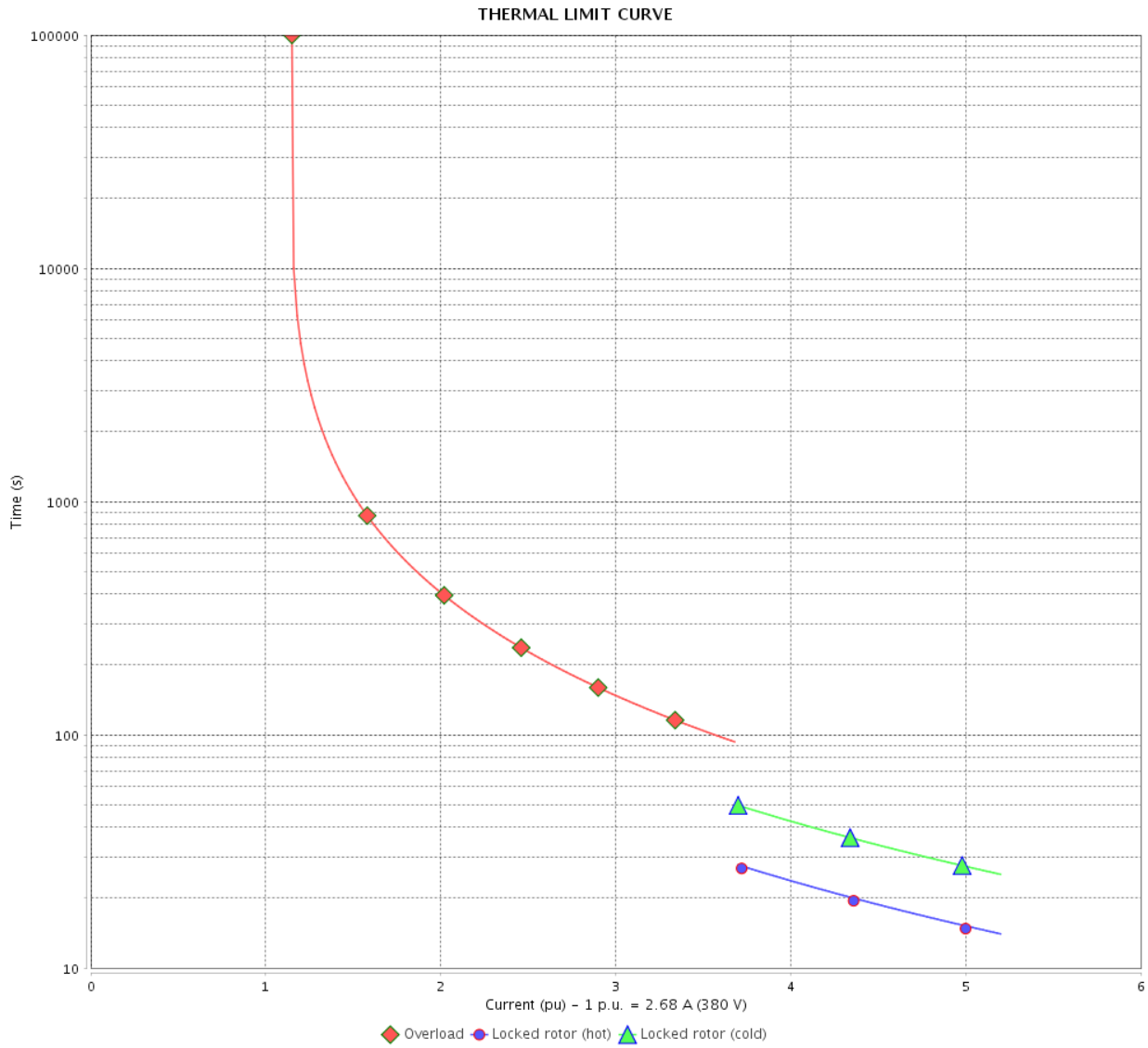
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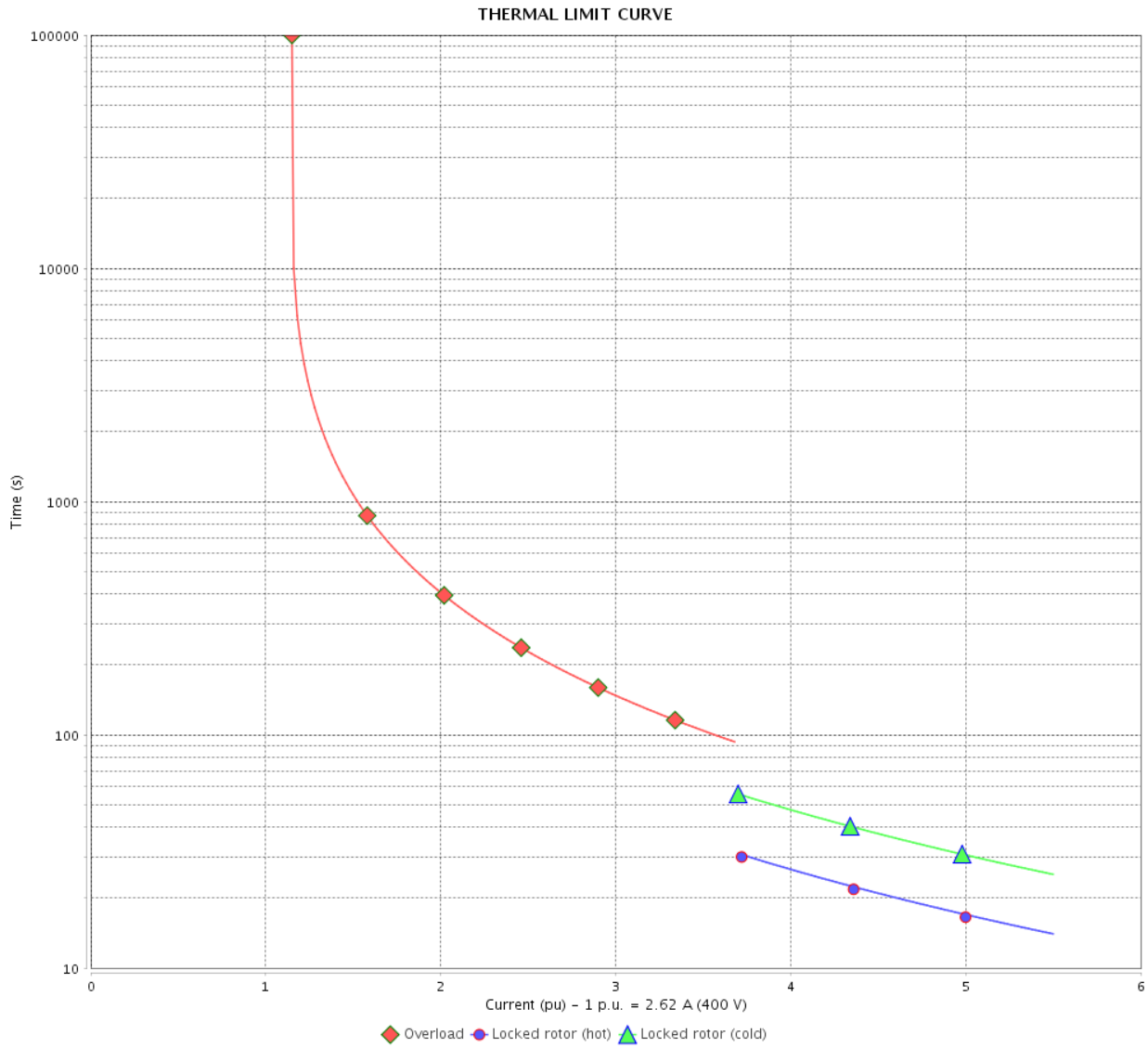
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THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : _____



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Date				

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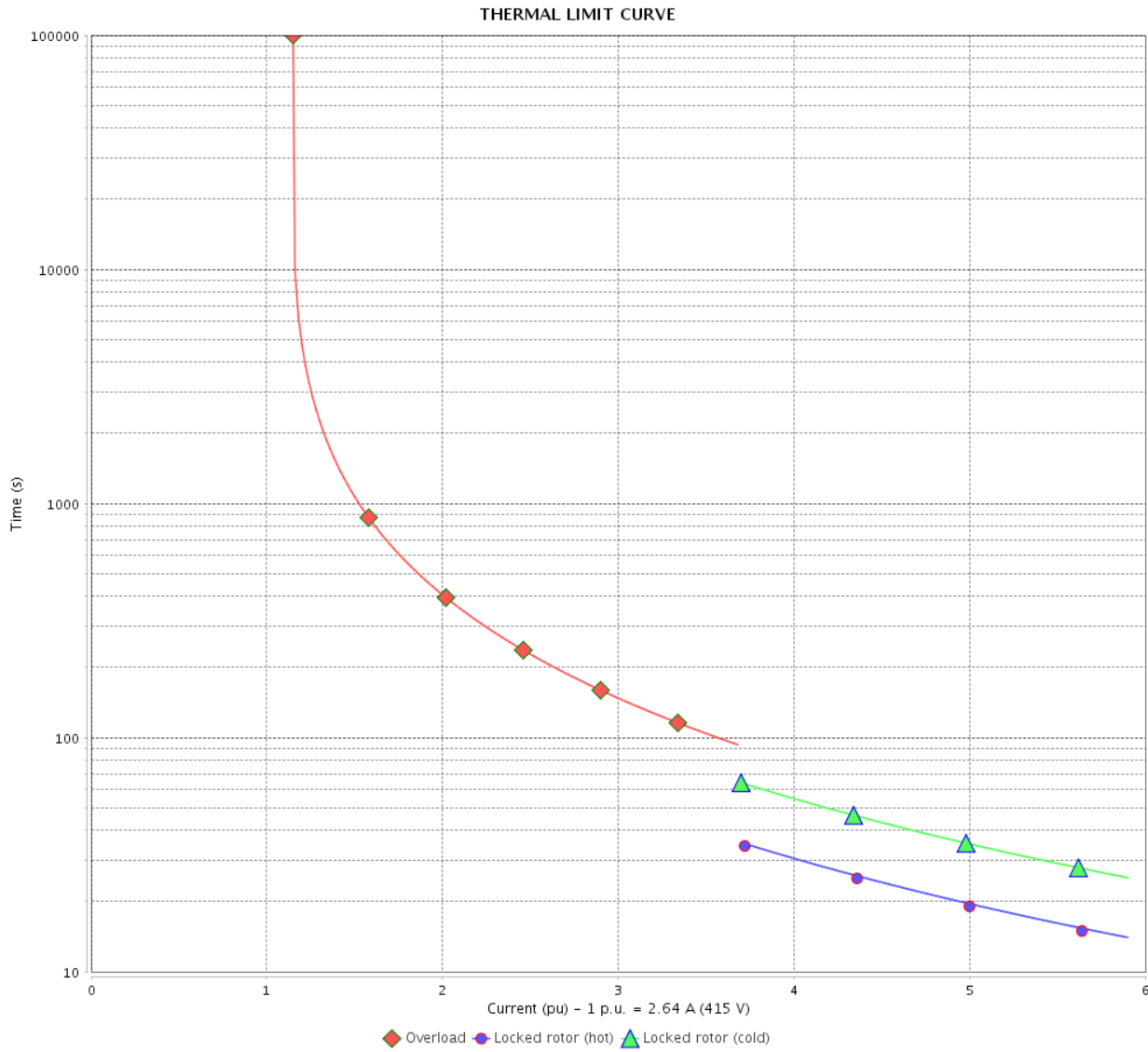
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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

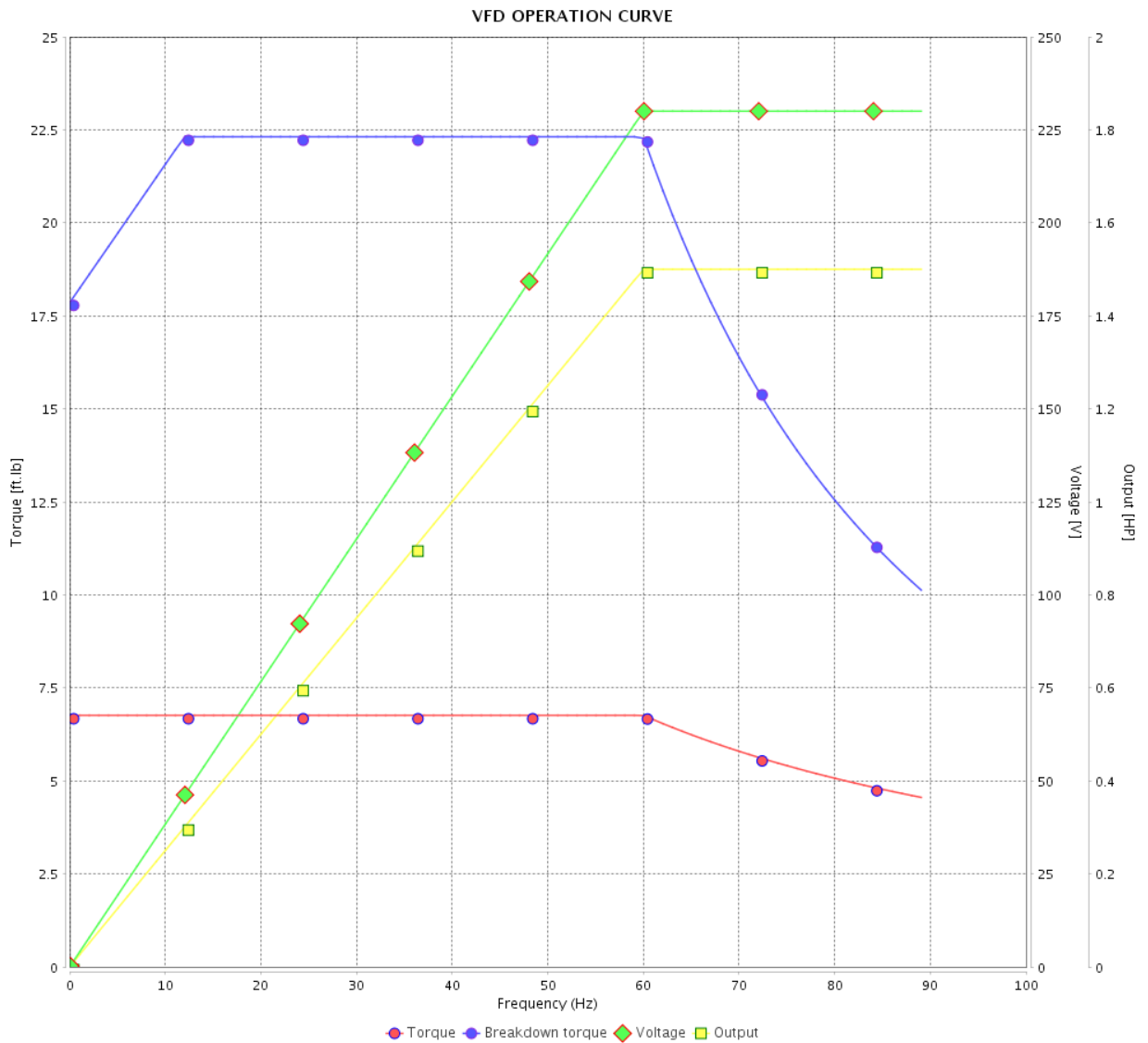


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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

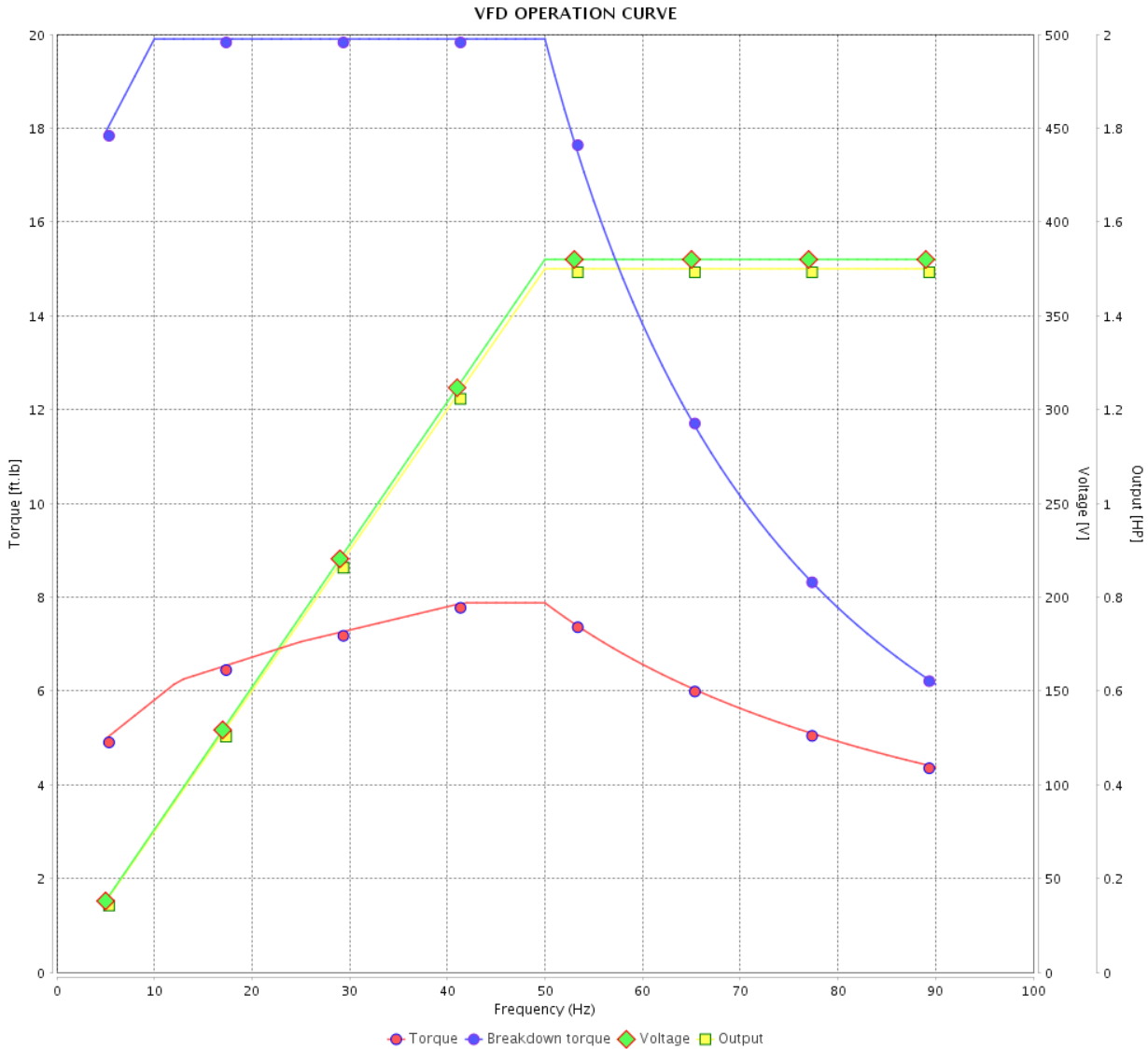


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Performance : 380 V 50 Hz 6P IE4

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VFD OPERATION CURVE

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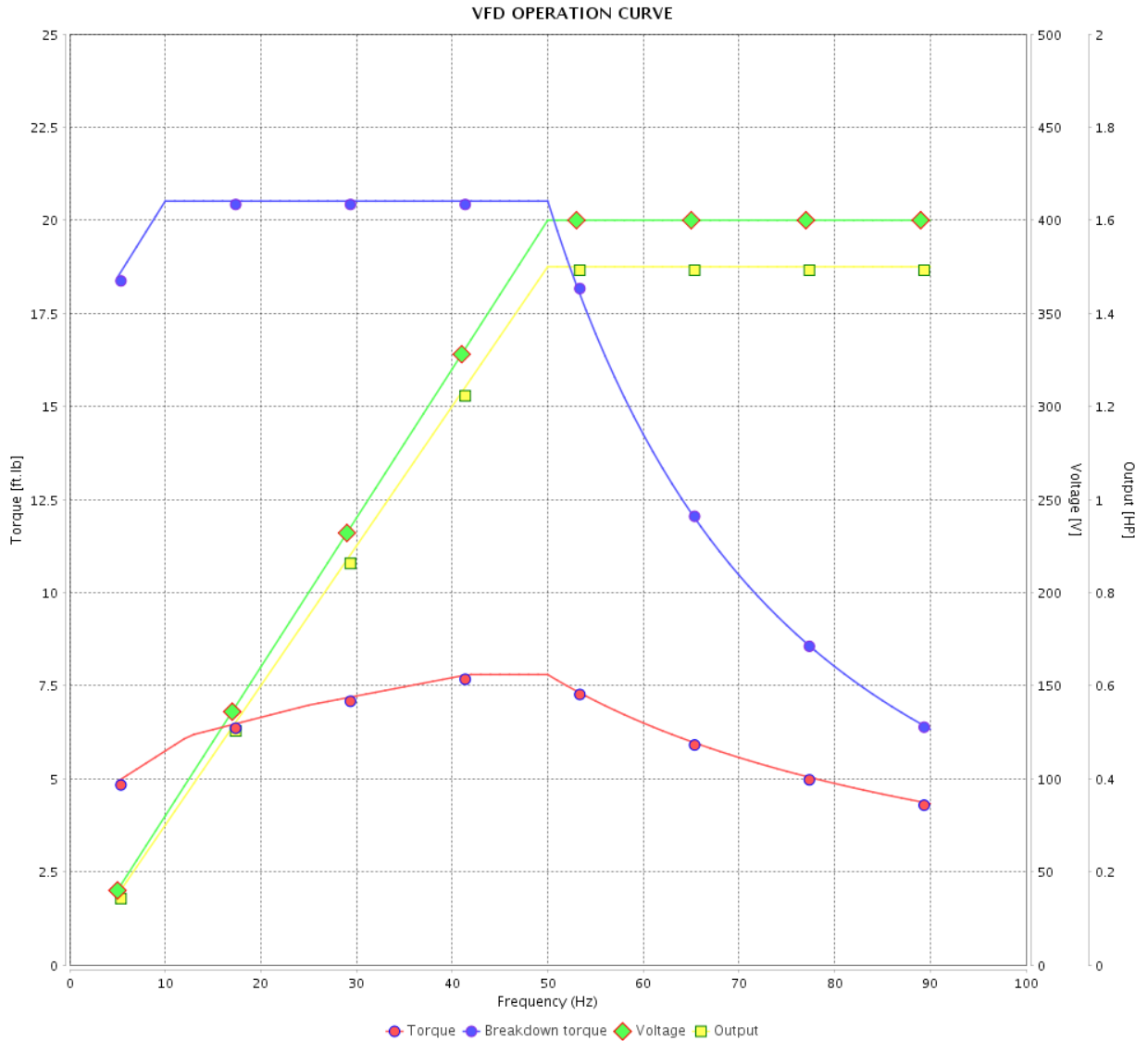


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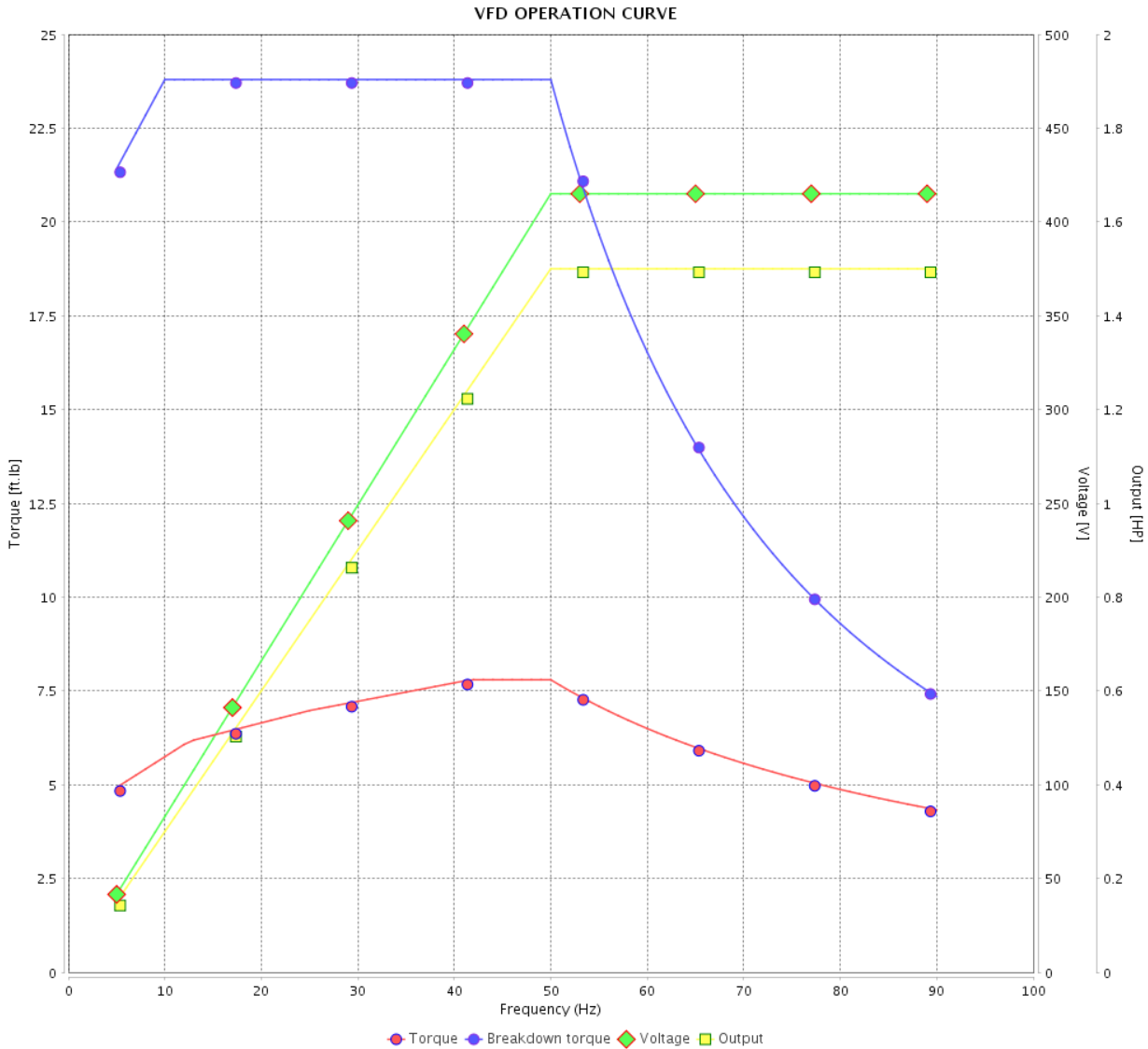


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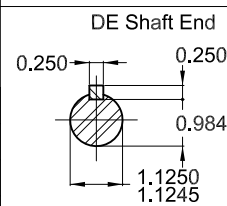
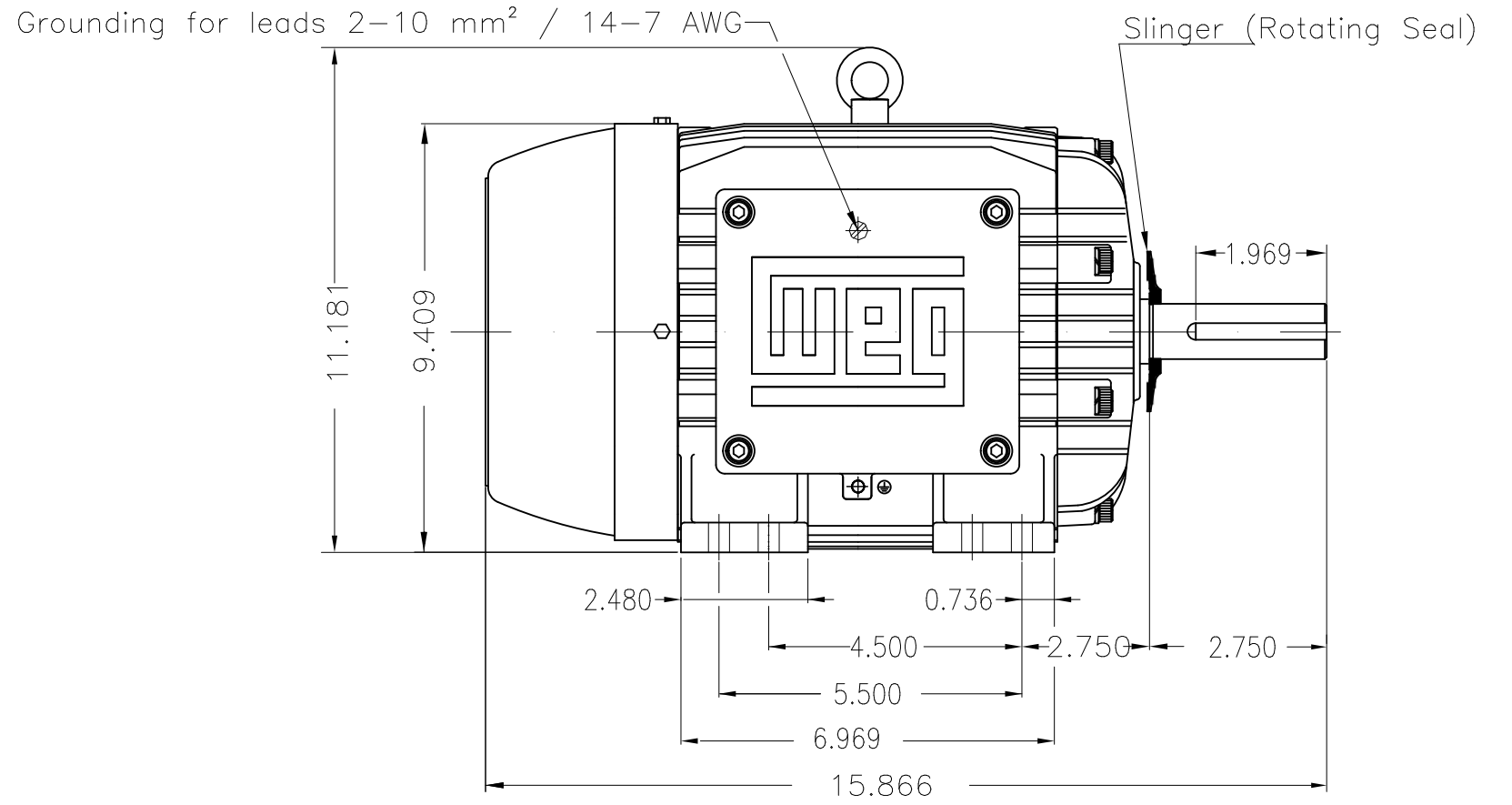
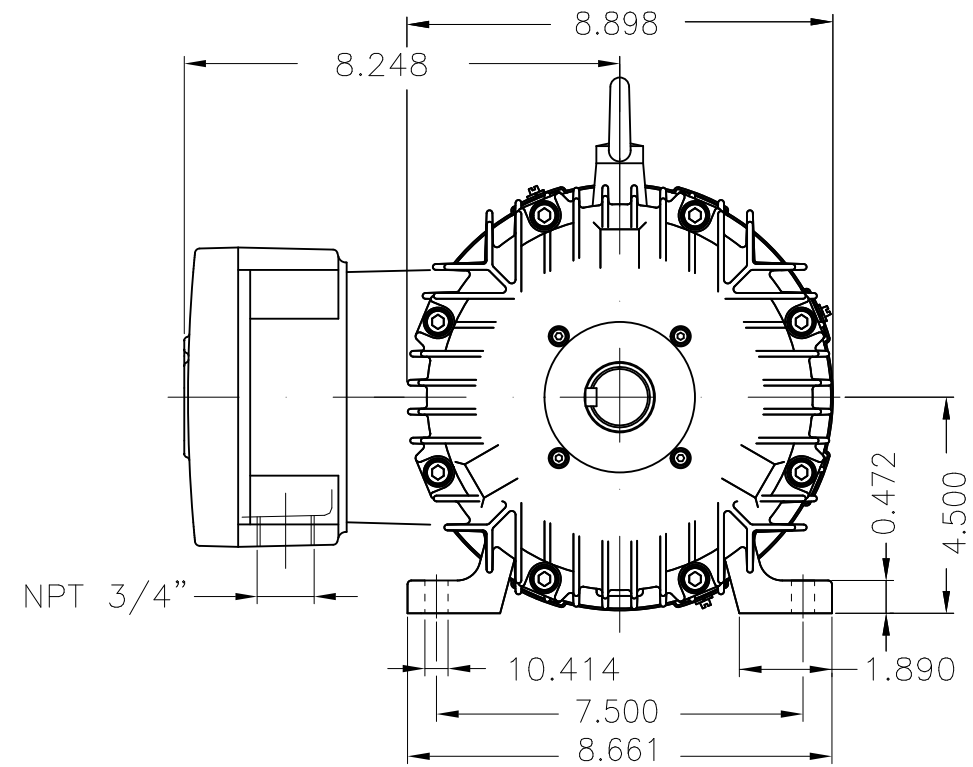


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Color RAL 5009
 Painting plan 202P
 Mounting NEMA F-1
 Mounting B3R(D)

1.5 HP 06 Poles 60 Hz

ECM	LOC	SUMMARY OF MODIFICATIONS	EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	PIRWBUSER	THREE PH. MOTOR EXPLOSION PROOF PREM. EFF.					
CHECKED		FRAME 182/4T IP55 TEFC					
RELEASED							
REL DT.	WMO	Jaragua do Sul	Product Engineering				

PREVIEW
 WDD



SHEET 1 / 1

MADE IN BRAZIL

**W21X NEMA**
Premium

14275902



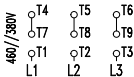
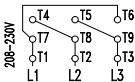
LISTED

CC029A

Inverter Duty Motor
Severe Duty

MODEL 00152XT3E182T

PH 3	FR 182/4T	
HP(kW) 1.5(1.1)		HZ 60 IP55
V 230/460		A 4.64/2.32
RPM 1165		NEMA NOM EFF 87.5%
PF 0.68	SFA 5.34/2.67	DES B
INS CL F Δ T 80 K	SF 1.15	ENCL TEFC
DUTY CONT.	CODE K	ALT 1000 m.a.s.l.
AMB 40°C	USABLE @208V	5.13 A SF 1.15 SFA 5.90
AMB 55°C	SF1.0	
1.5HP 1.1kW 50Hz 380V 2.68A 950RPM SF1.00 EFF 85.5% (IE4)		



→ 6307-2RS MOBIL POLYREX EM
→ 6206-2RS

123 Lbs



TEMP CODE T3C
CSA/UL: Class I - Div. 1 - Groups C and D
CSA: Class II - Div. 1 - Groups F and G
CSA: Class I - Zone 1 - IIB

EXPLOSION PROOF MOTOR

FOR USE ON VPWM VFD 1000:1VT, 20:1CT, 1.0SF, T3C, AMB 40°C.