

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer					
Product line		: NEMA Premium Efficiency Three-Phase		Product code : 14276270	
				Catalog # : 00536XT3E184T	
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 : 131 lb			
Protection degree : IP55		Moment of inertia (J) : 0.1889 sq.ft.lb			
Design : B					
Output [HP]	5	5	5	5	5
Poles	2	2	2	2	2
Frequency [Hz]	60	50	50	50	50
Rated voltage [V]	230/460	380	400	415	415
Rated current [A]	12.2/6.10	7.30	6.94	6.84	6.84
L. R. Amperes [A]	91.5/45.7	41.6	44.4	47.2	47.2
LRC [A]	7.5x(Code J)	5.7x(Code F)	6.4x(Code G)	6.9x(Code H)	6.9x(Code H)
No load current [A]	4.40/2.20	2.15	2.40	2.60	2.60
Rated speed [RPM]	3490	2850	2865	2875	2875
Slip [%]	3.06	5.00	4.50	4.17	4.17
Rated torque [ft.lb]	7.52	9.21	9.16	9.13	9.13
Locked rotor torque [%]	250	200	229	260	260
Breakdown torque [%]	380	280	310	340	340
Service factor	1.15	1.00	1.00	1.00	1.00
Temperature rise	80 K	80 K	80 K	80 K	80 K
Locked rotor time	46s (cold) 26s (hot)	46s (cold) 26s (hot)	46s (cold) 26s (hot)	46s (cold) 26s (hot)	46s (cold) 26s (hot)
Noise level ²	69.0 dB(A)	64.0 dB(A)	64.0 dB(A)	64.0 dB(A)	64.0 dB(A)
Efficiency (%)	25%	84.3	86.9	86.1	86.1
	50%	85.5	86.5	86.5	86.5
	75%	87.5	87.5	87.5	87.5
	100%	88.5	86.5	87.5	87.5
Power Factor	25%	0.47	0.53	0.48	0.45
	50%	0.70	0.76	0.72	0.69
	75%	0.81	0.86	0.83	0.80
	100%	0.86	0.89	0.88	0.86
Bearing type		Drive end : 6307 2RS	Non drive end : 6206 2RS	Foundation loads	
Sealing		Oil Seal	Lip Seal	Max. traction : 133 lb	
Lubrication interval		-	-	Max. compression : 264 lb	
Lubricant amount		-	-		
Lubricant type		Mobil Polyrex EM			
Notes					
USABLE @208V 13.5A SF 1.15 SFA 15.5A					
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



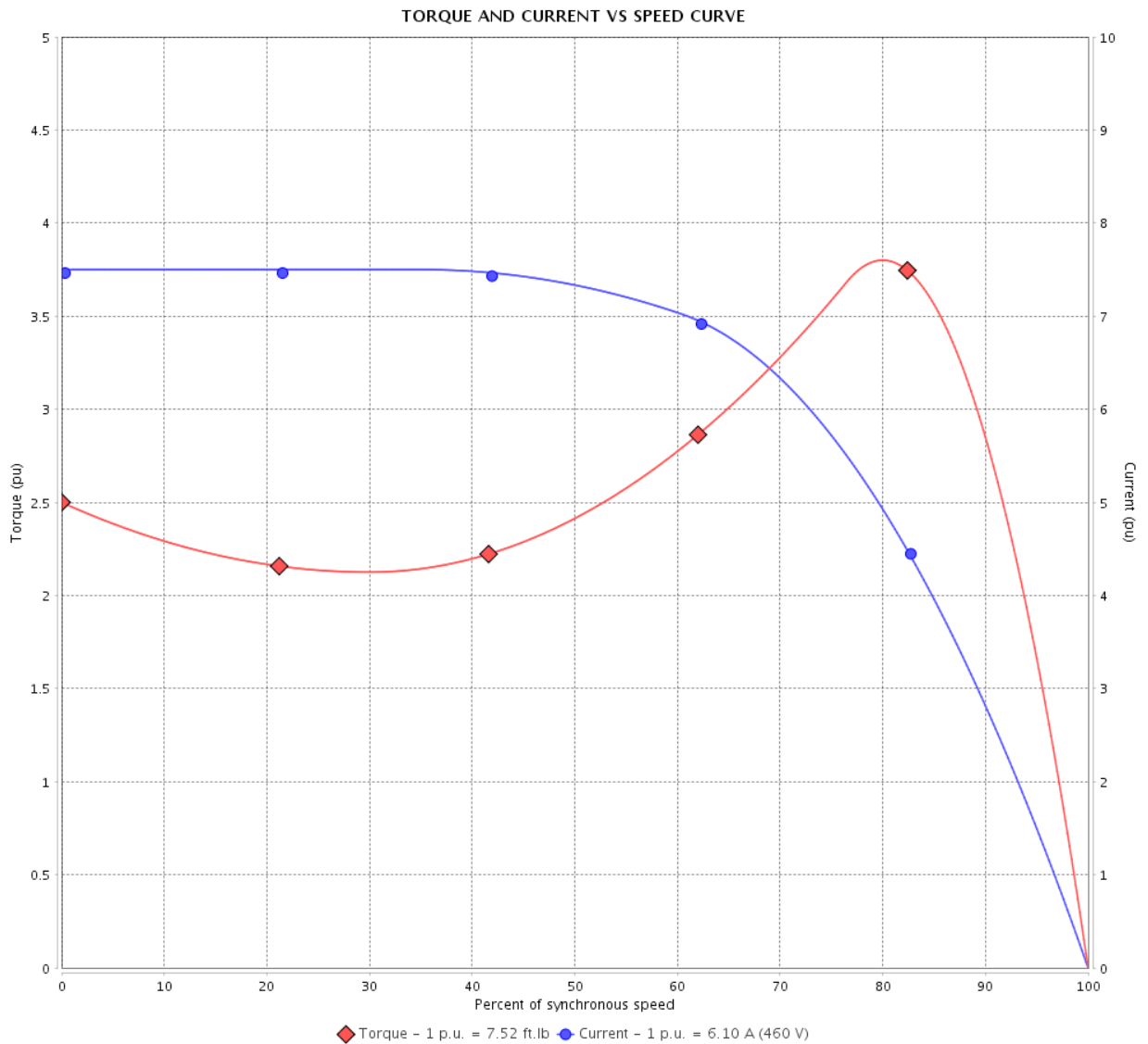
Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 14276270

Catalog # : 00536XT3E184T



Performance : 230/460 V 60 Hz 2P

Rated current : 12.2/6.10 A
 LRC : 7.5
 Rated torque : 7.52 ft.lb
 Locked rotor torque : 250 %
 Breakdown torque : 380 %
 Rated speed : 3490 rpm

Moment of inertia (J) : 0.1889 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

Locked rotor time : 46s (cold) 26s (hot)

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TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



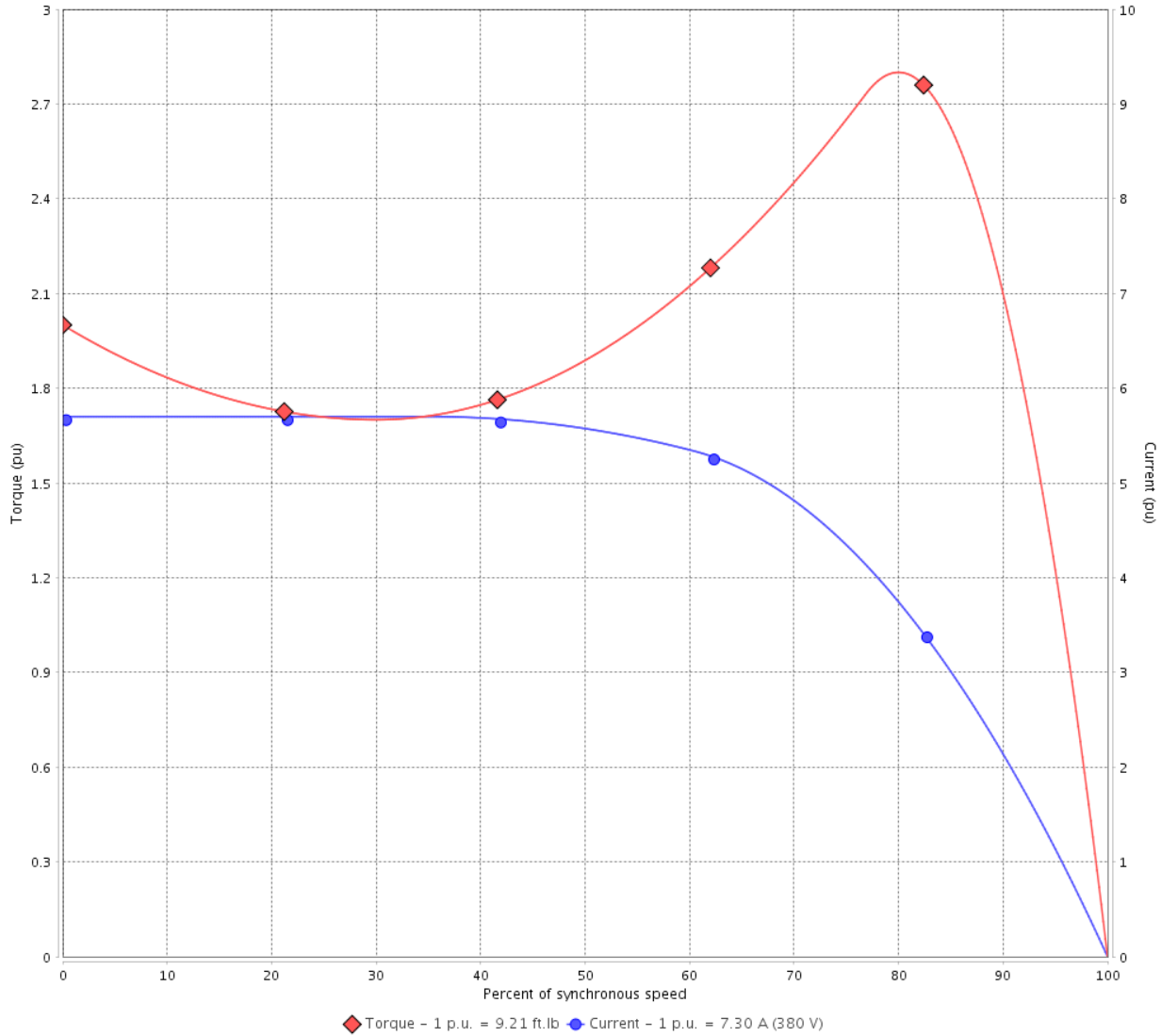
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TORQUE AND CURRENT VS SPEED CURVE



Performance : 380 V 50 Hz 2P IE2

Rated current	: 7.30 A	Moment of inertia (J)	: 0.1889 sq.ft.lb
LRC	: 5.7	Duty cycle	: Cont.(S1)
Rated torque	: 9.21 ft.lb	Insulation class	: F
Locked rotor torque	: 200 %	Service factor	: 1.00
Breakdown torque	: 280 %	Temperature rise	: 80 K
Rated speed	: 2850 rpm	Design	: B

Locked rotor time : 46s (cold) 26s (hot)

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TORQUE AND CURRENT VS SPEED CURVE



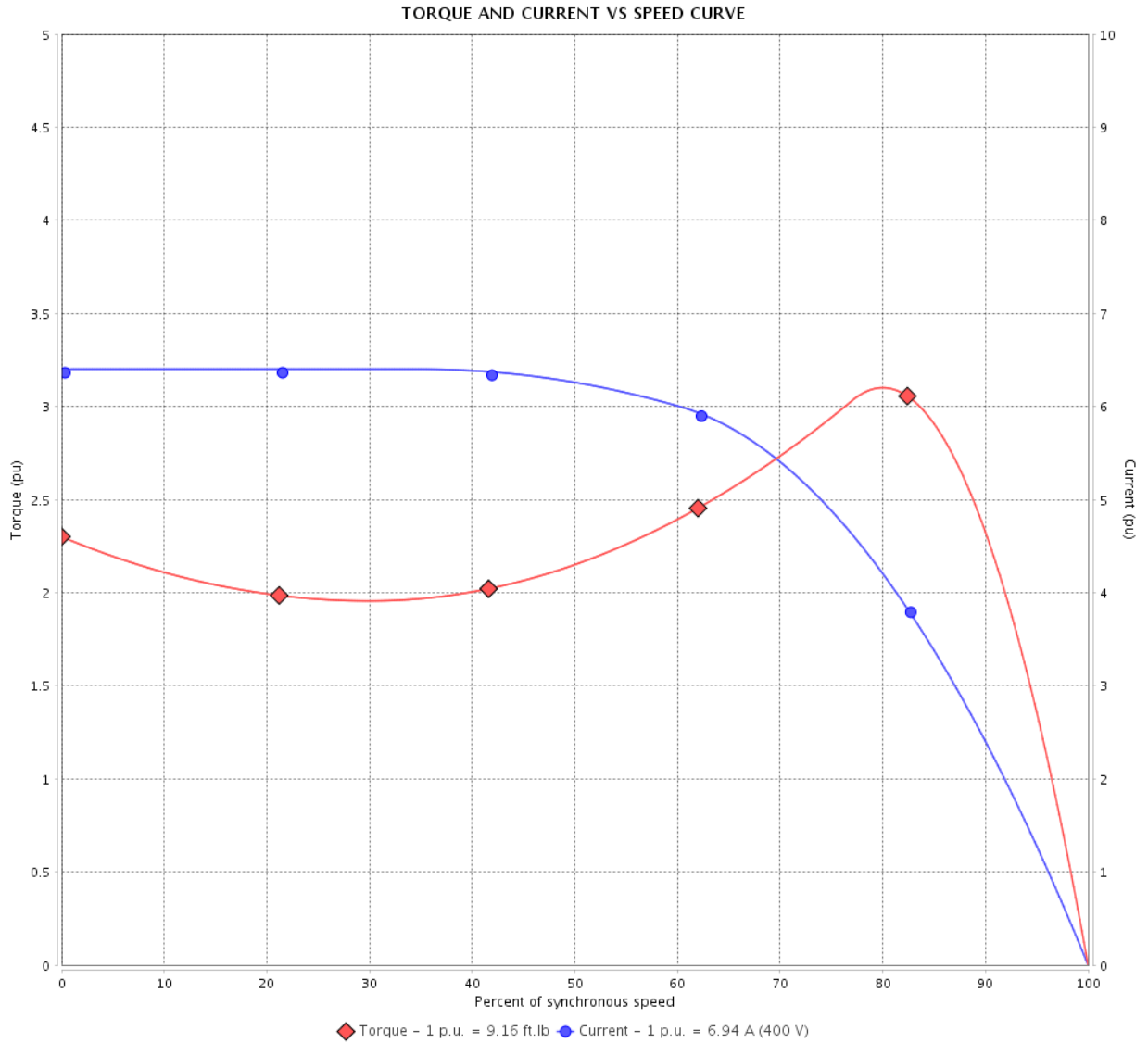
Three Phase Induction Motor - Squirrel Cage

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Performance : 400 V 50 Hz 2P IE2

Rated current : 6.94 A
 LRC : 6.4
 Rated torque : 9.16 ft.lb
 Locked rotor torque : 229 %
 Breakdown torque : 310 %
 Rated speed : 2865 rpm

Moment of inertia (J) : 0.1889 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : B

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TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



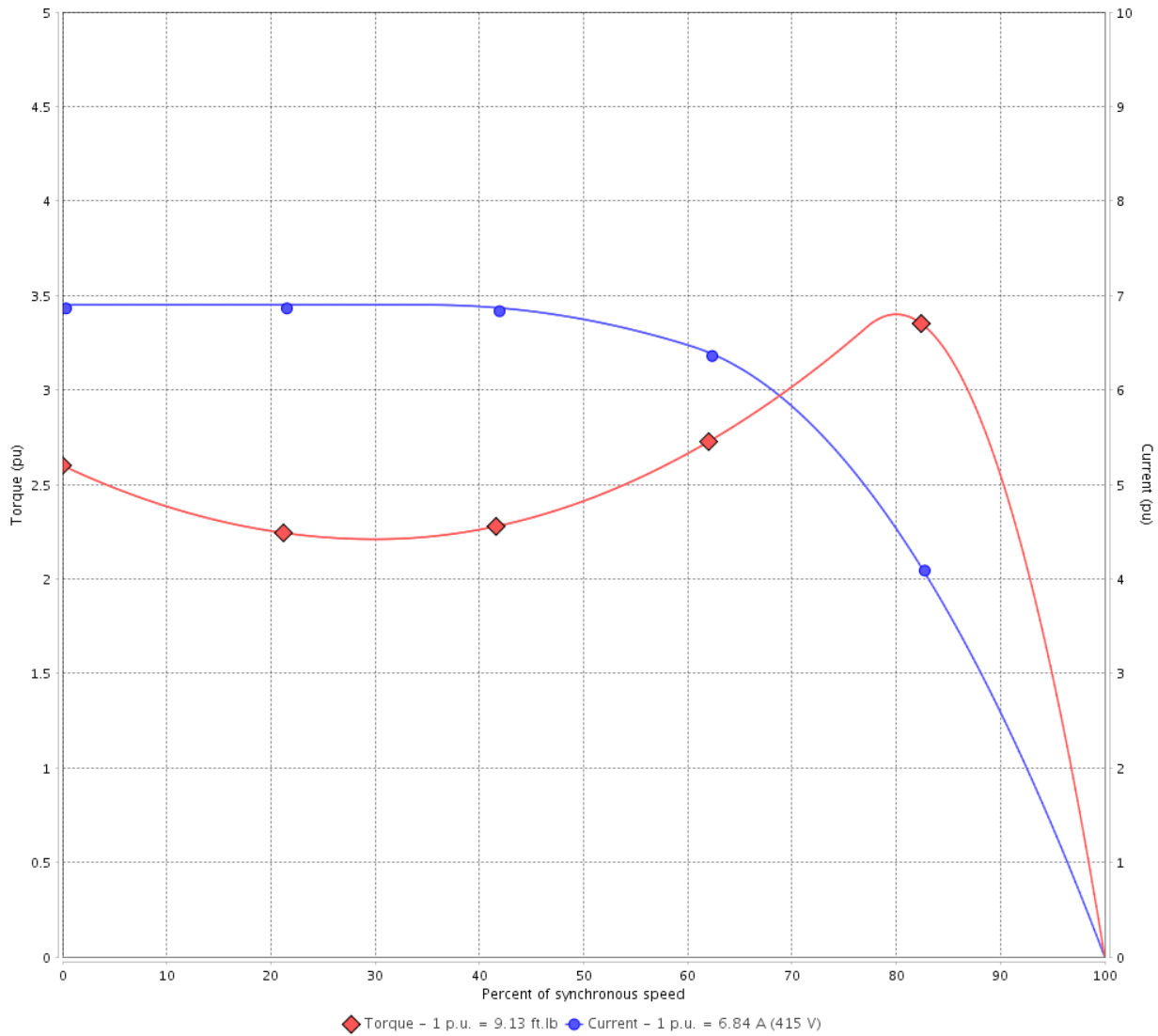
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TORQUE AND CURRENT VS SPEED CURVE



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LRC	: 6.9	Duty cycle	: Cont.(S1)
Rated torque	: 9.13 ft.lb	Insulation class	: F
Locked rotor torque	: 260 %	Service factor	: 1.00
Breakdown torque	: 340 %	Temperature rise	: 80 K
Rated speed	: 2875 rpm	Design	: B

Locked rotor time : 46s (cold) 26s (hot)

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LOAD PERFORMANCE CURVE

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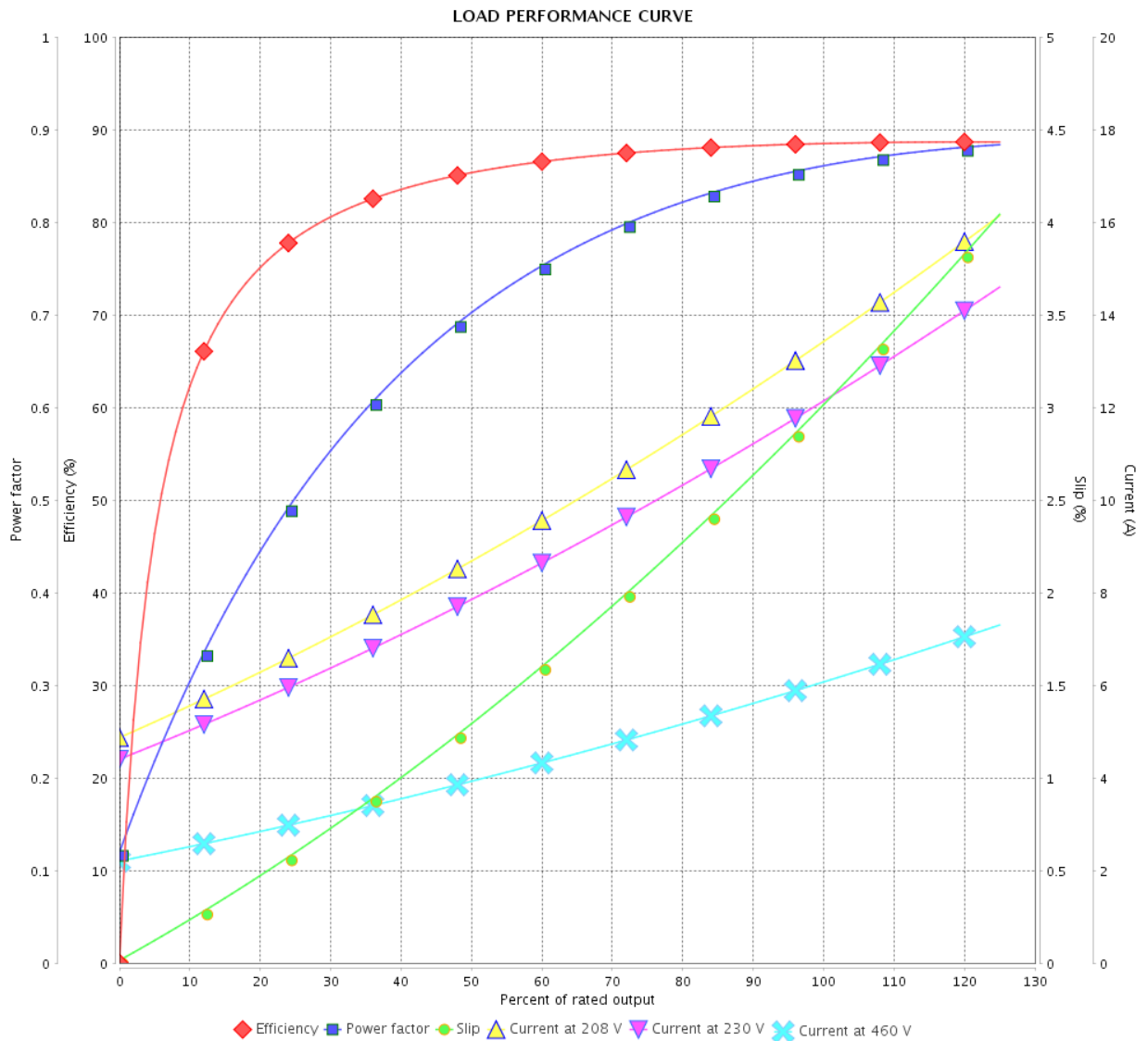


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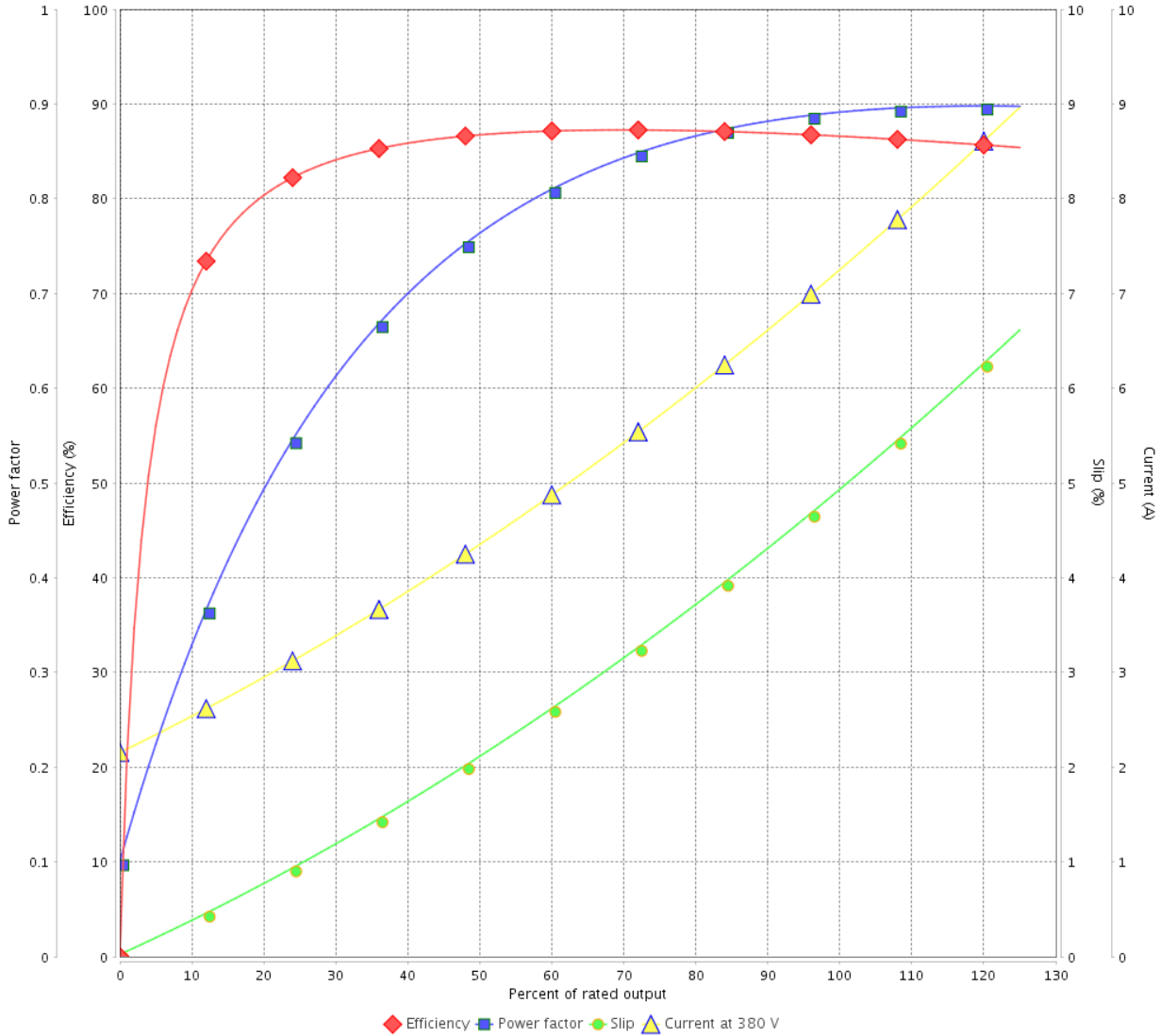
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Three Phase Induction Motor - Squirrel Cage

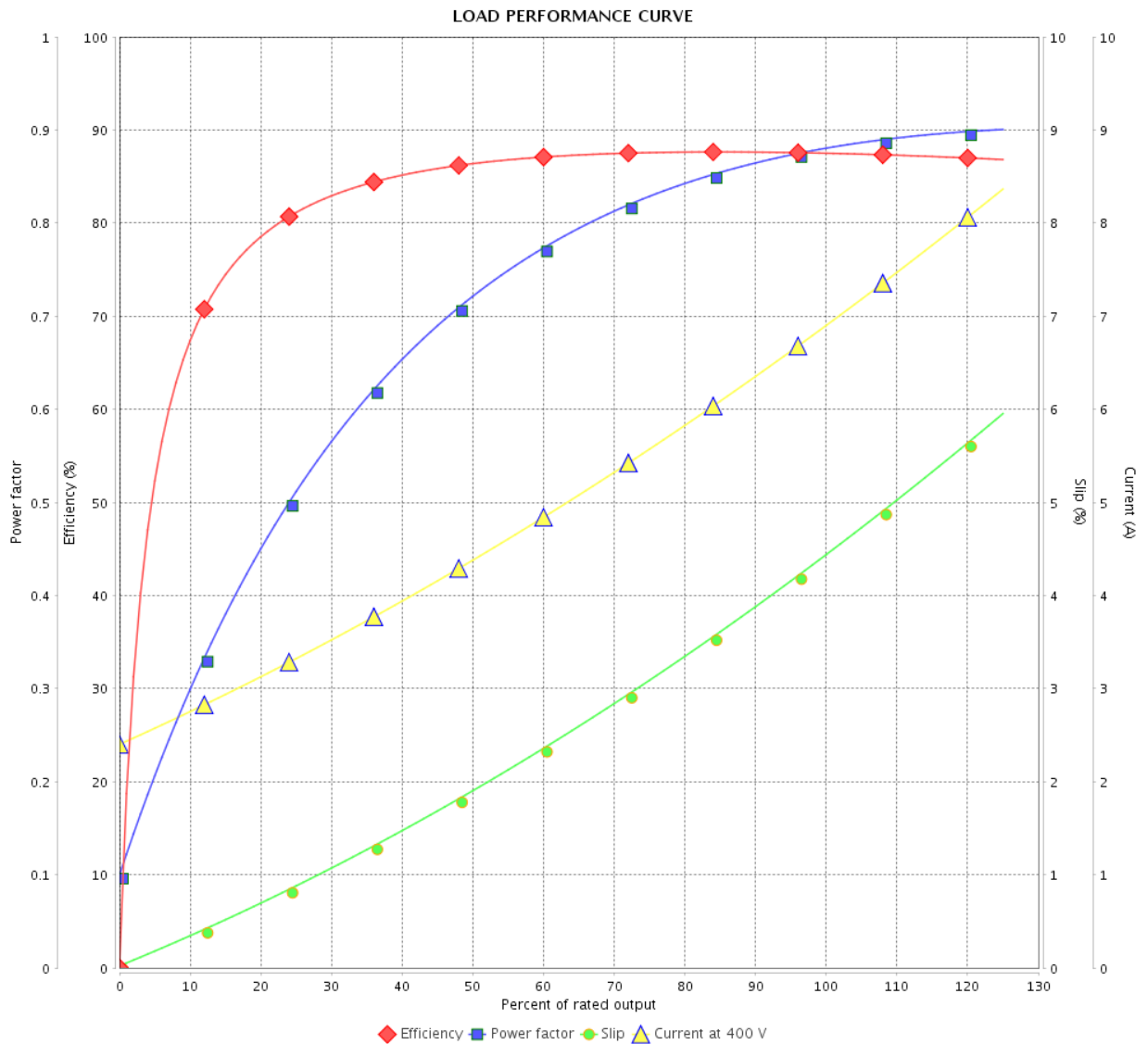


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 Insulation class : F
 Service factor : 1.00
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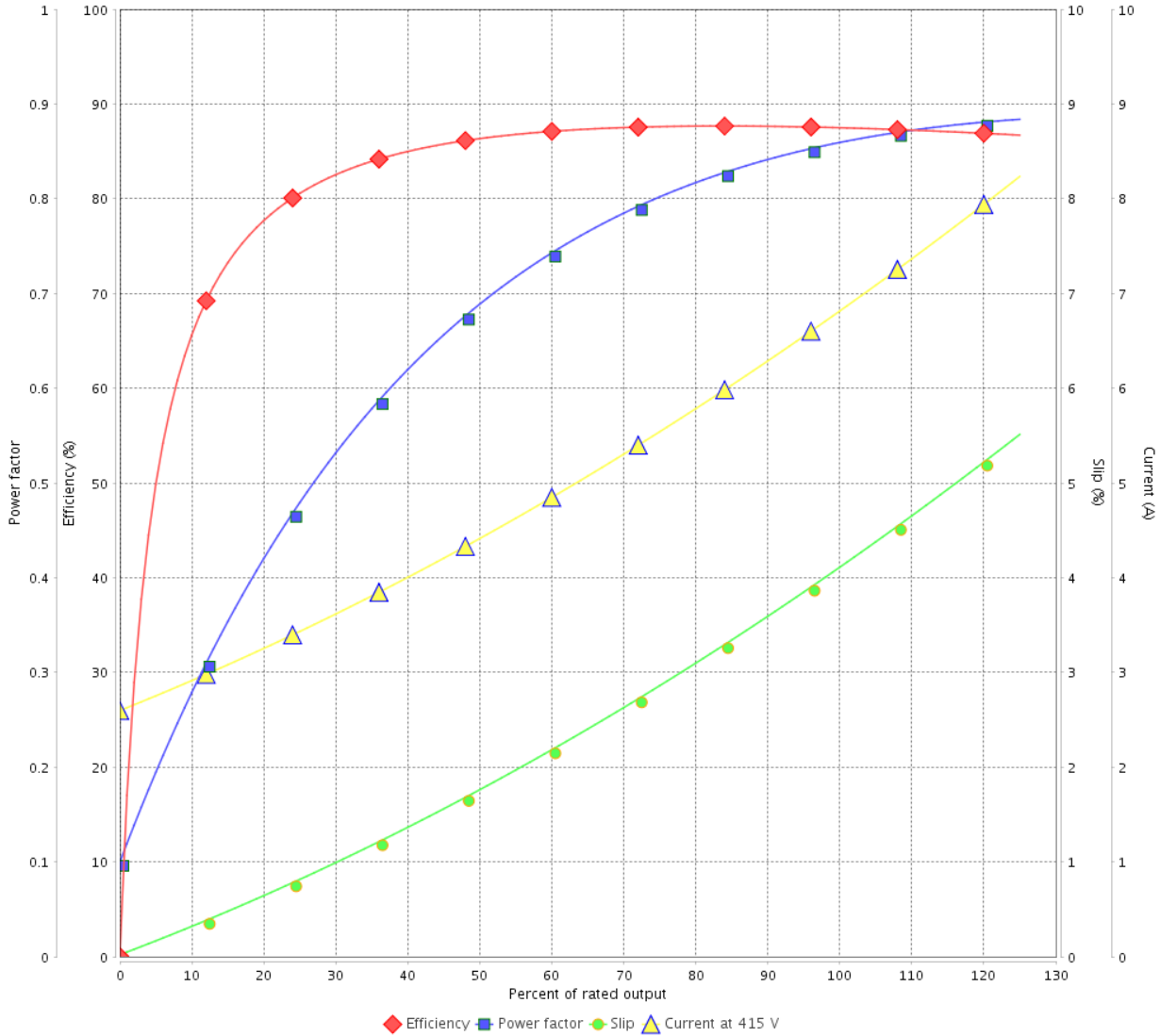
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THERMAL LIMIT CURVE



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Heating constant

Cooling constant

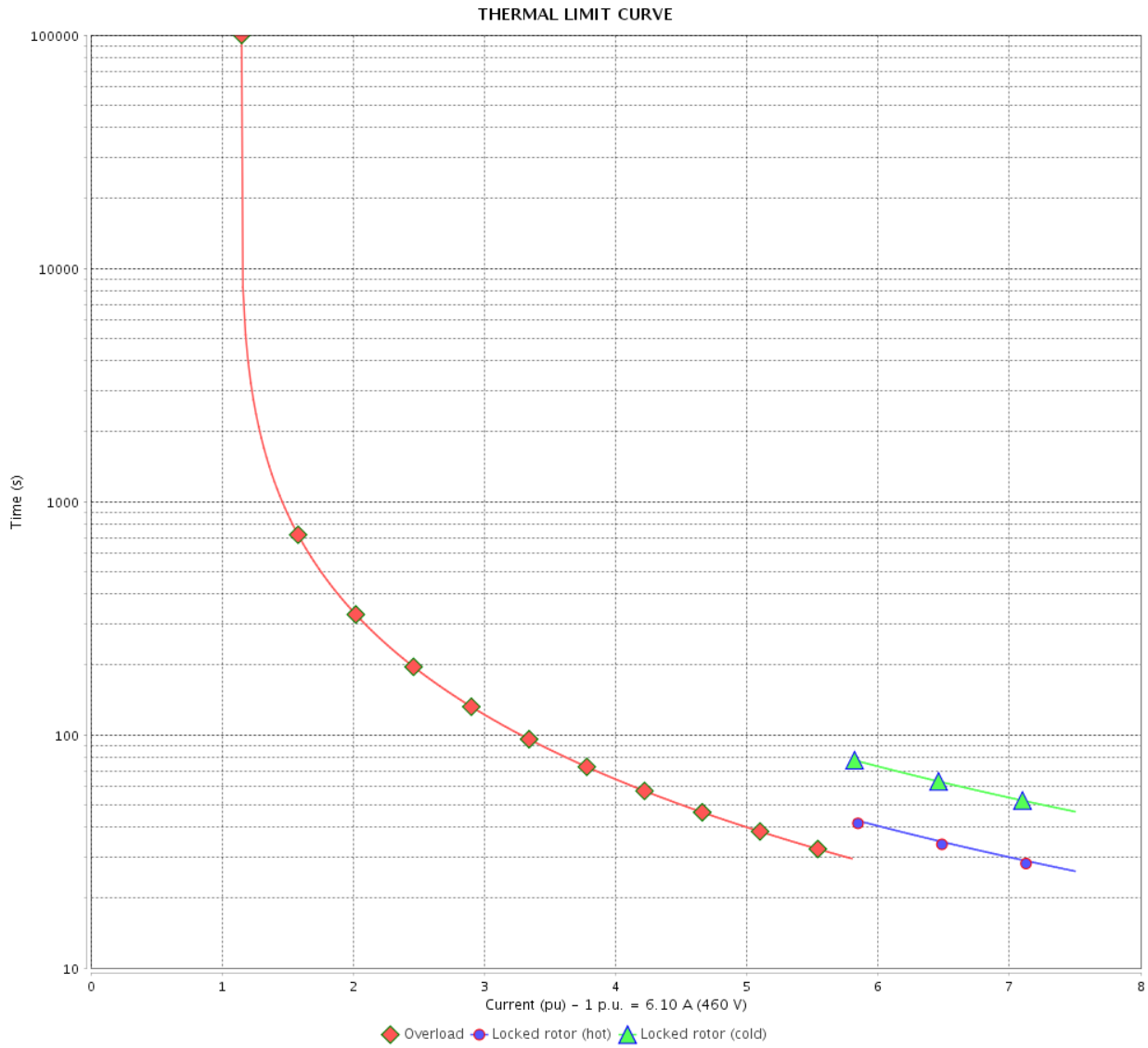
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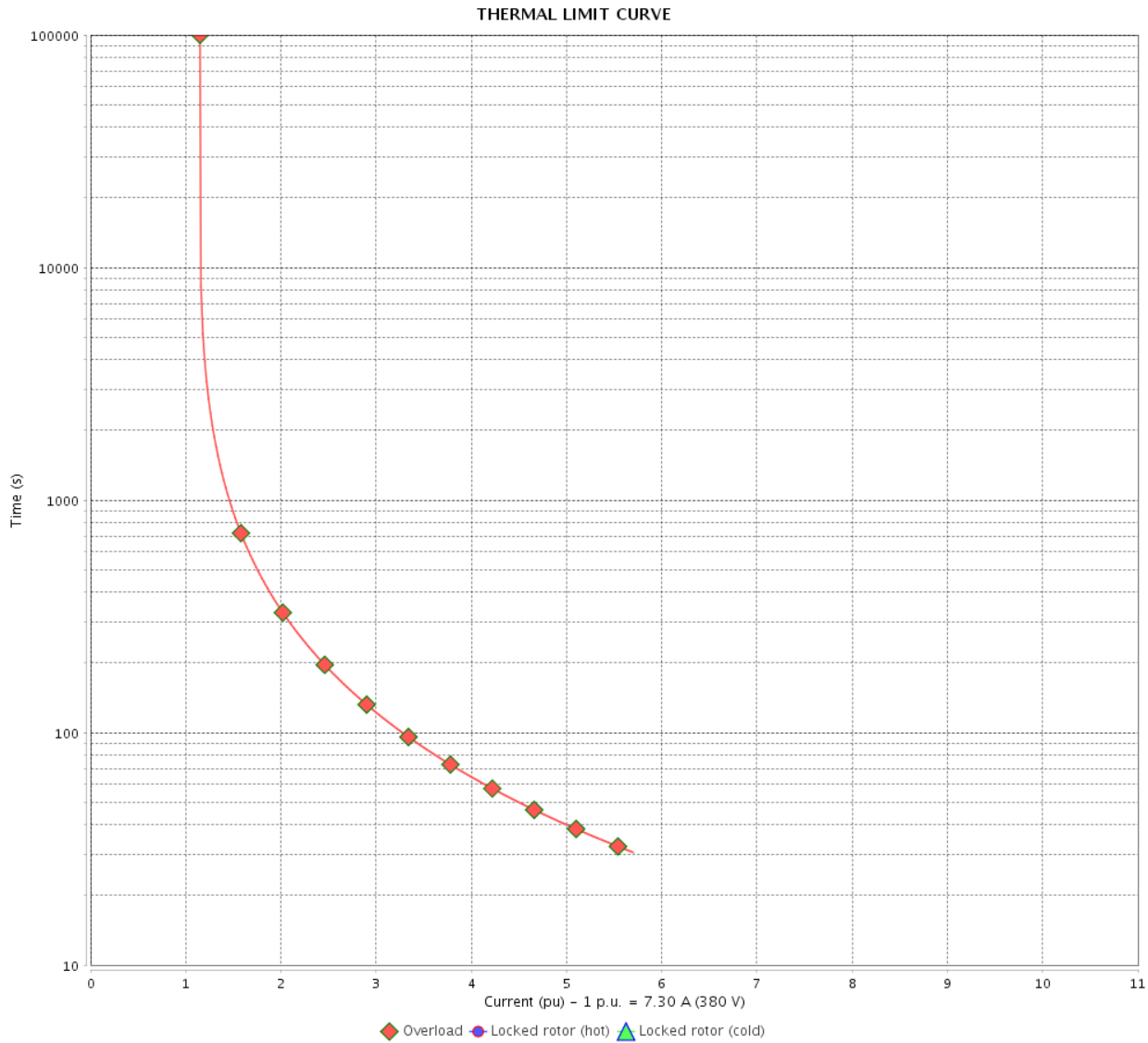
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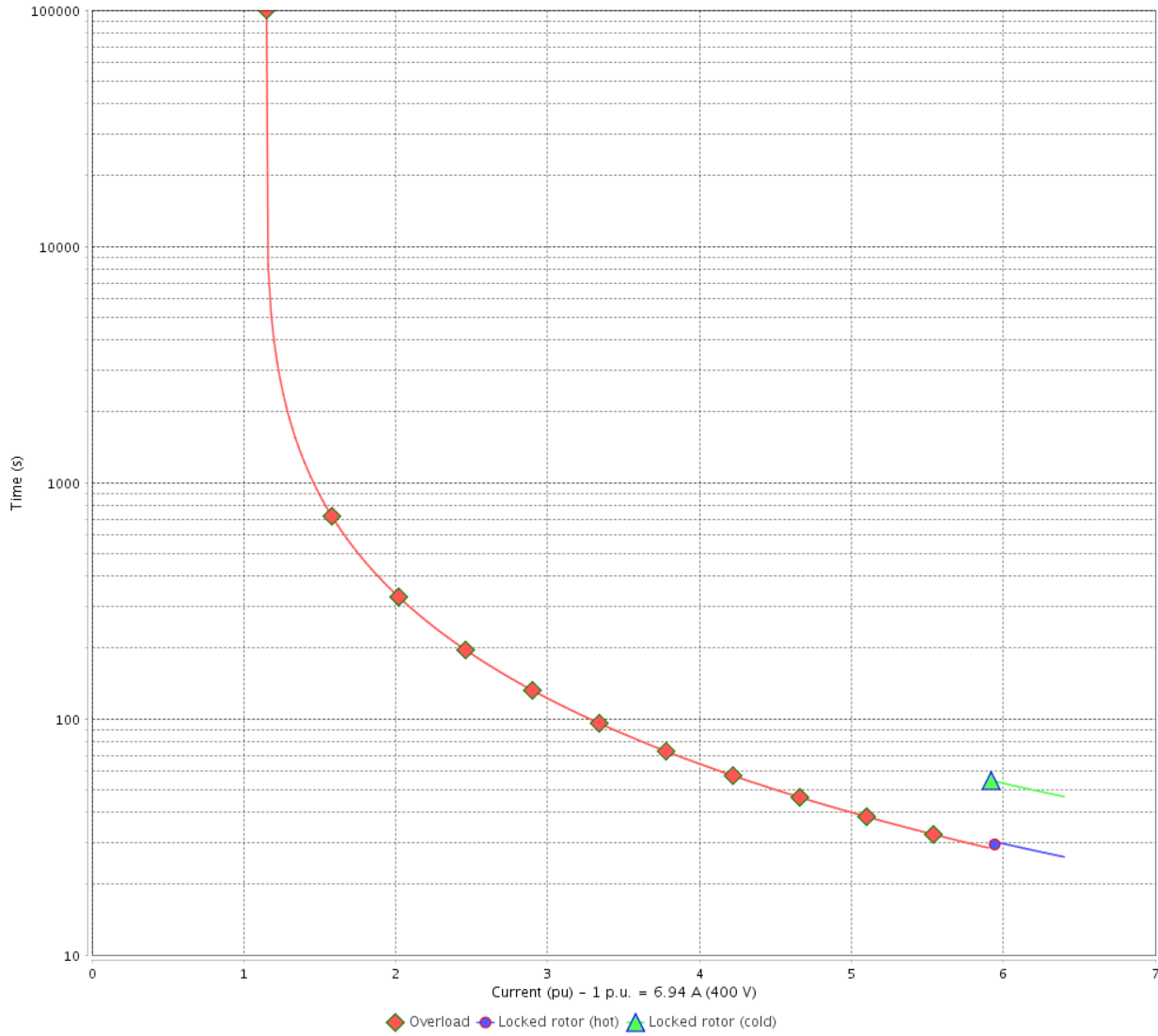
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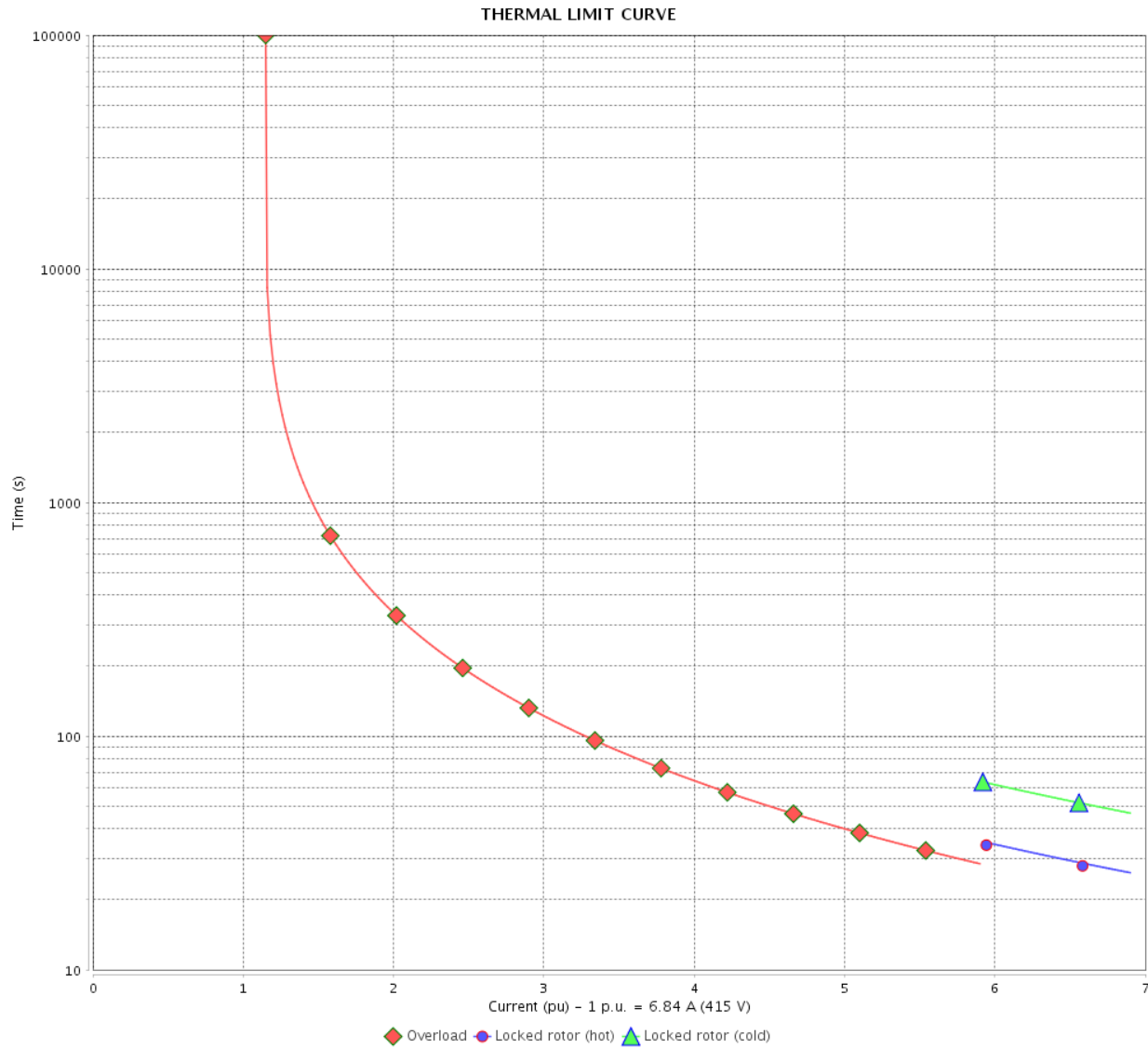
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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

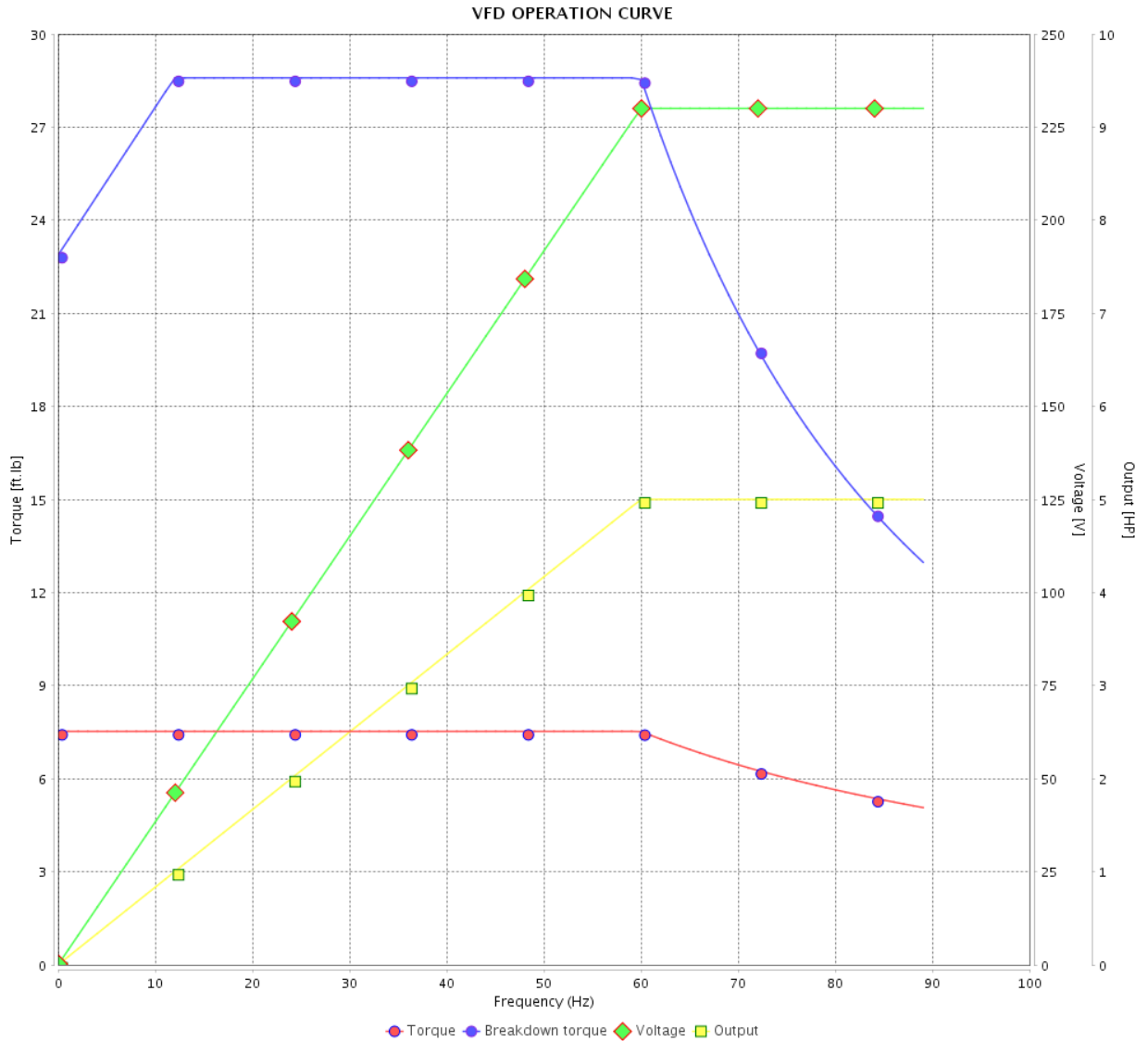


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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



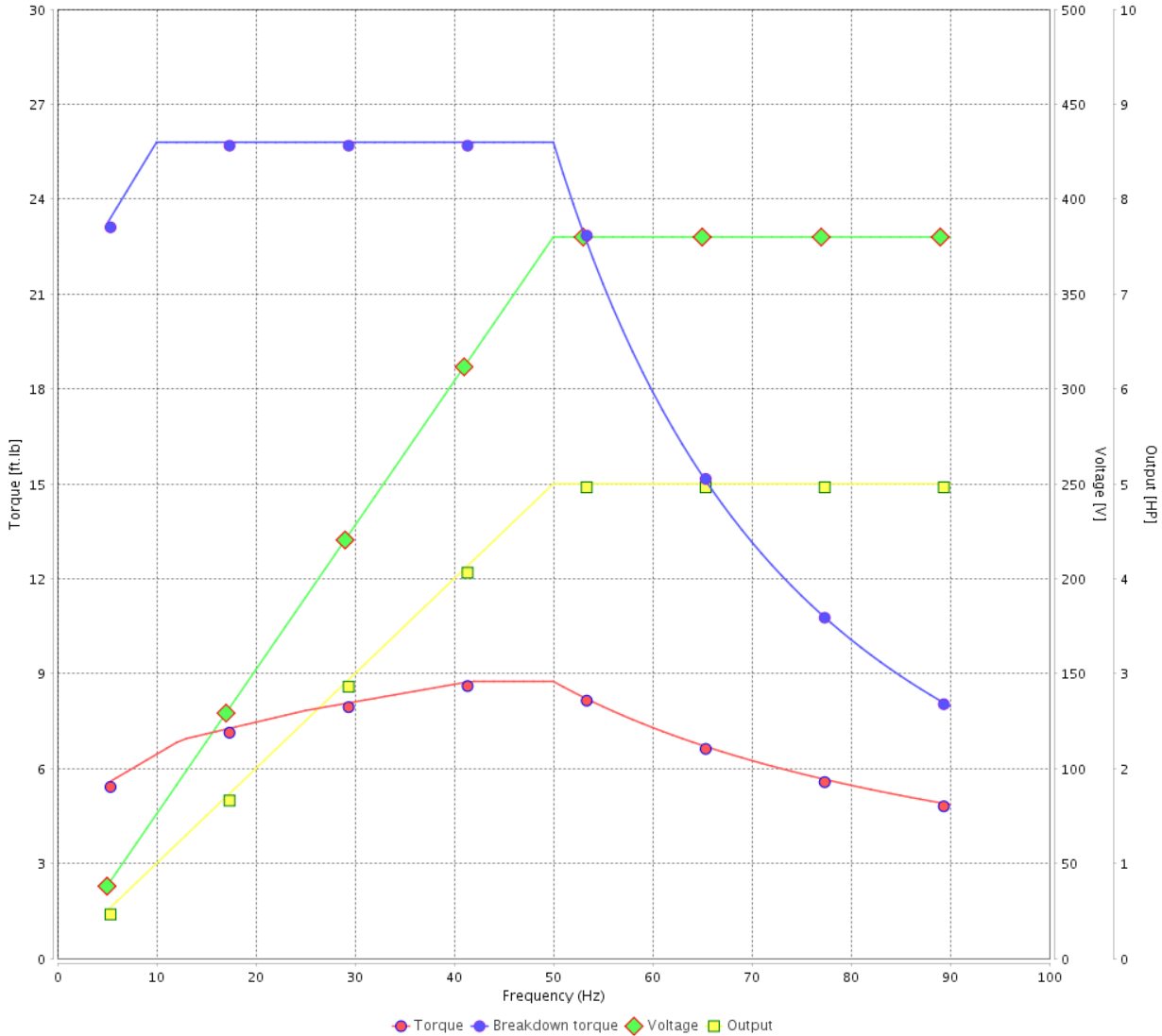
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VFD OPERATION CURVE



Performance : 380 V 50 Hz 2P IE2

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 Breakdown torque : 280 %
 Rated speed : 2850 rpm

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VFD OPERATION CURVE

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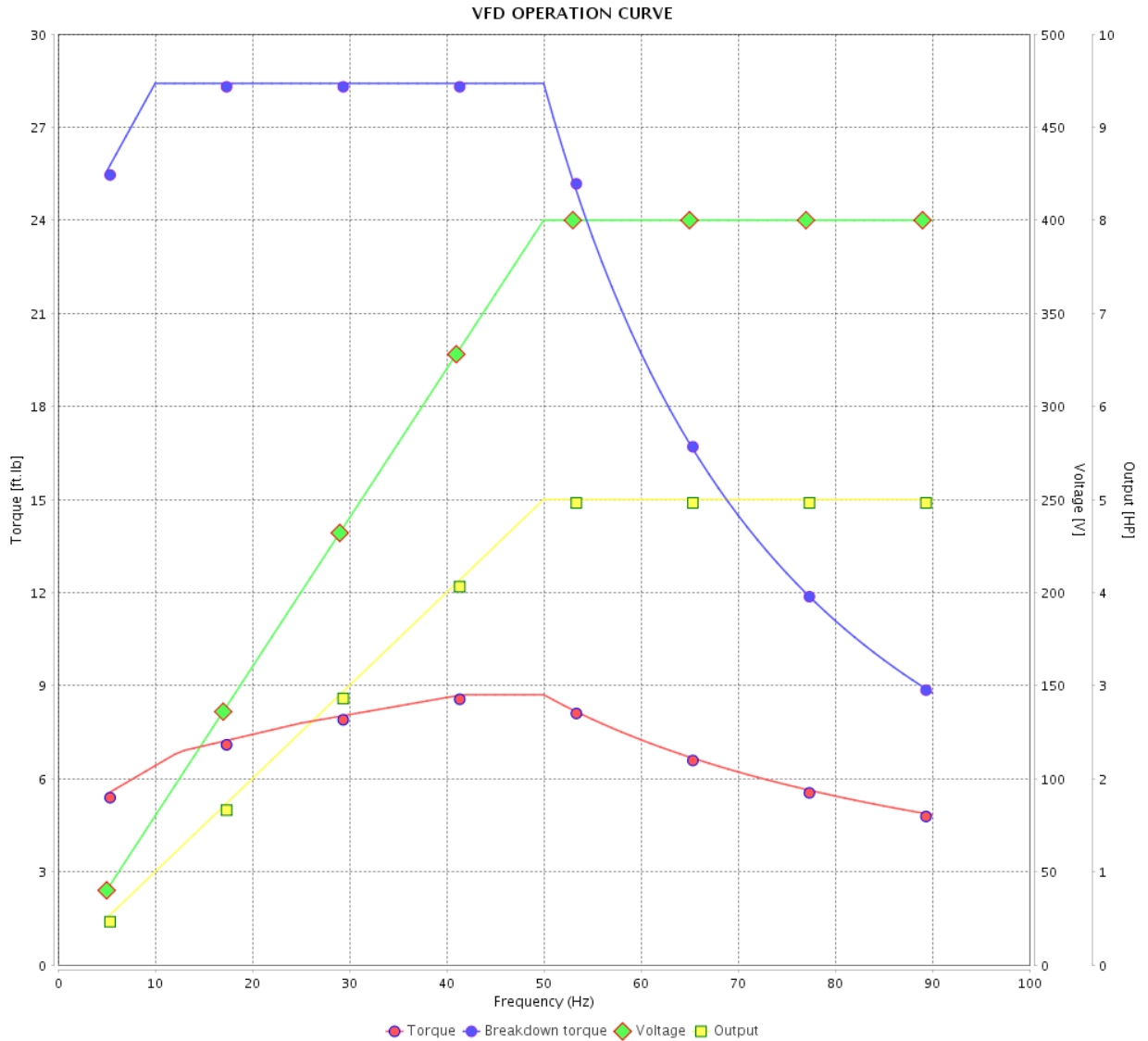


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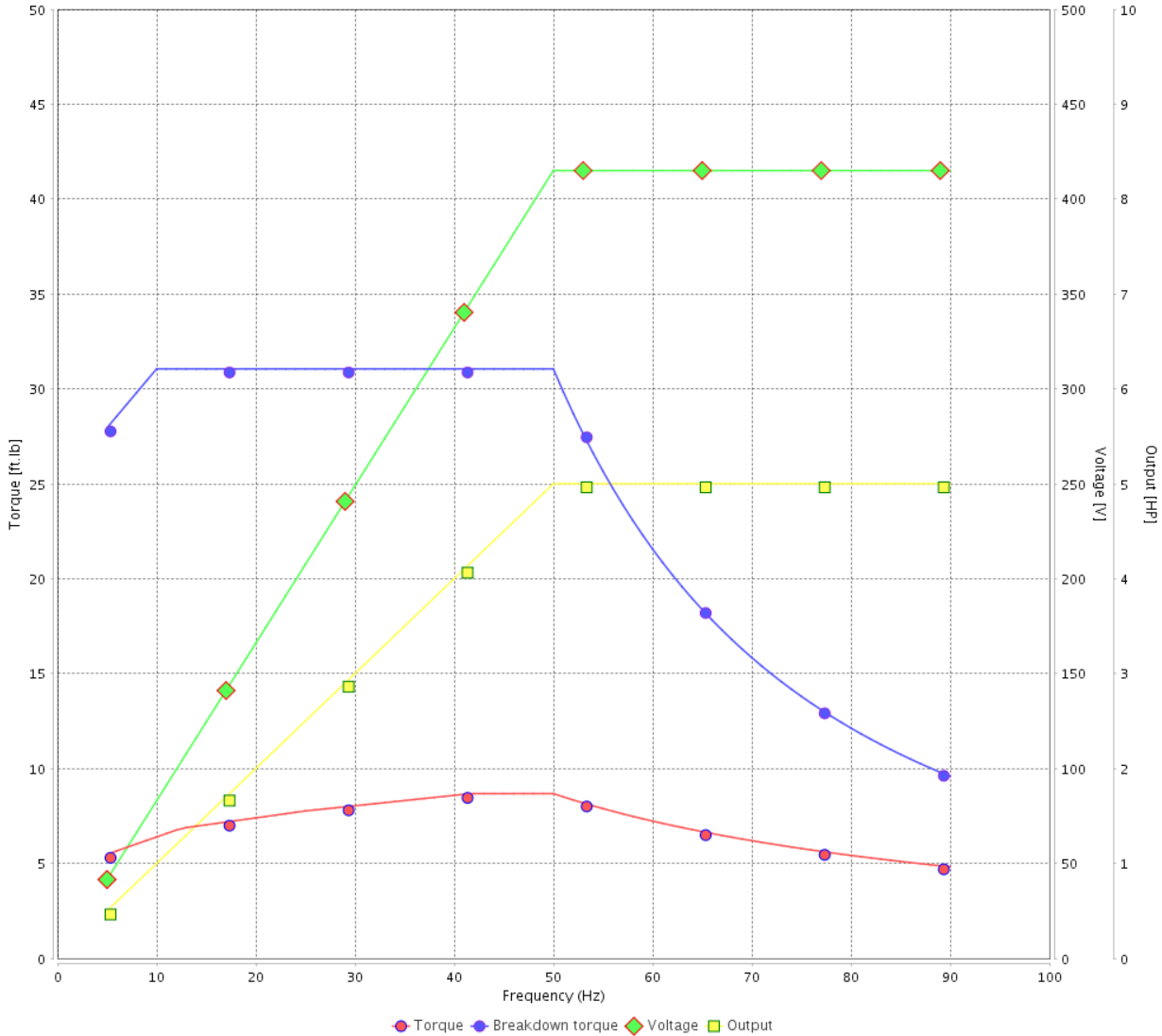
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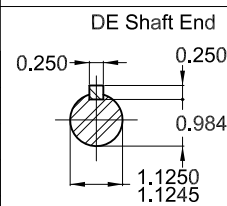
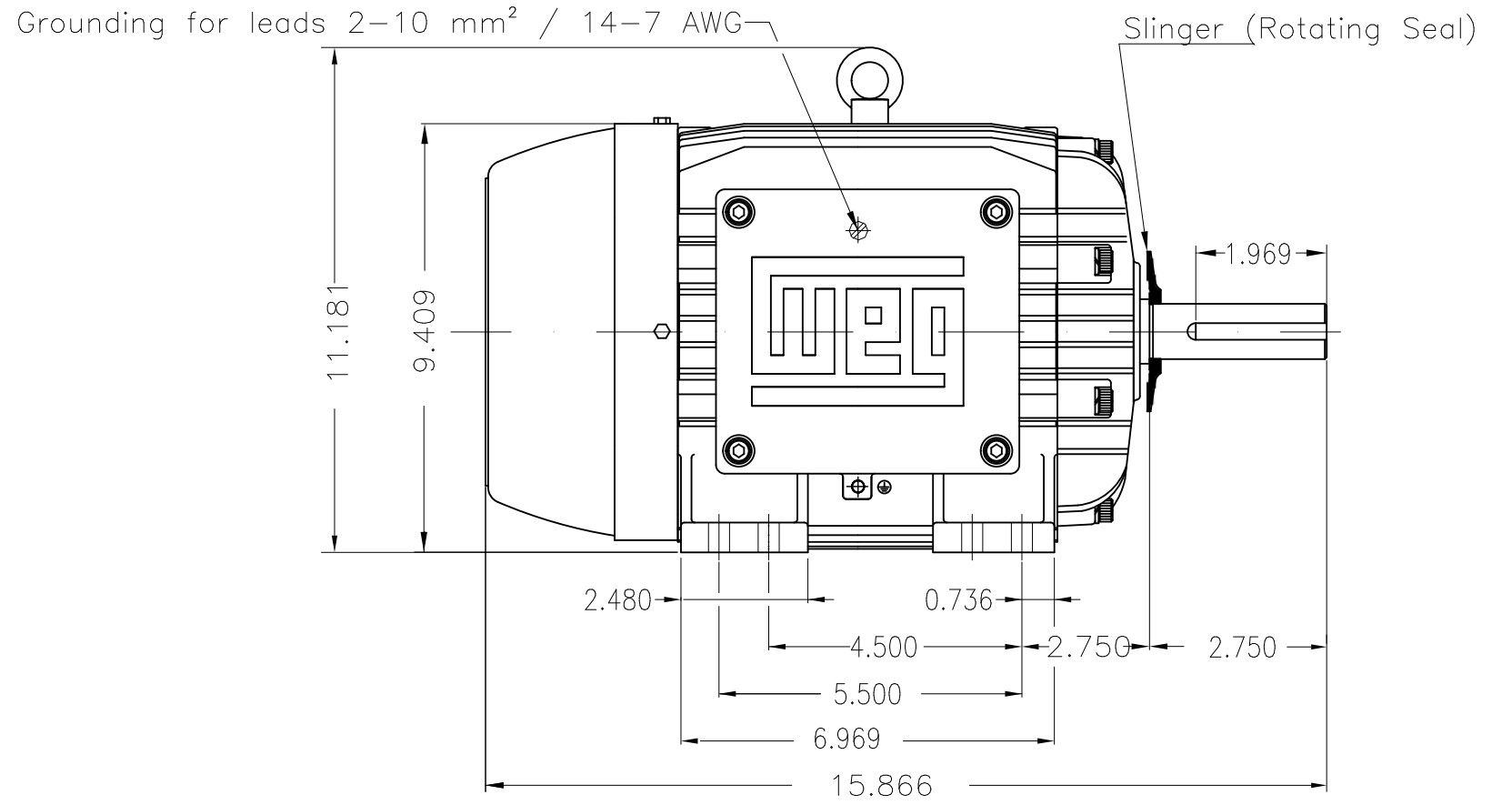
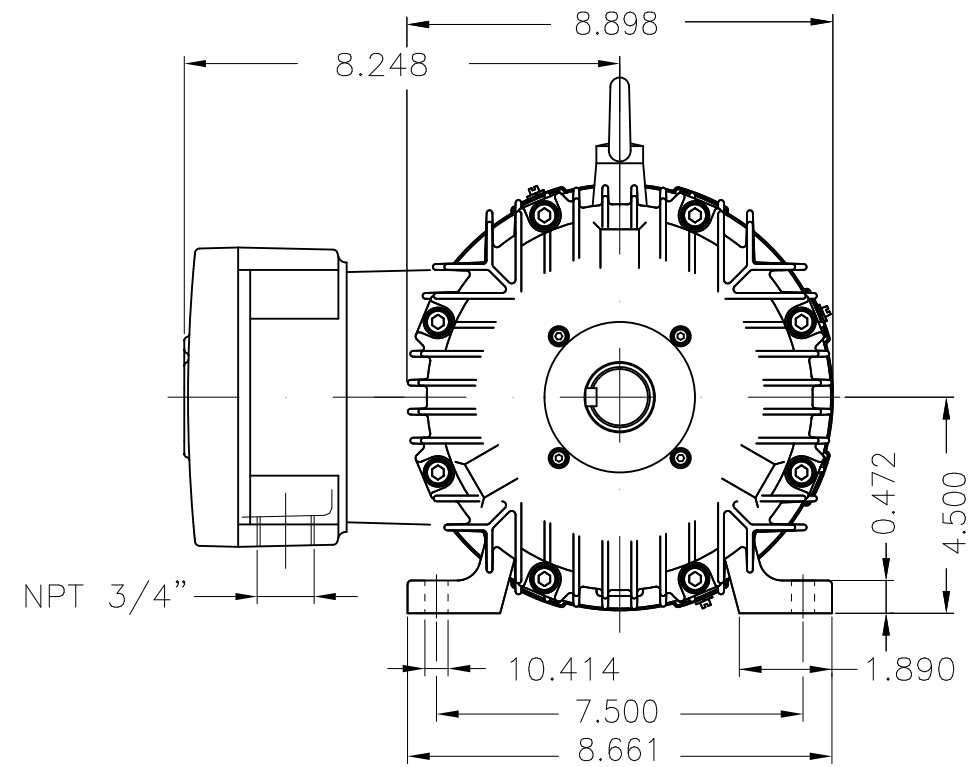


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Packing - crate
 Color RAL 5009
 Painting plan 202P
 Mounting NEMA F-1
 Mounting B3R(D)

5 HP 02 Poles 60 Hz

Dimensions in inches

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

14276270

CC029A

Inverter Duty Motor
Severe Duty


LISTED

MODEL 00536XT3E184T

PH 3 FR 182/4T

HP(kW) 5.0(3.7)

HZ 60

IP55

V 230/460

A 12.2/6.10

RPM 3490

NEMA NOM EFF 88.5%

PF 0.86

SFA 14.0/7.01

DES B

INS CL F Δ T 80 K SF 1.15

ENCL TEFC

DUTY CONT.

CODE J

ALT 1000

m.a.s.l.

AMB 40°C

USABLE @208V

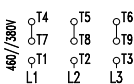
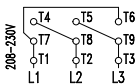
13.5 A

SF 1.15

SFA 15.5

AMB 55°C SF1.0

5.0HP 3.7kW 50Hz 380V 7.30A 2850RPM SF1.00 EFF 86.5% (IE2)



→ 6307-2RS MOBIL POLYREX EM

→ 6206-2RS

132 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.