

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :				
Product line		: NEMA Premium Efficiency Three-Phase	Product code :	14281643
			Catalog # :	00212XT3E184TC
Frame	: 182/4TC	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	: 137 lb	
Protection degree	: IP55	Moment of inertia (J)	: 0.5323 sq.ft.lb	
Design	: B			
Output [HP]	2	2	2	2
Poles	6	6	6	6
Frequency [Hz]	60	50	50	50
Rated voltage [V]	230/460	380	400	415
Rated current [A]	6.26/3.13	3.66	3.59	3.56
L. R. Amperes [A]	46.9/23.5	22.0	24.1	25.3
LRC [A]	7.5x(Code L)	6.0x(Code J)	6.7x(Code K)	7.1x(Code L)
No load current [A]	4.00/2.00	1.80	1.95	2.05
Rated speed [RPM]	1165	955	960	965
Slip [%]	2.92	4.50	4.00	3.50
Rated torque [ft.lb]	9.02	11.0	10.9	10.9
Locked rotor torque [%]	300	220	260	300
Breakdown torque [%]	330	240	270	300
Service factor	1.15	1.00	1.00	1.00
Temperature rise	80 K	80 K	80 K	80 K
Locked rotor time	82s (cold) 46s (hot)	95s (cold) 53s (hot)	84s (cold) 47s (hot)	75s (cold) 42s (hot)
Noise level ²	52.0 dB(A)	49.0 dB(A)	49.0 dB(A)	49.0 dB(A)
Efficiency (%)	25%			
	50%	84.5	87.0	86.5
	75%	86.5	87.5	87.5
	100%	88.5	86.5	87.5
Power Factor	25%			
	50%	0.47	0.53	0.49
	75%	0.58	0.65	0.62
	100%	0.68	0.72	0.69
Bearing type	: <u>Drive end</u> 6307 2RS <u>Non drive end</u> 6206 2RS	Foundation loads		
Sealing	: Oil Seal Lip Seal	Max. traction	: 140 lb	
Lubrication interval	: - -	Max. compression	: 277 lb	
Lubricant amount	: - -			
Lubricant type	: Mobil Polyrex EM			
Notes USABLE @208V 6.92A SF 1.15 SFA 7.96A				
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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Customer : _____

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



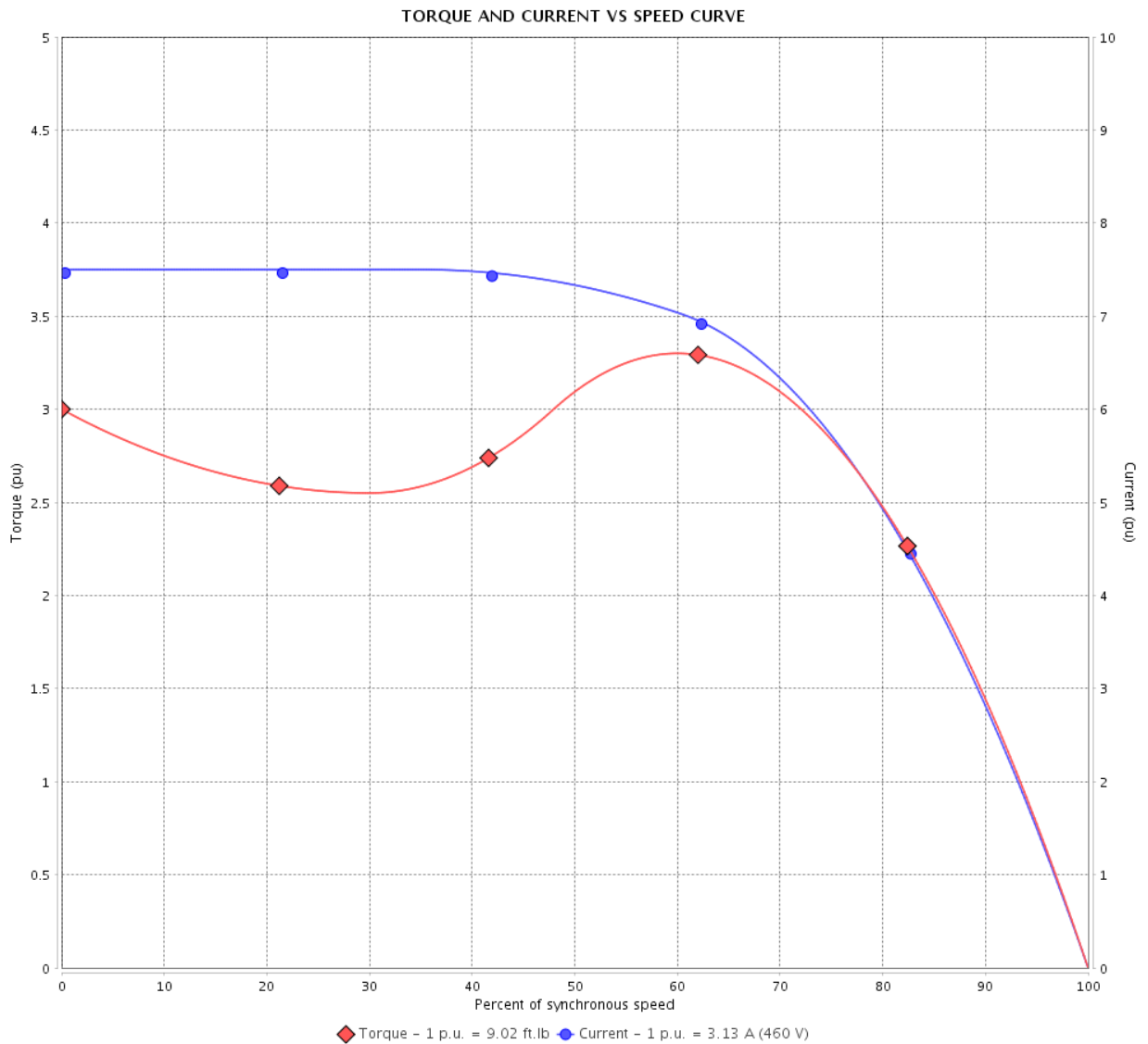
Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 14281643

Catalog # : 00212XT3E184TC



Performance : 230/460 V 60 Hz 6P

Rated current : 6.26/3.13 A
 LRC : 7.5
 Rated torque : 9.02 ft.lb
 Locked rotor torque : 300 %
 Breakdown torque : 330 %
 Rated speed : 1165 rpm

Moment of inertia (J) : 0.5323 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



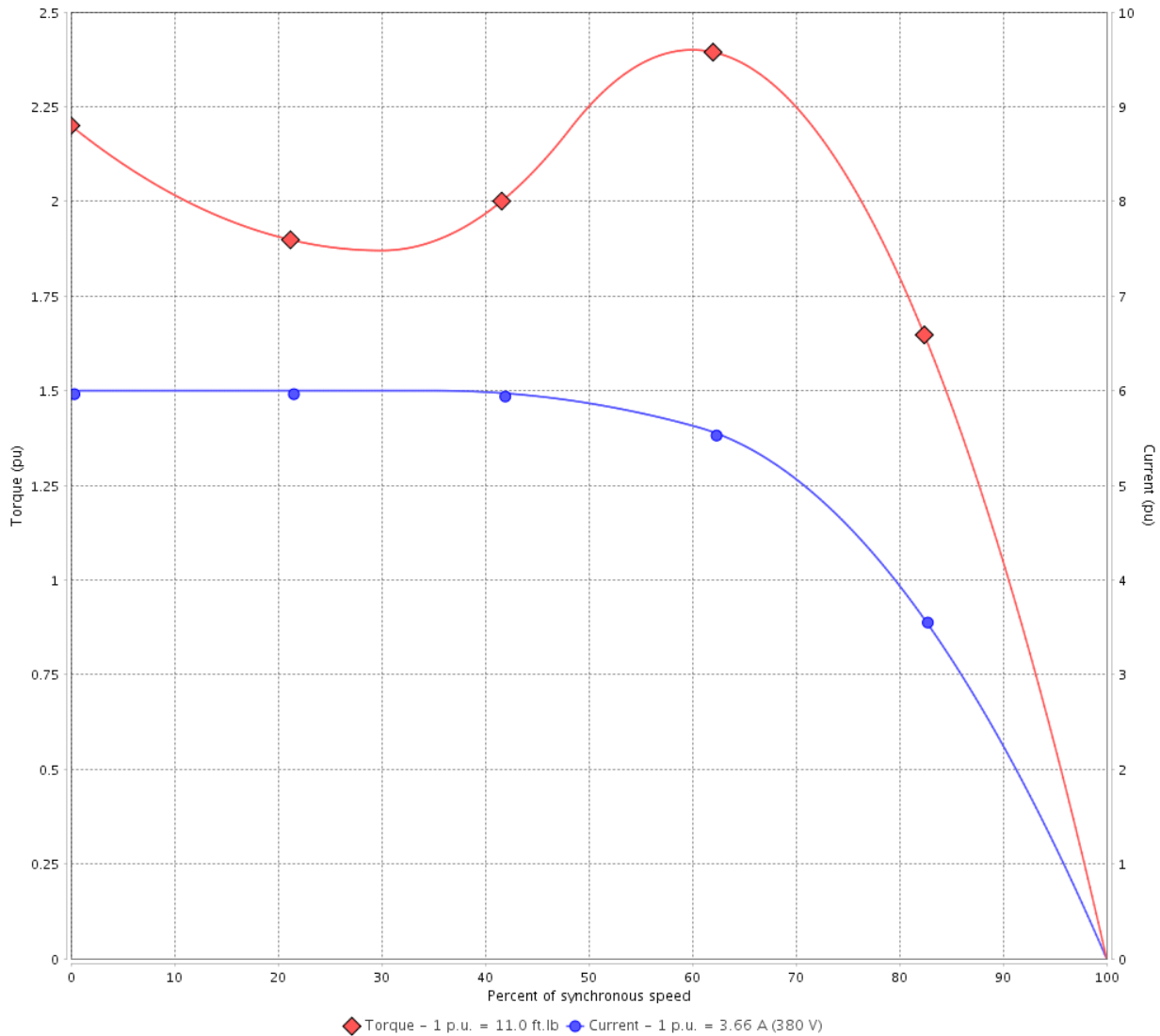
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 14281643

Catalog # : 00212XT3E184TC

TORQUE AND CURRENT VS SPEED CURVE



Performance : 380 V 50 Hz 6P IE4

Rated current	: 3.66 A	Moment of inertia (J)	: 0.5323 sq.ft.lb
LRC	: 6.0	Duty cycle	: Cont.(S1)
Rated torque	: 11.0 ft.lb	Insulation class	: F
Locked rotor torque	: 220 %	Service factor	: 1.00
Breakdown torque	: 240 %	Temperature rise	: 80 K
Rated speed	: 955 rpm	Design	: B

Locked rotor time : 95s (cold) 53s (hot)

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TORQUE AND CURRENT VS SPEED CURVE



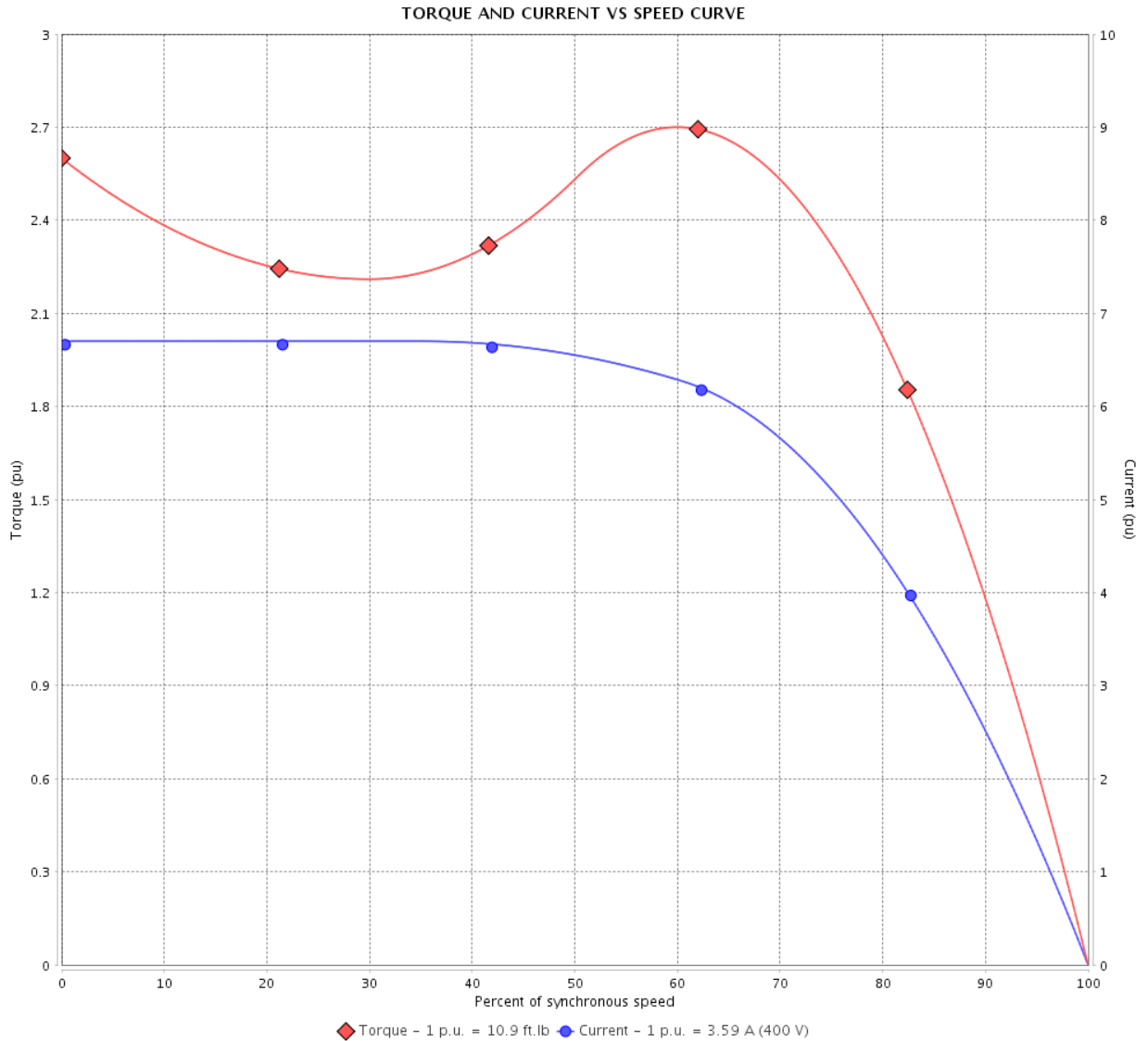
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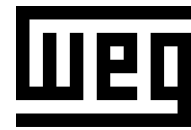
Performance : 400 V 50 Hz 6P IE4

Rated current	: 3.59 A	Moment of inertia (J)	: 0.5323 sq.ft.lb
LRC	: 6.7	Duty cycle	: Cont.(S1)
Rated torque	: 10.9 ft.lb	Insulation class	: F
Locked rotor torque	: 260 %	Service factor	: 1.00
Breakdown torque	: 270 %	Temperature rise	: 80 K
Rated speed	: 960 rpm	Design	: B

Locked rotor time : 84s (cold) 47s (hot)

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TORQUE AND CURRENT VS SPEED CURVE



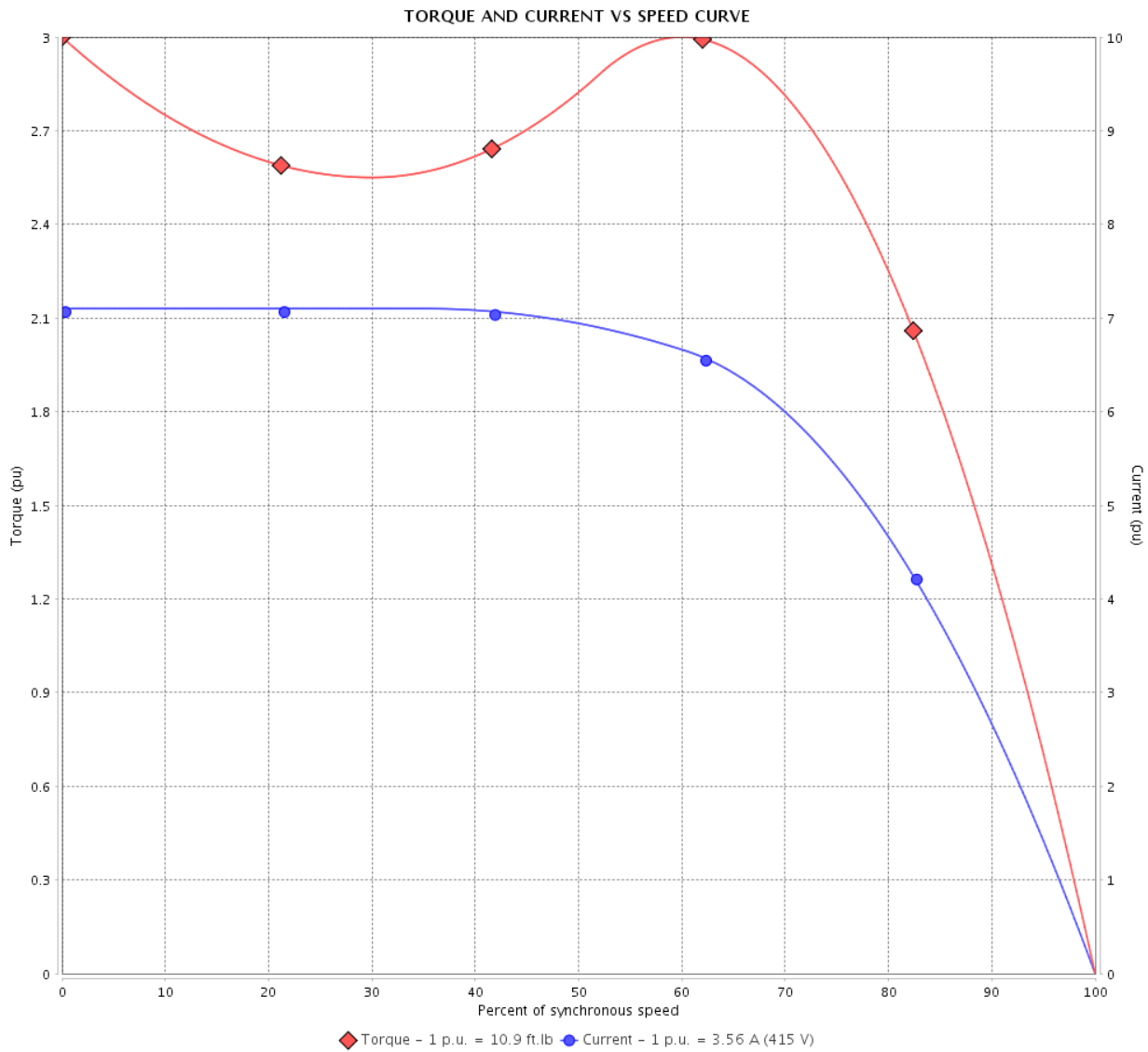
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Performance : 415 V 50 Hz 6P IE4

Rated current	: 3.56 A	Moment of inertia (J)	: 0.5323 sq.ft.lb
LRC	: 7.1	Duty cycle	: Cont.(S1)
Rated torque	: 10.9 ft.lb	Insulation class	: F
Locked rotor torque	: 300 %	Service factor	: 1.00
Breakdown torque	: 300 %	Temperature rise	: 80 K
Rated speed	: 965 rpm	Design	: B

Locked rotor time : 75s (cold) 42s (hot)

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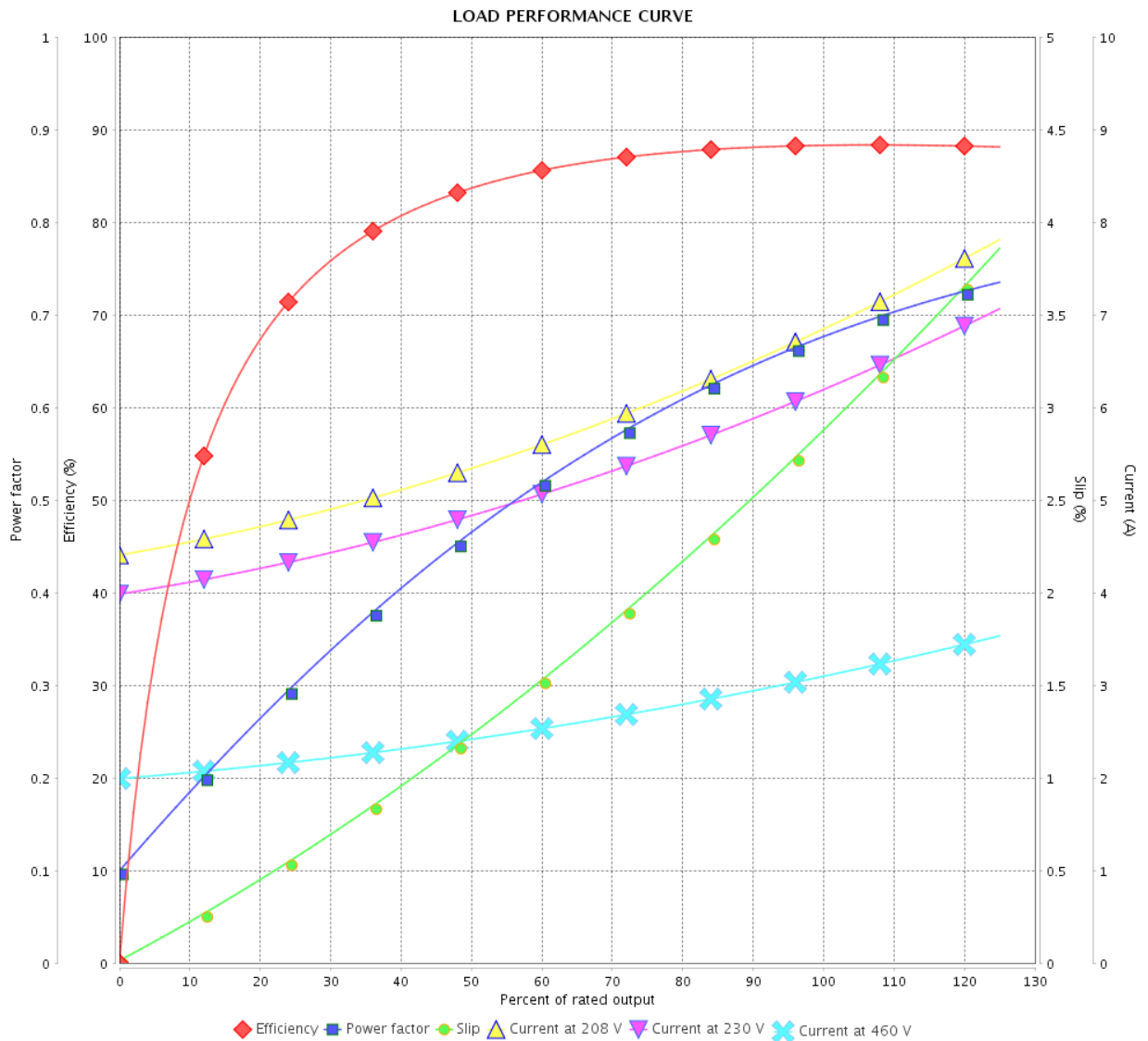


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Performance : 230/460 V 60 Hz 6P

Rated current : 6.26/3.13 A
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 Rated torque : 9.02 ft.lb
 Locked rotor torque : 300 %
 Breakdown torque : 330 %
 Rated speed : 1165 rpm

Moment of inertia (J) : 0.5323 sq.ft.lb
 Duty cycle : Cont.(S1)
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 Service factor : 1.15
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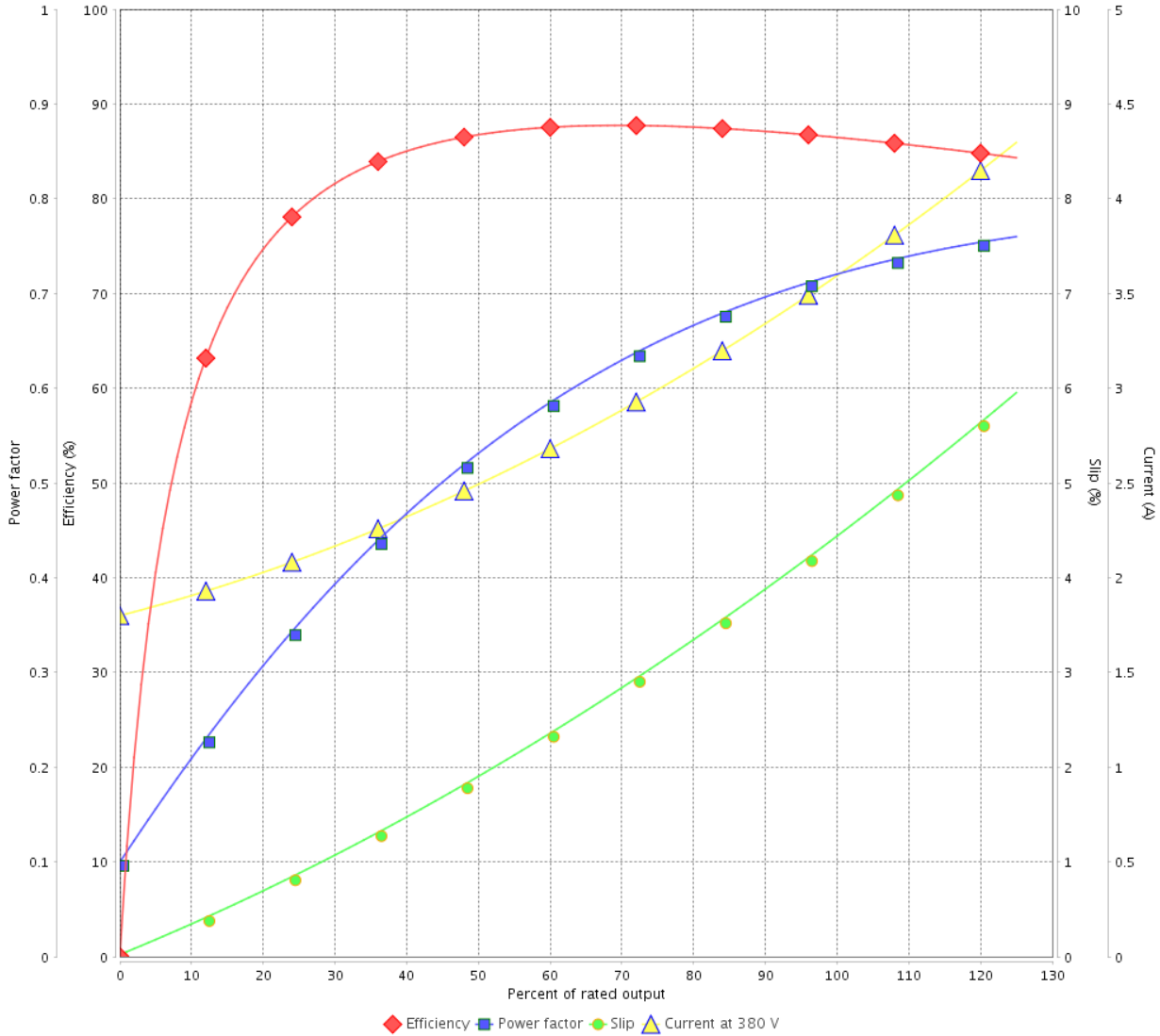
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Performance : 380 V 50 Hz 6P IE4

Rated current : 3.66 A
 LRC : 6.0
 Rated torque : 11.0 ft.lb
 Locked rotor torque : 220 %
 Breakdown torque : 240 %
 Rated speed : 955 rpm

Moment of inertia (J) : 0.5323 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : B

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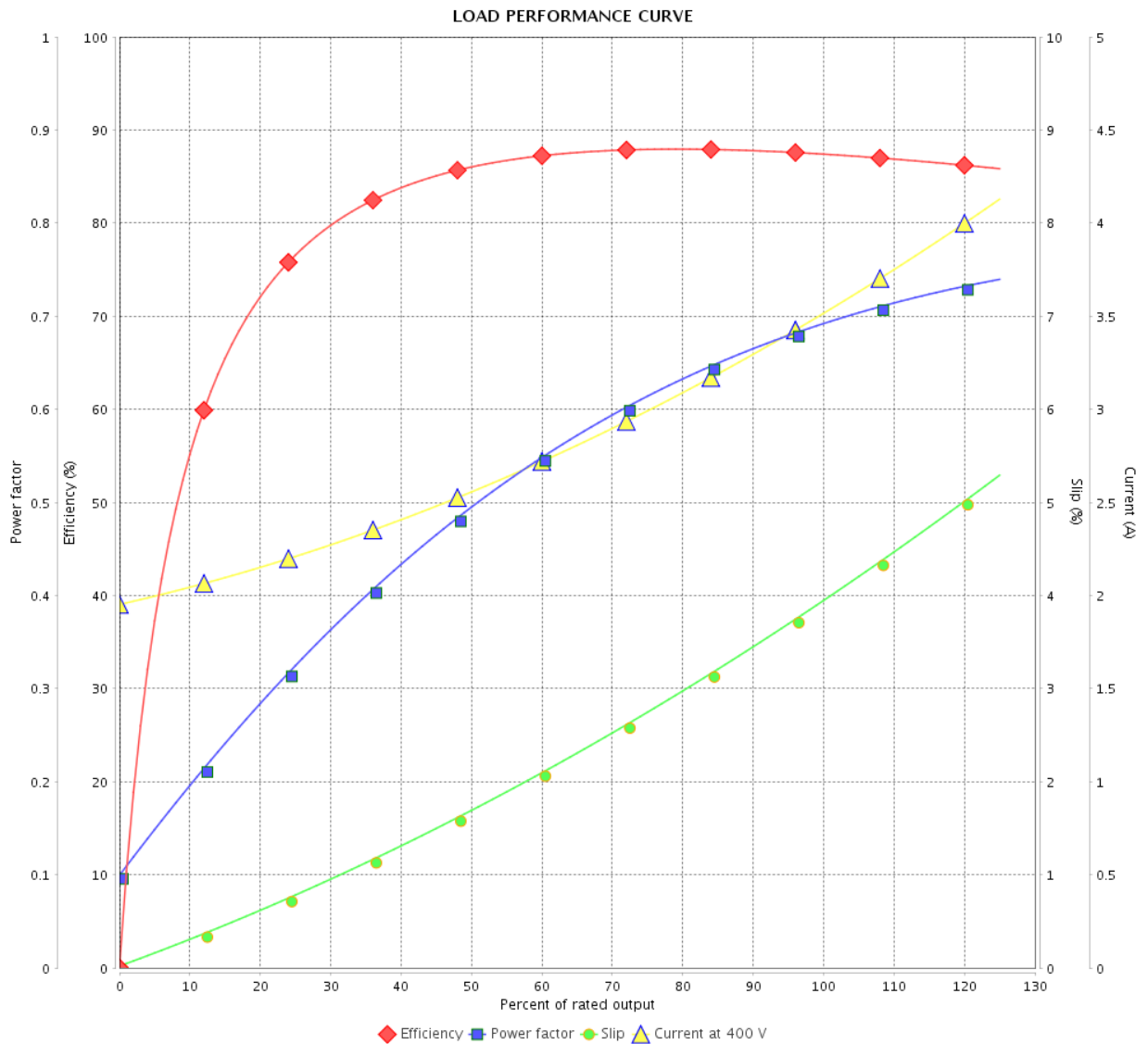


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 Breakdown torque : 270 %
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 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : B

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Three Phase Induction Motor - Squirrel Cage



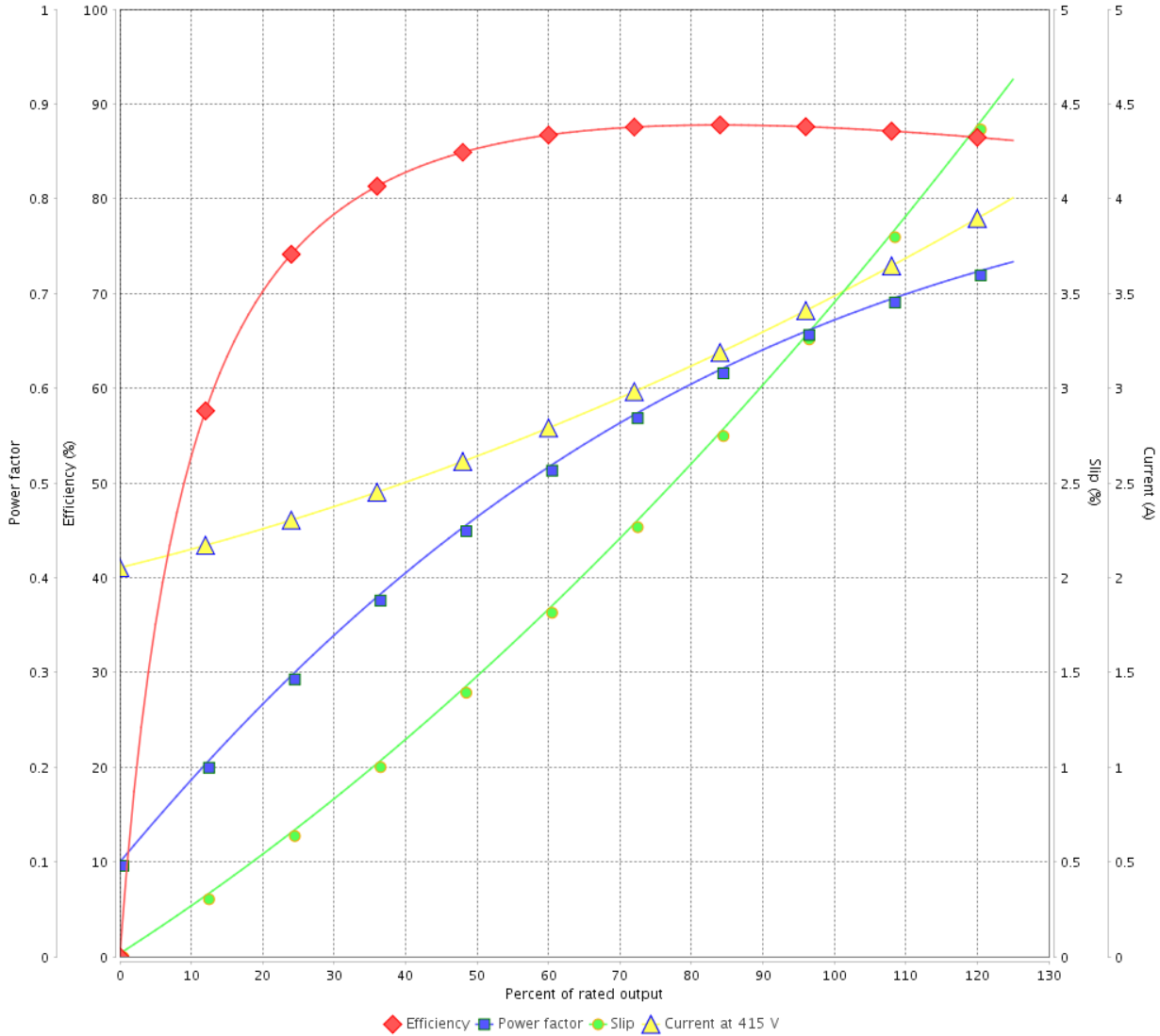
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THERMAL LIMIT CURVE



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Rated speed : 1165 rpm	Design : B

Heating constant

Cooling constant

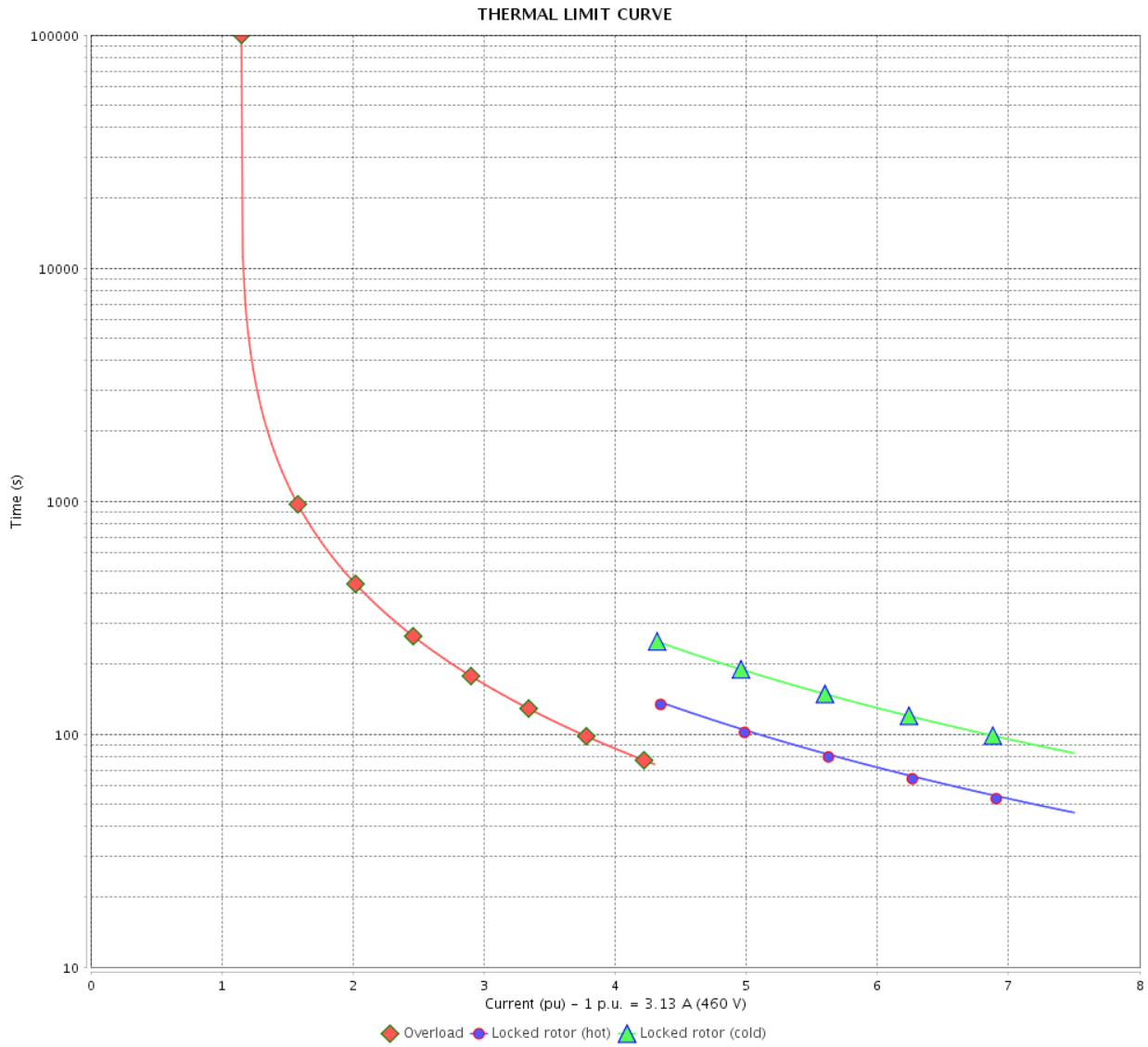
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Rated torque : 11.0 ft.lb	Insulation class : F
Locked rotor torque : 220 %	Service factor : 1.00
Breakdown torque : 240 %	Temperature rise : 80 K
Rated speed : 955 rpm	Design : B

Heating constant

Cooling constant

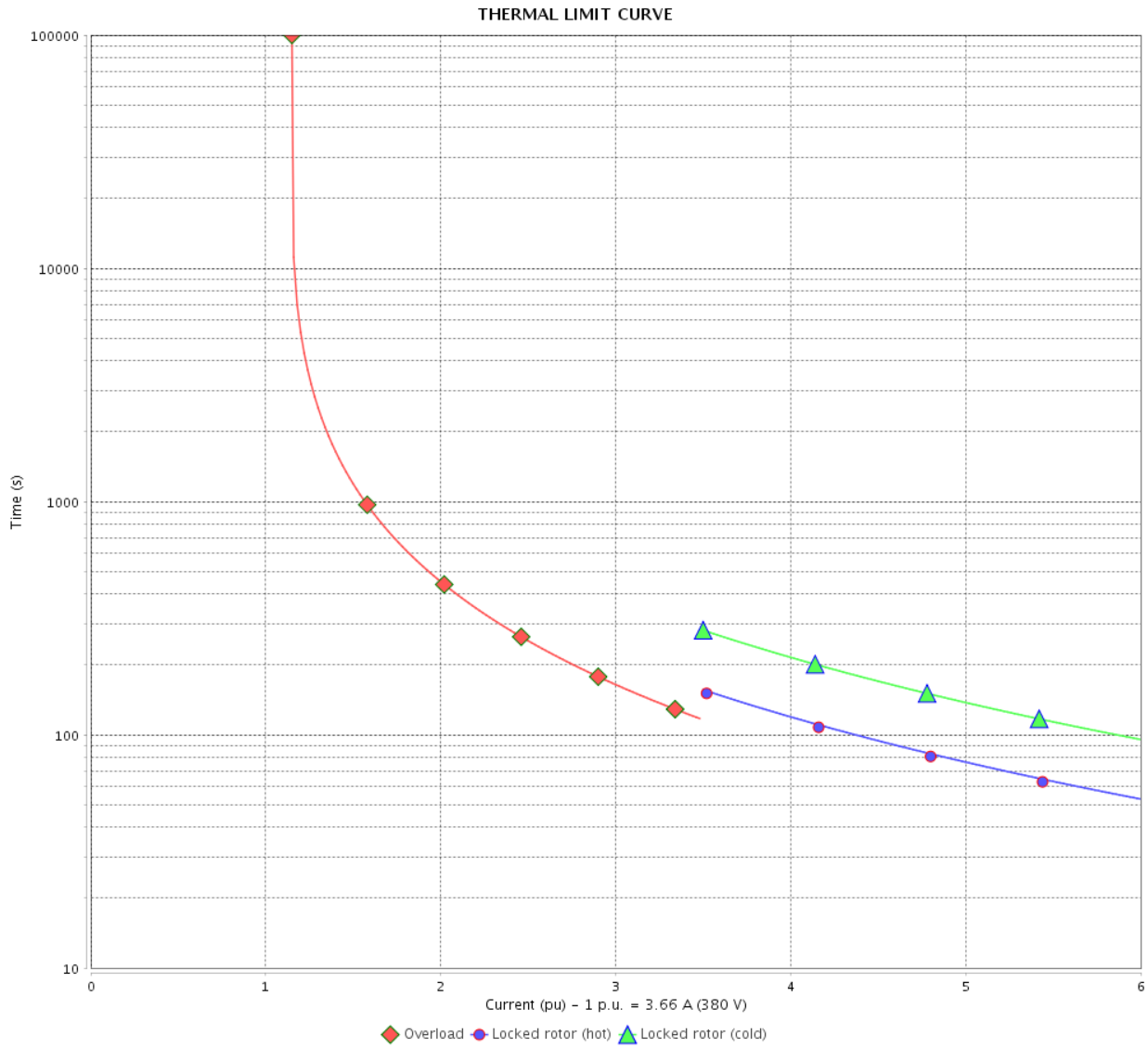
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 Service factor : 1.00
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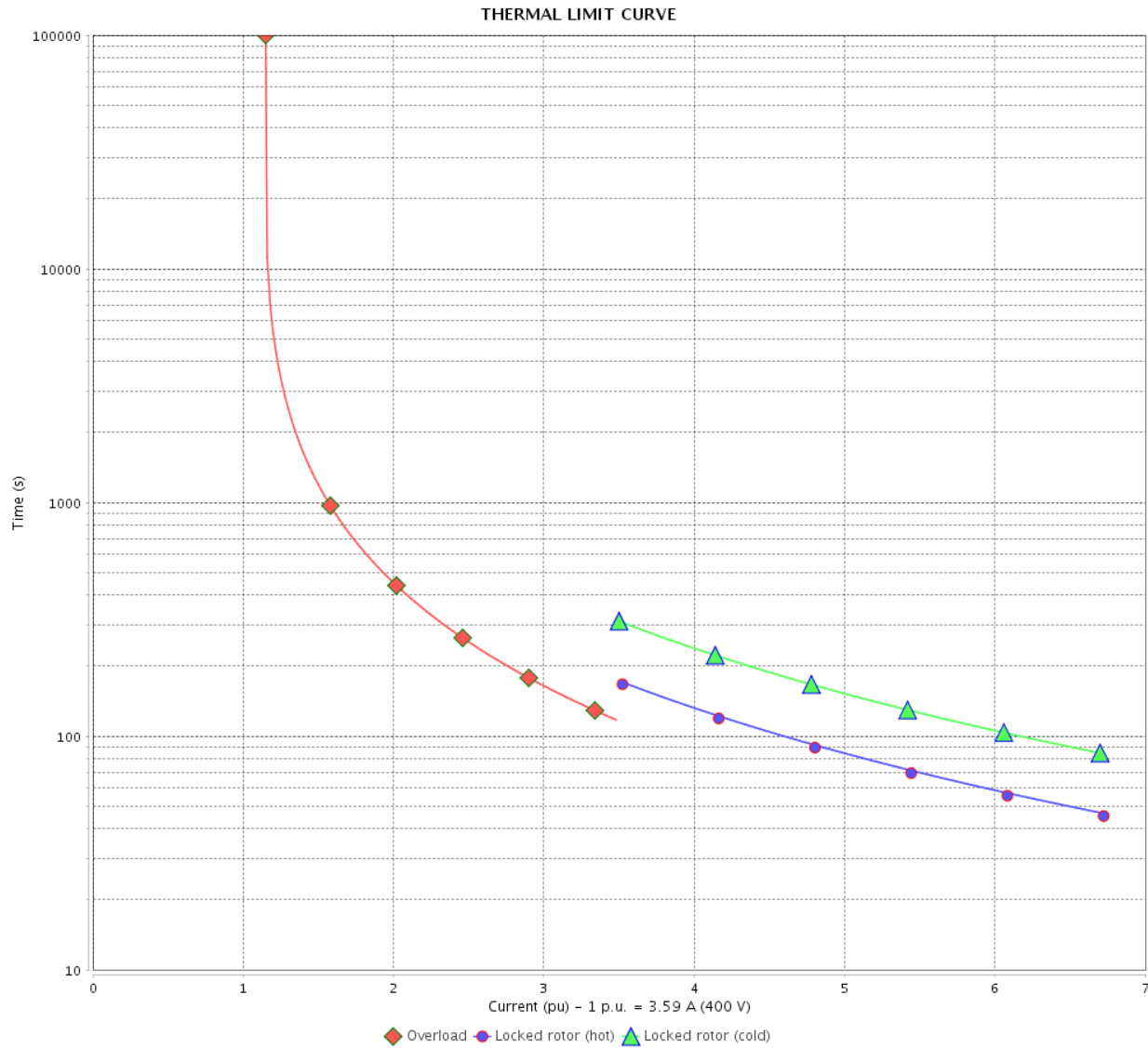
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Customer : _____



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Locked rotor torque : 300 %	Service factor : 1.00
Breakdown torque : 300 %	Temperature rise : 80 K
Rated speed : 965 rpm	Design : B

Heating constant

Cooling constant

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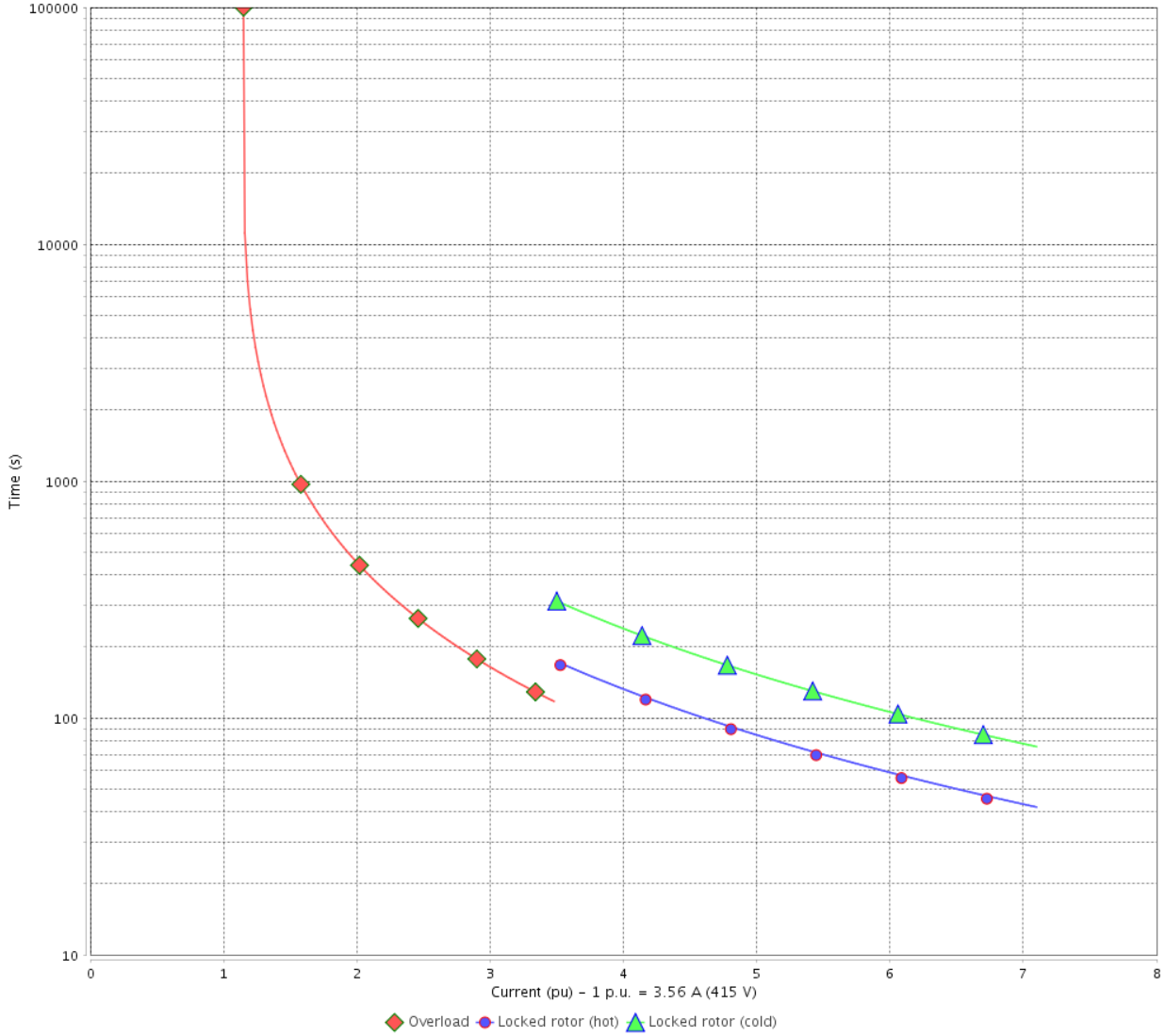
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THERMAL LIMIT CURVE



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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

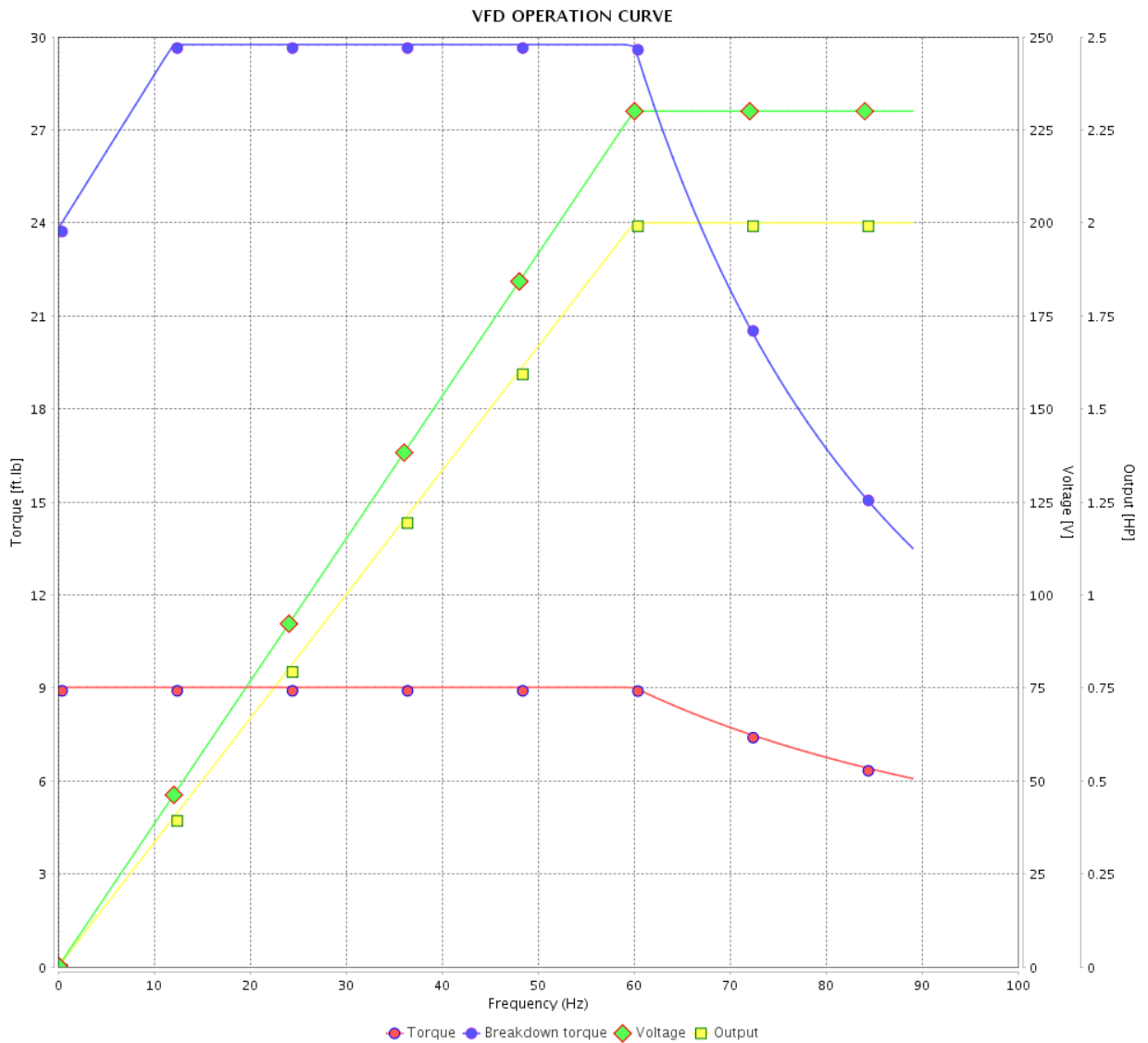


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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



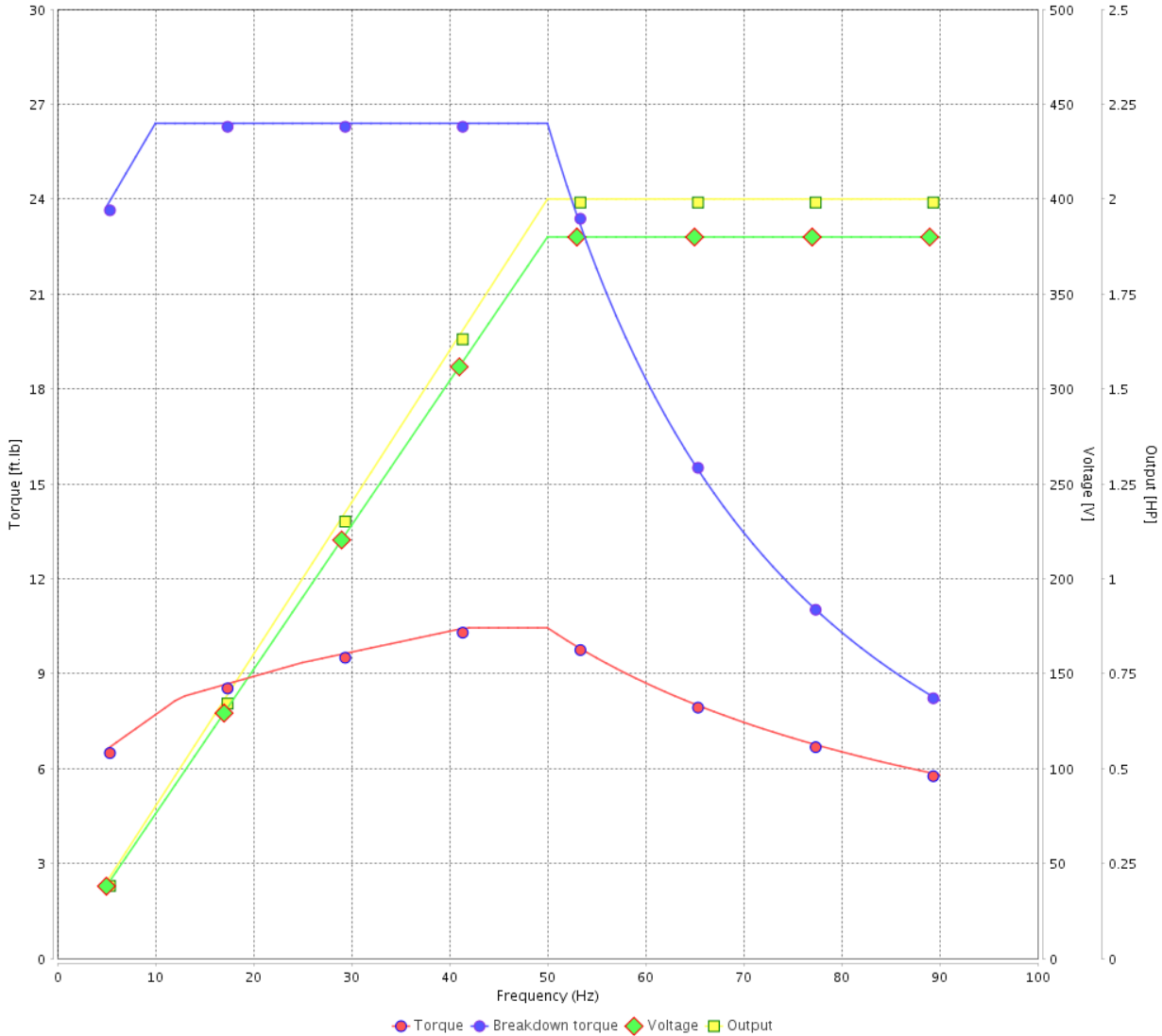
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VFD OPERATION CURVE



Performance : 380 V 50 Hz 6P IE4

Rated current : 3.66 A
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 Locked rotor torque : 220 %
 Breakdown torque : 240 %
 Rated speed : 955 rpm

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 Insulation class : F
 Service factor : 1.00
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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

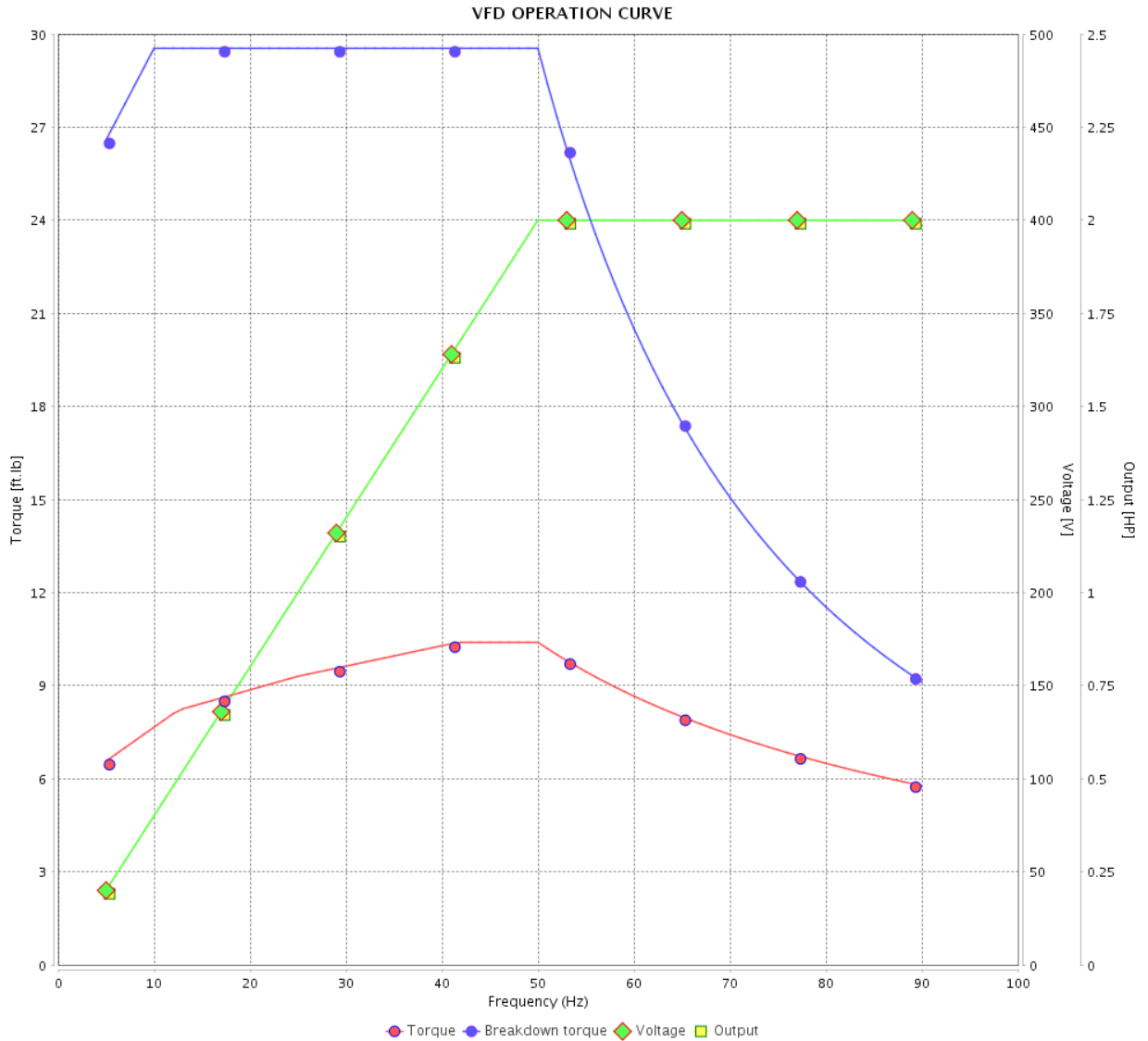


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VFD OPERATION CURVE

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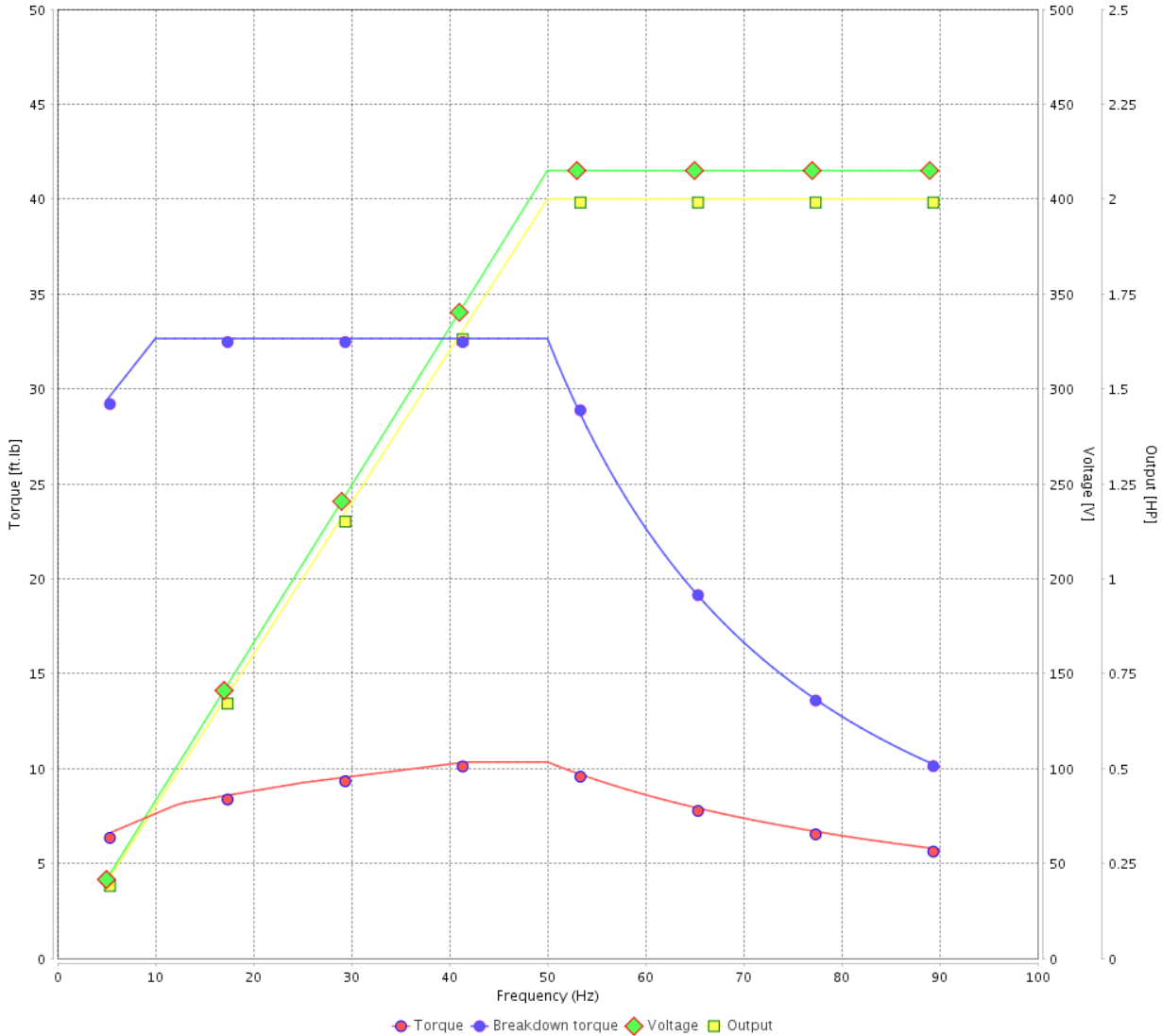
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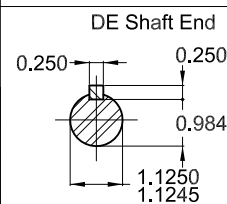
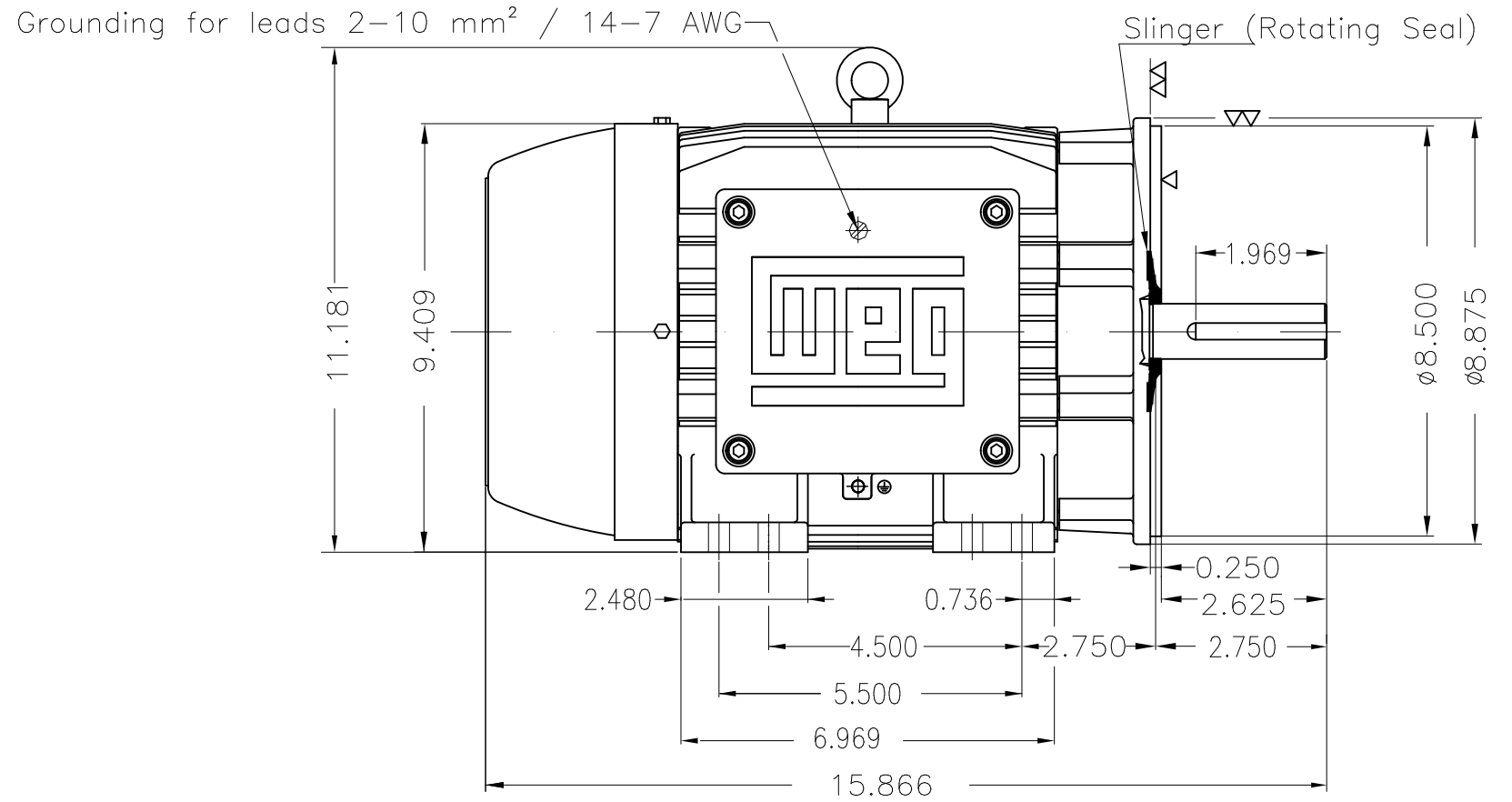
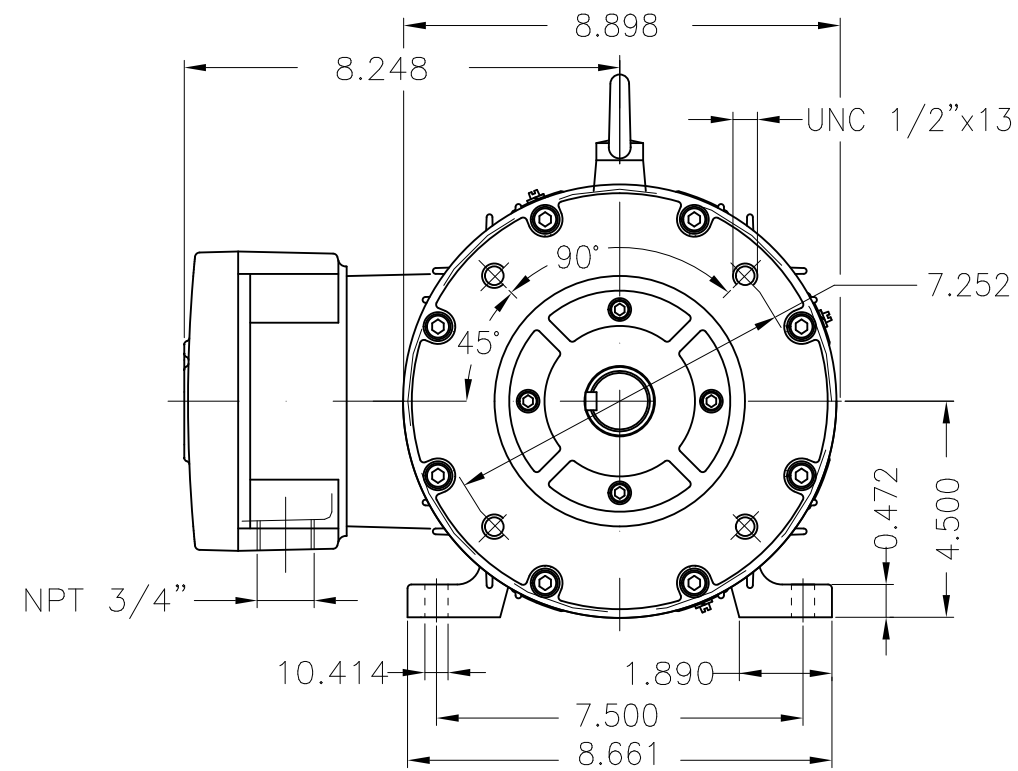


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Color RAL 5009
 Painting plan 202P
 Mounting NEMA F-1
 Mounting B34R(D)

2 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 182/4TC IP55 TEFC					
RELEASED							
REL DT.	WMO	Jaragua do Sul	Product Engineering				

PREVIEW
 WDD



SHEET 1 / 1

Dimensions in inches

XME A3

MADE IN BRAZIL

**W21X NEMA**
Premium

14281643



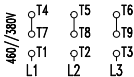
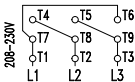
LISTED

CC029A

Inverter Duty Motor
Severe Duty

MODEL 00212XT3E184TC

PH 3	FR 182/4TC		
HP(kW) 2.0(1.5)		HZ 60	IP55
V 230/460		A 6.26/3.13	
RPM 1165		NEMA NOM EFF 88.5%	
PF 0.68		SFA 7.20/3.60	DES B
INS CL F Δ T 80 K		SF 1.15	ENCL TEFC
DUTY CONT.		CODE L	ALT 1000 m.a.s.l.
AMB 40°C	USABLE @208V	6.92 A	SF 1.15 SFA 7.96
AMB 55°C SF1.0			
2.0HP 1.5kW 50Hz 380V 3.66A 955RPM SF1.00 EFF 86.5% (IE4)			



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

137 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.