

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :					
Product line	: NEMA Premium Efficiency Three-Phase	Product code :	14458358		
		Catalog # :	00136XT3E143T		
Frame	: 143/5T	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	: 69.8 lb		
Protection degree	: IP55	Moment of inertia (J)	: 0.0415 sq.ft.lb		
Design	: B				
Output [HP]	1	1	1	1	
Poles	2	2	2	2	
Frequency [Hz]	60	50	50	50	
Rated voltage [V]	230/460	380	400	415	
Rated current [A]	2.98/1.49	1.64	1.60	1.58	
L. R. Amperes [A]	26.8/13.4	13.1	13.6	14.2	
LRC [A]	9.0x(Code M)	8.0x(Code K)	8.5x(Code L)	9.0x(Code M)	
No load current [A]	1.30/0.650	0.650	0.700	0.750	
Rated speed [RPM]	3500	2885	2895	2905	
Slip [%]	2.78	3.83	3.50	3.17	
Rated torque [ft.lb]	1.50	1.82	1.81	1.81	
Locked rotor torque [%]	340	250	290	300	
Breakdown torque [%]	400	300	340	370	
Service factor	1.15	1.00	1.00	1.00	
Temperature rise	80 K	80 K	80 K	80 K	
Locked rotor time	72s (cold) 40s (hot)	72s (cold) 40s (hot)	72s (cold) 40s (hot)	72s (cold) 40s (hot)	
Noise level ²	68.0 dB(A)	62.0 dB(A)	62.0 dB(A)	62.0 dB(A)	
Efficiency (%)	25%	75.2	74.4	74.4	74.4
	50%	75.5	75.5	75.5	75.5
	75%	77.0	80.0	80.0	80.0
	100%	77.0	80.7	80.7	80.7
Power Factor	25%	0.40	0.46	0.42	0.40
	50%	0.65	0.71	0.67	0.64
	75%	0.76	0.81	0.78	0.76
	100%	0.82	0.86	0.84	0.82
Bearing type	: Drive end : 6205 2RS Non drive end : 6204 2RS	Foundation loads			
Sealing	: Oil Seal Lip Seal	Max. traction	: 23 lb		
Lubrication interval	: - -	Max. compression	: 93 lb		
Lubricant amount	: - -				
Lubricant type	: Mobil Polyrex EM				
Notes USABLE @208V 3.13A SF 1.15 SFA 3.59A					
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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DATA SHEET

Three Phase Induction Motor - Squirrel Cage



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



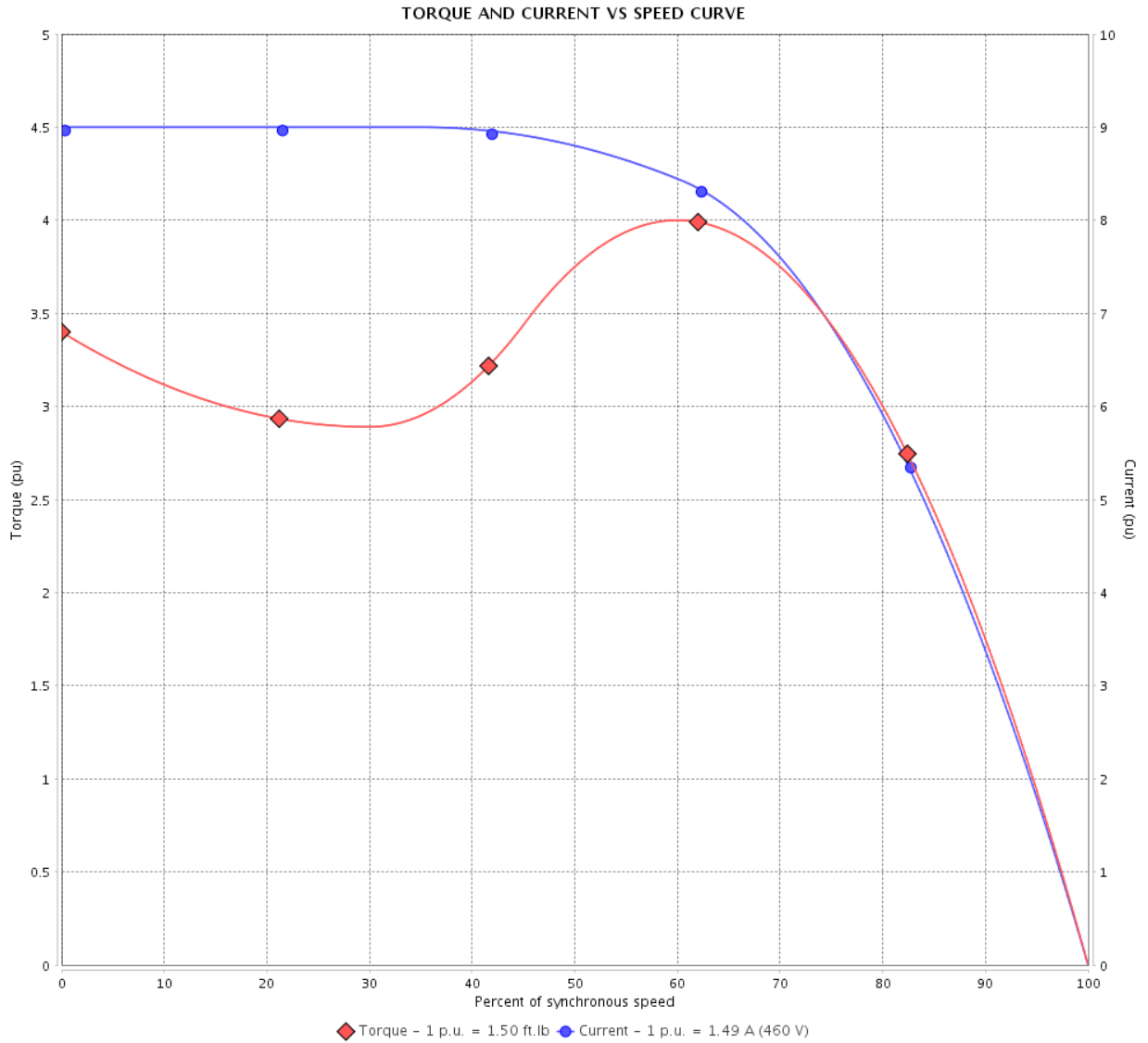
Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 14458358

Catalog # : 00136XT3E143T



Performance : 230/460 V 60 Hz 2P

Rated current : 2.98/1.49 A
 LRC : 9.0
 Rated torque : 1.50 ft.lb
 Locked rotor torque : 340 %
 Breakdown torque : 400 %
 Rated speed : 3500 rpm

Moment of inertia (J) : 0.0415 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

Locked rotor time : 72s (cold) 40s (hot)

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TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



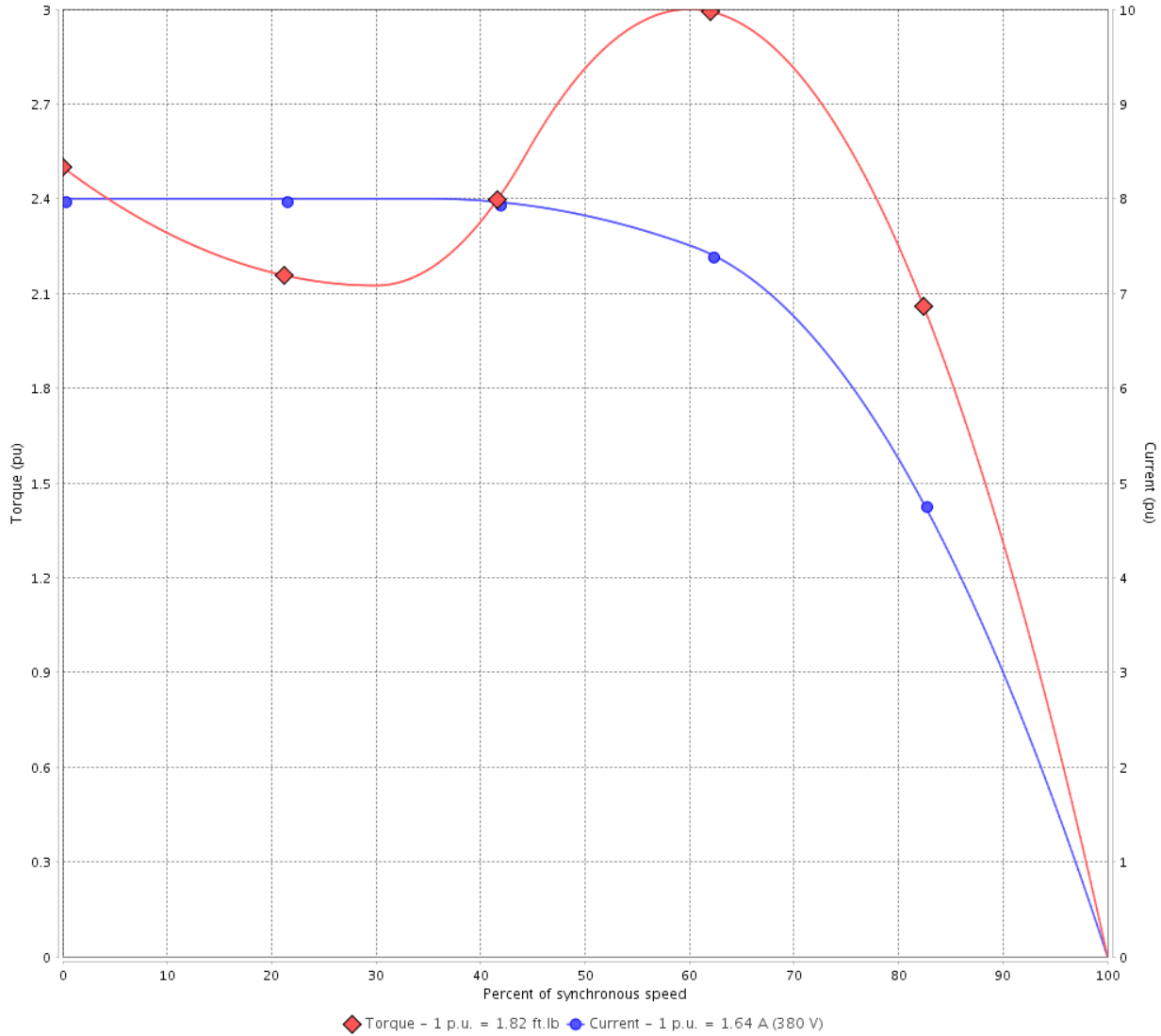
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 14458358

Catalog # : 00136XT3E143T

TORQUE AND CURRENT VS SPEED CURVE



Performance : 380 V 50 Hz 2P IE3

Rated current	: 1.64 A	Moment of inertia (J)	: 0.0415 sq.ft.lb
LRC	: 8.0	Duty cycle	: Cont.(S1)
Rated torque	: 1.82 ft.lb	Insulation class	: F
Locked rotor torque	: 250 %	Service factor	: 1.00
Breakdown torque	: 300 %	Temperature rise	: 80 K
Rated speed	: 2885 rpm	Design	: B

Locked rotor time : 72s (cold) 40s (hot)

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TORQUE AND CURRENT VS SPEED CURVE



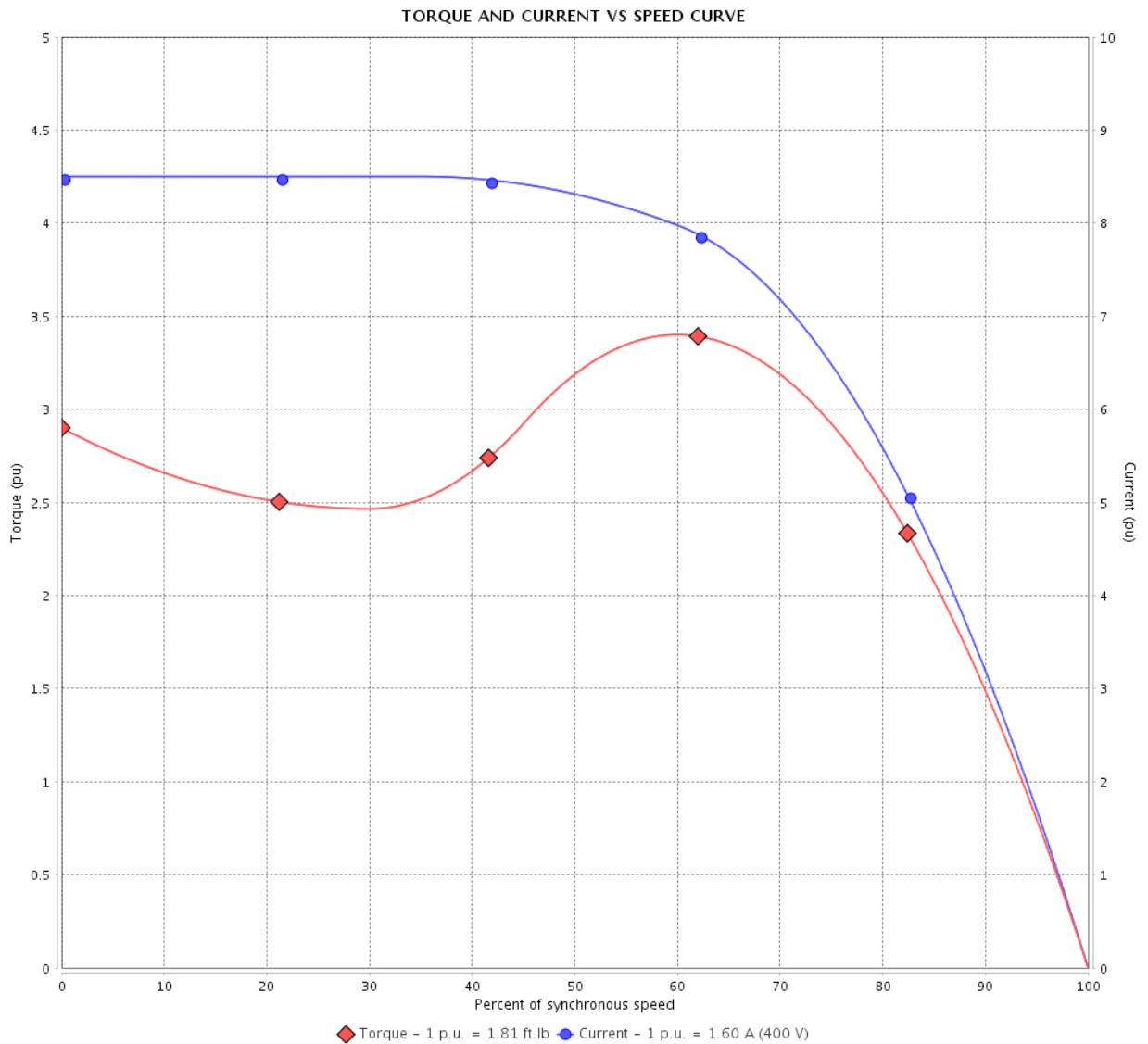
Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 14458358

Catalog # : 00136XT3E143T



Performance : 400 V 50 Hz 2P IE3

Rated current : 1.60 A
 LRC : 8.5
 Rated torque : 1.81 ft.lb
 Locked rotor torque : 290 %
 Breakdown torque : 340 %
 Rated speed : 2895 rpm

Moment of inertia (J) : 0.0415 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : B

Locked rotor time : 72s (cold) 40s (hot)

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TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



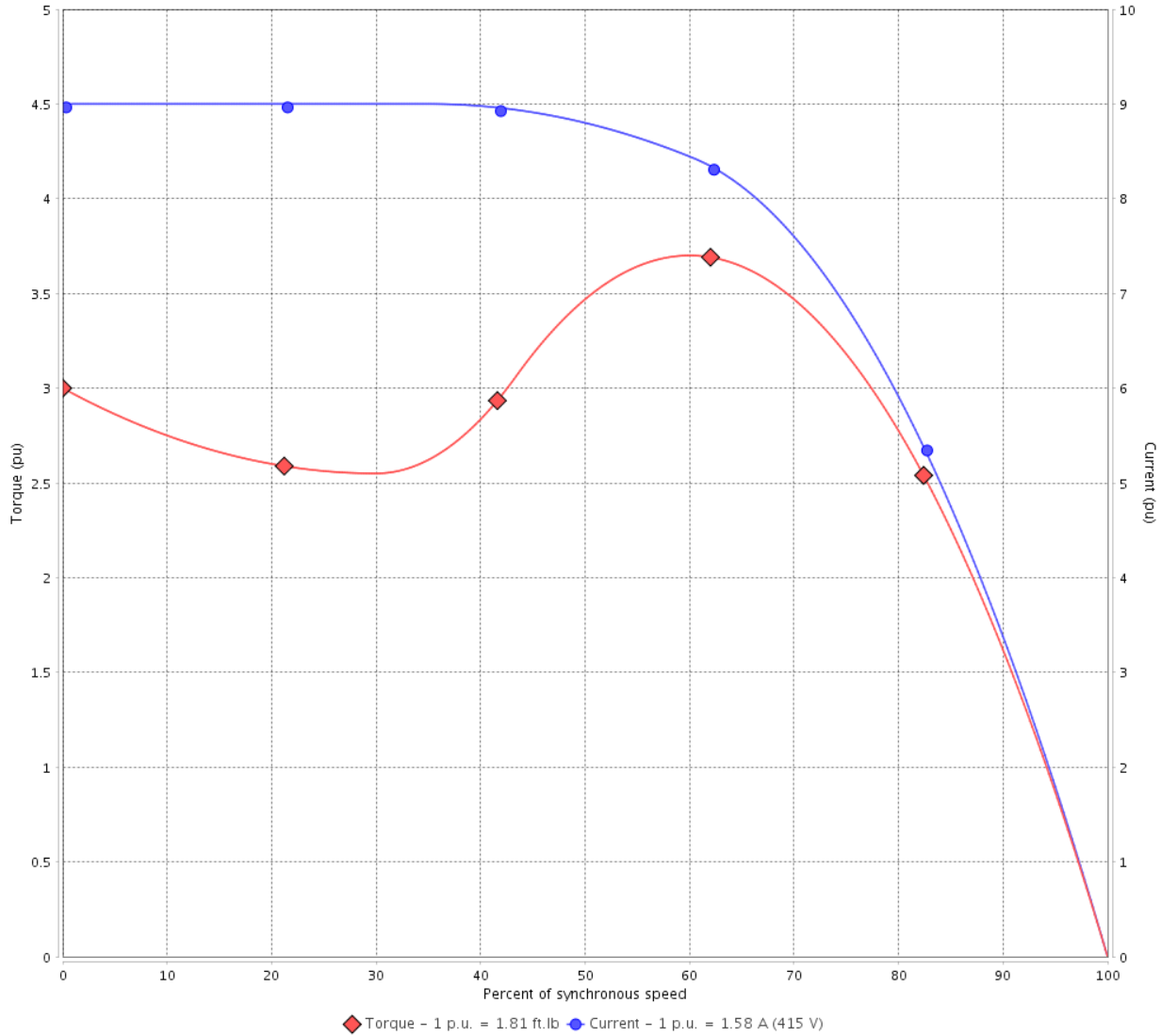
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TORQUE AND CURRENT VS SPEED CURVE



Performance : 415 V 50 Hz 2P IE3

Rated current	: 1.58 A	Moment of inertia (J)	: 0.0415 sq.ft.lb
LRC	: 9.0	Duty cycle	: Cont.(S1)
Rated torque	: 1.81 ft.lb	Insulation class	: F
Locked rotor torque	: 300 %	Service factor	: 1.00
Breakdown torque	: 370 %	Temperature rise	: 80 K
Rated speed	: 2905 rpm	Design	: B

Locked rotor time : 72s (cold) 40s (hot)

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LOAD PERFORMANCE CURVE

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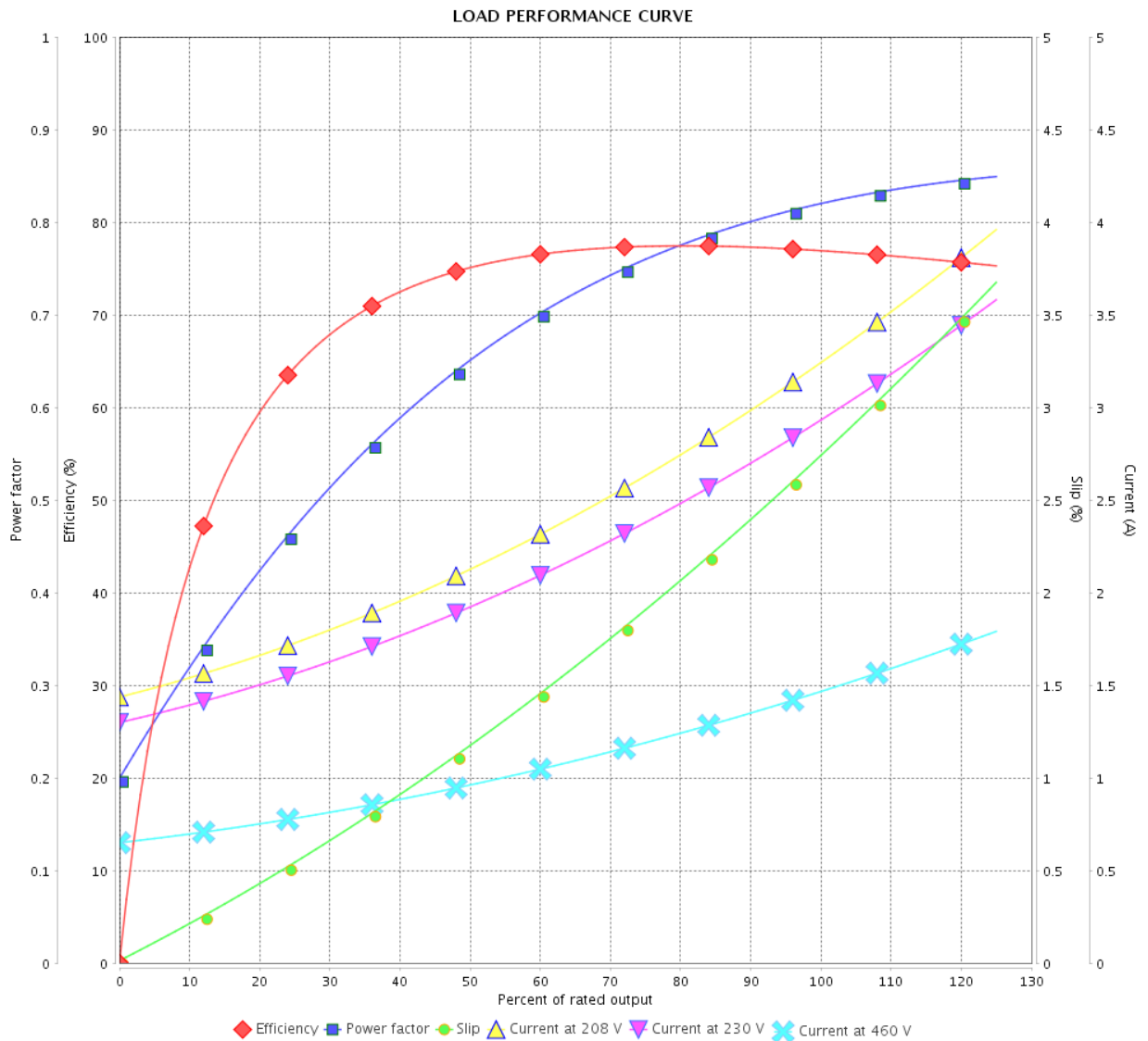


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Performance : 230/460 V 60 Hz 2P

Rated current : 2.98/1.49 A
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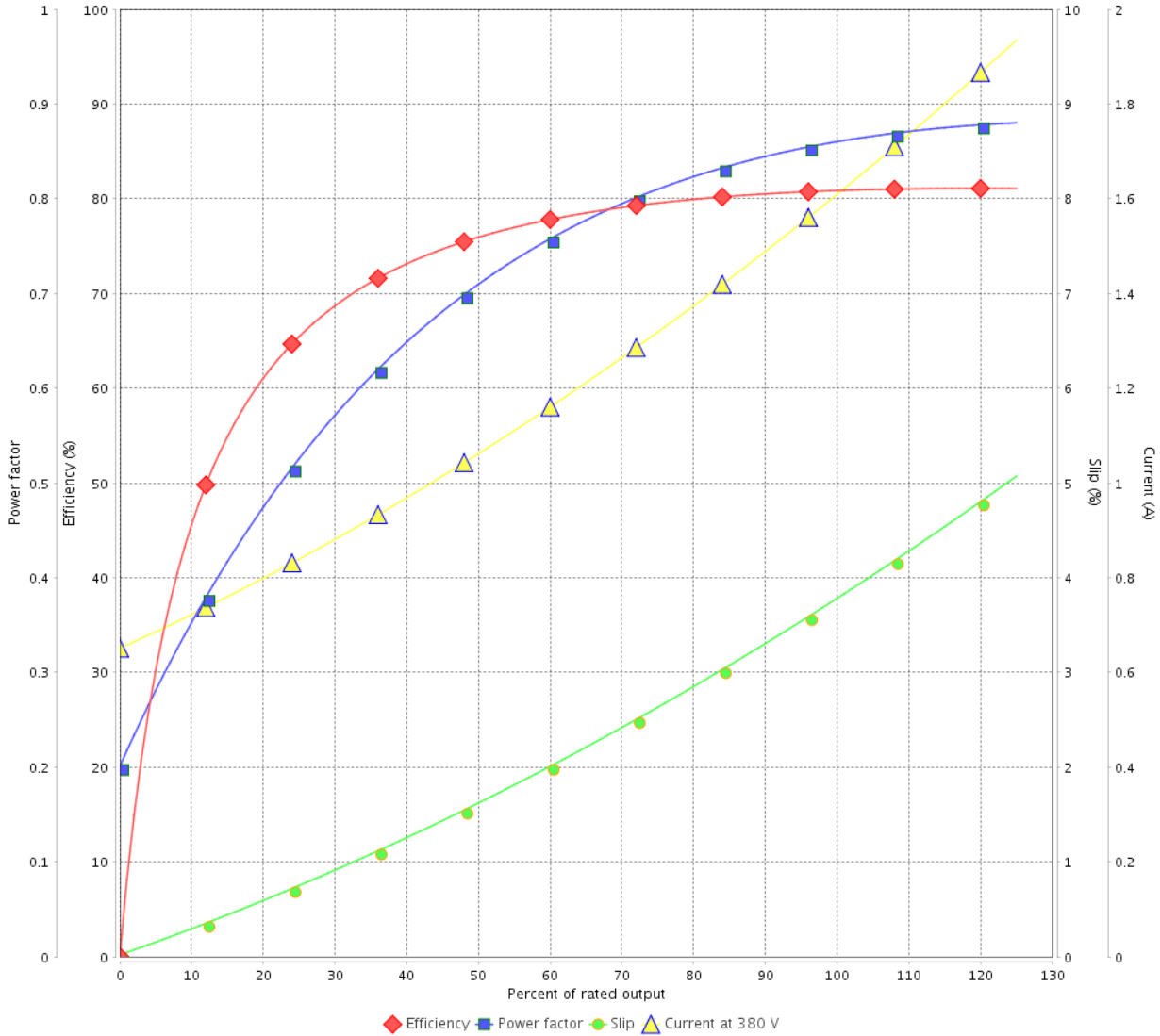
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Rated current : 1.64 A
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 Rated torque : 1.82 ft.lb
 Locked rotor torque : 250 %
 Breakdown torque : 300 %
 Rated speed : 2885 rpm

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Three Phase Induction Motor - Squirrel Cage

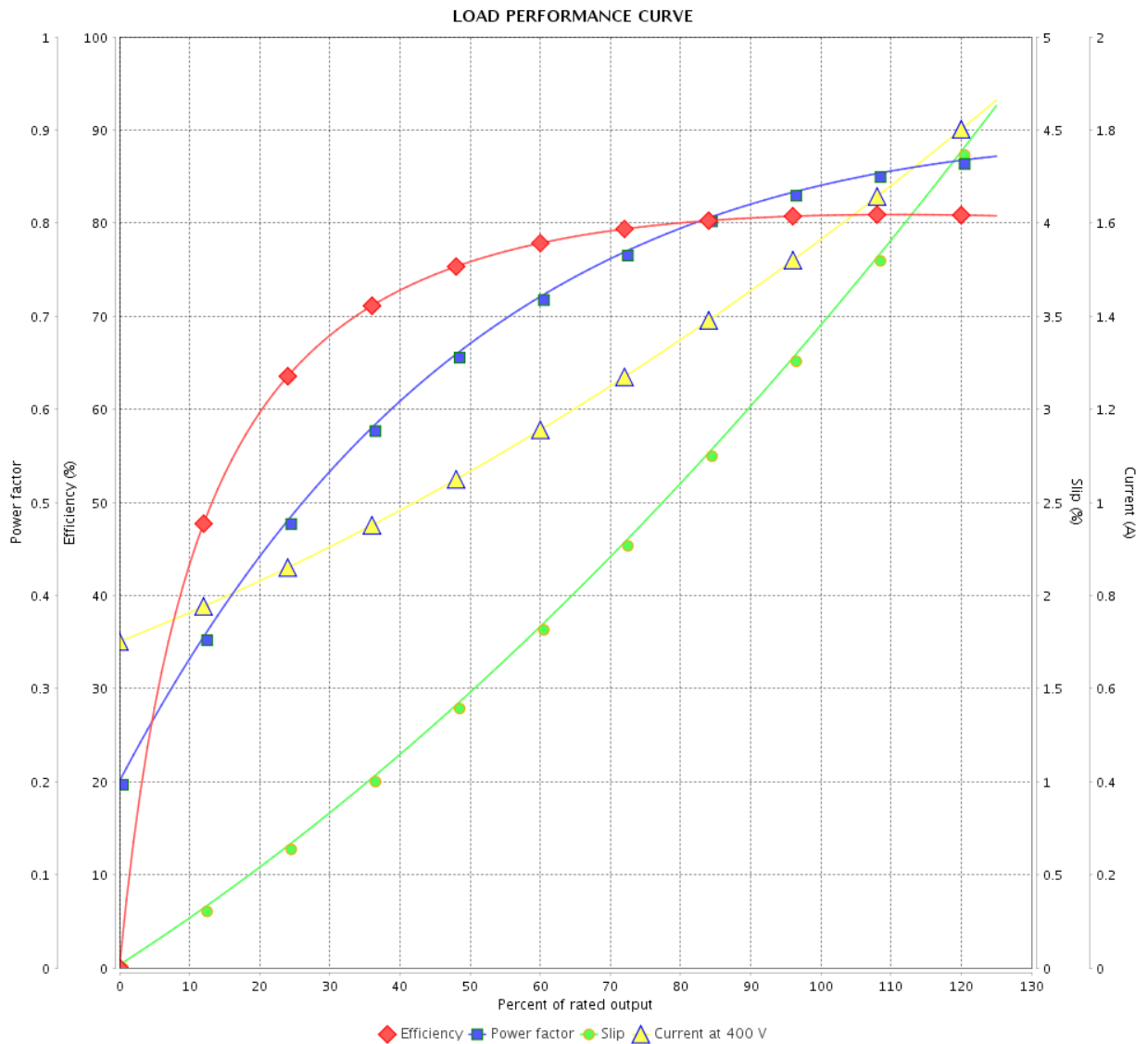


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Performance : 400 V 50 Hz 2P IE3

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 Breakdown torque : 340 %
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 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
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Three Phase Induction Motor - Squirrel Cage



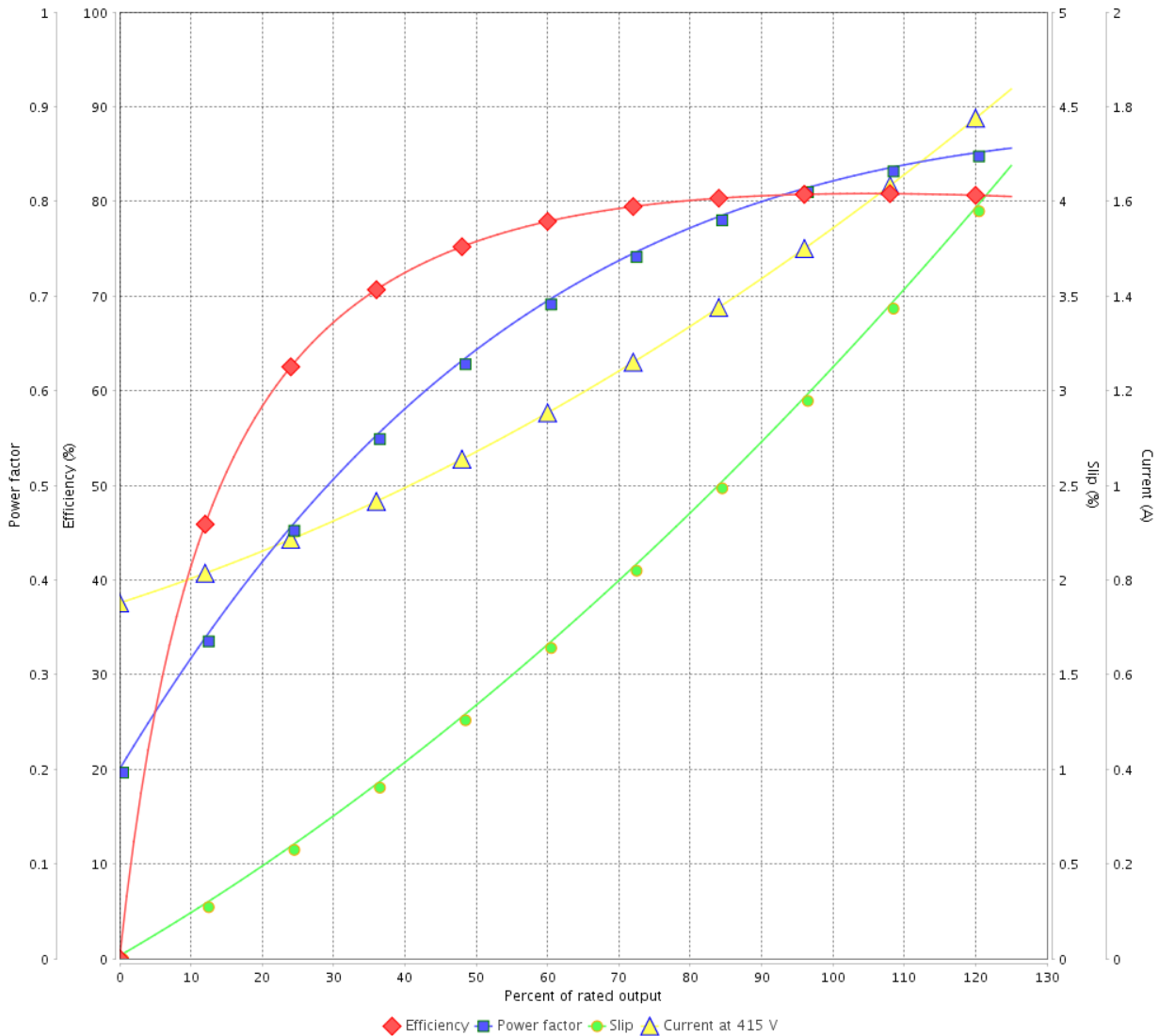
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THERMAL LIMIT CURVE



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Rated speed : 3500 rpm	Design : B

Heating constant

Cooling constant

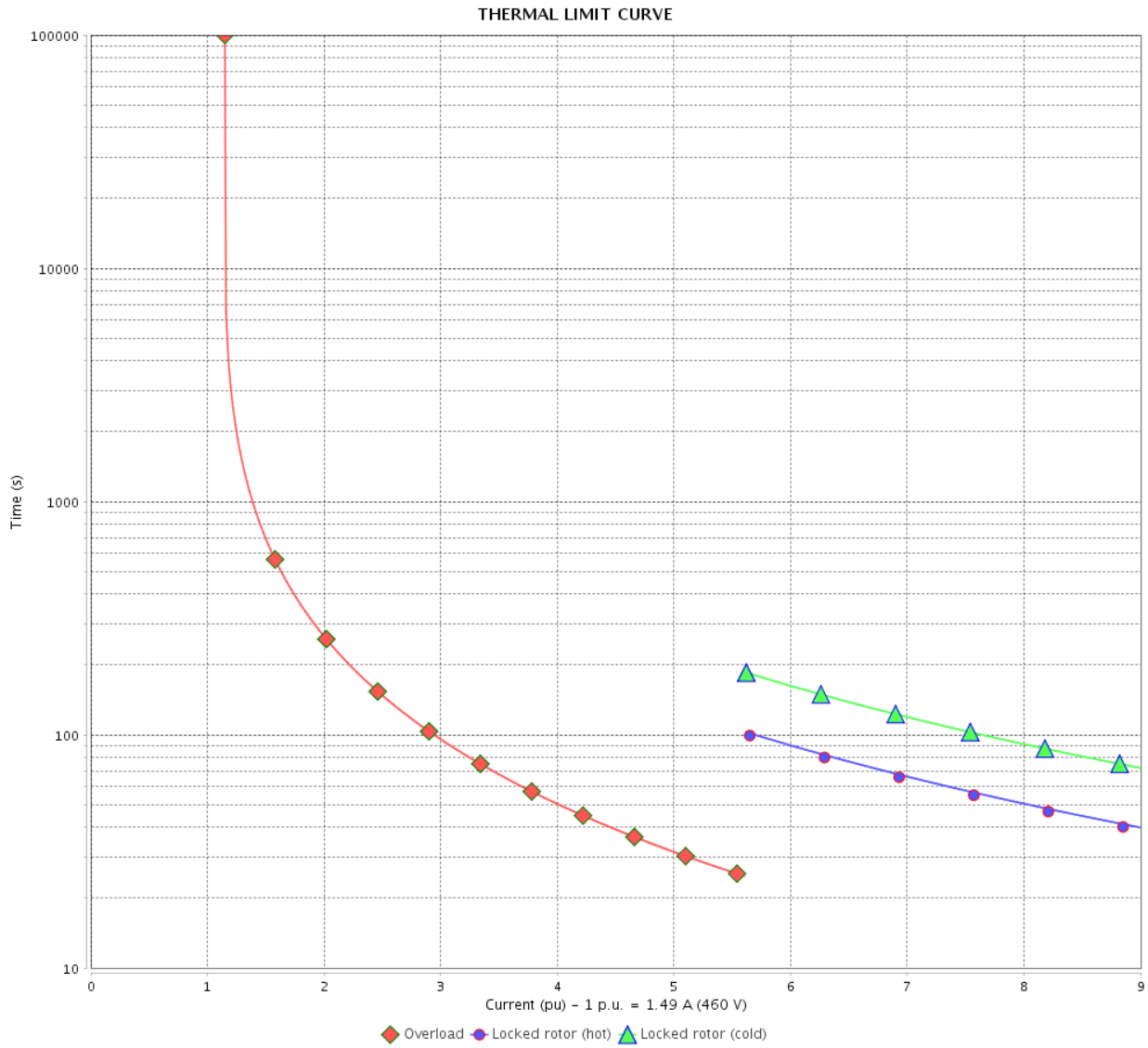
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Rated torque : 1.82 ft.lb	Insulation class : F
Locked rotor torque : 250 %	Service factor : 1.00
Breakdown torque : 300 %	Temperature rise : 80 K
Rated speed : 2885 rpm	Design : B

Heating constant

Cooling constant

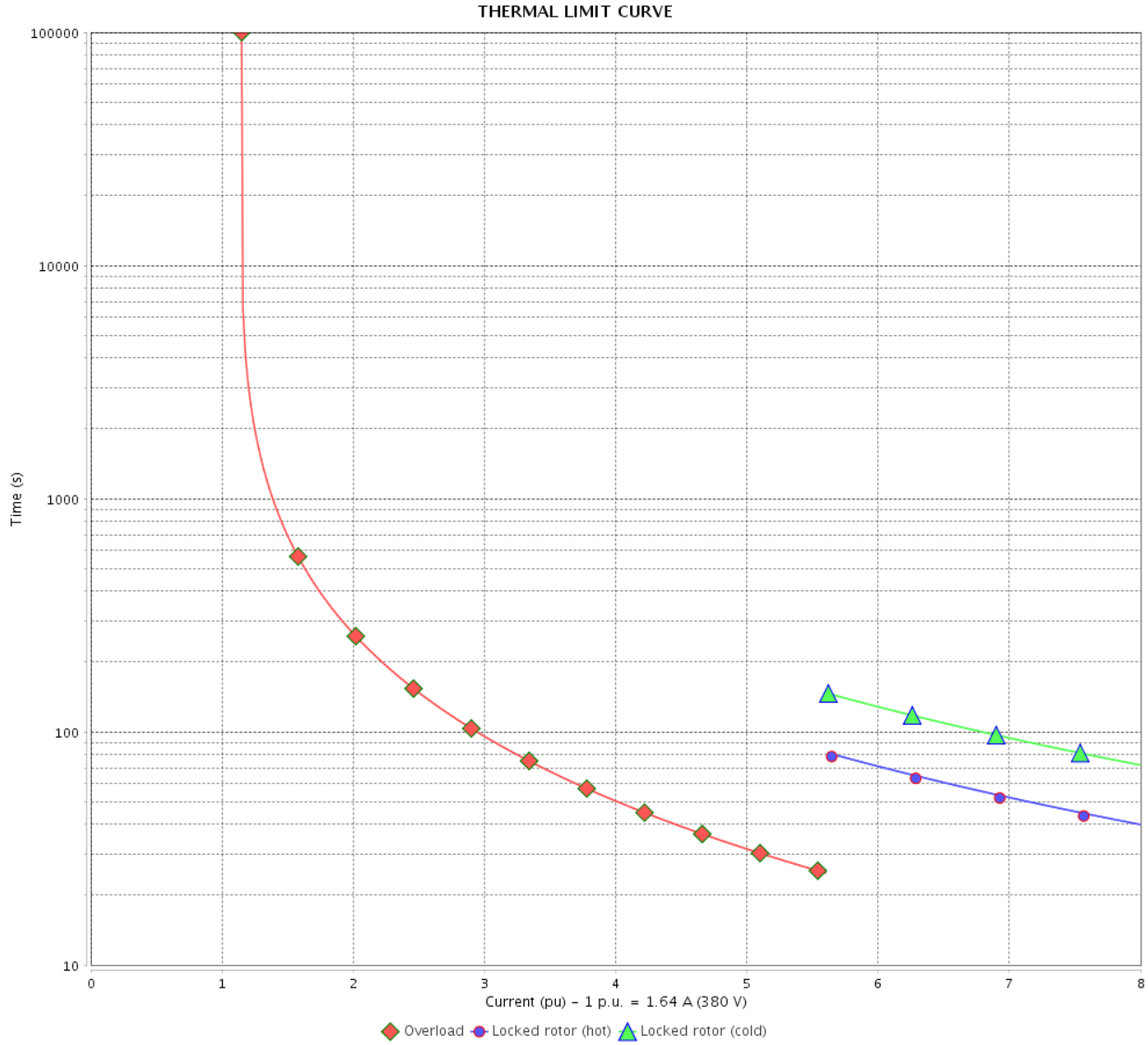
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Performance : 400 V 50 Hz 2P IE3

Rated current : 1.60 A	Moment of inertia (J) : 0.0415 sq.ft.lb
LRC : 8.5	Duty cycle : Cont.(S1)
Rated torque : 1.81 ft.lb	Insulation class : F
Locked rotor torque : 290 %	Service factor : 1.00
Breakdown torque : 340 %	Temperature rise : 80 K
Rated speed : 2895 rpm	Design : B

Heating constant

Cooling constant

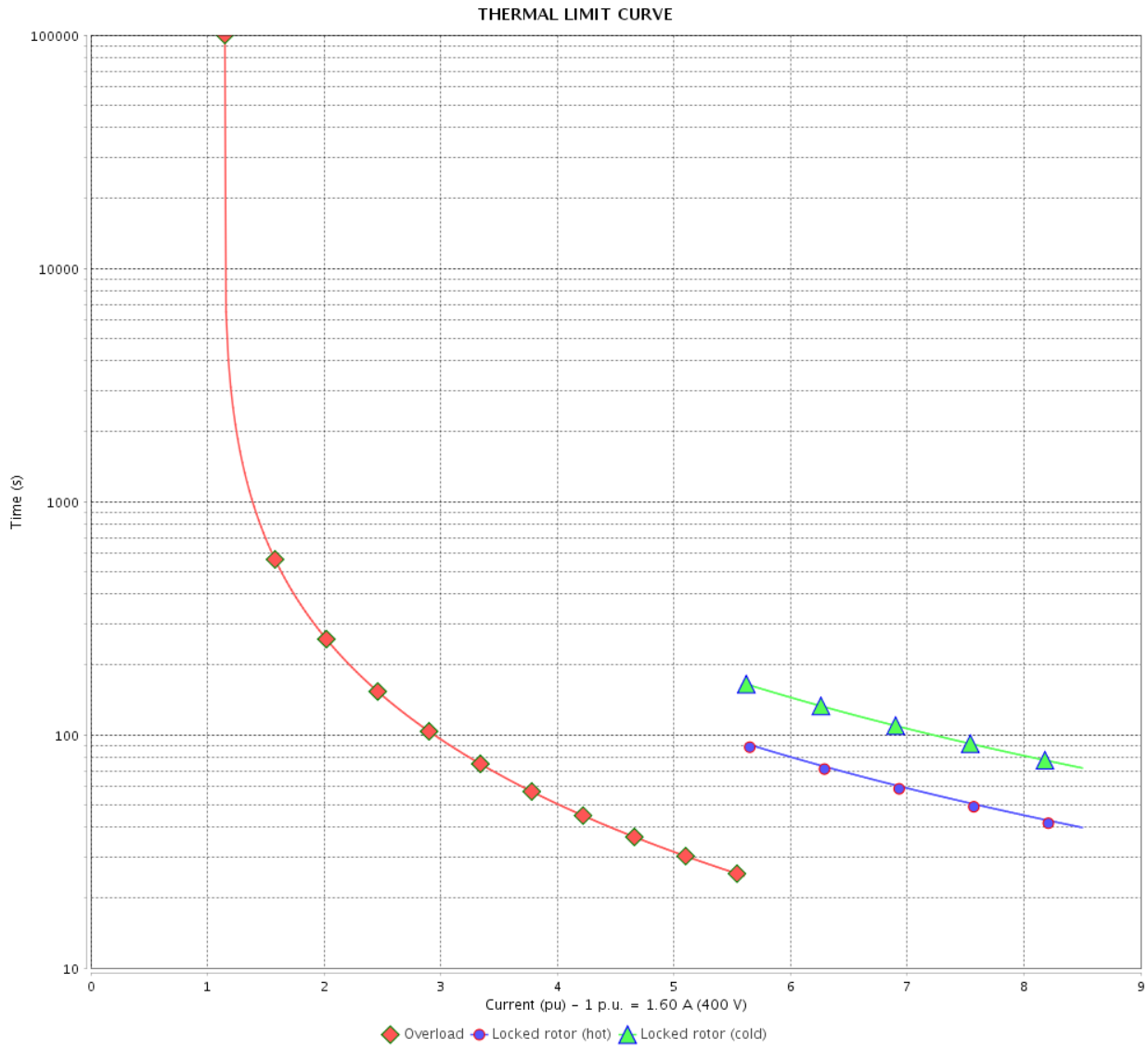
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Three Phase Induction Motor - Squirrel Cage



Customer : _____



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Rated torque : 1.81 ft.lb	Insulation class : F
Locked rotor torque : 300 %	Service factor : 1.00
Breakdown torque : 370 %	Temperature rise : 80 K
Rated speed : 2905 rpm	Design : B

Heating constant

Cooling constant

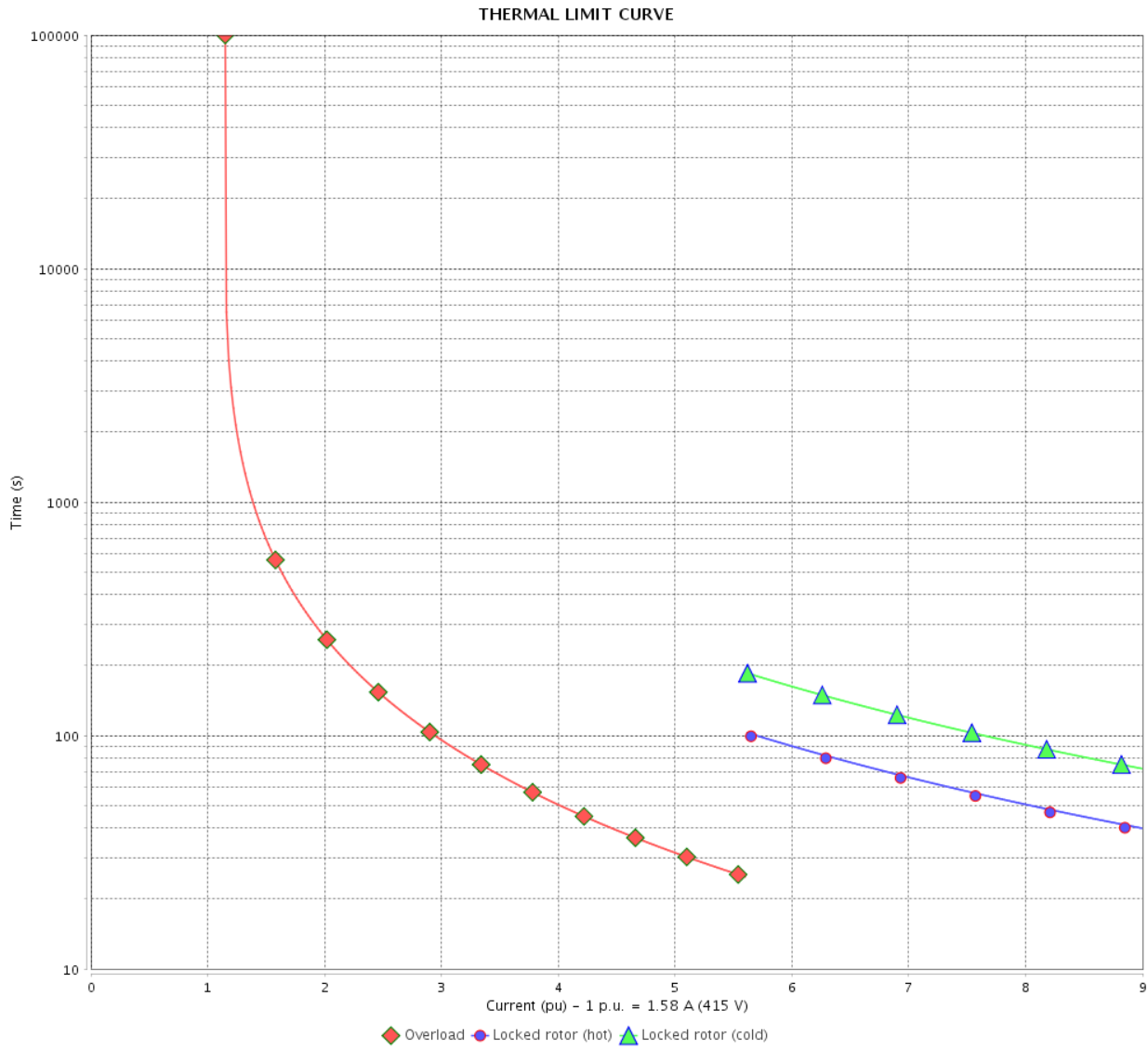
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Three Phase Induction Motor - Squirrel Cage



Customer : _____



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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

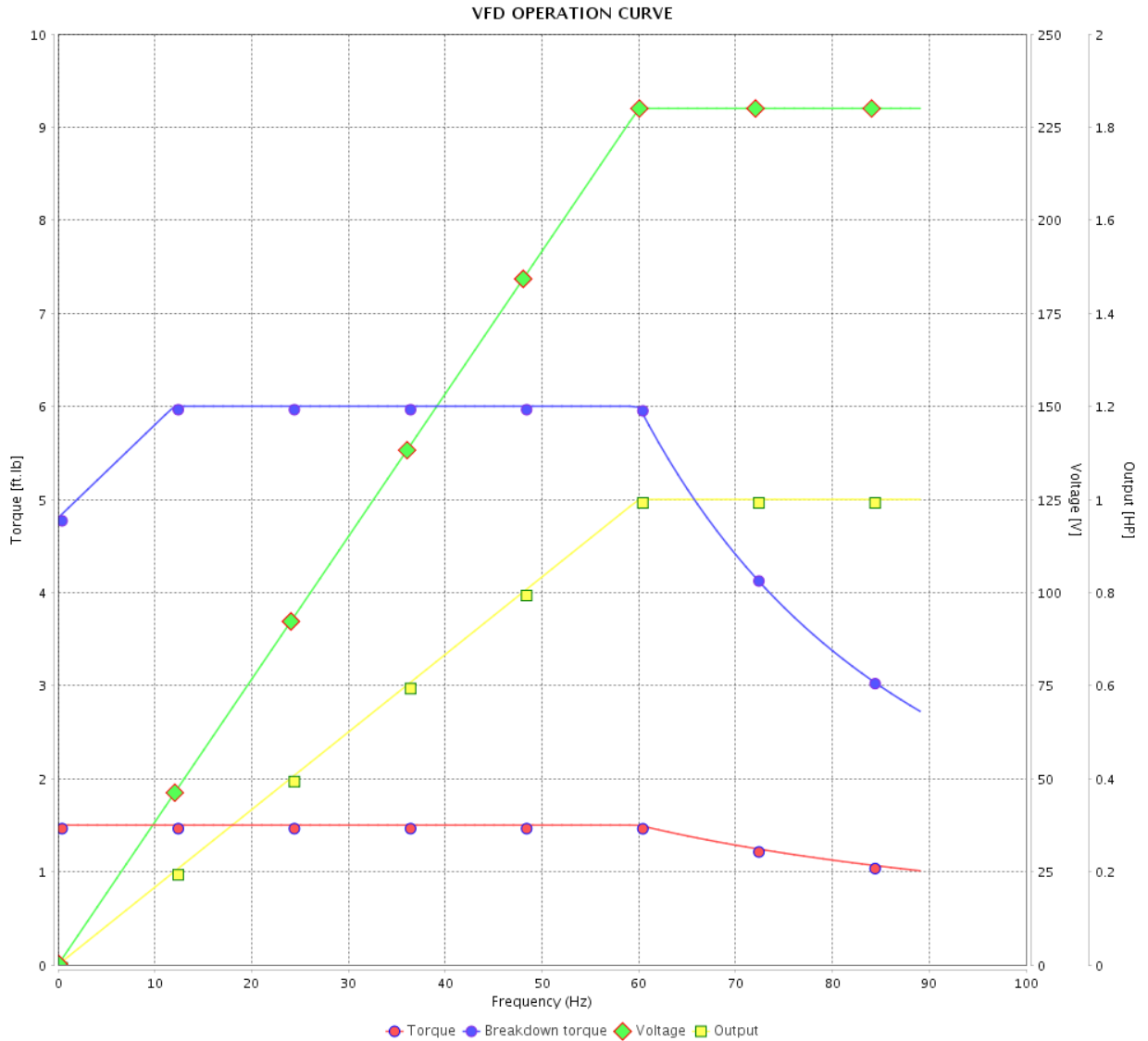


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 Insulation class : F
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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



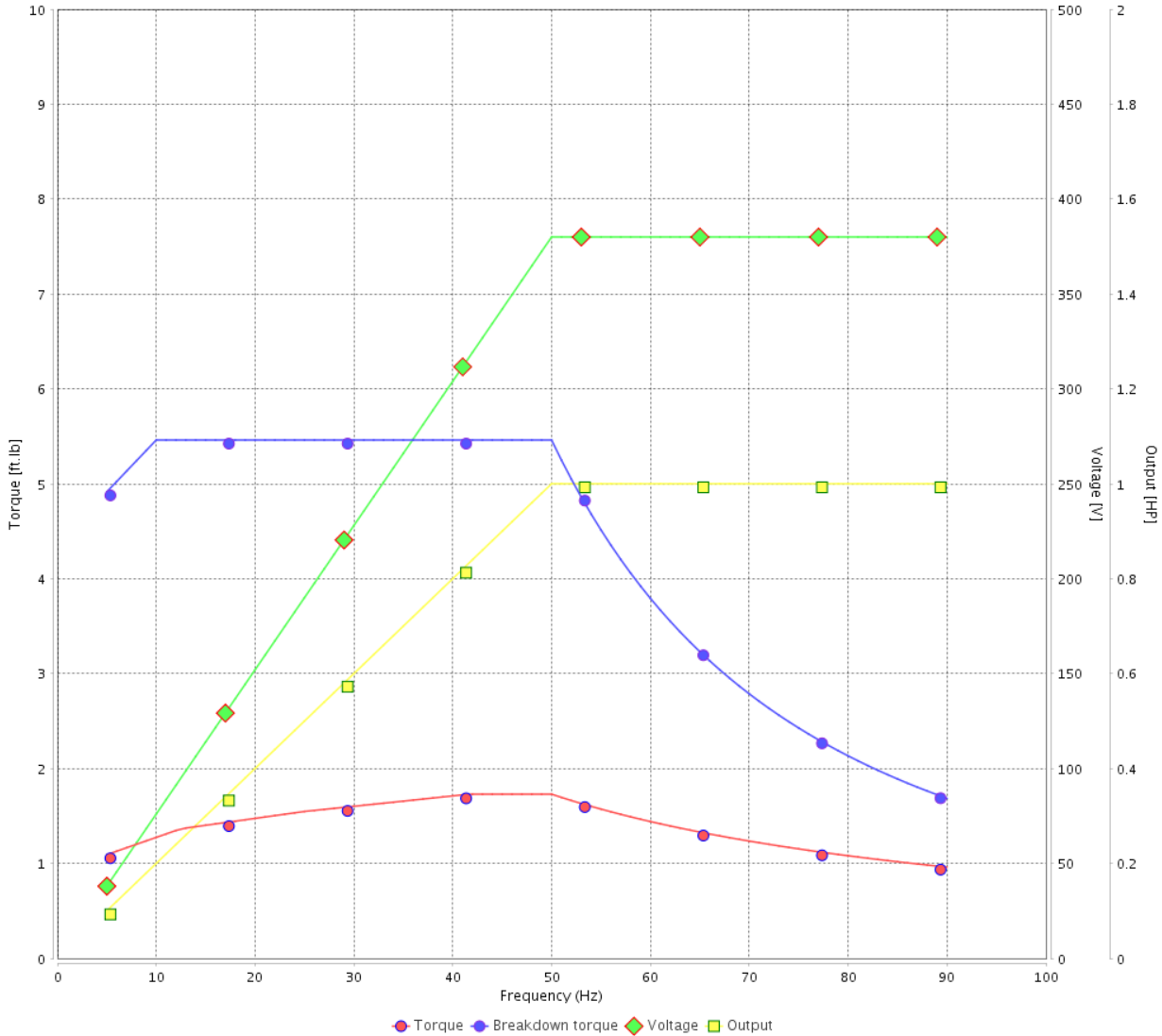
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VFD OPERATION CURVE



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 Insulation class : F
 Service factor : 1.00
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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

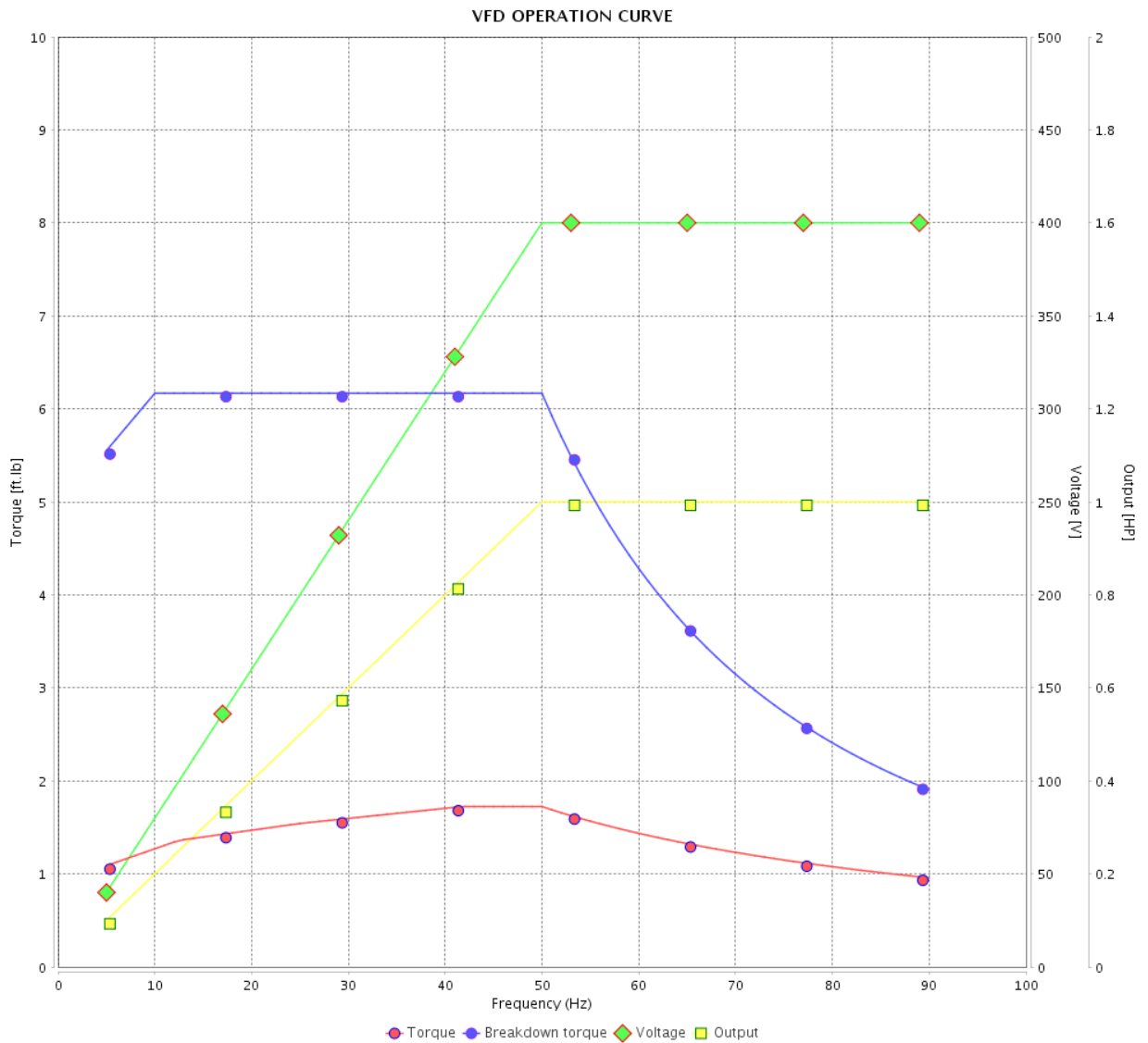


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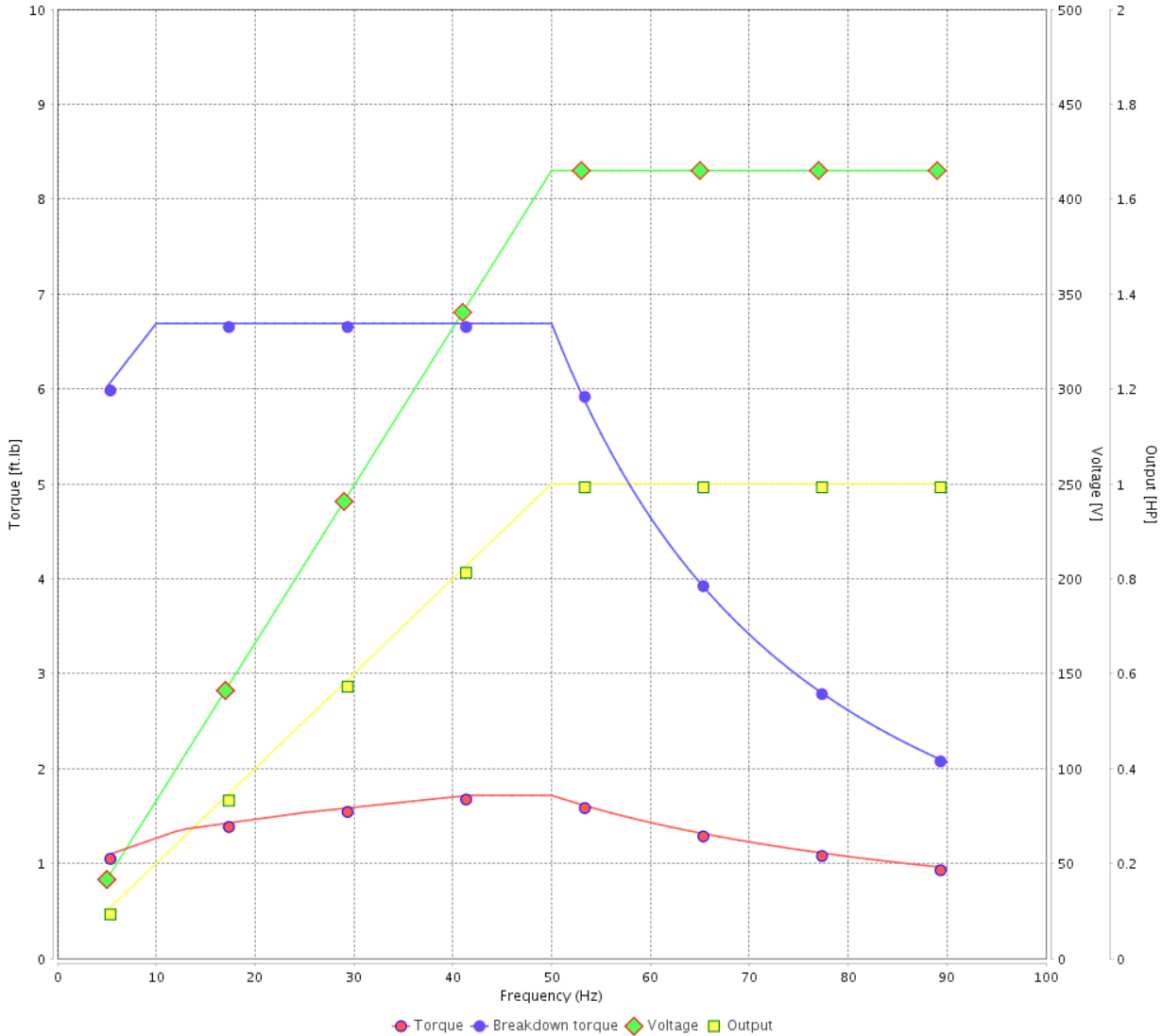
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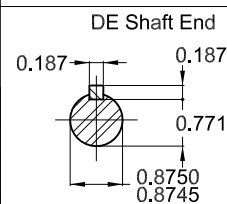
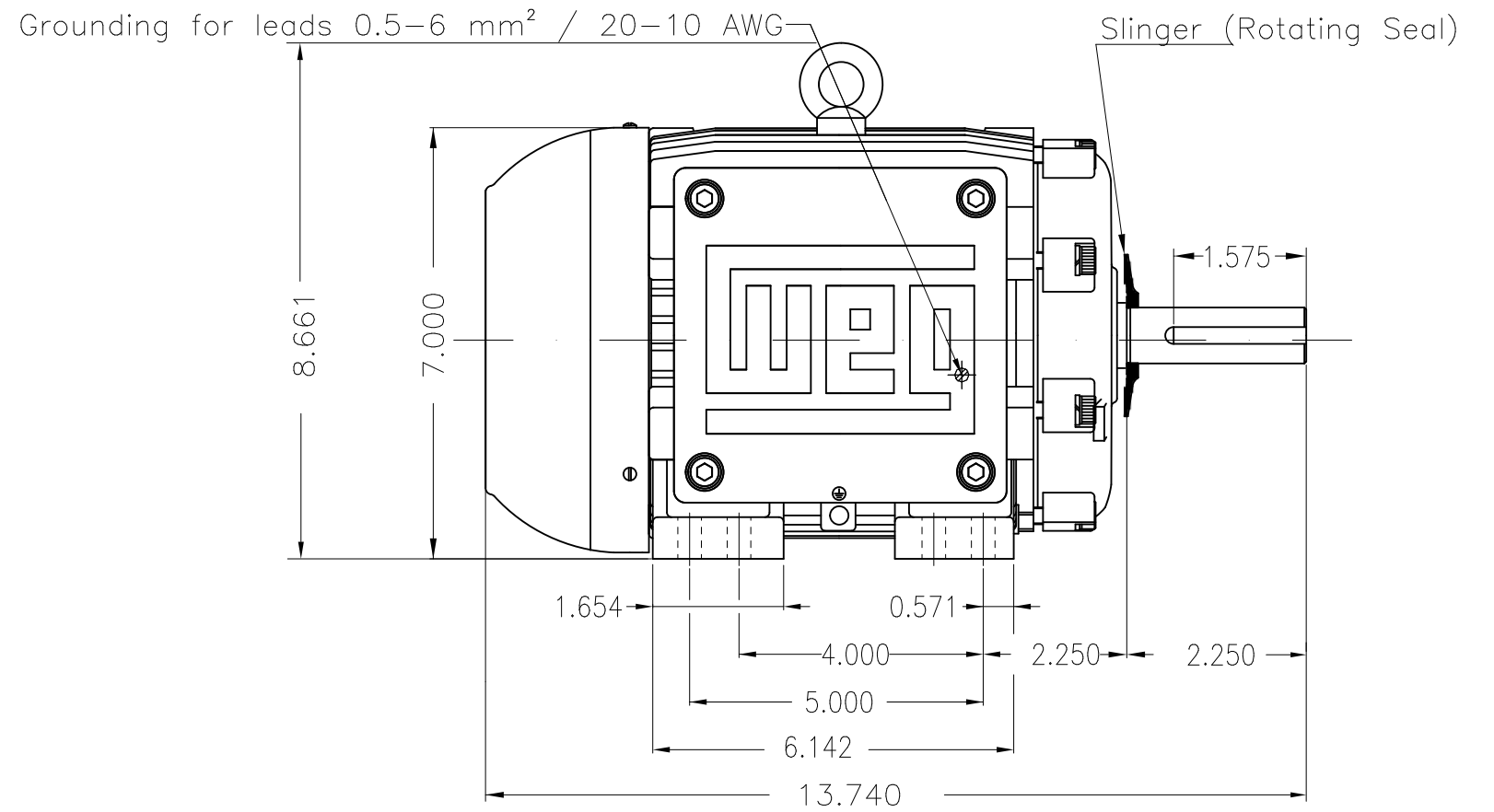
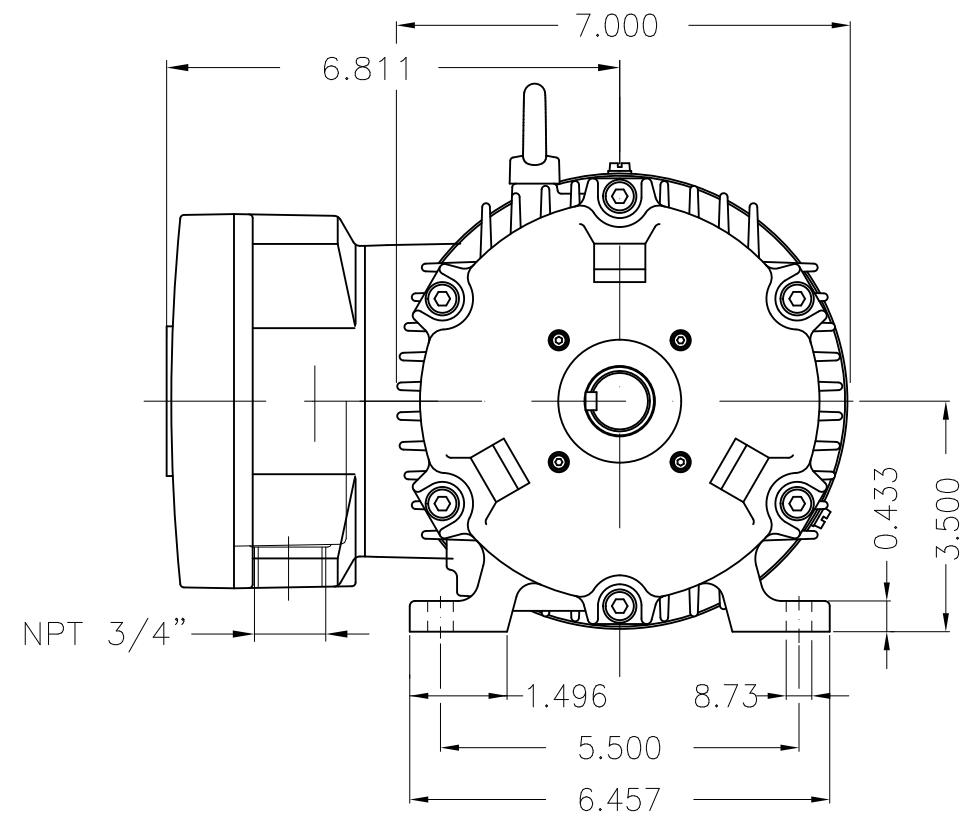


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Color RAL 5009
Painting plan 202P
Mounting NEMA F-1
Mounting B3R(D)

1 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 143/5T IP55 TEFC					
RELEASED							
REL DT.	WMO	Jaragua do Sul	Product Engineering				

PREVIEW
WDD



SHEET 1 / 1

MADE IN BRAZIL

**W21X NEMA**
Premium

14458358



LISTED

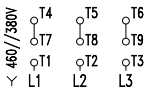
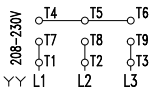
CC029A

Inverter Duty Motor
Severe Duty

MODEL 00136XT3E143T

PH 3	FR 143/5T	
HP(kW) 1.0(0.75)		HZ 60 IP55
V 230/460		A 2.98/1.49
RPM 3500		NEMA NOM EFF 77.0%
PF 0.82	SFA 3.43/1.71	DES B
INS CL F Δ T 80 K	SF 1.15	ENCL TEFC
DUTY CONT.	CODE M	ALT 1000 m.a.s.l.
AMB 40°C	USABLE @208V 3.13 A	SF 1.15 SFA 3.60
AMB 55°C	SF1.0	

1.0HP 0.75kW 50Hz 380V 1.64A 2885RPM SF1.00 EFF 80.7% (IE3)



→ 6205-2RS MOBIL POLYREX EM
→ 6204-2RS

71 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.