

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer					
Product line		: NEMA Premium Efficiency Three-Phase	Product code :		12373466
			Catalog # :		00118ST3QIE143T-W22
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		: 57.4 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]	460	380	400	415	
Rated current [A]	1.47	1.71	1.65	1.63	
L. R. Amperes [A]	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]	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%				
	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%				
	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 : 6205 C3	Non drive end : 6204 C3	Foundation loads	
Sealing		: Inpro/Seal	: Inpro/Seal	Max. traction : 68 lb	
Lubrication interval		: 20000 h	: 20000 h	Max. compression : 126 lb	
Lubricant amount		: 4 g	: 4 g		
Lubricant type		: Mobil Polyrex EM			
Notes					
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



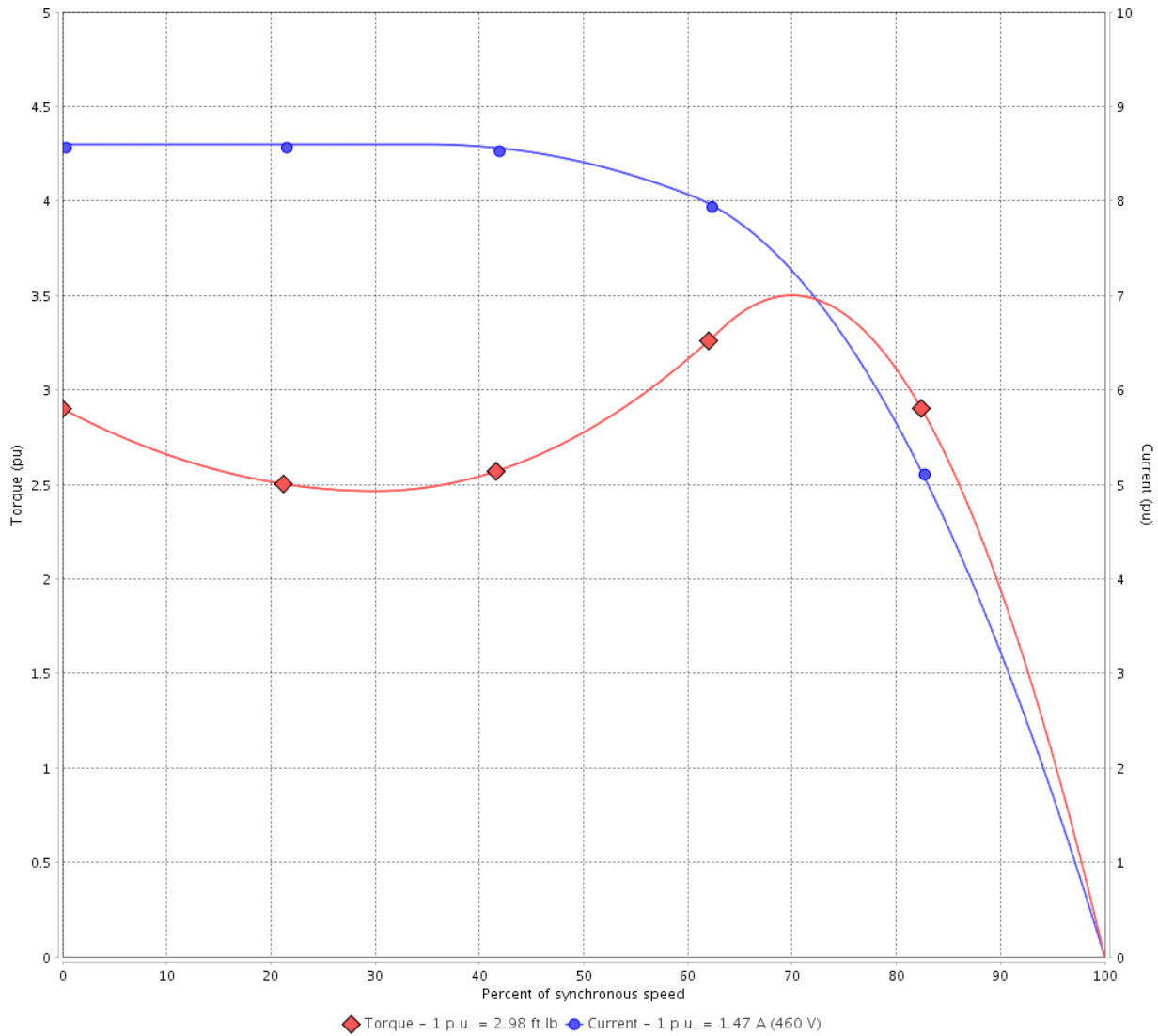
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12373466

Catalog # : 00118ST3QIE143T-W22

TORQUE AND CURRENT VS SPEED CURVE



Performance : 460 V 60 Hz 4P

Rated current	: 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



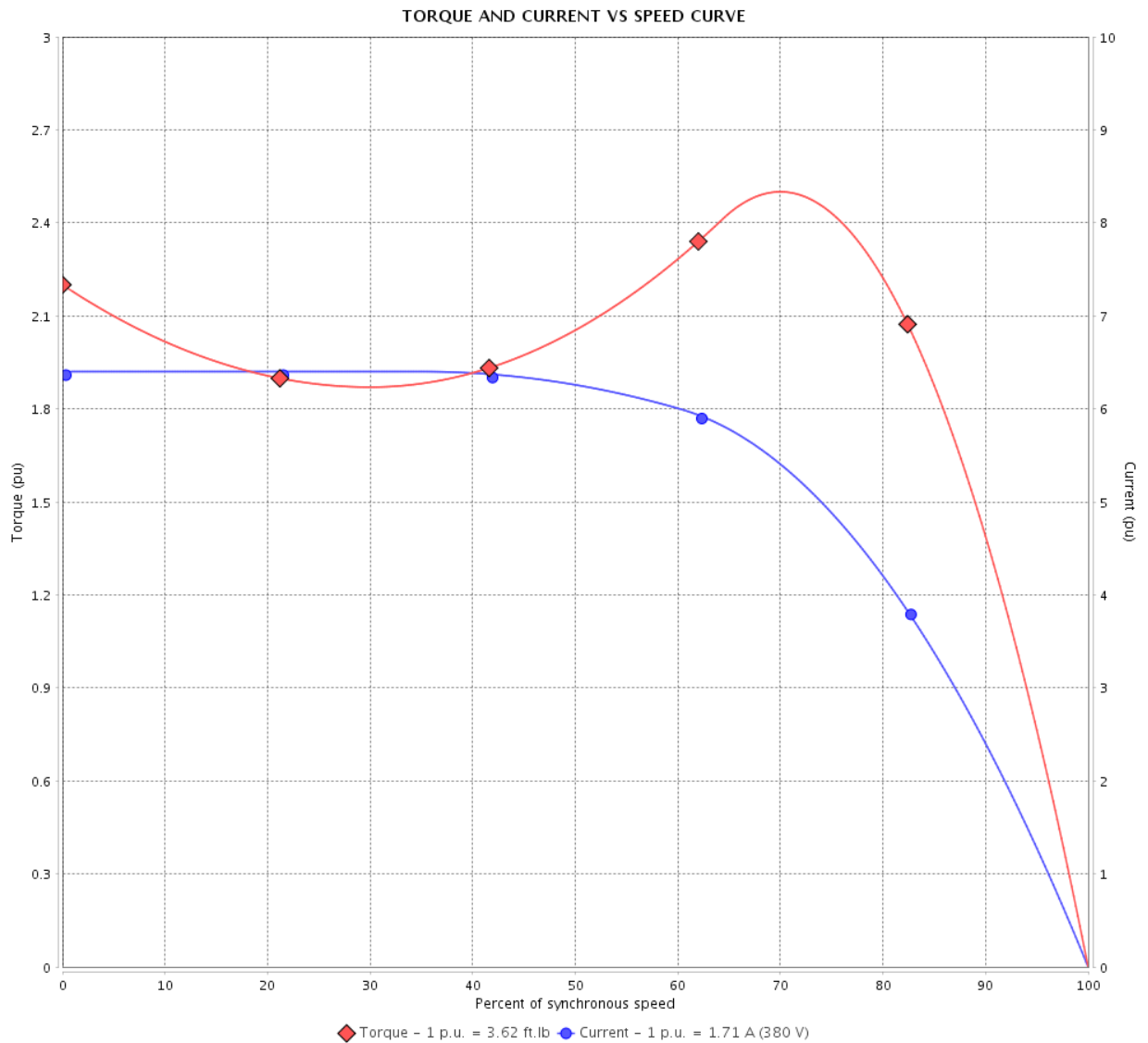
Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12373466

Catalog # : 00118ST3QIE143T-W22



Performance : 380 V 50 Hz 4P IE3

Rated current	: 1.71 A	Moment of inertia (J)	: 0.1172 sq.ft.lb
LRC	: 6.4	Duty cycle	: Cont.(S1)
Rated torque	: 3.62 ft.lb	Insulation class	: F
Locked rotor torque	: 220 %	Service factor	: 1.25
Breakdown torque	: 250 %	Temperature rise	: 80 K
Rated speed	: 1450 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



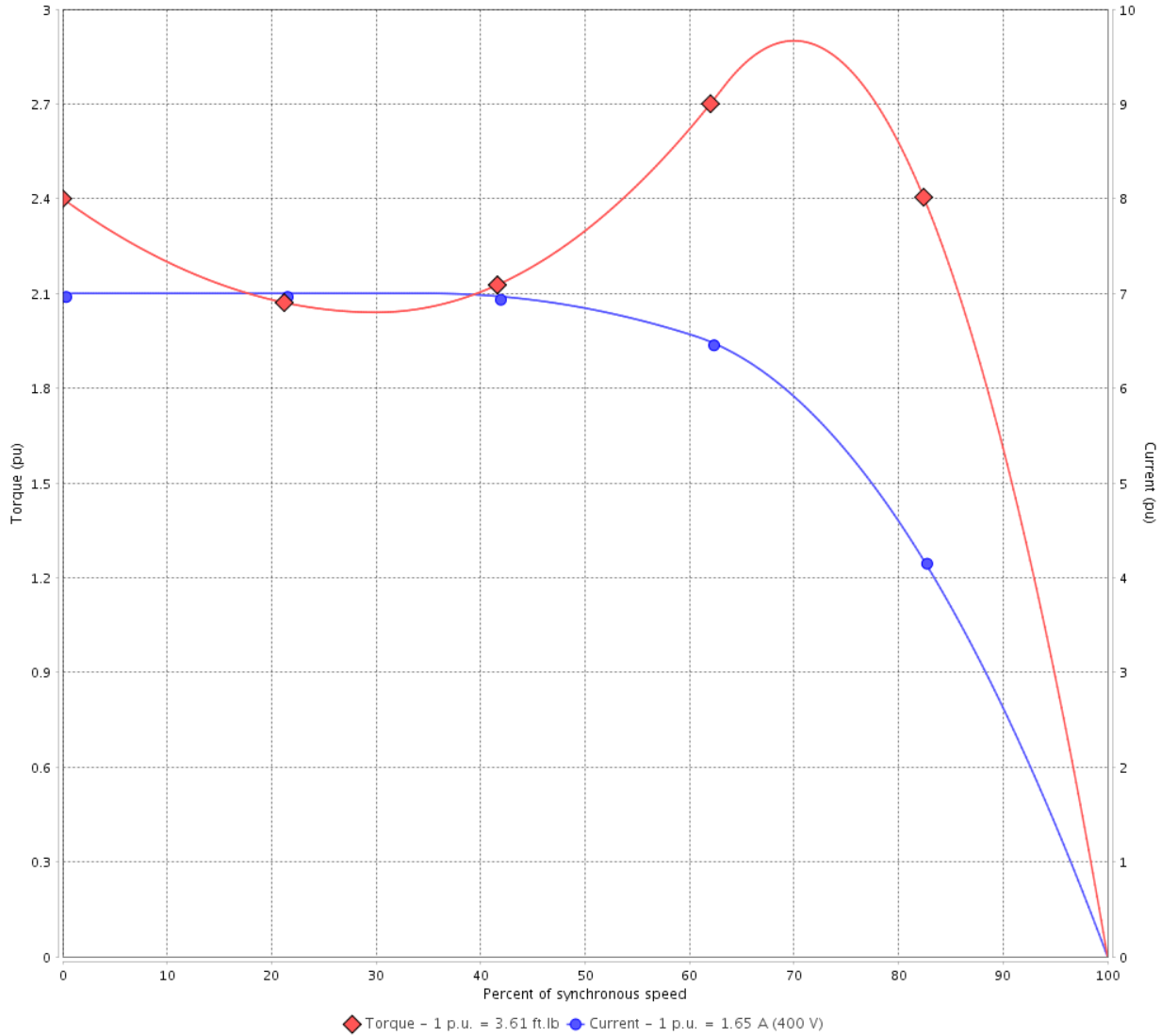
Customer :

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Catalog # : 00118ST3QIE143T-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



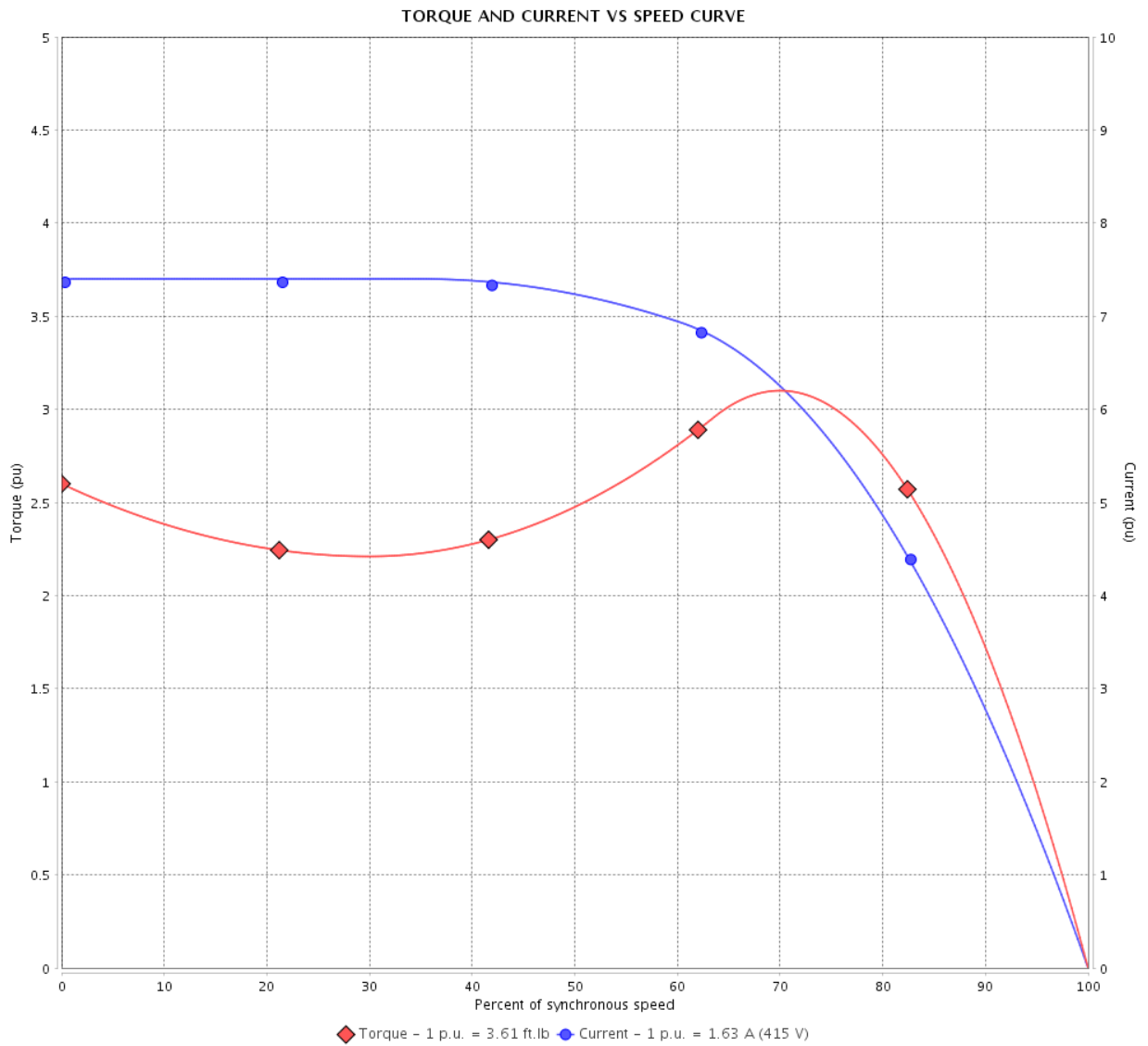
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Performance : 415 V 50 Hz 4P IE3

Rated current : 1.63 A
 LRC : 7.4
 Rated torque : 3.61 ft.lb
 Locked rotor torque : 260 %
 Breakdown torque : 310 %
 Rated speed : 1455 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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LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage



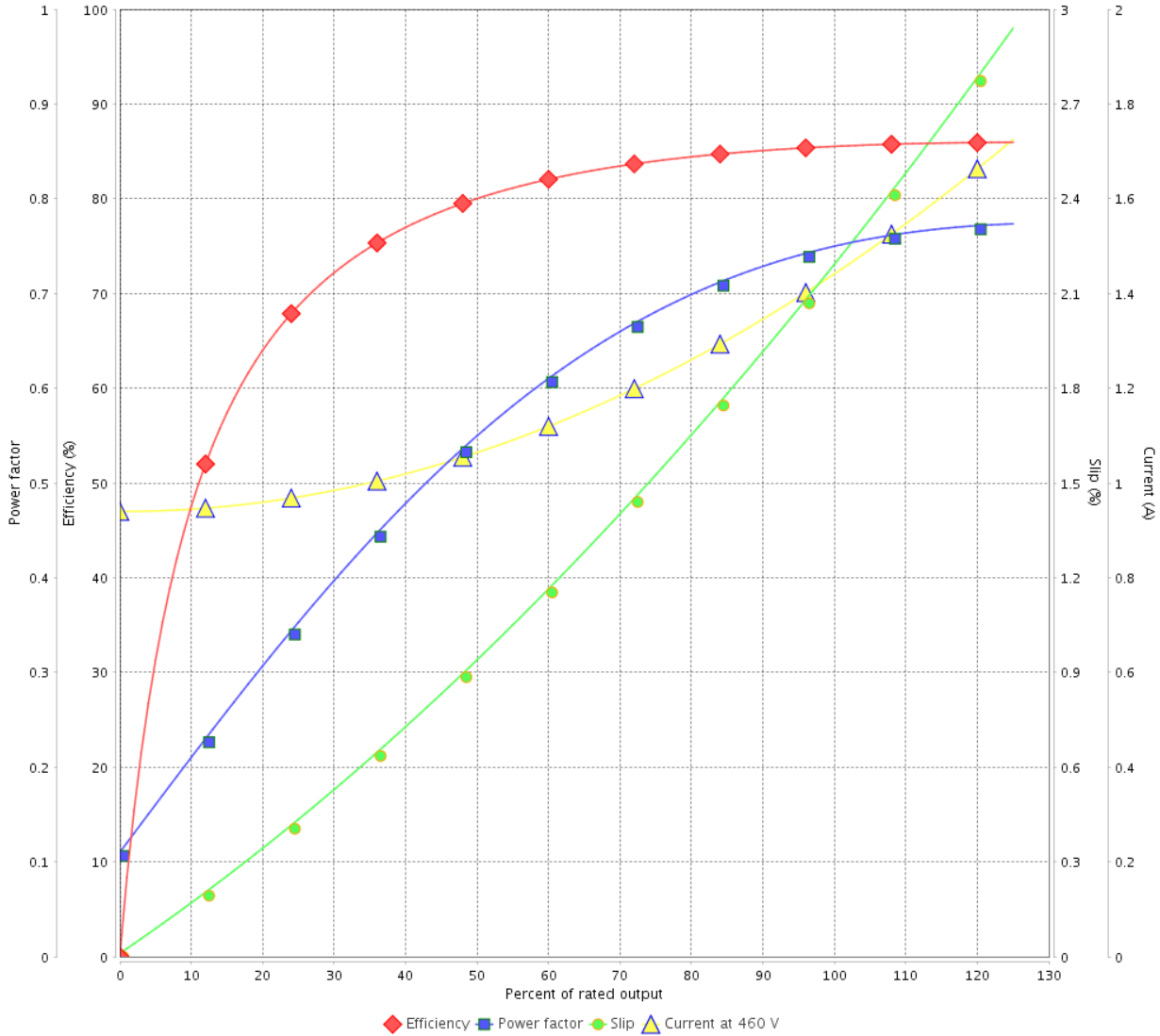
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LOAD PERFORMANCE CURVE



Performance : 460 V 60 Hz 4P

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

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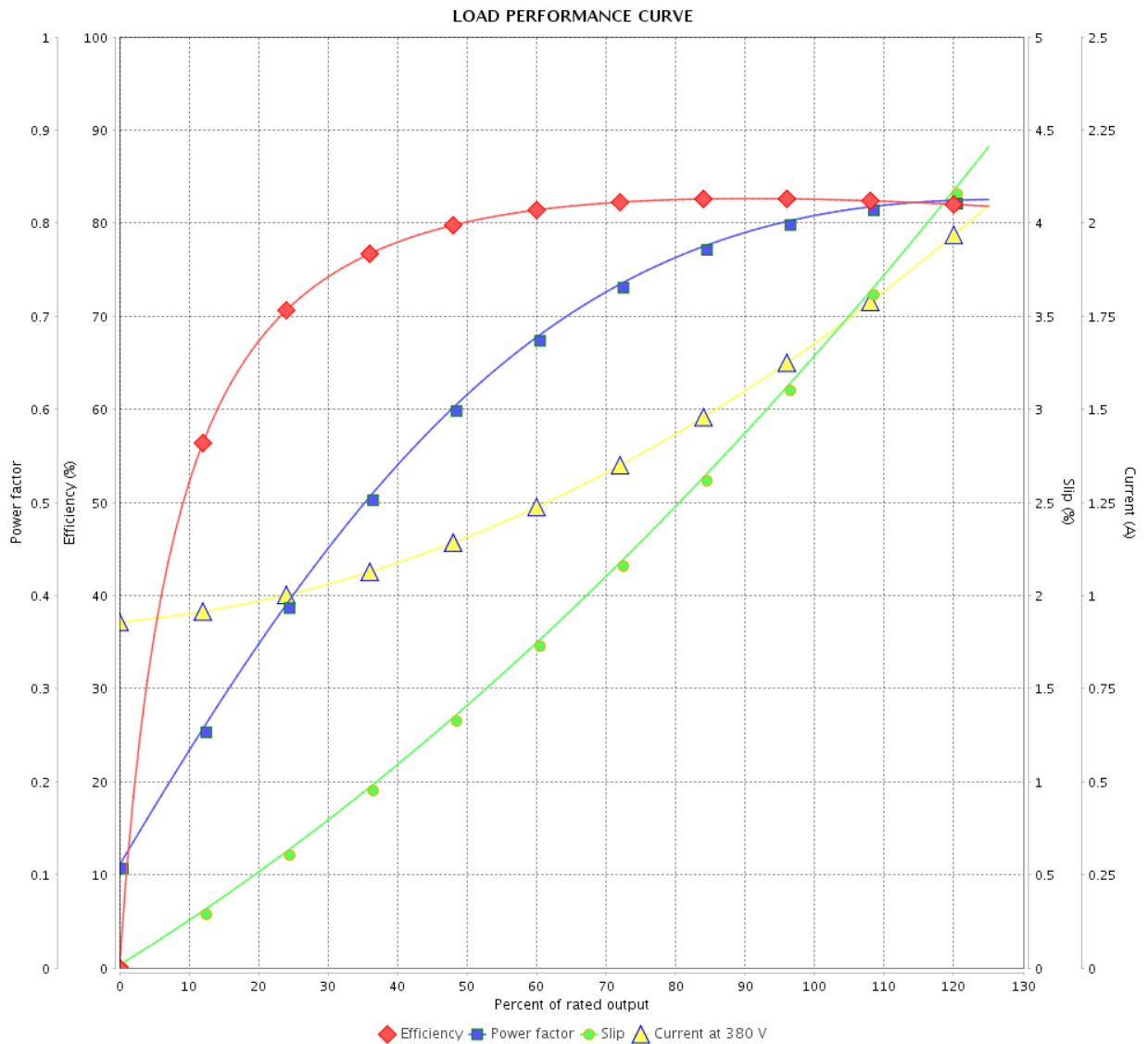


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Rated current : 1.71 A
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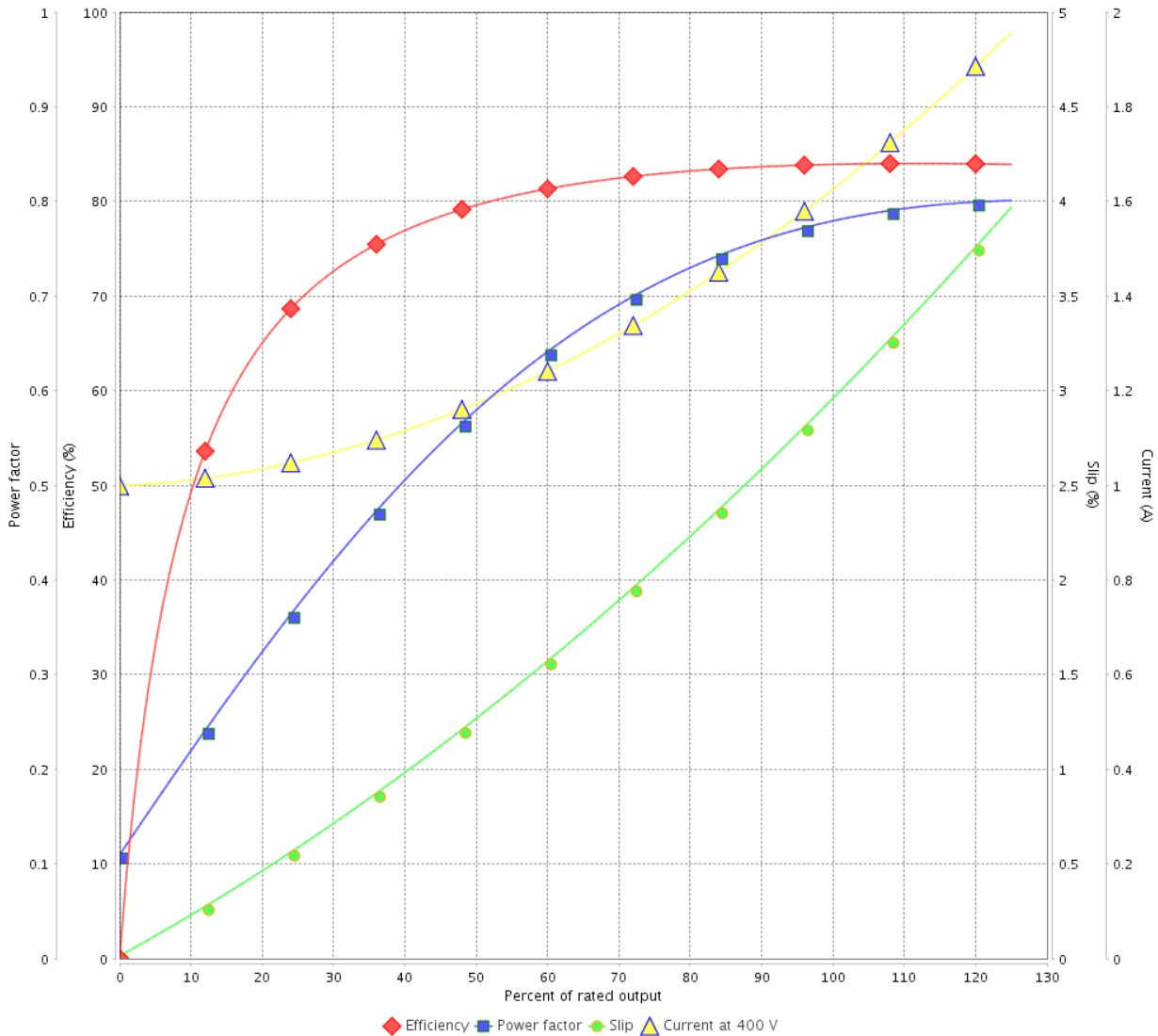
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Three Phase Induction Motor - Squirrel Cage

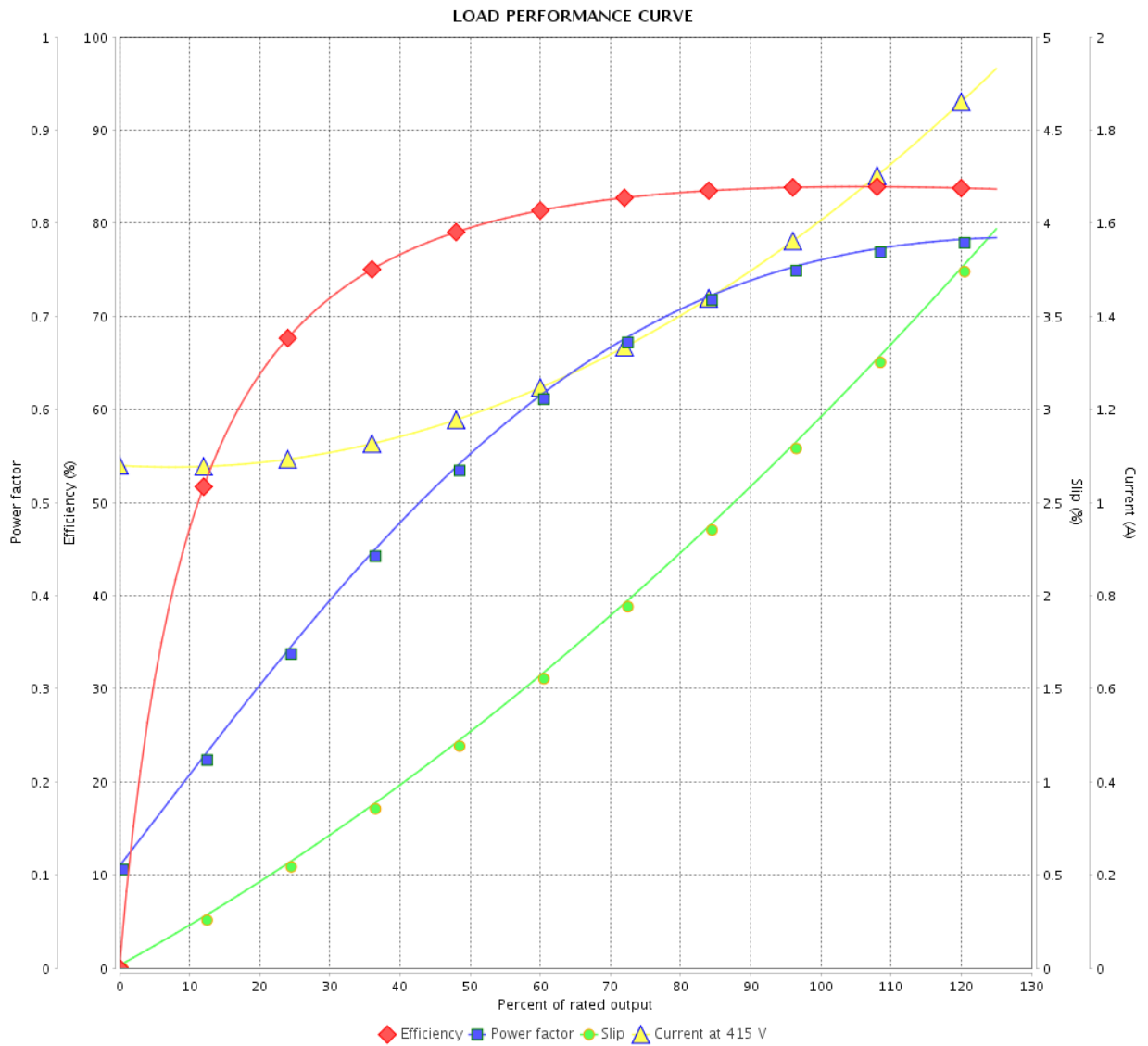


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THERMAL LIMIT CURVE



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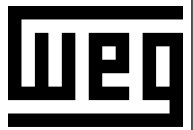
Heating constant

Cooling constant

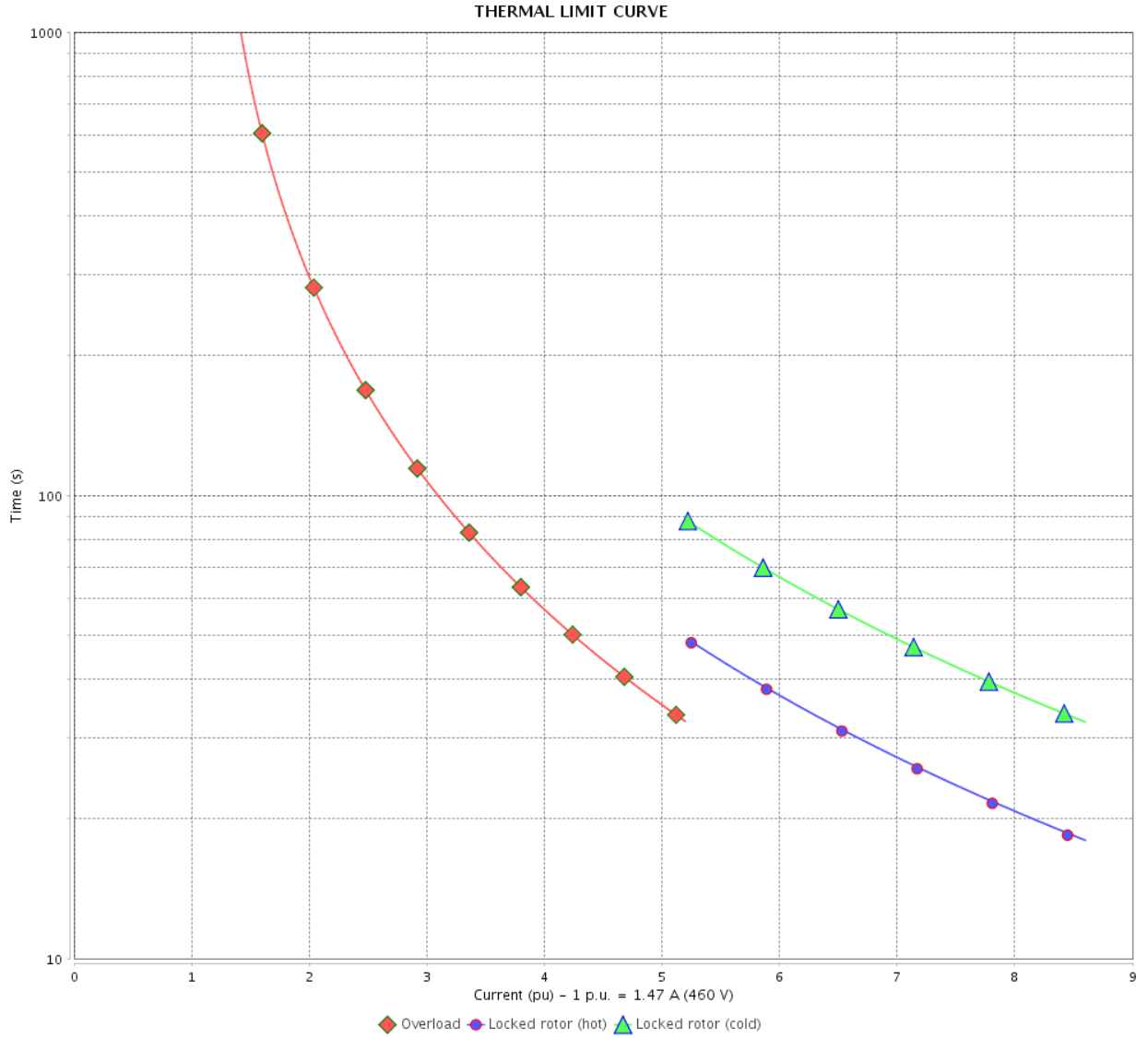
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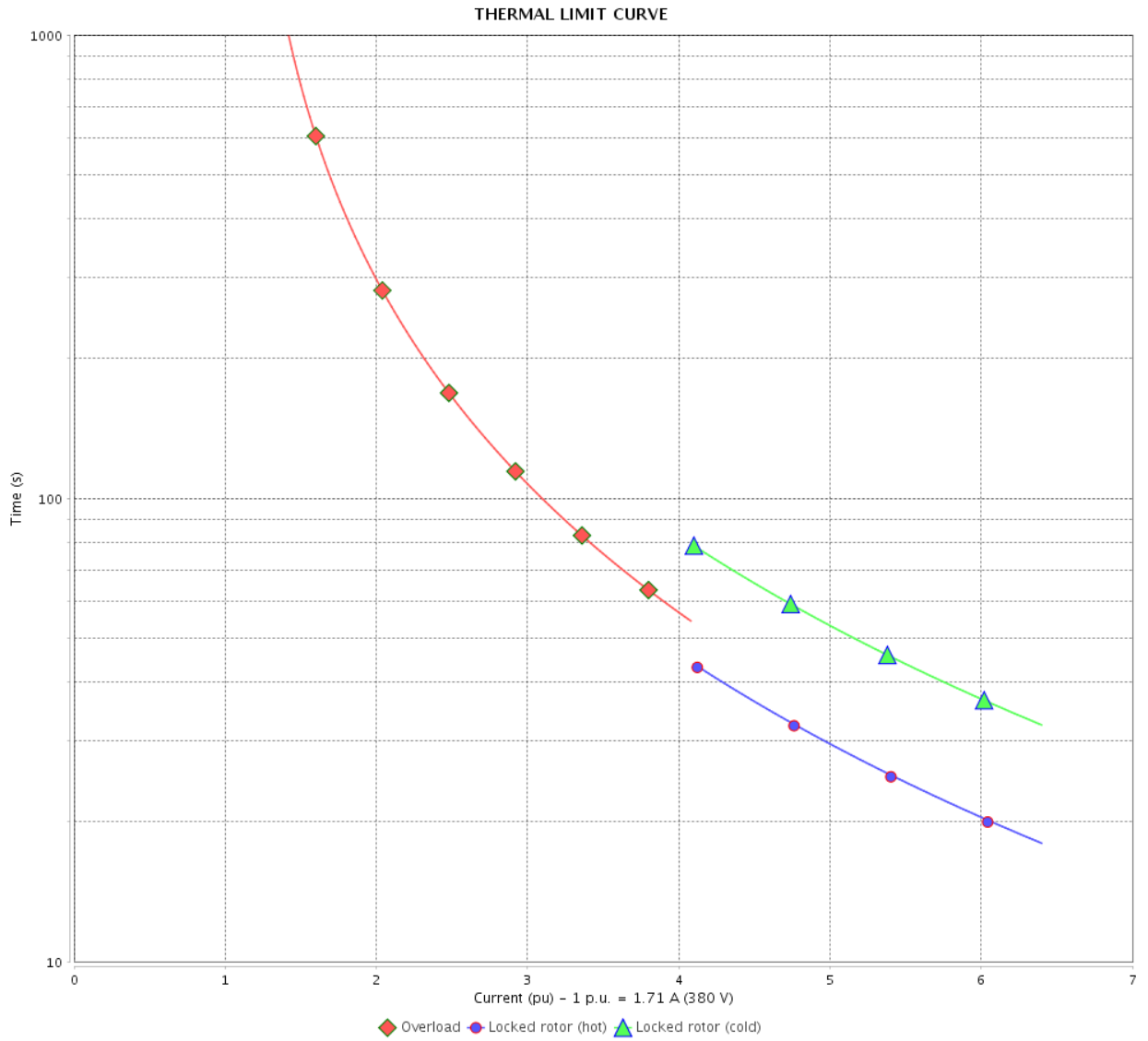
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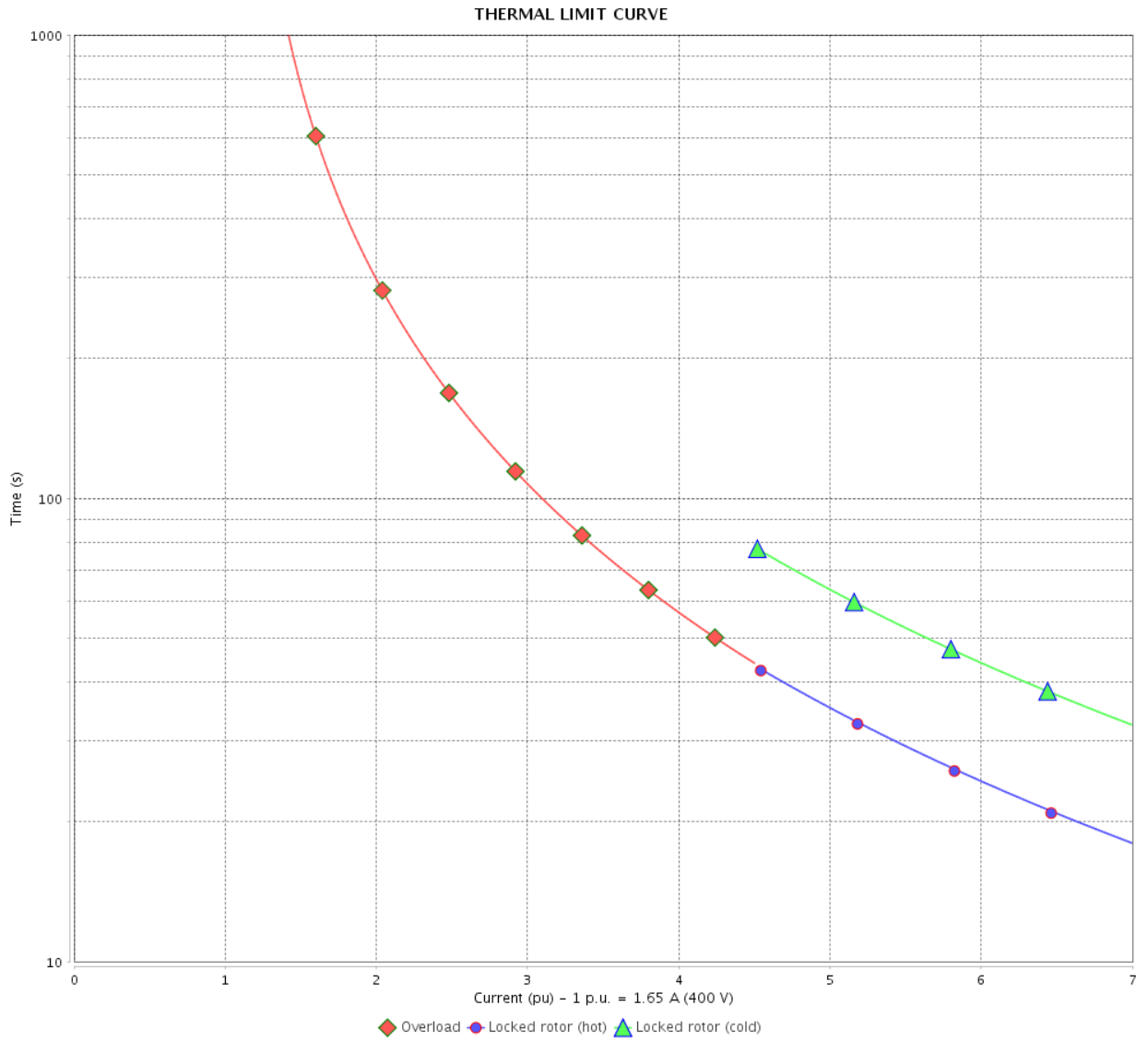
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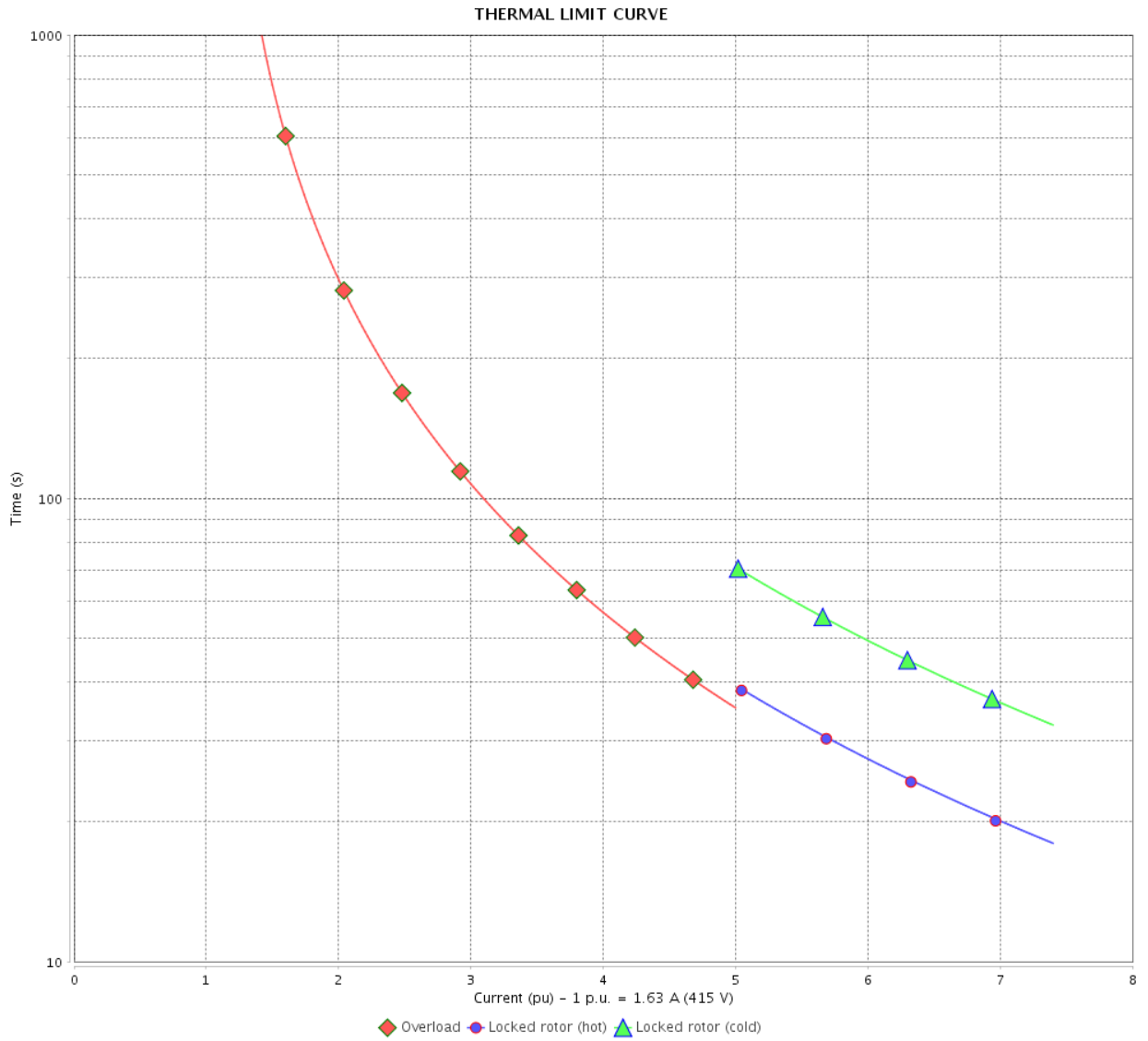
Rev.	Changes Summary	Performed	Checked	Date
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THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



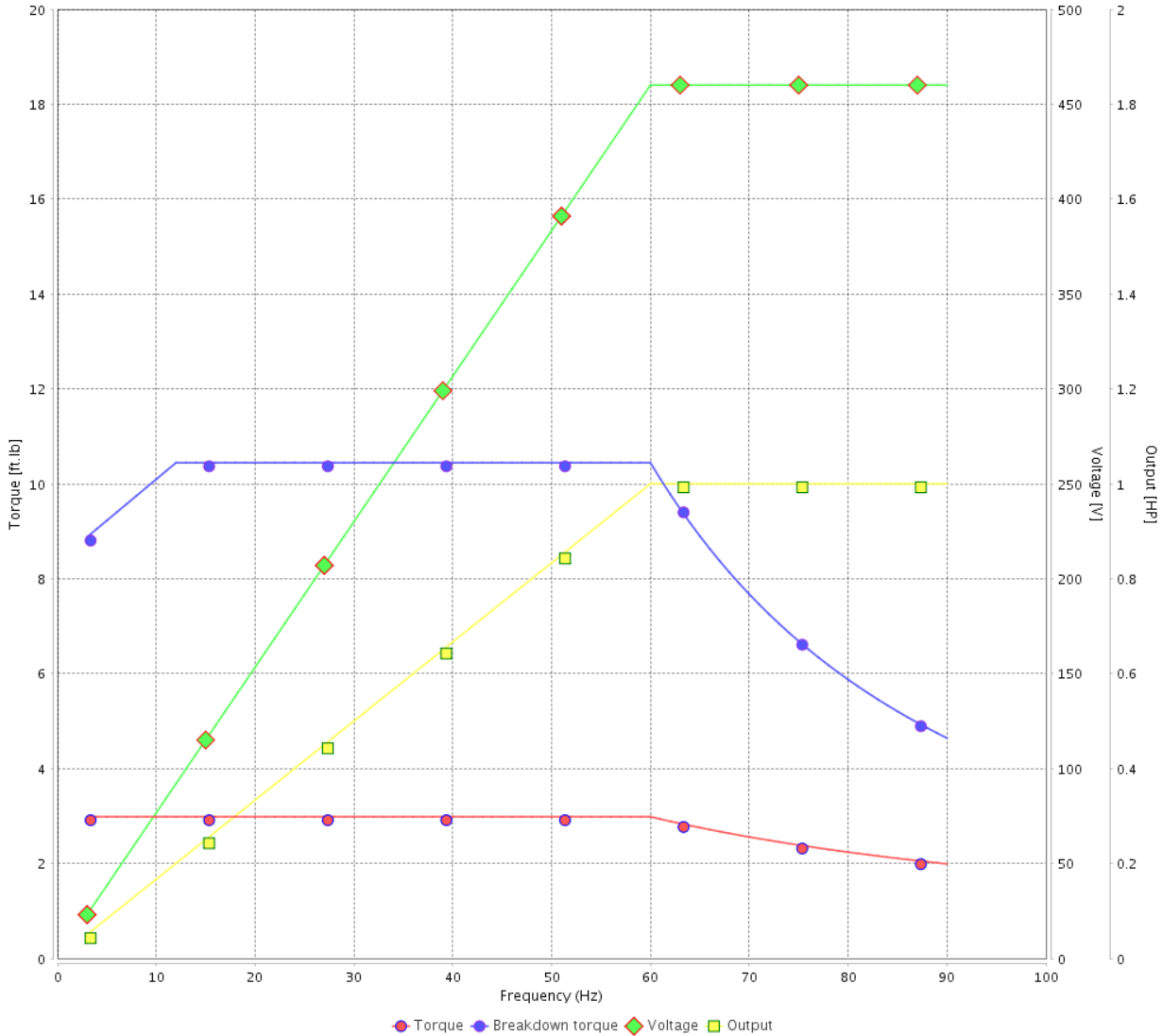
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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

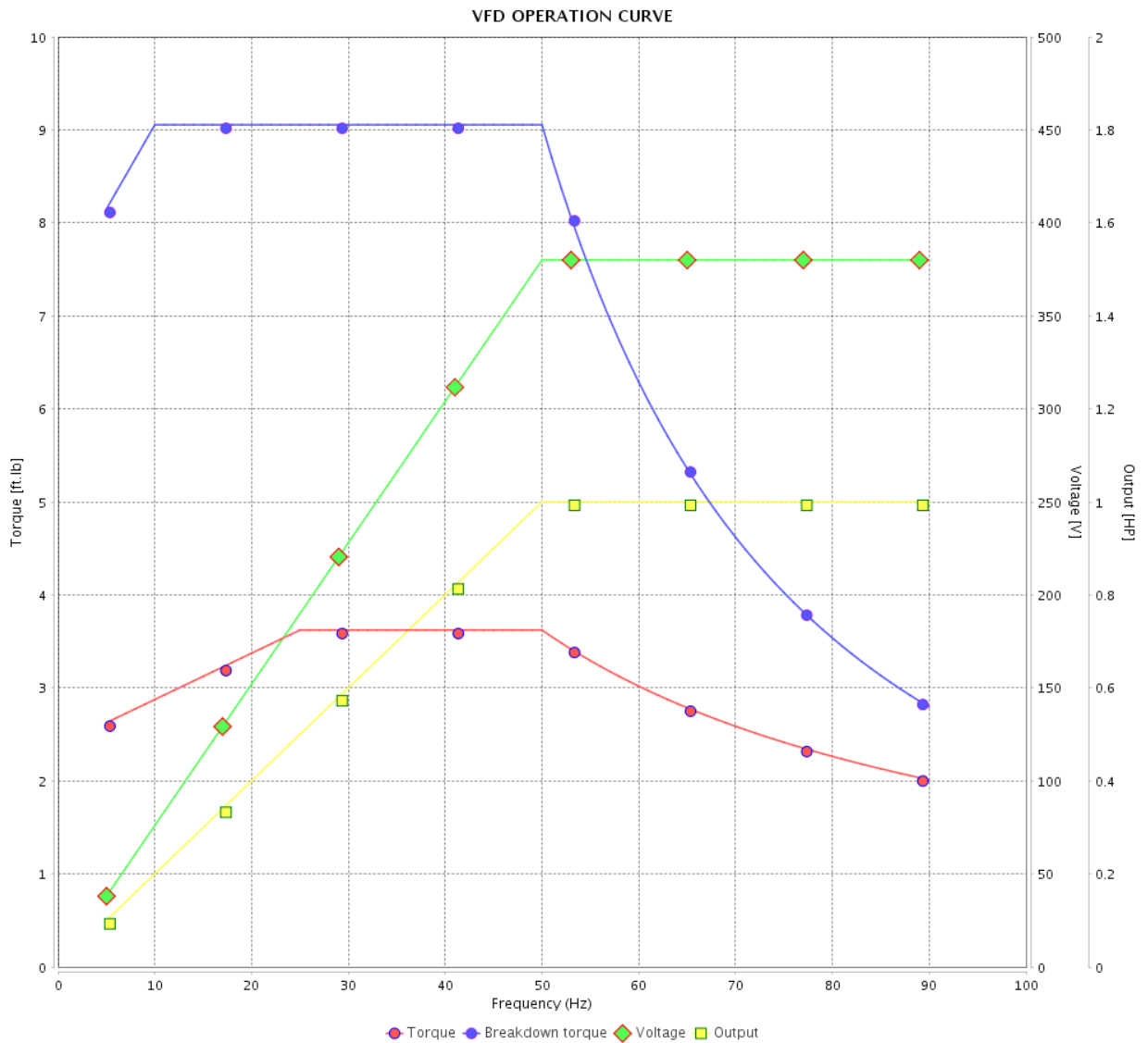


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Rated current : 1.71 A
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Three Phase Induction Motor - Squirrel Cage



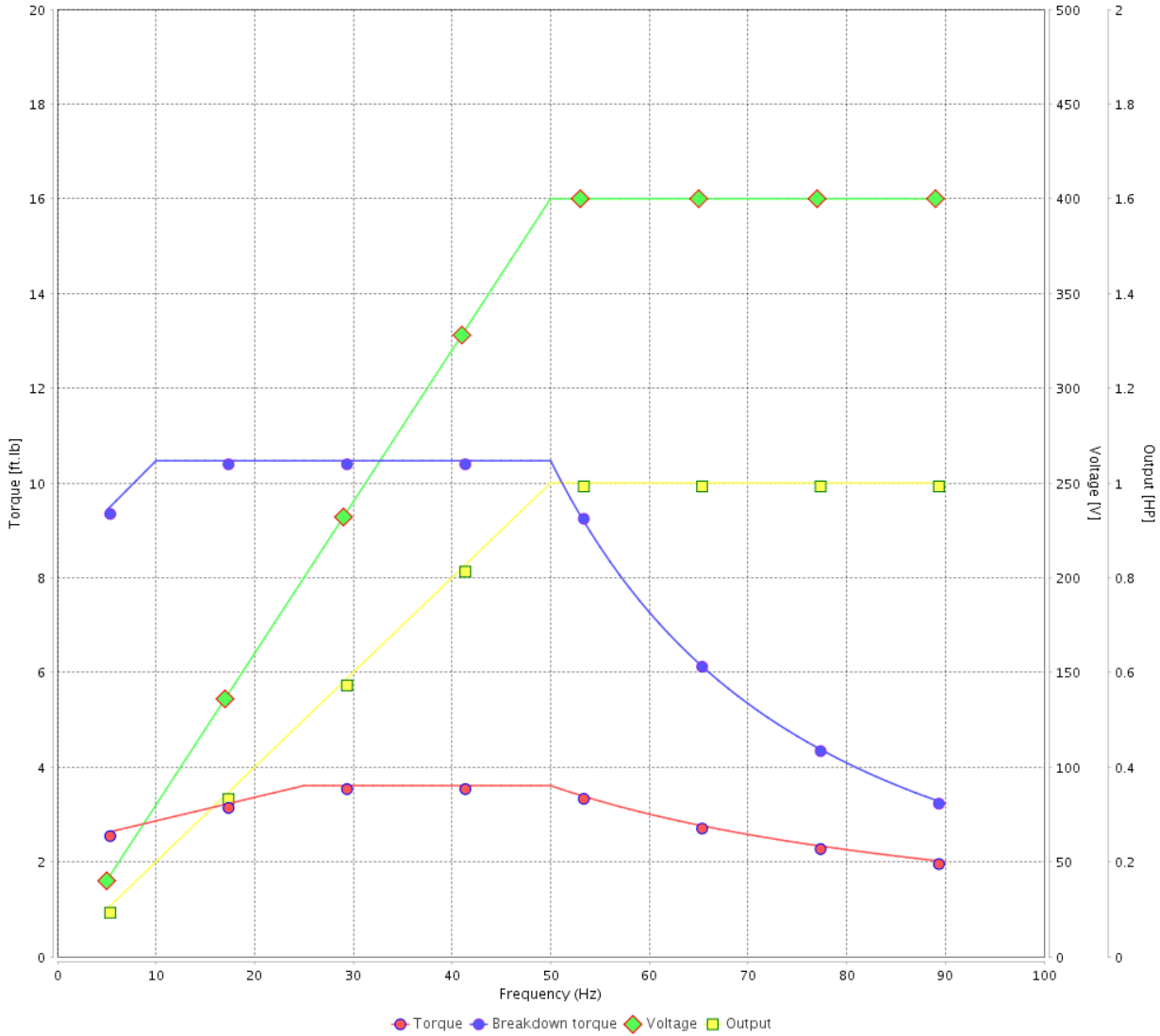
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VFD OPERATION CURVE

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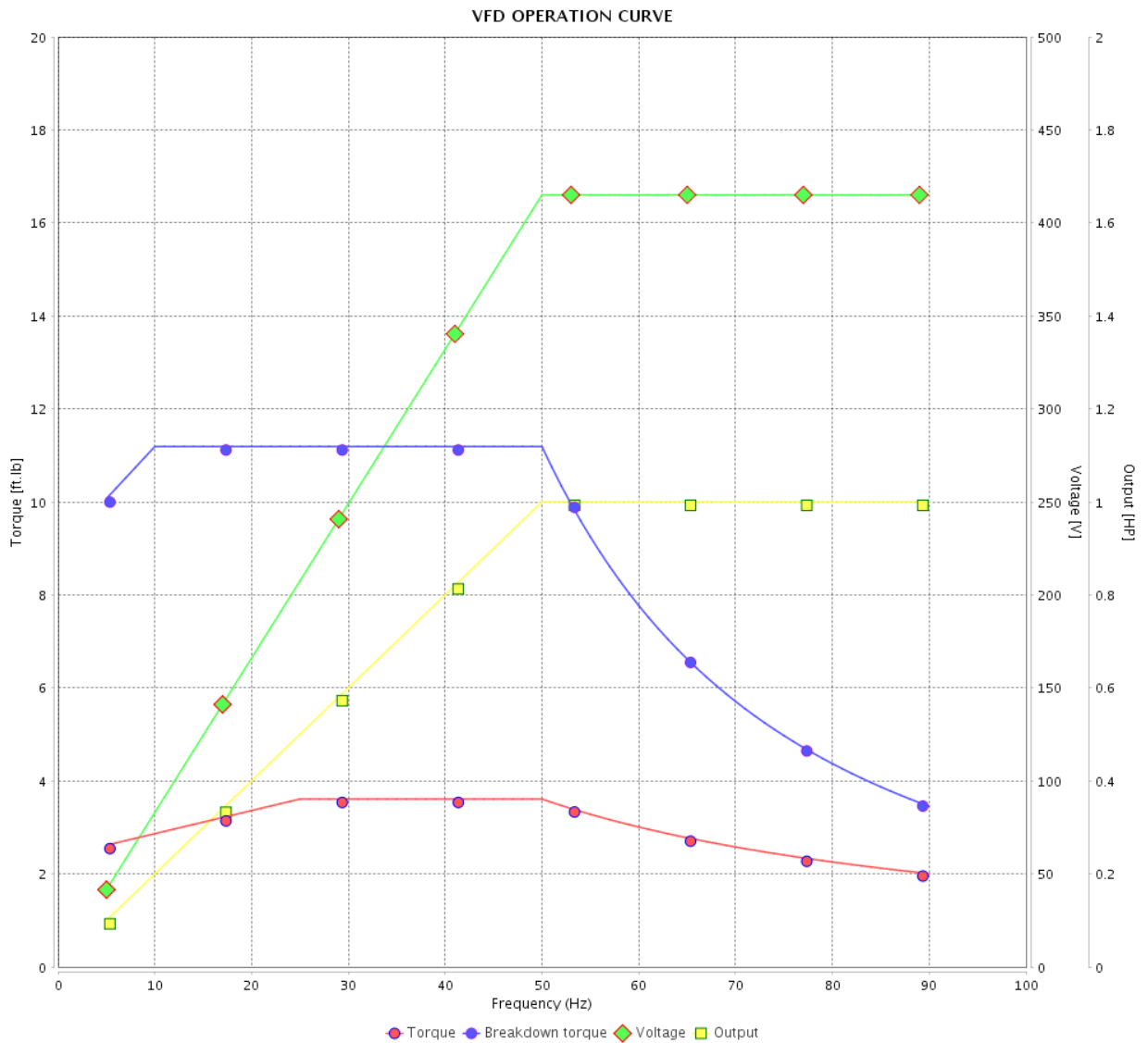


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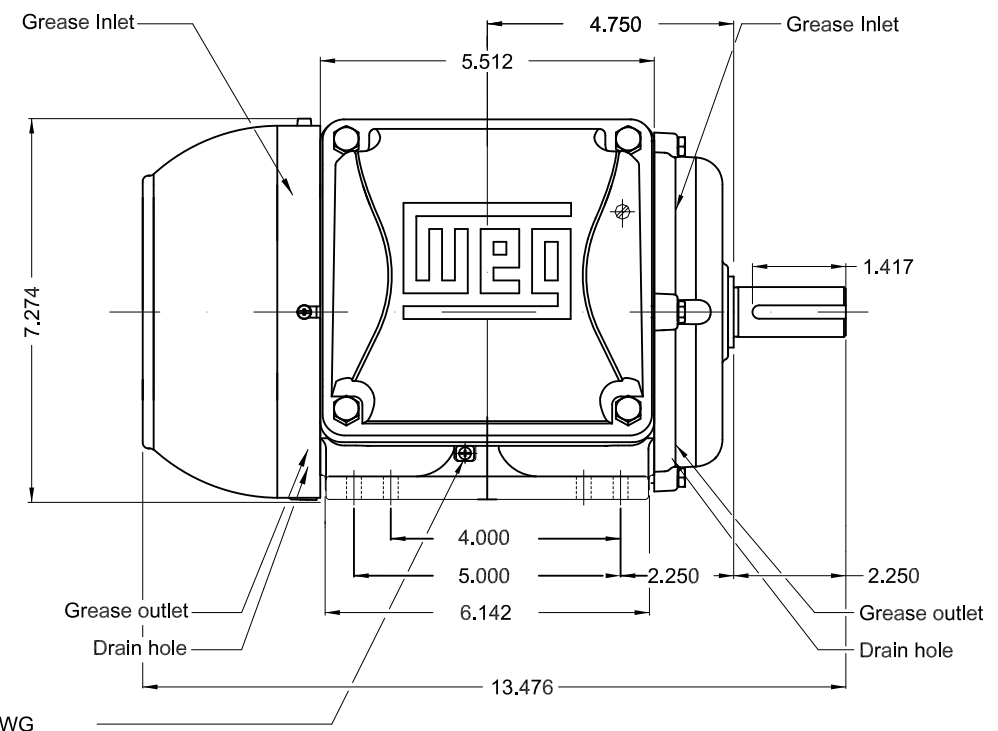
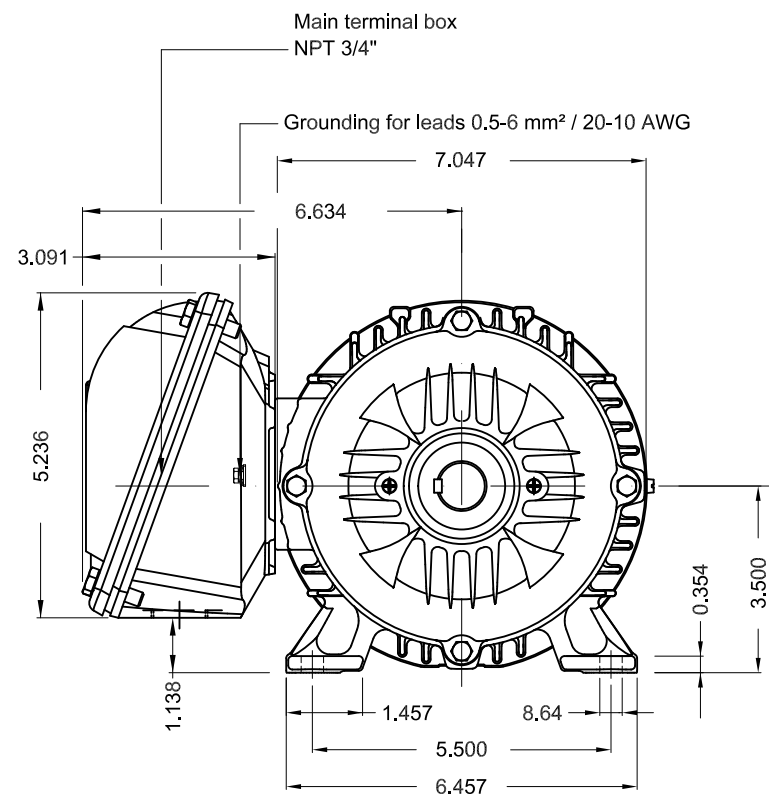


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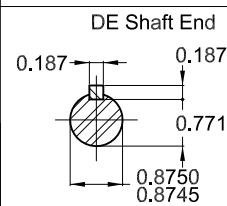
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				Revision



Grounding for leads 0.5-6 mm² / 20-10 AWG

Color RAL 5009
 Painting plan 202E
 Mounting B3R(D)



1 HP 04 Poles 60 Hz

Dimensions in inches

ECM	LOC	SUMMARY OF MODIFICATIONS	EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	PIRWBUSER	THREE PH. MOTOR IEEE 841 W22 PREM. EFF.					
CHECKED		FRAME 143/5T IP55 TEFC					
RELEASED							
REL DT.	WMO	Jaragua do Sul	Product Engineering	SHEET	1 / 1		

PREVIEW
 WDD



MADE IN BRAZIL
12373466



NEMA
Premium

IE000404W22IS

Inverter Duty Motor
Severe Duty

IEEE
841-2009



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,
VT 1000:1, CT 20:1, 1.00SF - T4A



FOR SAFE AREA
Mod. TE1BFOXON
CC029A

PH3 60Hz Fr. 143/5T 1000m.a.s.l. IP55 TEFC 53lb

V 460

A 1.47

HP 1.0

kW 0.75

SF 1.25

SFA 1.84

RPM 1760

PF 0.75

AMB 40°C

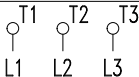
INS cl. F DT80K

NEMA NOM EFF 85.5%

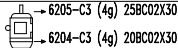
DUTY CONT.

DES B Code M

GUARANT. EFF 82.5%



460V



MOBIL POLYREX EM (20000h)

