

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :					
Product line	: W40 NEMA Premium Efficiency Three-Phase	Product code :	14497227		
		Catalog # :	05018OT3G326TS-W40		
Frame	: 324/6TS	Cooling method	: IC01 - ODP		
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	: 509 lb		
Protection degree	: IP23	Moment of inertia (J)	: 7.08 sq.ft.lb		
Design	: B				
Output [HP]	50	40	40	40	
Poles	4	4	4	4	
Frequency [Hz]	60	50	50	50	
Rated voltage [V]	460	380	400	415	
Rated current [A]	58.5	58.0	56.4	55.7	
L. R. Amperes [A]	369	383	389	401	
LRC [A]	6.3x(Code G)	6.6x(Code G)	6.9x(Code H)	7.2x(Code J)	
No load current [A]	23.2	22.8	25.2	27.0	
Rated speed [RPM]	1775	1475	1475	1480	
Slip [%]	1.39	1.67	1.67	1.33	
Rated torque [ft.lb]	148	142	142	142	
Locked rotor torque [%]	240	220	250	270	
Breakdown torque [%]	240	240	270	300	
Service factor	1.25	1.00	1.00	1.00	
Temperature rise	80 K	80 K	80 K	80 K	
Locked rotor time	19s (cold) 11s (hot)	21s (cold) 12s (hot)	21s (cold) 12s (hot)	21s (cold) 12s (hot)	
Noise level ²	66.0 dB(A)				
Efficiency (%)	25%	94.0	92.9	92.9	92.9
	50%	94.1	93.1	93.1	93.1
	75%	94.5	93.5	93.5	93.5
	100%	94.5	93.6	93.6	93.6
Power Factor	25%	0.44	0.44	0.40	0.37
	50%	0.70	0.70	0.66	0.62
	75%	0.80	0.80	0.77	0.74
	100%	0.84	0.84	0.82	0.80
Bearing type	: <u>Drive end</u> 6312 Z C3	<u>Non drive end</u> 6211 Z C3	Foundation loads		
Sealing	: Without	Without	Max. traction		
	Bearing Seal	Bearing Seal	Max. compression		
Lubrication interval	: 20000 h	20000 h			
Lubricant amount	: 21 g	11 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



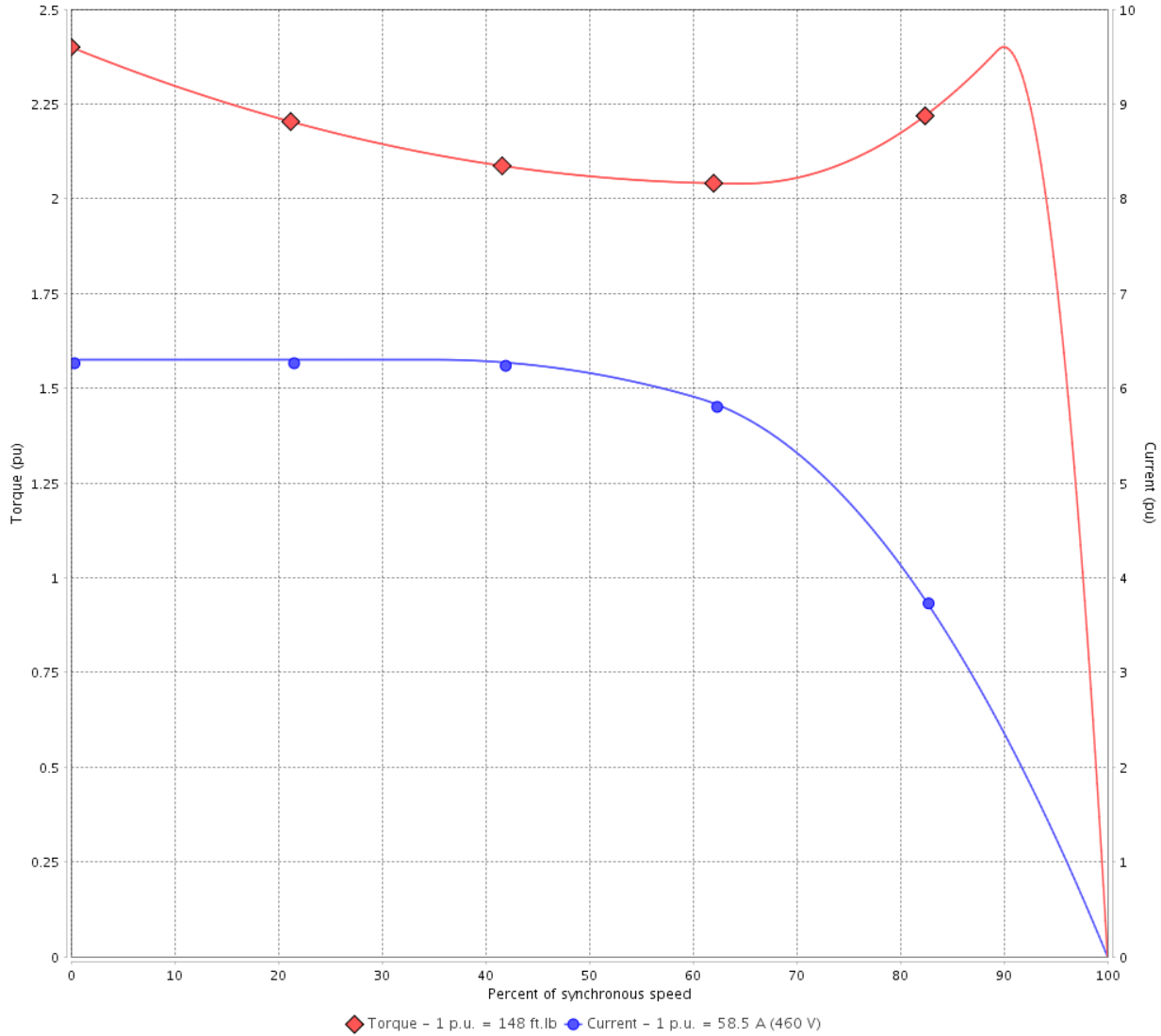
Customer :

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Three-Phase

Product code : 14497227

Catalog # : 05018OT3G326TS-W40

TORQUE AND CURRENT VS SPEED CURVE



Performance : 460 V 60 Hz 4P

Rated current	: 58.5 A	Moment of inertia (J)	: 7.08 sq.ft.lb
LRC	: 6.3	Duty cycle	: Cont.(S1)
Rated torque	: 148 ft.lb	Insulation class	: F
Locked rotor torque	: 240 %	Service factor	: 1.25
Breakdown torque	: 240 %	Temperature rise	: 80 K
Rated speed	: 1775 rpm	Design	: B

Locked rotor time : 19s (cold) 11s (hot)

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TORQUE AND CURRENT VS SPEED CURVE



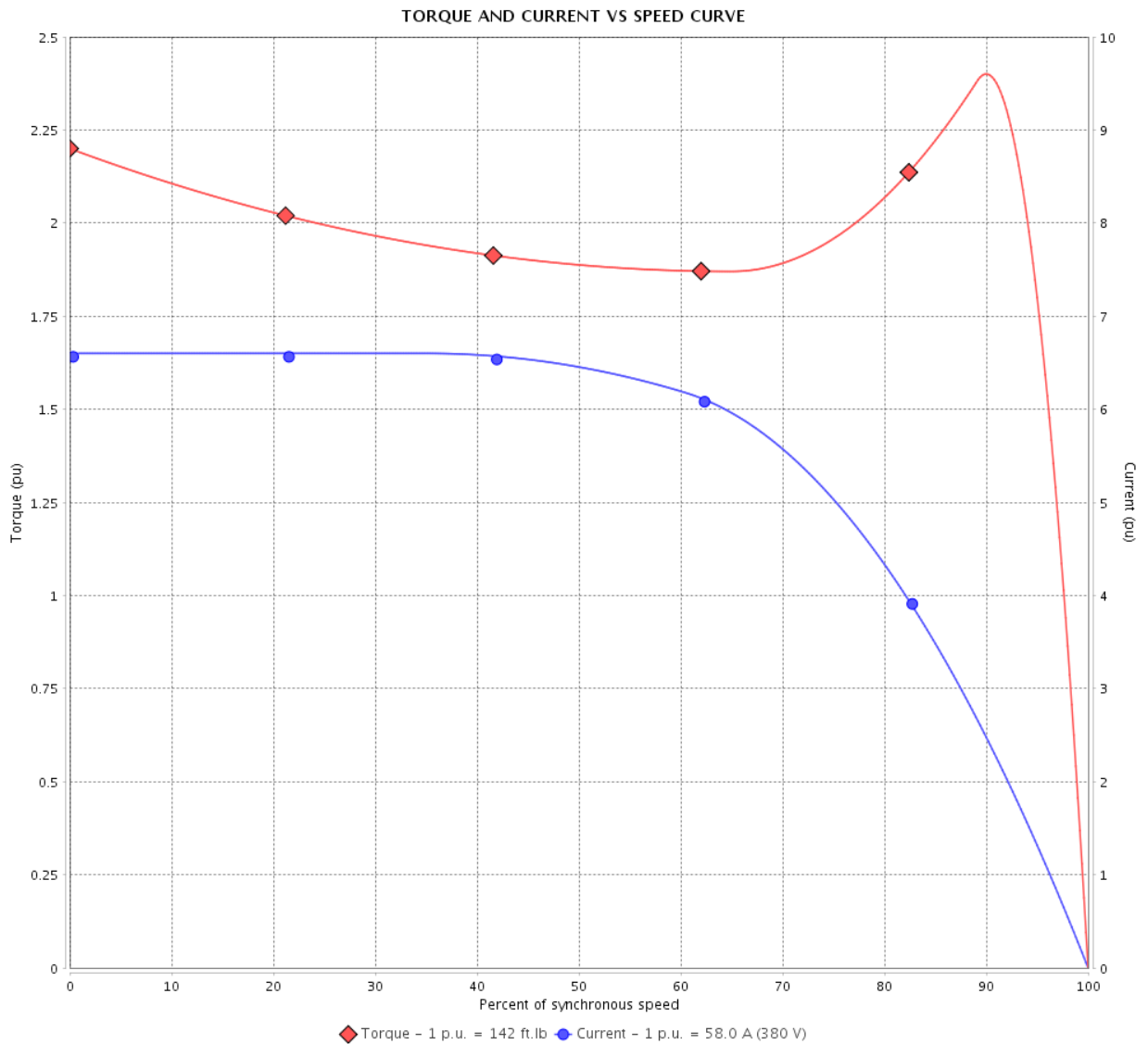
Three Phase Induction Motor - Squirrel Cage

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Product code : 14497227

Catalog # : 05018OT3G326TS-W40



Performance : 380 V 50 Hz 4P IE3

Rated current	: 58.0 A	Moment of inertia (J)	: 7.08 sq.ft.lb
LRC	: 6.6	Duty cycle	: Cont.(S1)
Rated torque	: 142 ft.lb	Insulation class	: F
Locked rotor torque	: 220 %	Service factor	: 1.00
Breakdown torque	: 240 %	Temperature rise	: 80 K
Rated speed	: 1475 rpm	Design	: B

Locked rotor time : 21s (cold) 12s (hot)

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TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



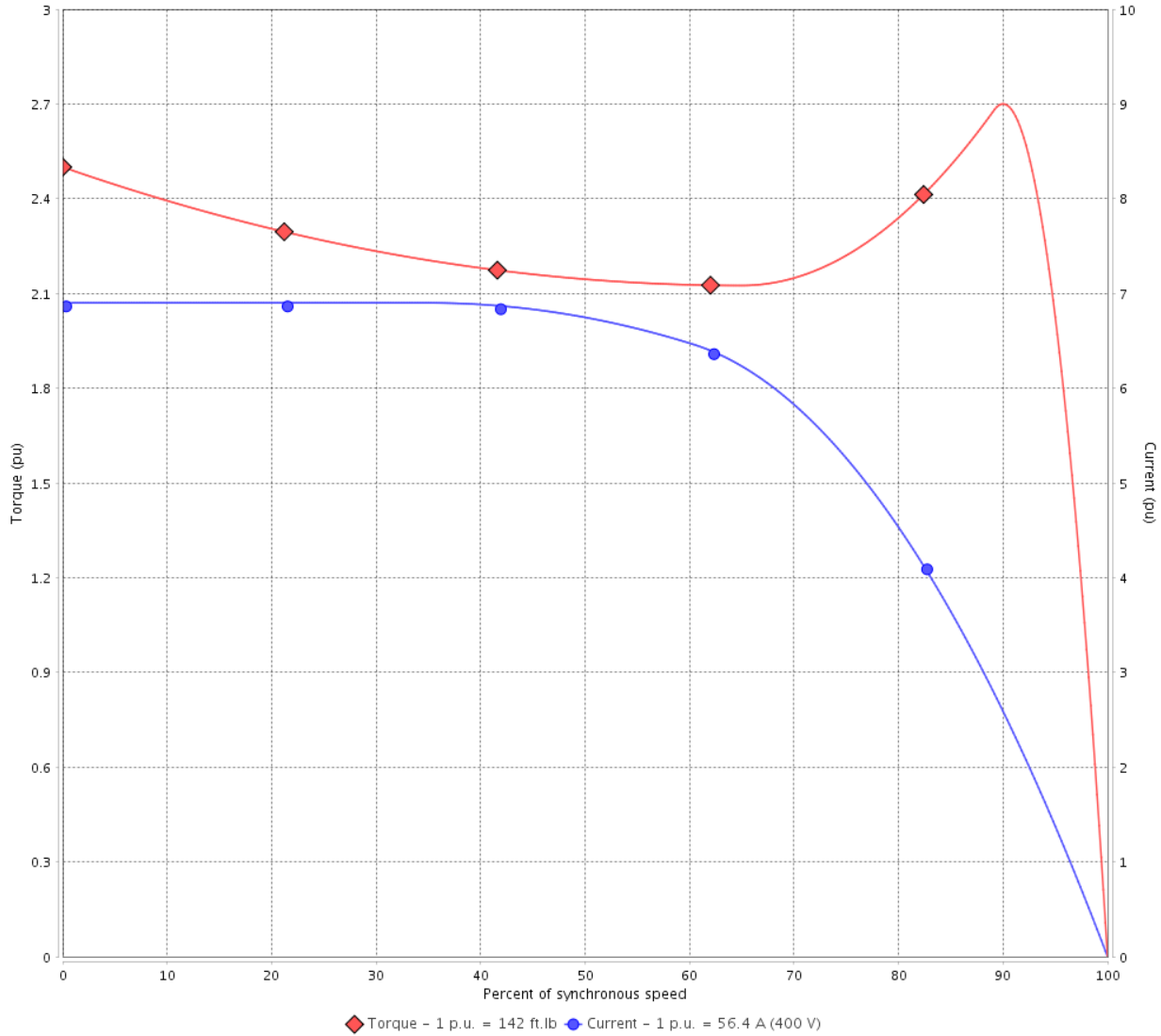
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TORQUE AND CURRENT VS SPEED CURVE



Performance : 400 V 50 Hz 4P IE3

Rated current	: 56.4 A	Moment of inertia (J)	: 7.08 sq.ft.lb
LRC	: 6.9	Duty cycle	: Cont.(S1)
Rated torque	: 142 ft.lb	Insulation class	: F
Locked rotor torque	: 250 %	Service factor	: 1.00
Breakdown torque	: 270 %	Temperature rise	: 80 K
Rated speed	: 1475 rpm	Design	: B

Locked rotor time : 21s (cold) 12s (hot)

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TORQUE AND CURRENT VS SPEED CURVE



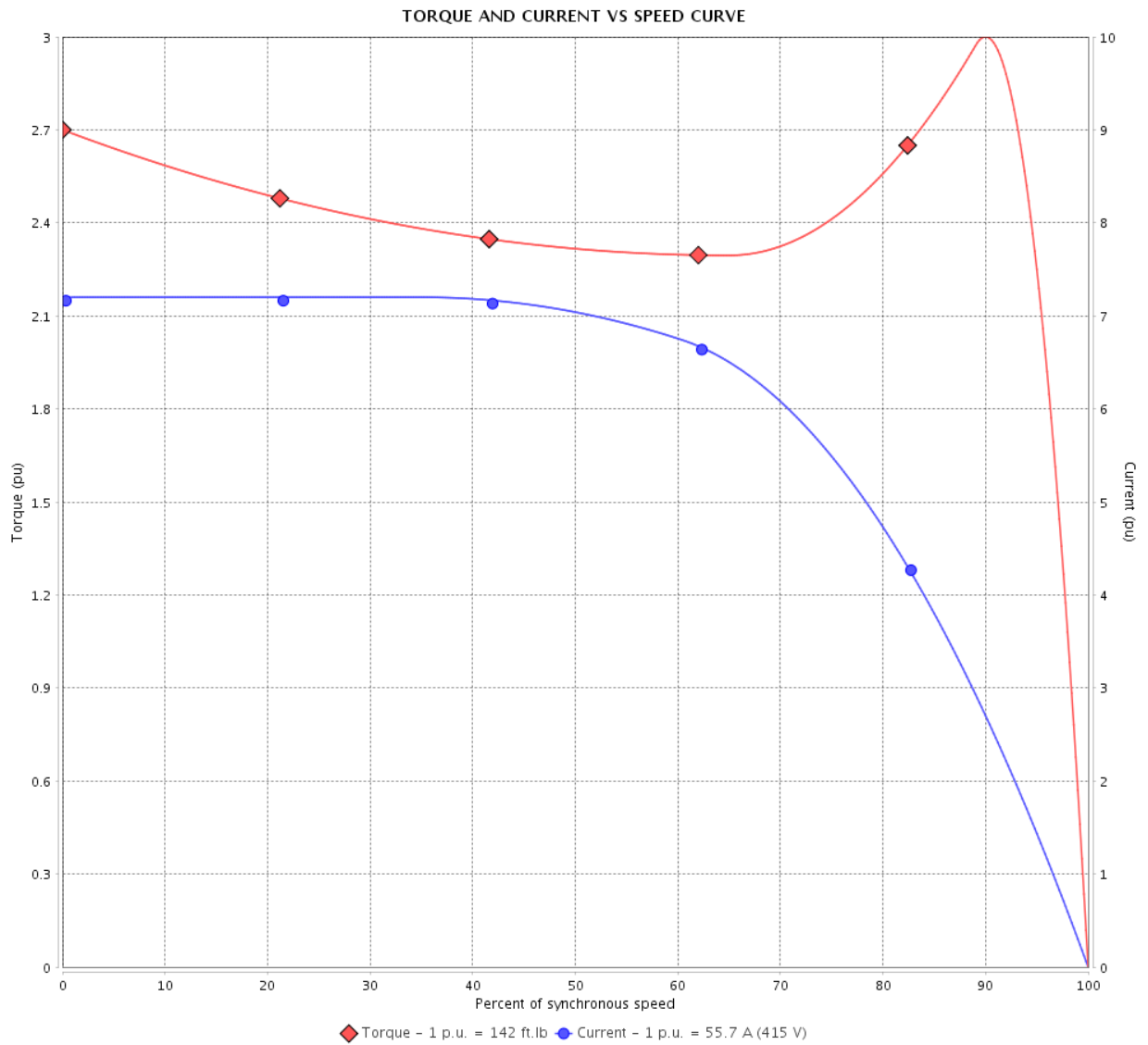
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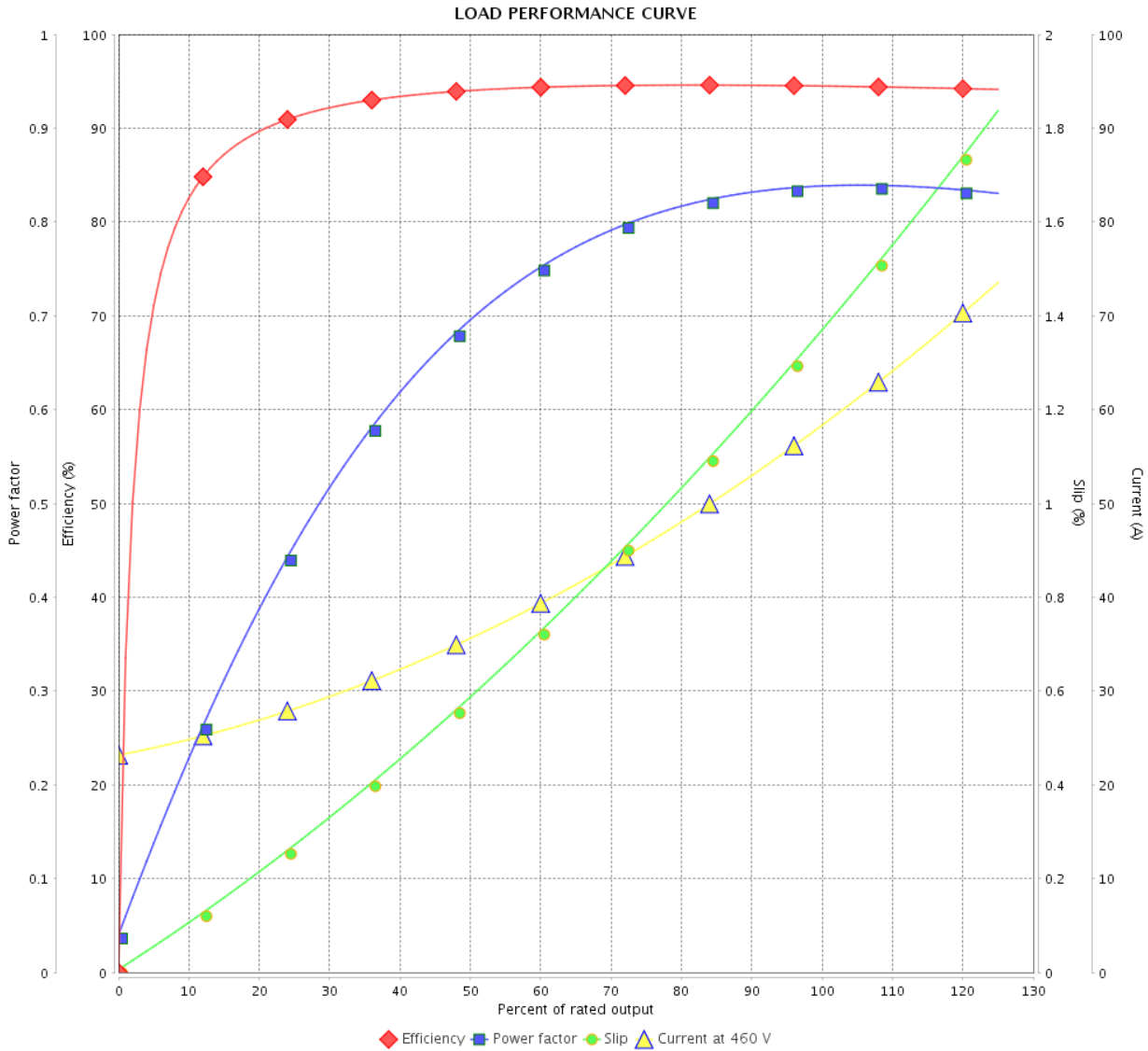


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Performance : 460 V 60 Hz 4P

Rated current	: 58.5 A	Moment of inertia (J)	: 7.08 sq.ft.lb
LRC	: 6.3	Duty cycle	: Cont.(S1)
Rated torque	: 148 ft.lb	Insulation class	: F
Locked rotor torque	: 240 %	Service factor	: 1.25
Breakdown torque	: 240 %	Temperature rise	: 80 K
Rated speed	: 1775 rpm	Design	: B

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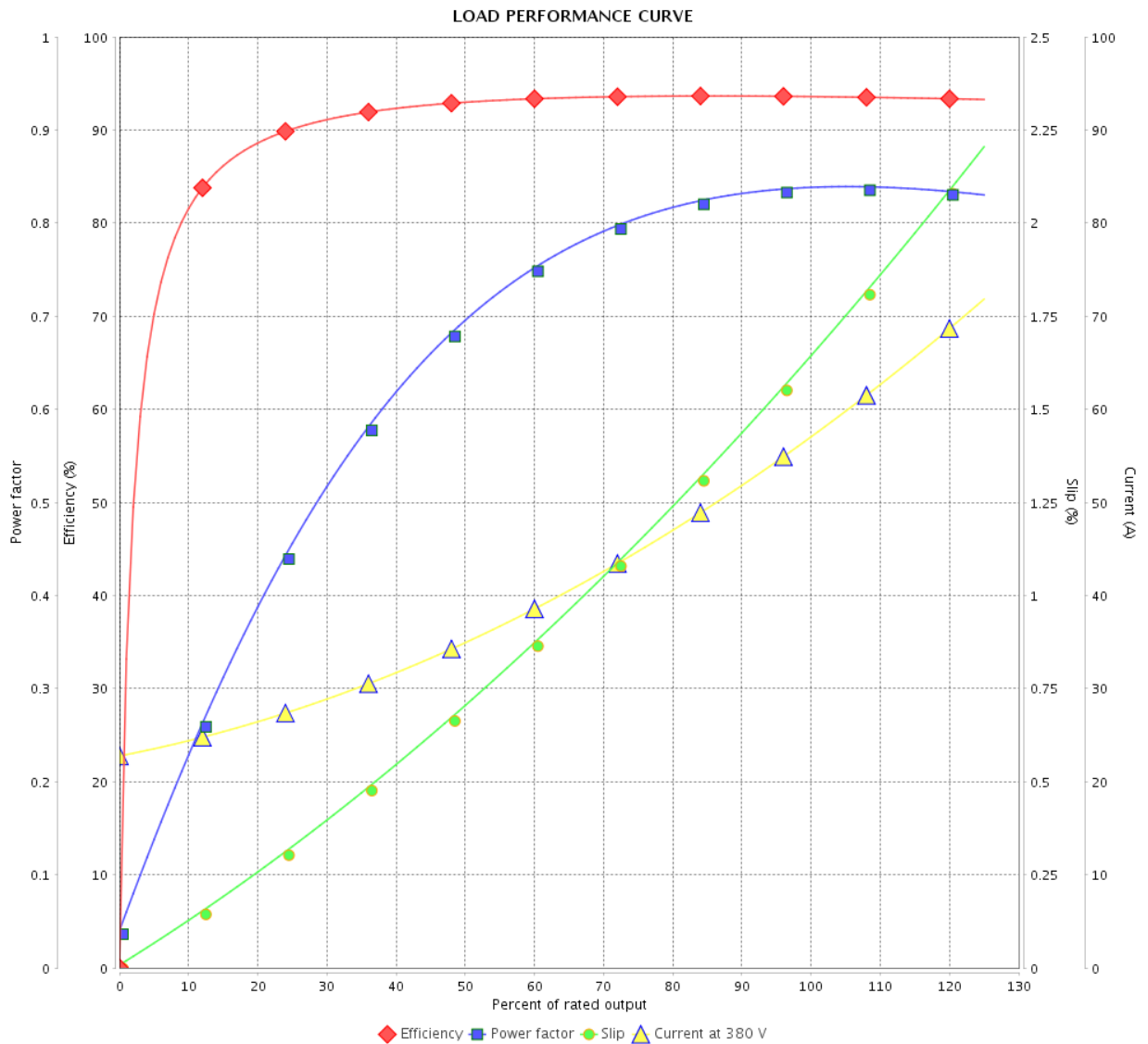


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Performance : 380 V 50 Hz 4P IE3

Rated current : 58.0 A
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 Locked rotor torque : 220 %
 Breakdown torque : 240 %
 Rated speed : 1475 rpm

Moment of inertia (J) : 7.08 sq.ft.lb
 Duty cycle : Cont.(S1)
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 Service factor : 1.00
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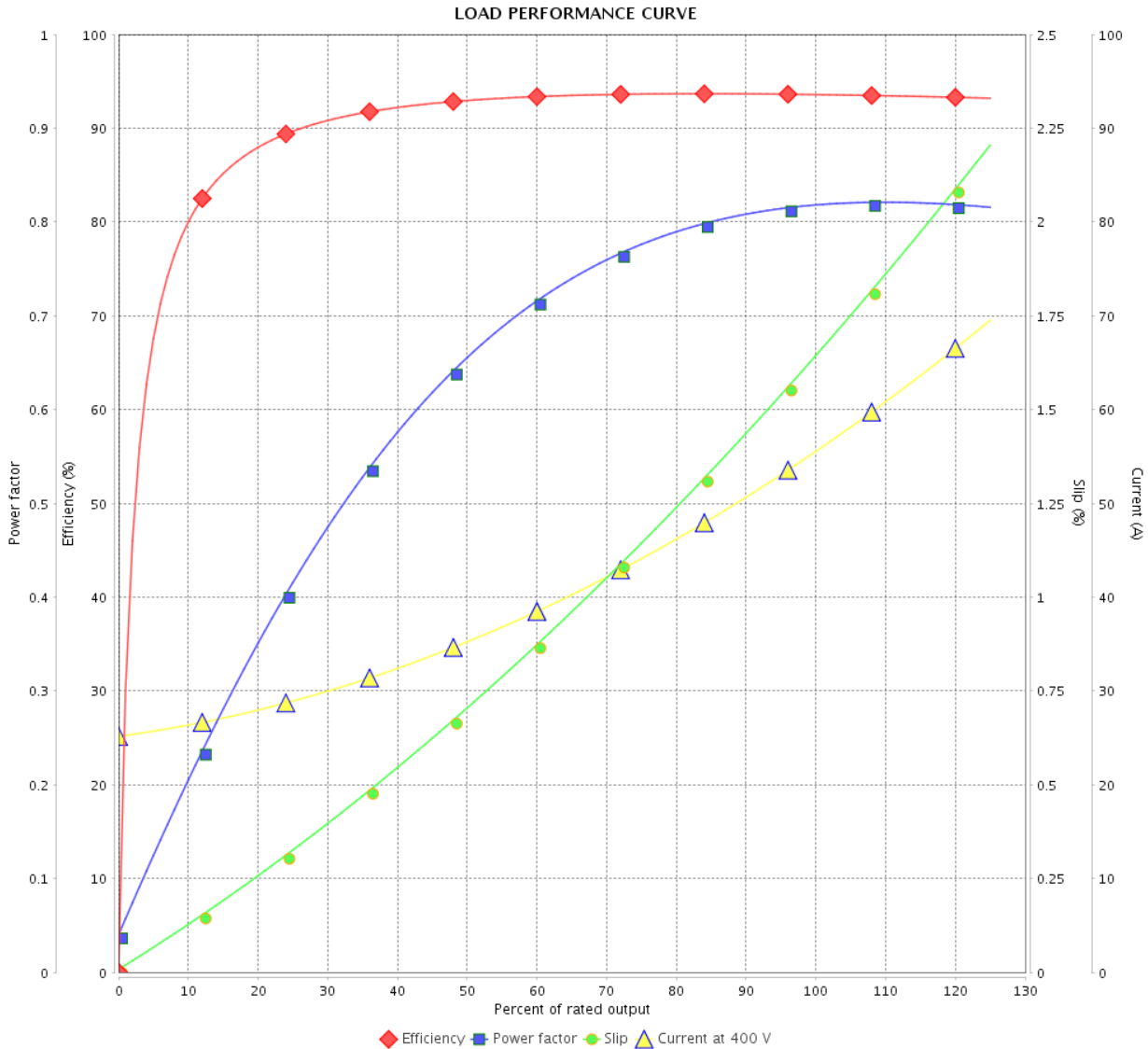


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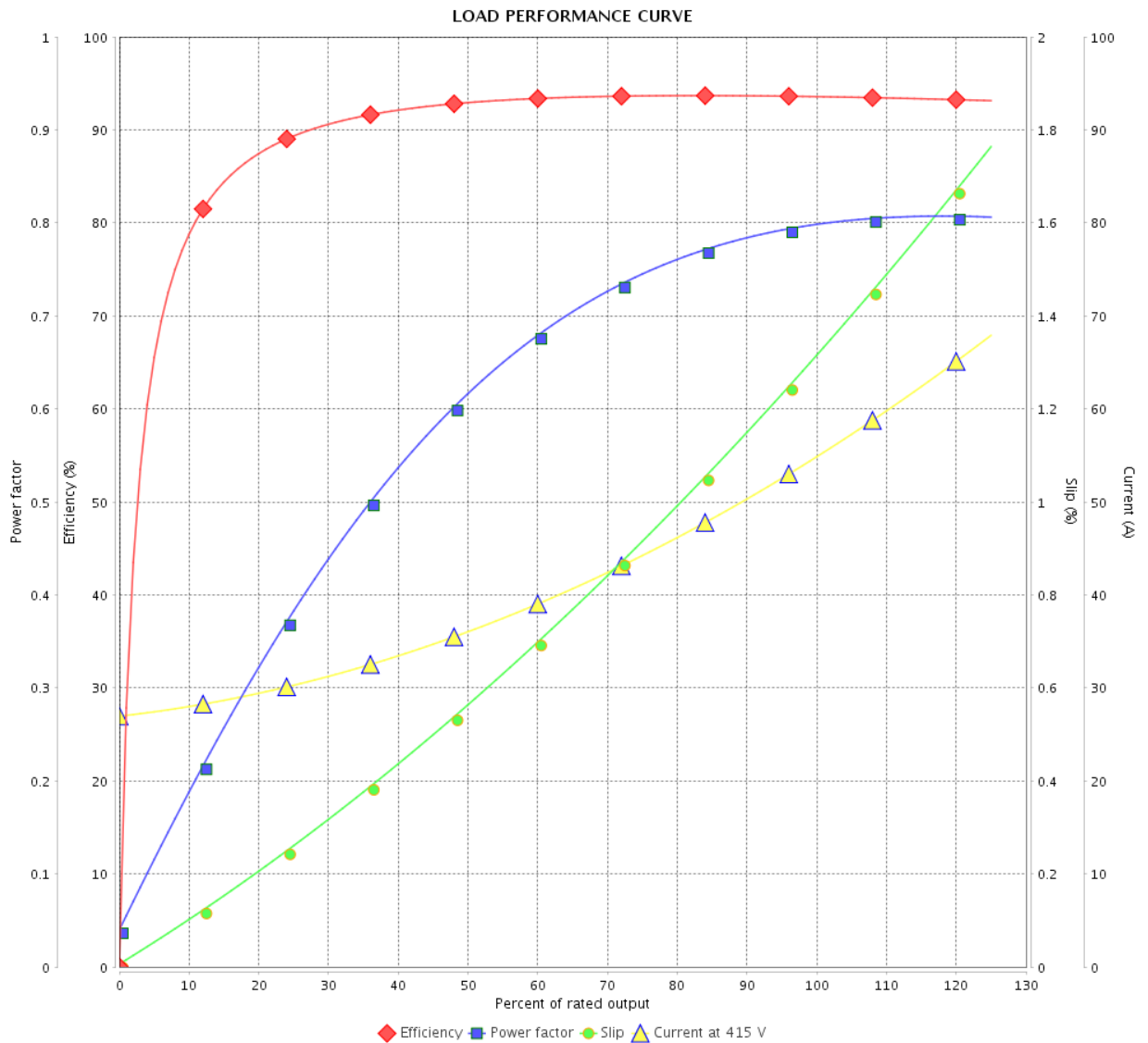


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THERMAL LIMIT CURVE



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Heating constant

Cooling constant

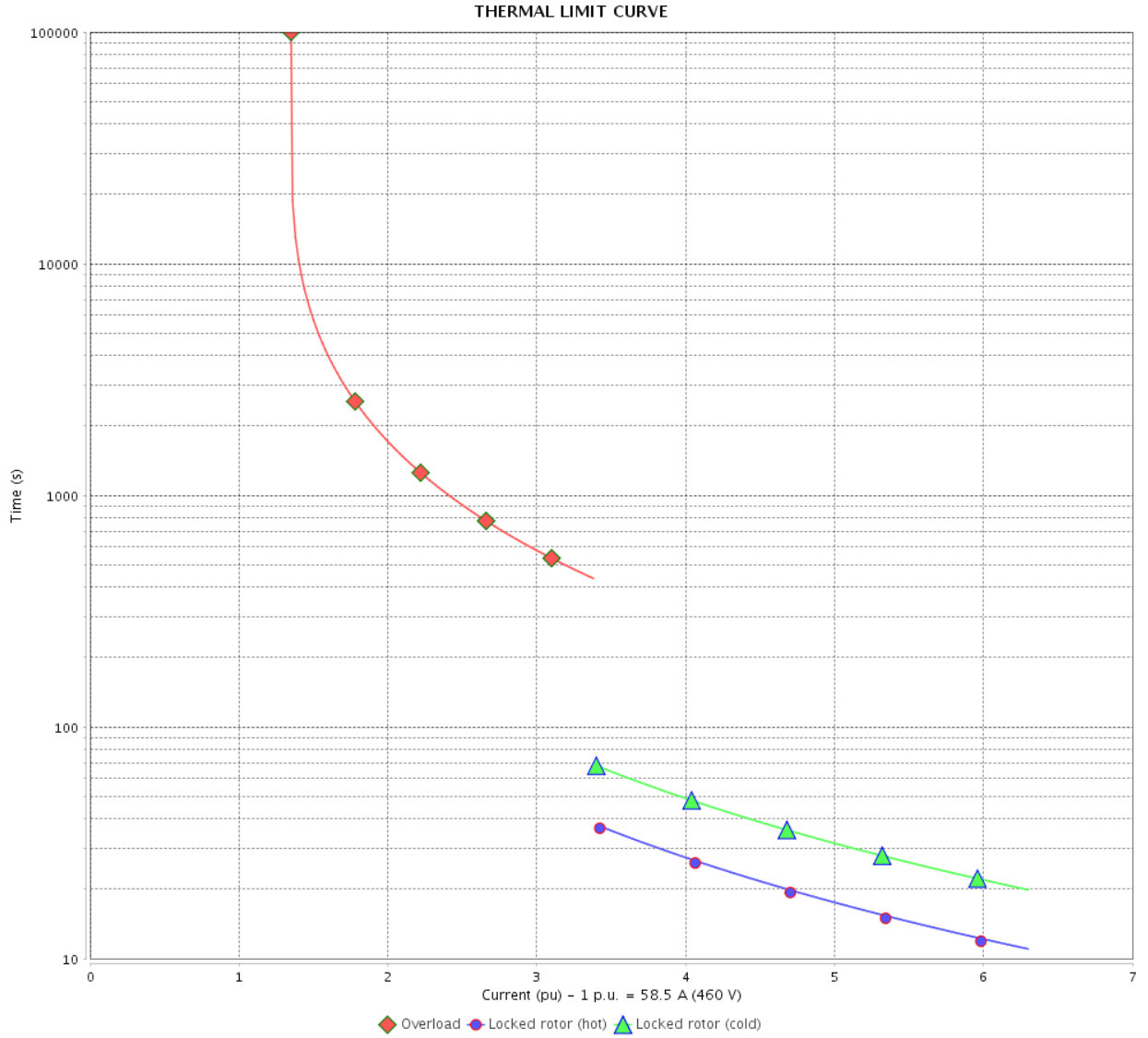
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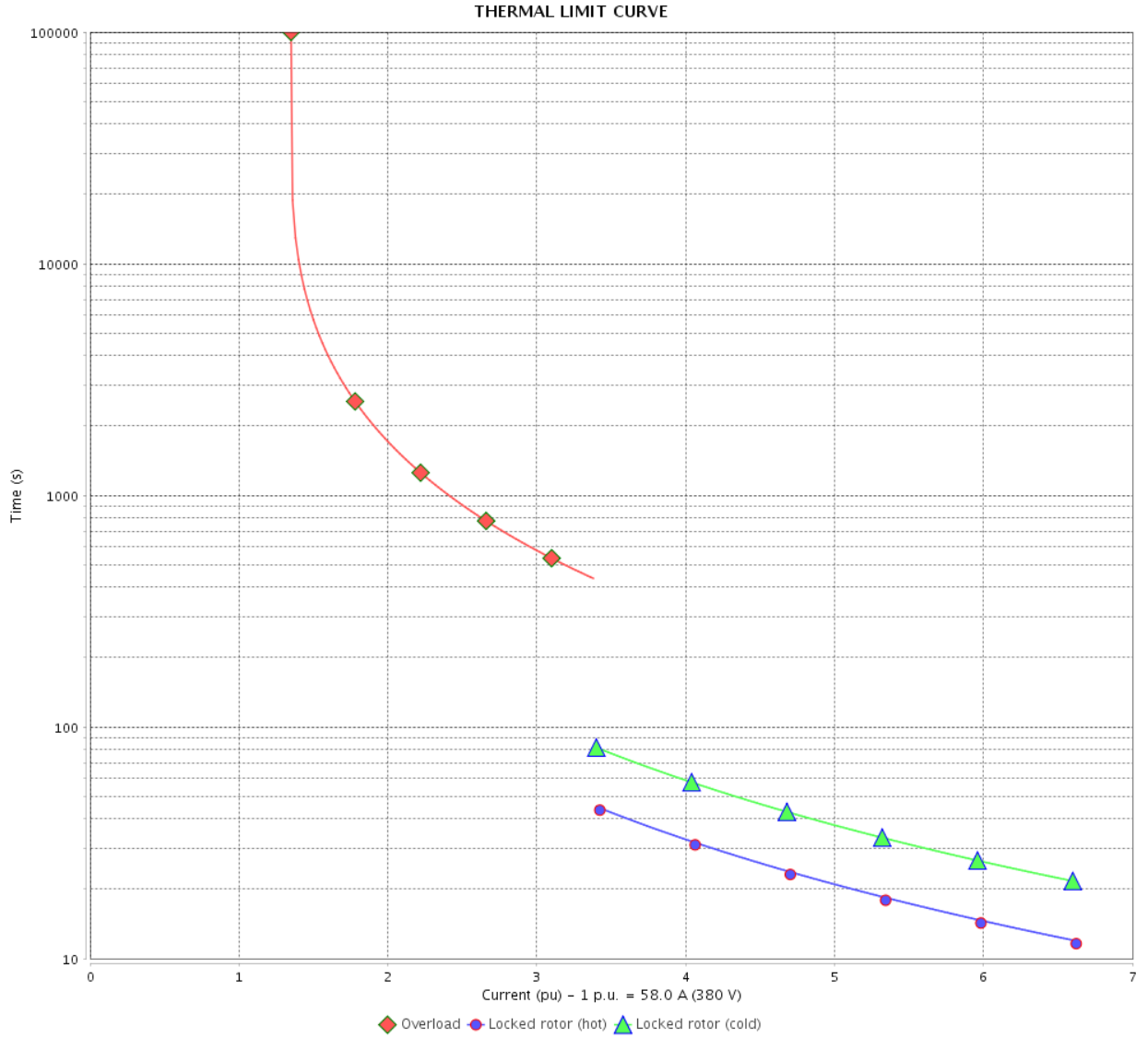
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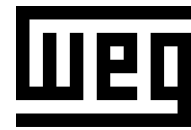


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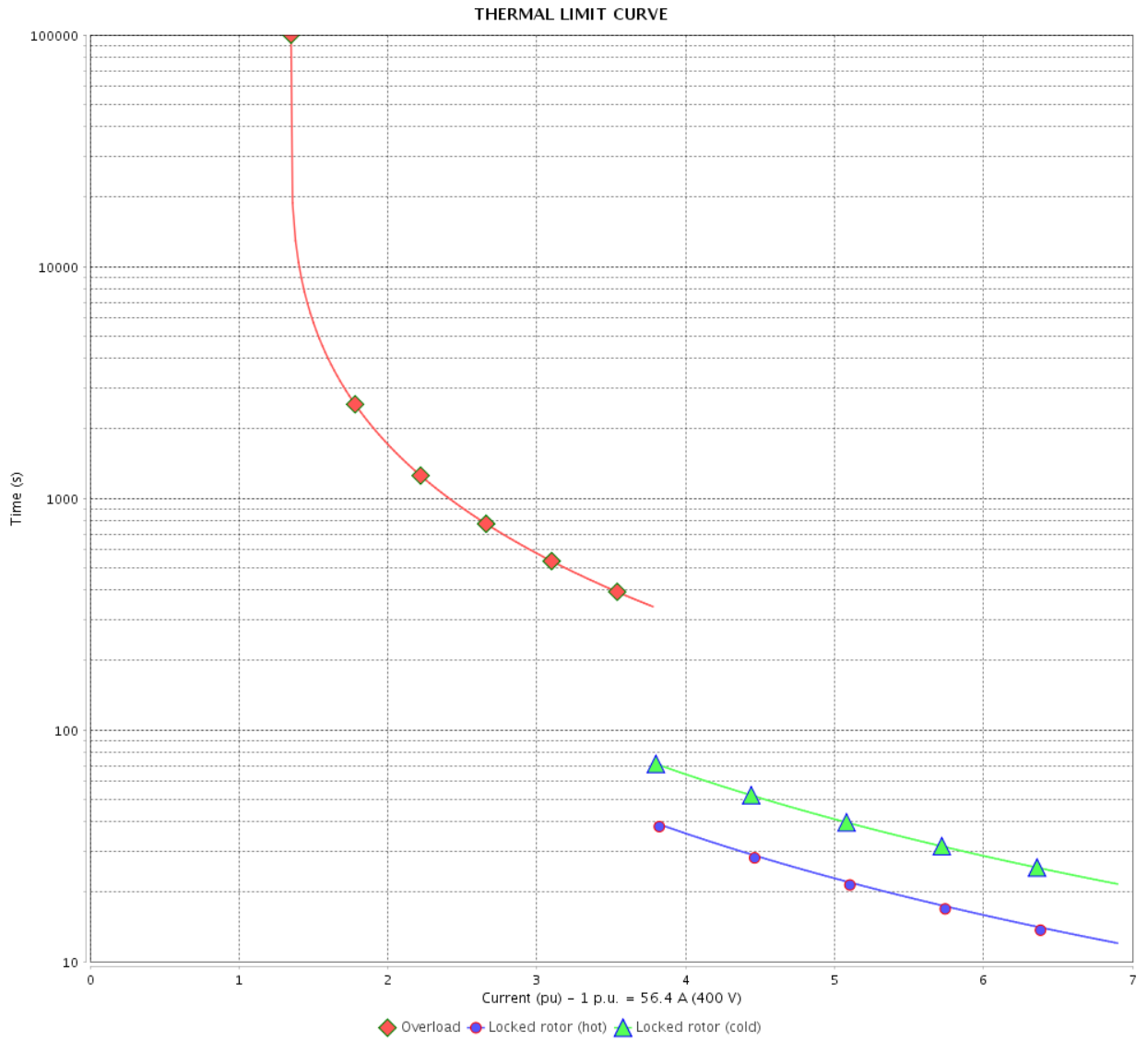
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LRC : 7.2	Duty cycle : Cont.(S1)
Rated torque : 142 ft.lb	Insulation class : F
Locked rotor torque : 270 %	Service factor : 1.00
Breakdown torque : 300 %	Temperature rise : 80 K
Rated speed : 1480 rpm	Design : B

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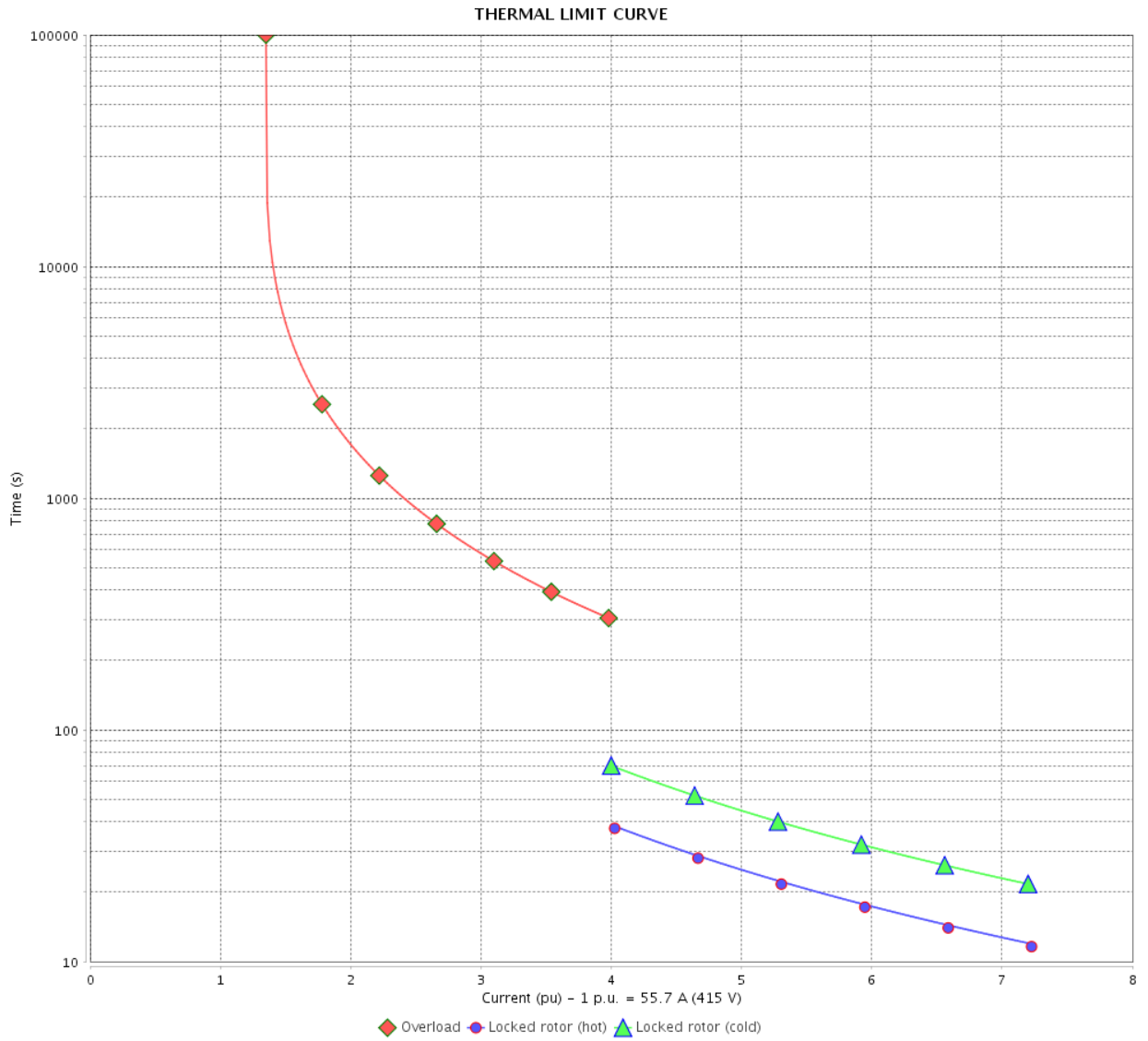
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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

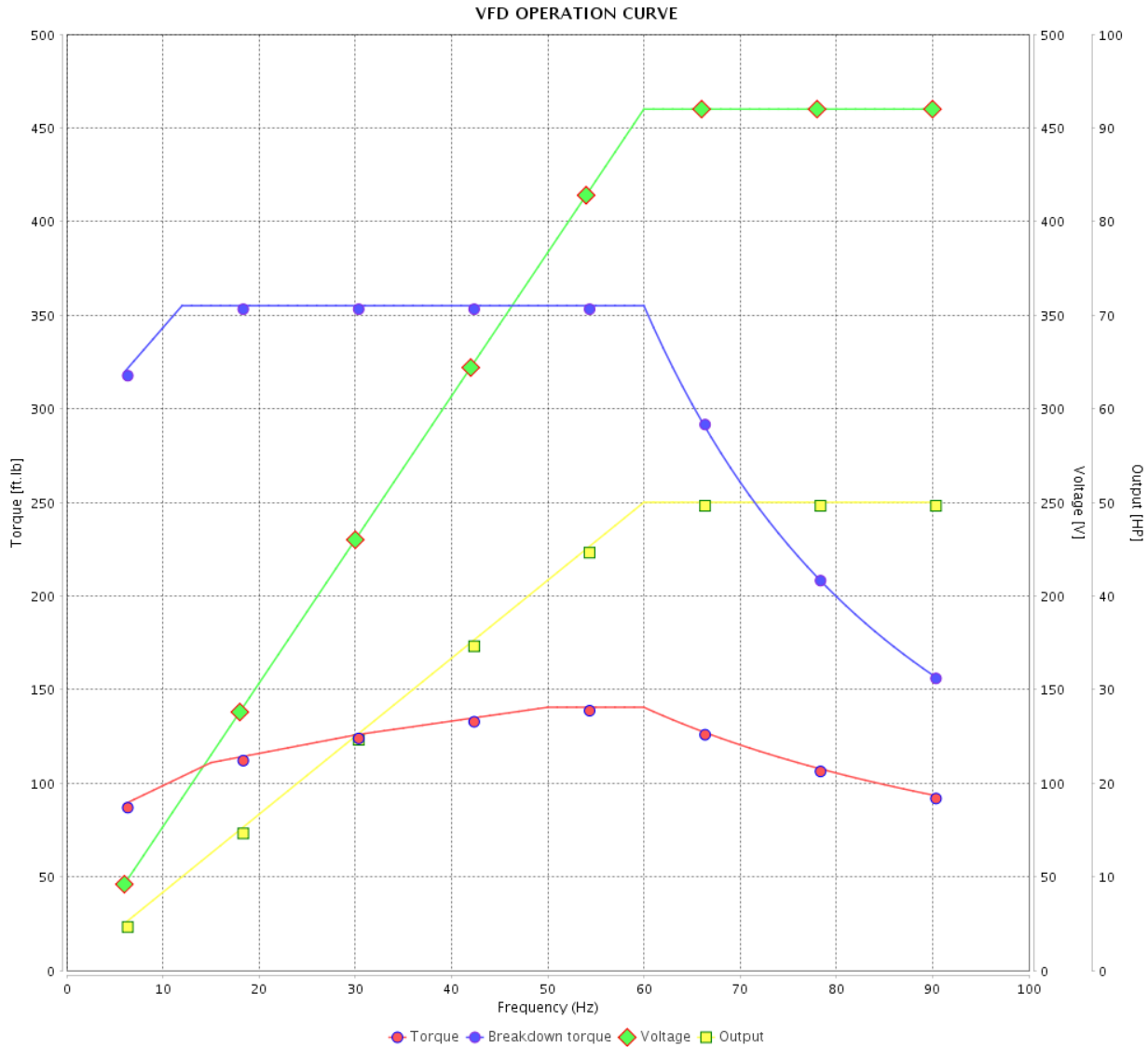


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 Rated speed : 1775 rpm

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 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.25
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Rev.	Changes Summary	Performed	Checked	Date
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VFD OPERATION CURVE

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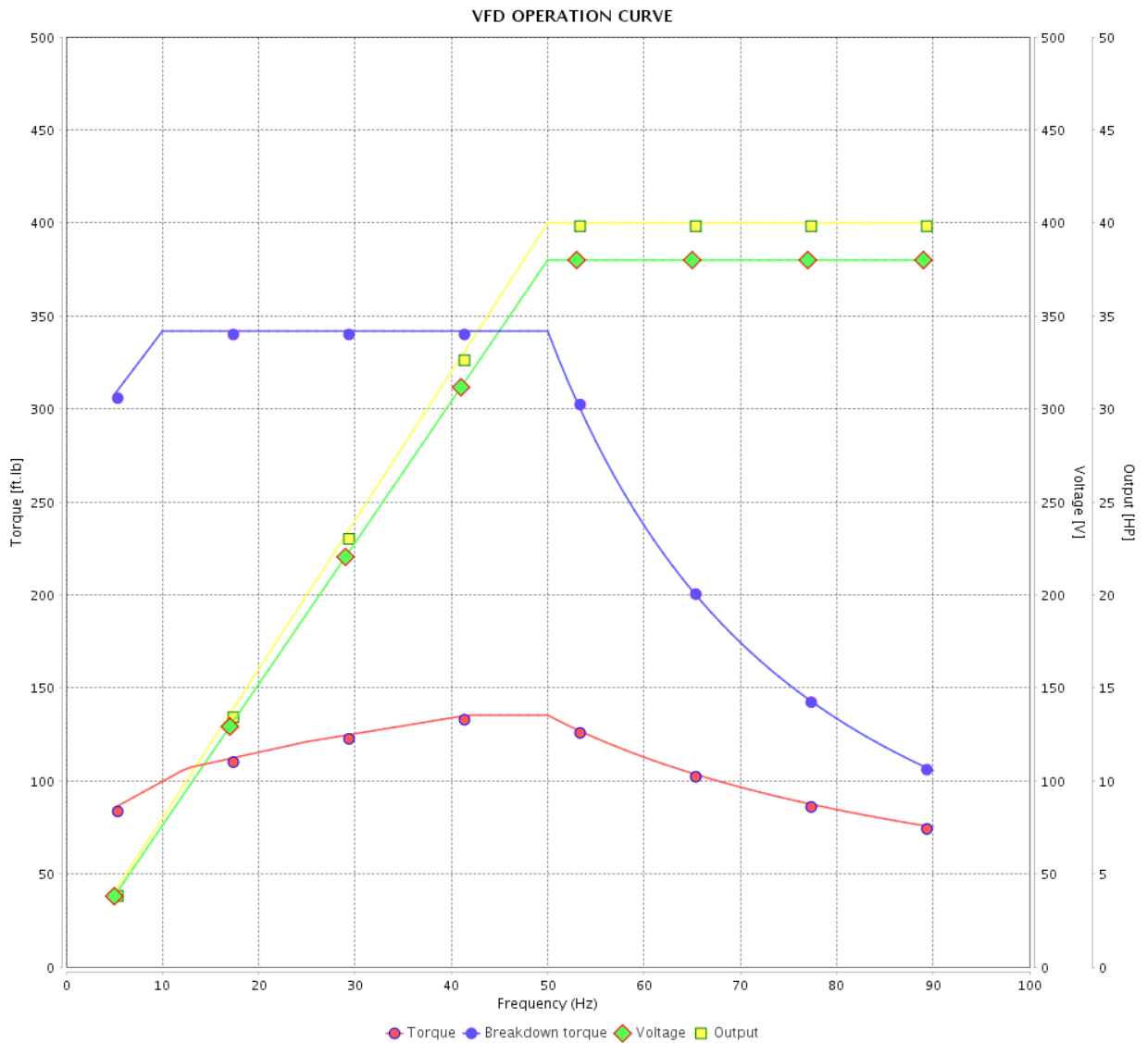


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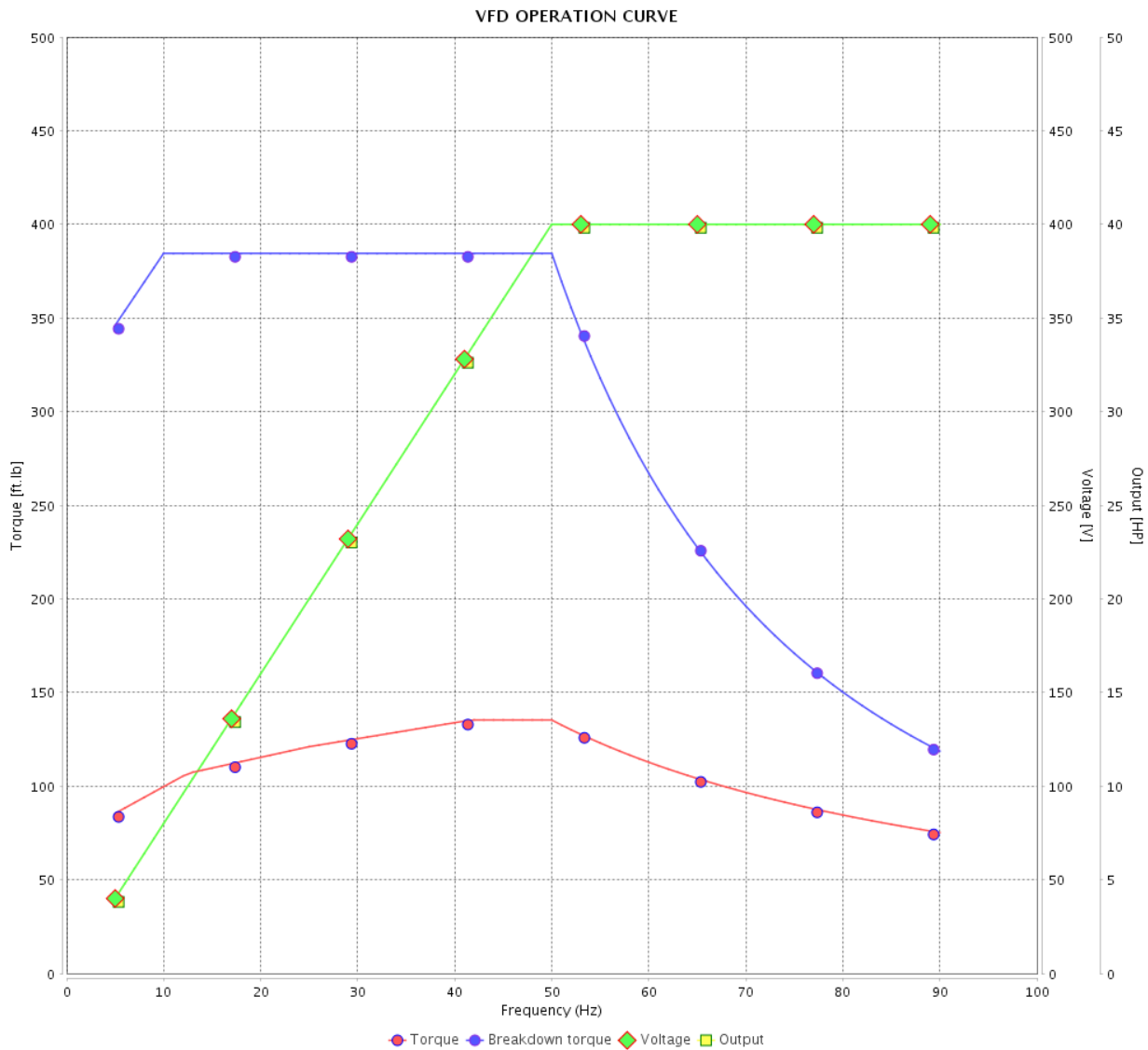


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VFD OPERATION CURVE

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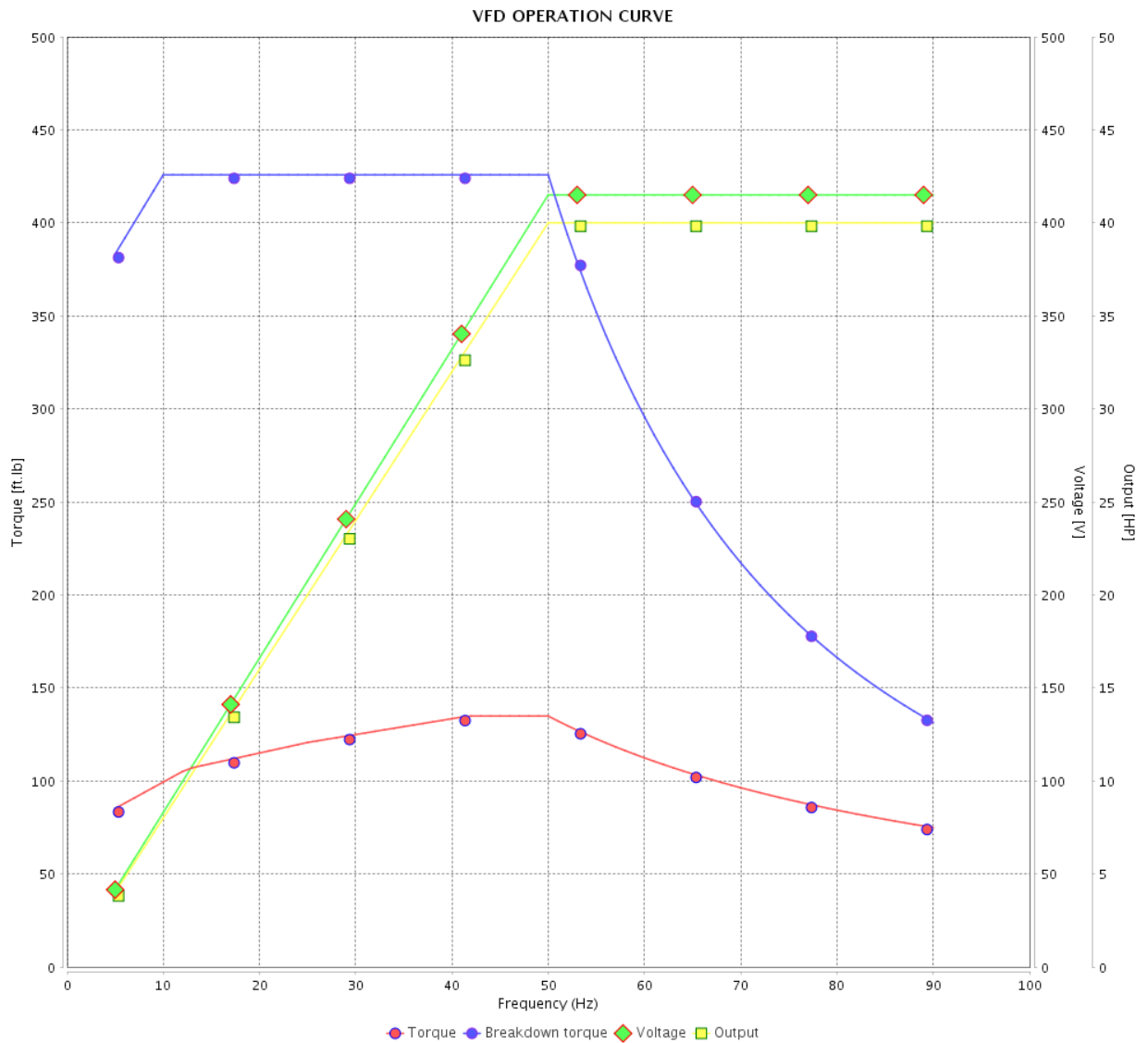


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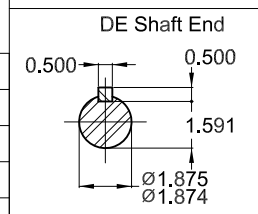
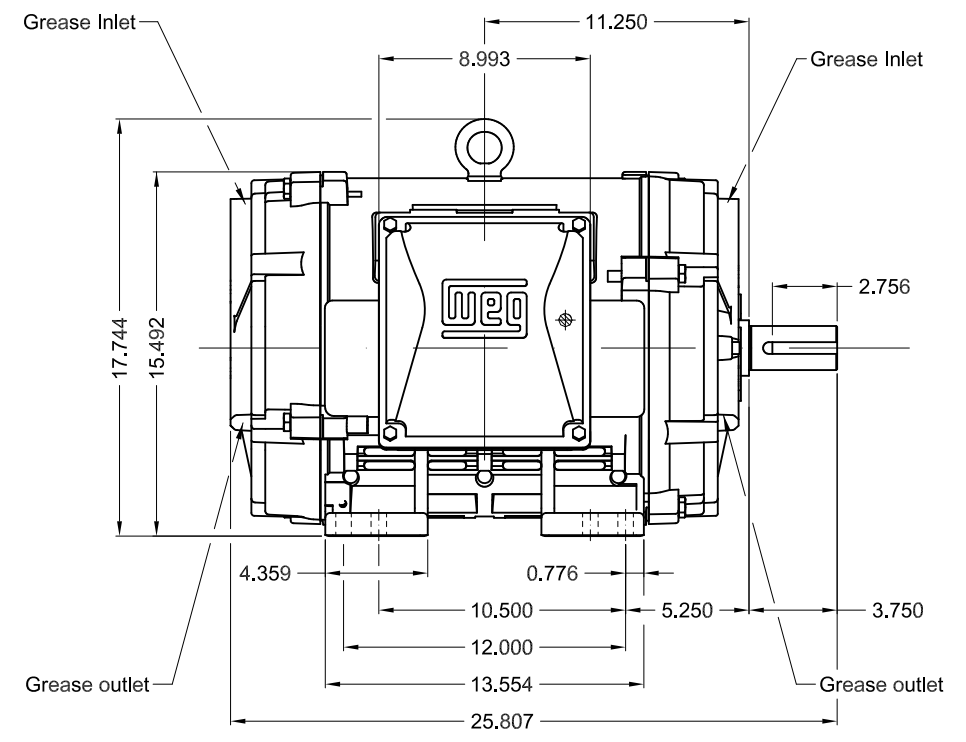
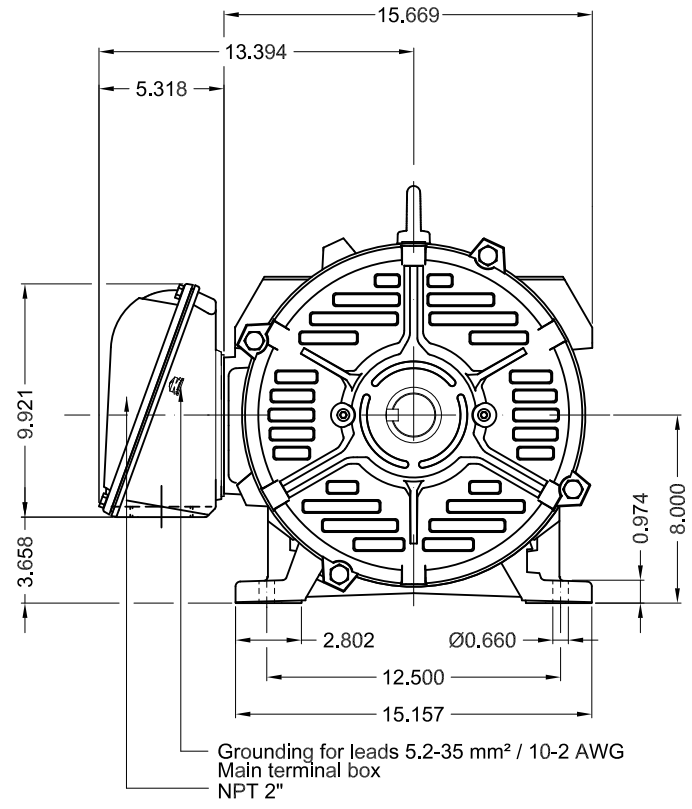


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TS shaft end
Color RAL 5009
Painting plan 203A
Mounting NEMA F-1
Mounting B3R(D)

50 HP 04 Poles 60 Hz A

1:8

ECM	LOC	SUMMARY OF MODIFICATIONS	EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	PIRWBUSER	THREE PH. MOTOR W40 PREM. EFF. FRAME 324/6TS IP23 ODP					
CHECKED							
RELEASED							
REL DT.		WMO Jaragua do Sul	Product Engineering	SHEET	1 / 1		

PREVIEW
WDD



MODEL 050180T3G326TS-W40
MADE IN BRAZIL
14497227

WEG **W40 NEMA**
CC029A Premium
Inverter Duty Motor

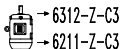
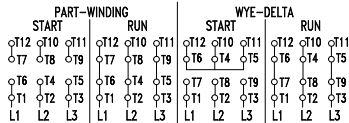


IEC 60034-1
MOD.T01#FOXON



For use on PWM, VT 1000:1, CT 3:1, 1.0SF

PH 3	FR 324/6TS	HP(kW) 50(37)		Hz 60
V 460		A 58.5		IP23
NEMA NOM EFF		94.5	%	RPM 1775
ENCL ODP	DUTY CONT.		INS. CL. F ΔT 80 K	
PF 0.84		DES B	CODE G	AMB. 40°C
SF 1.25		SFA 73.1		ALT 1000 m.a.s.l.



MOBIL POLYREX EM
21 g 20000 h

509 Lbs