

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :					
Product line		: W40 JP Pump NEMA Premium Efficiency Three-Phase		Product code : 14486223	
			Catalog # :	02512OT3E324JP-W40	
Frame : 324JP		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 : 517 lb			
Protection degree : IP23		Moment of inertia (J) : 7.69 sq.ft.lb			
Design : B					
Output [HP]	25	20	20	20	
Poles	6	6	6	6	
Frequency [Hz]	60	50	50	50	
Rated voltage [V]	230/460	380	400	415	
Rated current [A]	61.6/30.8	30.5	30.1	29.7	
L. R. Amperes [A]	382/191	201	205	205	
LRC [A]	6.2x(Code G)	6.6x(Code H)	6.8x(Code H)	6.9x(Code J)	
No load current [A]	28.4/14.2	14.0	15.5	16.7	
Rated speed [RPM]	1183	980	985	985	
Slip [%]	1.42	2.00	1.50	1.50	
Rated torque [ft.lb]	111	107	107	107	
Locked rotor torque [%]	210	170	229	210	
Breakdown torque [%]	250	250	290	310	
Service factor	1.25	1.00	1.00	1.00	
Temperature rise	80 K	80 K	80 K	80 K	
Locked rotor time	32s (cold) 18s (hot)	23s (cold) 13s (hot)	25s (cold) 14s (hot)	25s (cold) 14s (hot)	
Noise level ²	62.0 dB(A)				
Efficiency (%)	25%	91.0	90.6	90.9	90.1
	50%	91.7	90.8	91.0	90.3
	75%	92.4	91.2	91.2	91.2
	100%	93.0	91.2	91.2	91.2
Power Factor	25%	0.39	0.39	0.35	0.32
	50%	0.65	0.65	0.60	0.56
	75%	0.76	0.76	0.73	0.70
	100%	0.81	0.82	0.79	0.77
Bearing type	Drive end : 6312 Z C3	Non drive end : 6211 Z C3	Foundation loads		
Sealing	Without	Without	Max. traction		
	Bearing Seal	Bearing Seal	Max. compression		
Lubrication interval	: 20000 h				
Lubricant amount	: 21 g				
Lubricant type	: Mobil Polyrex EM				
Notes USABLE @208V 68.1A SF 1.15 SFA 78.3A					
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



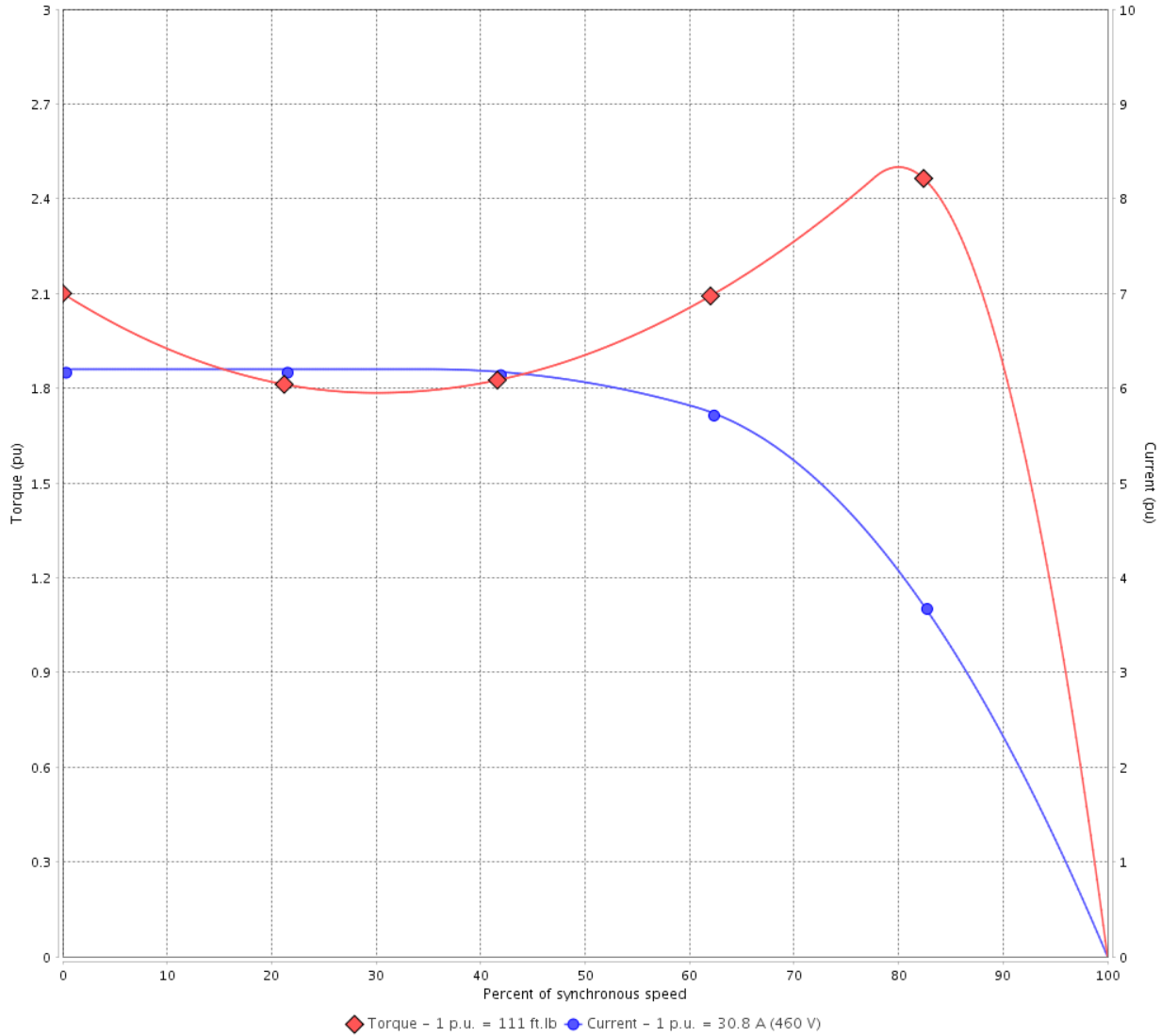
Customer :

Product line : W40 JP Pump NEMA Premium Efficiency Three-Phase

Product code : 14486223

Catalog # : 025120T3E324JP-W40

TORQUE AND CURRENT VS SPEED CURVE



Performance : 230/460 V 60 Hz 6P

Rated current	: 61.6/30.8 A	Moment of inertia (J)	: 7.69 sq.ft.lb
LRC	: 6.2	Duty cycle	: Cont.(S1)
Rated torque	: 111 ft.lb	Insulation class	: F
Locked rotor torque	: 210 %	Service factor	: 1.25
Breakdown torque	: 250 %	Temperature rise	: 80 K
Rated speed	: 1183 rpm	Design	: B

Locked rotor time : 32s (cold) 18s (hot)

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TORQUE AND CURRENT VS SPEED CURVE



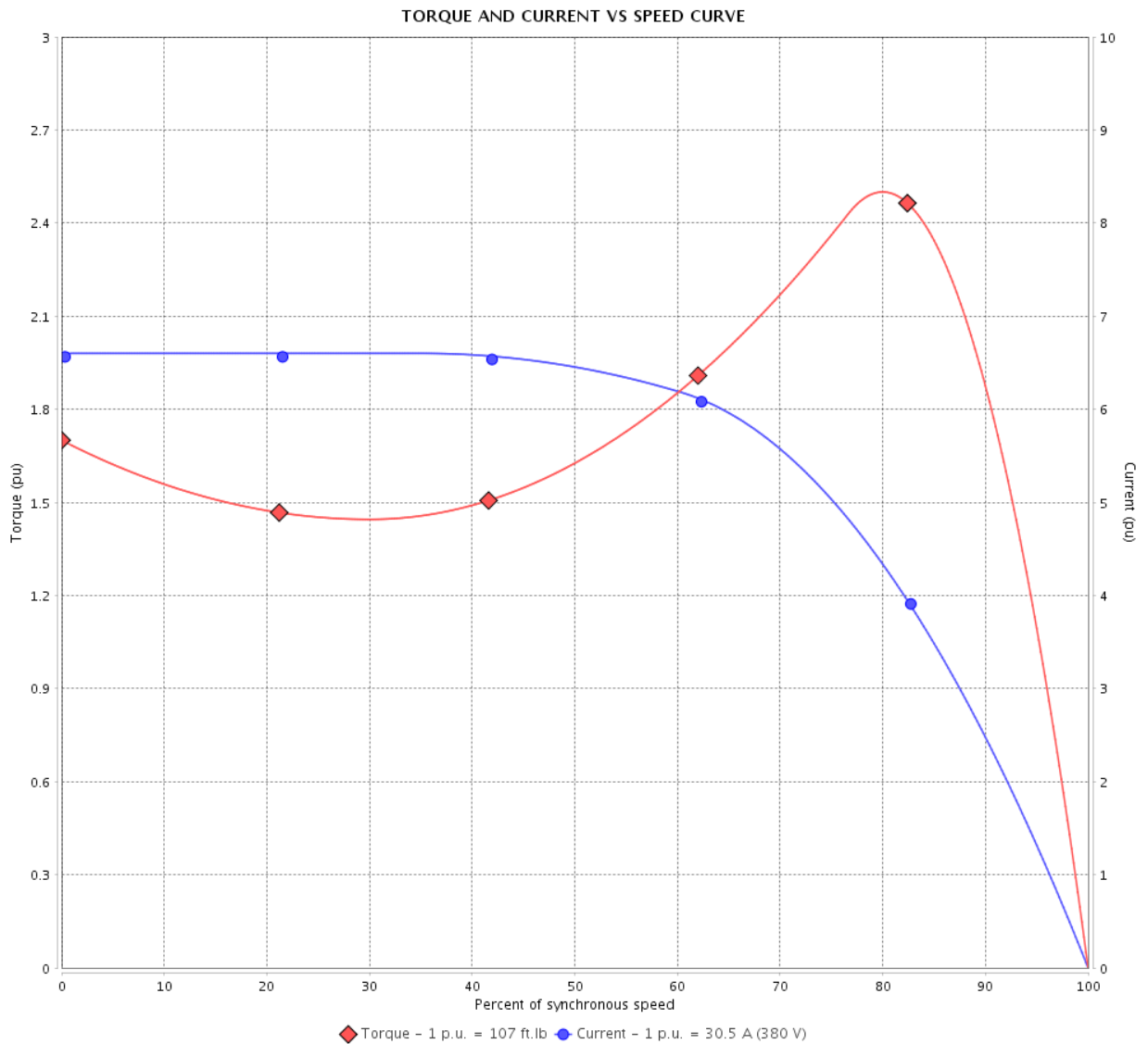
Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : W40 JP Pump NEMA Premium Efficiency Three-Phase

Product code : 14486223

Catalog # : 02512OT3E324JP-W40



Performance : 380 V 50 Hz 6P IE3

Rated current	: 30.5 A	Moment of inertia (J)	: 7.69 sq.ft.lb
LRC	: 6.6	Duty cycle	: Cont.(S1)
Rated torque	: 107 ft.lb	Insulation class	: F
Locked rotor torque	: 170 %	Service factor	: 1.00
Breakdown torque	: 250 %	Temperature rise	: 80 K
Rated speed	: 980 rpm	Design	: B

Locked rotor time : 23s (cold) 13s (hot)

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TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



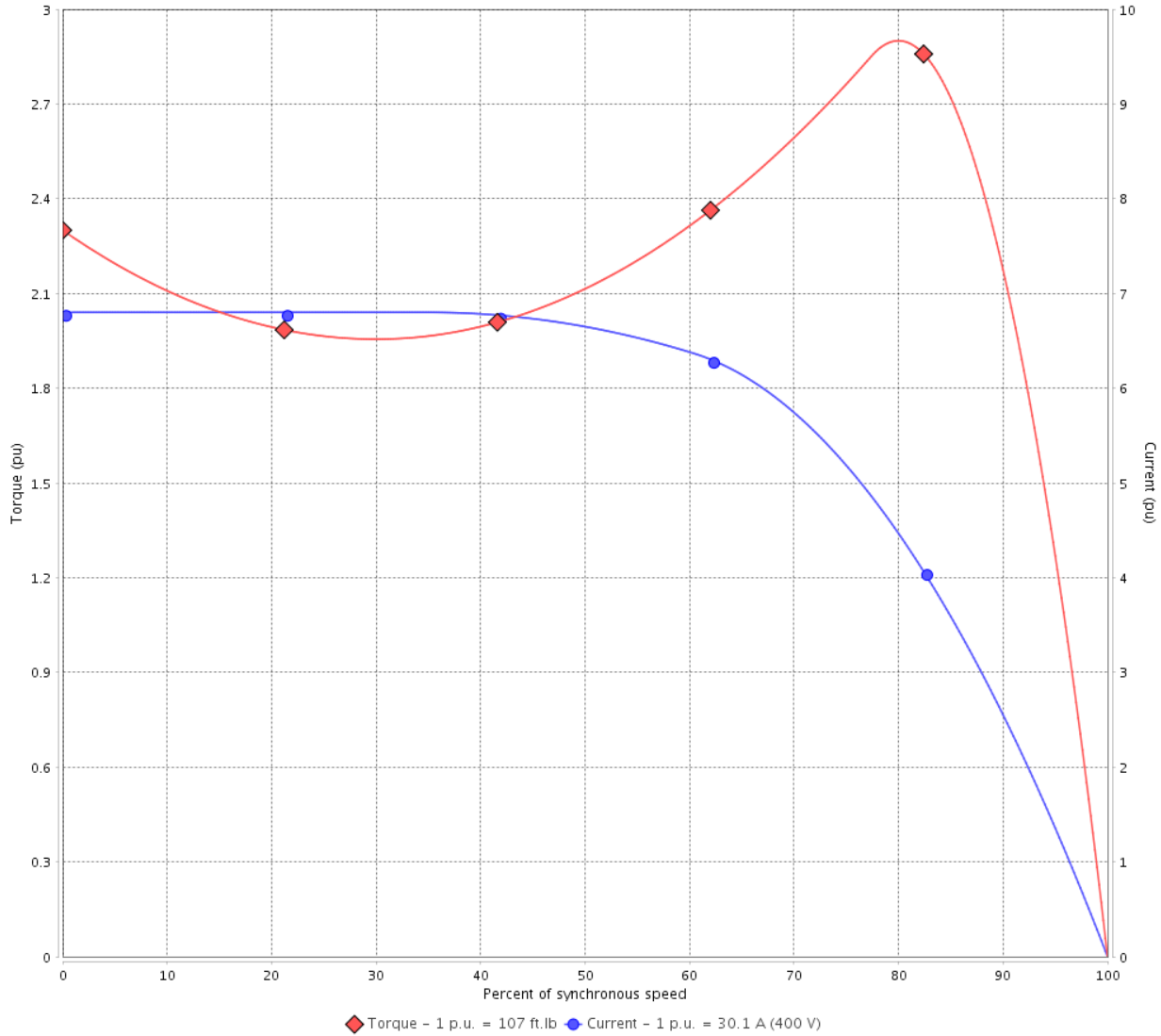
Customer :

Product line : W40 JP Pump NEMA Premium Efficiency Three-Phase

Product code : 14486223

Catalog # : 025120T3E324JP-W40

TORQUE AND CURRENT VS SPEED CURVE



Performance : 400 V 50 Hz 6P IE3

Rated current	: 30.1 A	Moment of inertia (J)	: 7.69 sq.ft.lb
LRC	: 6.8	Duty cycle	: Cont.(S1)
Rated torque	: 107 ft.lb	Insulation class	: F
Locked rotor torque	: 229 %	Service factor	: 1.00
Breakdown torque	: 290 %	Temperature rise	: 80 K
Rated speed	: 985 rpm	Design	: B

Locked rotor time : 25s (cold) 14s (hot)

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TORQUE AND CURRENT VS SPEED CURVE



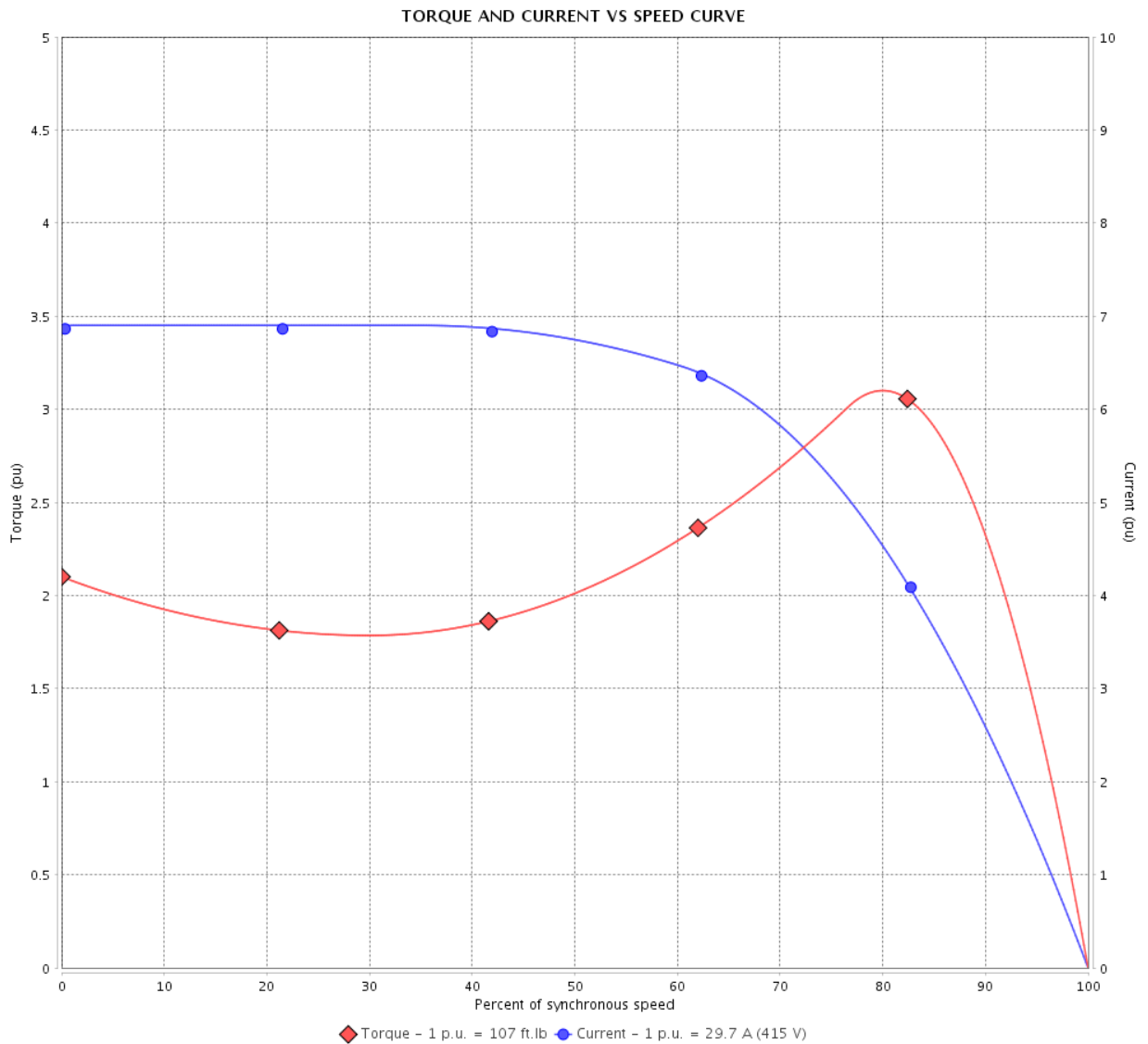
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Rated torque	: 107 ft.lb	Insulation class	: F
Locked rotor torque	: 210 %	Service factor	: 1.00
Breakdown torque	: 310 %	Temperature rise	: 80 K
Rated speed	: 985 rpm	Design	: B

Locked rotor time : 25s (cold) 14s (hot)

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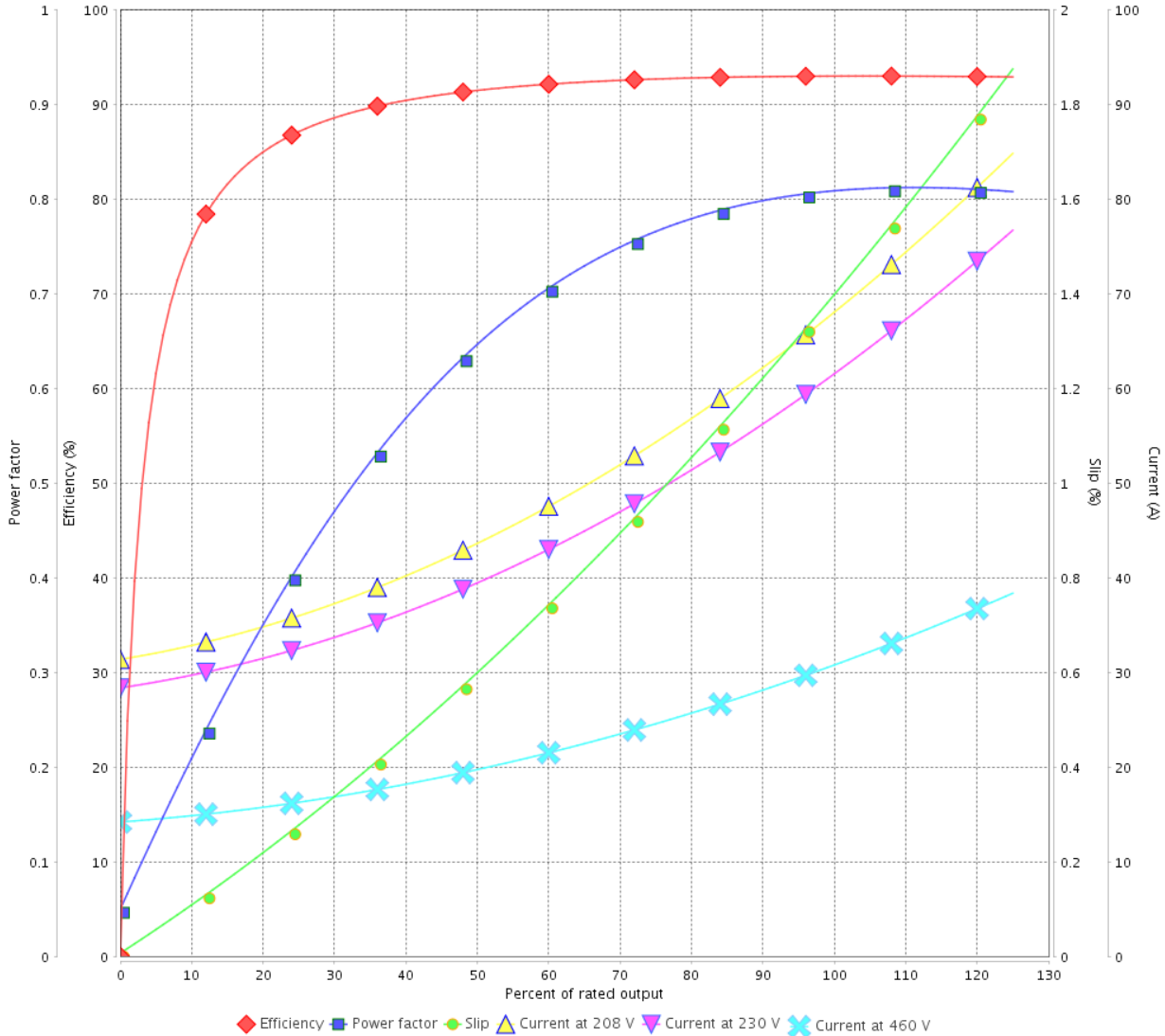
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Product code : 14486223

Catalog # : 025120T3E324JP-W40

LOAD PERFORMANCE CURVE



Performance : 230/460 V 60 Hz 6P

Rated current : 61.6/30.8 A
 LRC : 6.2
 Rated torque : 111 ft.lb
 Locked rotor torque : 210 %
 Breakdown torque : 250 %
 Rated speed : 1183 rpm

Moment of inertia (J) : 7.69 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.25
 Temperature rise : 80 K
 Design : B

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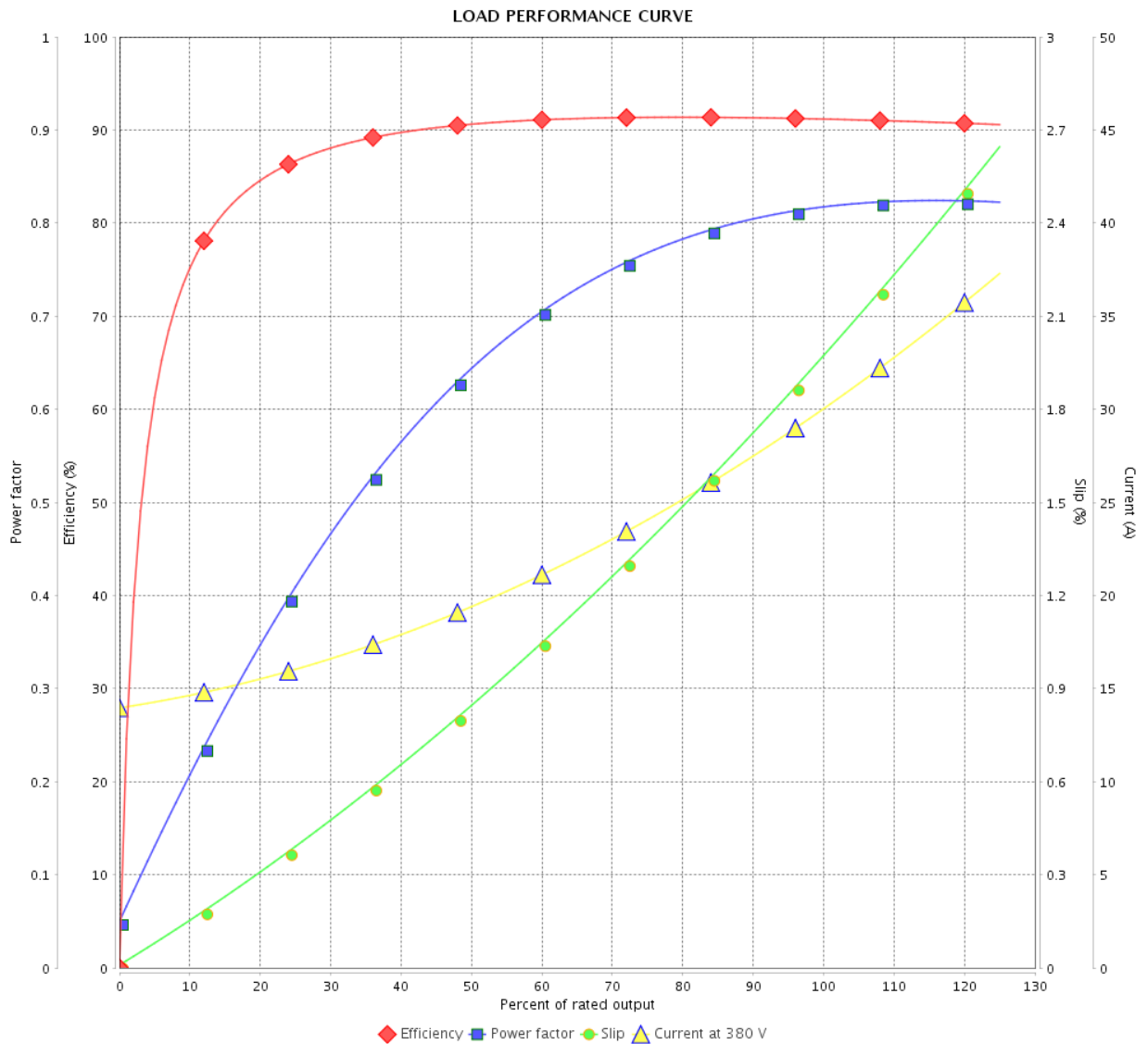


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Performance : 380 V 50 Hz 6P IE3

Rated current : 30.5 A
 LRC : 6.6
 Rated torque : 107 ft.lb
 Locked rotor torque : 170 %
 Breakdown torque : 250 %
 Rated speed : 980 rpm

Moment of inertia (J) : 7.69 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : B

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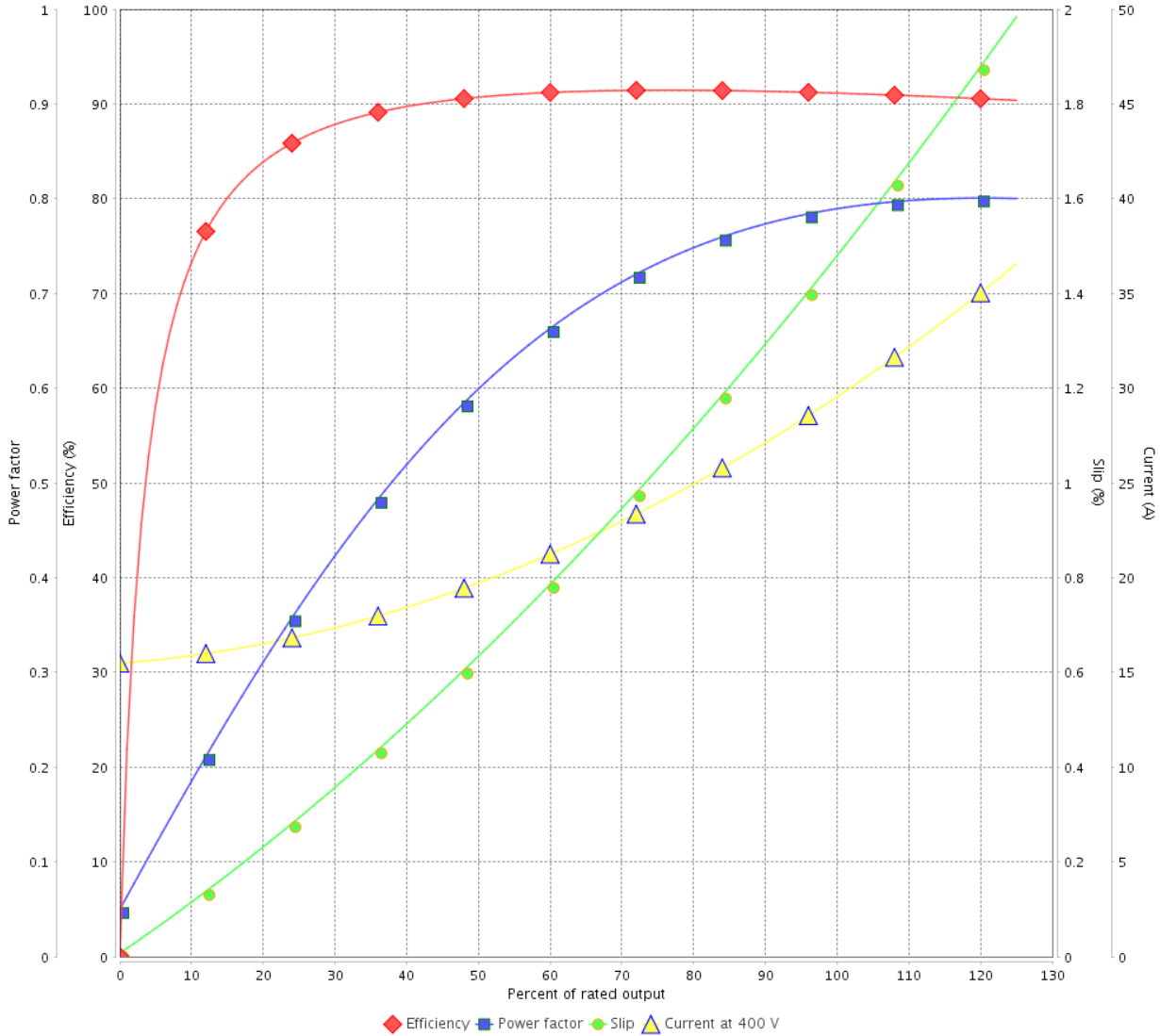
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Performance : 400 V 50 Hz 6P IE3

Rated current : 30.1 A
LRC : 6.8
Rated torque : 107 ft.lb
Locked rotor torque : 229 %
Breakdown torque : 290 %
Rated speed : 985 rpm

Moment of inertia (J) : 7.69 sq.ft.lb
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

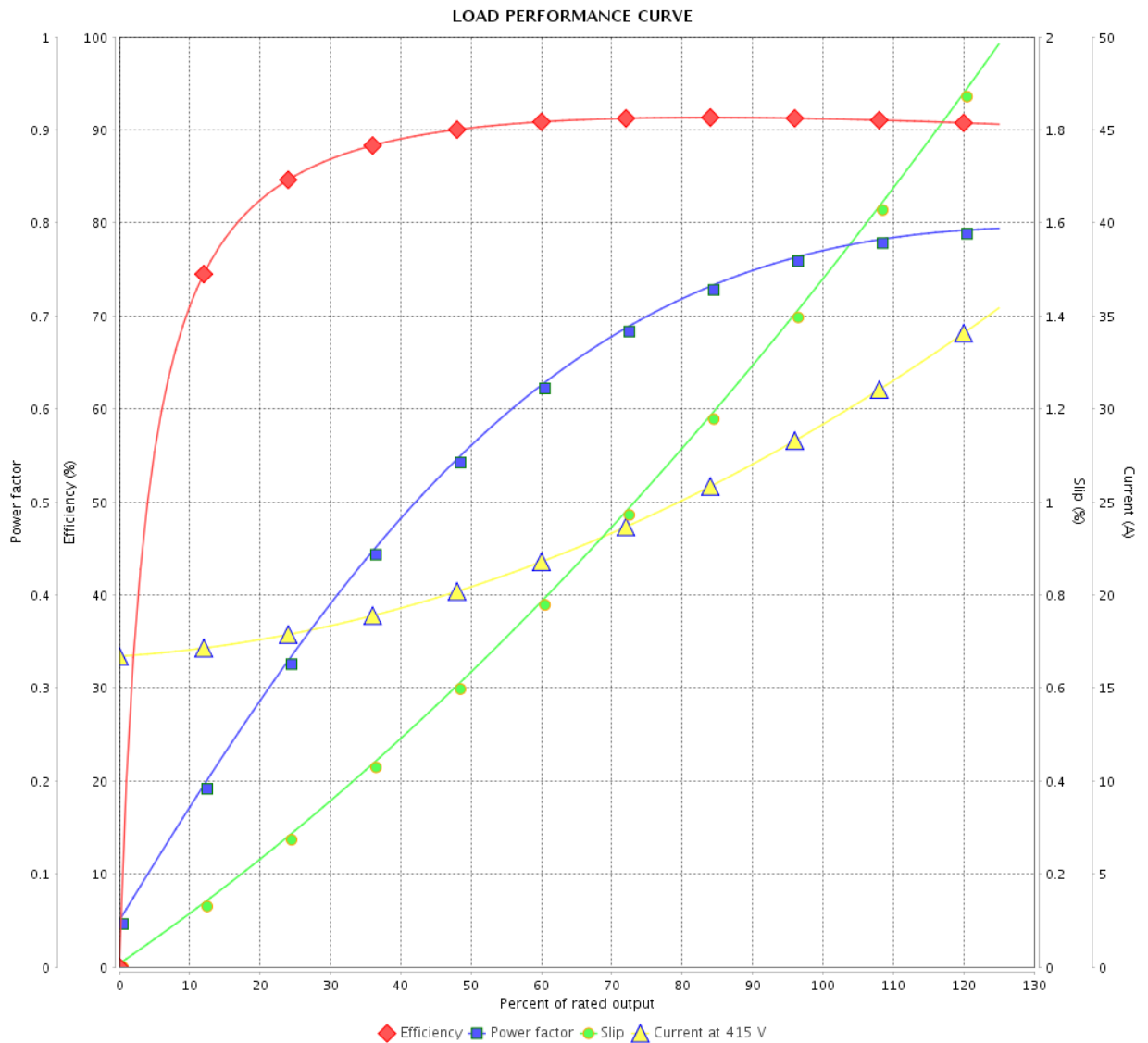


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THERMAL LIMIT CURVE



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Insulation class : F
Service factor : 1.25
Temperature rise : 80 K
Design : B

Heating constant

Cooling constant

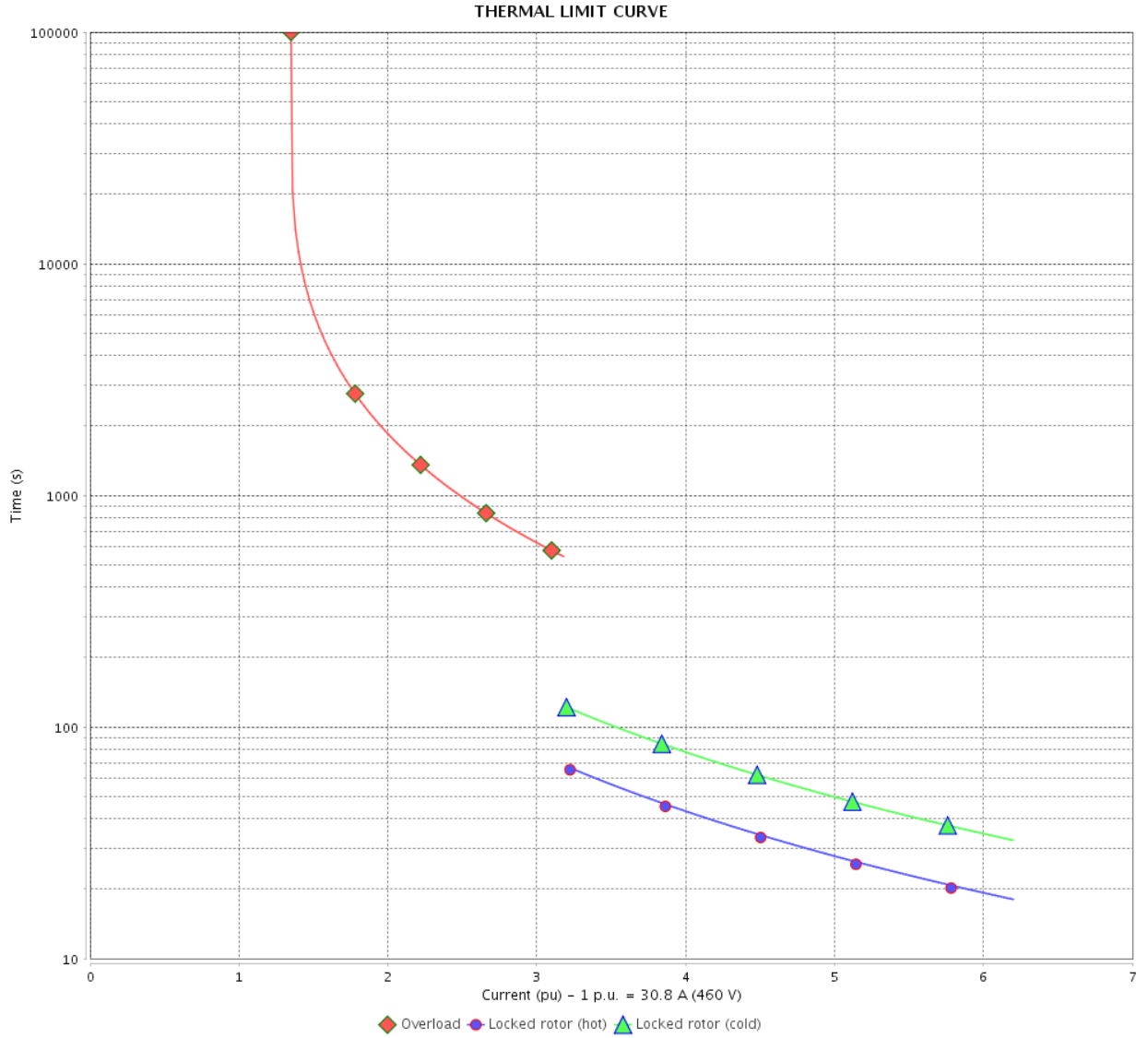
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LRC	: 6.6	Duty cycle	: Cont.(S1)
Rated torque	: 107 ft.lb	Insulation class	: F
Locked rotor torque	: 170 %	Service factor	: 1.00
Breakdown torque	: 250 %	Temperature rise	: 80 K
Rated speed	: 980 rpm	Design	: B

Heating constant

Cooling constant

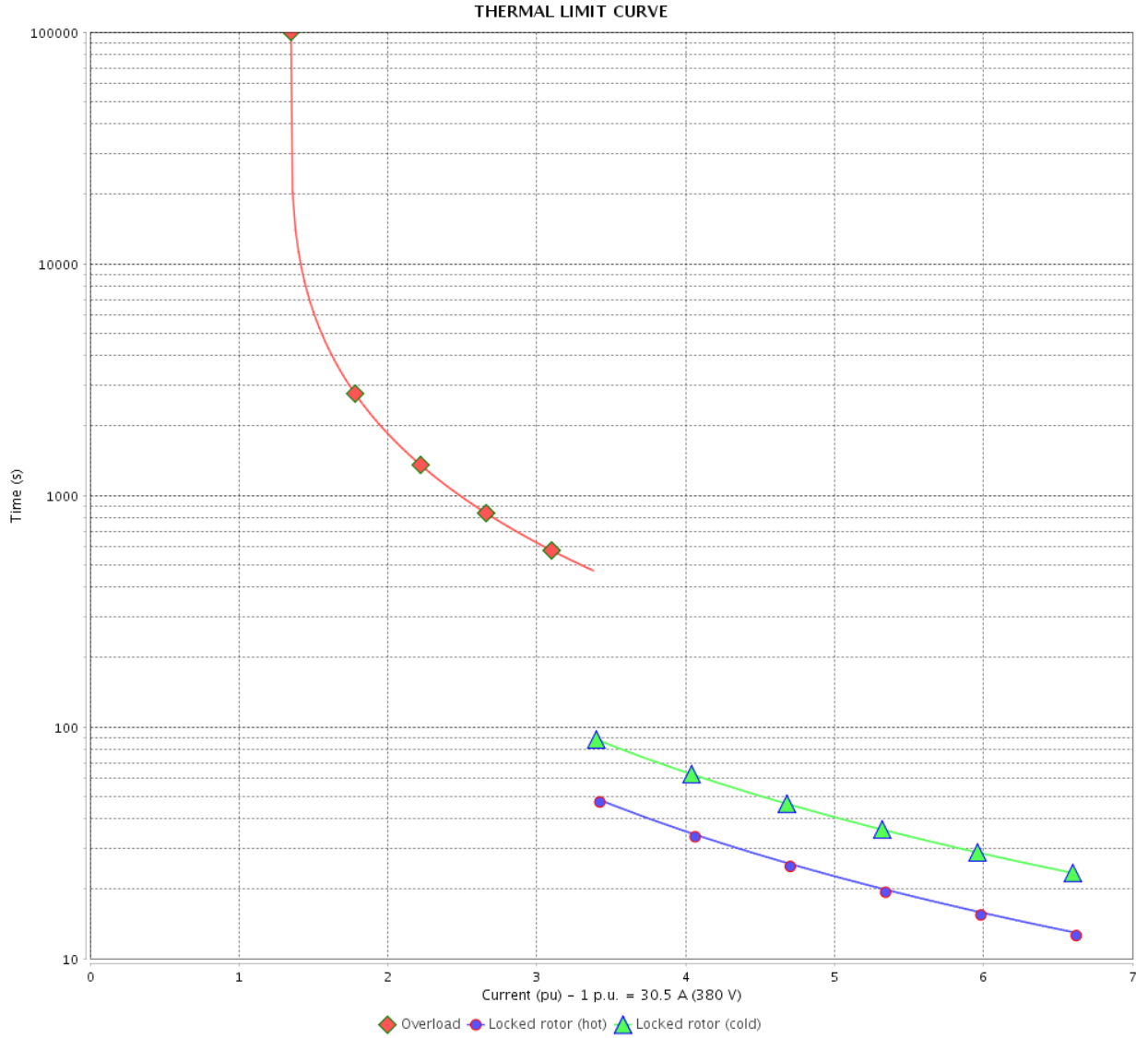
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Locked rotor torque	: 229 %	Service factor	: 1.00
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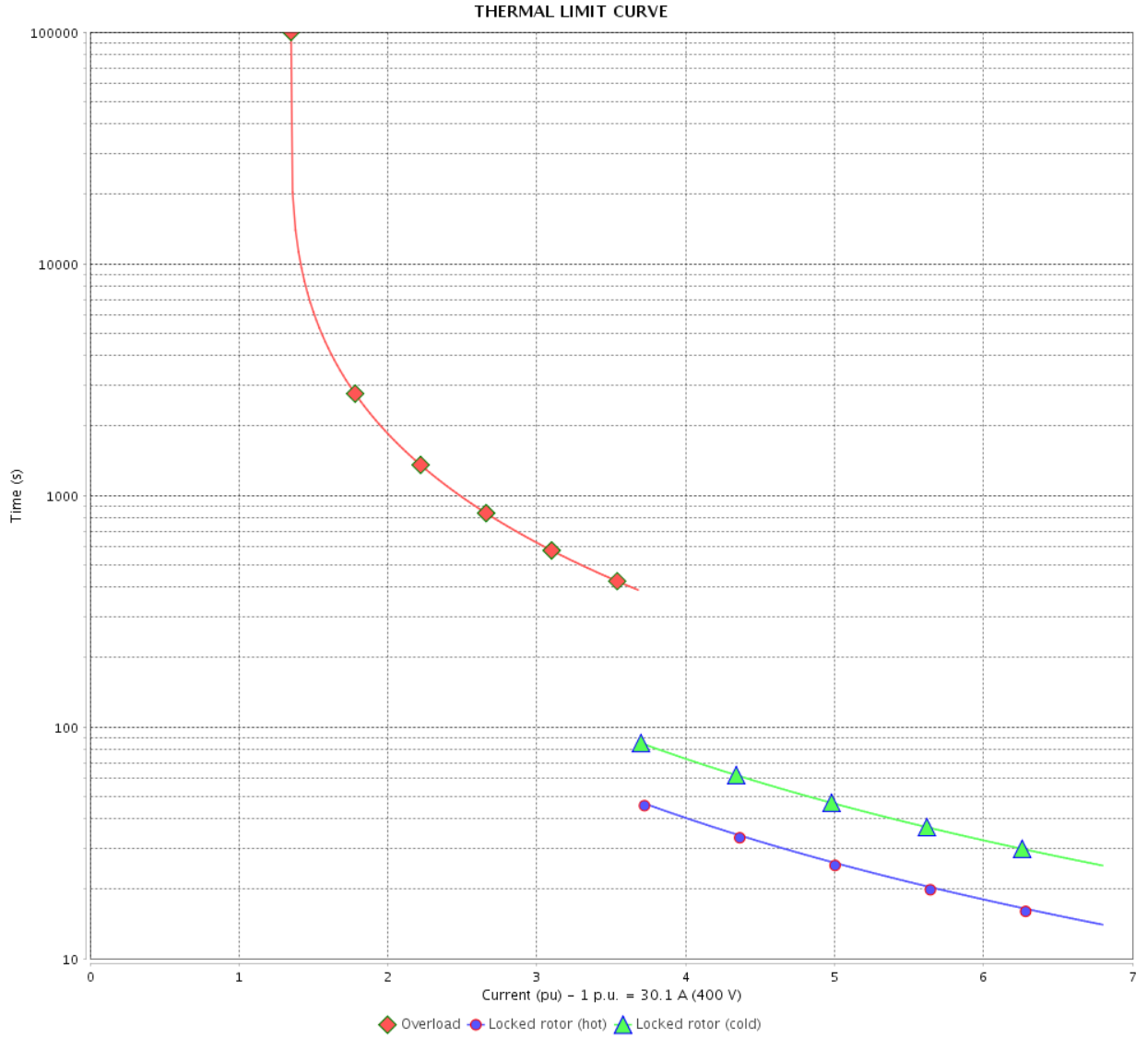
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Rated torque	: 107 ft.lb	Insulation class	: F
Locked rotor torque	: 210 %	Service factor	: 1.00
Breakdown torque	: 310 %	Temperature rise	: 80 K
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Cooling constant

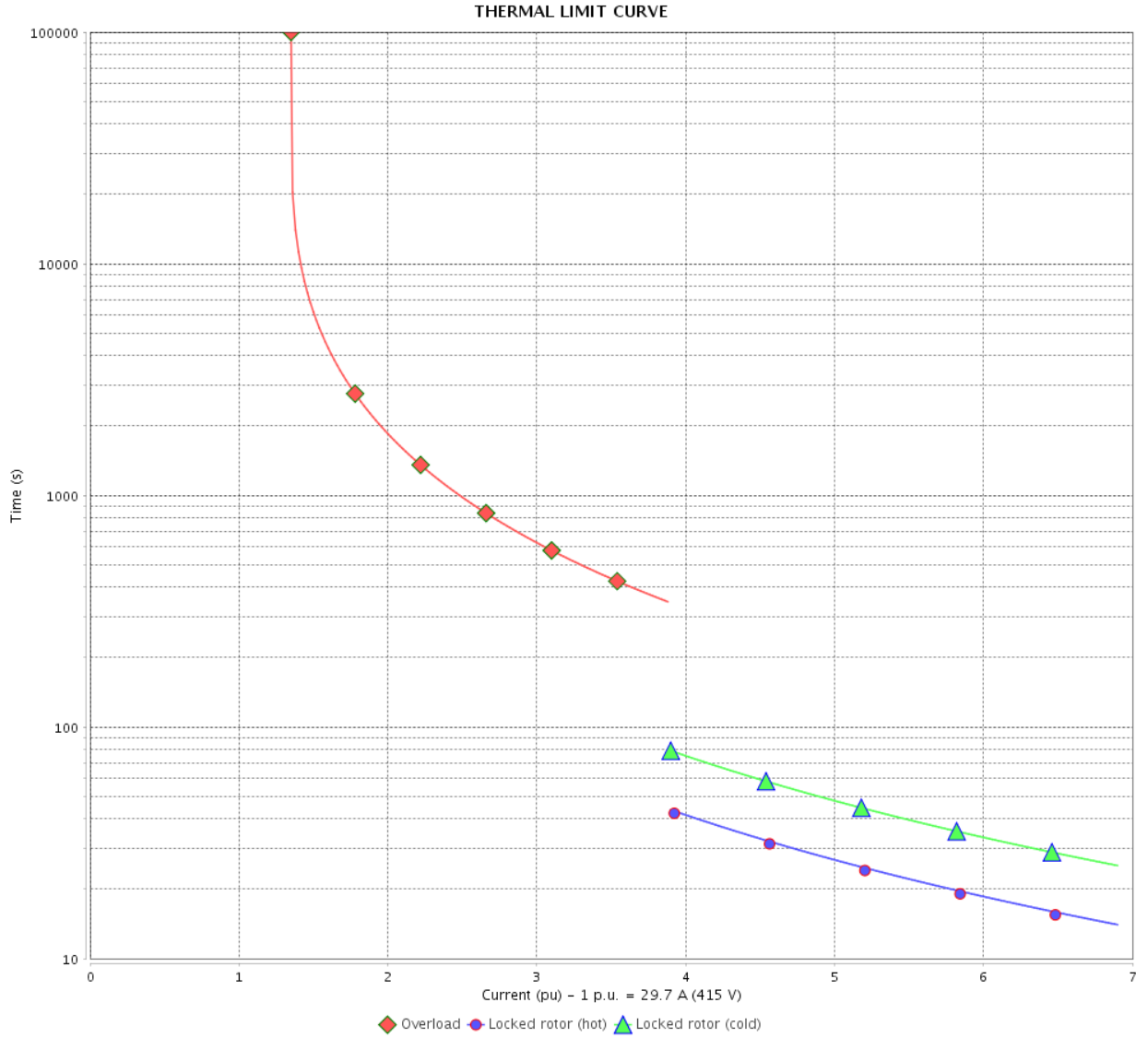
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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

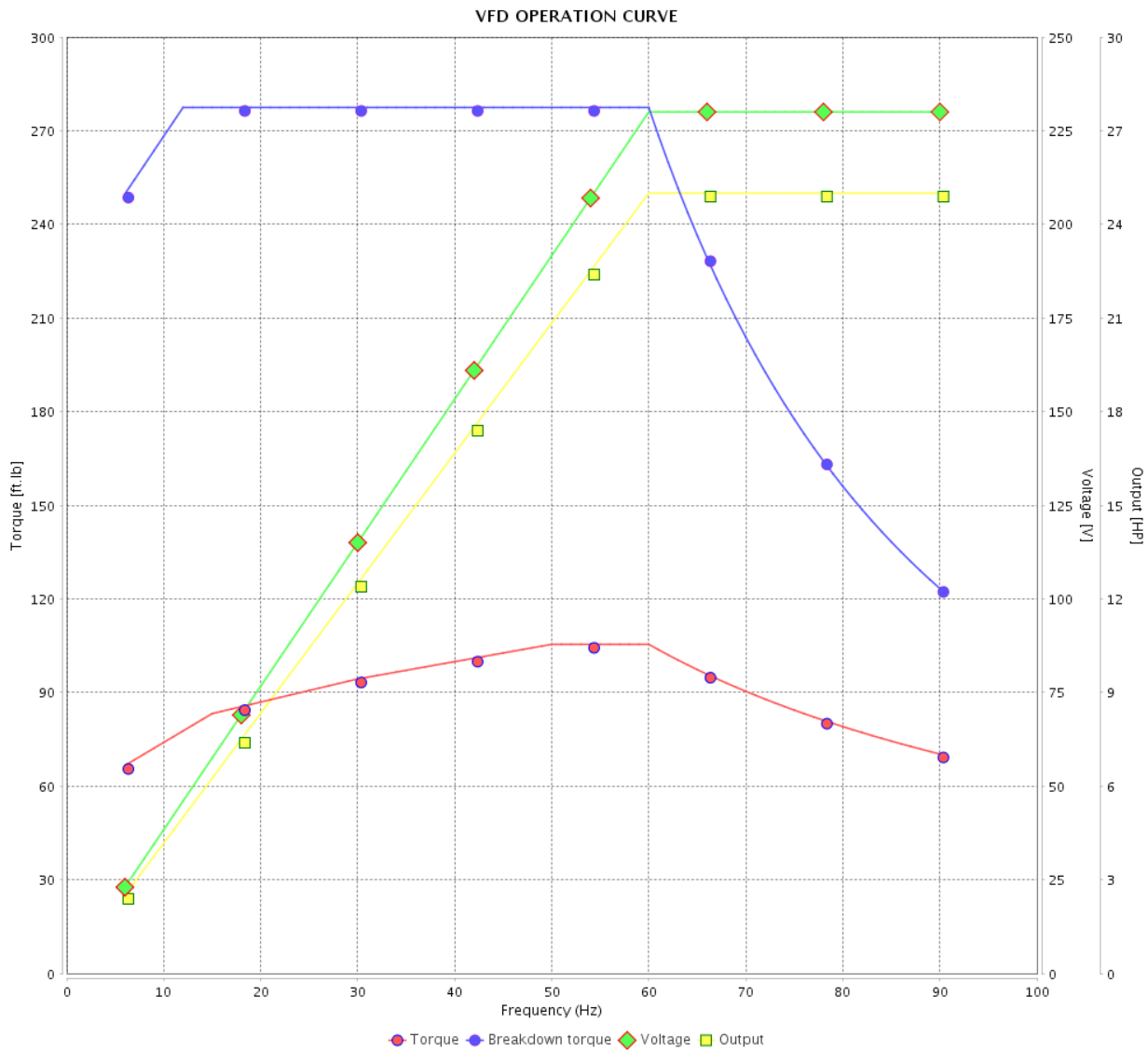


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Performance : 230/460 V 60 Hz 6P

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 LRC : 6.2
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 Locked rotor torque : 210 %
 Breakdown torque : 250 %
 Rated speed : 1183 rpm

Moment of inertia (J) : 7.69 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.25
 Temperature rise : 80 K
 Design : B

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VFD OPERATION CURVE

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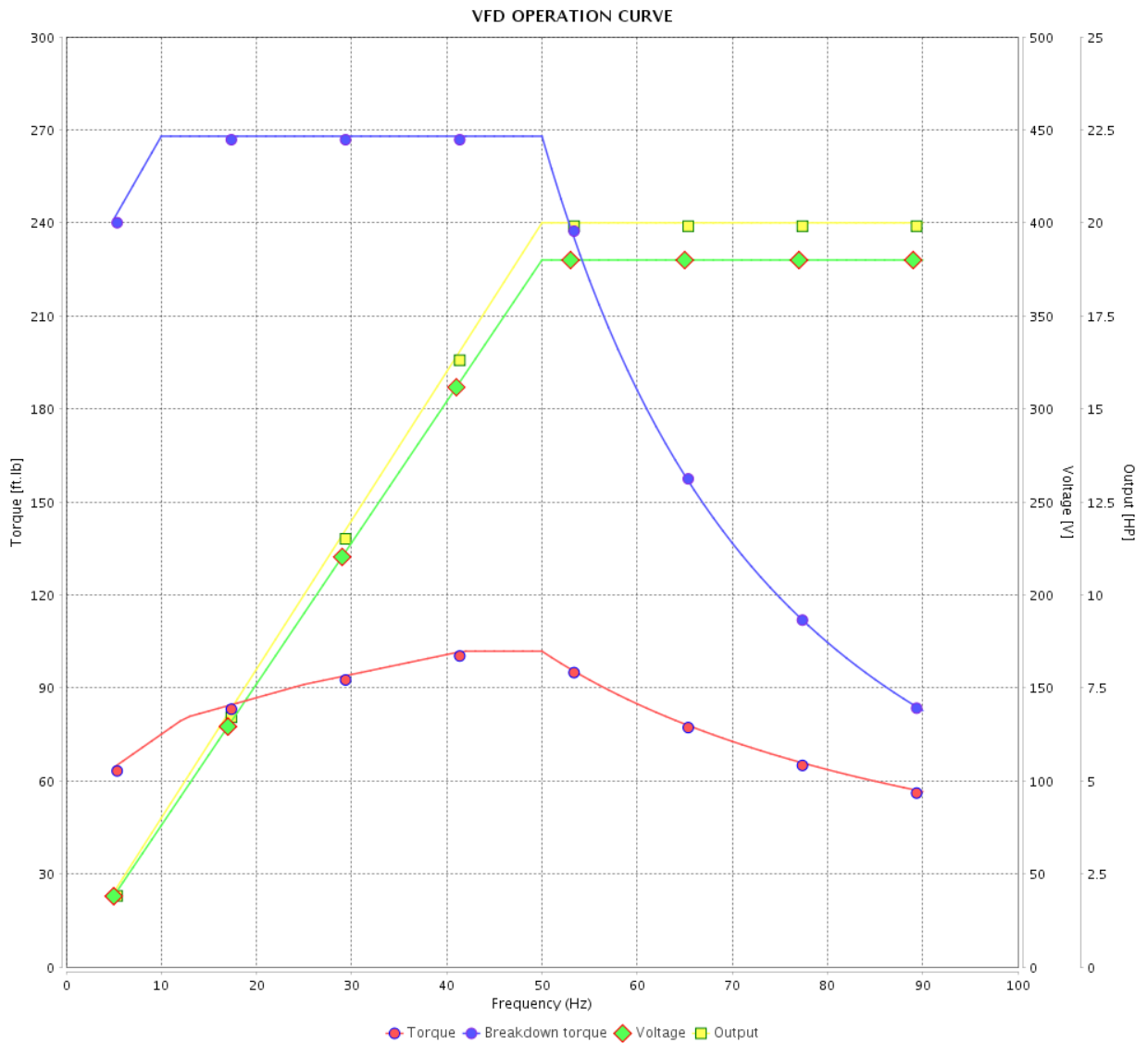


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VFD OPERATION CURVE

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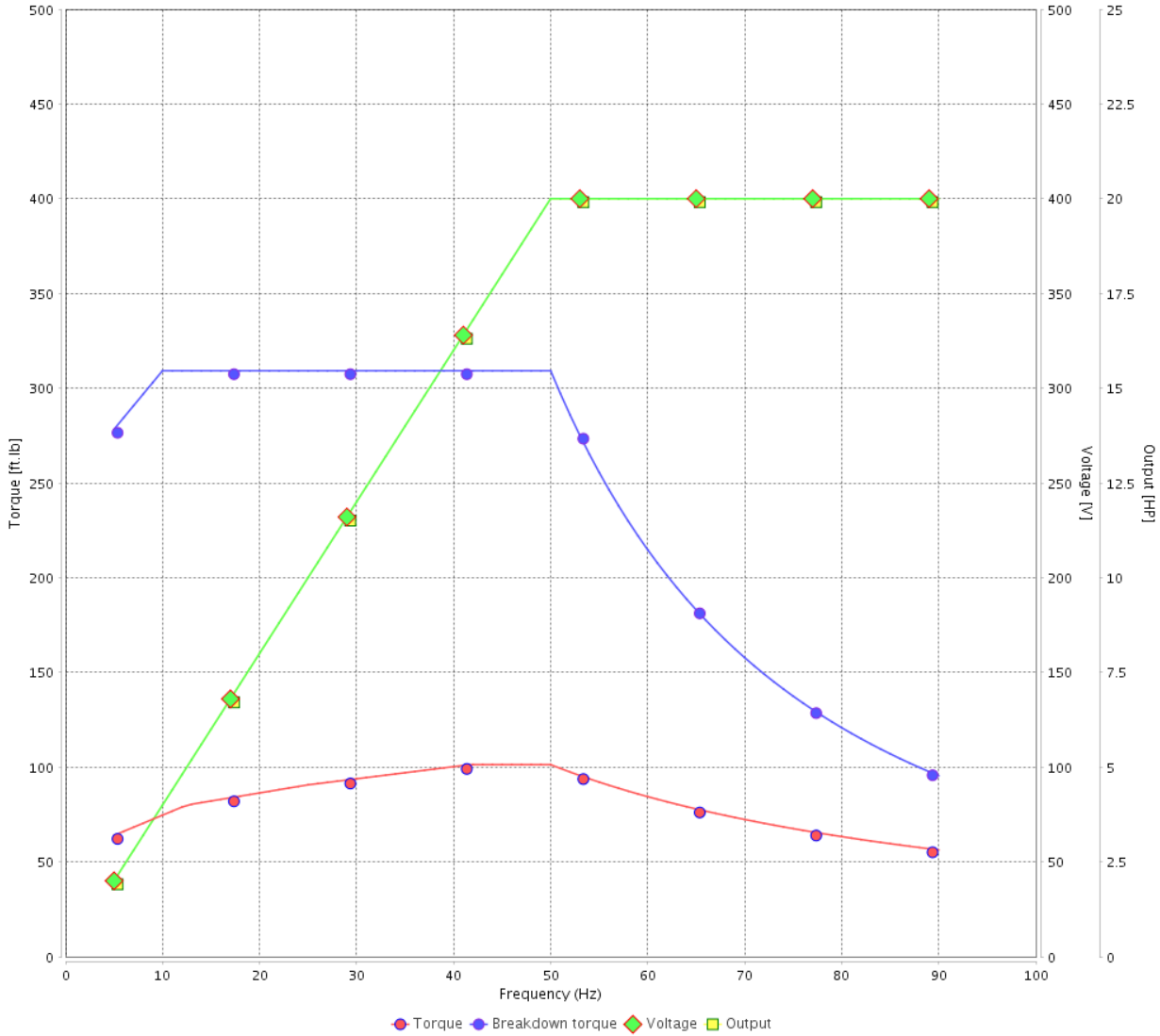
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VFD OPERATION CURVE



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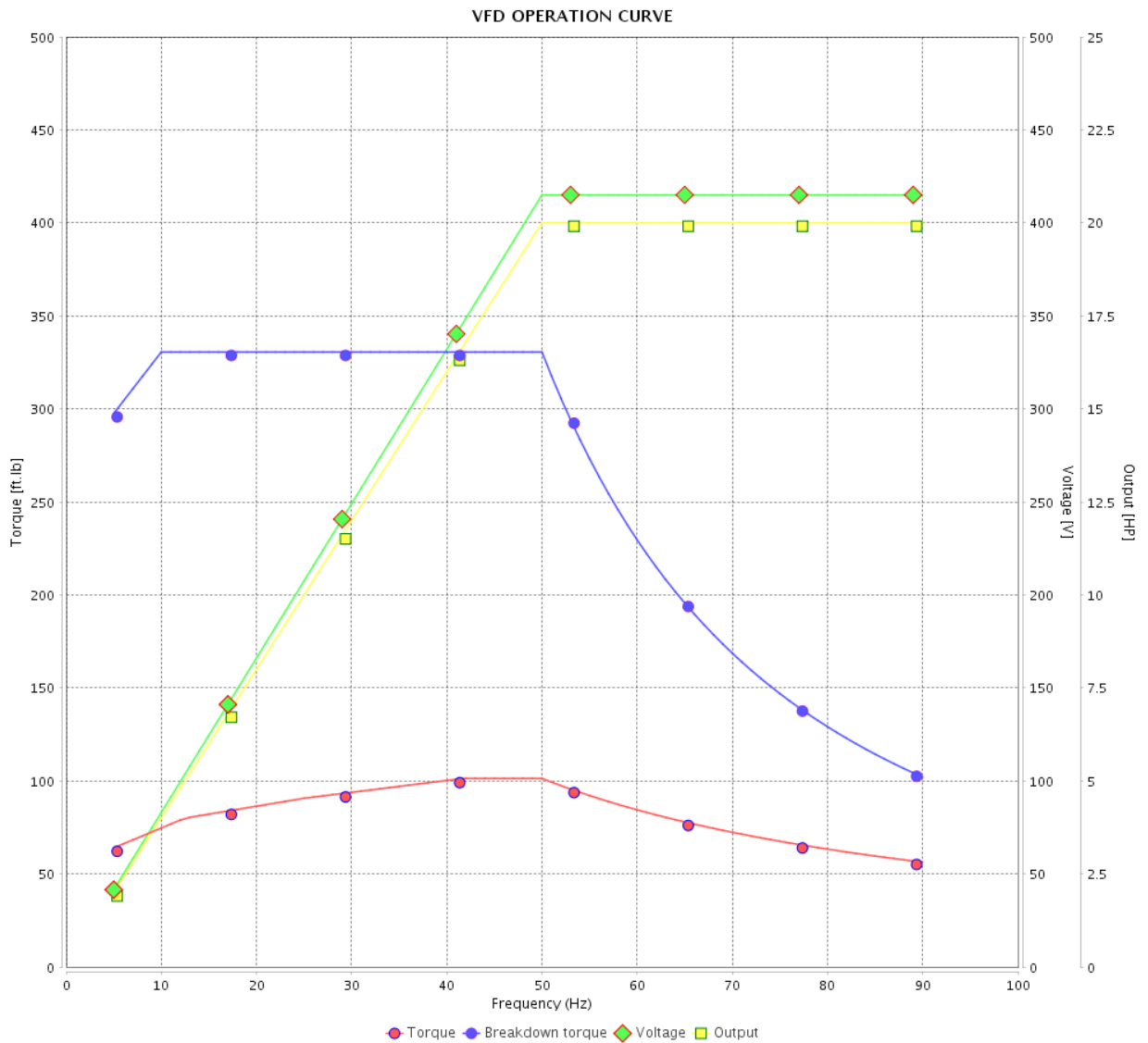


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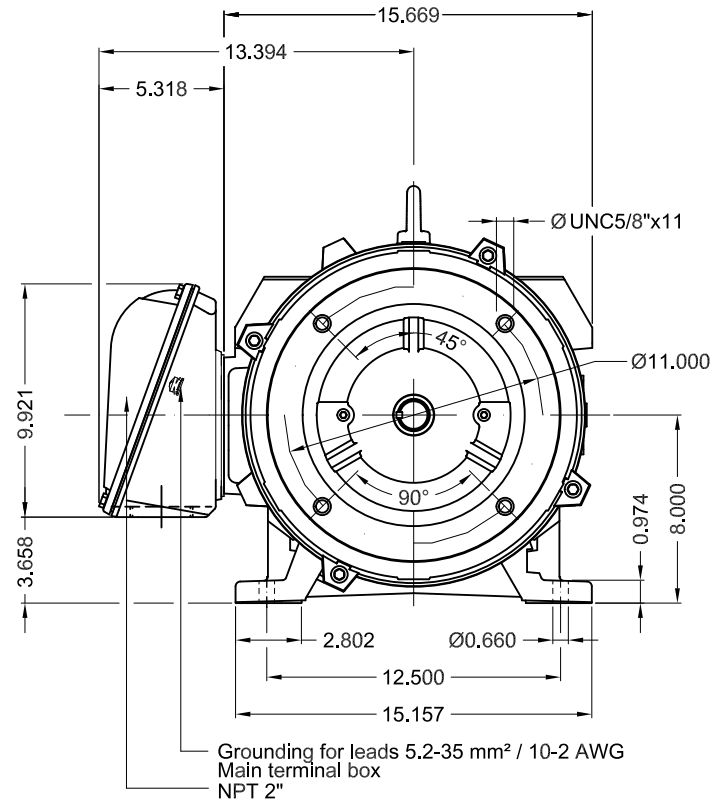


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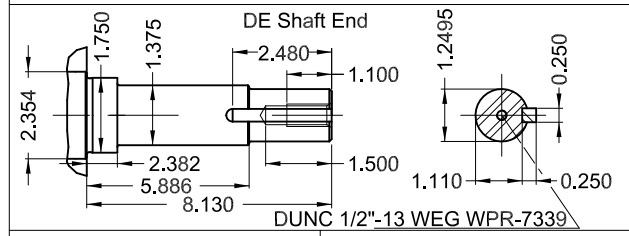
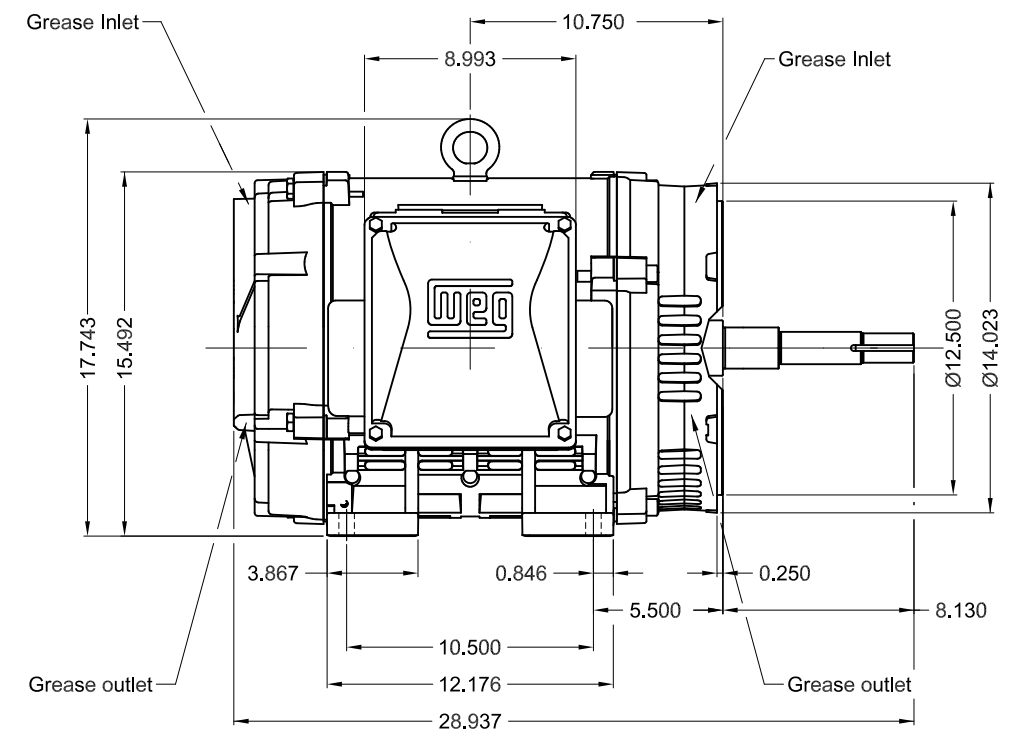
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Grounding for leads 5.2-35 mm² / 10-2 AWG
Main terminal box
NPT 2"



25 HP 06 Poles 60 Hz A

1:8

ECM	LOC	SUMMARY OF MODIFICATIONS	EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	PIRWBUSER	THREE PH. MOTOR W40 CLOSE COUPLED PUMP JP TYPE PREM. FT.					
CHECKED		FRAME 324JP IP23 ODP					
RELEASED							
REL DT.	WMO	Jaragua do Sul	Product Engineering	WDD	SHEET	1 / 1	

Color RAL 5009
Painting plan 203A
Mounting NEMA F-1
Mounting B34R(D)

PREVIEW

