

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer					
Product line		: W40 JP Pump NEMA Premium Efficiency Three-Phase		Product code : 14269639	
				Catalog # : 05012OT3E365JP-W40	
Frame : 364/5JP		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 : 820 lb			
Protection degree : IP23		Moment of inertia (J) : 23.9 sq.ft.lb			
Design : B					
Output [HP]	50	40	40	40	40
Poles	6	6	6	6	6
Frequency [Hz]	60	50	50	50	50
Rated voltage [V]	230/460	380	400	415	415
Rated current [A]	116/58.1	57.1	54.8	53.5	53.5
L. R. Amperes [A]	779/389	400	395	412	412
LRC [A]	6.7x(Code G)	7.0x(Code H)	7.2x(Code H)	7.7x(Code J)	7.7x(Code J)
No load current [A]	40.8/20.4	20.2	21.7	23.0	23.0
Rated speed [RPM]	1185	985	985	985	985
Slip [%]	1.25	1.50	1.50	1.50	1.50
Rated torque [ft.lb]	222	213	213	213	213
Locked rotor torque [%]	220	200	229	250	250
Breakdown torque [%]	240	240	270	290	290
Service factor	1.25	1.00	1.00	1.00	1.00
Temperature rise	80 K	80 K	80 K	80 K	80 K
Locked rotor time	27s (cold) 15s (hot)	25s (cold) 14s (hot)	25s (cold) 14s (hot)	25s (cold) 14s (hot)	25s (cold) 14s (hot)
Noise level ²	68.0 dB(A)				
Efficiency (%)	25%	93.5	92.4	92.4	92.4
	50%	93.6	92.5	92.5	92.5
	75%	94.1	92.9	92.9	92.9
	100%	94.1	92.9	92.9	92.9
Power Factor	25%	0.48	0.48	0.44	0.42
	50%	0.74	0.74	0.70	0.68
	75%	0.82	0.83	0.80	0.79
	100%	0.85	0.86	0.85	0.84
Bearing type		Drive end : 6314 C3	Non drive end : 6212 Z C3	Foundation loads	
Sealing		Without	Without	Max. traction : 1709 lb	
Lubrication interval		Bearing Seal : 20000 h	Bearing Seal : 20000 h	Max. compression : 2529 lb	
Lubricant amount		27 g	13 g		
Lubricant type		Mobil Polyrex EM			
Notes USABLE @208V 128A SF 1.15 SFA 148A					
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



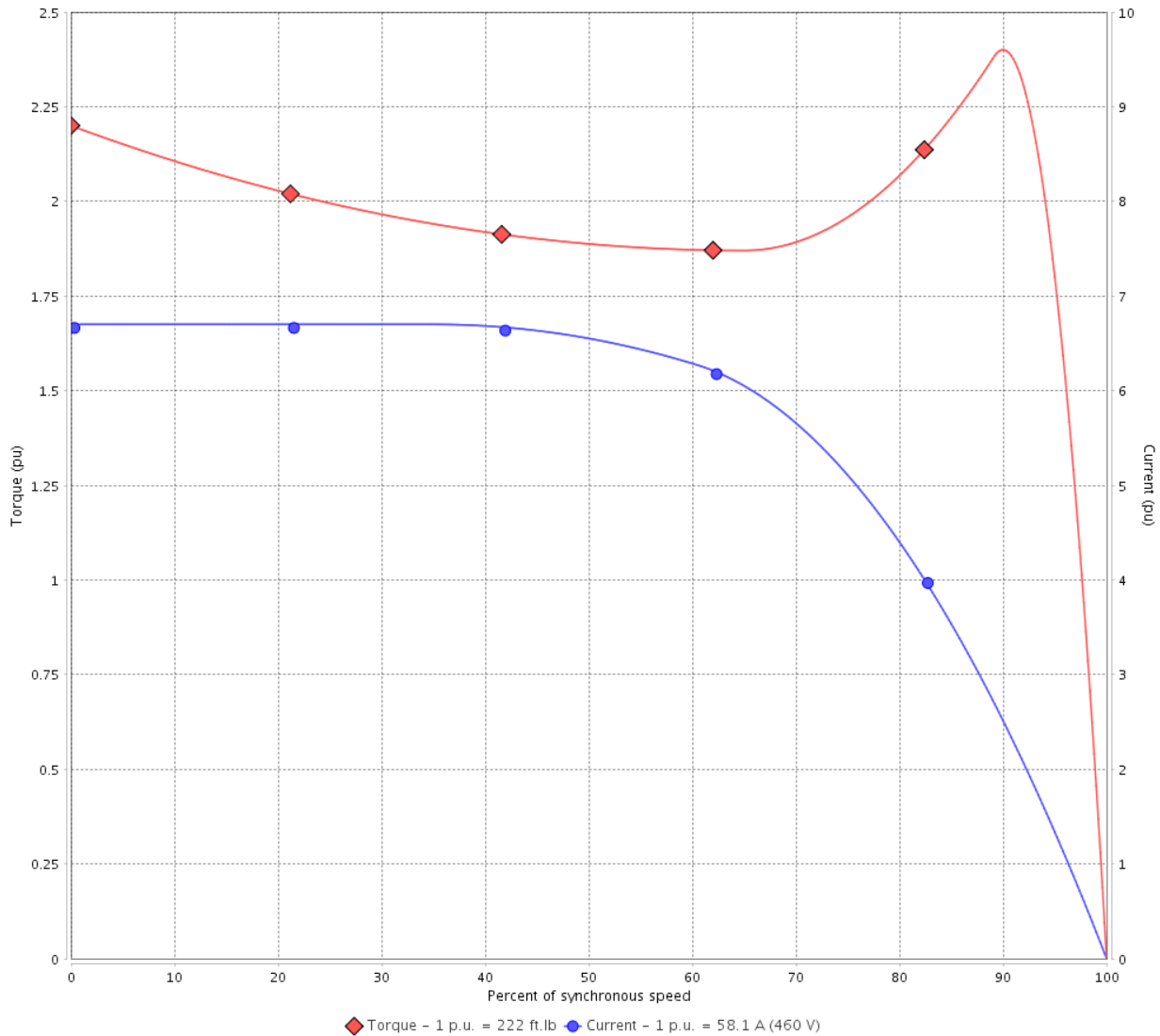
Customer :

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

Product code : 14269639

Catalog # : 05012OT3E365JP-W40

TORQUE AND CURRENT VS SPEED CURVE



Performance : 230/460 V 60 Hz 6P

Rated current : 116/58.1 A
 LRC : 6.7
 Rated torque : 222 ft.lb
 Locked rotor torque : 220 %
 Breakdown torque : 240 %
 Rated speed : 1185 rpm

Moment of inertia (J) : 23.9 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.25
 Temperature rise : 80 K
 Design : B

Locked rotor time : 27s (cold) 15s (hot)

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TORQUE AND CURRENT VS SPEED CURVE



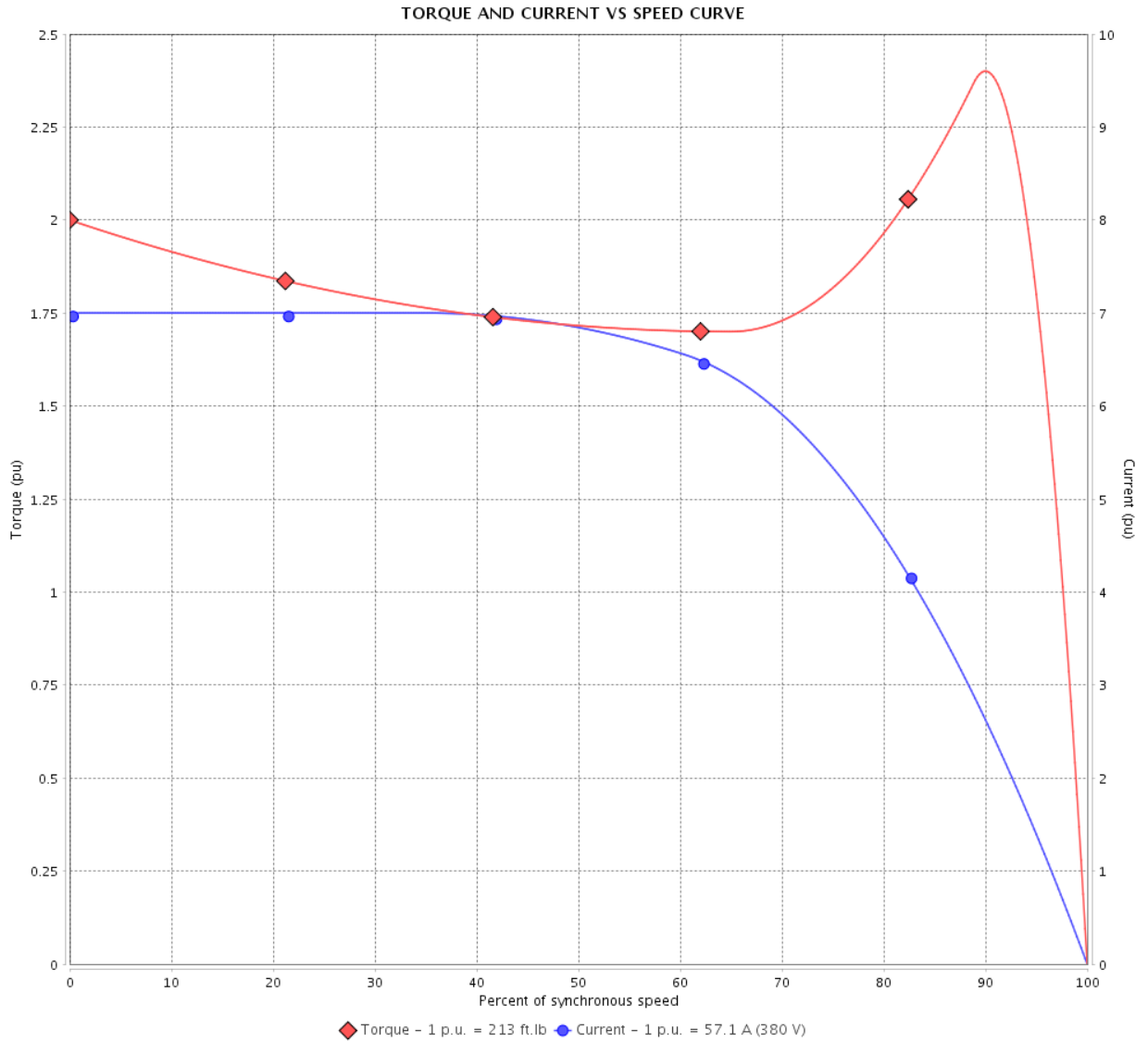
Three Phase Induction Motor - Squirrel Cage

Customer :

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

Product code : 14269639

Catalog # : 05012OT3E365JP-W40



Performance : 380 V 50 Hz 6P IE3

Rated current	: 57.1 A	Moment of inertia (J)	: 23.9 sq.ft.lb
LRC	: 7.0	Duty cycle	: Cont.(S1)
Rated torque	: 213 ft.lb	Insulation class	: F
Locked rotor torque	: 200 %	Service factor	: 1.00
Breakdown torque	: 240 %	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

Three Phase Induction Motor - Squirrel Cage



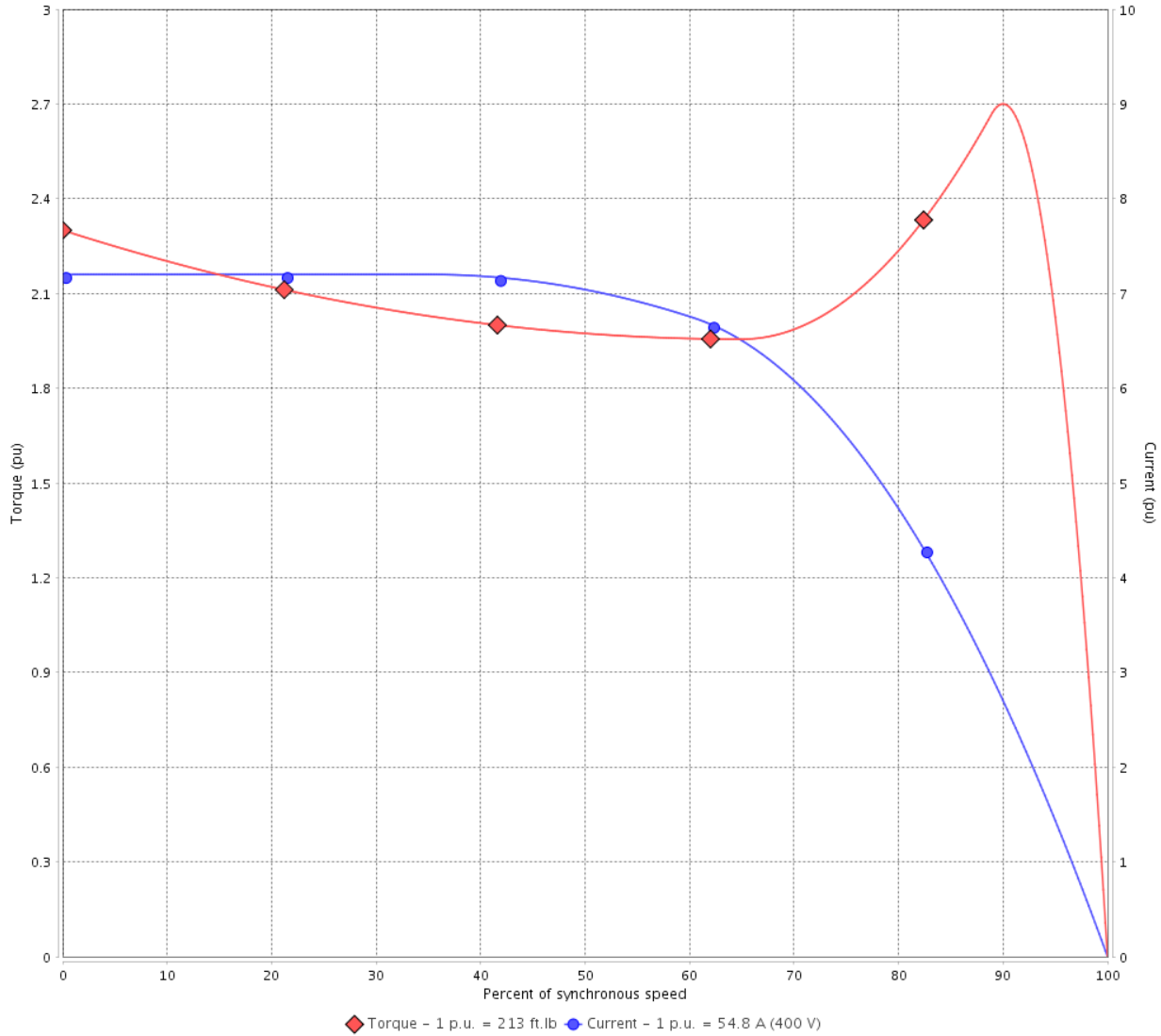
Customer :

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Catalog # : 05012OT3E365JP-W40

TORQUE AND CURRENT VS SPEED CURVE



Performance : 400 V 50 Hz 6P IE3

Rated current	: 54.8 A	Moment of inertia (J)	: 23.9 sq.ft.lb
LRC	: 7.2	Duty cycle	: Cont.(S1)
Rated torque	: 213 ft.lb	Insulation class	: F
Locked rotor torque	: 229 %	Service factor	: 1.00
Breakdown torque	: 270 %	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



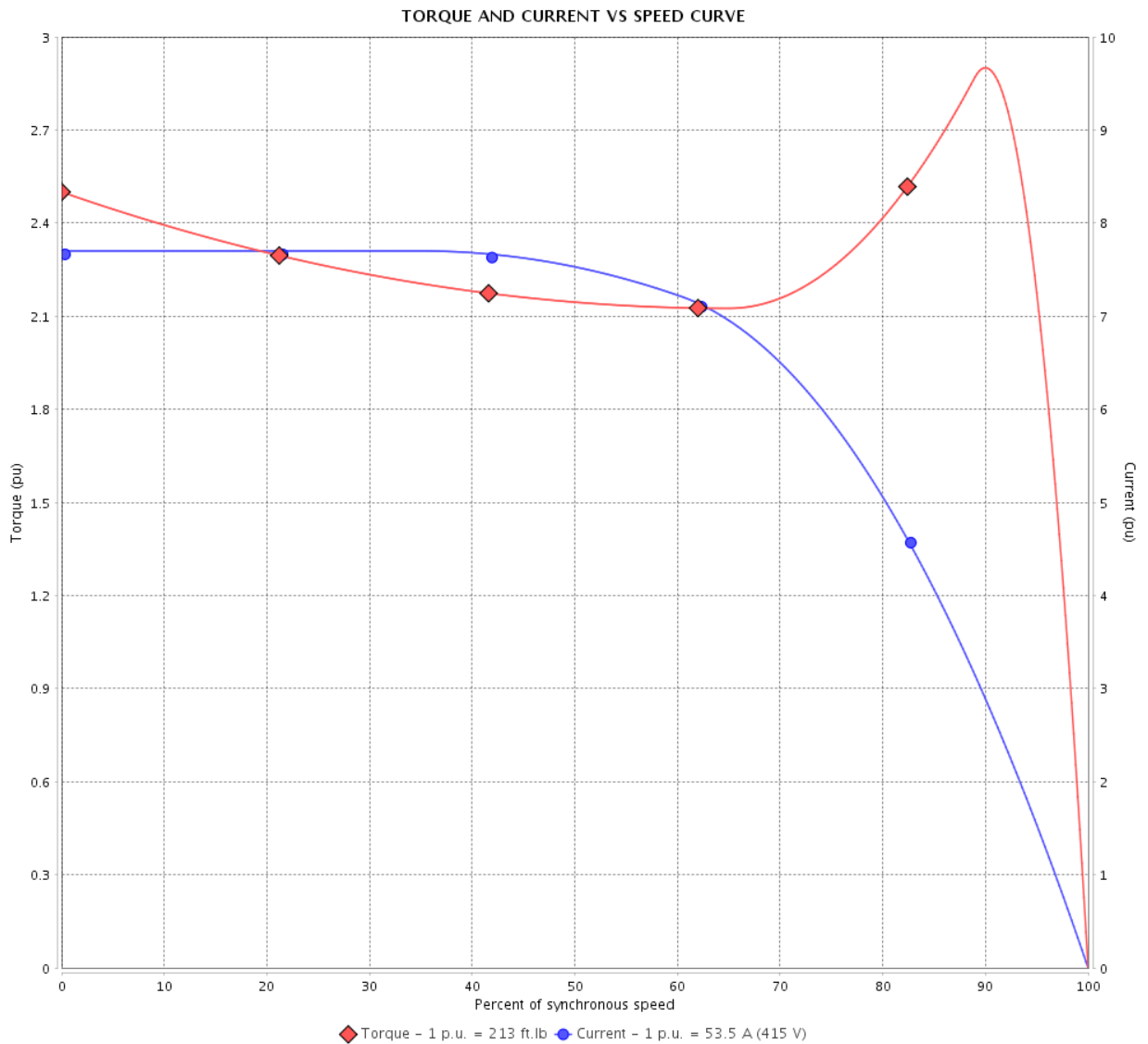
Three Phase Induction Motor - Squirrel Cage

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Performance : 415 V 50 Hz 6P IE3

Rated current	: 53.5 A	Moment of inertia (J)	: 23.9 sq.ft.lb
LRC	: 7.7	Duty cycle	: Cont.(S1)
Rated torque	: 213 ft.lb	Insulation class	: F
Locked rotor torque	: 250 %	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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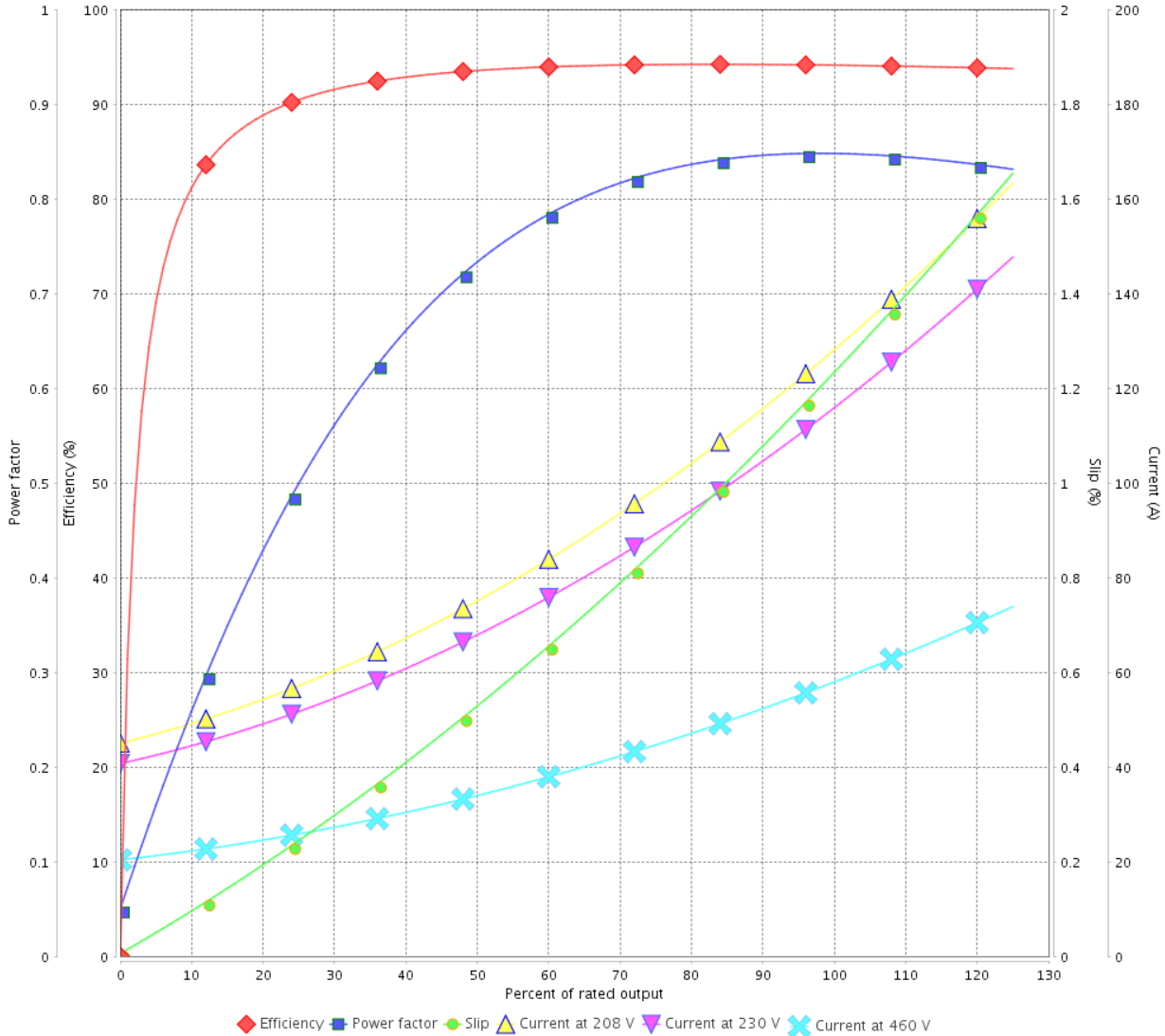
Customer :

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LOAD PERFORMANCE CURVE



Performance : 230/460 V 60 Hz 6P

Rated current : 116/58.1 A
 LRC : 6.7
 Rated torque : 222 ft.lb
 Locked rotor torque : 220 %
 Breakdown torque : 240 %
 Rated speed : 1185 rpm

Moment of inertia (J) : 23.9 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.25
 Temperature rise : 80 K
 Design : B

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Three Phase Induction Motor - Squirrel Cage

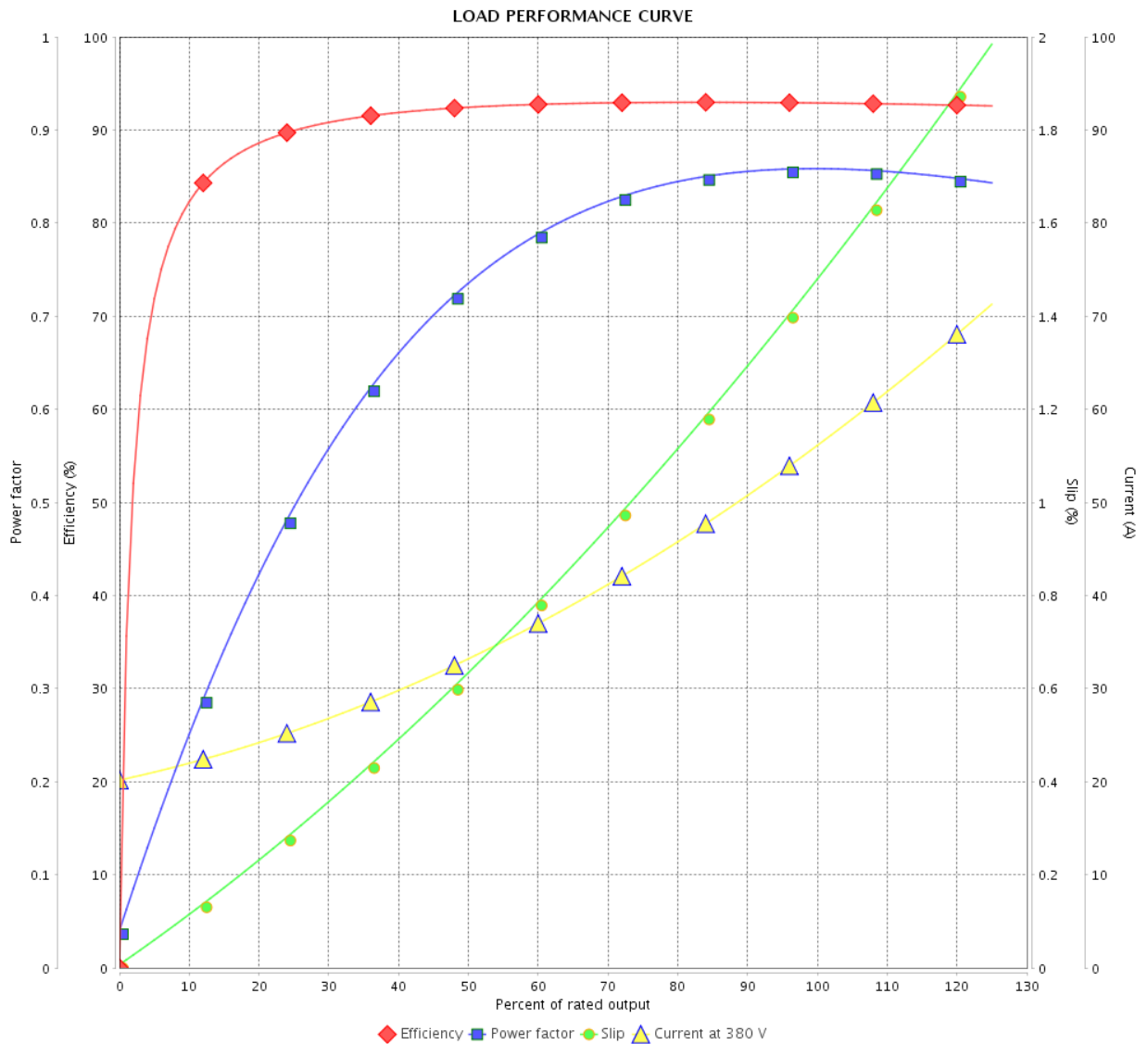


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Performance : 380 V 50 Hz 6P IE3

Rated current : 57.1 A
 LRC : 7.0
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 Breakdown torque : 240 %
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Moment of inertia (J) : 23.9 sq.ft.lb
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 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : B

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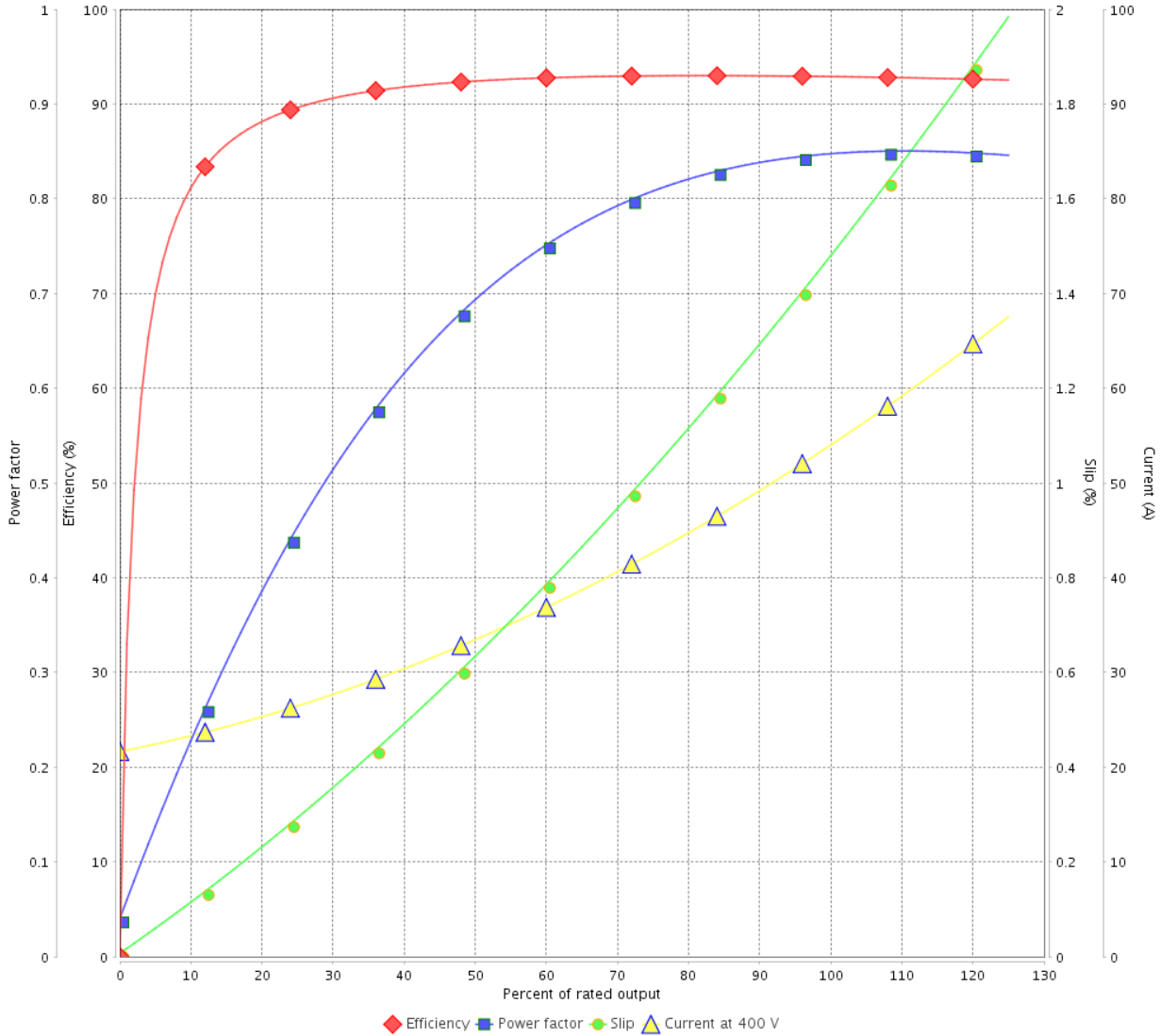
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LOAD PERFORMANCE CURVE



Performance : 400 V 50 Hz 6P IE3

Rated current : 54.8 A
 LRC : 7.2
 Rated torque : 213 ft.lb
 Locked rotor torque : 229 %
 Breakdown torque : 270 %
 Rated speed : 985 rpm

Moment of inertia (J) : 23.9 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

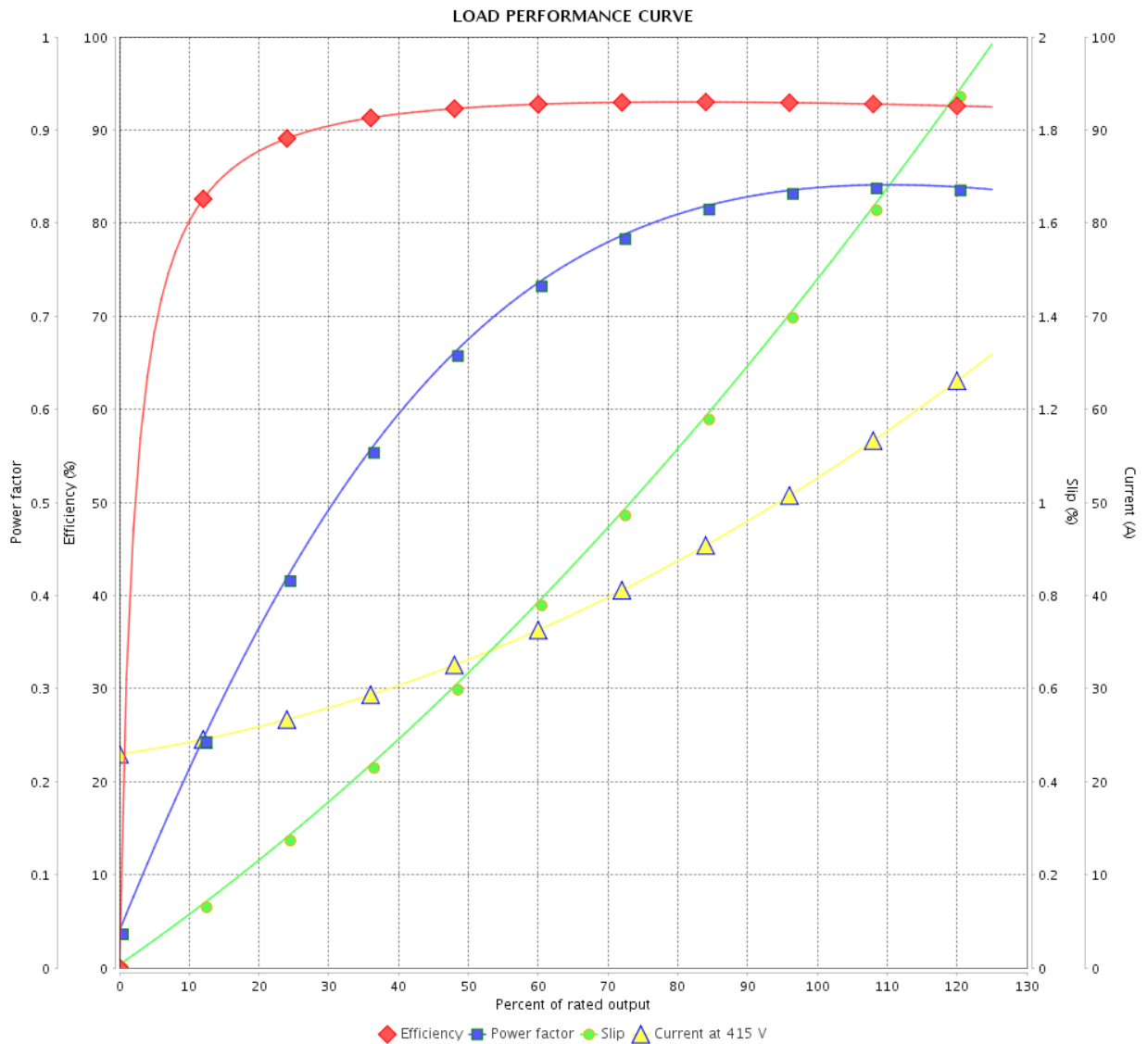


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Performance : 415 V 50 Hz 6P IE3

Rated current : 53.5 A
 LRC : 7.7
 Rated torque : 213 ft.lb
 Locked rotor torque : 250 %
 Breakdown torque : 290 %
 Rated speed : 985 rpm

Moment of inertia (J) : 23.9 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : B

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THERMAL LIMIT CURVE



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Rated torque : 222 ft.lb	Insulation class : F
Locked rotor torque : 220 %	Service factor : 1.25
Breakdown torque : 240 %	Temperature rise : 80 K
Rated speed : 1185 rpm	Design : B

Heating constant

Cooling constant

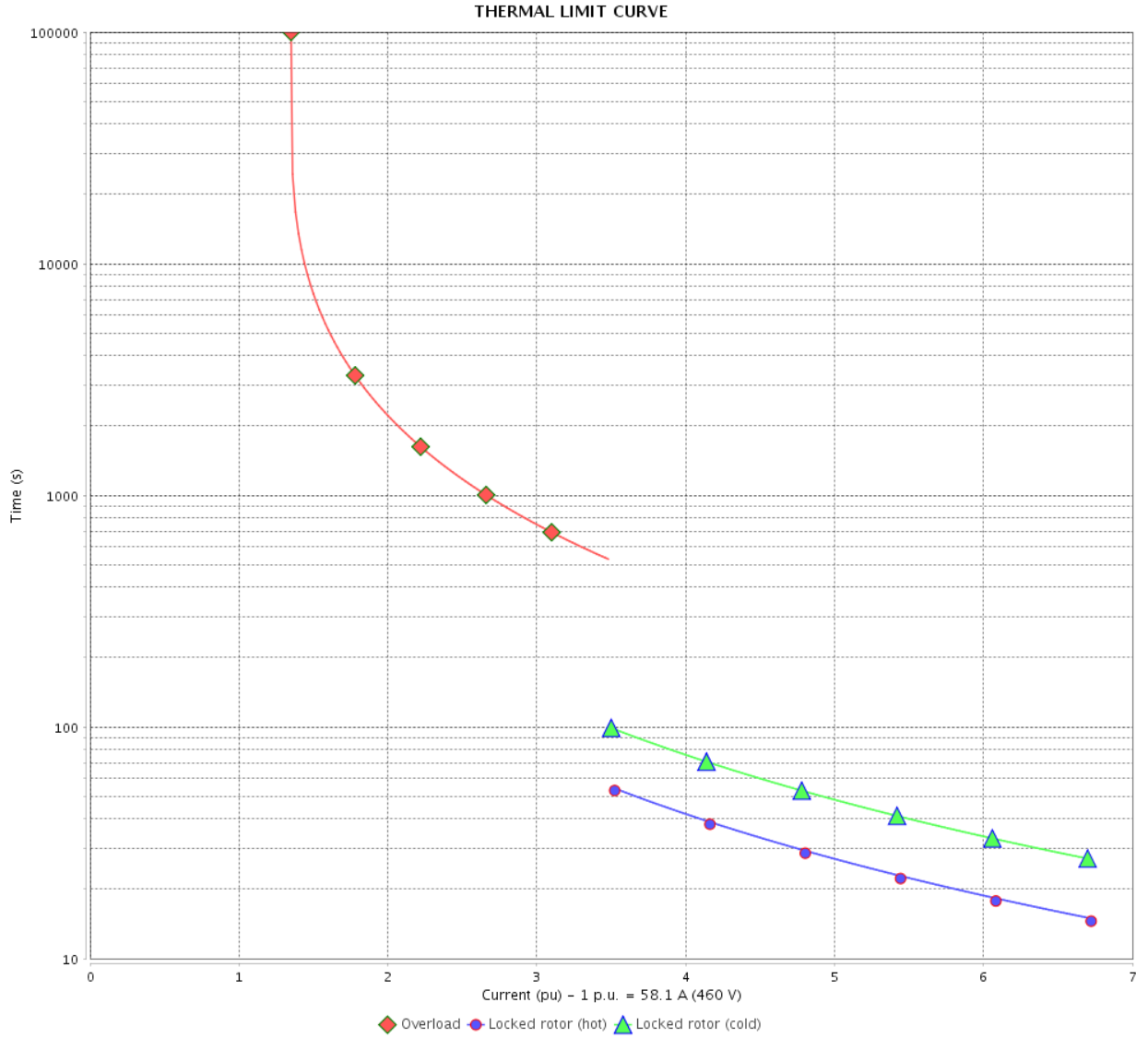
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Rated torque	: 213 ft.lb	Insulation class	: F
Locked rotor torque	: 200 %	Service factor	: 1.00
Breakdown torque	: 240 %	Temperature rise	: 80 K
Rated speed	: 985 rpm	Design	: B

Heating constant

Cooling constant

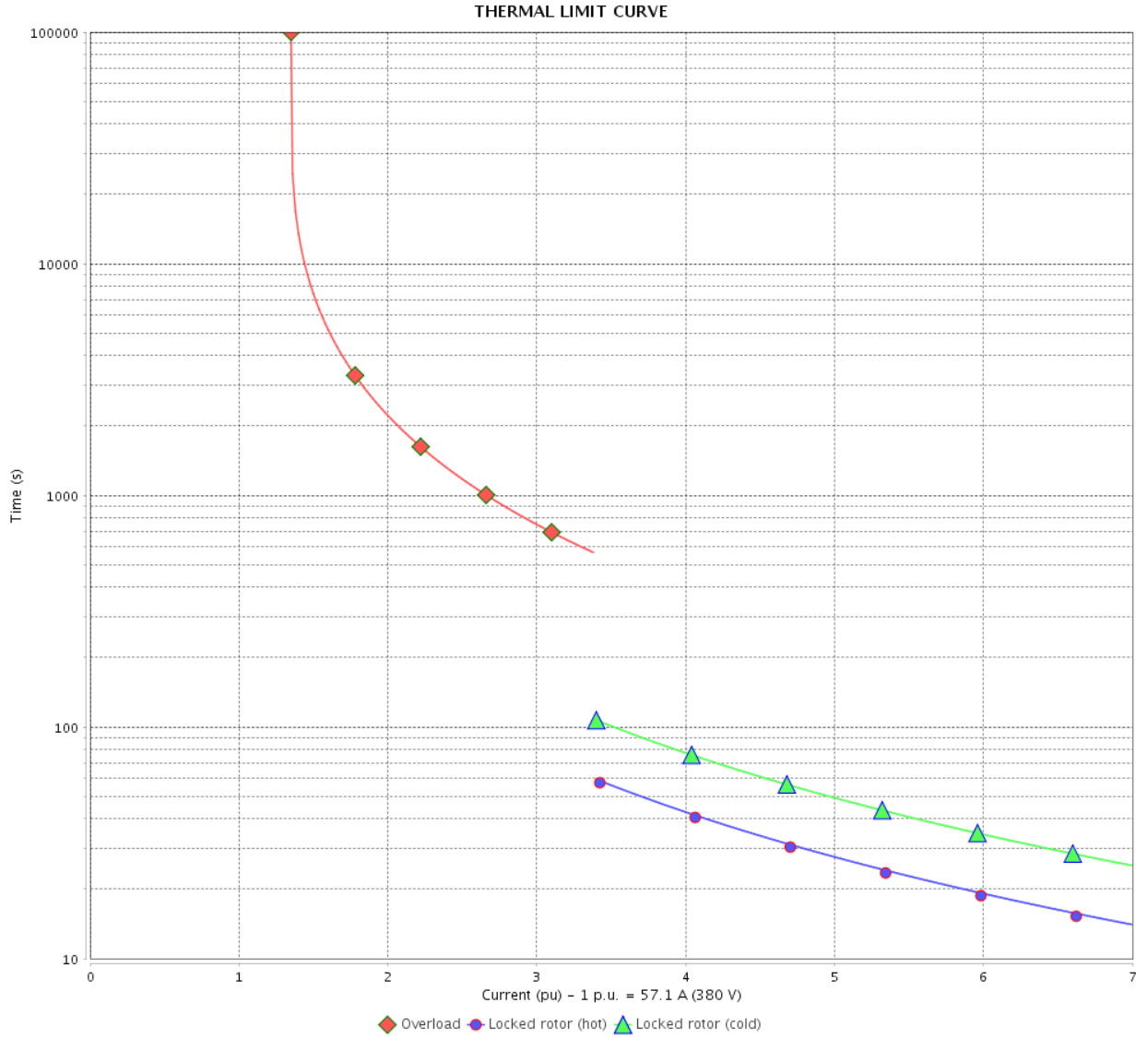
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Rated torque	: 213 ft.lb	Insulation class	: F
Locked rotor torque	: 229 %	Service factor	: 1.00
Breakdown torque	: 270 %	Temperature rise	: 80 K
Rated speed	: 985 rpm	Design	: B

Heating constant

Cooling constant

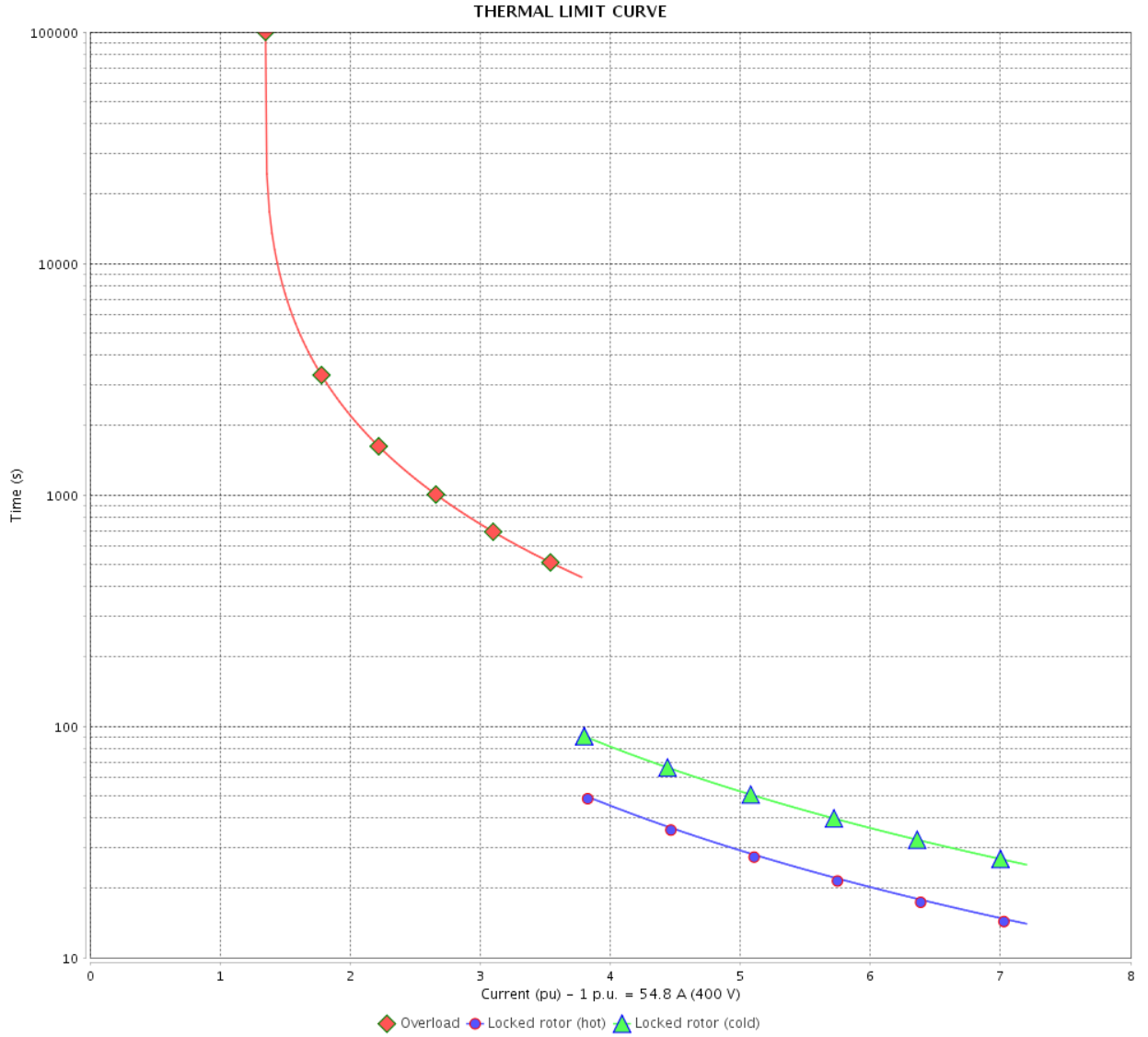
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Performance : 415 V 50 Hz 6P IE3

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LRC : 7.7	Duty cycle : Cont.(S1)
Rated torque : 213 ft.lb	Insulation class : F
Locked rotor torque : 250 %	Service factor : 1.00
Breakdown torque : 290 %	Temperature rise : 80 K
Rated speed : 985 rpm	Design : B

Heating constant

Cooling constant

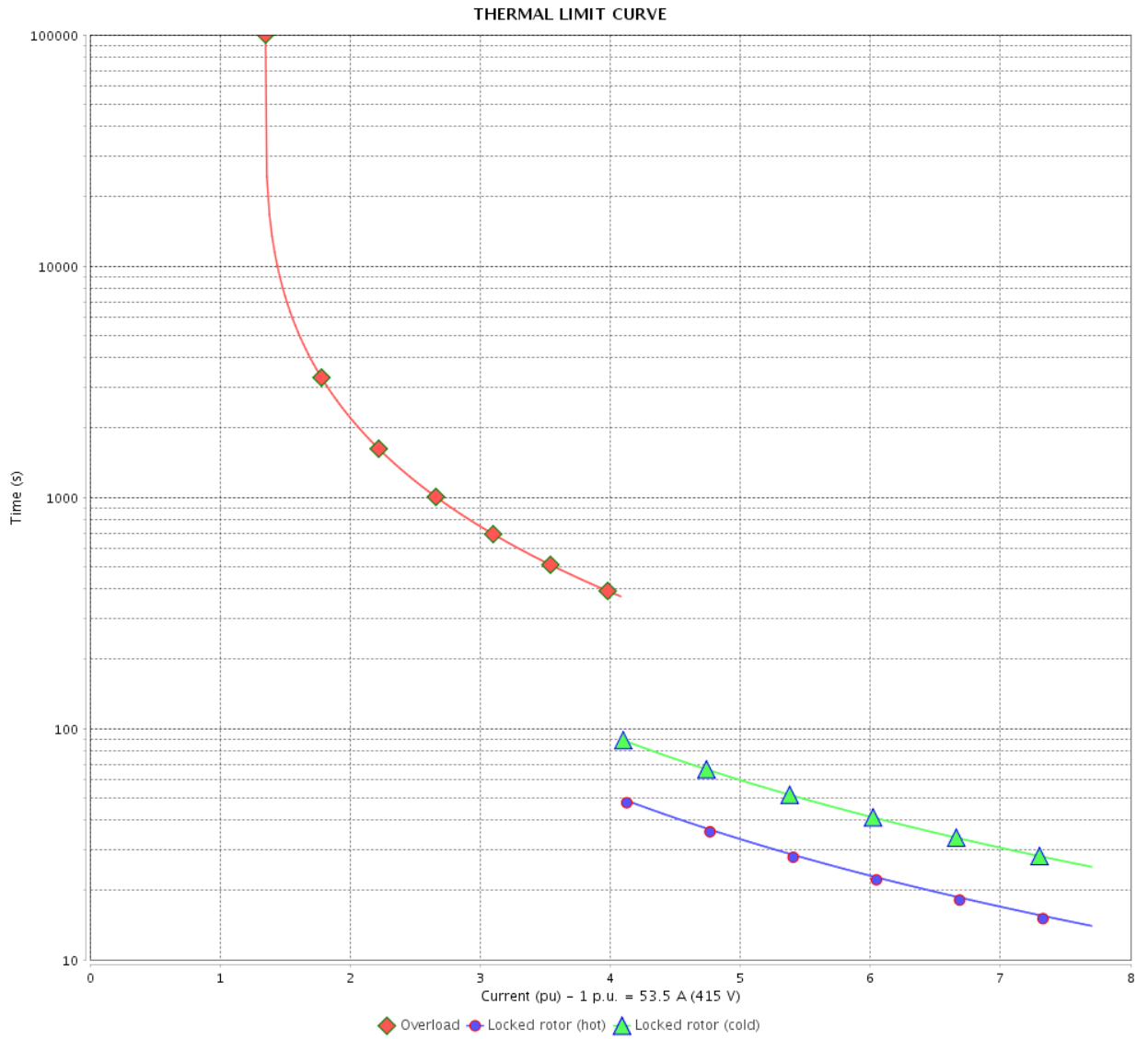
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VFD OPERATION CURVE

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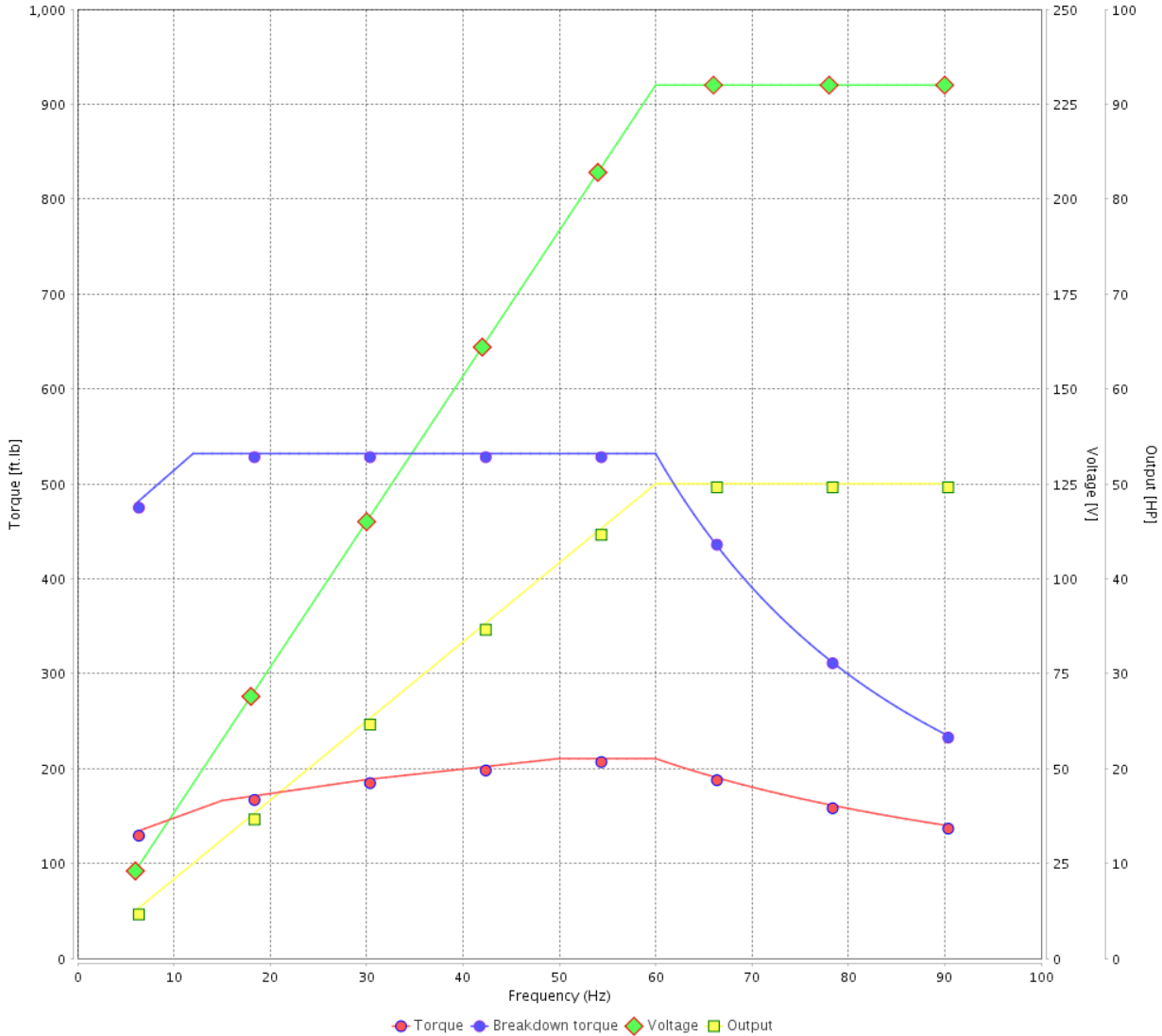
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 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.25
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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

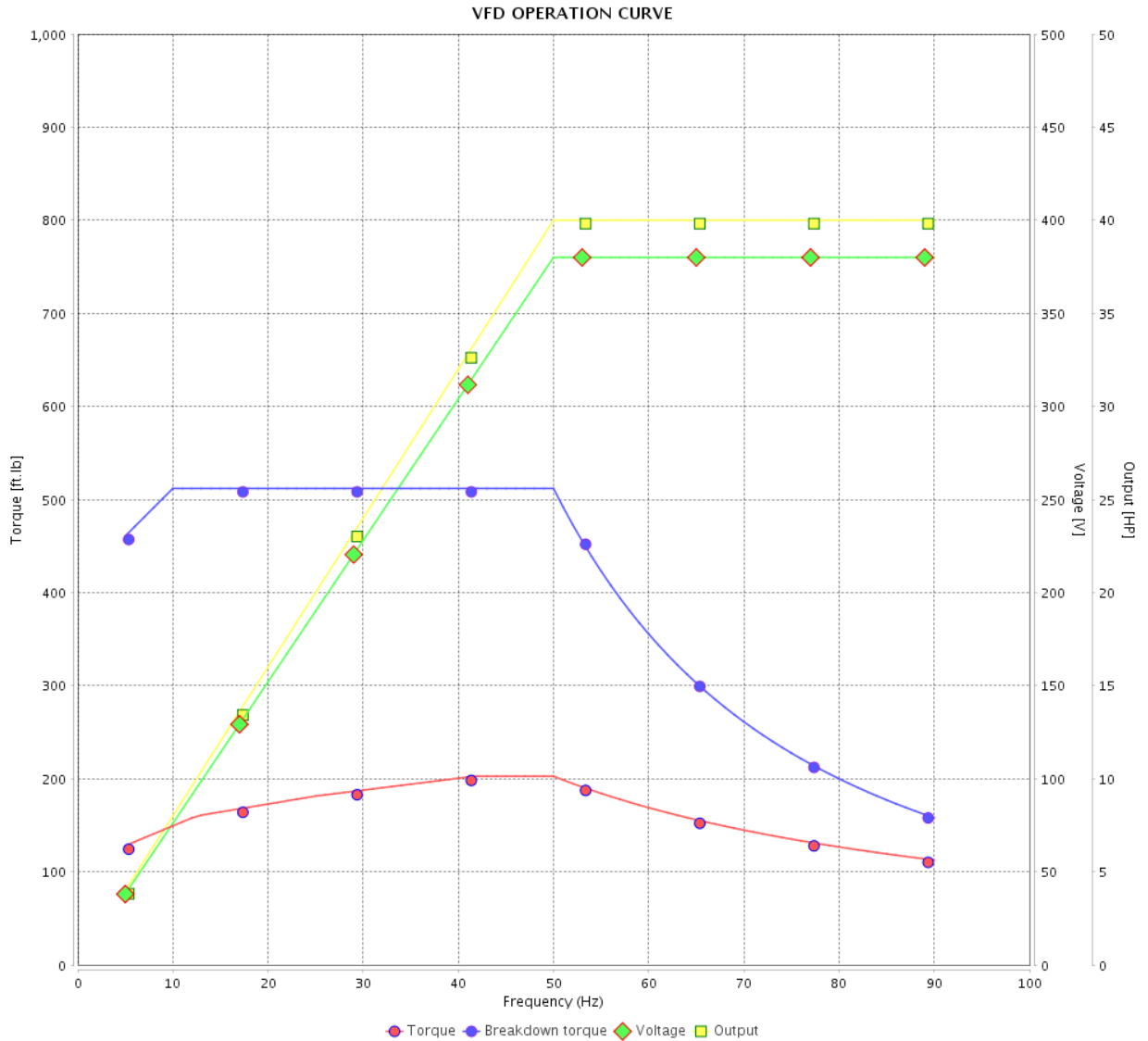


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VFD OPERATION CURVE

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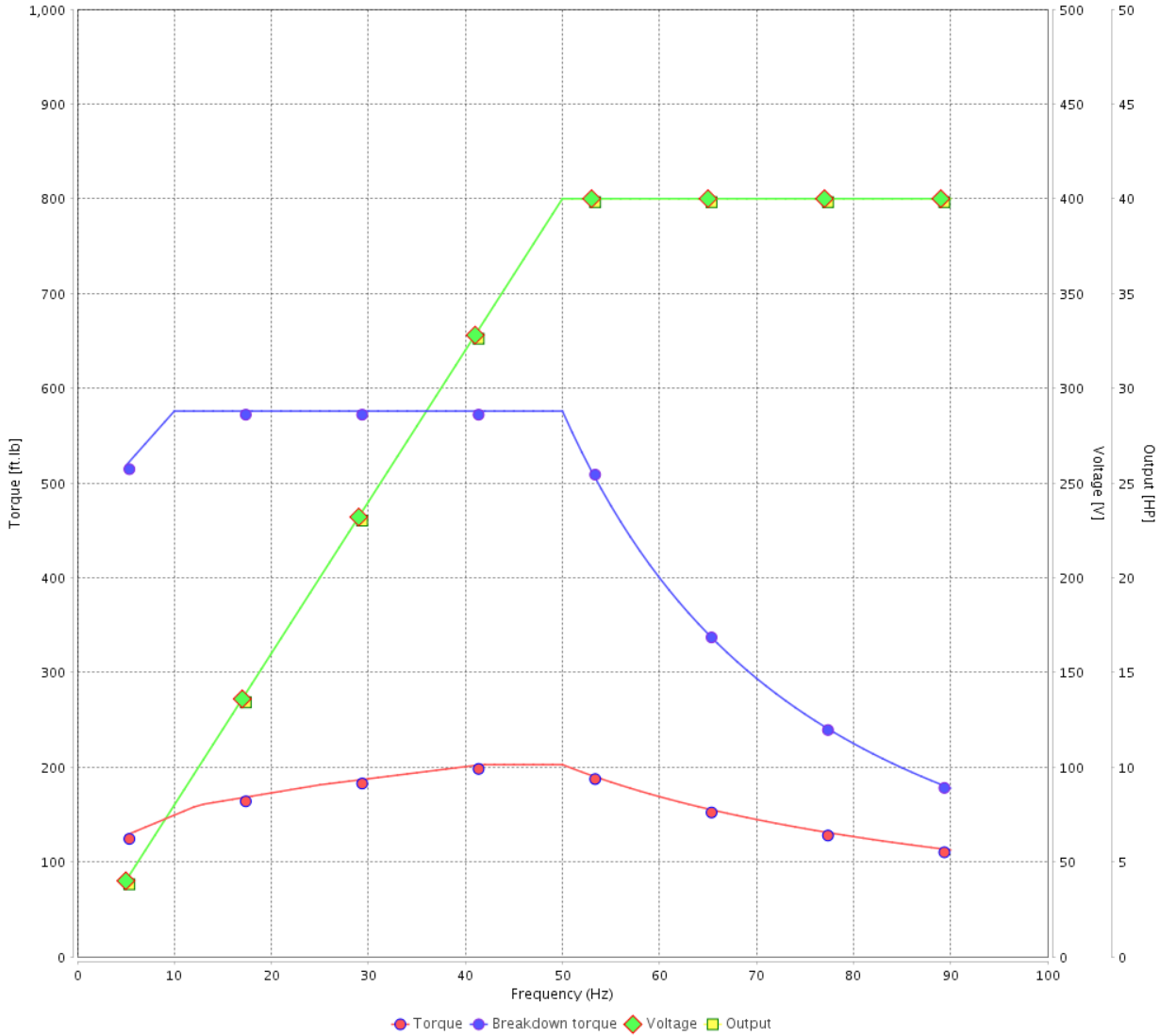
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Performance : 400 V 50 Hz 6P IE3

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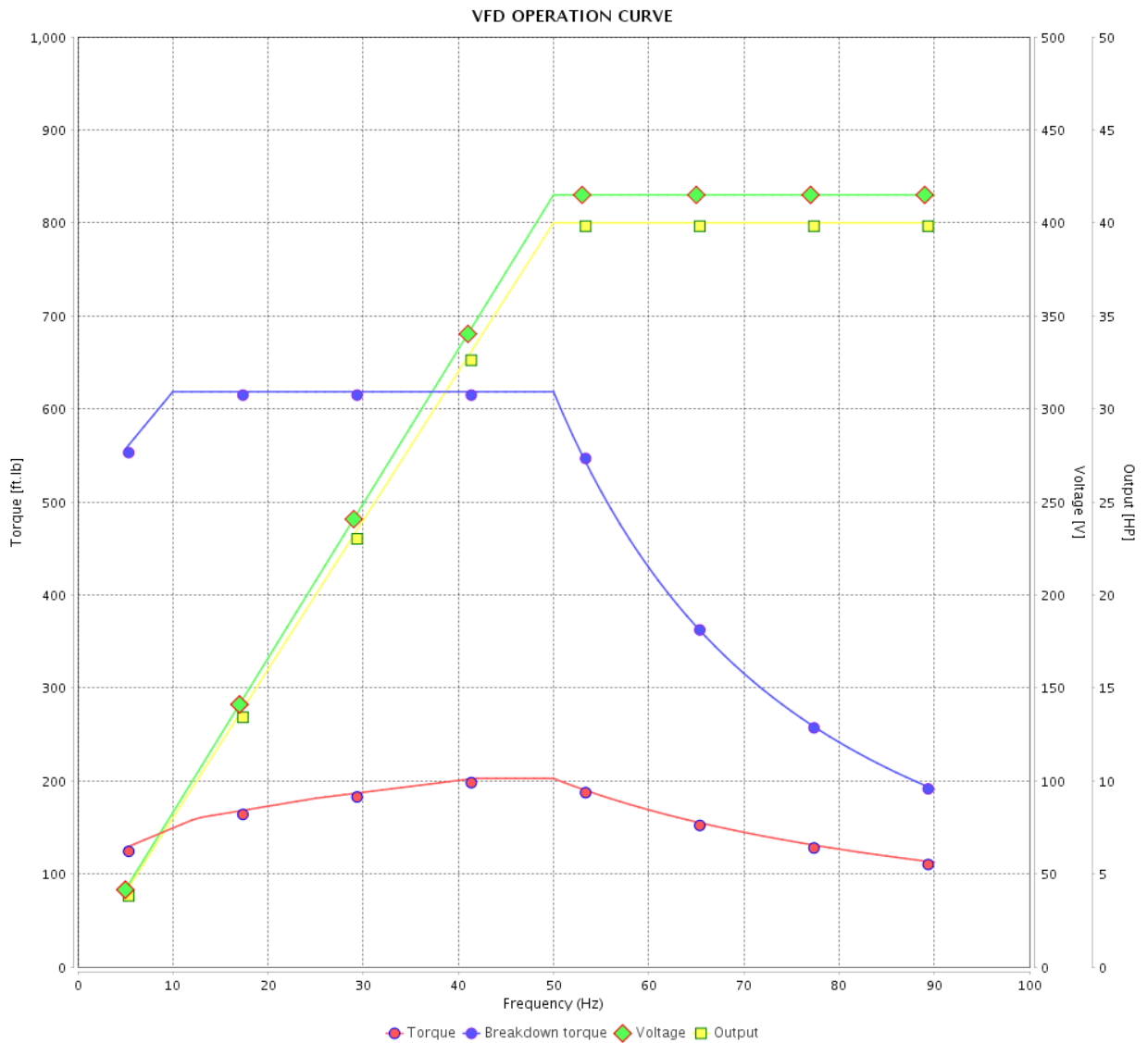


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