

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :			
Product line	: NEMA Premium Efficiency Three-Phase	Product code :	12674856
		Catalog # :	003120T3E213TC-S
Frame	: 213/5TC	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	: 98.3 lb
Design	: B	Moment of inertia (J)	: 0.8104 sq.ft.lb
Output [HP]	3	3	3
Poles	6	6	6
Frequency [Hz]	60	50	50
Rated voltage [V]	230/460	190/380	220/415
Rated current [A]	8.32/4.16	9.88/4.94	9.00/4.77
L. R. Amperes [A]	49.1/24.5	45.4/22.7	45.9/24.3
LRC [A]	5.9x(Code H)	4.6x(Code E)	5.1x(Code G)
No load current [A]	4.58/2.29	4.52/2.26	4.60/2.44
Rated speed [RPM]	1175	965	970
Slip [%]	2.08	3.50	3.00
Rated torque [ft.lb]	13.4	16.3	16.2
Locked rotor torque [%]	210	160	180
Breakdown torque [%]	260	190	220
Service factor	1.15	1.15	1.15
Temperature rise	80 K	80 K	80 K
Locked rotor time	70s (cold) 39s (hot)	0s (cold) 0s (hot)	0s (cold) 0s (hot)
Noise level ²	55.0 dB(A)	53.0 dB(A)	53.0 dB(A)
Efficiency (%)	25%	85.4	85.9
	50%	86.5	85.8
	75%	87.5	86.1
	100%	88.5	84.6
Power Factor	25%	0.33	0.35
	50%	0.56	0.59
	75%	0.68	0.72
	100%	0.75	0.80
Bearing type	: <u>Drive end</u> 6208 ZZ <u>Non drive end</u> 6206 ZZ	Foundation loads	
Sealing	: Without Without Bearing Seal Bearing Seal	Max. traction	: 152 lb
		Max. compression	: 250 lb
Lubrication interval	: - -		
Lubricant amount	: - -		
Lubricant type	: Mobil Polyrex EM		
Notes USABLE @208V 9.20A SF 1.00 SFA 9.20A			
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



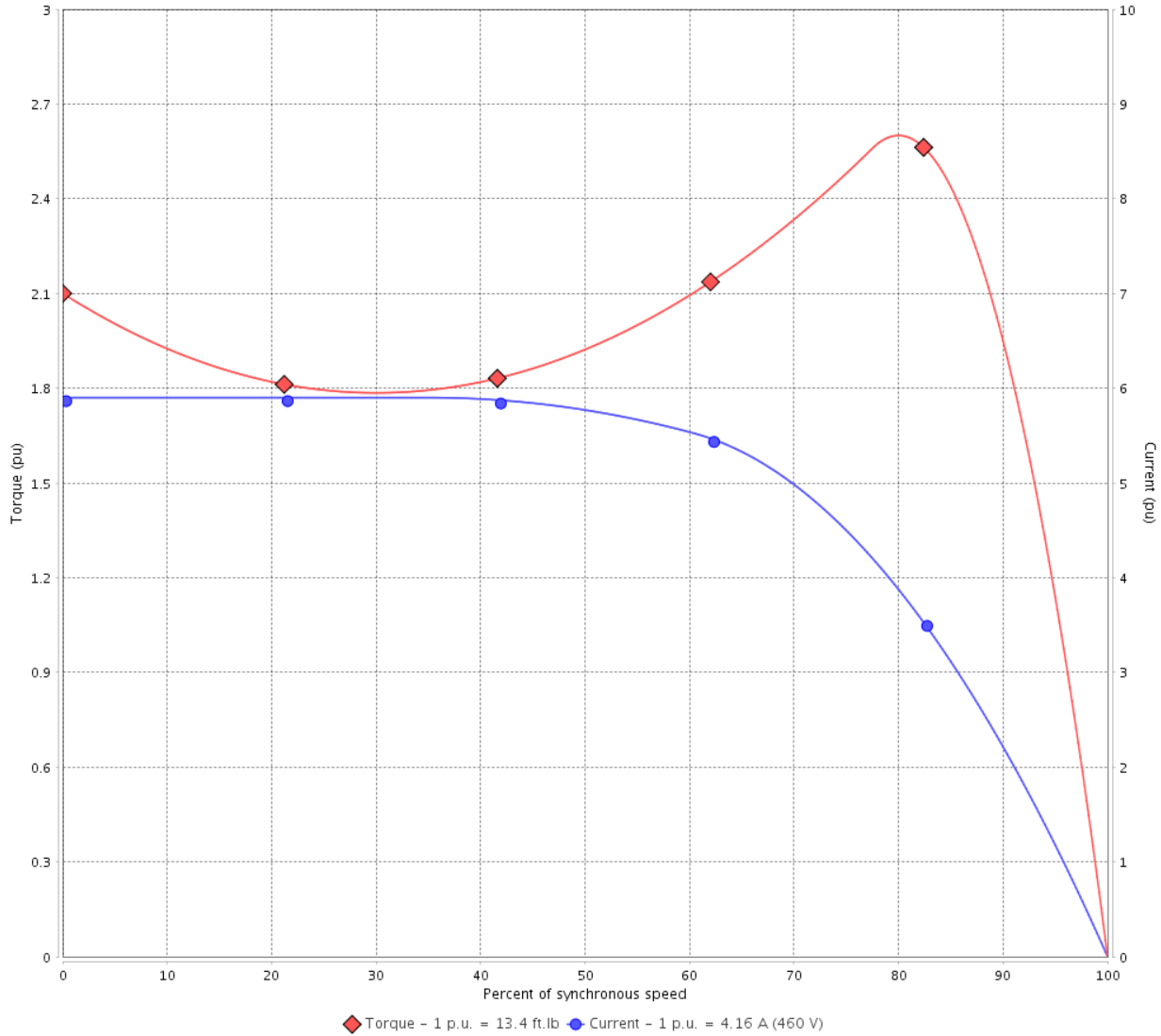
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12674856

Catalog # : 003120T3E213TC-S

TORQUE AND CURRENT VS SPEED CURVE



Performance : 230/460 V 60 Hz 6P

Rated current	: 8.32/4.16 A	Moment of inertia (J)	: 0.8104 sq.ft.lb
LRC	: 5.9	Duty cycle	: Cont.(S1)
Rated torque	: 13.4 ft.lb	Insulation class	: F
Locked rotor torque	: 210 %	Service factor	: 1.15
Breakdown torque	: 260 %	Temperature rise	: 80 K
Rated speed	: 1175 rpm	Design	: B

Locked rotor time : 70s (cold) 39s (hot)

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TORQUE AND CURRENT VS SPEED CURVE



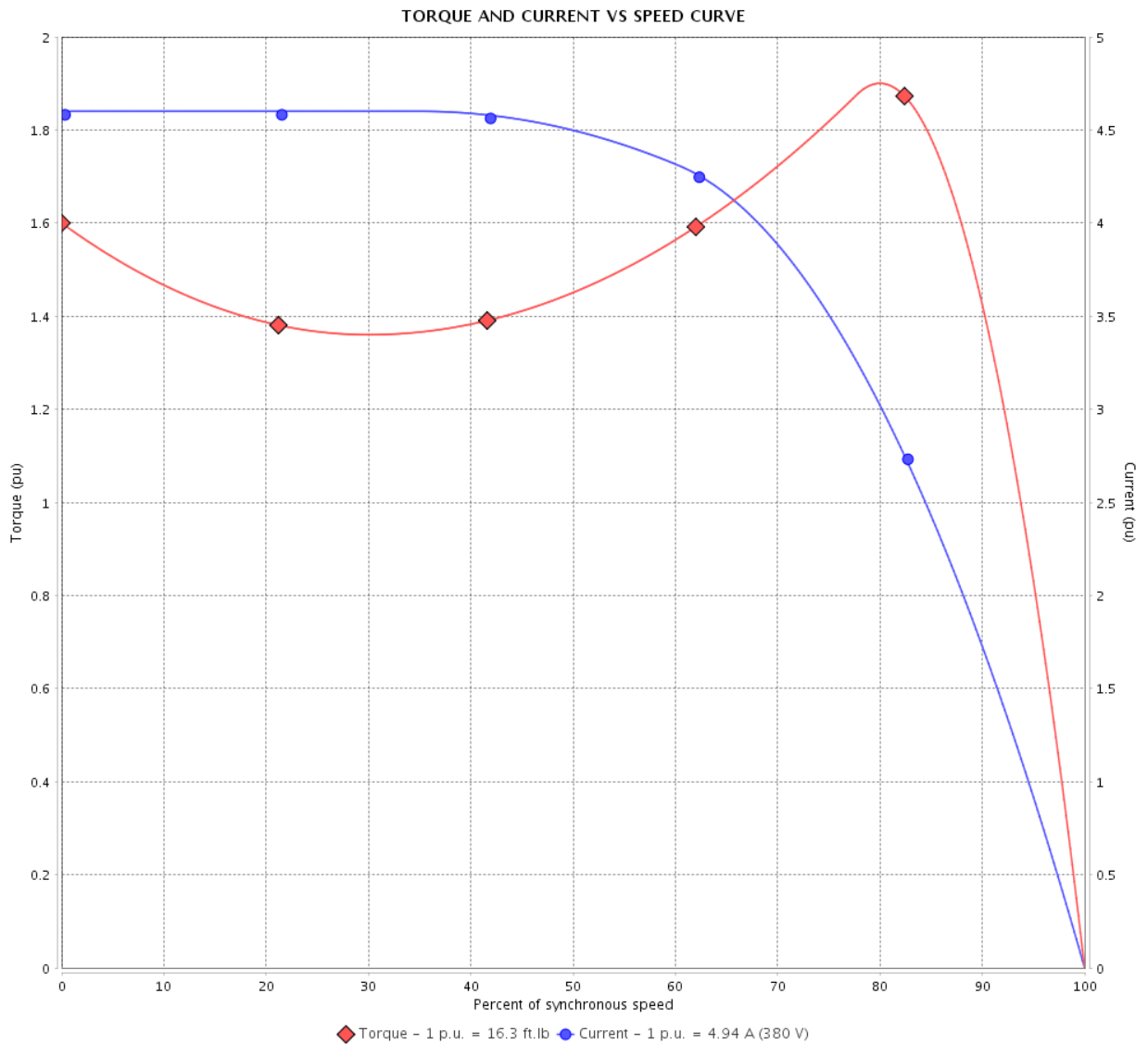
Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12674856

Catalog # : 003120T3E213TC-S



Performance : 190/380 V 50 Hz 6P

Rated current	: 9.88/4.94 A	Moment of inertia (J)	: 0.8104 sq.ft.lb
LRC	: 4.6	Duty cycle	: Cont.(S1)
Rated torque	: 16.3 ft.lb	Insulation class	: F
Locked rotor torque	: 160 %	Service factor	: 1.15
Breakdown torque	: 190 %	Temperature rise	: 80 K
Rated speed	: 965 rpm	Design	: B

Locked rotor time : 0s (cold) 0s (hot)

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TORQUE AND CURRENT VS SPEED CURVE

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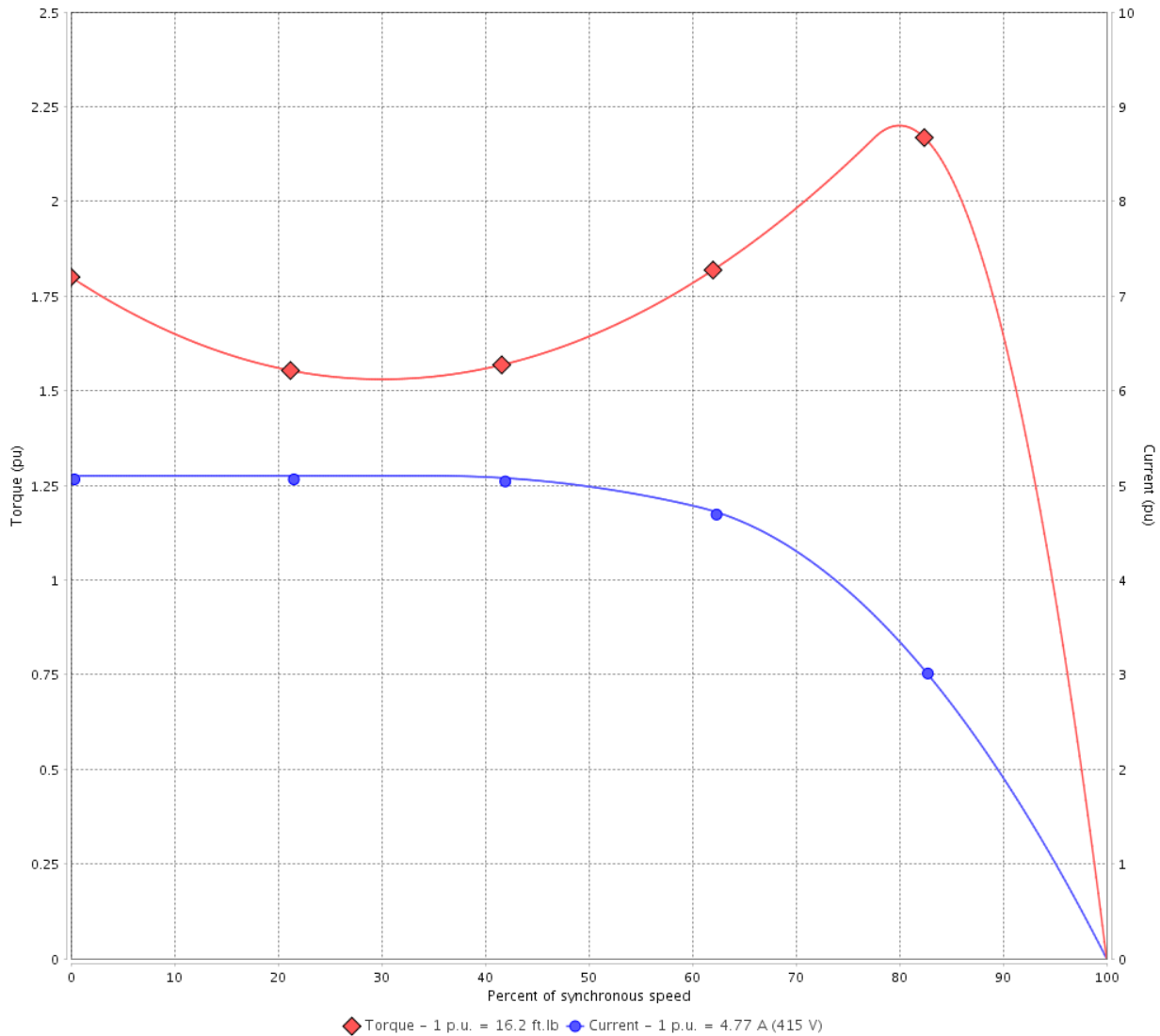
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12674856

Catalog # : 003120T3E213TC-S

TORQUE AND CURRENT VS SPEED CURVE



Performance : 220/415 V 50 Hz 6P

Rated current	: 9.00/4.77 A	Moment of inertia (J)	: 0.8104 sq.ft.lb
LRC	: 5.1	Duty cycle	: Cont.(S1)
Rated torque	: 16.2 ft.lb	Insulation class	: F
Locked rotor torque	: 180 %	Service factor	: 1.15
Breakdown torque	: 220 %	Temperature rise	: 80 K
Rated speed	: 970 rpm	Design	: B

Locked rotor time : 0s (cold) 0s (hot)

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LOAD PERFORMANCE CURVE

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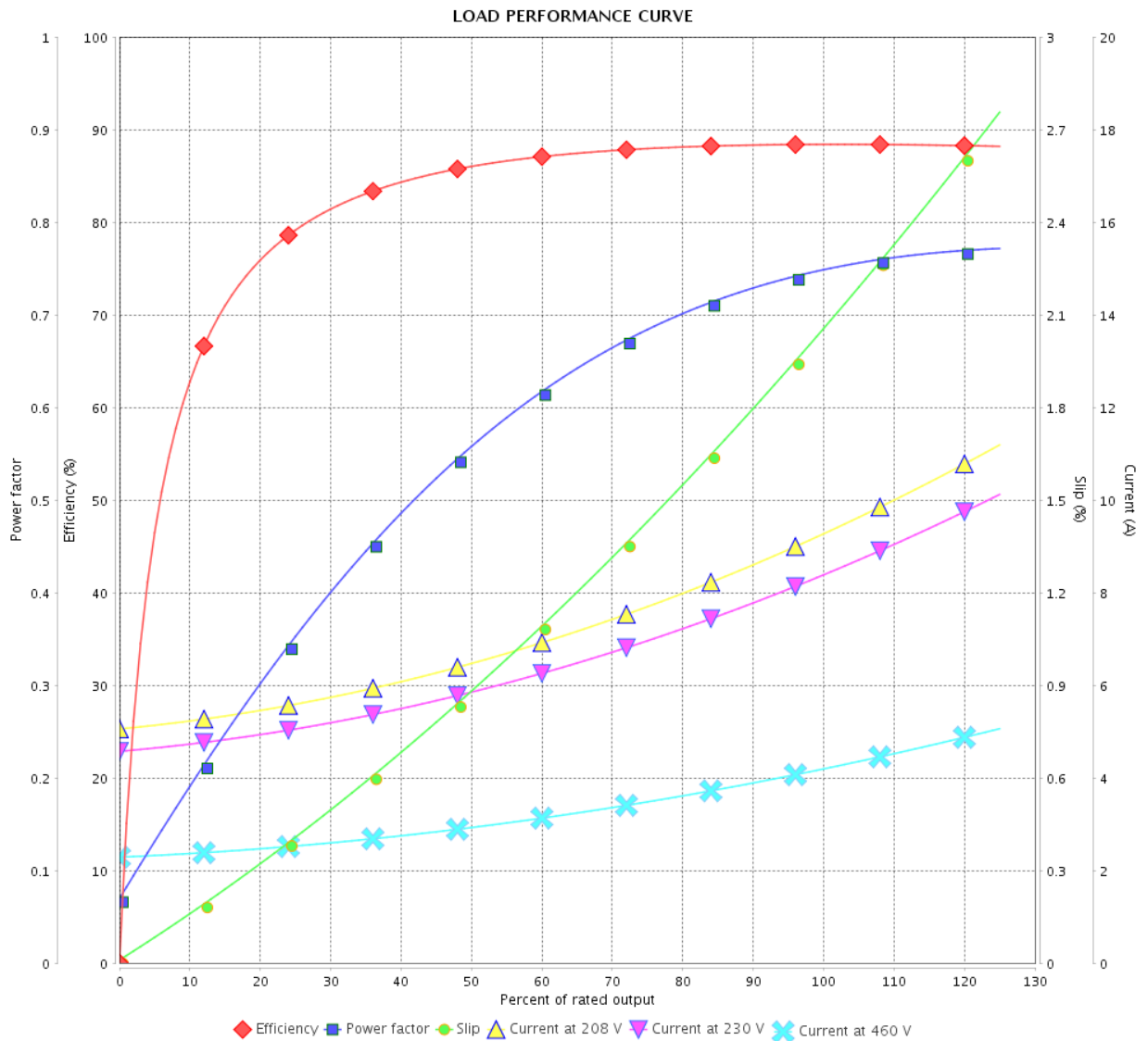


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Catalog # : 003120T3E213TC-S



Performance : 230/460 V 60 Hz 6P

Rated current : 8.32/4.16 A
 LRC : 5.9
 Rated torque : 13.4 ft.lb
 Locked rotor torque : 210 %
 Breakdown torque : 260 %
 Rated speed : 1175 rpm

Moment of inertia (J) : 0.8104 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

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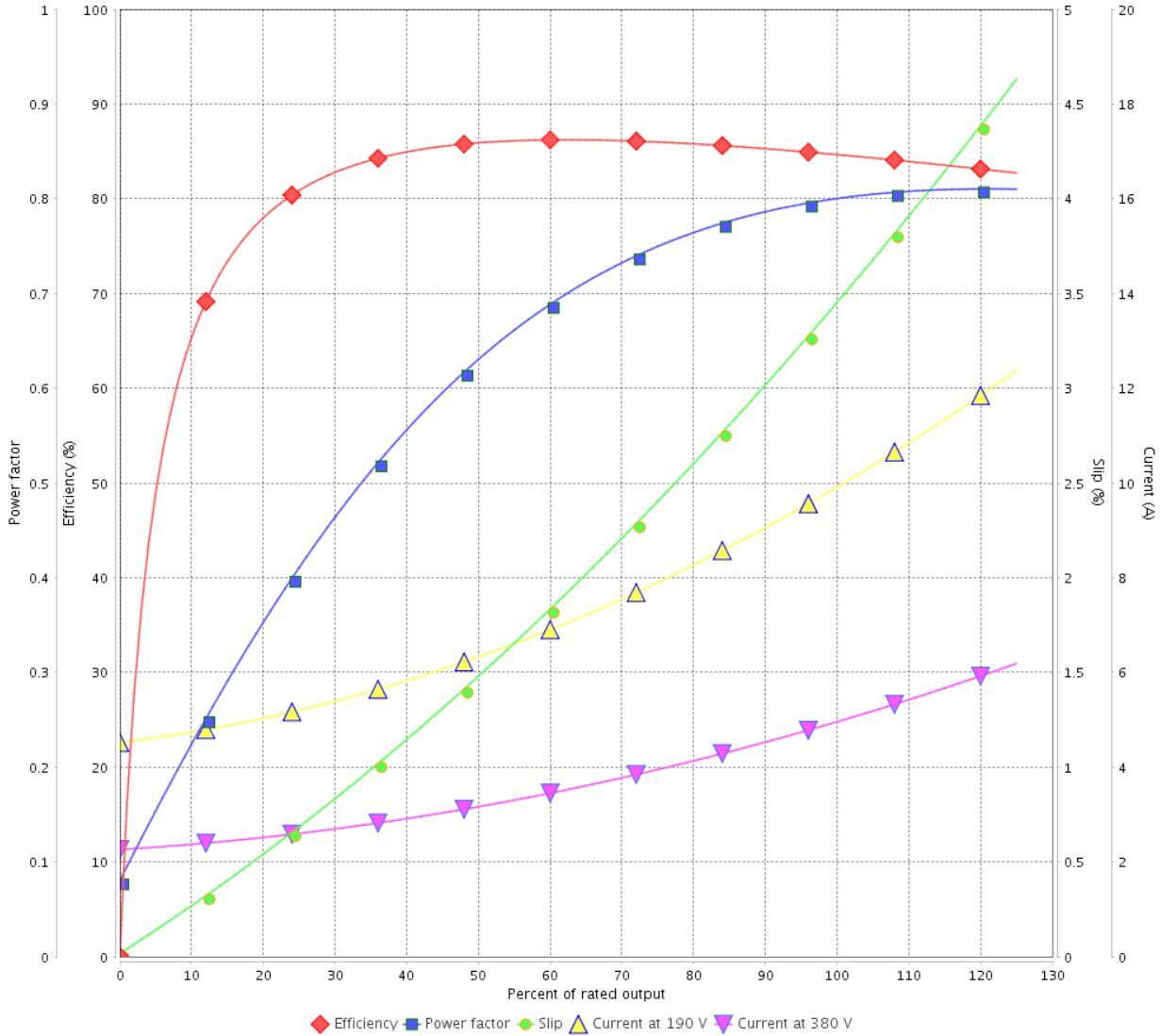
Customer :

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Performance : 190/380 V 50 Hz 6P

Rated current : 9.88/4.94 A
 LRC : 4.6
 Rated torque : 16.3 ft.lb
 Locked rotor torque : 160 %
 Breakdown torque : 190 %
 Rated speed : 965 rpm

Moment of inertia (J) : 0.8104 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

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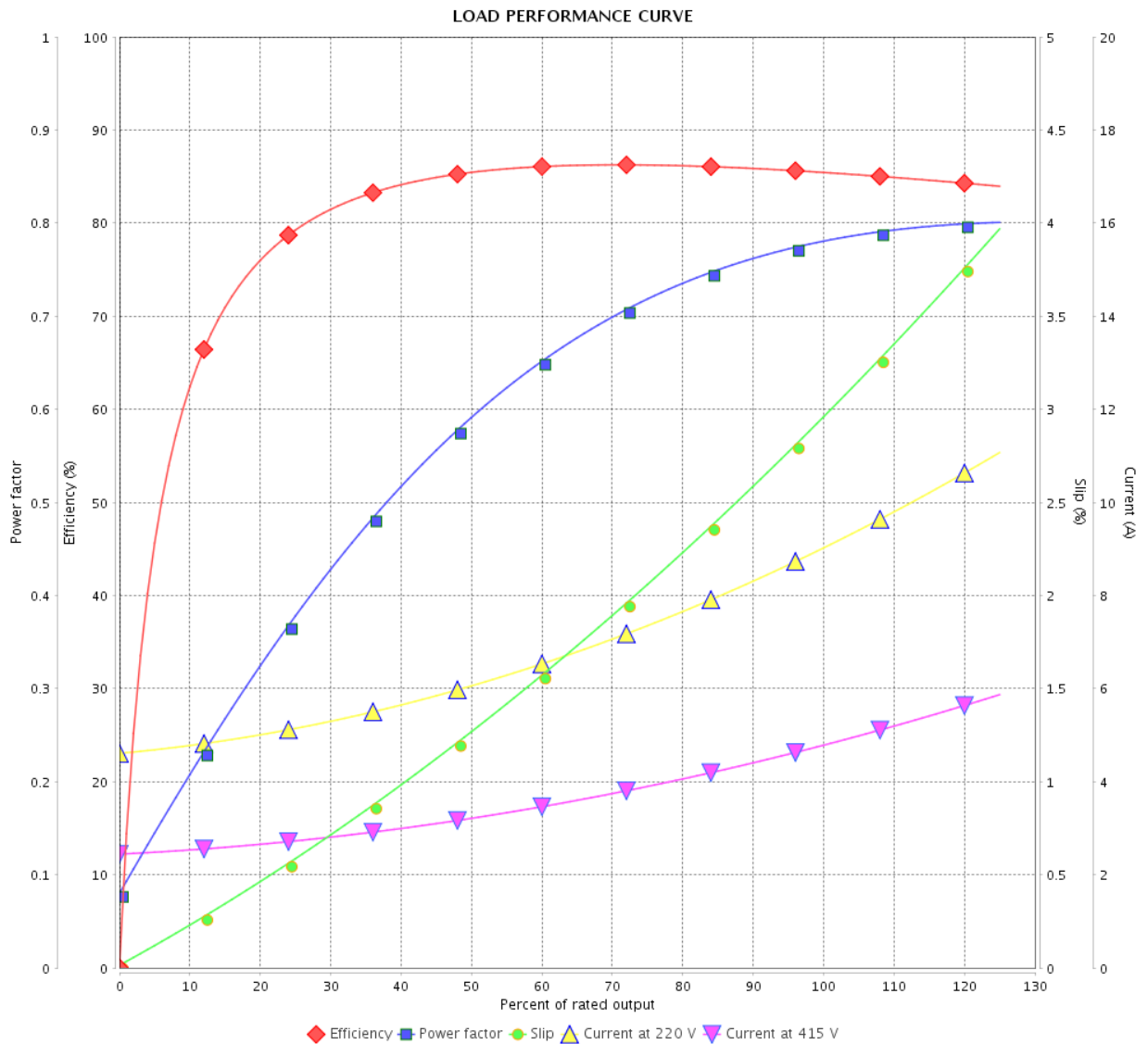


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Performance : 220/415 V 50 Hz 6P

Rated current : 9.00/4.77 A
 LRC : 5.1
 Rated torque : 16.2 ft.lb
 Locked rotor torque : 180 %
 Breakdown torque : 220 %
 Rated speed : 970 rpm

Moment of inertia (J) : 0.8104 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

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THERMAL LIMIT CURVE

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LRC	: 5.9	Duty cycle	: Cont.(S1)
Rated torque	: 13.4 ft.lb	Insulation class	: F
Locked rotor torque	: 210 %	Service factor	: 1.15
Breakdown torque	: 260 %	Temperature rise	: 80 K
Rated speed	: 1175 rpm	Design	: B

Heating constant

Cooling constant

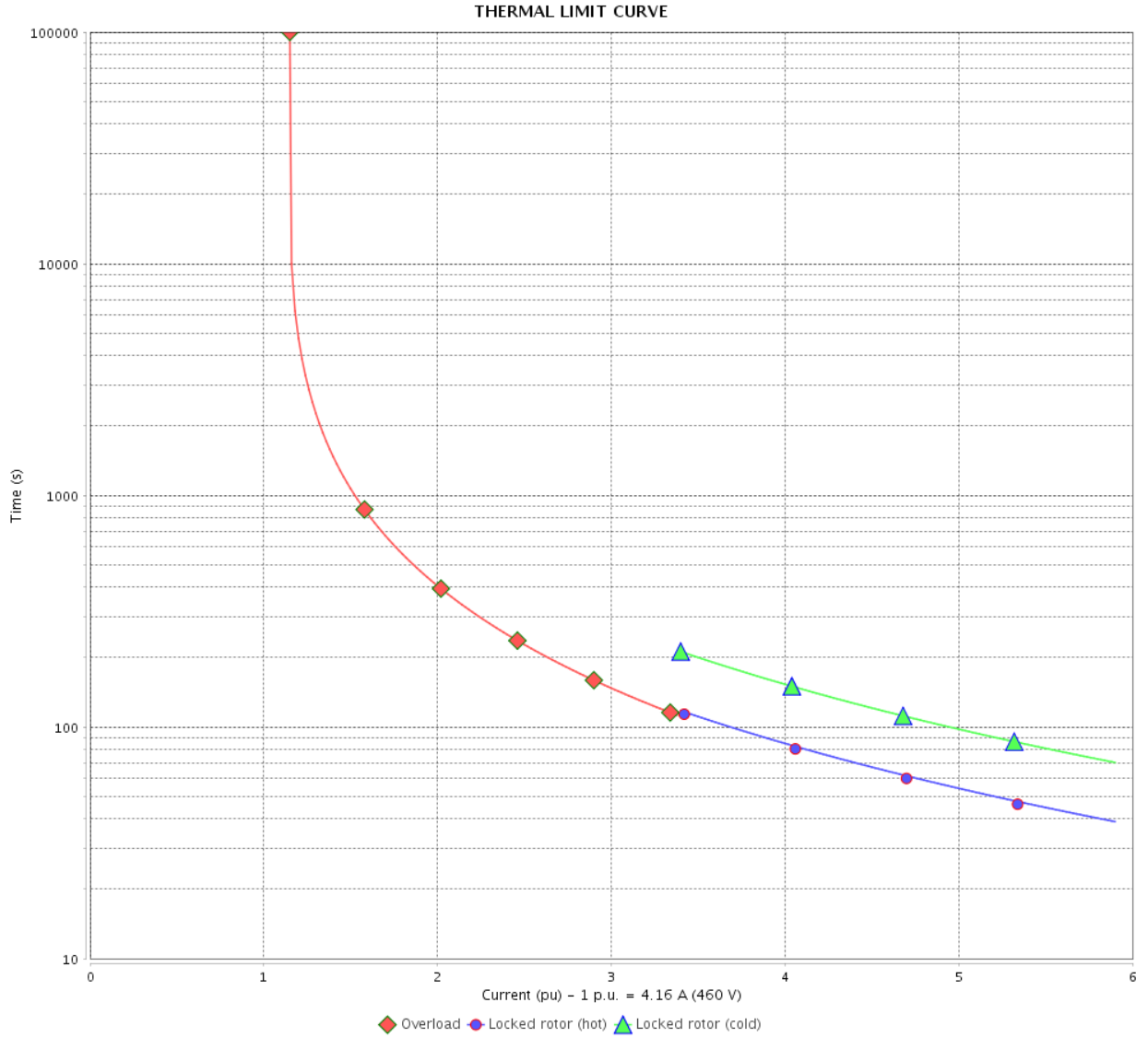
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Catalog # : 00312OT3E213TC-S

Performance : 190/380 V 50 Hz 6P

Rated current	: 9.88/4.94 A	Moment of inertia (J)	: 0.8104 sq.ft.lb
LRC	: 4.6	Duty cycle	: Cont.(S1)
Rated torque	: 16.3 ft.lb	Insulation class	: F
Locked rotor torque	: 160 %	Service factor	: 1.15
Breakdown torque	: 190 %	Temperature rise	: 80 K
Rated speed	: 965 rpm	Design	: B

Heating constant

Cooling constant

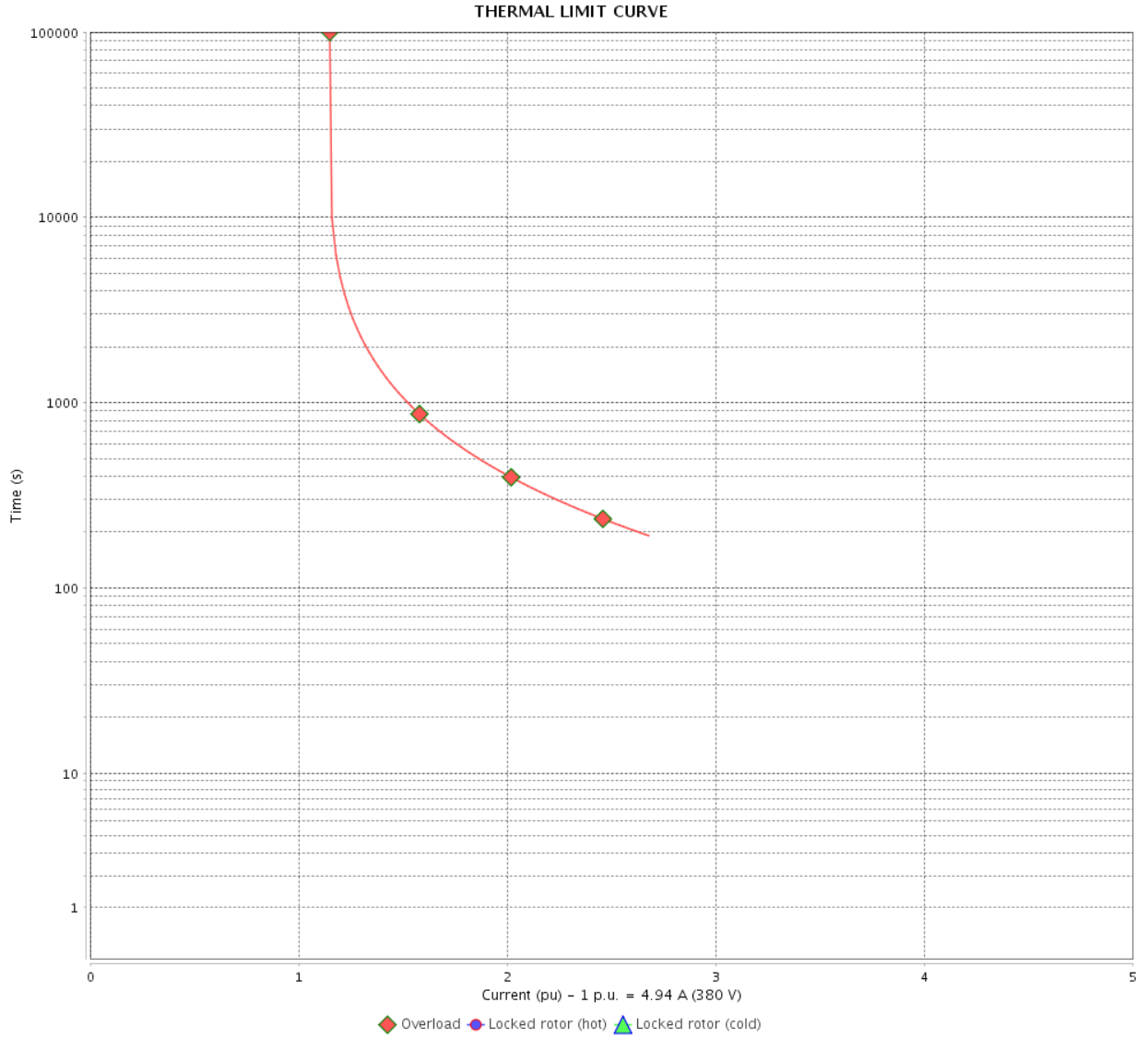
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Performance : 220/415 V 50 Hz 6P

Rated current : 9.00/4.77 A	Moment of inertia (J) : 0.8104 sq.ft.lb
LRC : 5.1	Duty cycle : Cont.(S1)
Rated torque : 16.2 ft.lb	Insulation class : F
Locked rotor torque : 180 %	Service factor : 1.15
Breakdown torque : 220 %	Temperature rise : 80 K
Rated speed : 970 rpm	Design : B

Heating constant

Cooling constant

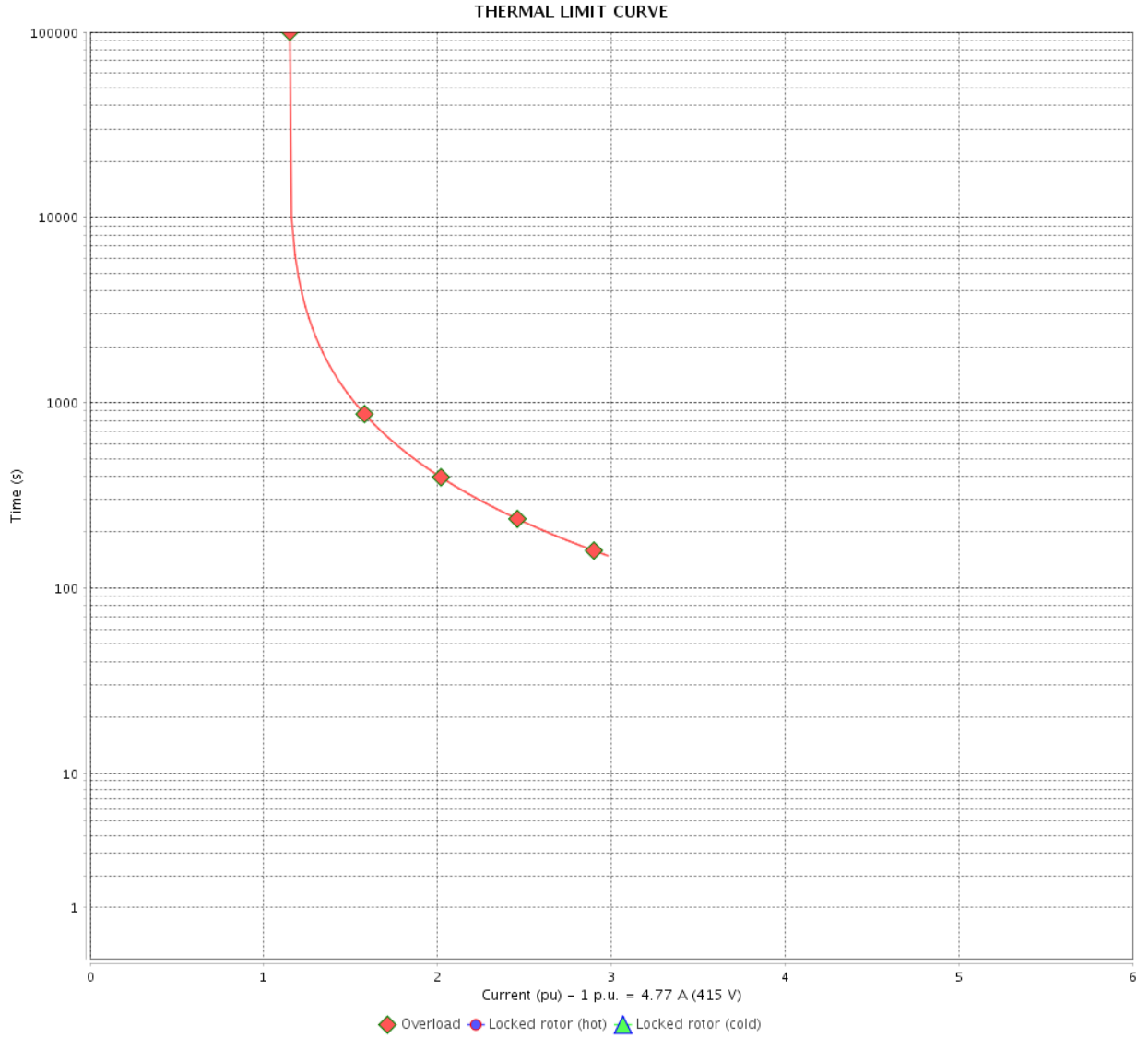
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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

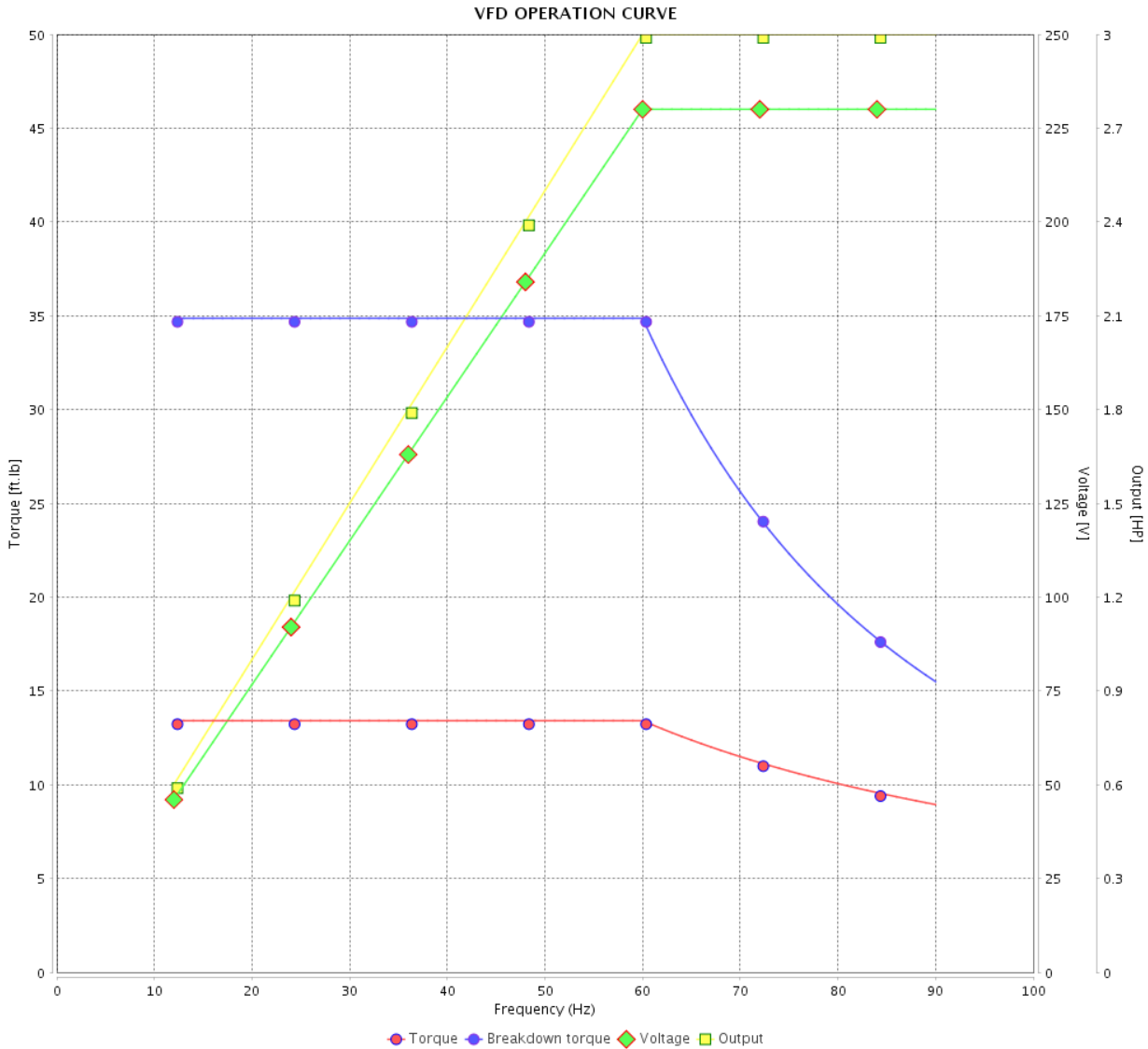


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Performance : 230/460 V 60 Hz 6P

Rated current : 8.32/4.16 A
 LRC : 5.9
 Rated torque : 13.4 ft.lb
 Locked rotor torque : 210 %
 Breakdown torque : 260 %
 Rated speed : 1175 rpm

Moment of inertia (J) : 0.8104 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

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VFD OPERATION CURVE

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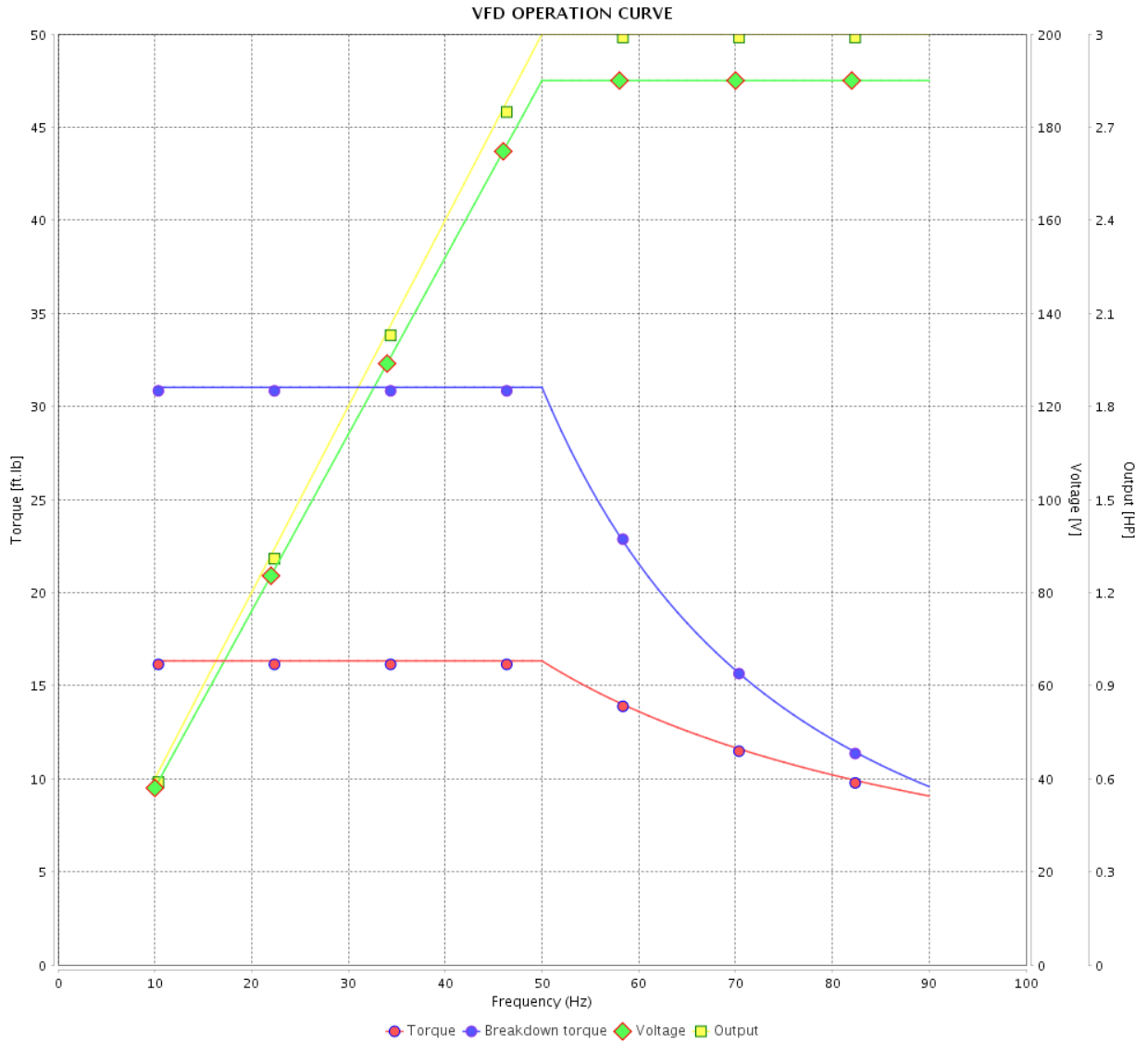


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 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

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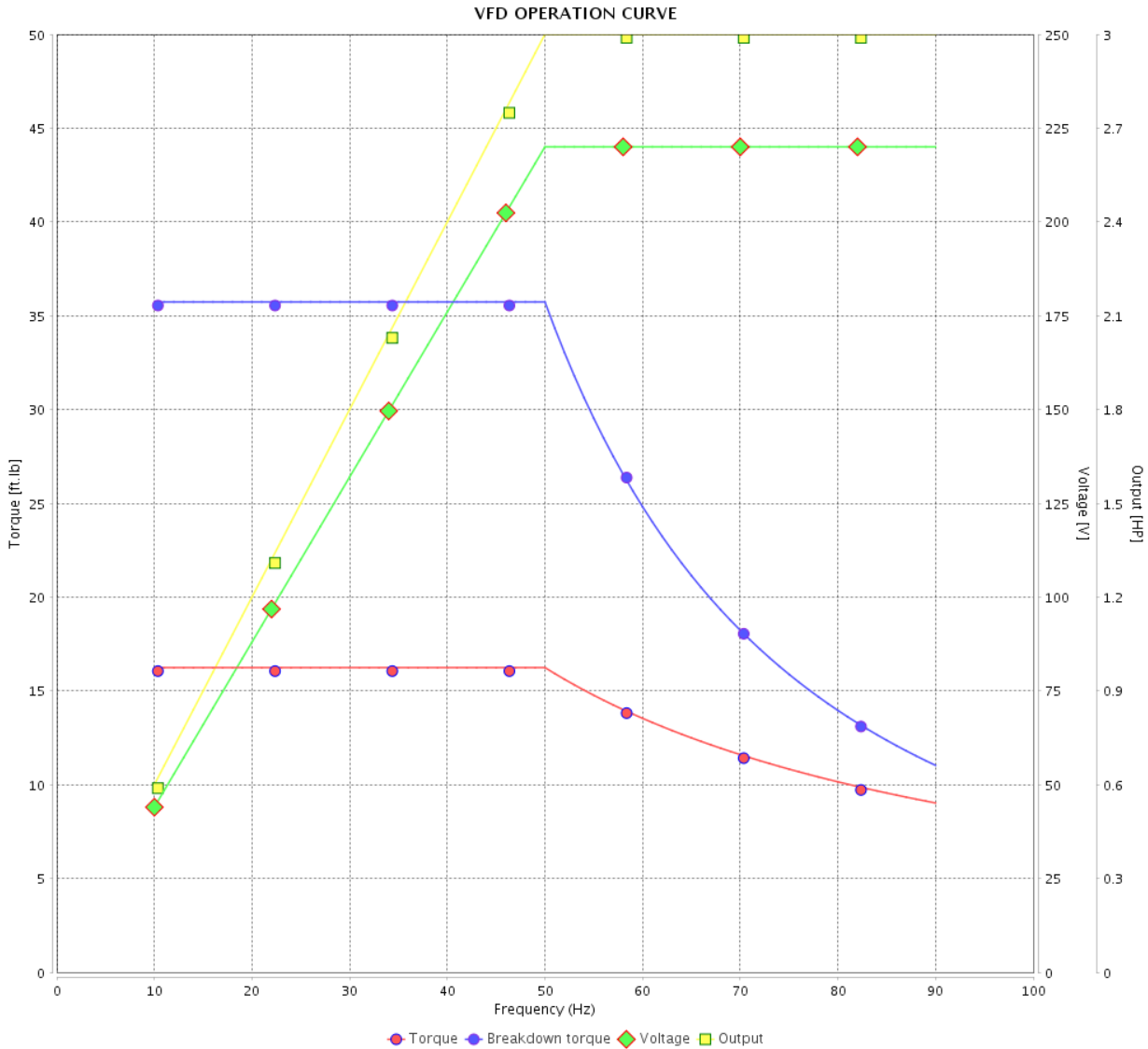


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 Insulation class : F
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 Design : B

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