

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :					
Product line		: NEMA Premium Efficiency Three-Phase	Product code :	11507579	
			Catalog # :	03009XT3E364T	
Frame		: 364/5T	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 : 904 lb		
Protection degree		: IP55	Moment of inertia (J) : 23.5 sq.ft.lb		
Design		: B			
Output [HP]	30	30	30	30	
Poles	8	8	8	8	
Frequency [Hz]	60	50	50	50	
Rated voltage [V]	230/460	380	400	415	
Rated current [A]	77.0/38.5	46.1	44.1	43.0	
L. R. Amperes [A]	439/219	263	251	245	
LRC [A]	5.7x(Code G)	5.7x(Code G)	5.7x(Code G)	5.7x(Code G)	
No load current [A]	33.0/16.5	16.3	17.7	19.0	
Rated speed [RPM]	885	730	735	735	
Slip [%]	1.67	2.67	2.00	2.00	
Rated torque [ft.lb]	178	216	214	214	
Locked rotor torque [%]	220	170	190	210	
Breakdown torque [%]	220	170	200	220	
Service factor	1.15	1.00	1.00	1.00	
Temperature rise	80 K	80 K	80 K	80 K	
Locked rotor time	25s (cold) 14s (hot)	25s (cold) 14s (hot)	25s (cold) 14s (hot)	25s (cold) 14s (hot)	
Noise level ²	62.0 dB(A)	60.0 dB(A)	60.0 dB(A)	60.0 dB(A)	
Efficiency (%)	25%	92.2	92.8	92.2	81.5
	50%	92.4	92.4	92.4	82.4
	75%	93.0	92.4	92.4	92.4
	100%	93.0	91.7	92.4	92.4
Power Factor	25%	0.40	0.46	0.42	0.40
	50%	0.64	0.70	0.66	0.63
	75%	0.73	0.77	0.75	0.72
	100%	0.77	0.79	0.78	0.77
Bearing type		Drive end : 6314 C3	Non drive end : 6314 C3	Foundation loads	
Sealing		: Oil Seal	: Lip Seal	Max. traction : 1164 lb	
Lubrication interval		: 17353 h	: 17353 h	Max. compression : 2068 lb	
Lubricant amount		: 27 g	: 27 g		
Lubricant type		: Mobil Polyrex EM			
Notes					
USABLE @208V 85.1A SF 1.00 SFA 85.1A					
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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Thermal protection

ID	Application	Type	Quantity	Sensing Temperature
1	Winding	Thermostat - 2 wires	1 x Phase	155 °C

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TORQUE AND CURRENT VS SPEED CURVE



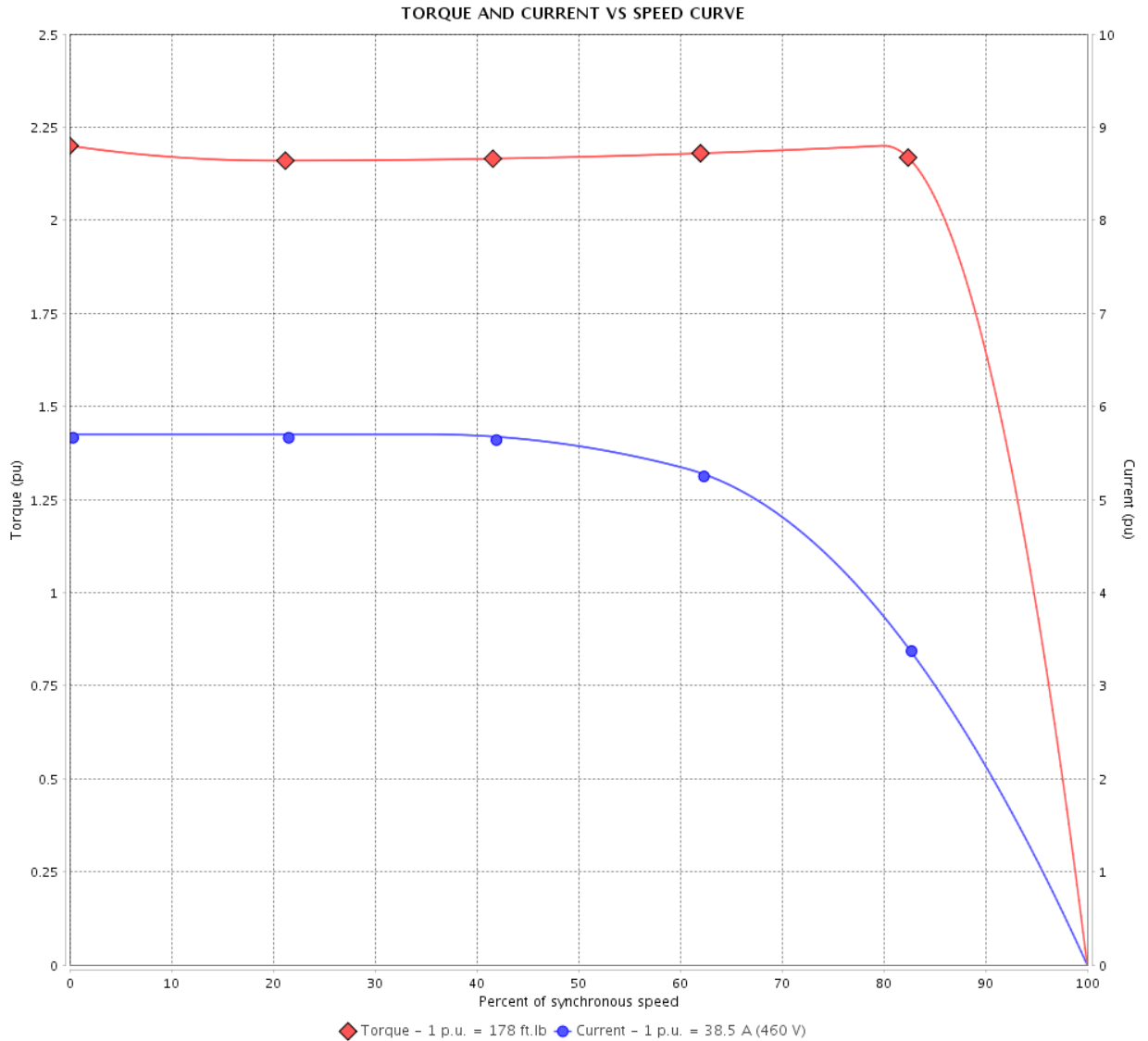
Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 11507579

Catalog # : 03009XT3E364T



Performance : 230/460 V 60 Hz 8P

Rated current : 77.0/38.5 A
 LRC : 5.7
 Rated torque : 178 ft.lb
 Locked rotor torque : 220 %
 Breakdown torque : 220 %
 Rated speed : 885 rpm

Moment of inertia (J) : 23.5 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 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



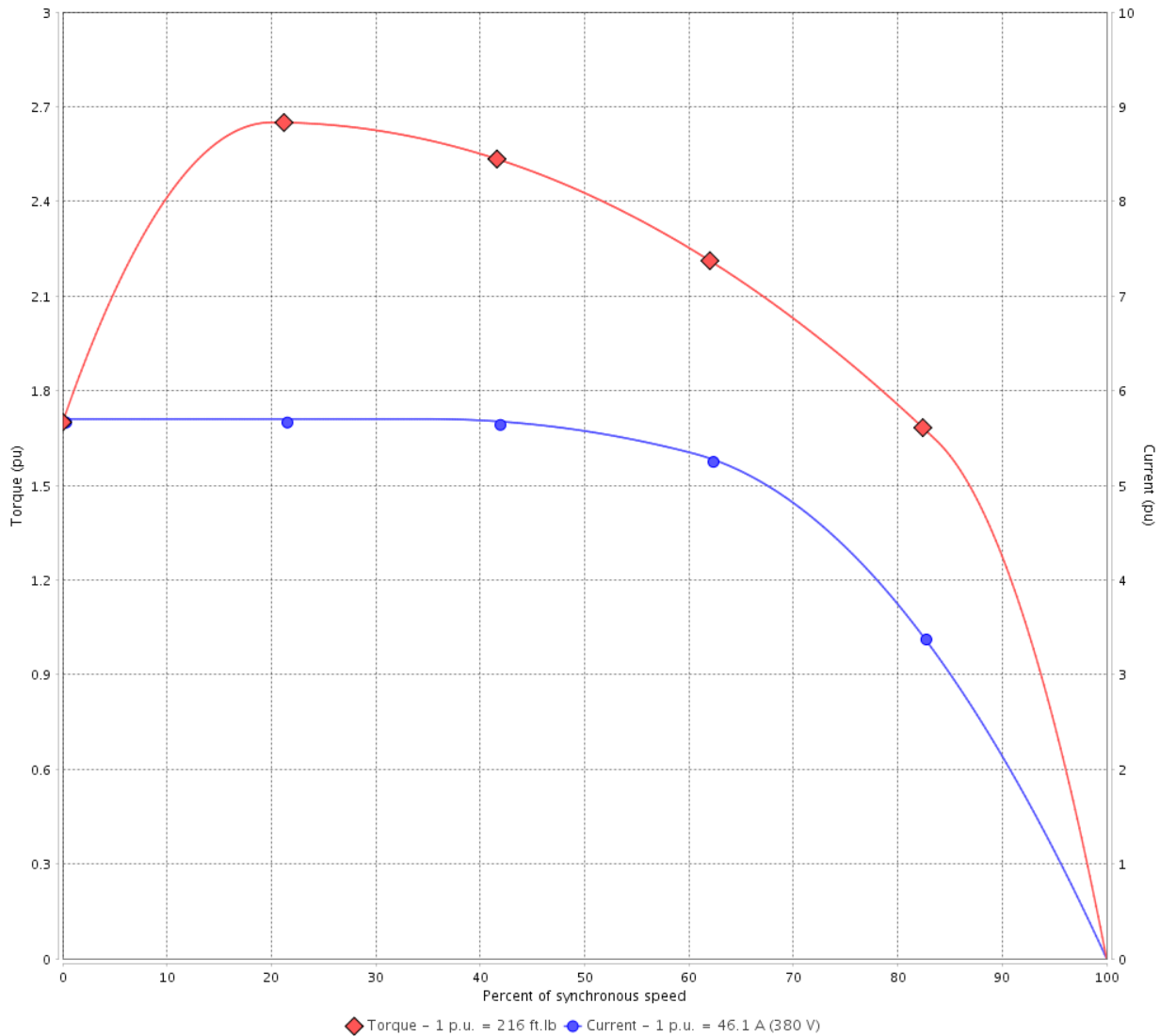
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 11507579

Catalog # : 03009XT3E364T

TORQUE AND CURRENT VS SPEED CURVE



Performance : 380 V 50 Hz 8P IE3

Rated current	: 46.1 A	Moment of inertia (J)	: 23.5 sq.ft.lb
LRC	: 5.7	Duty cycle	: Cont.(S1)
Rated torque	: 216 ft.lb	Insulation class	: F
Locked rotor torque	: 170 %	Service factor	: 1.00
Breakdown torque	: 170 %	Temperature rise	: 80 K
Rated speed	: 730 rpm	Design	: B

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

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TORQUE AND CURRENT VS SPEED CURVE



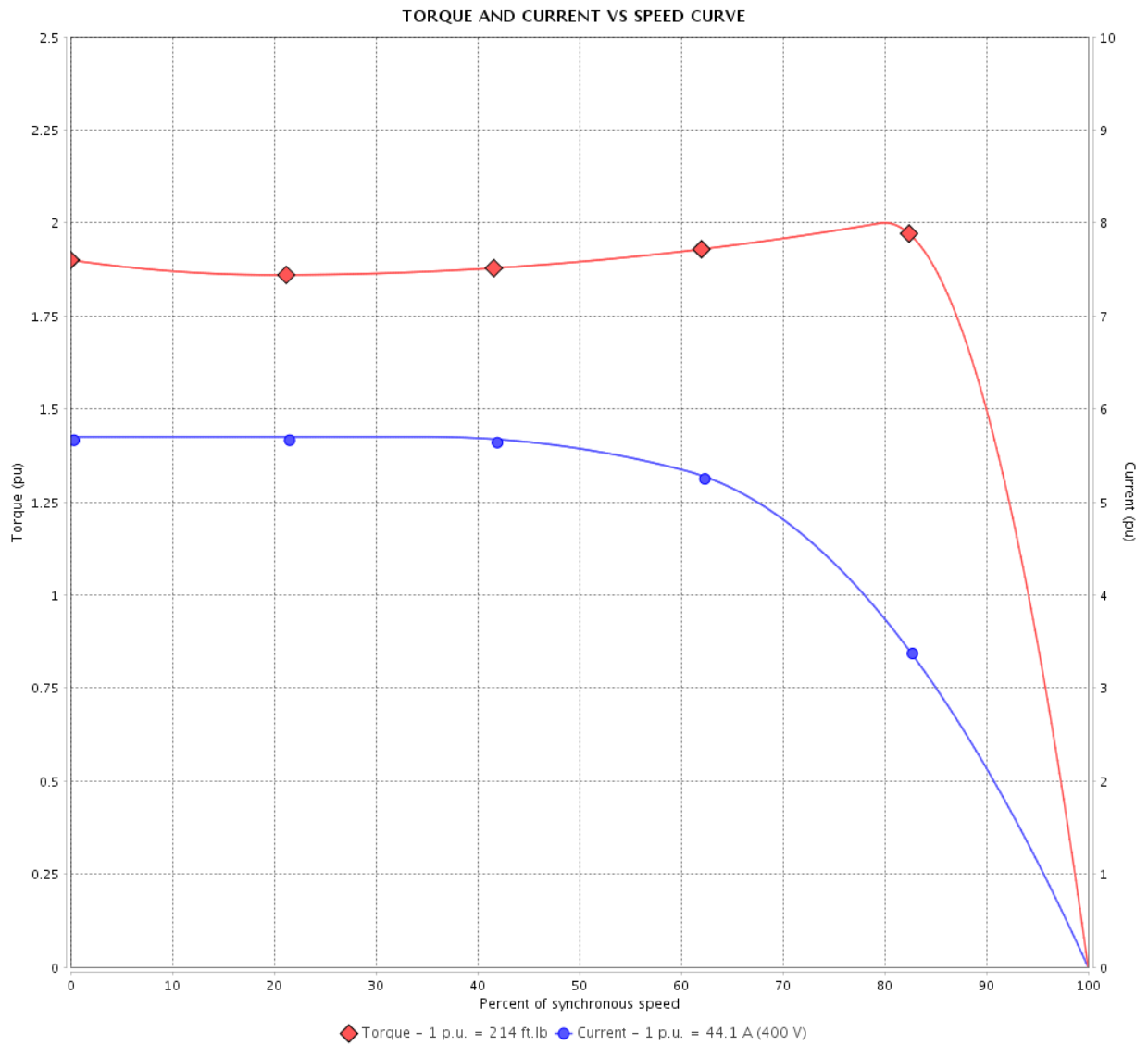
Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 11507579

Catalog # : 03009XT3E364T



Performance : 400 V 50 Hz 8P IE4

Rated current	: 44.1 A	Moment of inertia (J)	: 23.5 sq.ft.lb
LRC	: 5.7	Duty cycle	: Cont.(S1)
Rated torque	: 214 ft.lb	Insulation class	: F
Locked rotor torque	: 190 %	Service factor	: 1.00
Breakdown torque	: 200 %	Temperature rise	: 80 K
Rated speed	: 735 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



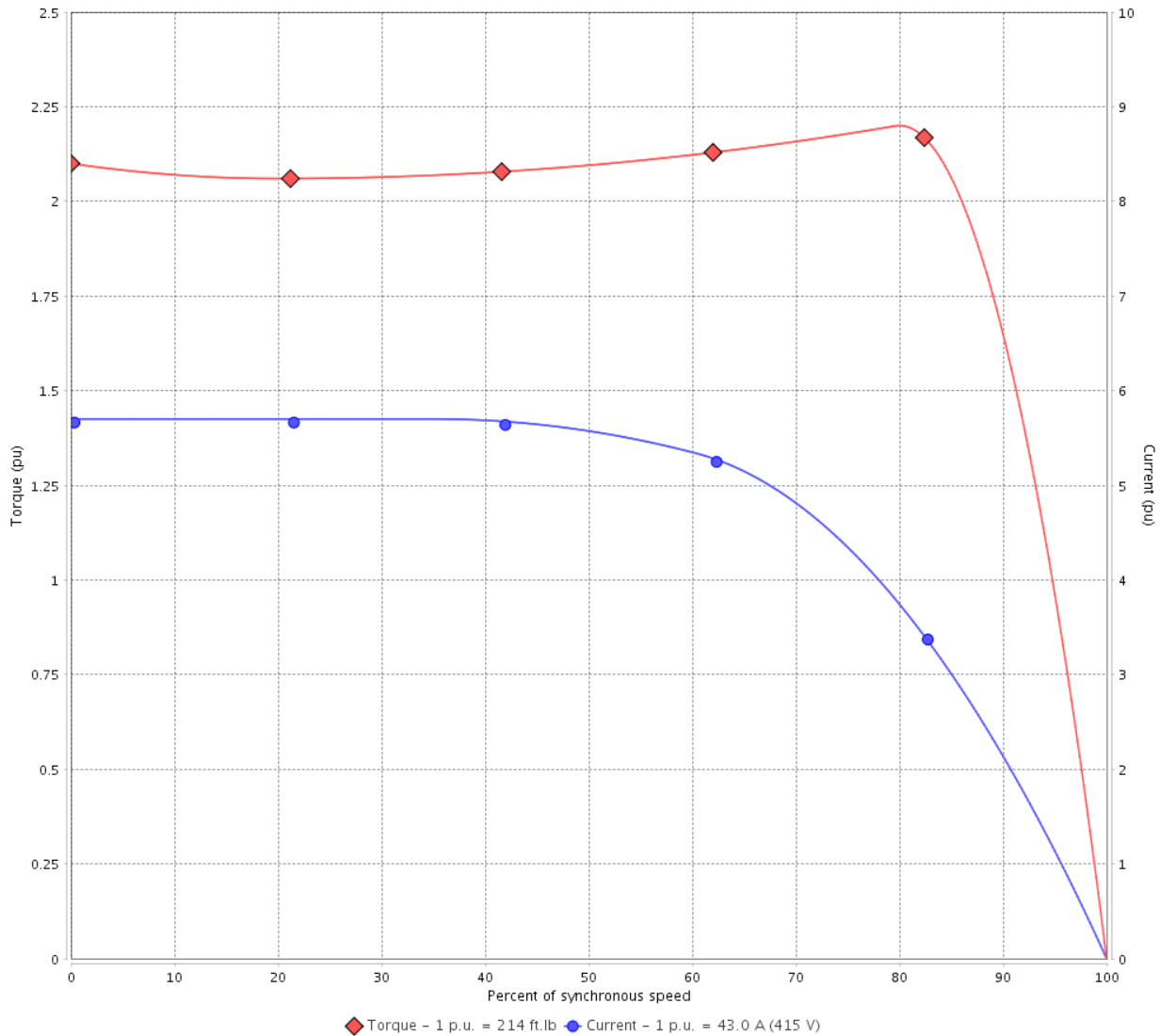
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Product code : 11507579

Catalog # : 03009XT3E364T

TORQUE AND CURRENT VS SPEED CURVE



Performance : 415 V 50 Hz 8P IE4

Rated current	: 43.0 A	Moment of inertia (J)	: 23.5 sq.ft.lb
LRC	: 5.7	Duty cycle	: Cont.(S1)
Rated torque	: 214 ft.lb	Insulation class	: F
Locked rotor torque	: 210 %	Service factor	: 1.00
Breakdown torque	: 220 %	Temperature rise	: 80 K
Rated speed	: 735 rpm	Design	: B

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

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LOAD PERFORMANCE CURVE

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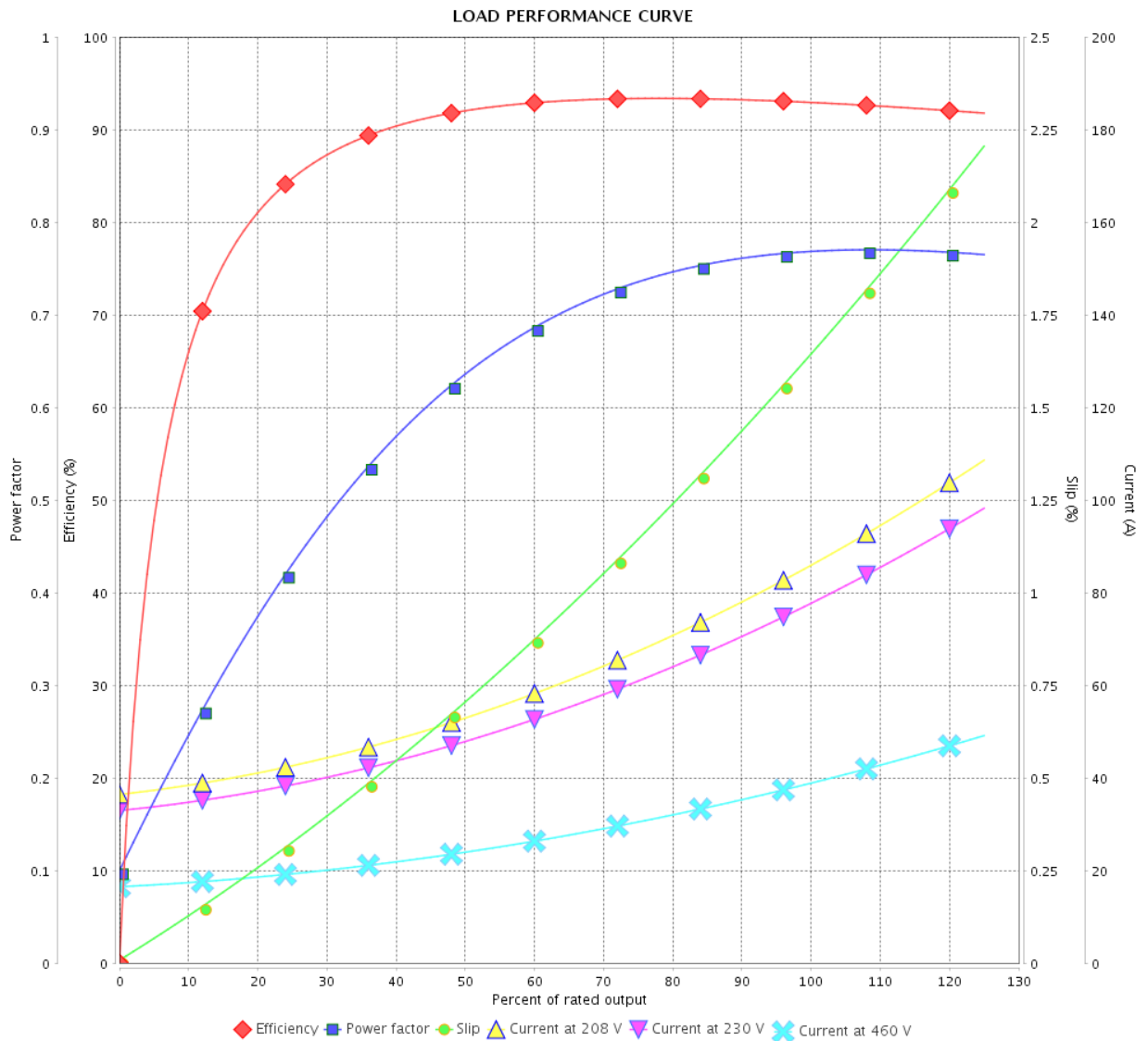


Customer : _____

Product line : NEMA Premium Efficiency Three-Phase

Product code : 11507579

Catalog # : 03009XT3E364T



Performance : 230/460 V 60 Hz 8P

Rated current : 77.0/38.5 A
 LRC : 5.7
 Rated torque : 178 ft.lb
 Locked rotor torque : 220 %
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 Duty cycle : Cont.(S1)
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 Service factor : 1.15
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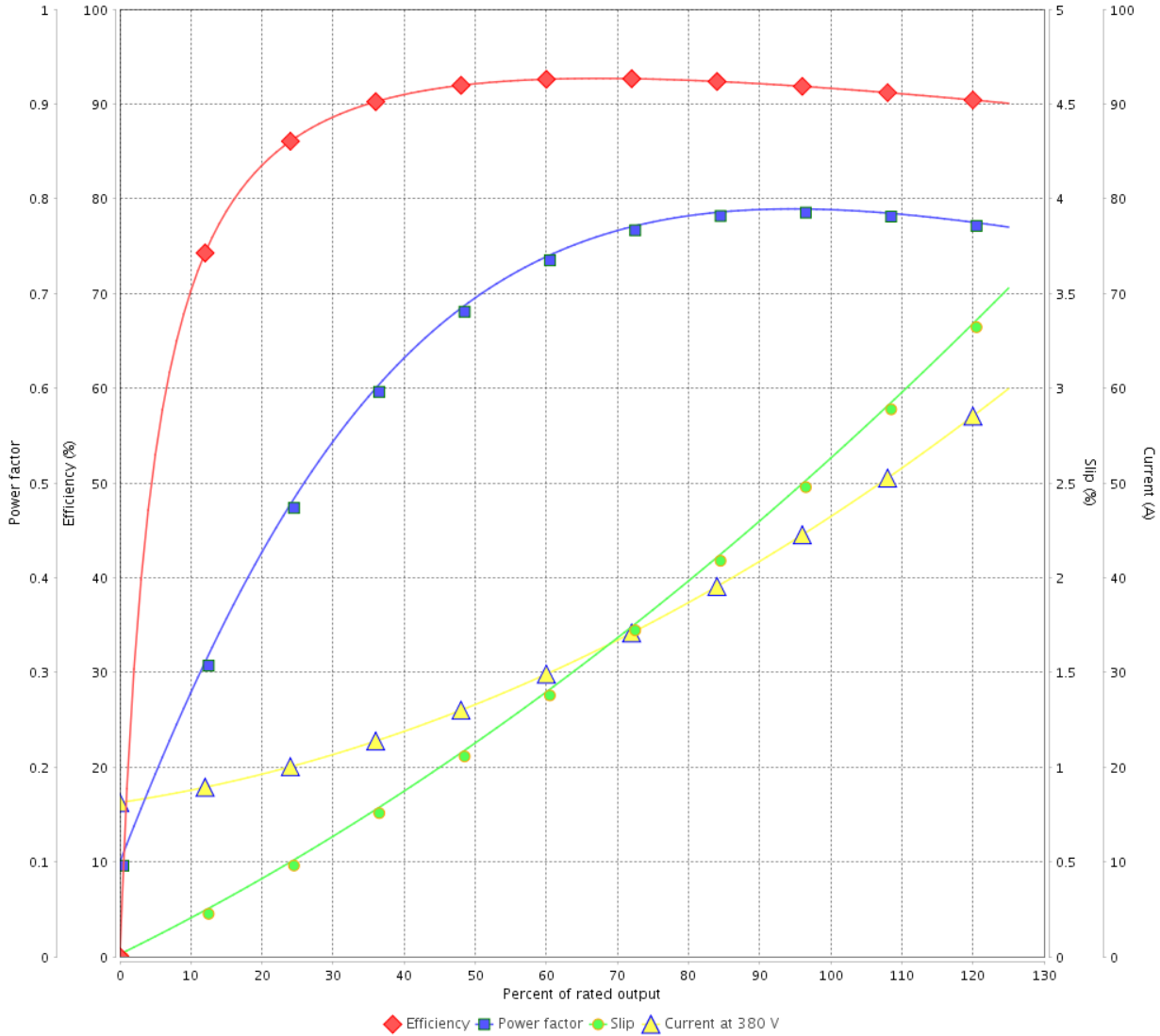
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 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
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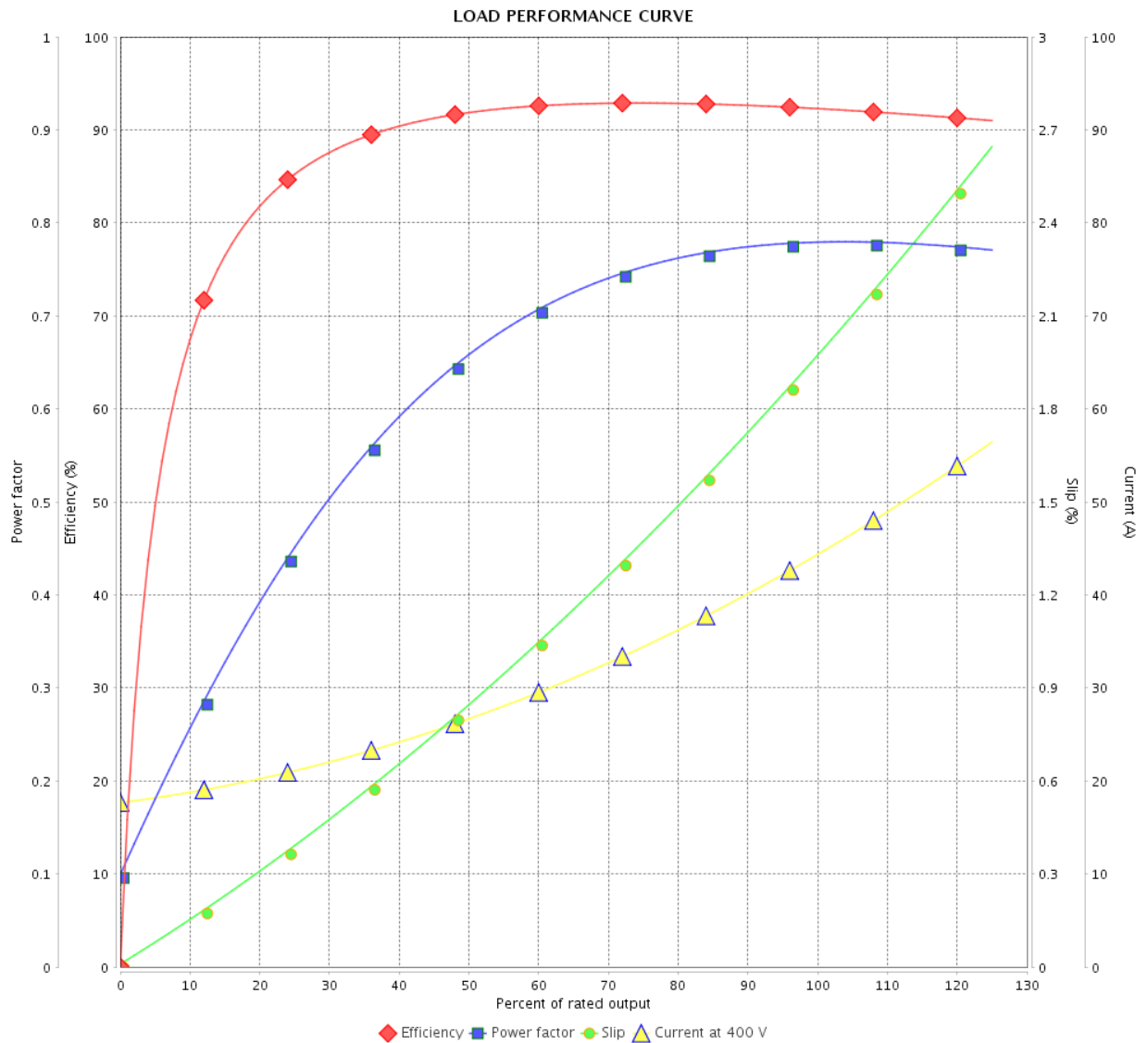


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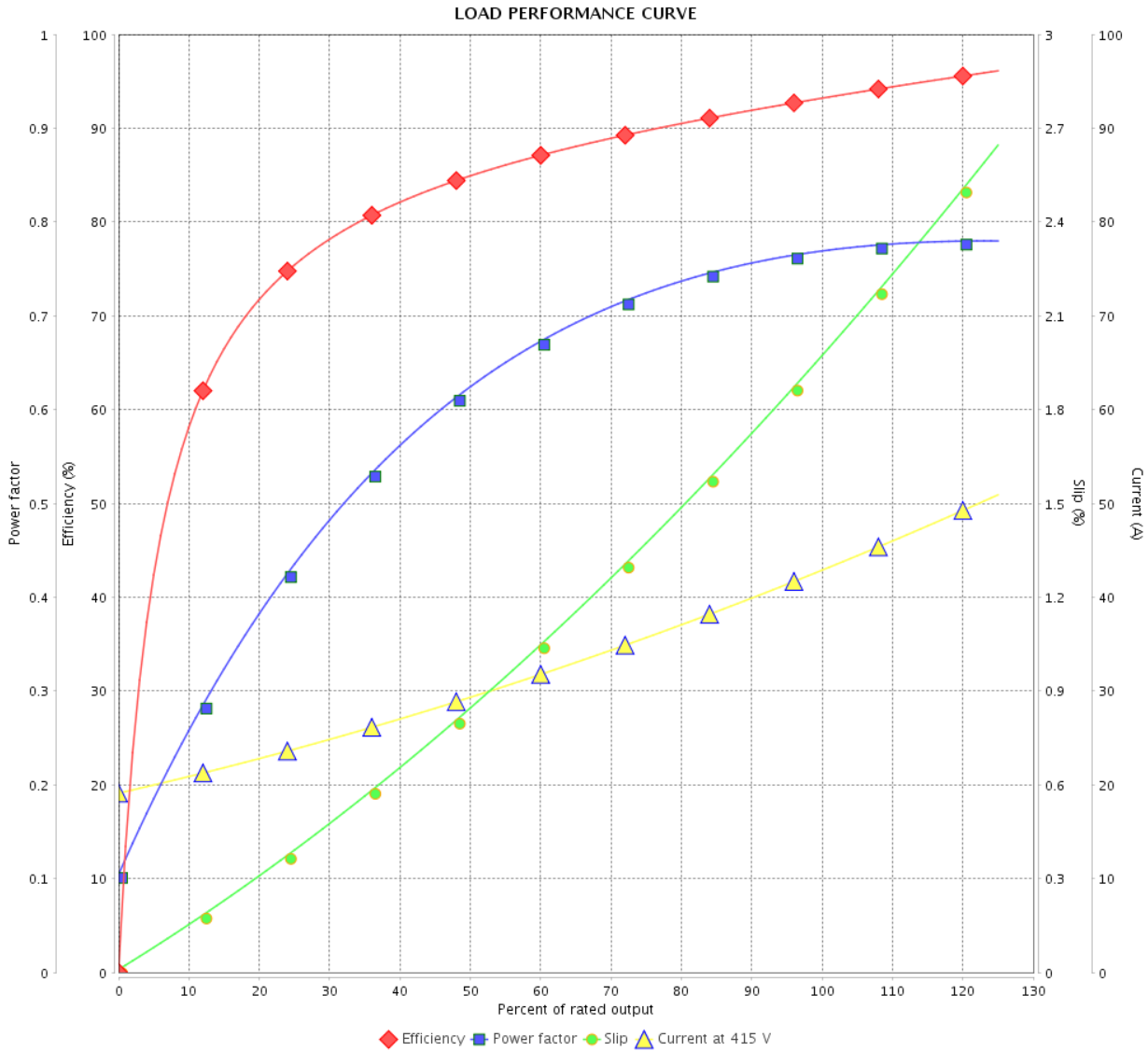


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THERMAL LIMIT CURVE



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Heating constant

Cooling constant

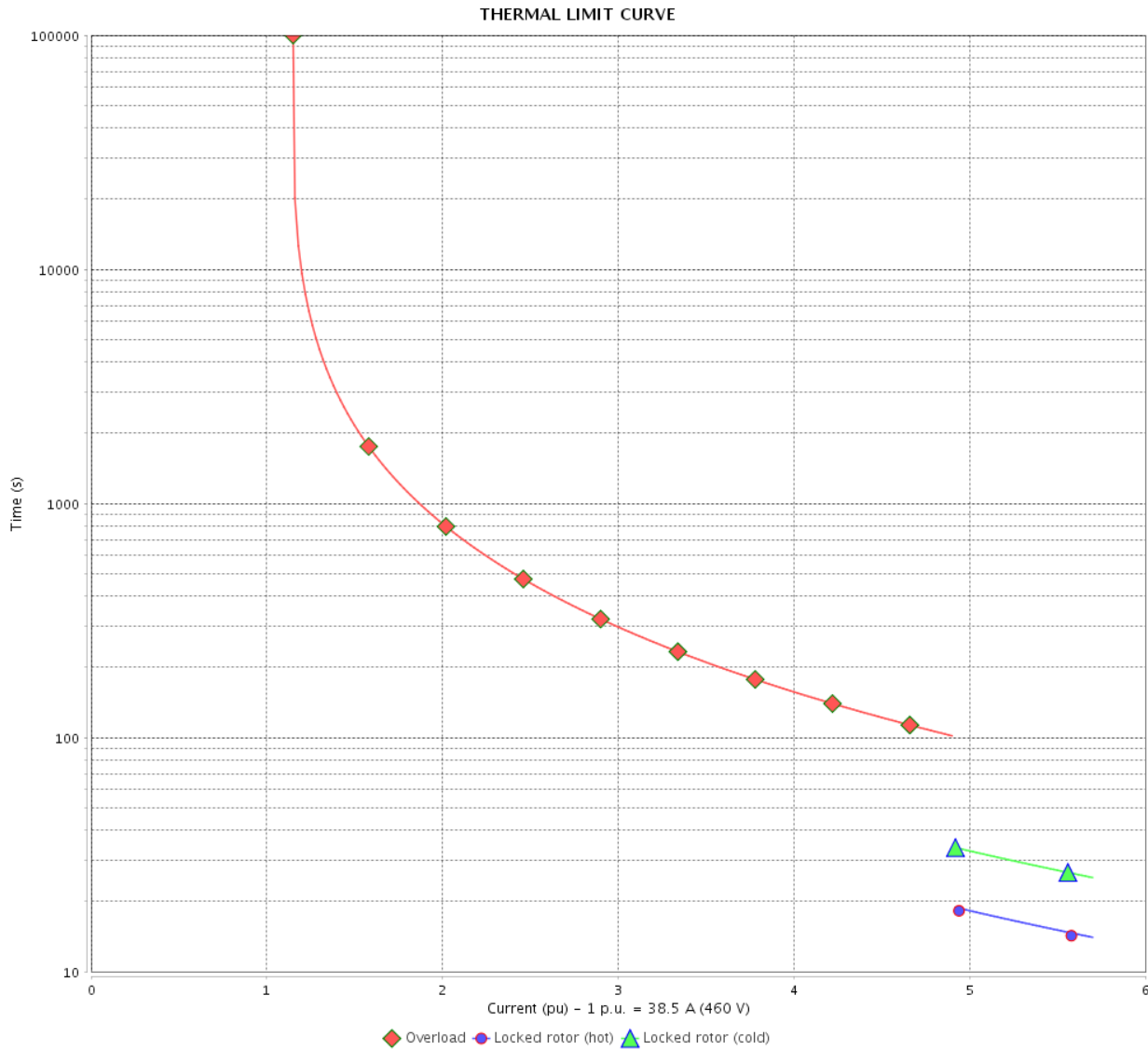
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Locked rotor torque : 170 %	Service factor : 1.00
Breakdown torque : 170 %	Temperature rise : 80 K
Rated speed : 730 rpm	Design : B

Heating constant

Cooling constant

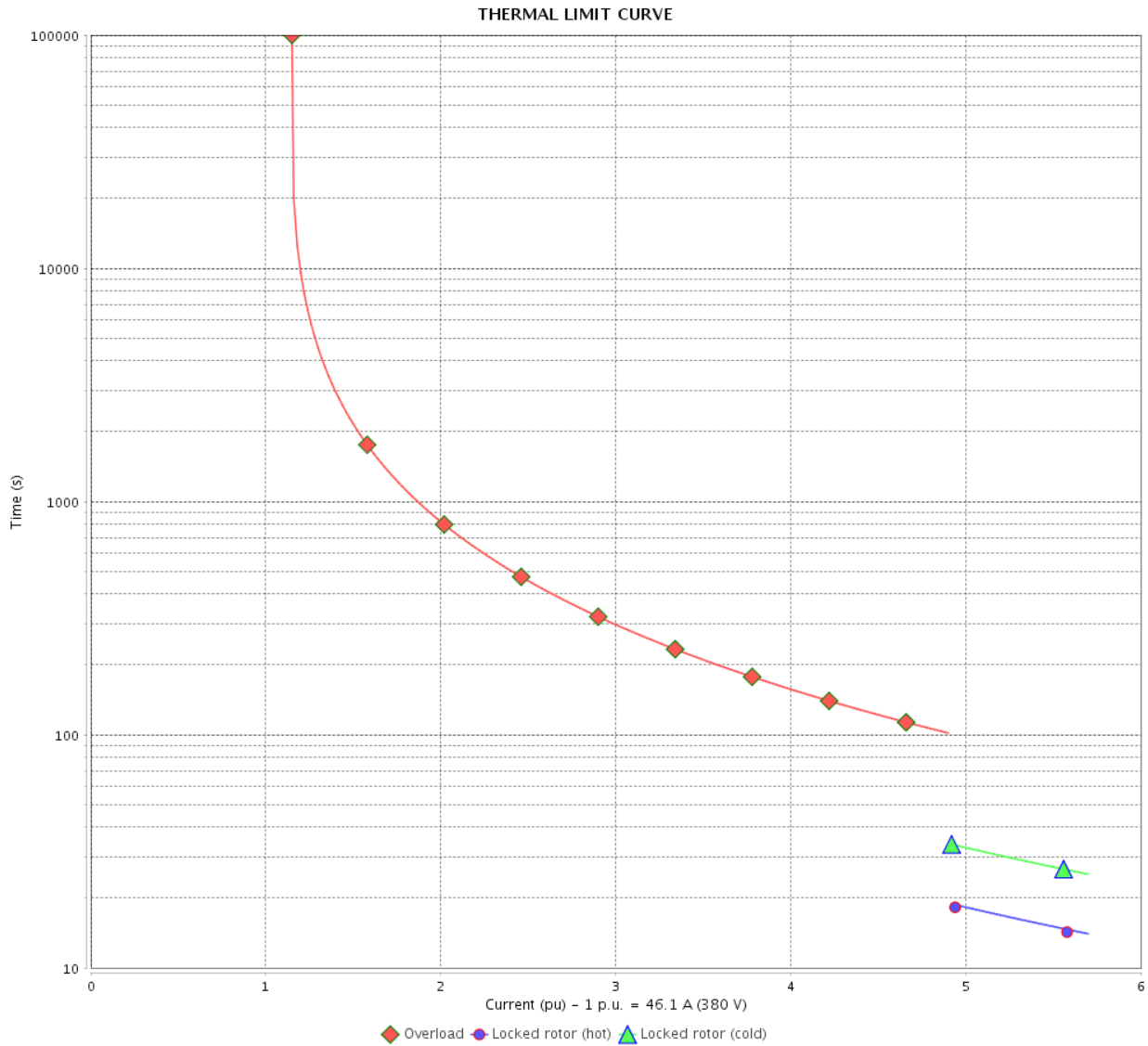
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Breakdown torque : 200 %	Temperature rise : 80 K
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Heating constant

Cooling constant

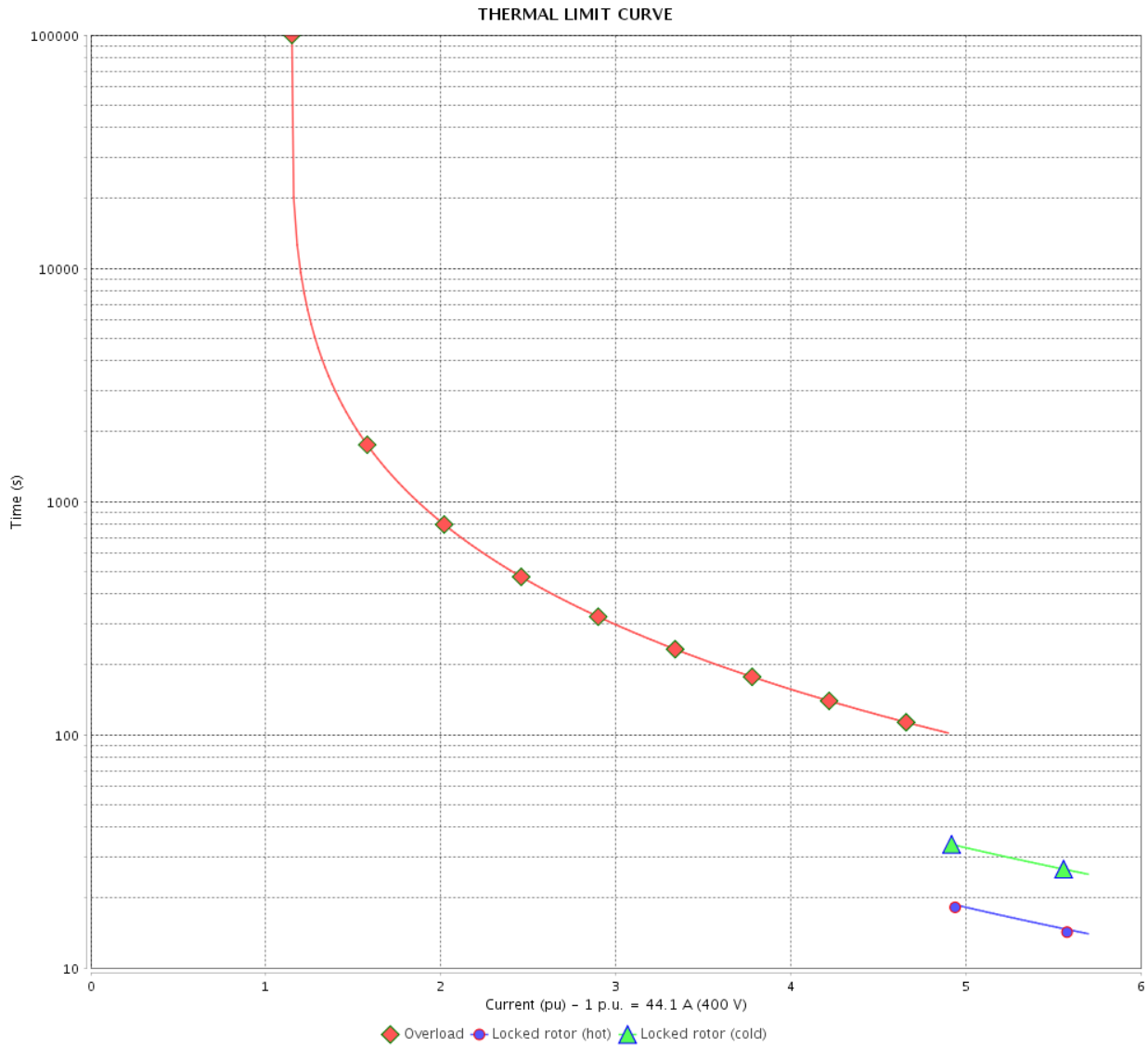
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Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.00
Temperature rise : 80 K
Design : B

Heating constant

Cooling constant

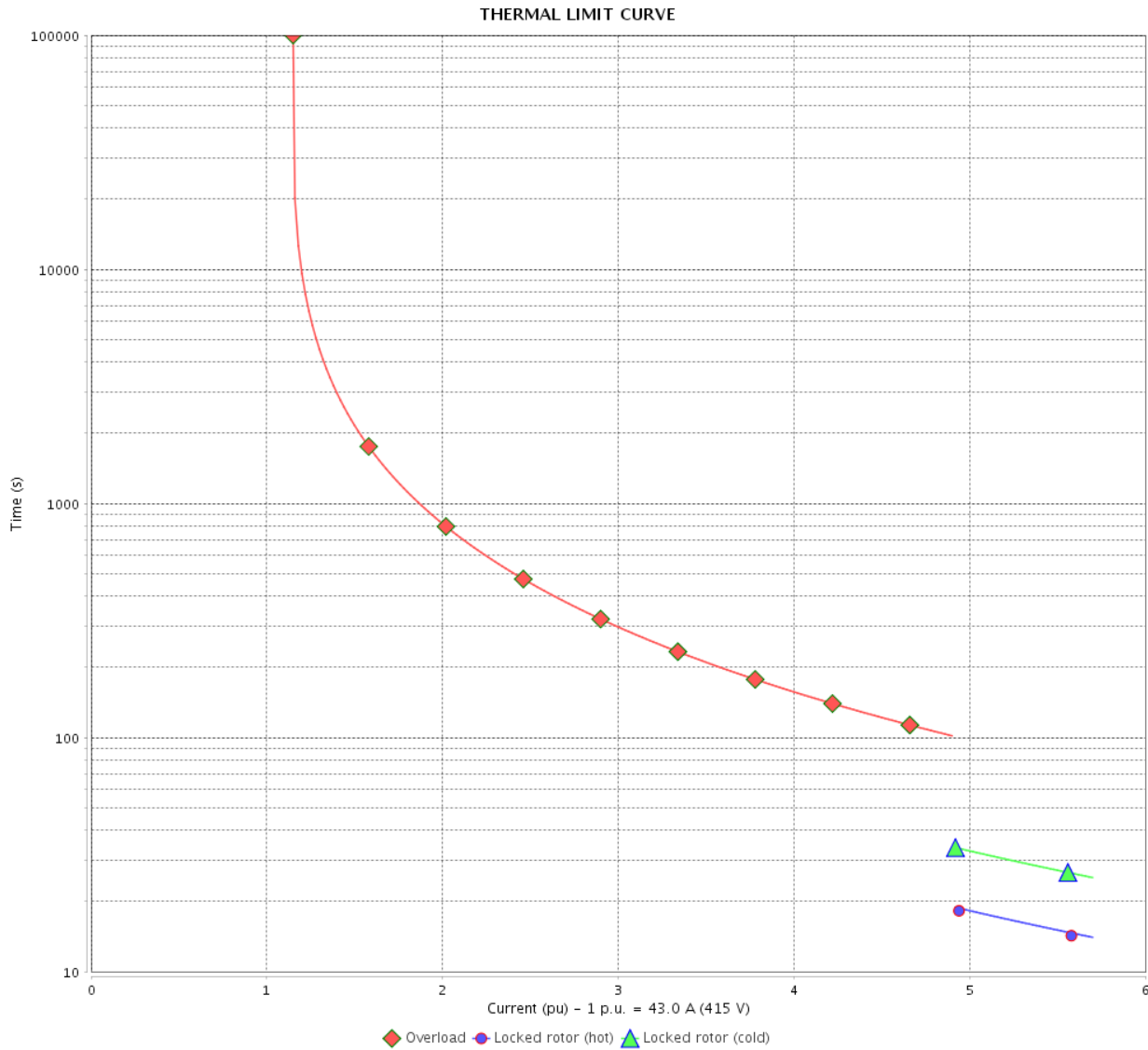
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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

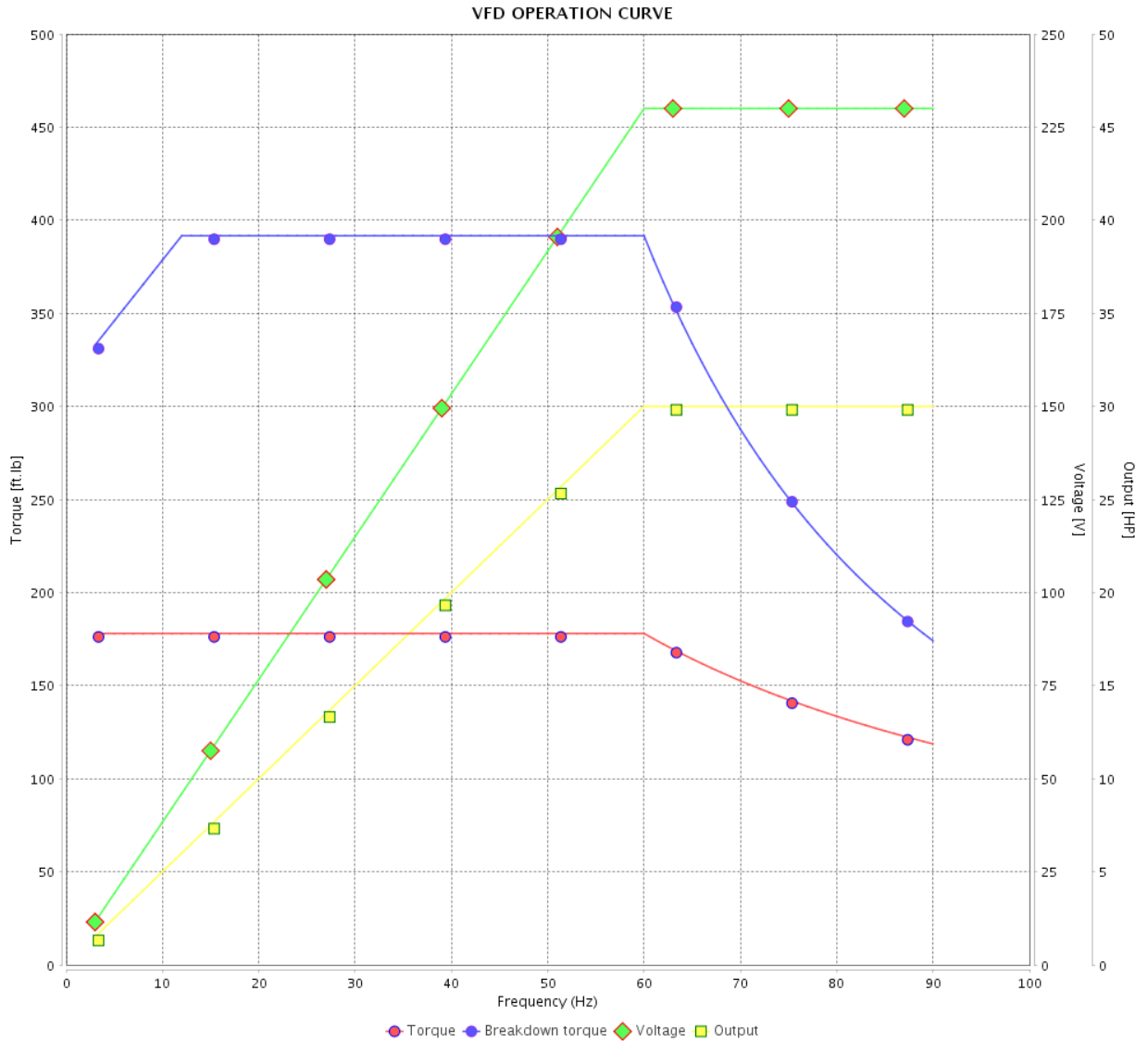


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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



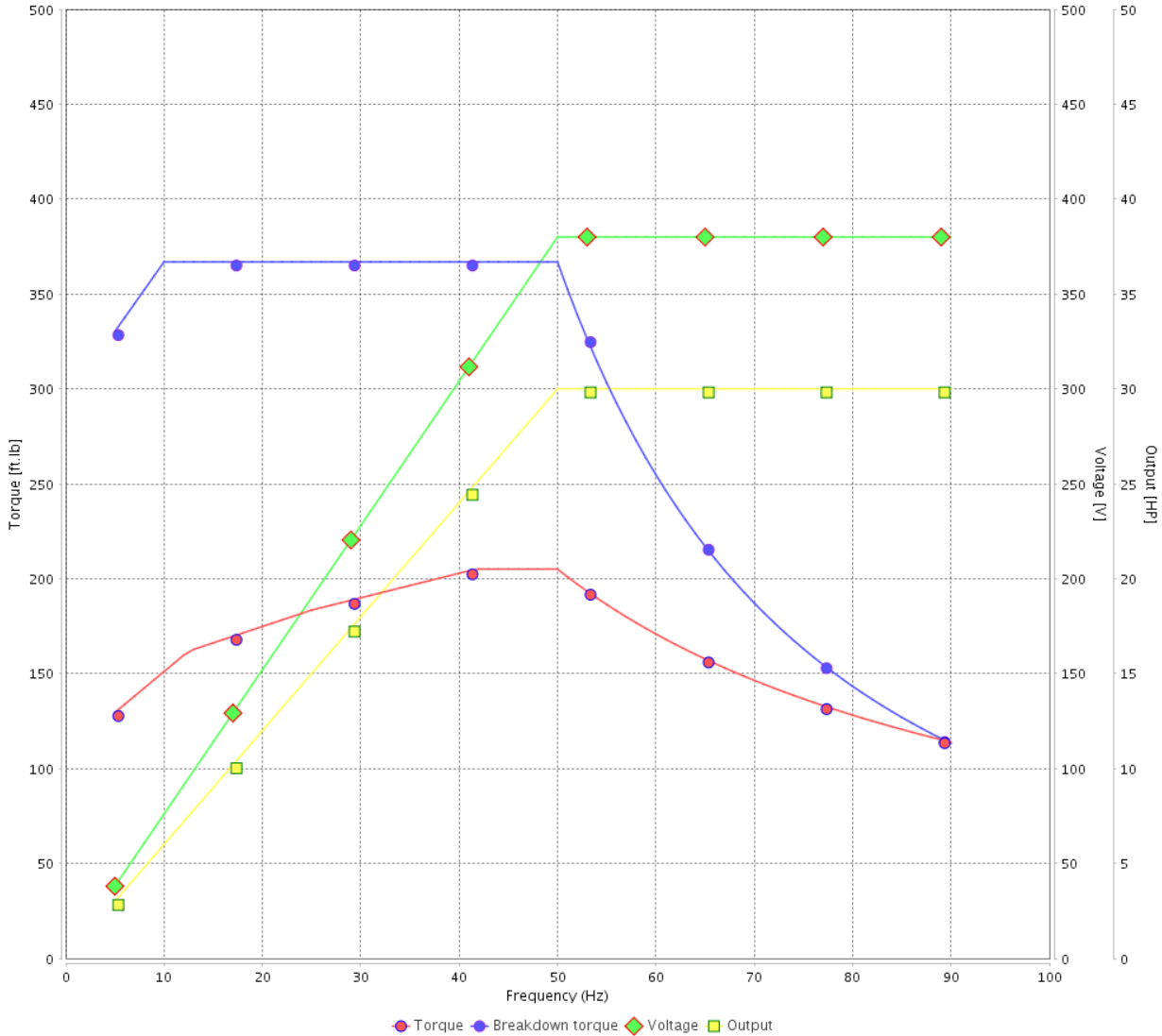
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VFD OPERATION CURVE



Performance : 380 V 50 Hz 8P IE3

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Rated torque	: 216 ft.lb	Insulation class	: F
Locked rotor torque	: 170 %	Service factor	: 1.00
Breakdown torque	: 170 %	Temperature rise	: 80 K
Rated speed	: 730 rpm	Design	: B

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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

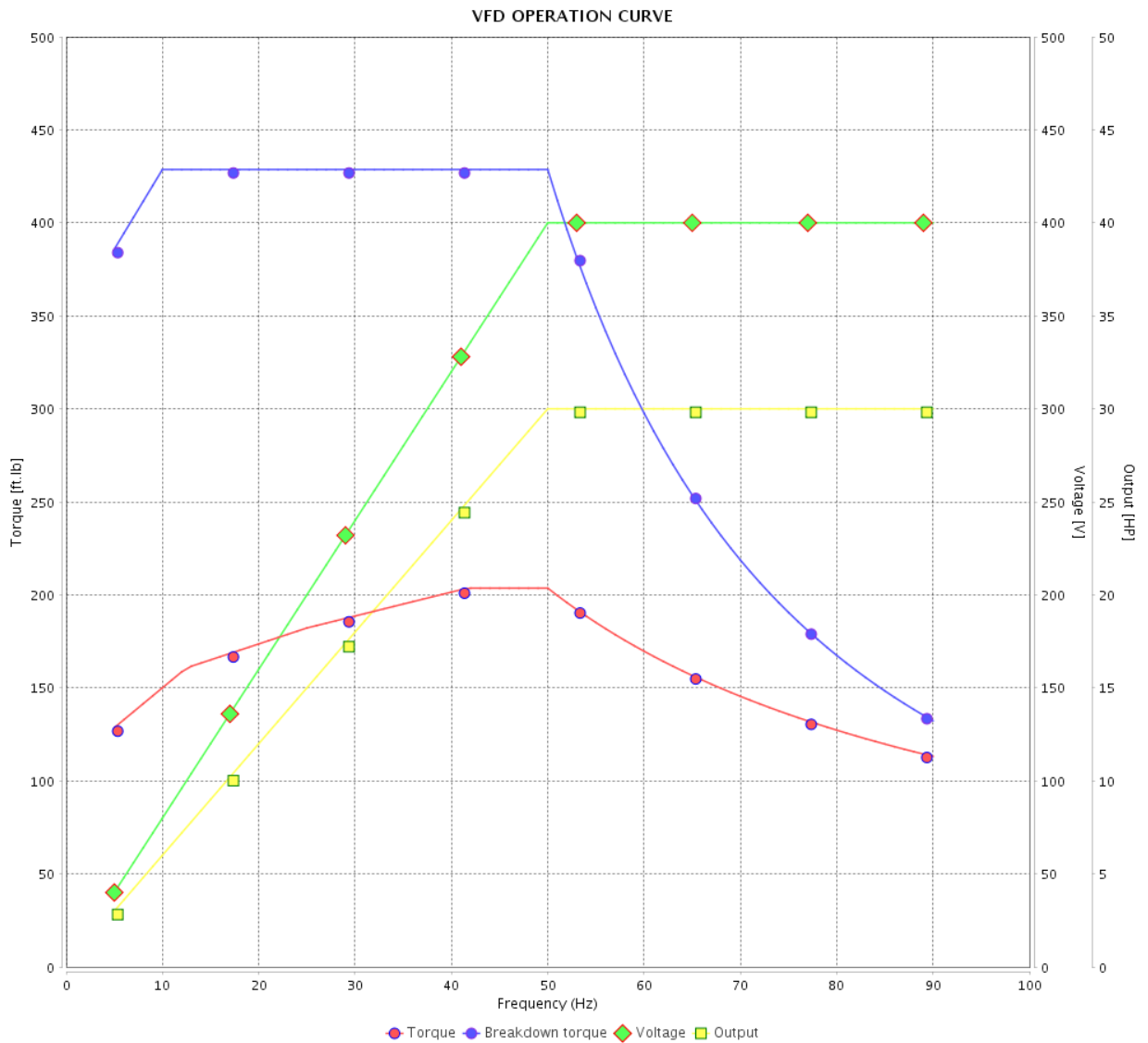


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 Service factor : 1.00
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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

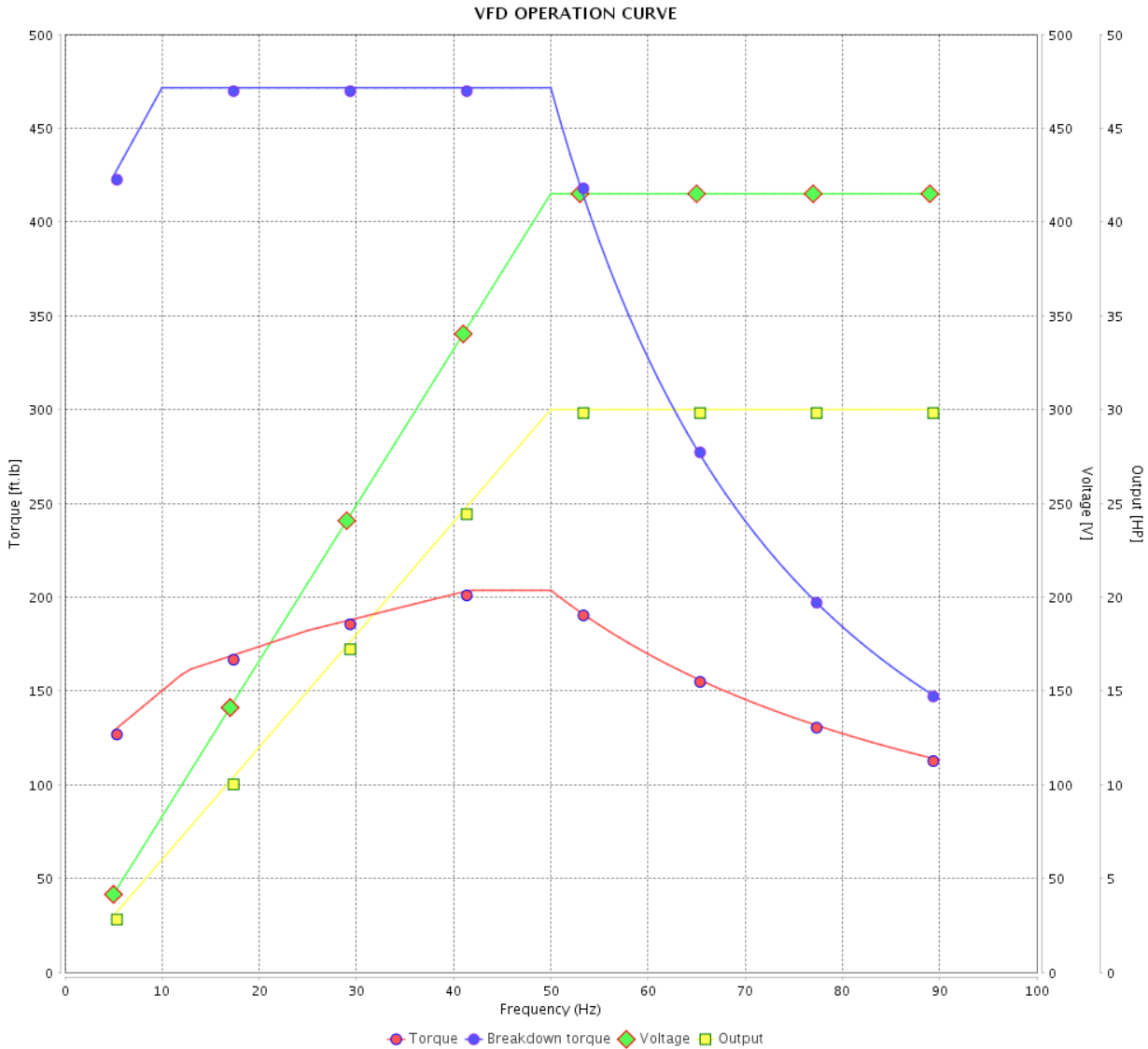


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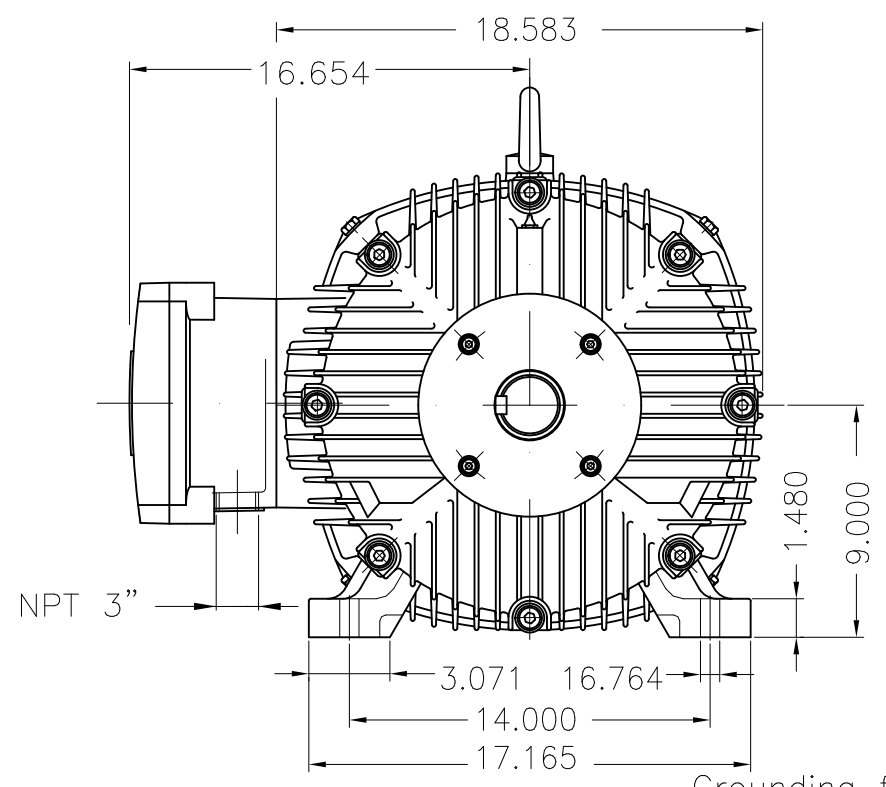
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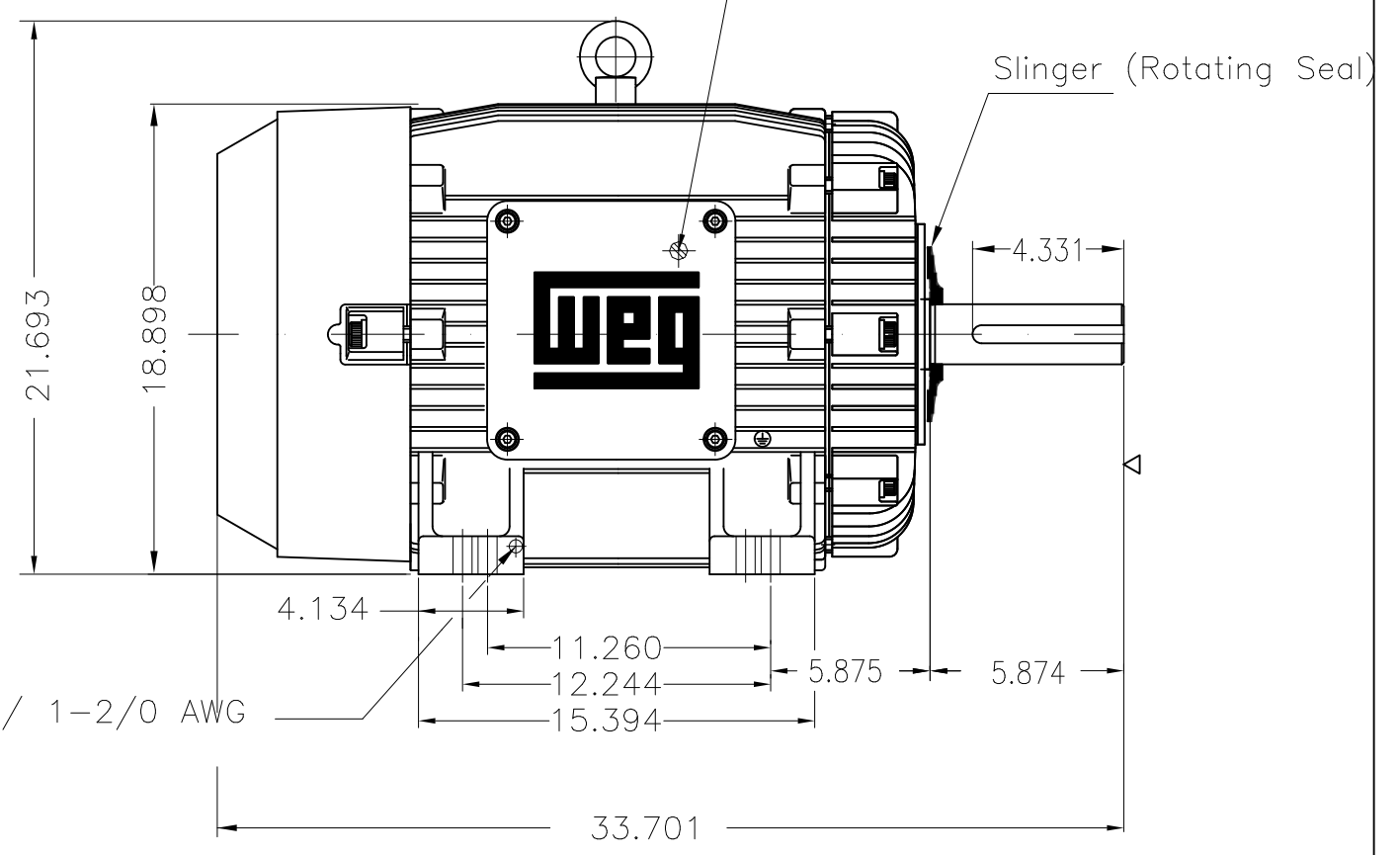
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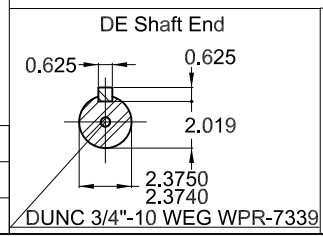


Grounding for leads 25-50 mm² / 3-1 AWG



Grounding for leads 35-70 mm² / 1-2/0 AWG

30 HP 08 Poles 60 Hz A



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

DUNC 3/4"-10 WEG WPR-7339

ECM	LOC	SUMMARY OF MODIFICATIONS	EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	PIRWBUSER	THREE PH. MOTOR EXPLOSION PROOF PREM. EFF.					
CHECKED		FRAME 364/5T IP55 TEFC					
RELEASED							
REL DT.	WMO	Jaragua do Sul	Product Engineering				

PREVIEW
 WDD



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