

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :				
Product line : IE3 Three-Phase	Product code : 12868213			
Frame : 132S Insulation class : F Duty cycle : S1 Ambient temperature : -20°C to +40°C Altitude : 1000 m.a.s.l. Protection degree : IP55 Design : N	Cooling method : IC411 - TEFC Mounting : B5T Rotation ¹ : Both (CW and CCW) Starting method : Direct On Line Approx. weight ² : 67.4 kg Moment of inertia (J) : 0.0491 kgm ²			
Output [kW]	5.5			
Poles	4			
Frequency [Hz]	50			
Rated voltage [V]	380/660			
Rated current [A]	10.8/6.22			
L. R. Amperes [A]	81.0/46.6			
LRC [A]	7.5			
No load current [A]	4.70/2.71			
Rated speed [RPM]	1460			
Slip [%]	2.67			
Rated torque [kgfm]	3.67			
Locked rotor torque [%]	210			
Breakdown torque [%]	300			
Service factor	1.00			
Temperature rise	80 K			
Locked rotor time	25s (cold) 14s (hot)			
Noise level ²	56.0 dB(A)			
Efficiency (%)	25%			
	50%			
	75%			
	100%			
Power Factor	25%			
	50%			
	75%			
	100%			
Bearing type : Drive end 6308 ZZ Non drive end 6207 ZZ Sealing : Oil Seal Lip Seal Lubrication interval : - - Lubricant amount : - - Lubricant type : Mobil Polyrex EM	Foundation loads Max. traction : 184 kgf Max. compression : 252 kgf			
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 IEC 60034-1.			
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Customer : _____

Thermal protection

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

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TORQUE AND CURRENT VS SPEED CURVE

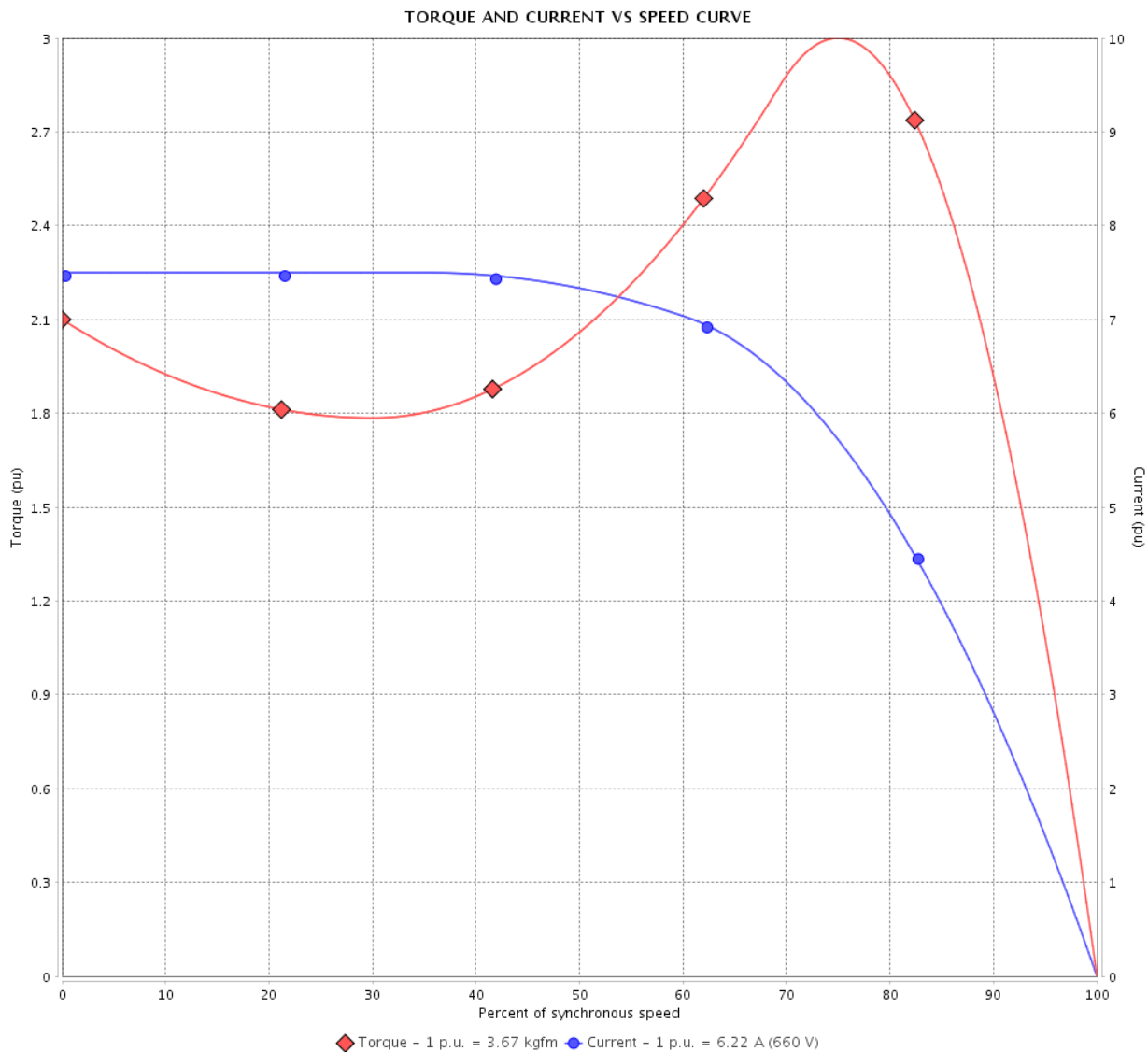


Three Phase Induction Motor - Squirrel Cage

Customer : _____

Product line : IE3 Three-Phase

Product code : 12868213



Performance : 380/660 V 50 Hz 4P

Rated current	: 10.8/6.22 A	Moment of inertia (J)	: 0.0491 kgm ²
LRC	: 7.5	Duty cycle	: S1
Rated torque	: 3.67 kgfm	Insulation class	: F
Locked rotor torque	: 210 %	Service factor	: 1.00
Breakdown torque	: 300 %	Temperature rise	: 80 K
Rated speed	: 1460 rpm	Design	: N

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

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TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage

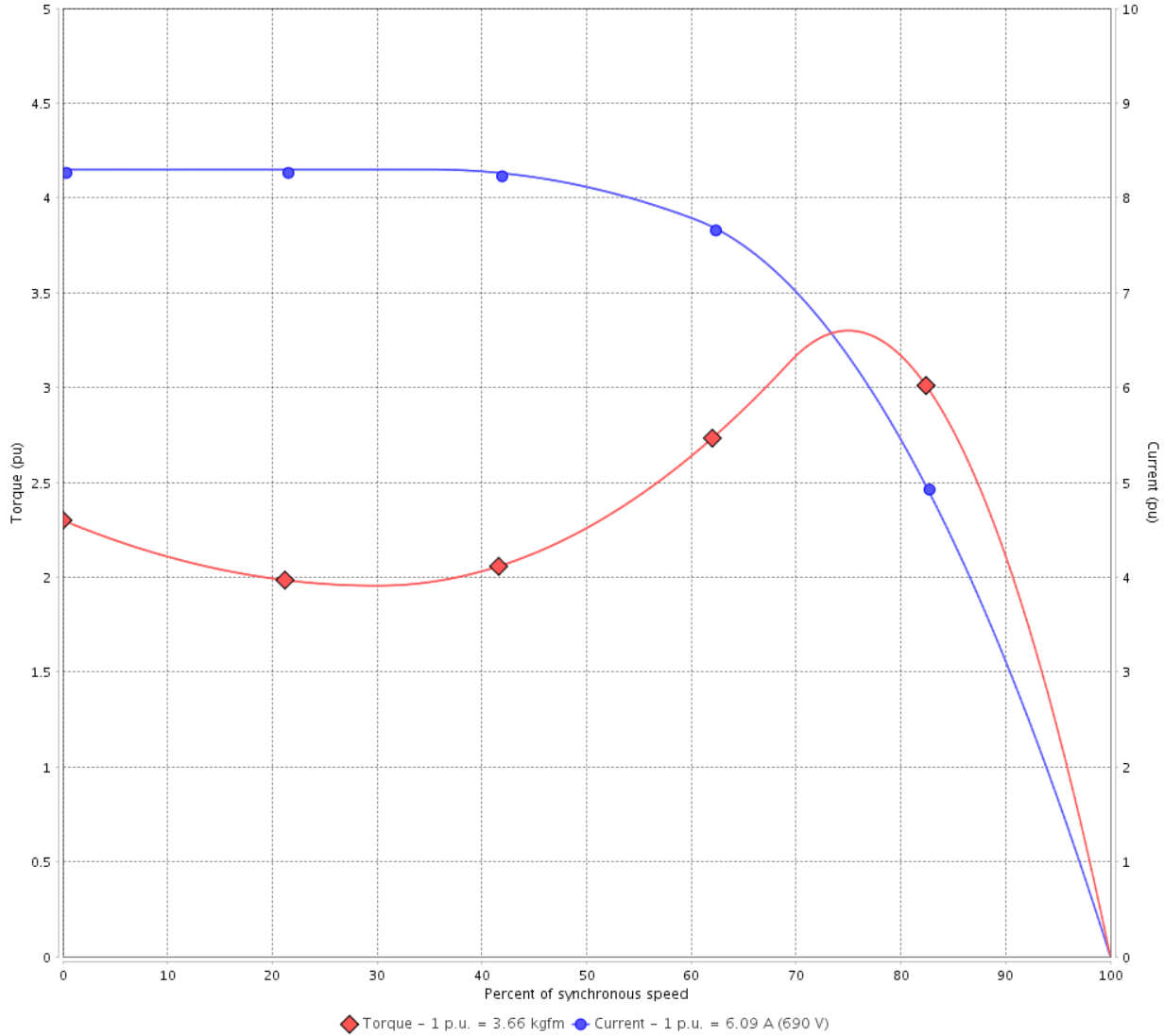


Customer :

Product line : IE3 Three-Phase

Product code : 12868213

TORQUE AND CURRENT VS SPEED CURVE



Performance : 400/690 V 50 Hz 4P

Rated current	: 10.5/6.09 A	Moment of inertia (J)	: 0.0491 kgm ²
LRC	: 8.3	Duty cycle	: S1
Rated torque	: 3.66 kgfm	Insulation class	: F
Locked rotor torque	: 229 %	Service factor	: 1.00
Breakdown torque	: 330 %	Temperature rise	: 80 K
Rated speed	: 1465 rpm	Design	: N

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

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TORQUE AND CURRENT VS SPEED CURVE

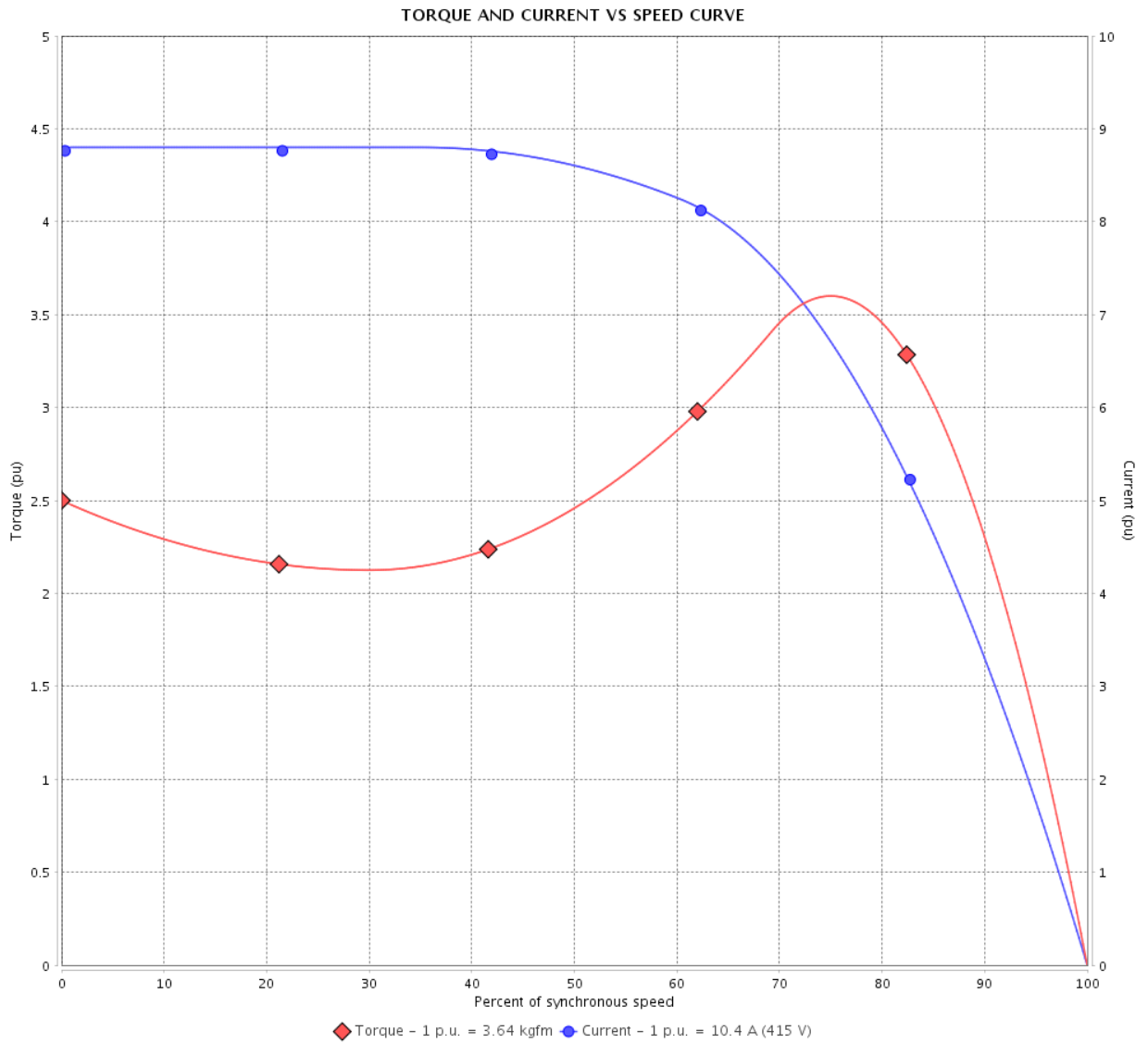
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : IE3 Three-Phase

Product code : 12868213



Performance : 415 V 50 Hz 4P

Rated current	: 10.4 A	Moment of inertia (J)	: 0.0491 kgm ²
LRC	: 8.8	Duty cycle	: S1
Rated torque	: 3.64 kgfm	Insulation class	: F
Locked rotor torque	: 250 %	Service factor	: 1.00
Breakdown torque	: 360 %	Temperature rise	: 80 K
Rated speed	: 1470 rpm	Design	: N

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

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TORQUE AND CURRENT VS SPEED CURVE

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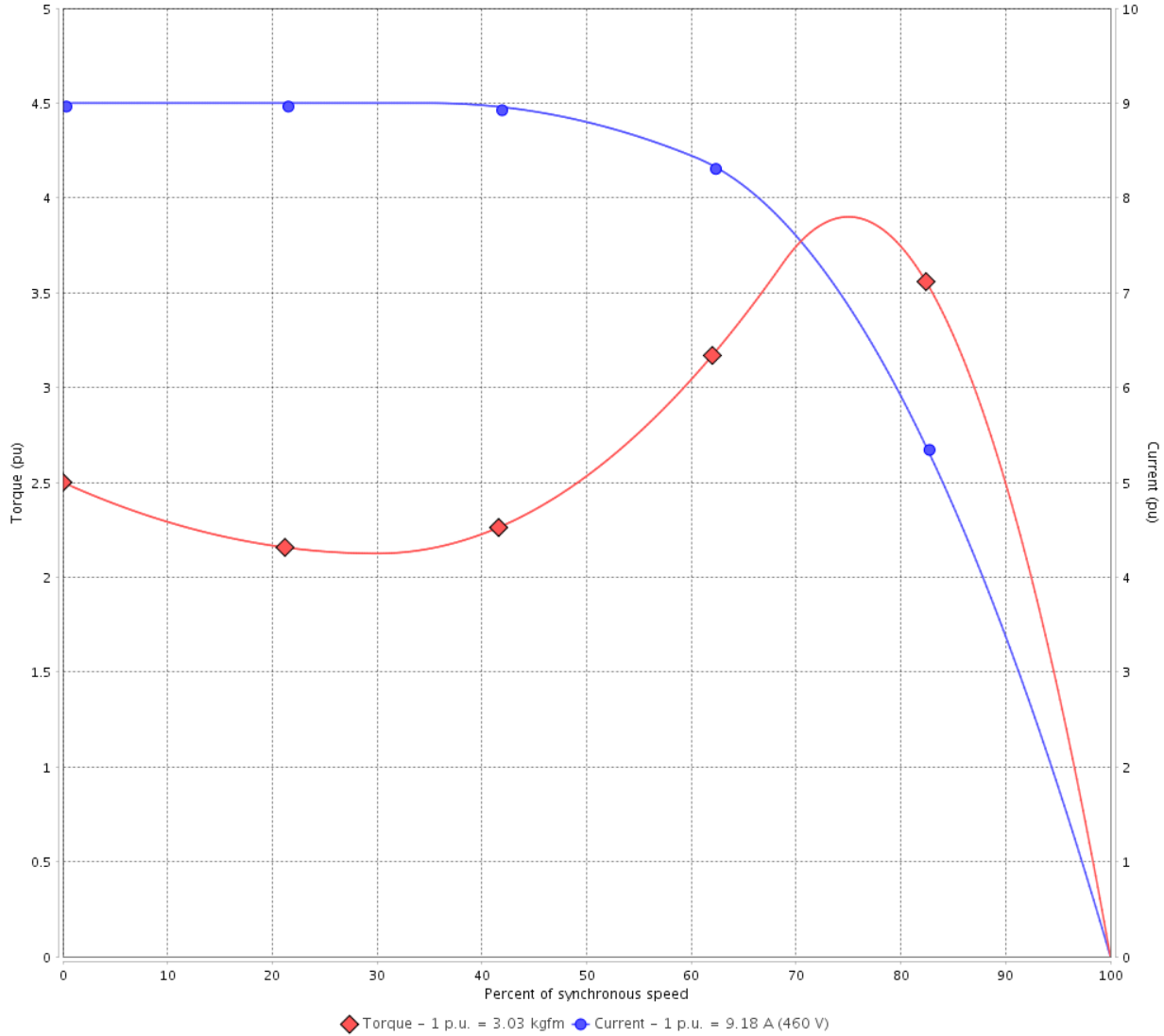


Customer :

Product line : IE3 Three-Phase

Product code : 12868213

TORQUE AND CURRENT VS SPEED CURVE



Performance : 460 V 60 Hz 4P

Rated current	: 9.18 A	Moment of inertia (J)	: 0.0491 kgm ²
LRC	: 9.0	Duty cycle	: S1
Rated torque	: 3.03 kgfm	Insulation class	: F
Locked rotor torque	: 250 %	Service factor	: 1.00
Breakdown torque	: 390 %	Temperature rise	: 80 K
Rated speed	: 1770 rpm	Design	: N

Locked rotor time : 28s (cold) 16s (hot)

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LOAD PERFORMANCE CURVE

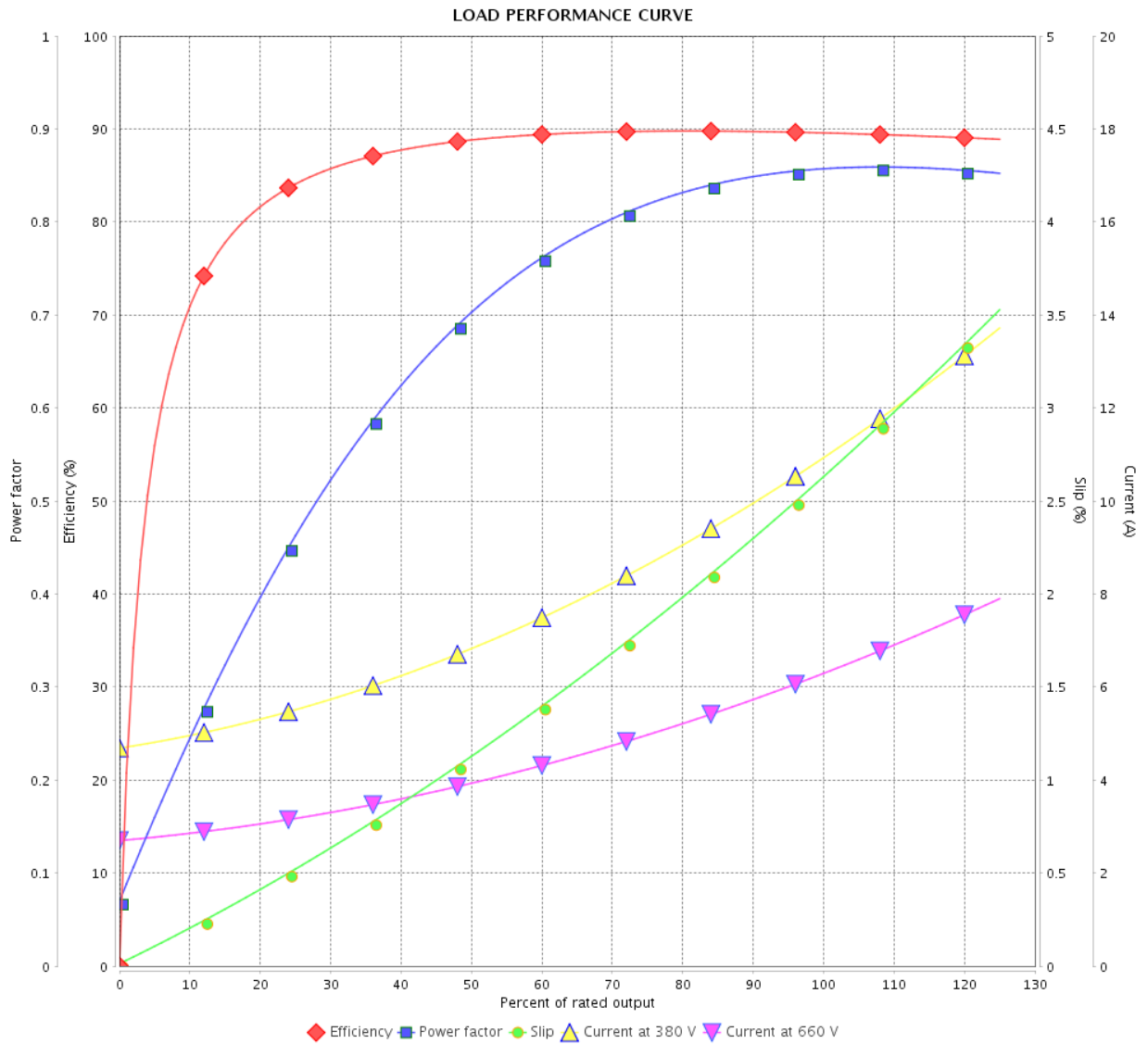
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Performance : 380/660 V 50 Hz 4P

Rated current : 10.8/6.22 A
 LRC : 7.5
 Rated torque : 3.67 kgfm
 Locked rotor torque : 210 %
 Breakdown torque : 300 %
 Rated speed : 1460 rpm

Moment of inertia (J) : 0.0491 kgm²
 Duty cycle : S1
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : N

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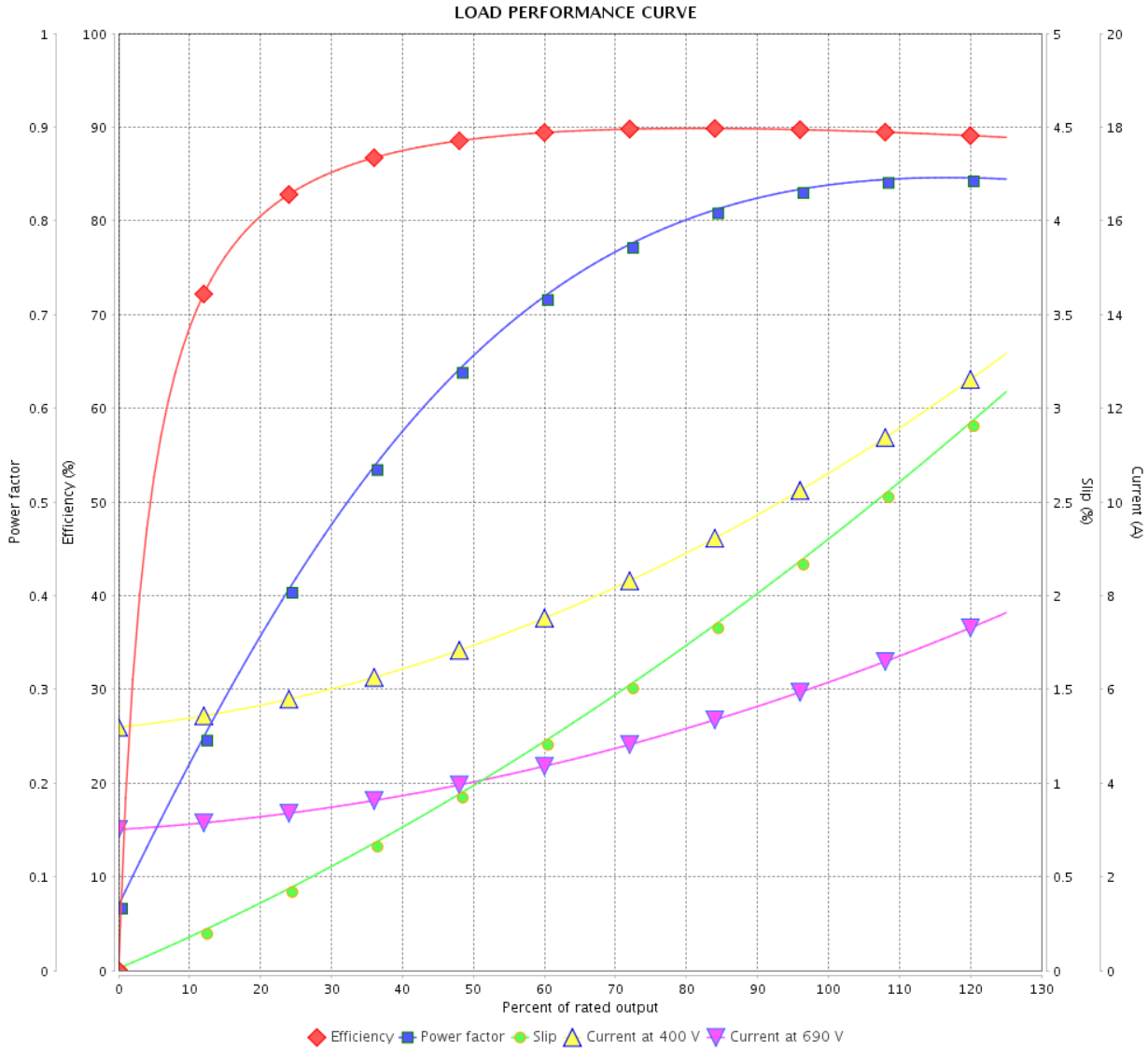
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 Locked rotor torque : 229 %
 Breakdown torque : 330 %
 Rated speed : 1465 rpm

Moment of inertia (J) : 0.0491 kgm²
 Duty cycle : S1
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : N

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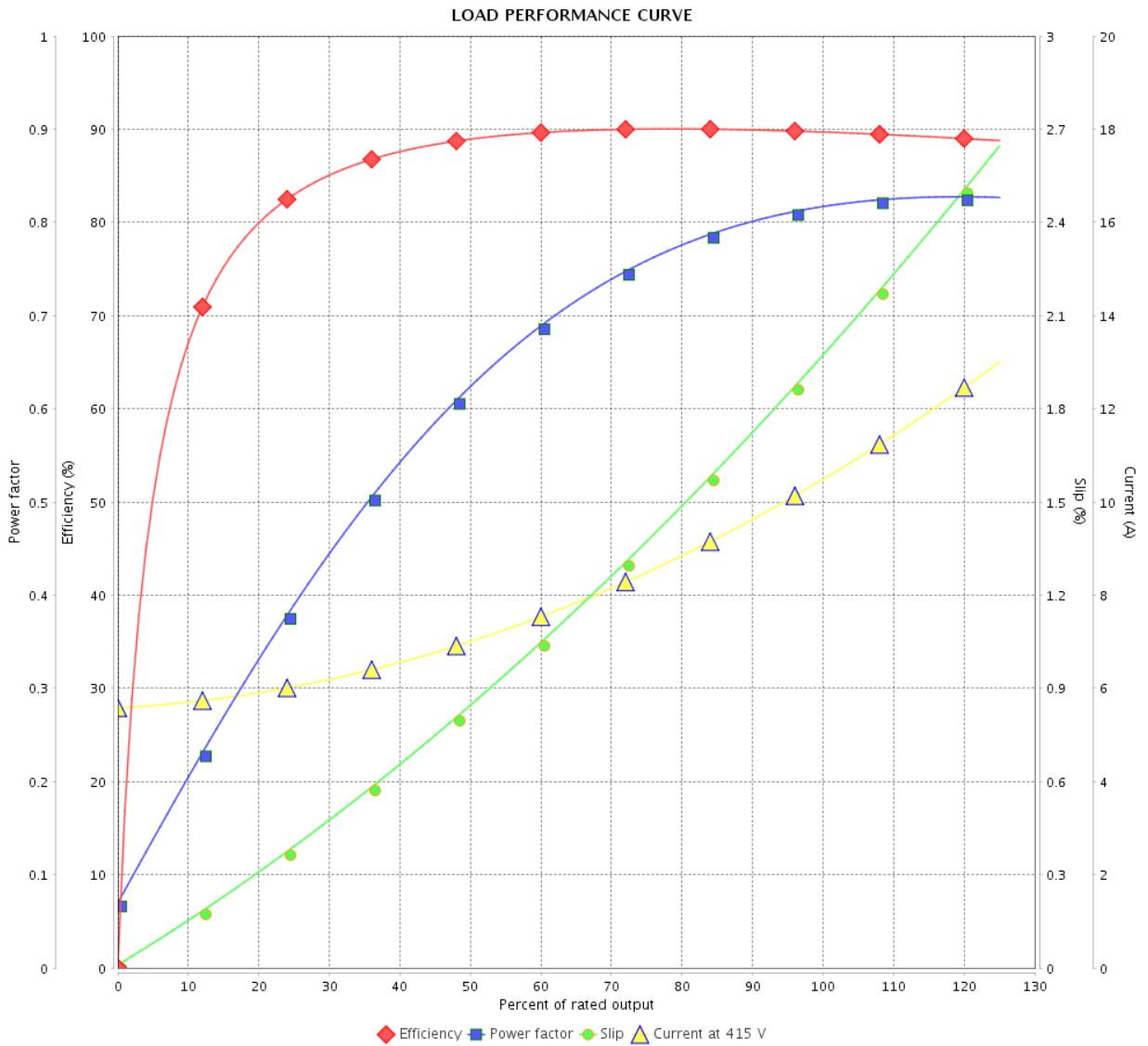
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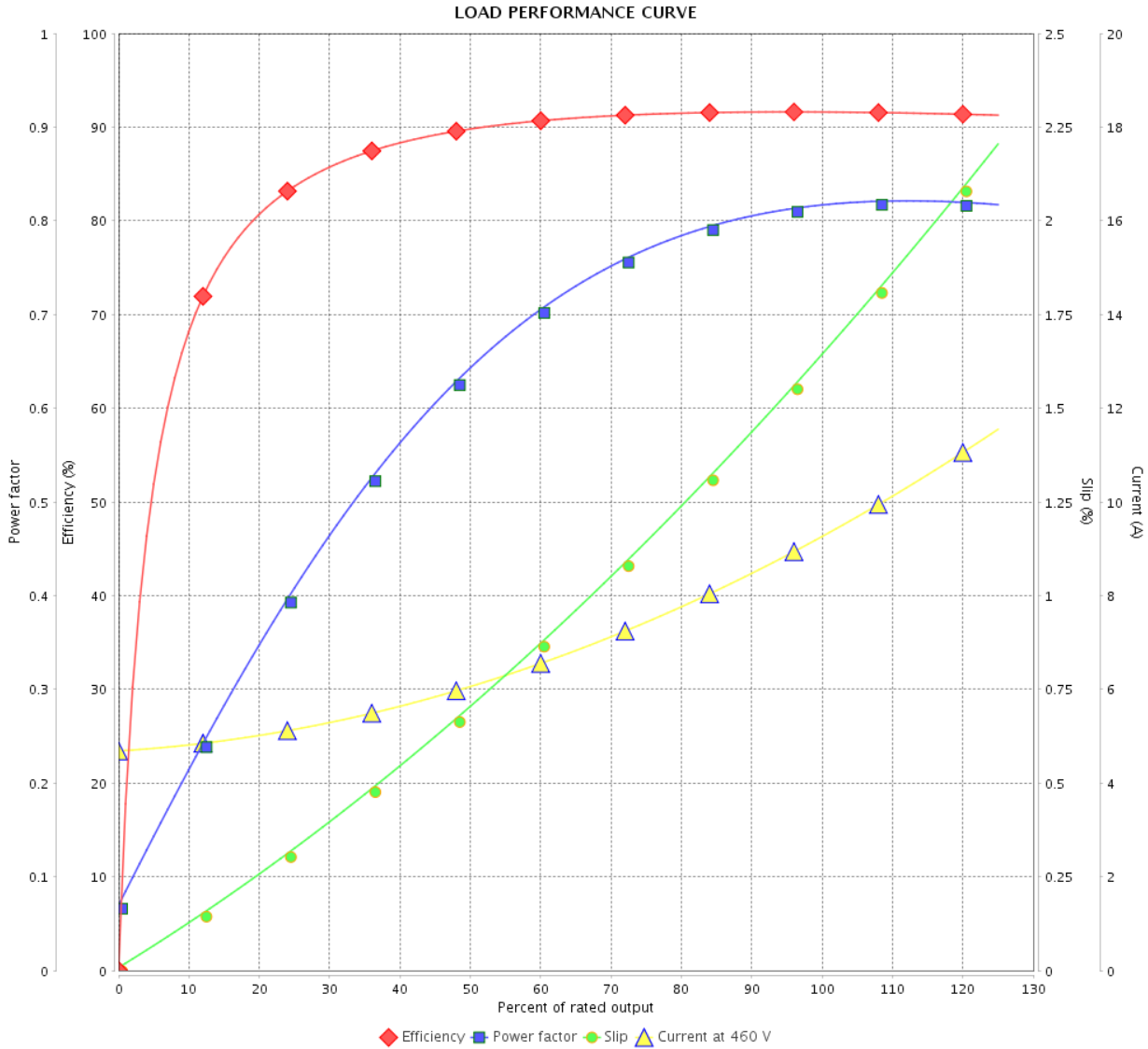
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 Duty cycle : S1
 Insulation class : F
 Service factor : 1.00
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THERMAL LIMIT CURVE

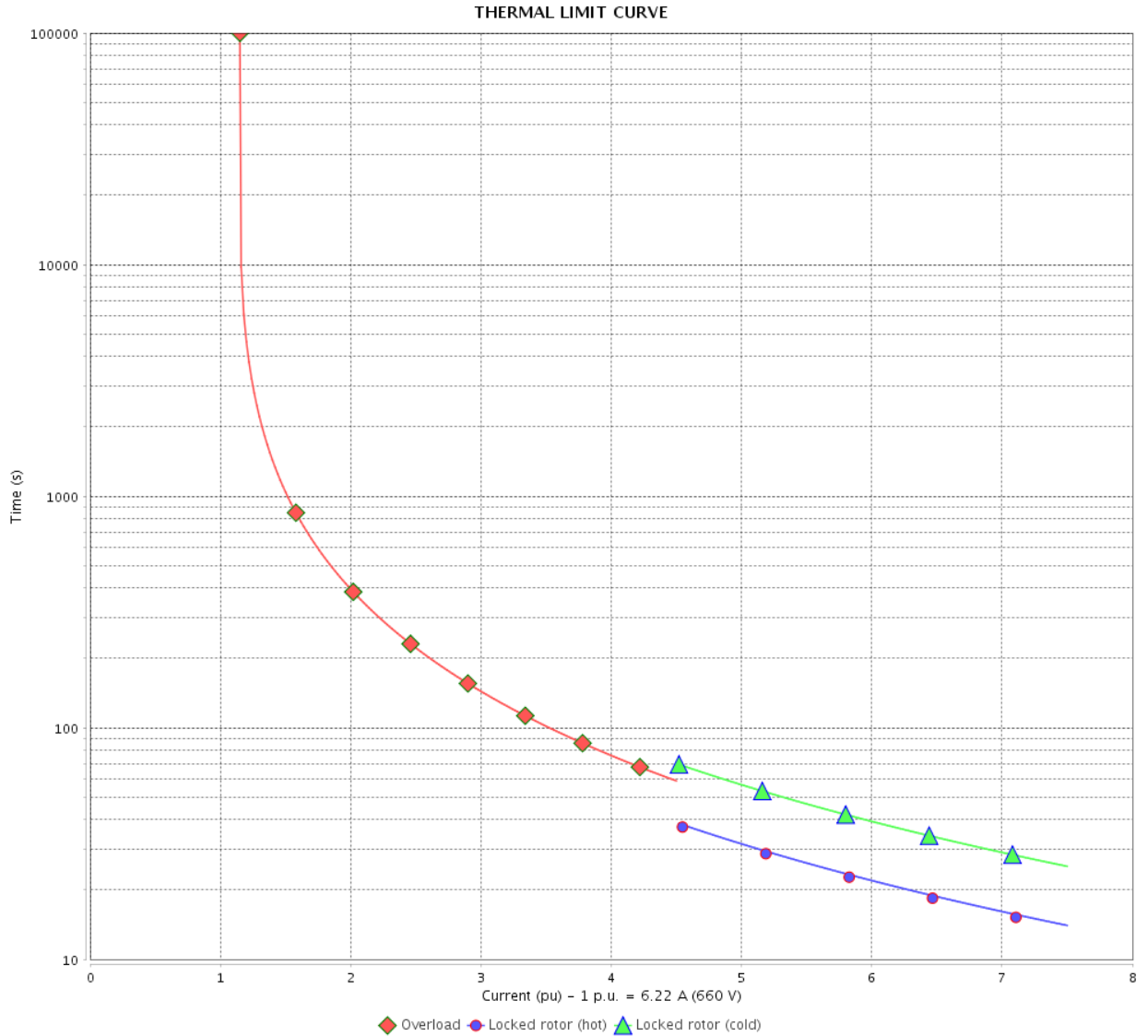
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Moment of inertia (J) : 0.0491 kgm²
 Duty cycle : S1
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : N

Heating constant

Cooling constant

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THERMAL LIMIT CURVE

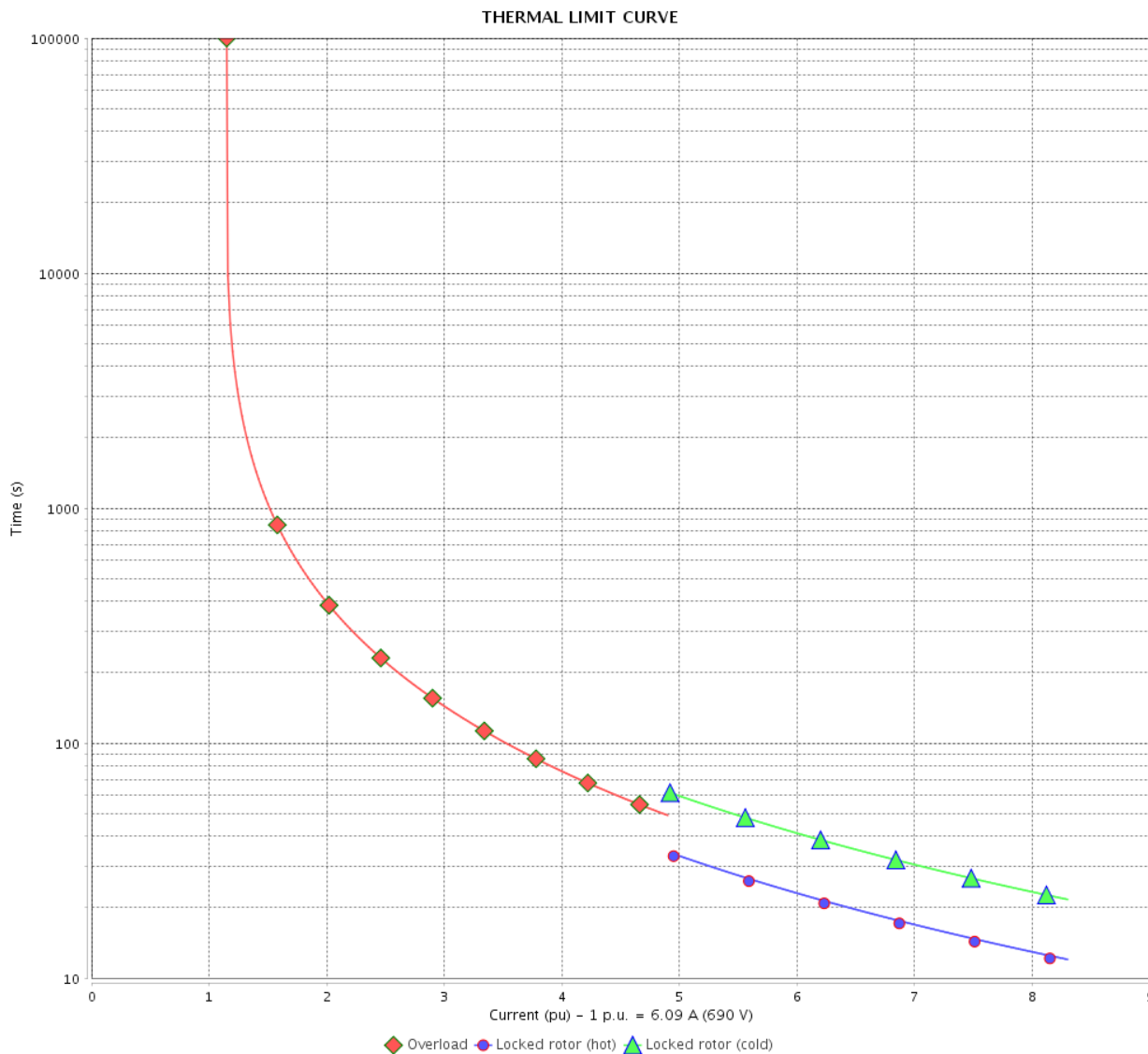
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 Duty cycle : S1
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 Service factor : 1.00
 Temperature rise : 80 K
 Design : N

Heating constant
 Cooling constant

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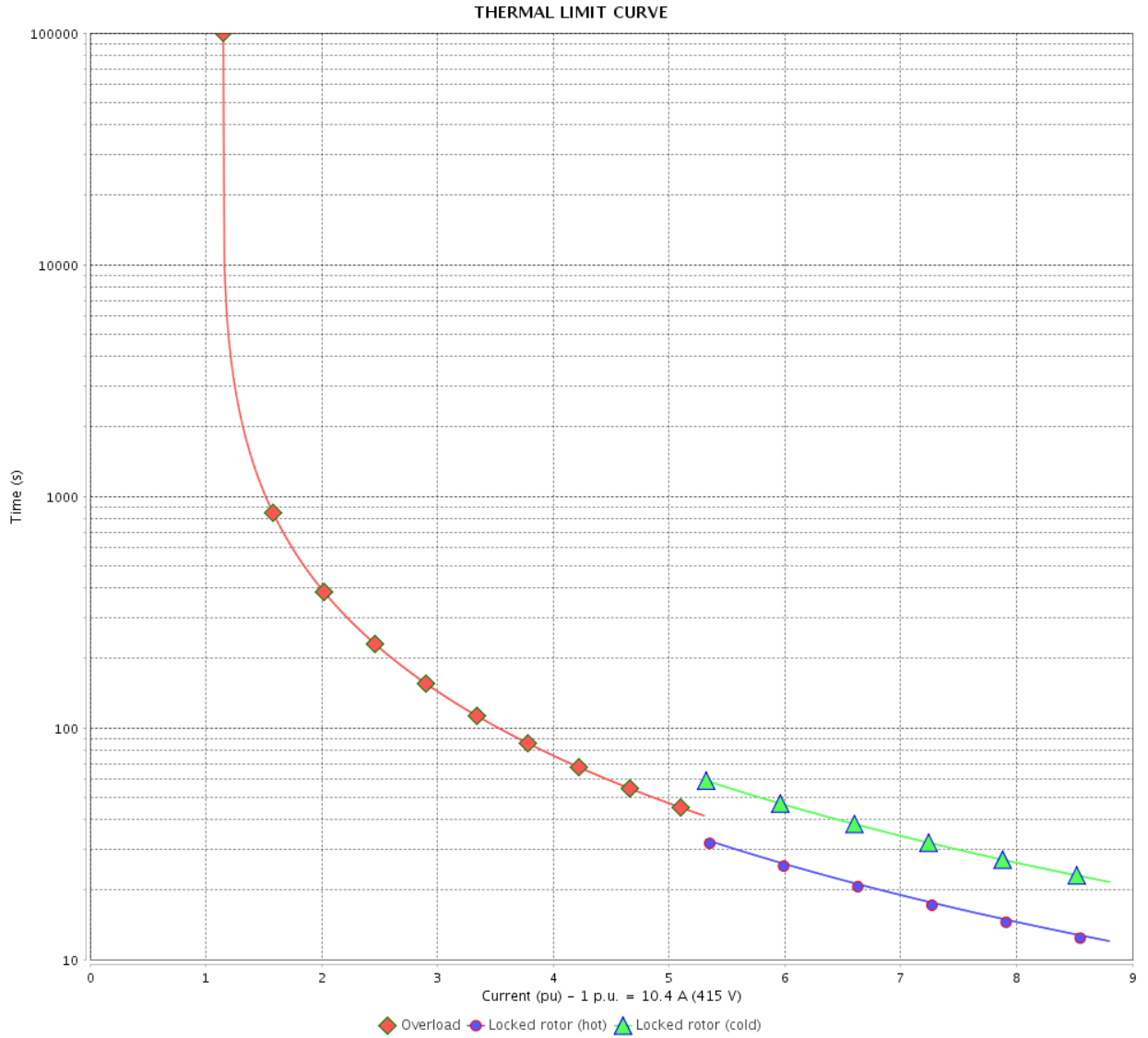
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Rated torque	: 3.64 kgfm	Insulation class	: F
Locked rotor torque	: 250 %	Service factor	: 1.00
Breakdown torque	: 360 %	Temperature rise	: 80 K
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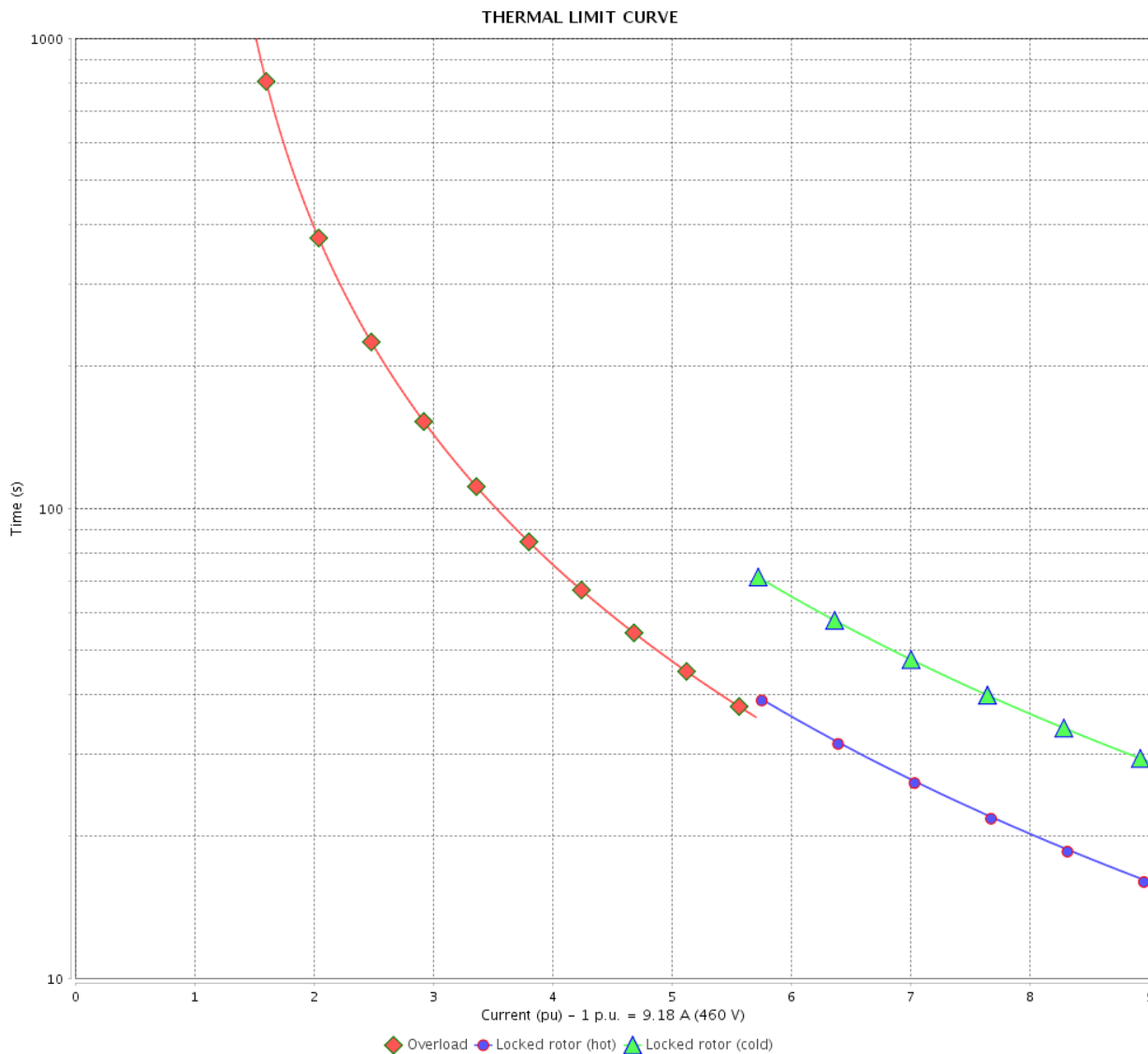
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Breakdown torque	: 390 %	Temperature rise	: 80 K
Rated speed	: 1770 rpm	Design	: N

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Cooling constant

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VFD OPERATION CURVE

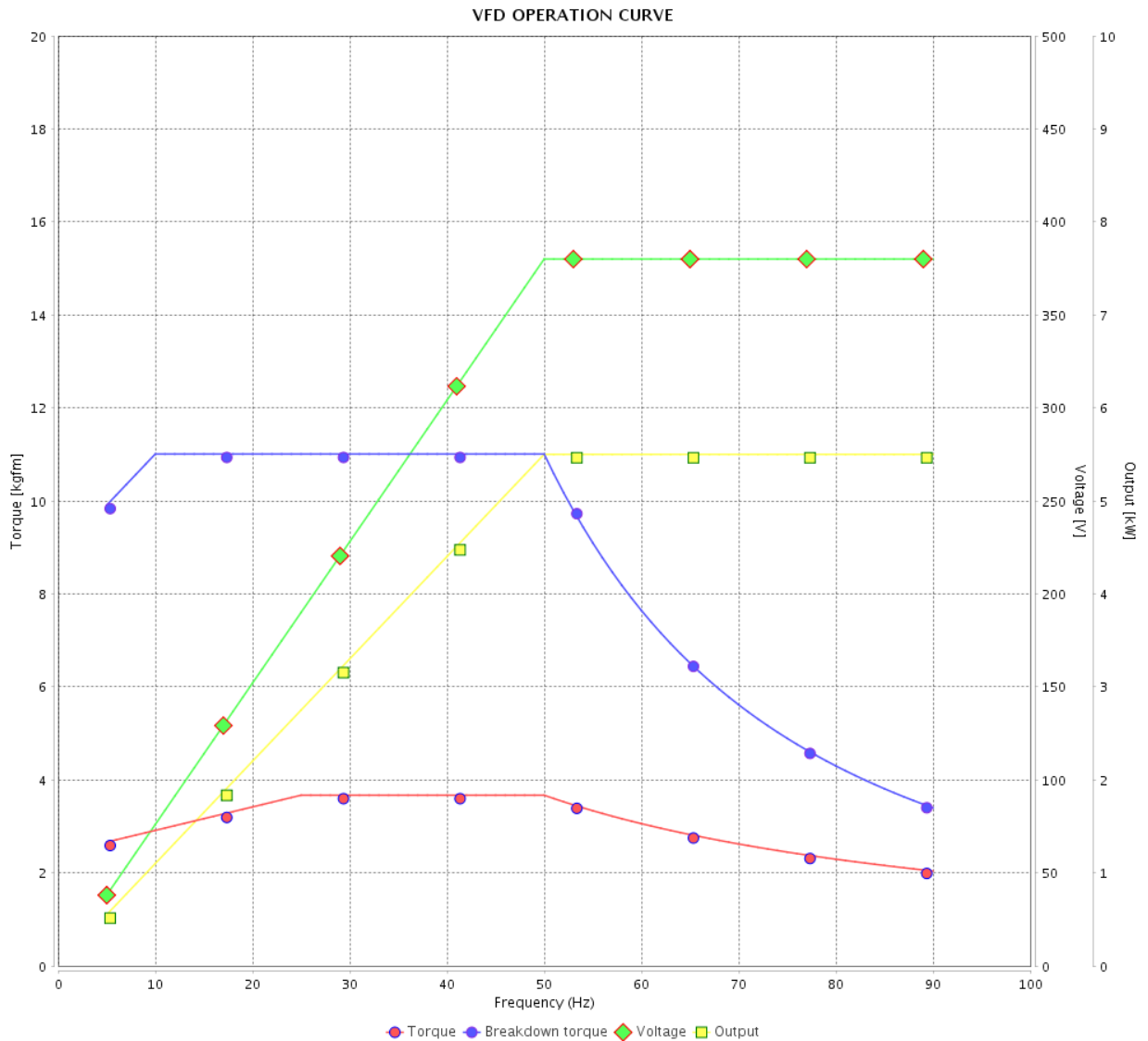
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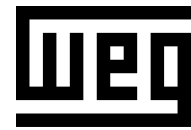
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 Rated speed : 1460 rpm

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 Duty cycle : S1
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : N

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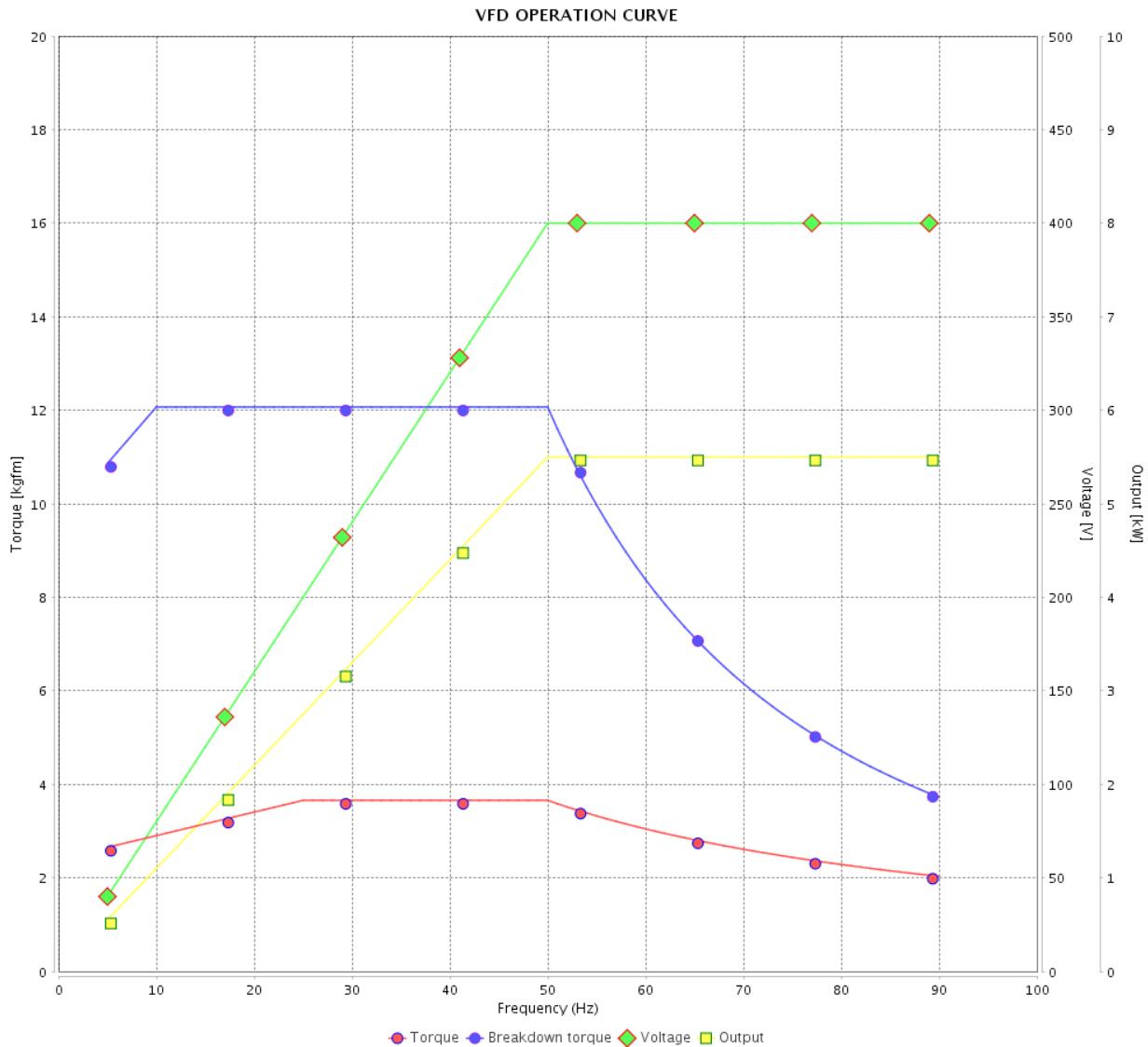
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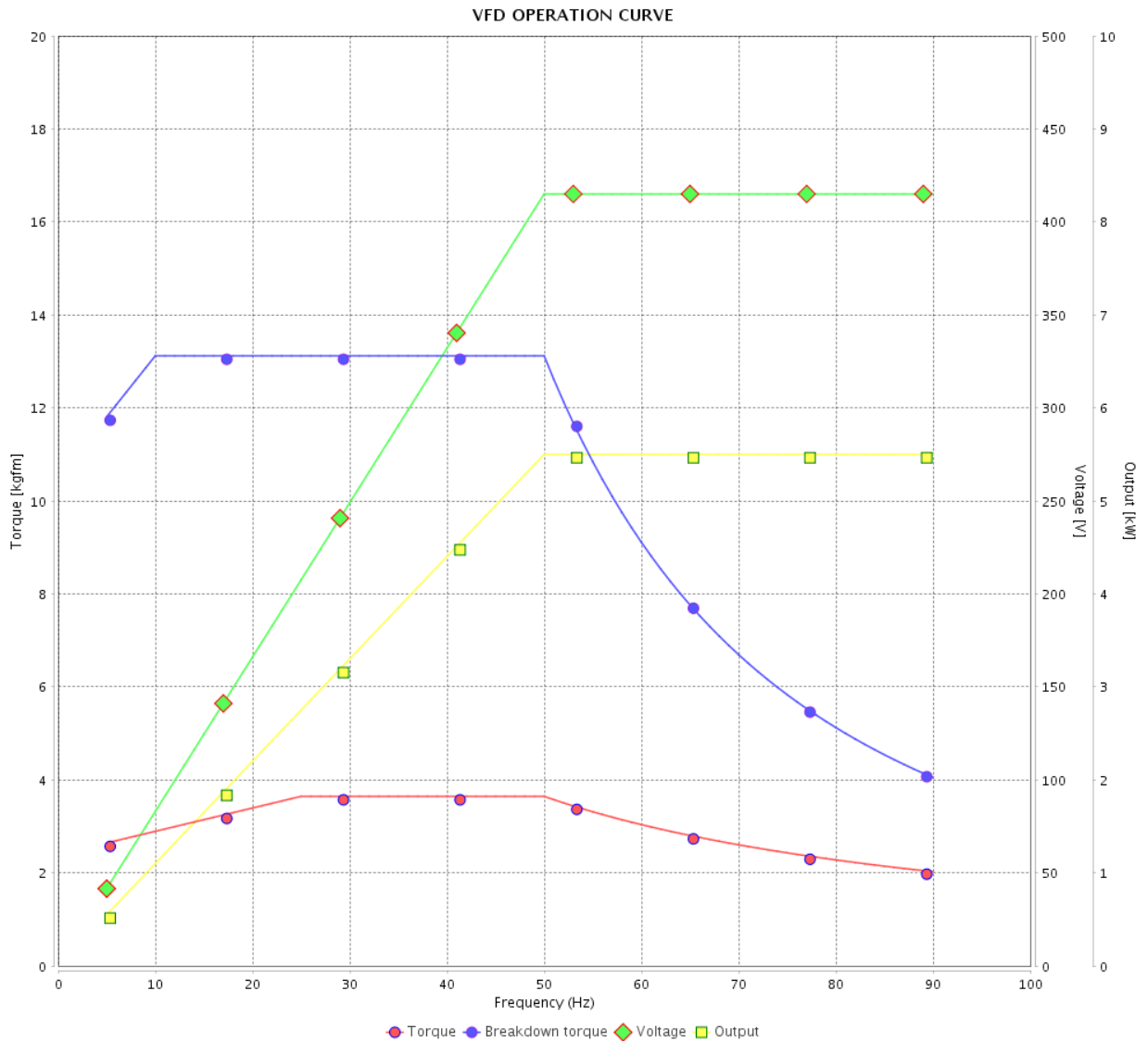
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VFD OPERATION CURVE

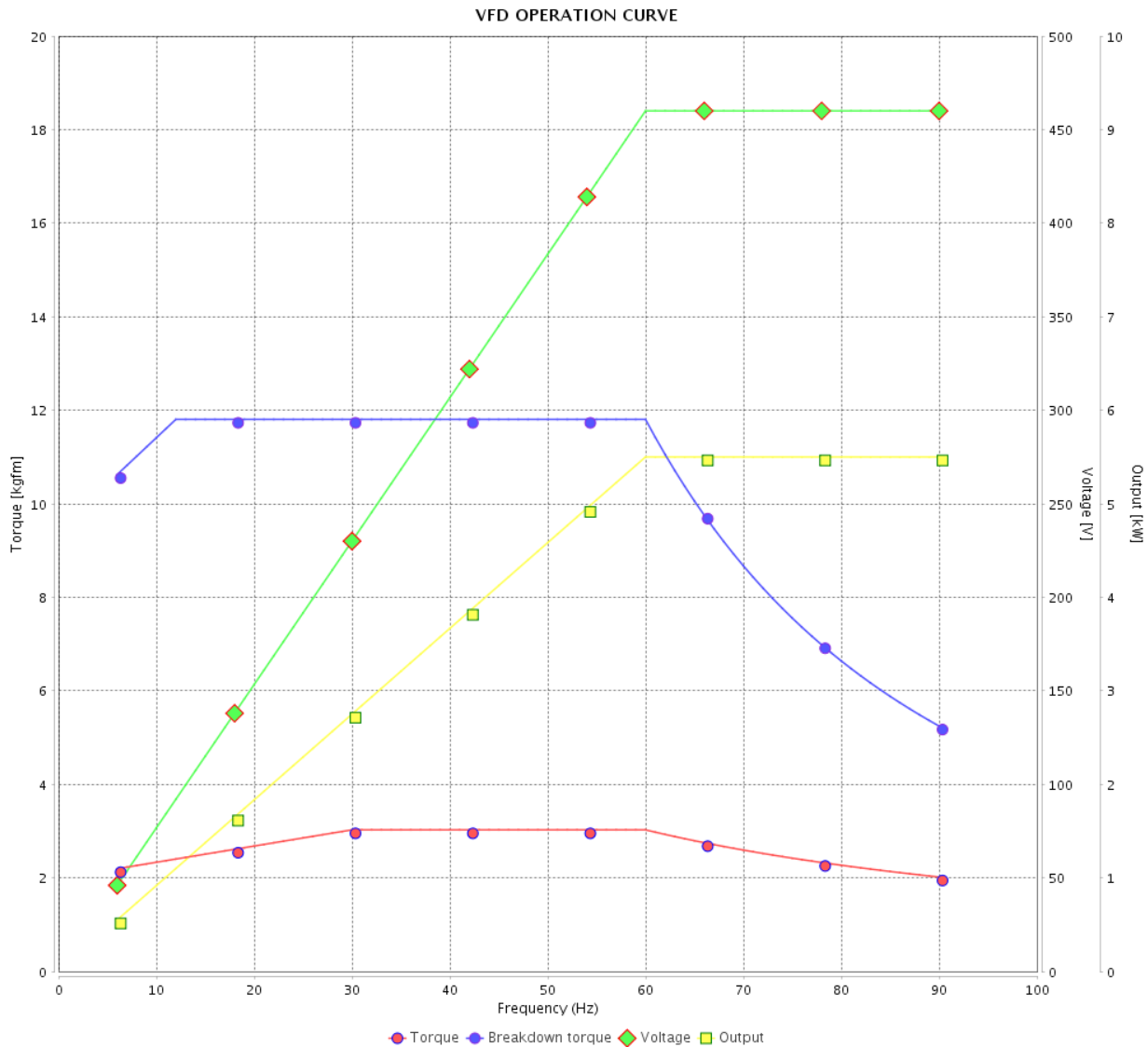
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Breakdown torque	: 390 %	Temperature rise	: 80 K
Rated speed	: 1770 rpm	Design	: N

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