

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :					
Product line : W22 IE3 Three-Phase	Product code : 12862424				
Frame : 63 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 : 8.1 kg Moment of inertia (J) : 0.0002 kgm ²				
Output [kW]	0.25	0.25	0.25	0.25	
Poles	2	2	2	2	
Frequency [Hz]	50	50	50	60	
Rated voltage [V]	220/380	230/400	240/415	460	
Rated current [A]	1.16/0.673	1.17/0.672	1.17/0.674	0.606	
L. R. Amperes [A]	6.16/3.57	6.43/3.70	6.64/3.84	4.00	
LRC [A]	5.3	5.5	5.7	6.6	
No load current [A]	0.829/0.480	0.939/0.540	1.00/0.580	0.470	
Rated speed [RPM]	2795	2820	2830	3440	
Slip [%]	6.83	6.00	5.67	4.44	
Rated torque [Nm]	0.855	0.847	0.844	0.694	
Locked rotor torque [%]	229	260	280	330	
Breakdown torque [%]	240	270	290	350	
Service factor	1.00	1.00	1.00	1.00	
Temperature rise	80 K	80 K	80 K	80 K	
Locked rotor time	18s (cold) 10s (hot)	18s (cold) 10s (hot)	18s (cold) 10s (hot)	18s (cold) 10s (hot)	
Noise level ²	52.0 dB(A)	52.0 dB(A)	52.0 dB(A)	56.0 dB(A)	
Efficiency (%)	25%				
	50%	64.6	63.0	61.5	64.0
	75%	68.7	68.0	67.2	68.0
	100%	69.7	69.7	69.7	70.0
Power Factor	25%				
	50%	0.59	0.54	0.51	0.53
	75%	0.72	0.68	0.64	0.65
	100%	0.81	0.77	0.74	0.74
Losses at normative operating points (speed;torque), in percentage of rated output power					
Losses (%)	P1 (0,9;1,0)	44.2	44.2	44.2	43.6
	P2 (0,5;1,0)	40.9	40.9	40.9	40.3
	P3 (0,25;1,0)	35.7	35.7	35.7	35.2
	P4 (0,9;0,5)	26.9	26.9	26.9	26.5
	P5 (0,5;0,5)	18.5	18.5	18.5	18.3
	P6 (0,5;0,25)	15.1	15.1	15.1	14.8
	P7 (0,25;0,25)	10.4	10.4	10.4	10.3
Bearing type	: Drive end : 6201 ZZ	: Non drive end : 6201 ZZ	Foundation loads		
Sealing	: Oil Seal	: Lip Seal	Max. traction	: 57 N	
Lubrication interval	: -	: -	Max. compression	: 136 N	
Lubricant amount	: -	: -			
Lubricant type	: Mobil Polyrex EM				
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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Three Phase Induction Motor - Squirrel Cage



Customer : _____

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TORQUE AND CURRENT VS SPEED CURVE

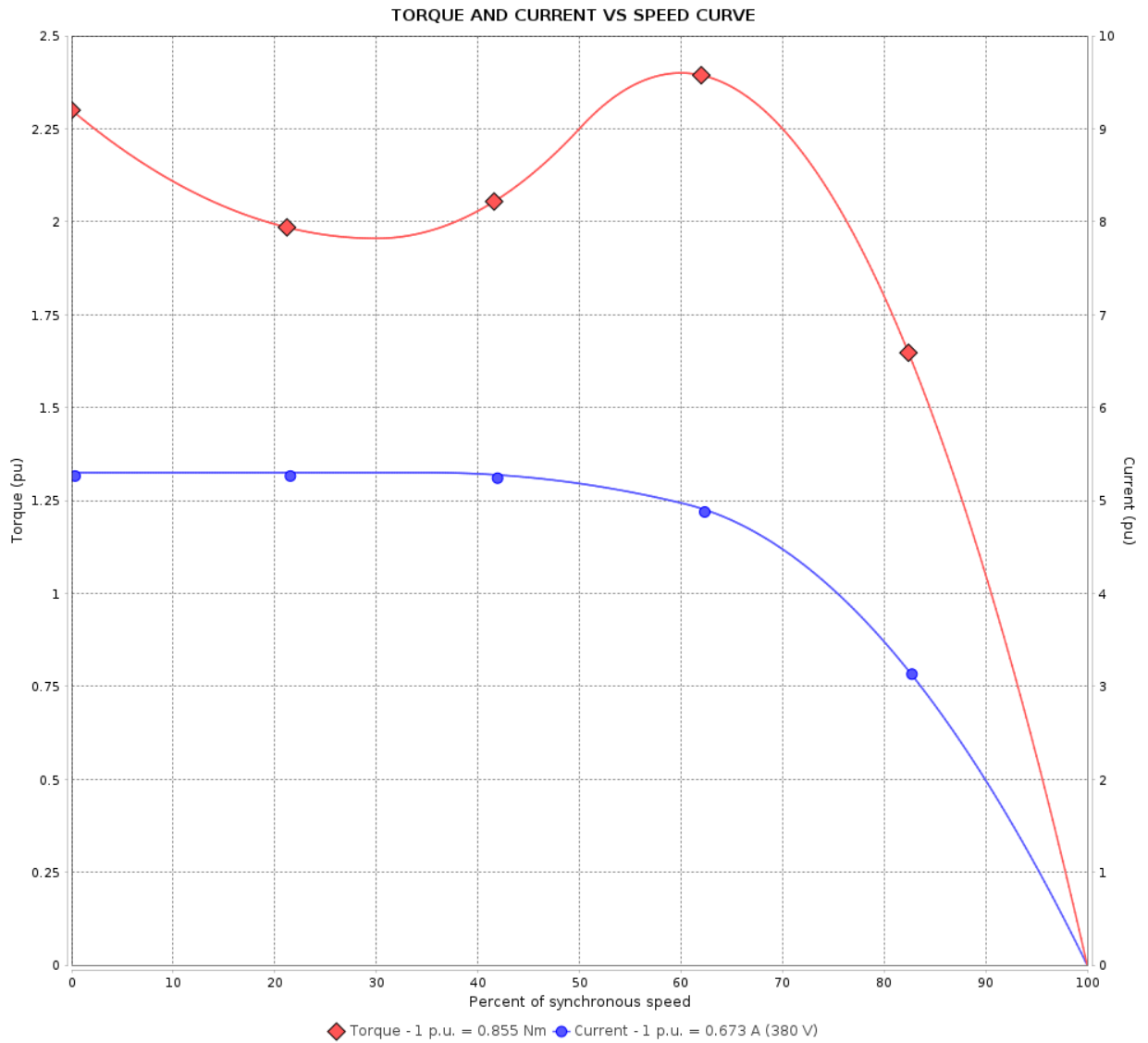
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 IE3 Three-Phase

Product code : 12862424



Performance : 220/380 V 50 Hz 2P

Rated current	: 1.16/0.673 A	Moment of inertia (J)	: 0.0002 kgm ²
LRC	: 5.3	Duty cycle	: S1
Rated torque	: 0.855 Nm	Insulation class	: F
Locked rotor torque	: 229 %	Service factor	: 1.00
Breakdown torque	: 240 %	Temperature rise	: 80 K
Rated speed	: 2795 rpm	Design	: N

Locked rotor time : 18s (cold) 10s (hot)

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TORQUE AND CURRENT VS SPEED CURVE

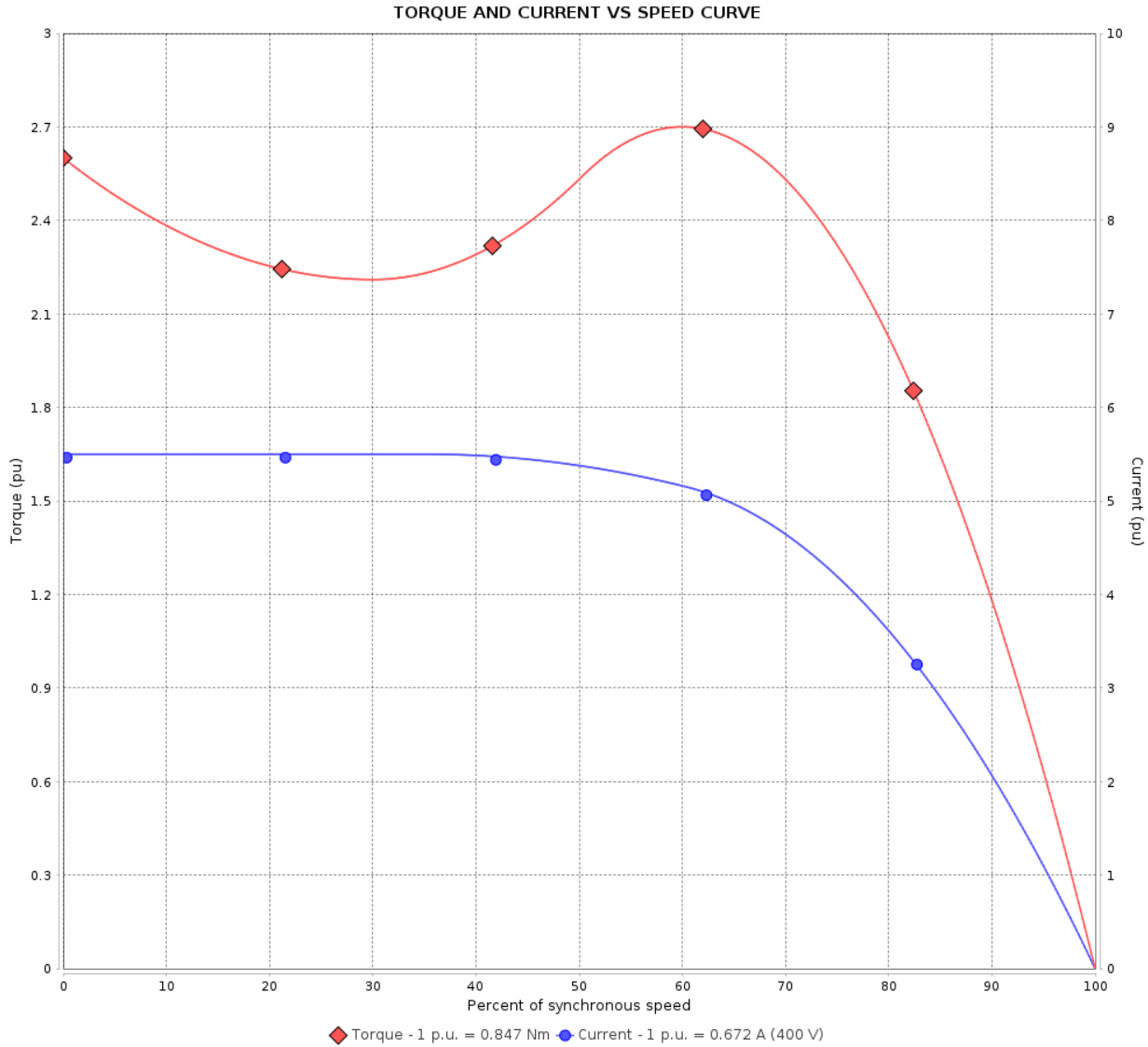
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 IE3 Three-Phase

Product code : 12862424



Performance : 230/400 V 50 Hz 2P

Rated current	: 1.17/0.672 A	Moment of inertia (J)	: 0.0002 kgm ²
LRC	: 5.5	Duty cycle	: S1
Rated torque	: 0.847 Nm	Insulation class	: F
Locked rotor torque	: 260 %	Service factor	: 1.00
Breakdown torque	: 270 %	Temperature rise	: 80 K
Rated speed	: 2820 rpm	Design	: N

Locked rotor time : 18s (cold) 10s (hot)

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TORQUE AND CURRENT VS SPEED CURVE

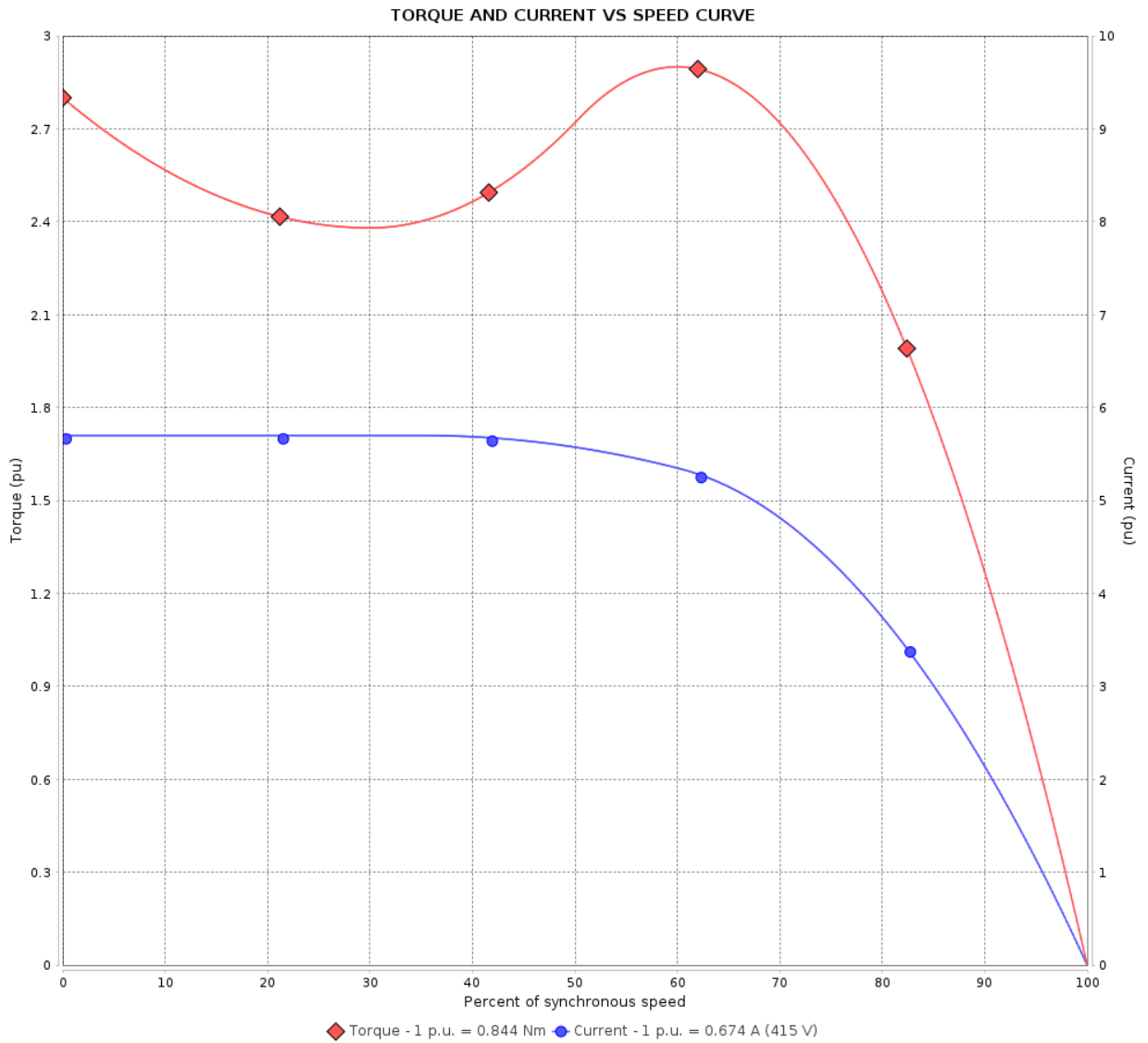
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 IE3 Three-Phase

Product code : 12862424



Performance : 240/415 V 50 Hz 2P

Rated current	: 1.17/0.674 A	Moment of inertia (J)	: 0.0002 kgm ²
LRC	: 5.7	Duty cycle	: S1
Rated torque	: 0.844 Nm	Insulation class	: F
Locked rotor torque	: 280 %	Service factor	: 1.00
Breakdown torque	: 290 %	Temperature rise	: 80 K
Rated speed	: 2830 rpm	Design	: N

Locked rotor time : 18s (cold) 10s (hot)

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TORQUE AND CURRENT VS SPEED CURVE

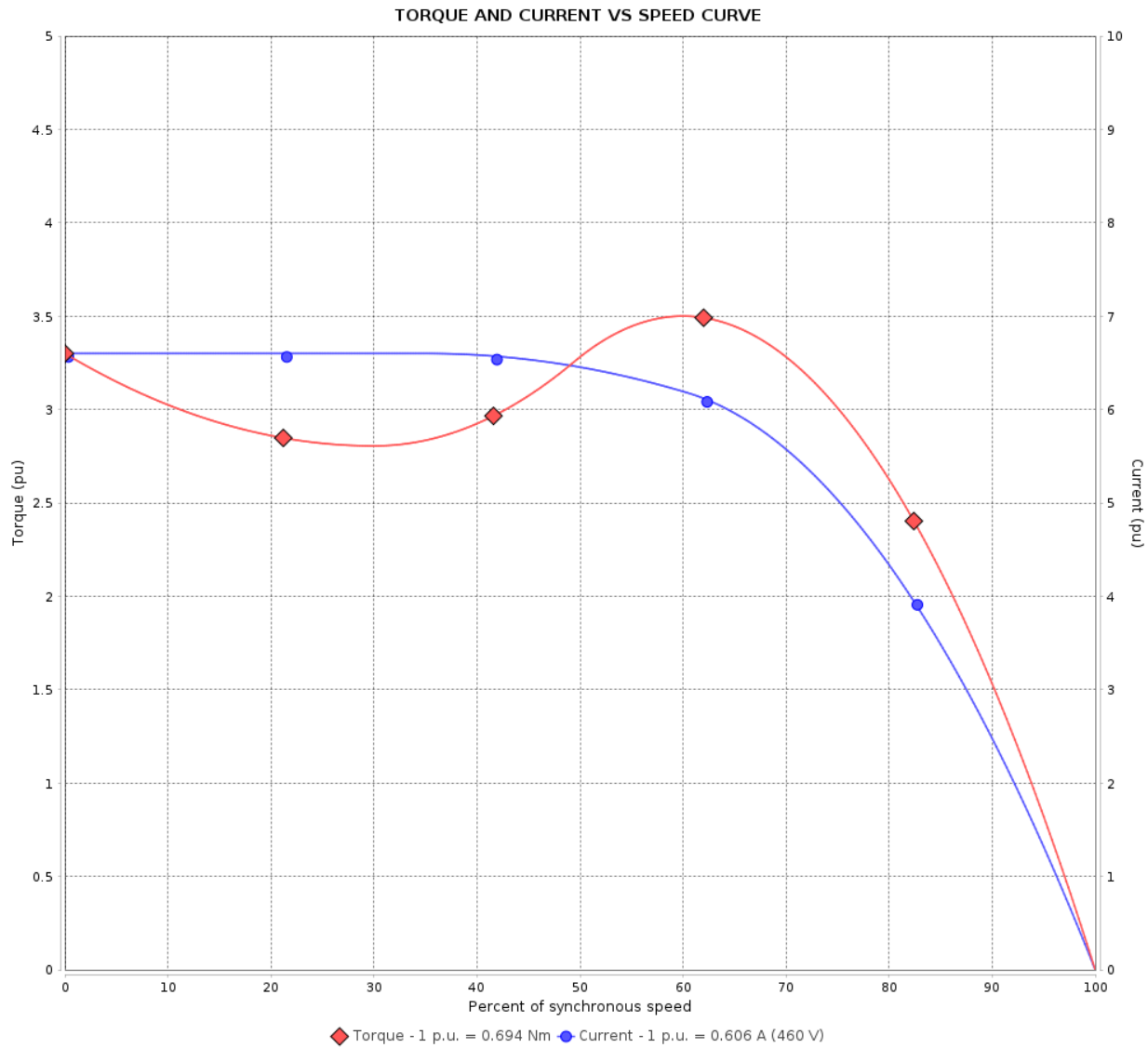
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W22 IE3 Three-Phase

Product code : 12862424



Performance : 460 V 60 Hz 2P

Rated current	: 0.606 A	Moment of inertia (J)	: 0.0002 kgm ²
LRC	: 6.6	Duty cycle	: S1
Rated torque	: 0.694 Nm	Insulation class	: F
Locked rotor torque	: 330 %	Service factor	: 1.00
Breakdown torque	: 350 %	Temperature rise	: 80 K
Rated speed	: 3440 rpm	Design	: N

Locked rotor time : 18s (cold) 10s (hot)

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LOAD PERFORMANCE CURVE

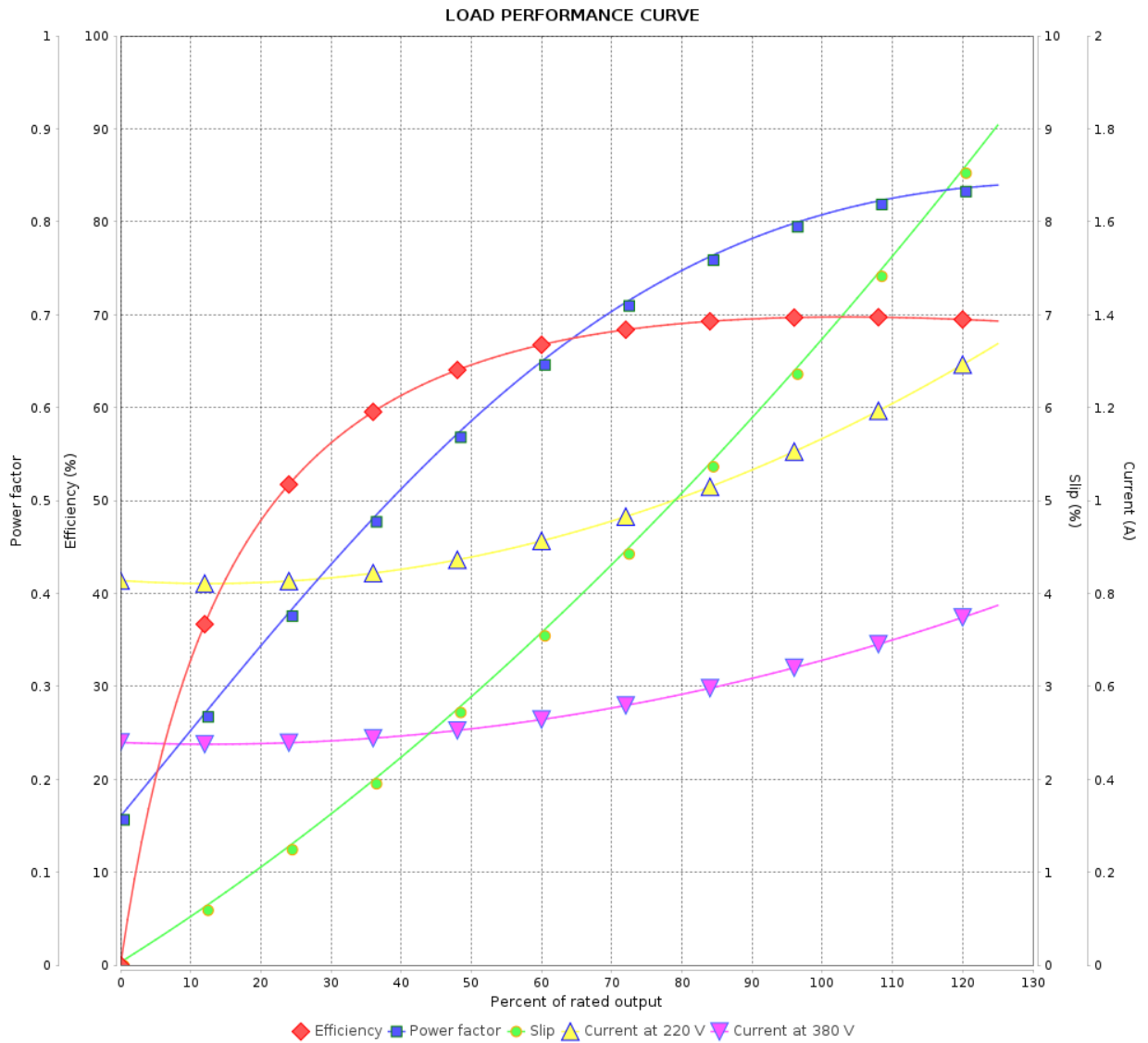
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W22 IE3 Three-Phase

Product code : 12862424



Performance : 220/380 V 50 Hz 2P

Rated current : 1.16/0.673 A
 LRC : 5.3
 Rated torque : 0.855 Nm
 Locked rotor torque : 229 %
 Breakdown torque : 240 %
 Rated speed : 2795 rpm

Moment of inertia (J) : 0.0002 kgm²
 Duty cycle : S1
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : N

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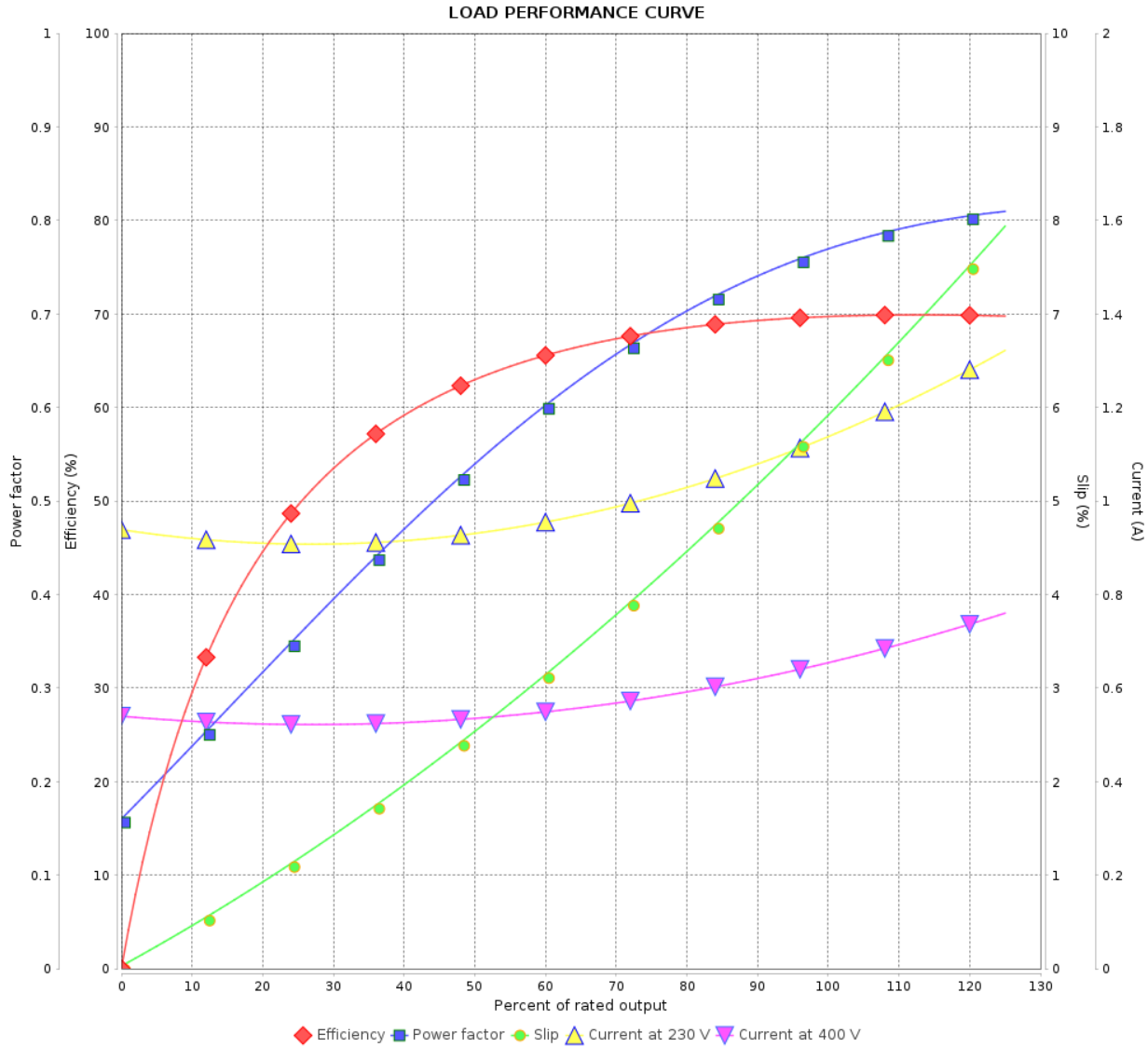
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Moment of inertia (J) : 0.0002 kgm²
 Duty cycle : S1
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : N

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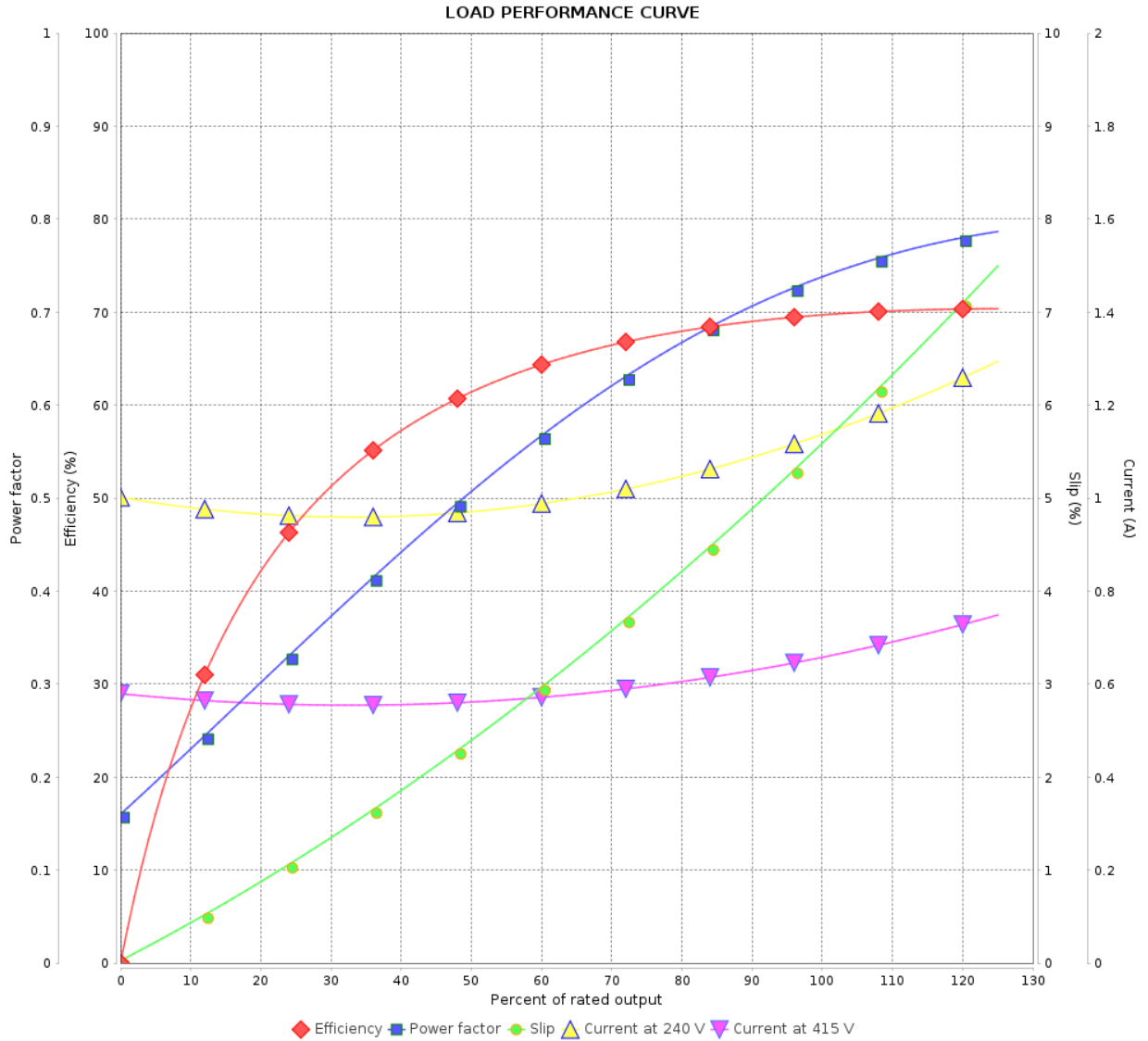
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Performance : 240/415 V 50 Hz 2P

Rated current : 1.17/0.674 A
 LRC : 5.7
 Rated torque : 0.844 Nm
 Locked rotor torque : 280 %
 Breakdown torque : 290 %
 Rated speed : 2830 rpm

Moment of inertia (J) : 0.0002 kgm²
 Duty cycle : S1
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : N

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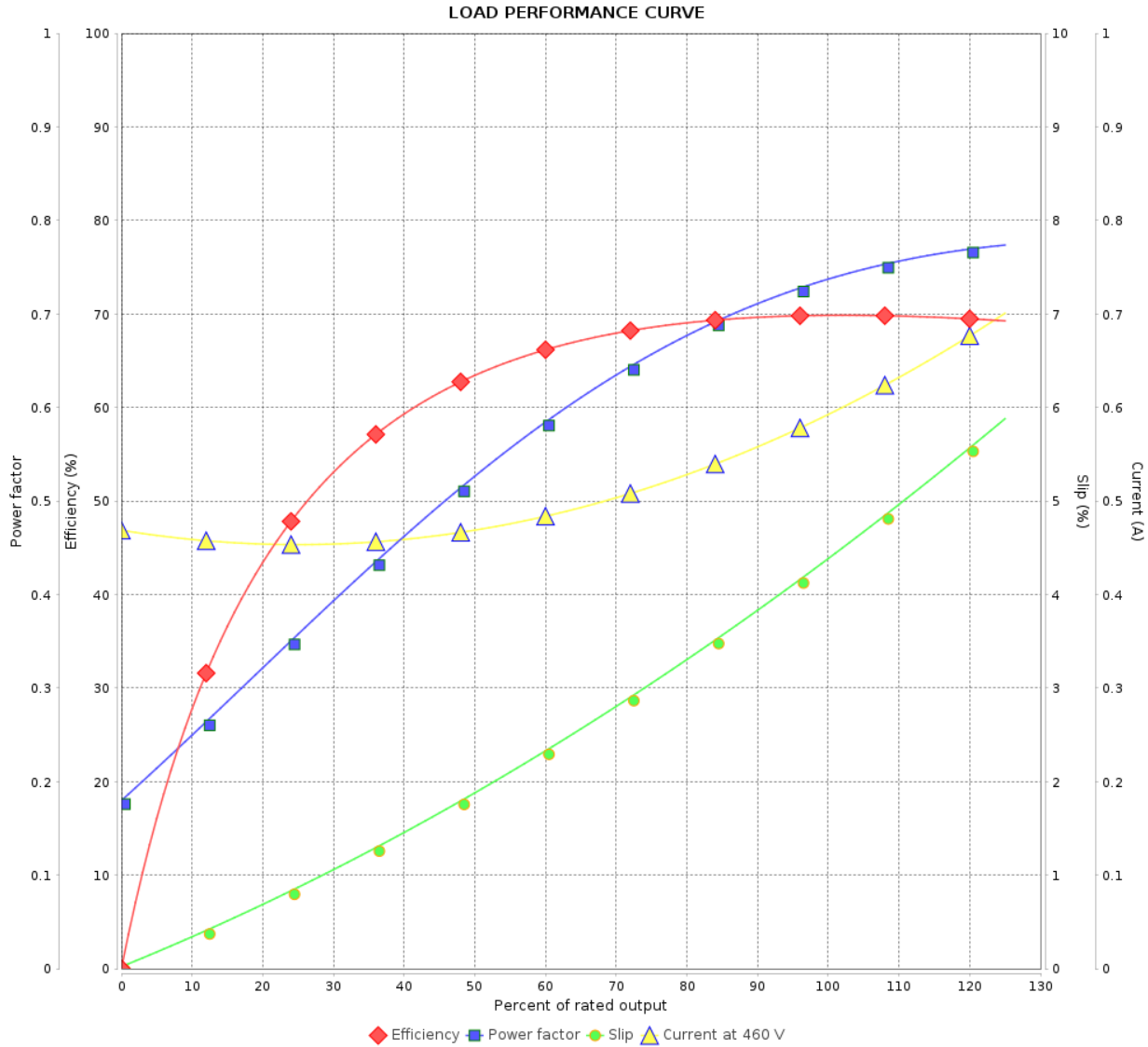
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 Duty cycle : S1
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 Service factor : 1.00
 Temperature rise : 80 K
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THERMAL LIMIT CURVE

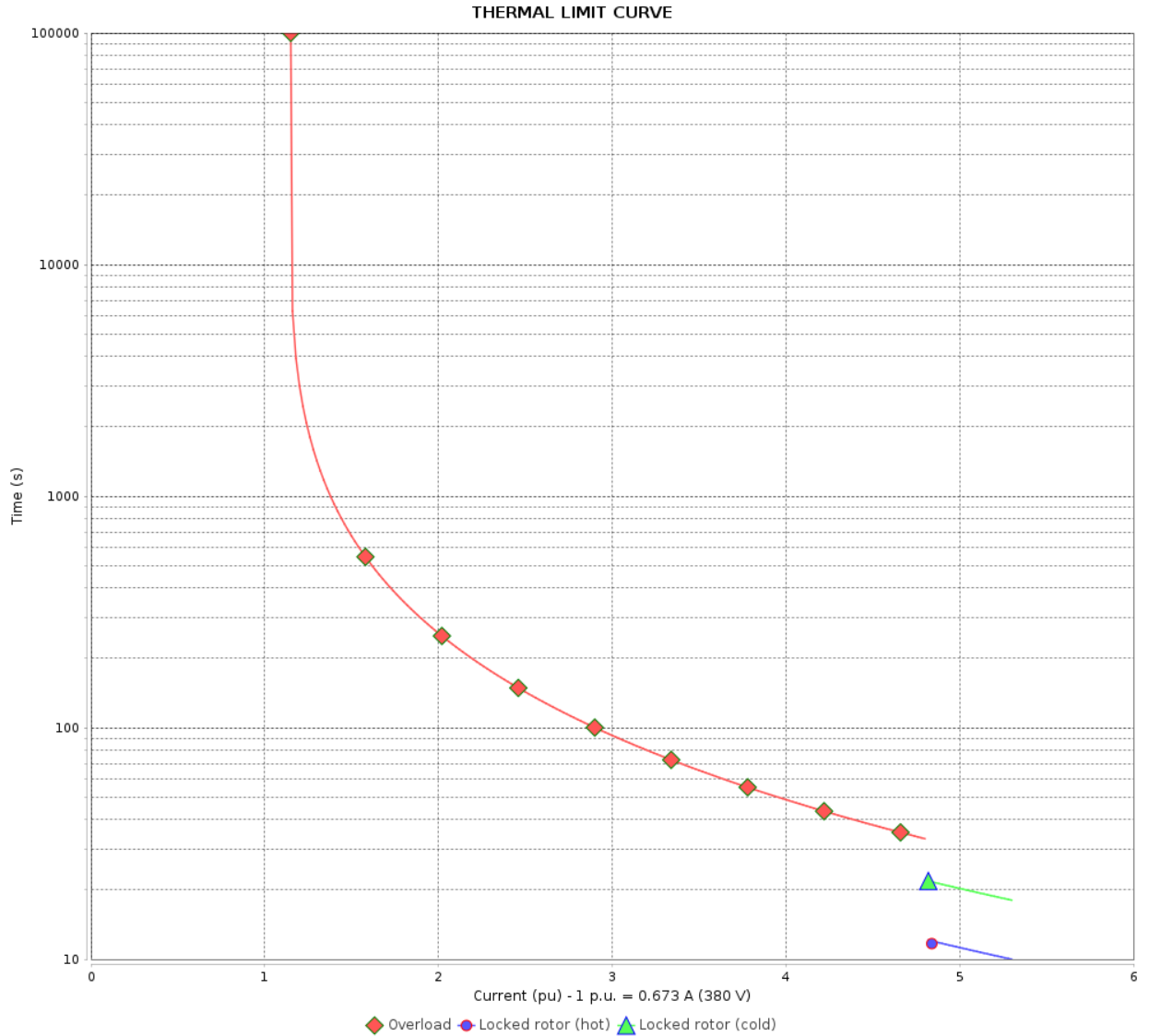
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 Duty cycle : S1
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : N

Heating constant

Cooling constant

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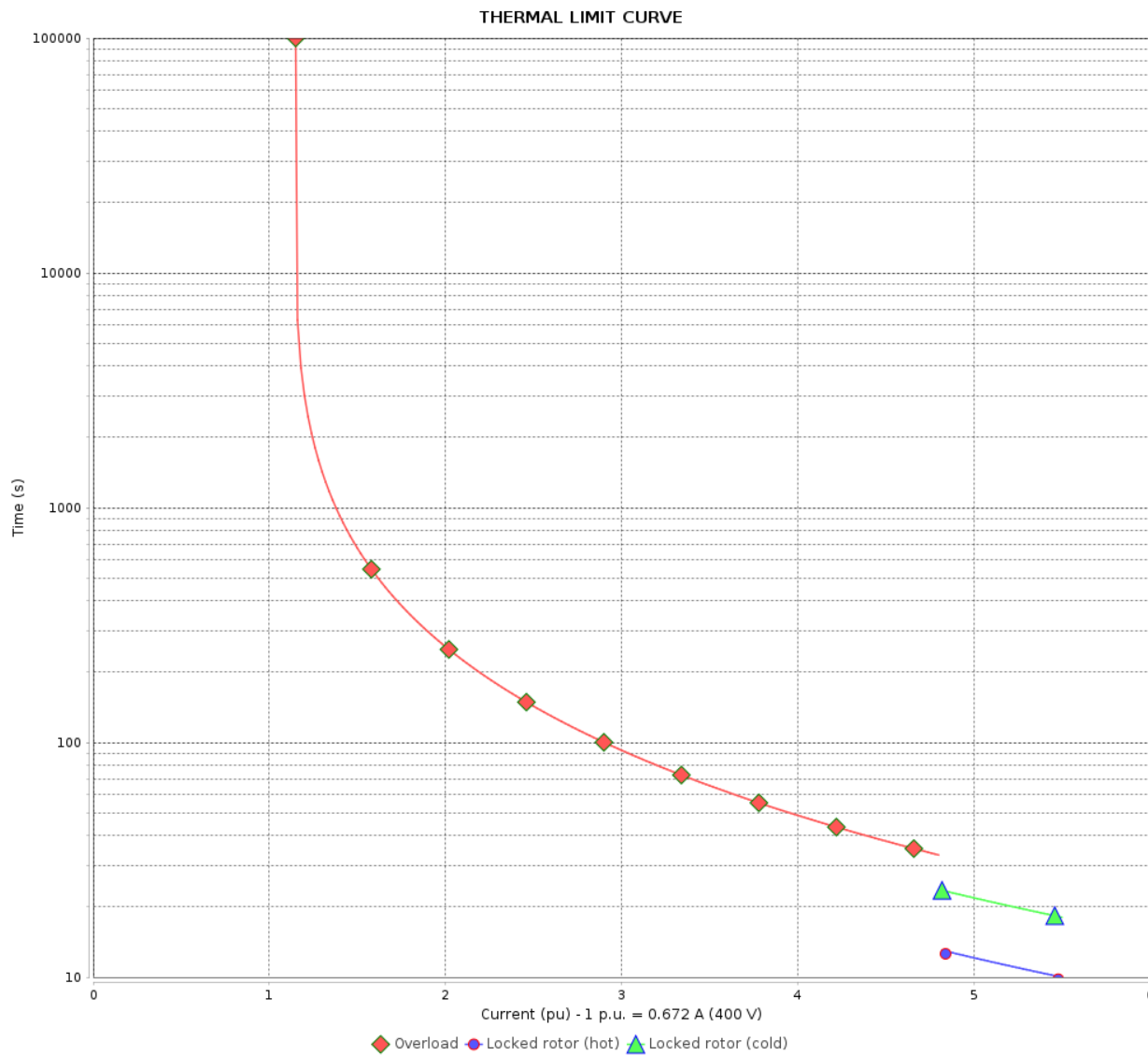
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 Temperature rise : 80 K
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Heating constant
 Cooling constant

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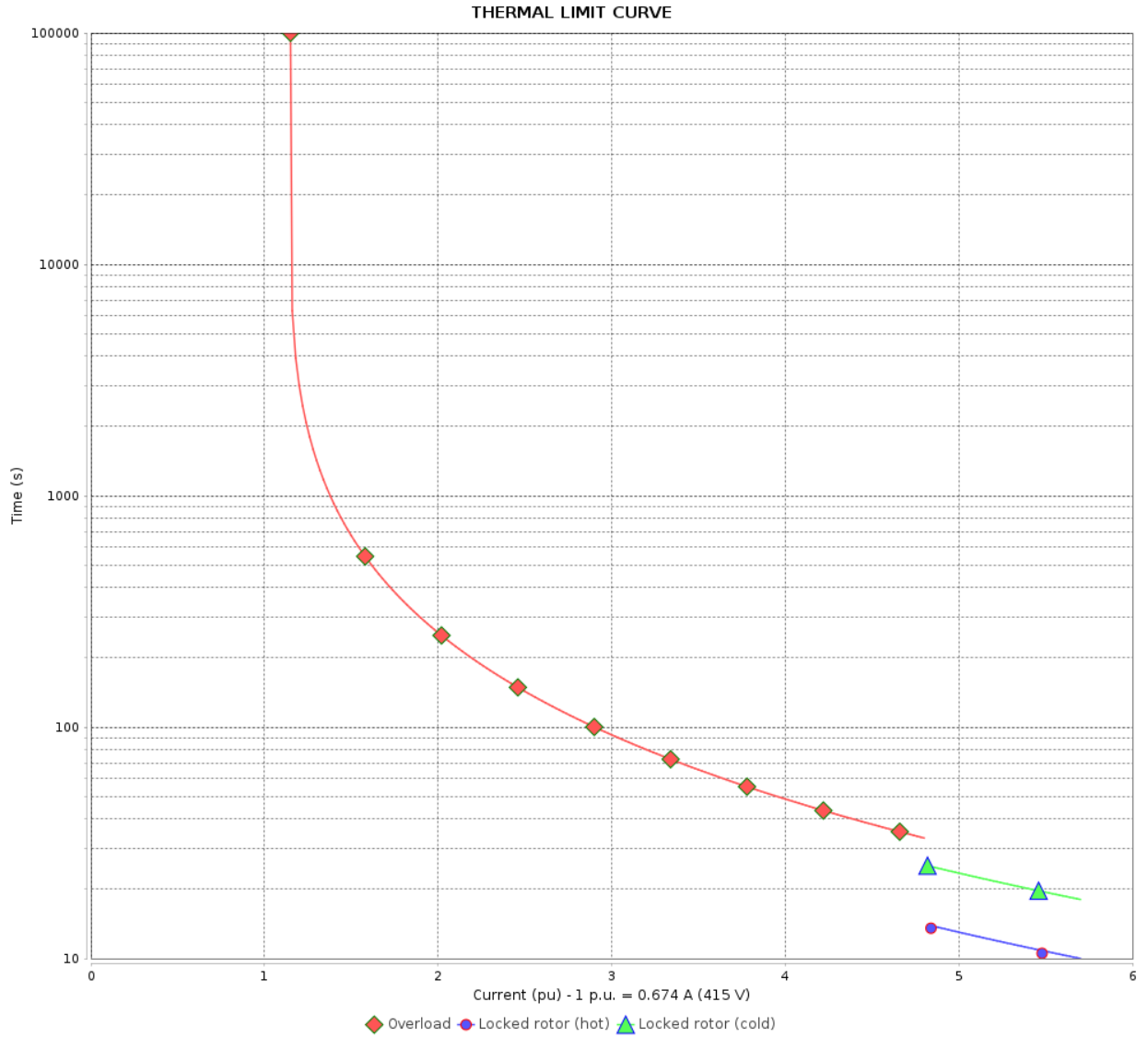
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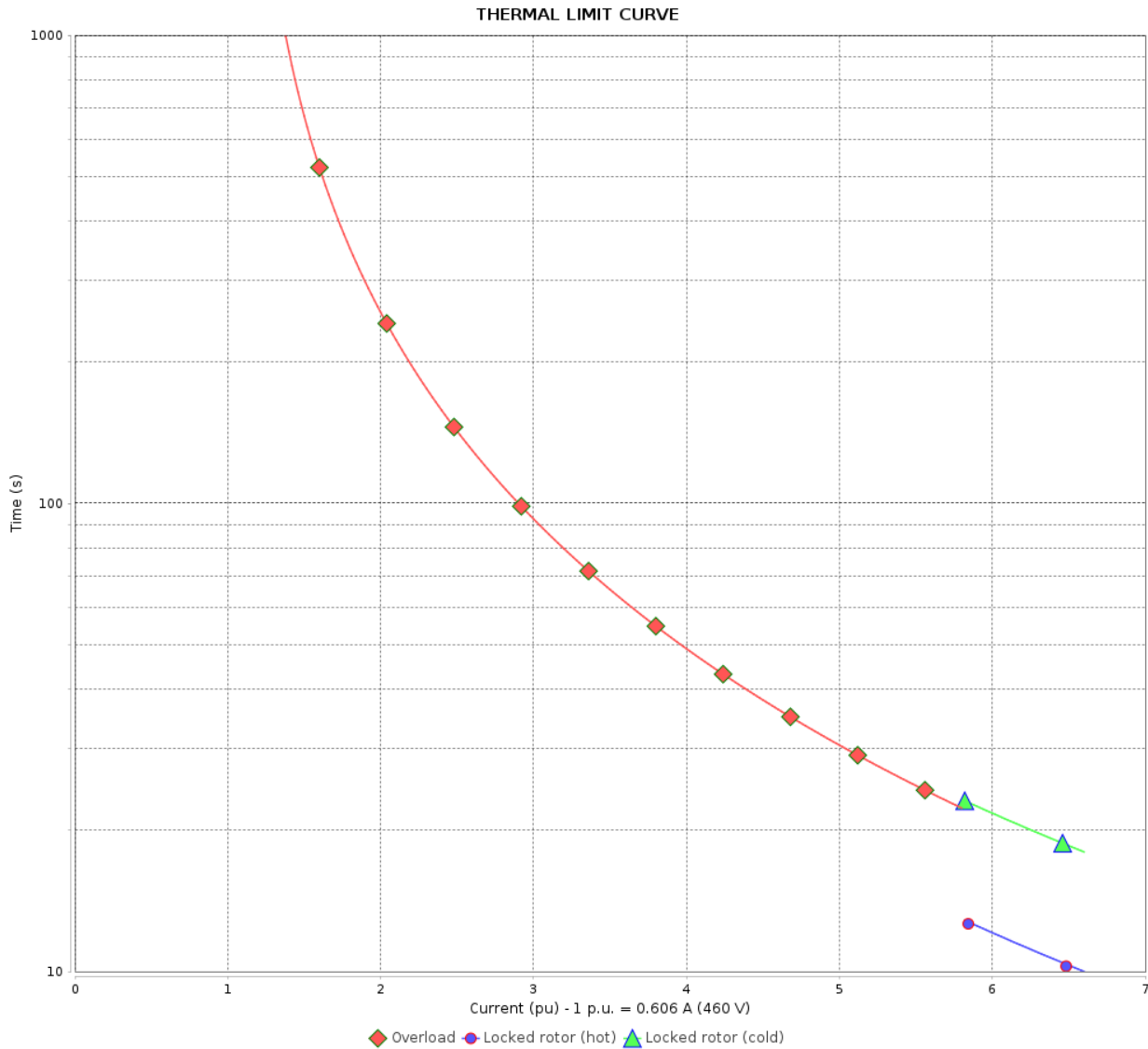
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Rated torque	: 0.694 Nm	Insulation class	: F
Locked rotor torque	: 330 %	Service factor	: 1.00
Breakdown torque	: 350 %	Temperature rise	: 80 K
Rated speed	: 3440 rpm	Design	: N

Heating constant

Cooling constant

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VFD OPERATION CURVE

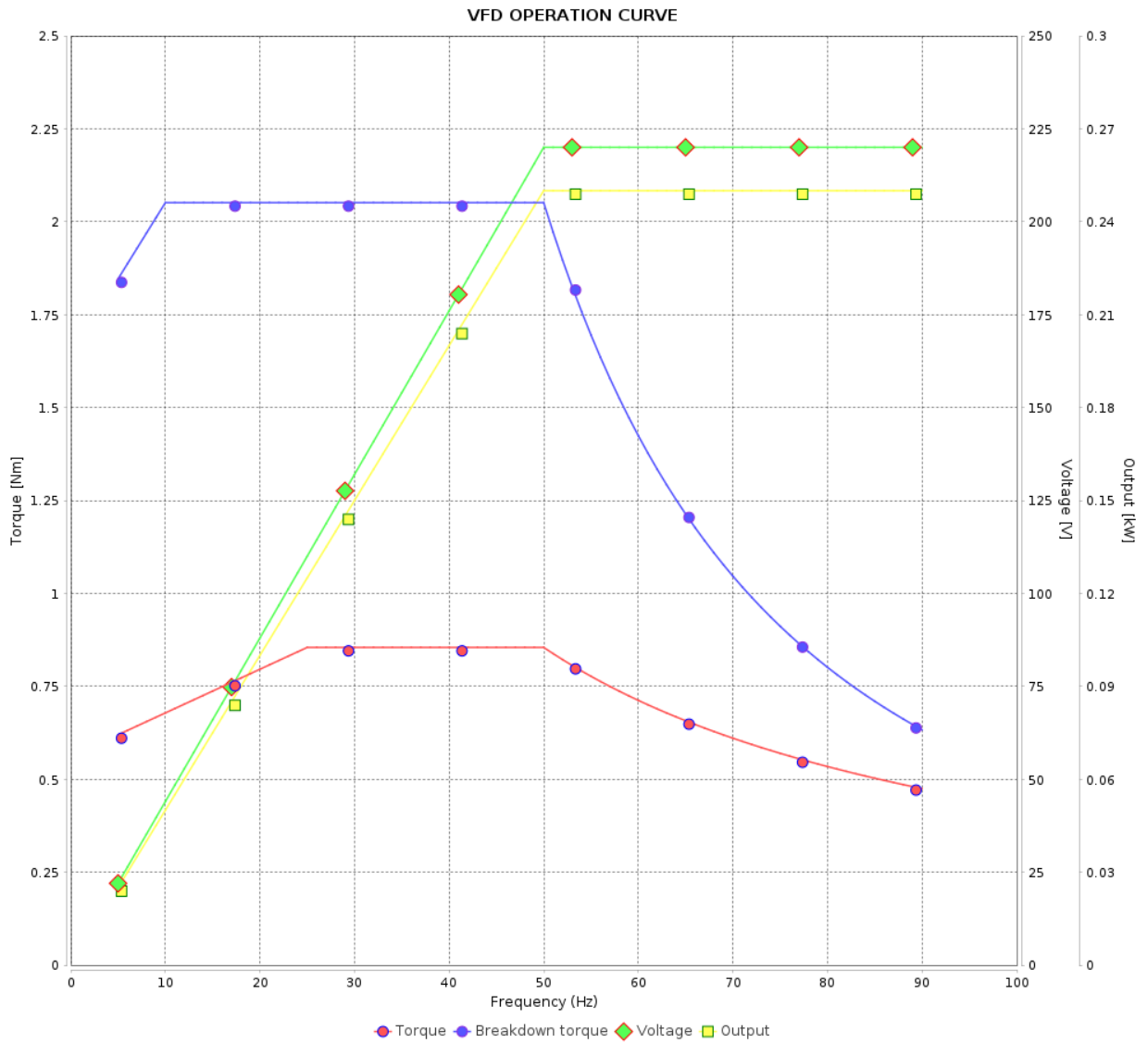
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 Insulation class : F
 Service factor : 1.00
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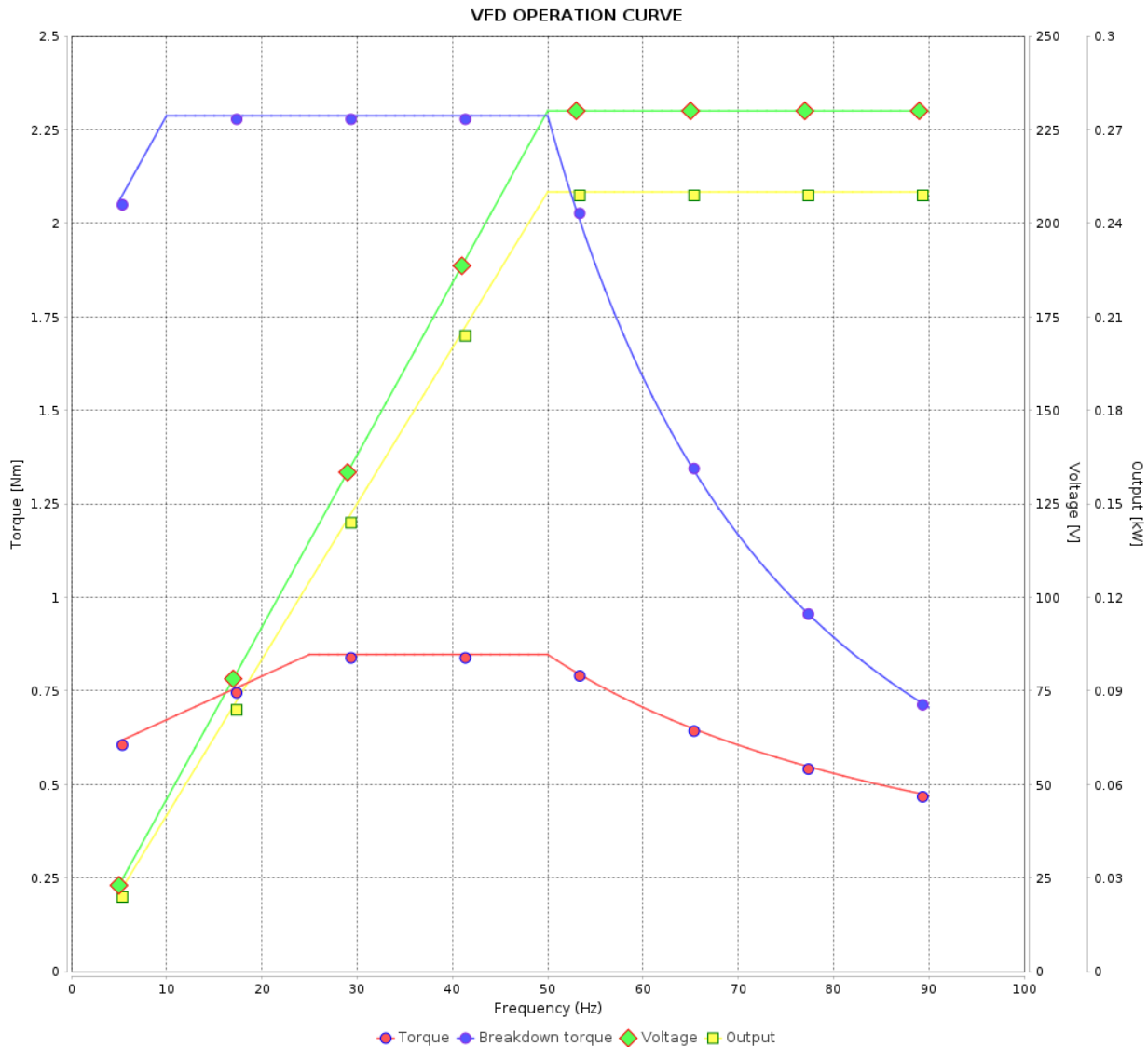
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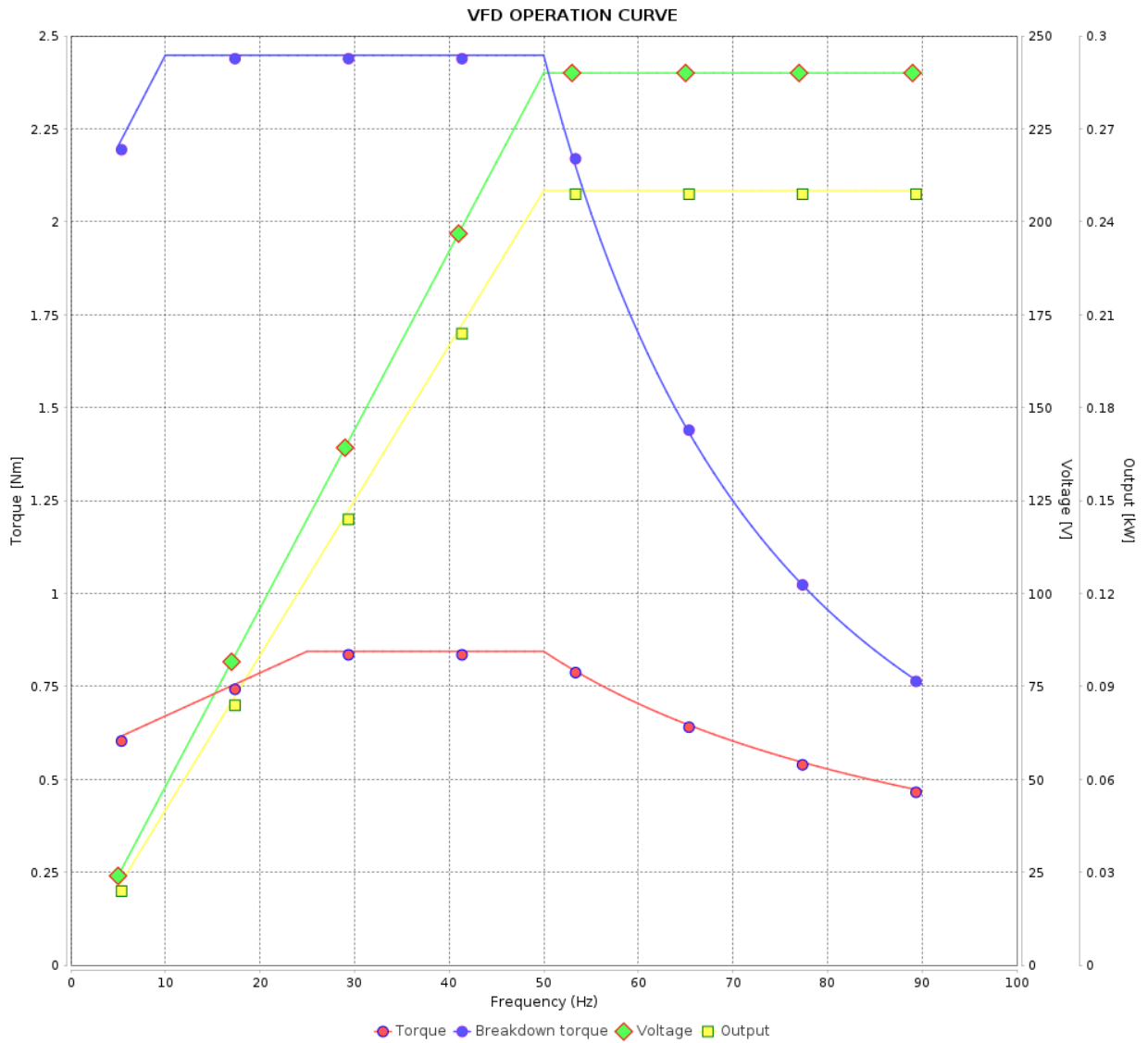
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VFD OPERATION CURVE

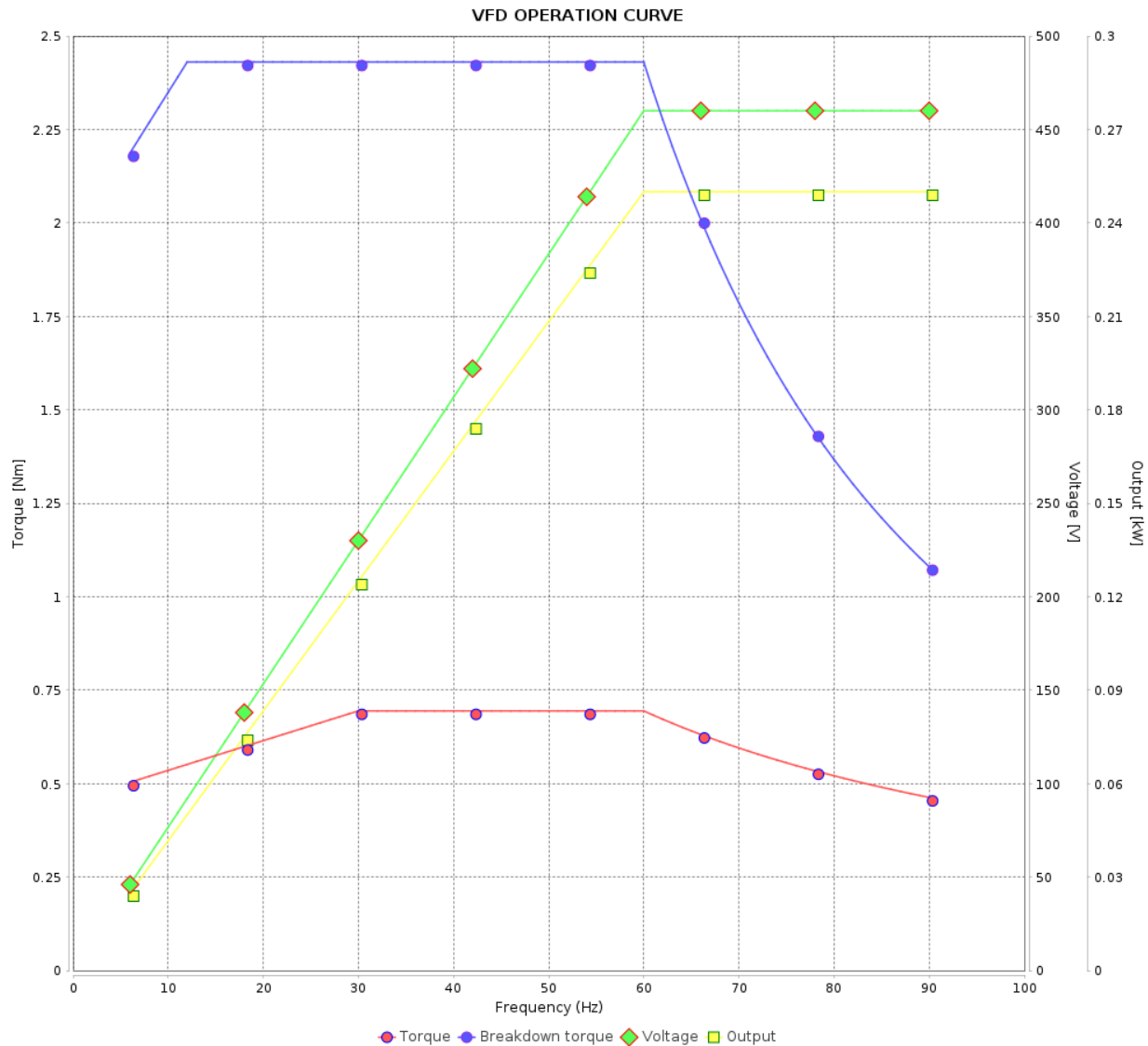
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