

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer		: Astraprom d.o.o.			
Product line		: Multimounting IE2 Three-Phase		Product code : 10016425	
Frame	: 71	Cooling method	: IC411 - TEFC		
Insulation class	: F	Mounting	: B3T		
Duty cycle	: 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	: 7.4 kg		
Protection degree	: IP55	Moment of inertia (J)	: 0.0007 kgm ²		
Design	: N				
Output [kW]	0.25	0.25	0.25	0.25	0.25
Poles	4	4	4	4	4
Frequency [Hz]	50	50	50	50	60
Rated voltage [V]	220/380	230/400	240/415	460	
Rated current [A]	1.29/0.749	1.29/0.742	1.27/0.736	0.669	
L. R. Amperes [A]	5.82/3.37	5.81/3.34	5.09/2.94	2.94	
LRC [A]	4.5	4.5	4.0	4.4	
No load current [A]	0.950/0.550	1.04/0.600	1.11/0.640	0.550	
Rated speed [RPM]	1400	1410	1420	1730	
Slip [%]	6.67	6.00	5.33	3.89	
Rated torque [kgfm]	0.174	0.173	0.171	0.141	
Locked rotor torque [%]	180	200	229	240	
Breakdown torque [%]	200	220	240	270	
Service factor	1.00	1.00	1.00	1.00	
Temperature rise	80 K	80 K	80 K	80 K	
Locked rotor time	122s (cold) 68s (hot)	122s (cold) 68s (hot)	122s (cold) 68s (hot)	122s (cold) 68s (hot)	
Noise level ²	43.0 dB(A)	43.0 dB(A)	43.0 dB(A)	47.0 dB(A)	
Efficiency (%)	25%	0.000	0.000	0.000	
	50%	60.0	59.0	57.8	62.0
	75%	65.0	65.0	64.5	67.0
	100%	68.5	68.5	68.5	70.0
Power Factor	25%	0.00	0.00	0.00	
	50%	0.53	0.49	0.46	0.48
	75%	0.66	0.62	0.59	0.59
	100%	0.74	0.71	0.69	0.67
Losses at normative operating points (speed;torque), in percentage of rated output power					
Losses (%)	P1 (0,9;1,0)	56.3	56.3	56.3	52.5
	P2 (0,5;1,0)	53.8	53.8	53.8	50.1
	P3 (0,25;1,0)	53.9	53.9	53.9	50.2
	P4 (0,9;0,5)	33.8	33.8	33.8	31.5
	P5 (0,5;0,5)	24.9	24.9	24.9	23.2
	P6 (0,5;0,25)	20.8	20.8	20.8	19.4
	P7 (0,25;0,25)	14.7	14.7	14.7	13.7
Bearing type	: Drive end : 6203 ZZ	Non drive end : 6202 ZZ	Foundation loads		
Sealing	: V'Ring	V'Ring	Max. traction	: 9 kgf	
Lubrication interval	: -	-	Max. compression	: 17 kgf	
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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TORQUE AND CURRENT VS SPEED CURVE

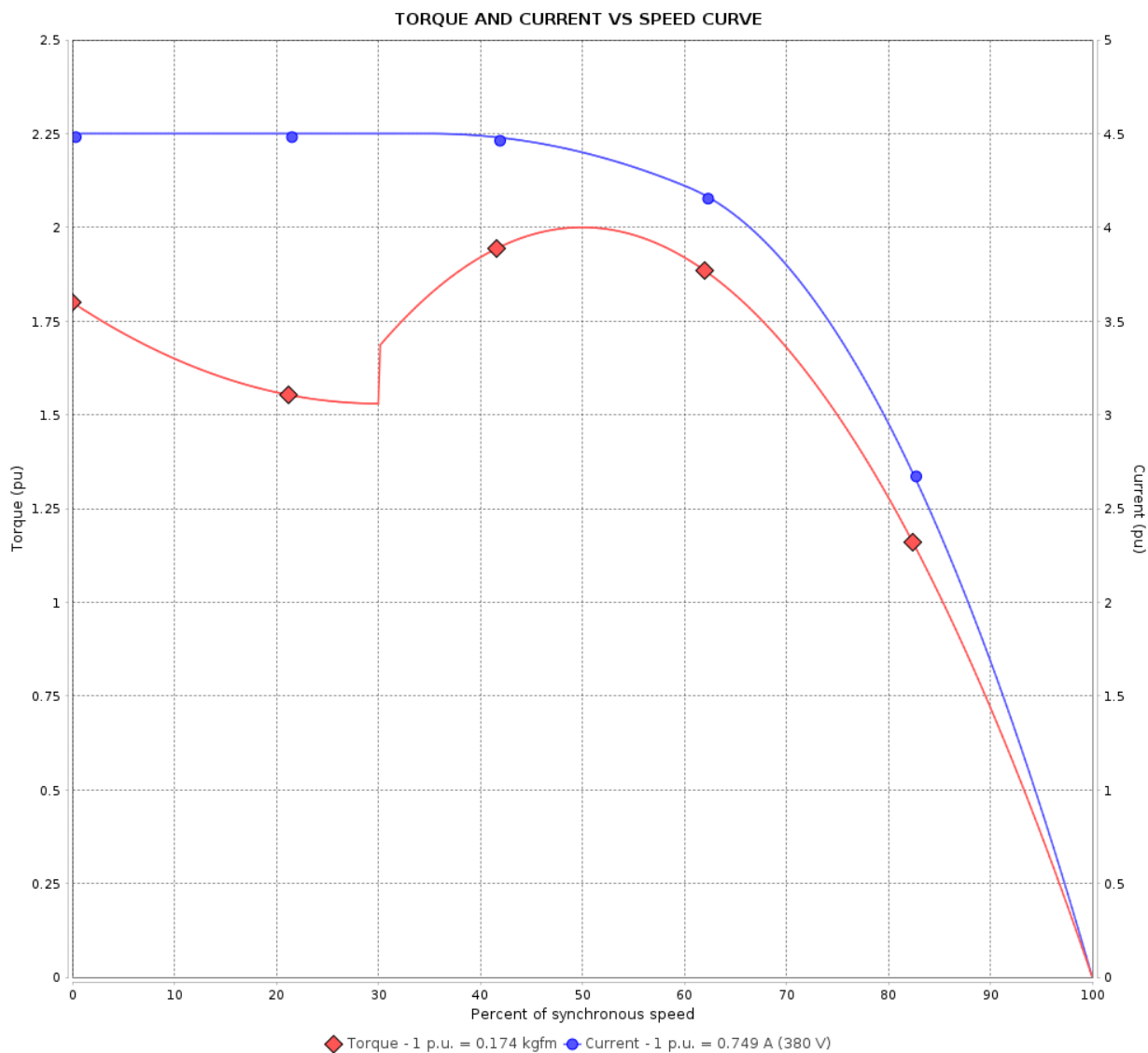


Three Phase Induction Motor - Squirrel Cage

Customer : Astraprom d.o.o.

Product line : Multimounting IE2 Three-Phase

Product code : 10016425



Performance : 220/380 V 50 Hz 4P

Rated current	: 1.29/0.749 A	Moment of inertia (J)	: 0.0007 kgm ²
LRC	: 4.5	Duty cycle	: S1
Rated torque	: 0.174 kgfm	Insulation class	: F
Locked rotor torque	: 180 %	Service factor	: 1.00
Breakdown torque	: 200 %	Temperature rise	: 80 K
Rated speed	: 1400 rpm	Design	: N

Locked rotor time : 122s (cold) 68s (hot)

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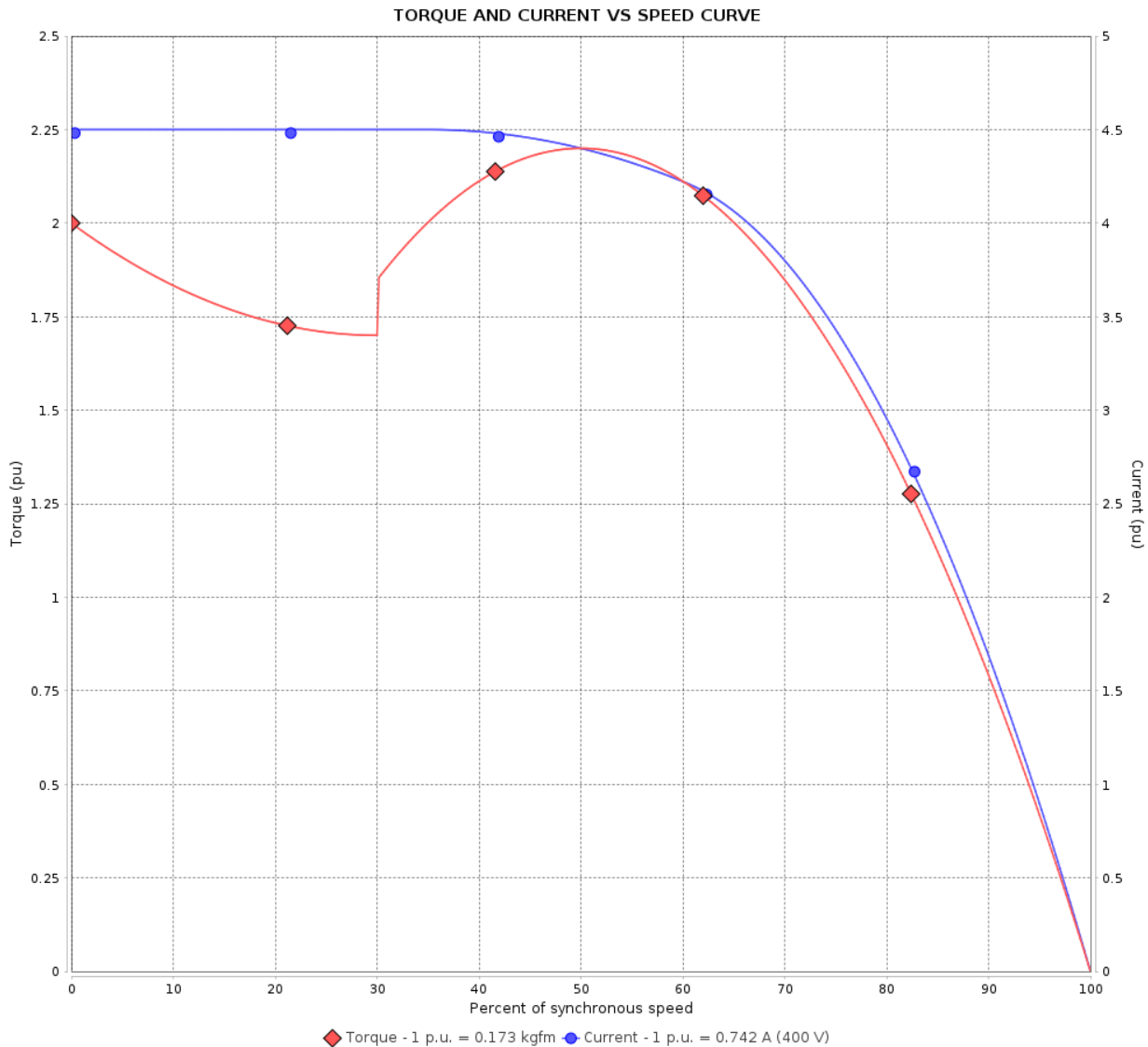
Three Phase Induction Motor - Squirrel Cage



Customer : Astraprom d.o.o.

Product line : Multimounting IE2 Three-Phase

Product code : 10016425



Performance : 230/400 V 50 Hz 4P

Rated current	: 1.29/0.742 A	Moment of inertia (J)	: 0.0007 kgm ²
LRC	: 4.5	Duty cycle	: S1
Rated torque	: 0.173 kgfm	Insulation class	: F
Locked rotor torque	: 200 %	Service factor	: 1.00
Breakdown torque	: 220 %	Temperature rise	: 80 K
Rated speed	: 1410 rpm	Design	: N

Locked rotor time : 122s (cold) 68s (hot)

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TORQUE AND CURRENT VS SPEED CURVE



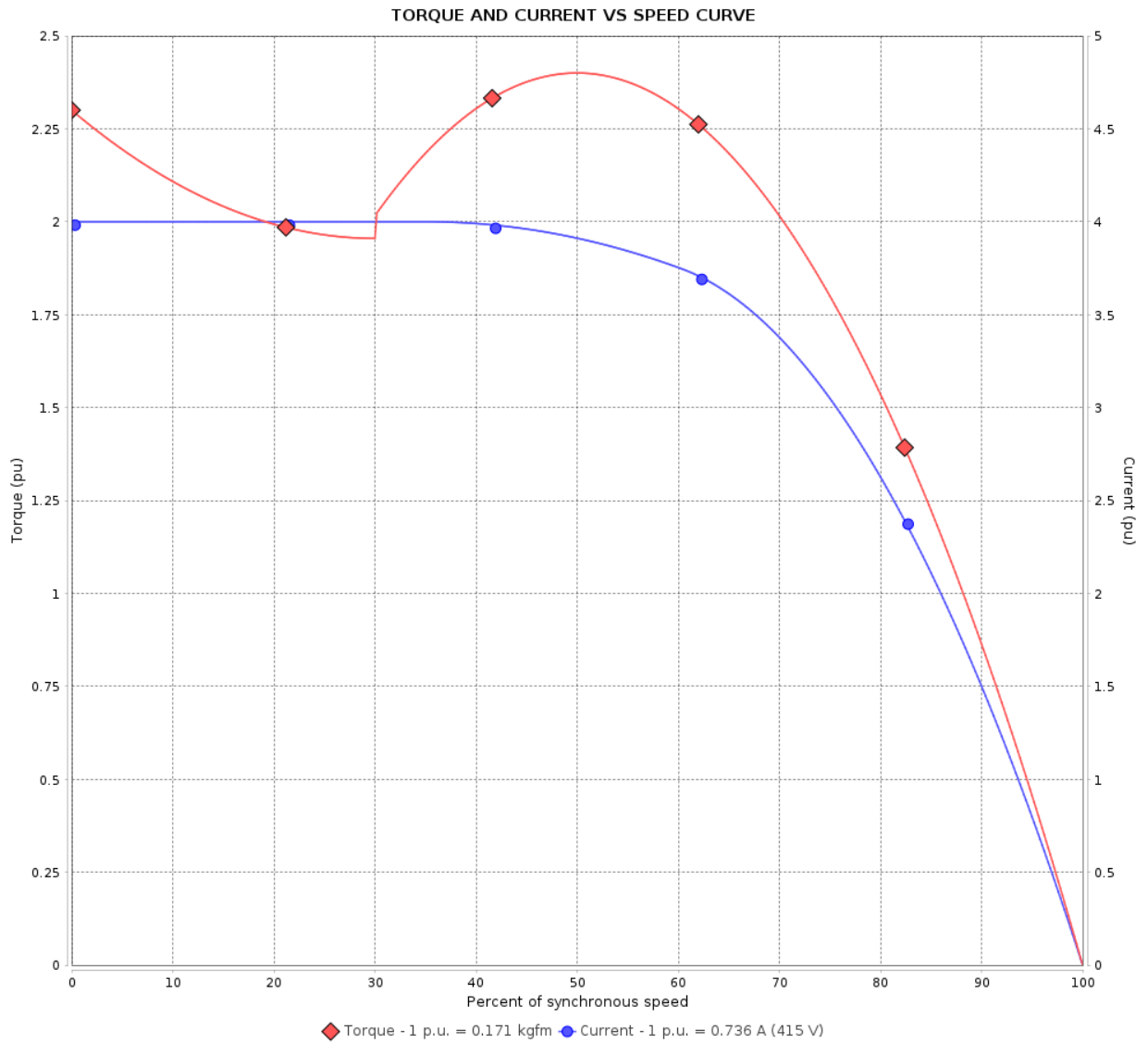
Three Phase Induction Motor - Squirrel Cage

Customer : Astraprom d.o.o.

Product line : Multimounting IE2 Three-Phase

Product code :

10016425



Performance : 240/415 V 50 Hz 4P

Rated current : 1.27/0.736 A
 LRC : 4.0
 Rated torque : 0.171 kgfm
 Locked rotor torque : 229 %
 Breakdown torque : 240 %
 Rated speed : 1420 rpm

Moment of inertia (J) : 0.0007 kgm²
 Duty cycle : S1
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : N

Locked rotor time : 122s (cold) 68s (hot)

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TORQUE AND CURRENT VS SPEED CURVE

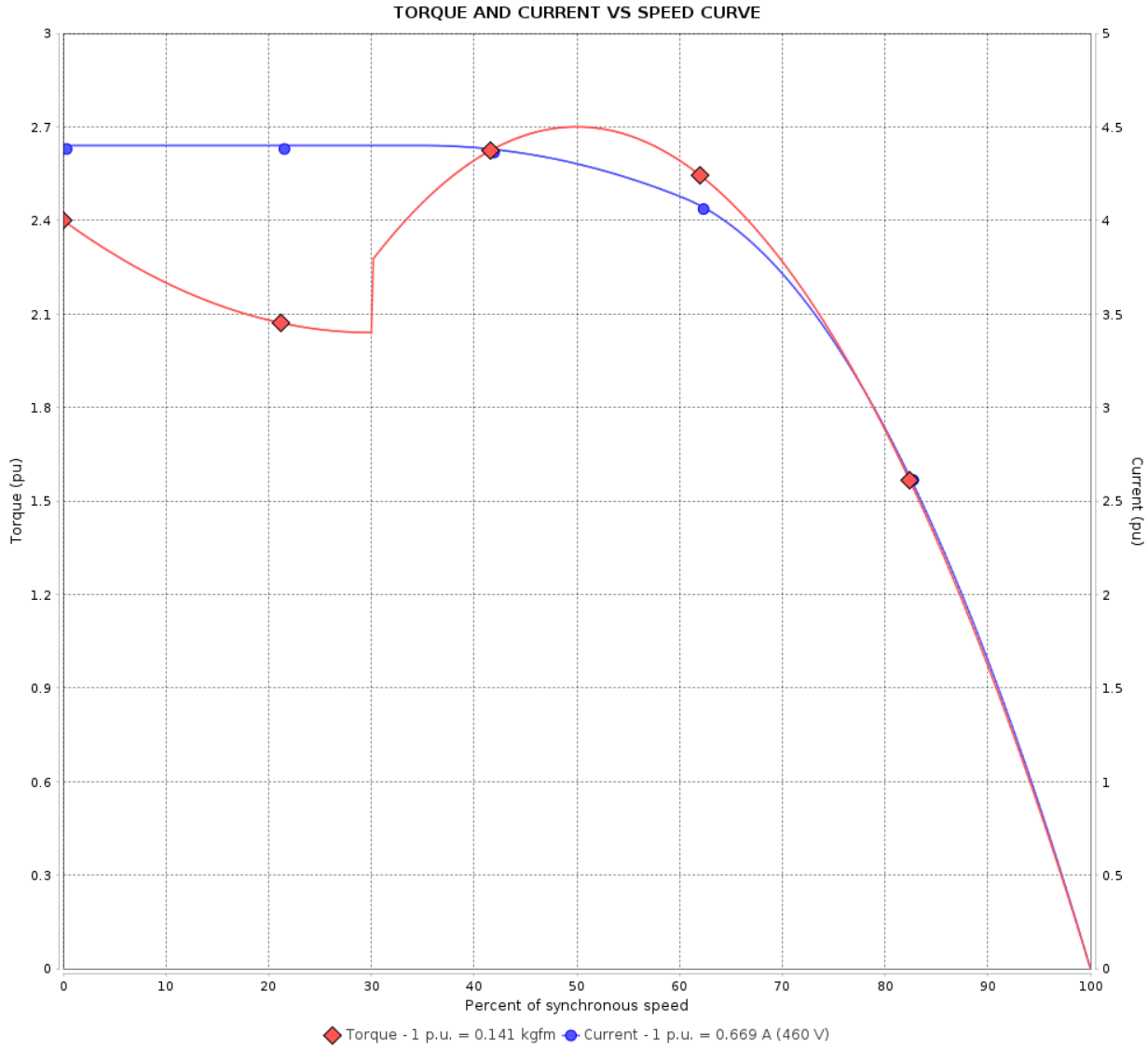
Three Phase Induction Motor - Squirrel Cage



Customer : Astraprom d.o.o.

Product line : Multimounting IE2 Three-Phase

Product code : 10016425



Performance : 460 V 60 Hz 4P

Rated current	: 0.669 A	Moment of inertia (J)	: 0.0007 kgm ²
LRC	: 4.4	Duty cycle	: S1
Rated torque	: 0.141 kgfm	Insulation class	: F
Locked rotor torque	: 240 %	Service factor	: 1.00
Breakdown torque	: 270 %	Temperature rise	: 80 K
Rated speed	: 1730 rpm	Design	: N

Locked rotor time : 122s (cold) 68s (hot)

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Three Phase Induction Motor - Squirrel Cage

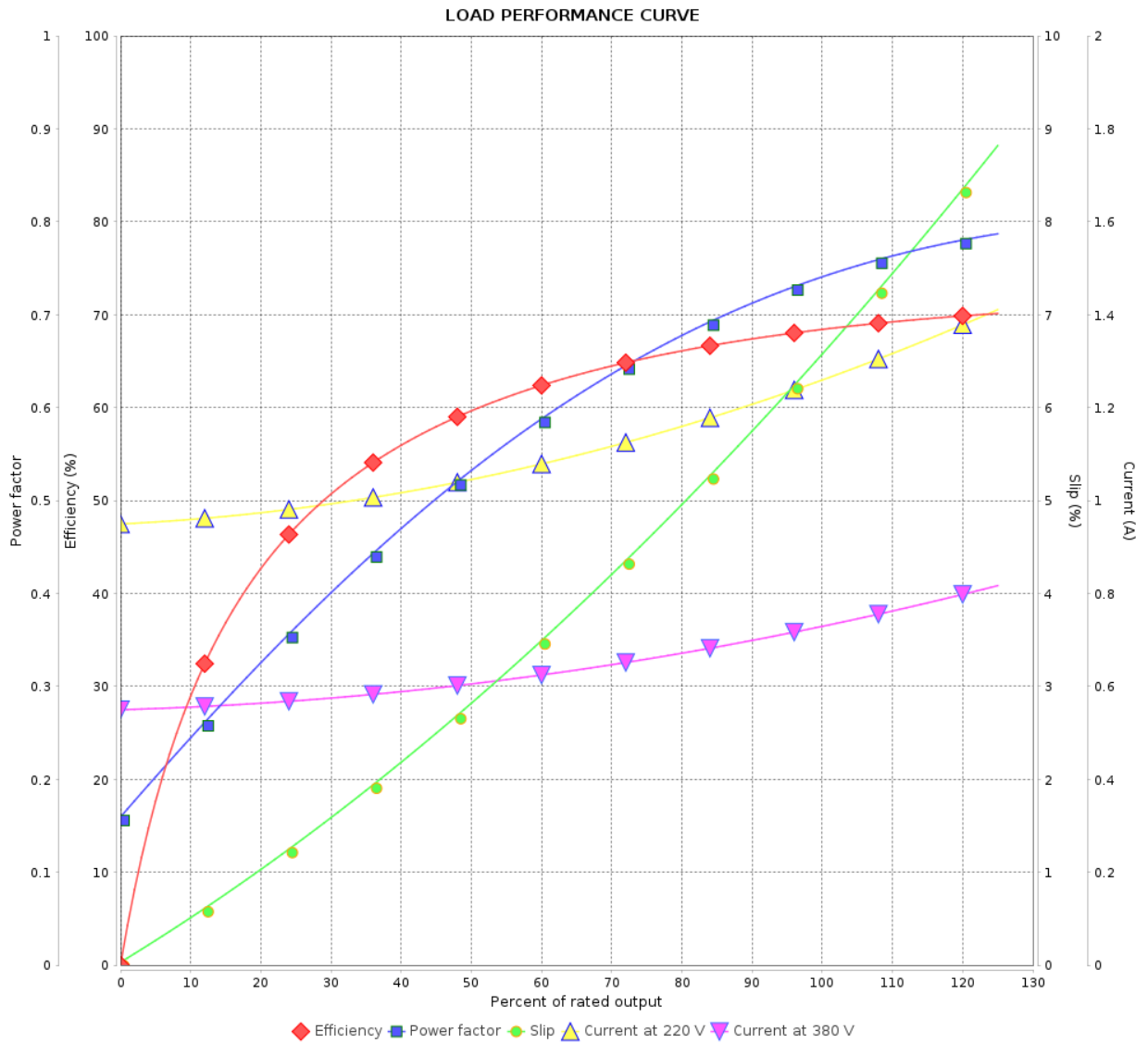


Customer : Astraprom d.o.o.

Product line : Multimounting IE2 Three-Phase

Product code :

10016425



Performance : 220/380 V 50 Hz 4P

Rated current : 1.29/0.749 A
 LRC : 4.5
 Rated torque : 0.174 kgfm
 Locked rotor torque : 180 %
 Breakdown torque : 200 %
 Rated speed : 1400 rpm

Moment of inertia (J) : 0.0007 kgm²
 Duty cycle : S1
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : N

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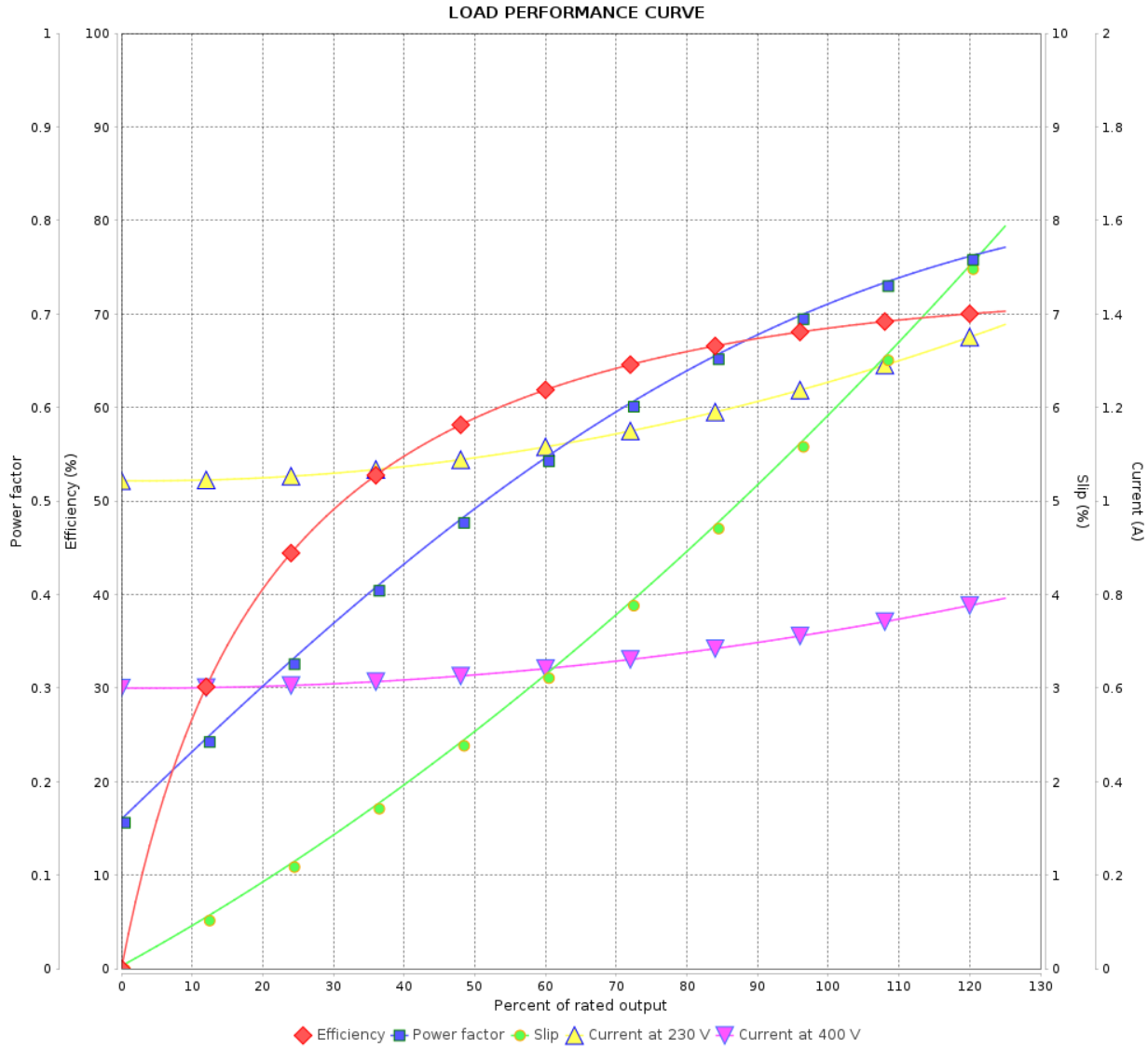
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Performance : 230/400 V 50 Hz 4P

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 LRC : 4.5
 Rated torque : 0.173 kgfm
 Locked rotor torque : 200 %
 Breakdown torque : 220 %
 Rated speed : 1410 rpm

Moment of inertia (J) : 0.0007 kgm²
 Duty cycle : S1
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : N

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Three Phase Induction Motor - Squirrel Cage

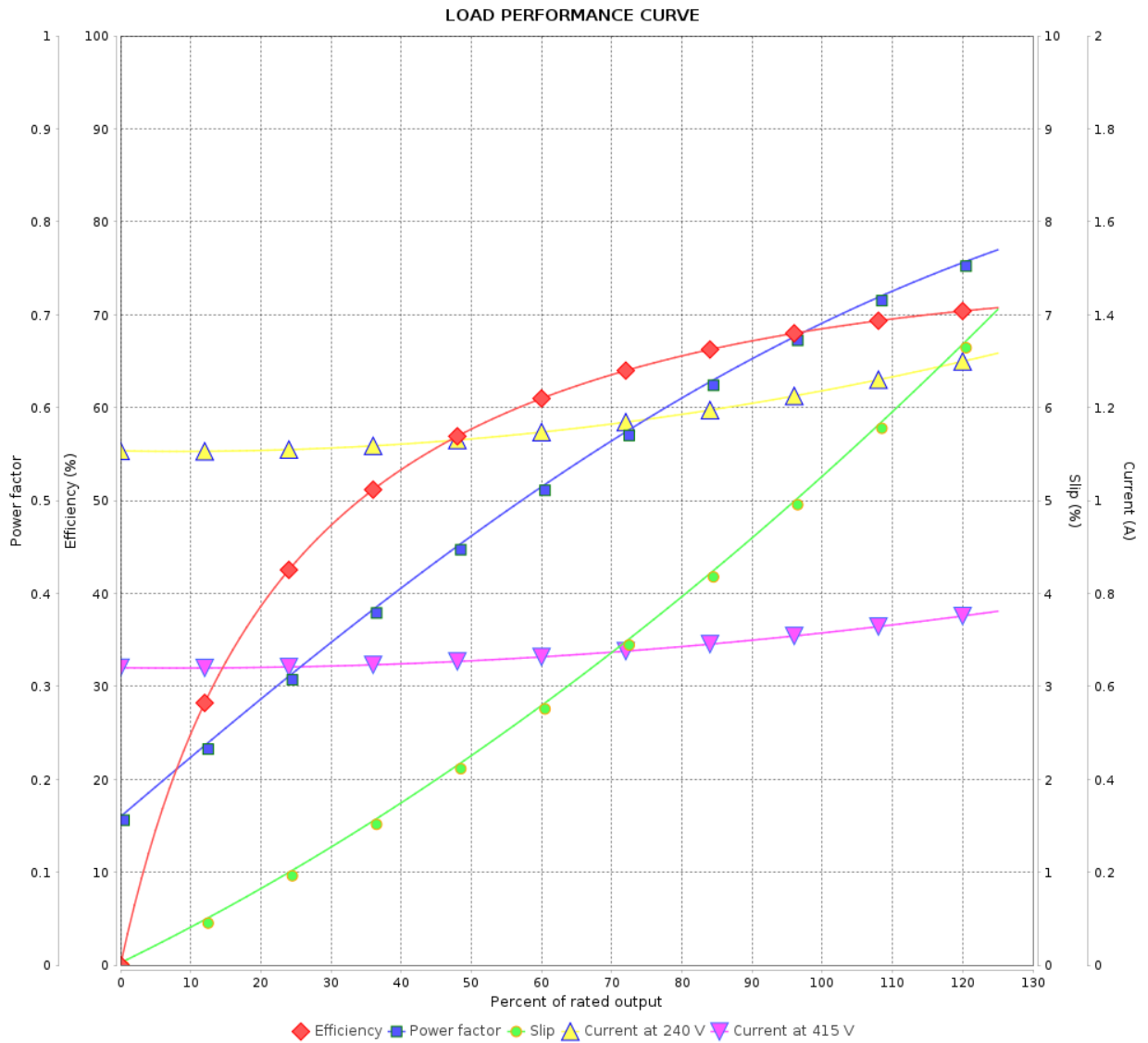


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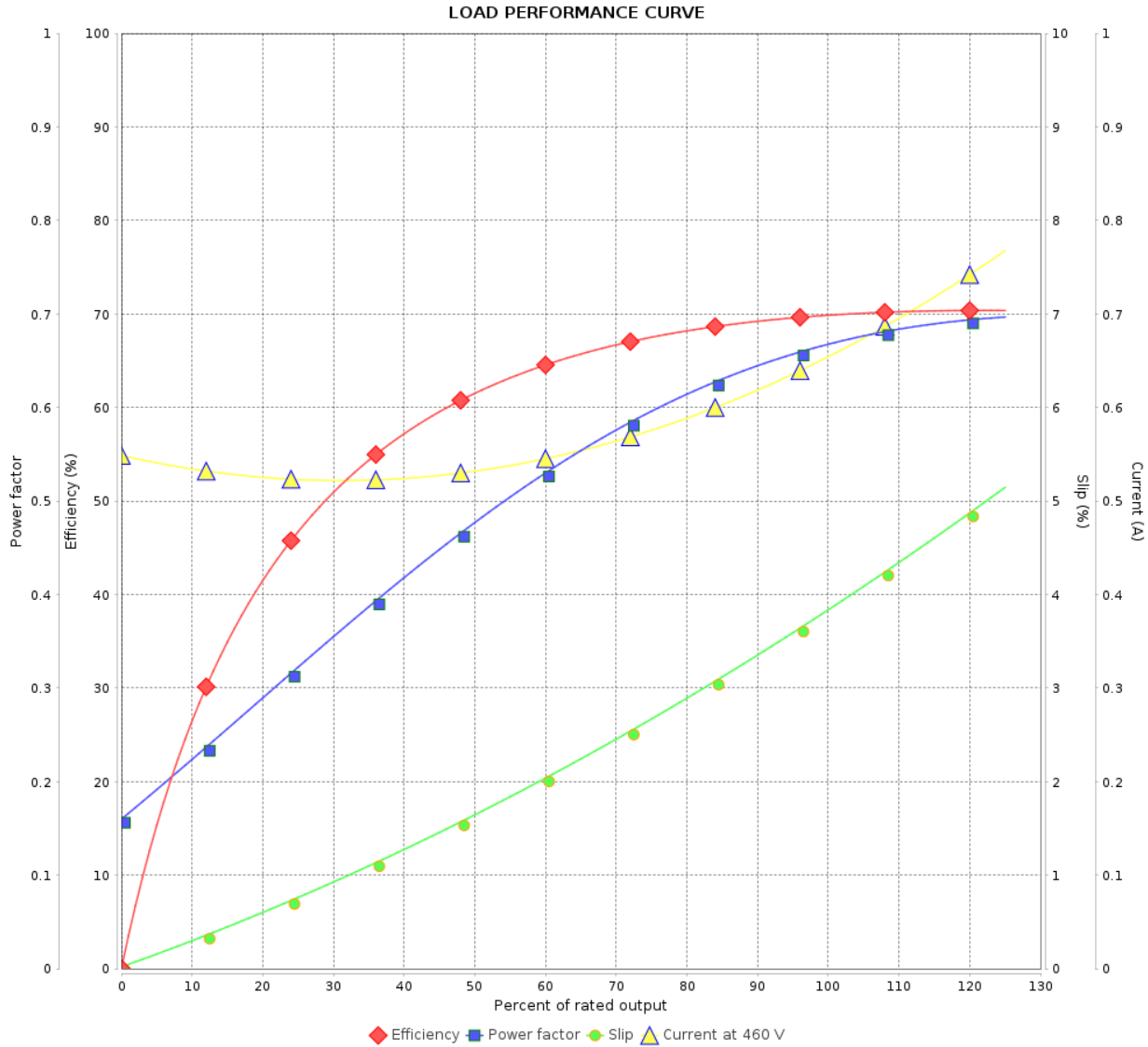
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 Duty cycle : S1
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
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THERMAL LIMIT CURVE

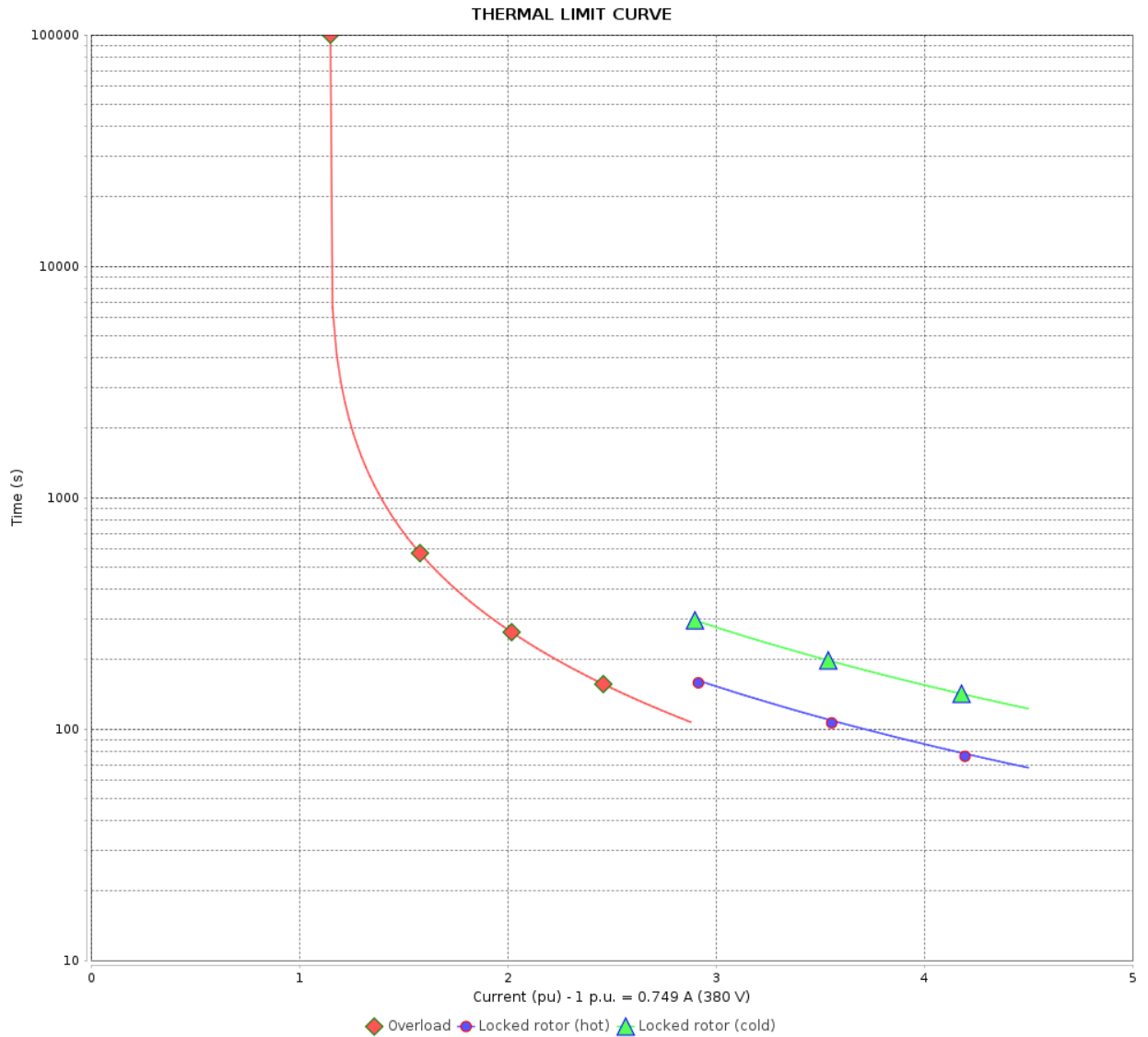
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 Duty cycle : S1
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : N

Heating constant

Cooling constant

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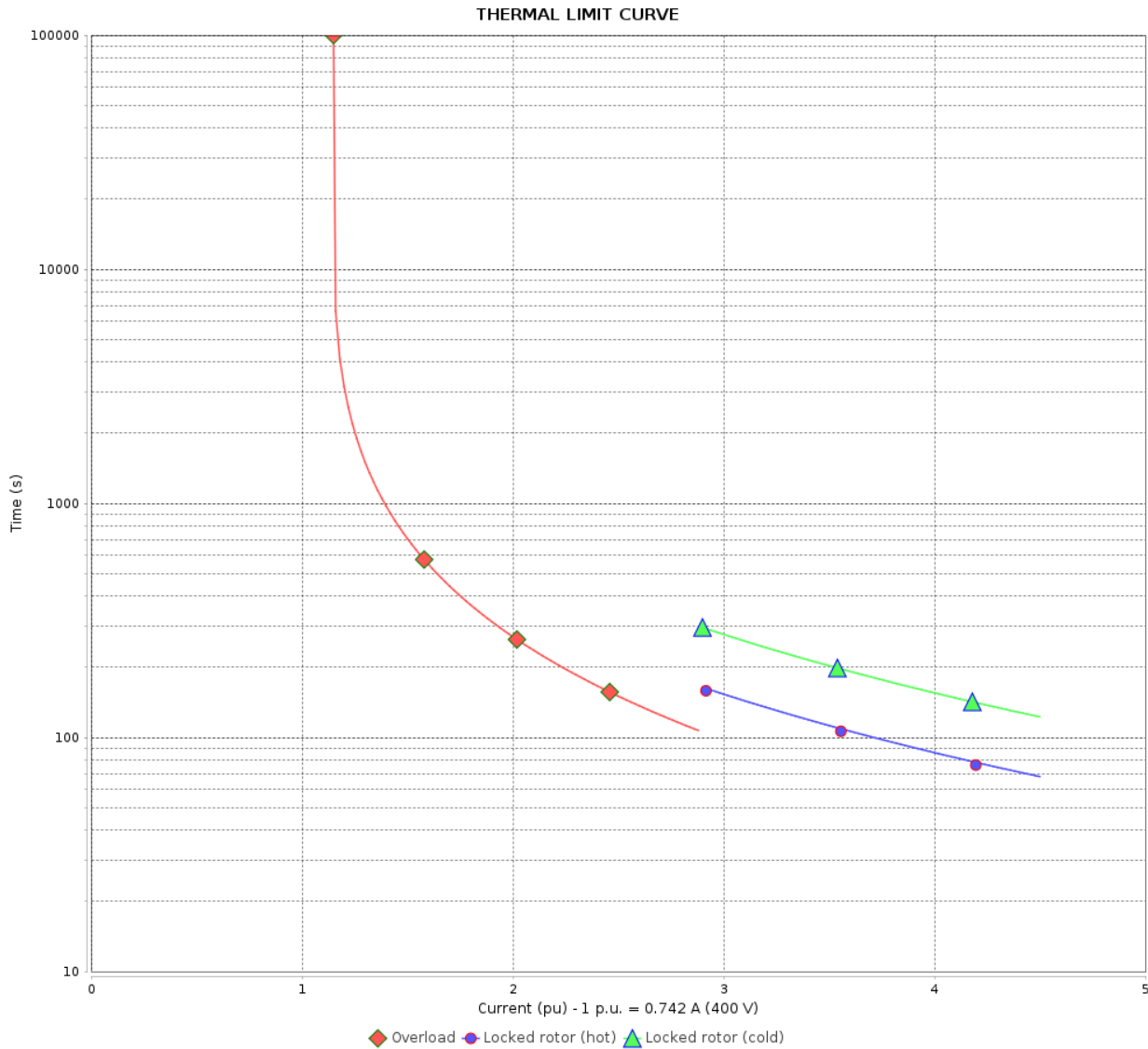
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Breakdown torque	: 220 %	Temperature rise	: 80 K
Rated speed	: 1410 rpm	Design	: N

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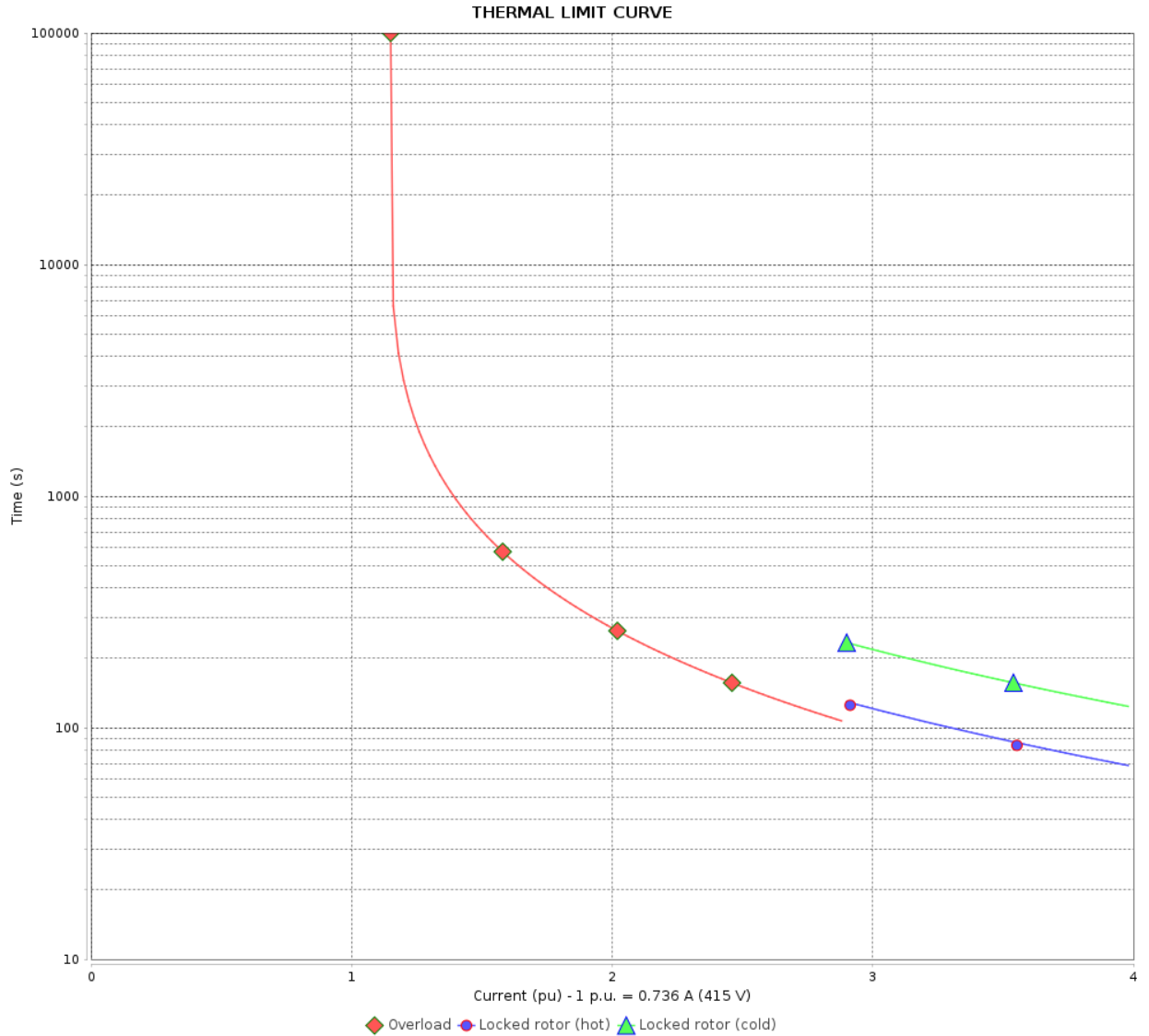
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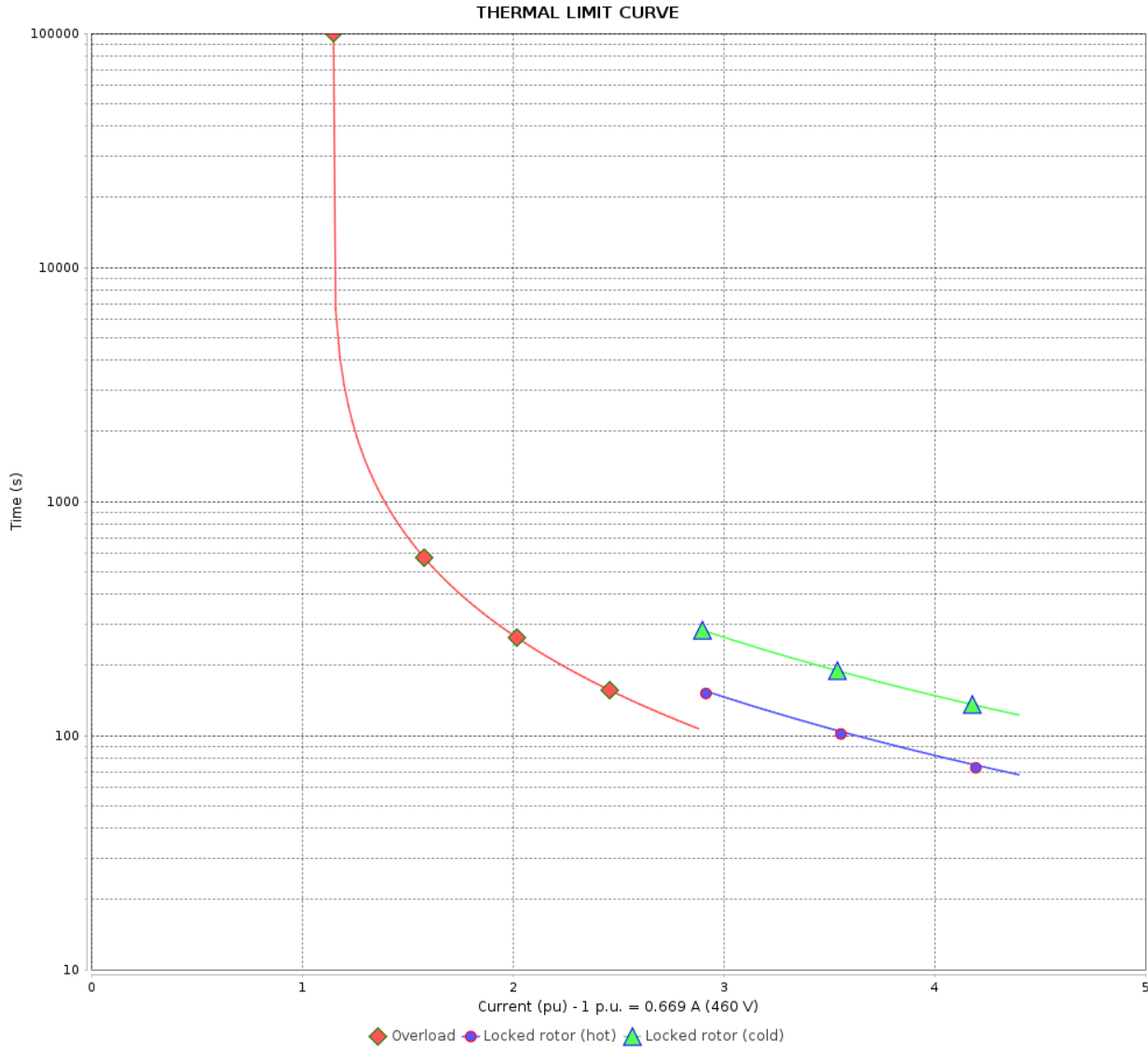
Three Phase Induction Motor - Squirrel Cage



Customer : Astraprom d.o.o.

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Product code : 10016425



Performance : 460 V 60 Hz 4P

Rated current	: 0.669 A	Moment of inertia (J)	: 0.0007 kgm ²
LRC	: 4.4	Duty cycle	: S1
Rated torque	: 0.141 kgfm	Insulation class	: F
Locked rotor torque	: 240 %	Service factor	: 1.00
Breakdown torque	: 270 %	Temperature rise	: 80 K
Rated speed	: 1730 rpm	Design	: N

Heating constant

Cooling constant

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VFD OPERATION CURVE

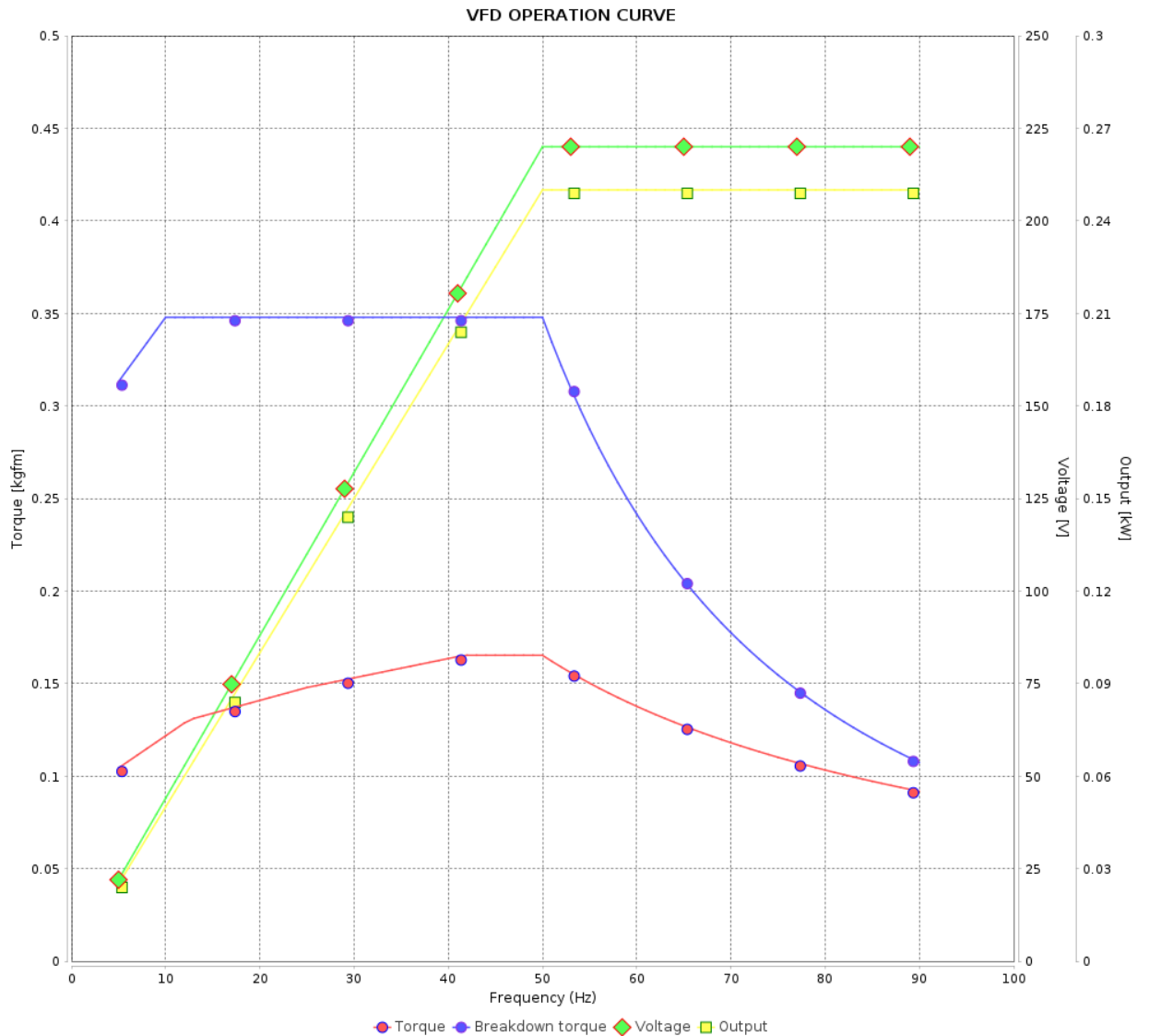
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 Rated speed : 1400 rpm

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 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
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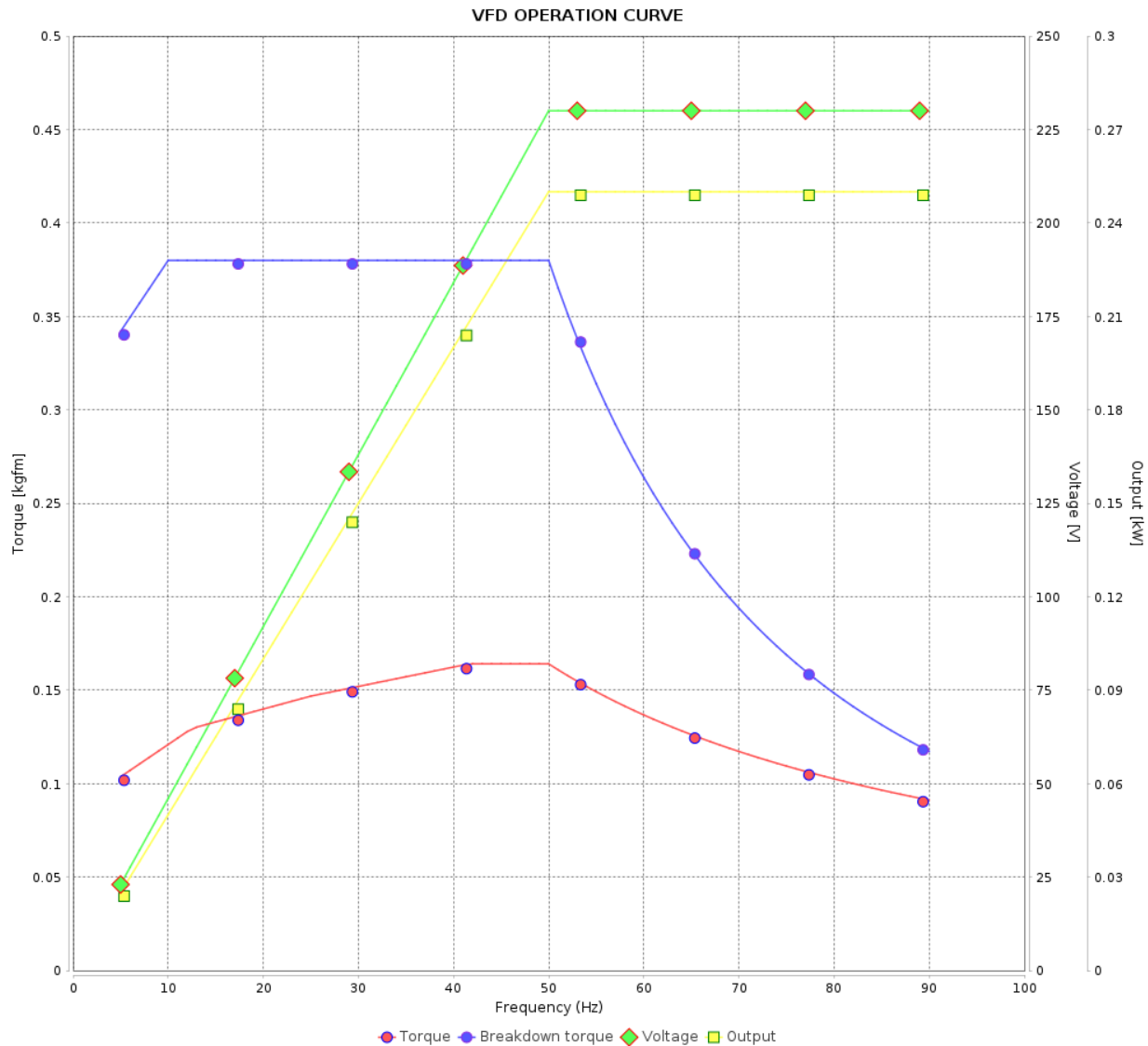
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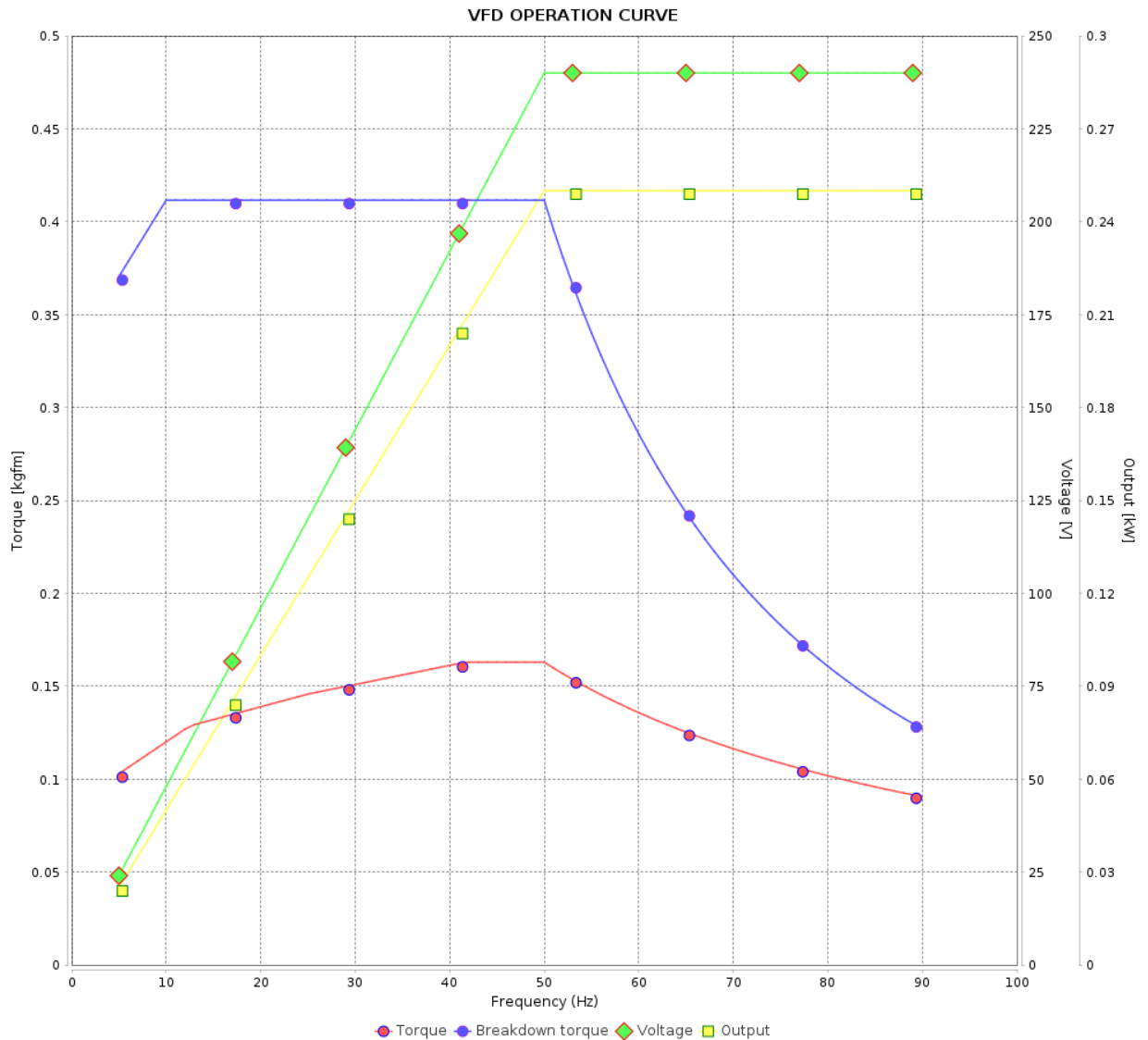
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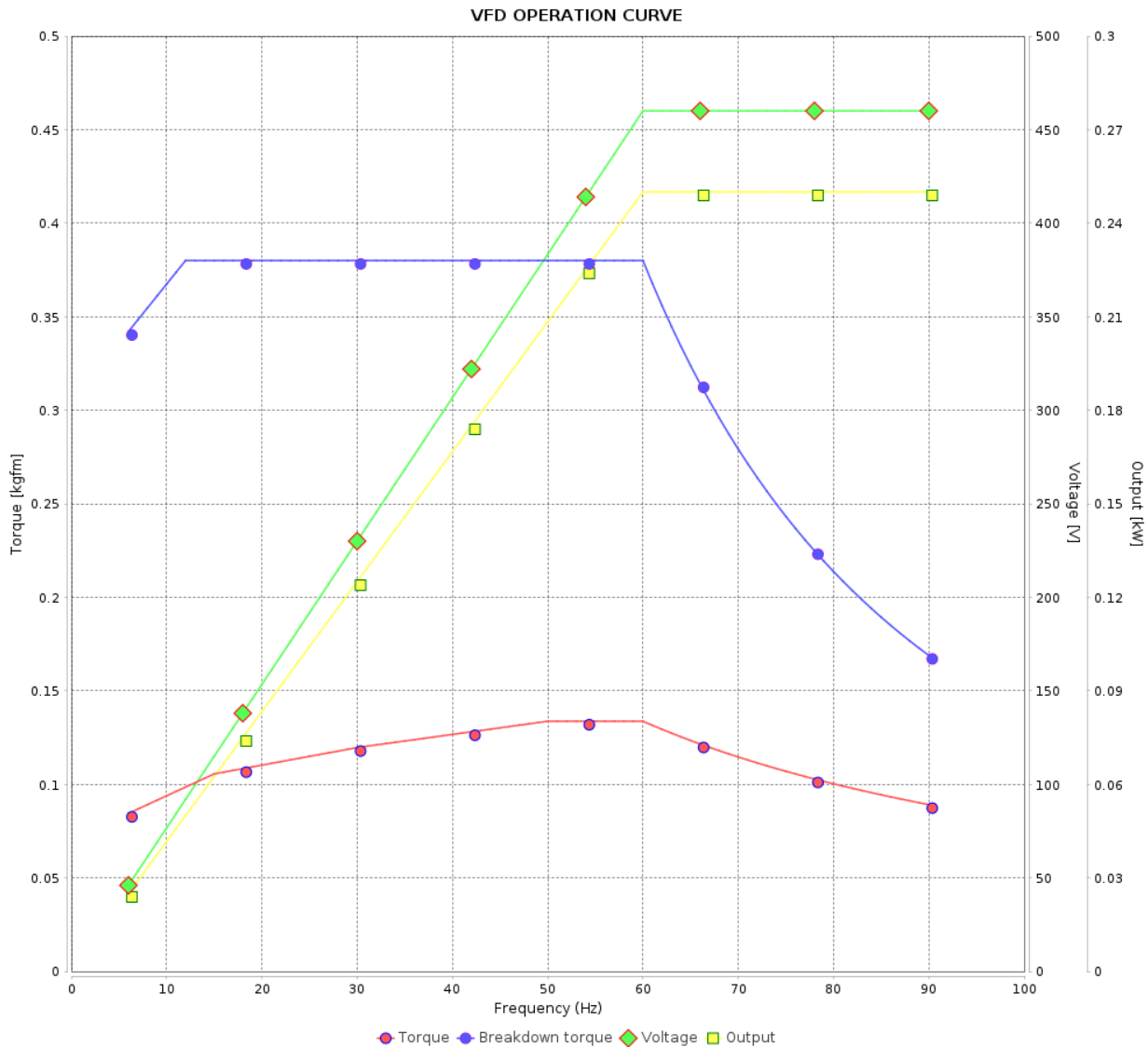
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