

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :						
Product line : IE3 Three-Phase			Product code : 12862754			
Frame : 225S/M Output : 30 kW (40 HP) Poles : 6 Frequency : 50 Hz Rated voltage : 400/690 V Rated current : 56.0/32.5 A L. R. Amperes : 392/227 A LRC : 7.0 No load current : 24.6/14.3 A Rated speed : 985 rpm Slip : 1.50 % Rated torque : 29.7 kgfm Locked rotor torque : 229 % Breakdown torque : 260 % Insulation class : F Service factor : 1.00 Moment of inertia (J) : 0.8194 kgm ² Design : N			Locked rotor time : 37s (cold) 21s (hot) Temperature rise : 80 K Duty cycle : S1 Ambient temperature : -20°C to +40°C Altitude : 1000 m.a.s.l. Protection degree : IP55 Cooling method : IC411 - TEFC Mounting : B3T Rotation ¹ : Both (CW and CCW) Noise level ² : 63.0 dB(A) Starting method : Direct On Line Approx. weight ³ : 370 kg			
Output 50% 75% 100% Efficiency (%) 93.0 93.4 93.1 Power Factor 0.67 0.78 0.83			Foundation loads Max. traction : 616 kgf Max. compression : 986 kgf			
Losses at normative operating points (speed;torque), in percentage of rated output power						
P1 (0,9;1,0)	P2 (0,5;1,0)	P3 (0,25;1,0)	P4 (0,9;0,5)	P5 (0,5;0,5)	P6 (0,5;0,25)	P7 (0,25;0,25)
7.2	6.1	5.5	3.3	2.3	1.4	1.0
		<u>Drive end</u>		<u>Non drive end</u>		
Bearing type :		6314 C3		6314 C3		
Sealing :		WSeal		WSeal		
Lubrication interval :		20000 h		20000 h		
Lubricant amount :		27 g		27 g		
Lubricant type :		Mobil Polyrex EM				
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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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

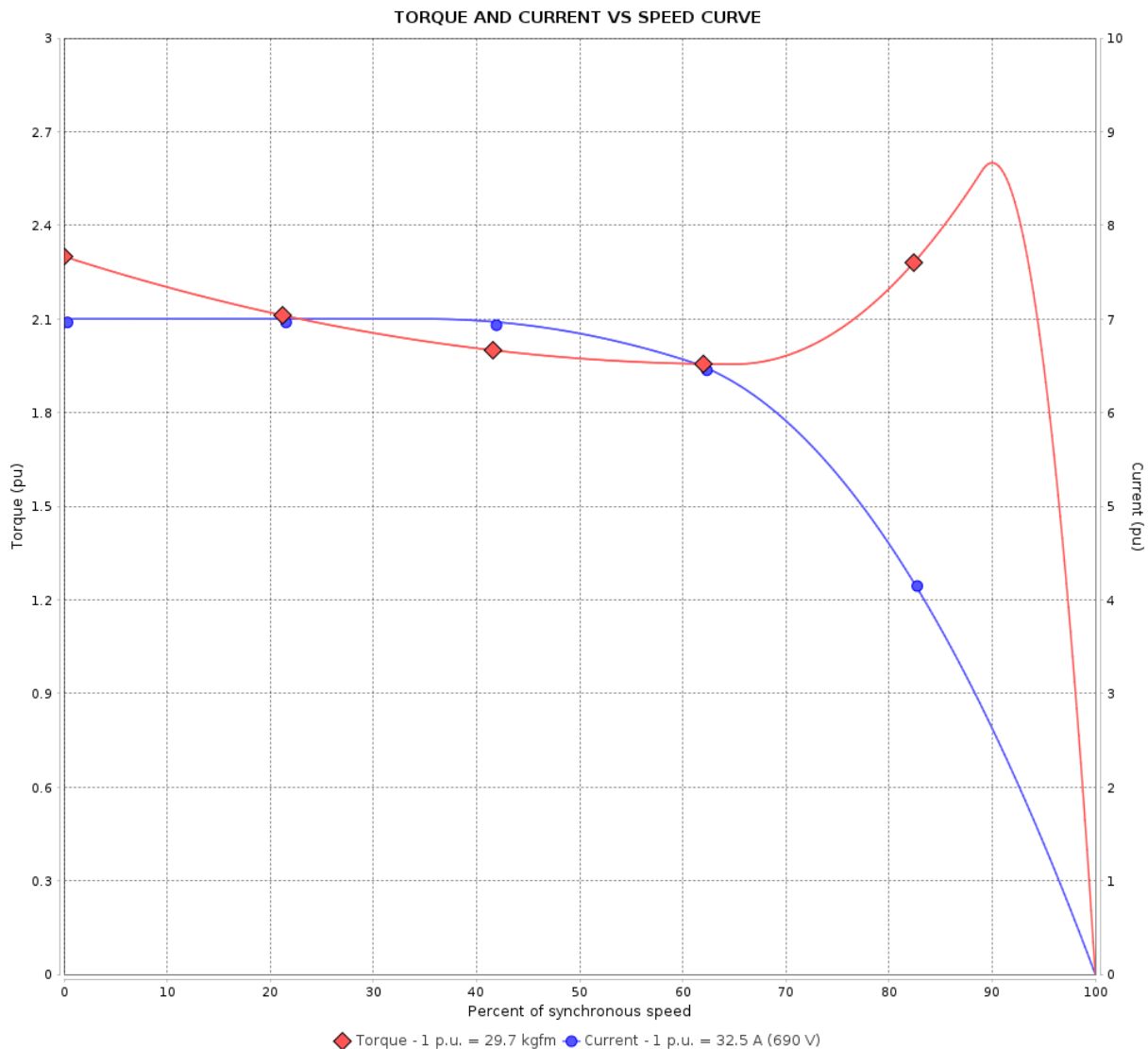


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 LRC : 7.0
 Rated torque : 29.7 kgfm
 Locked rotor torque : 229 %
 Breakdown torque : 260 %
 Rated speed : 985 rpm

Moment of inertia (J) : 0.8194 kgm²
 Duty cycle : S1
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : N

Locked rotor time : 37s (cold) 21s (hot)

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LOAD PERFORMANCE CURVE

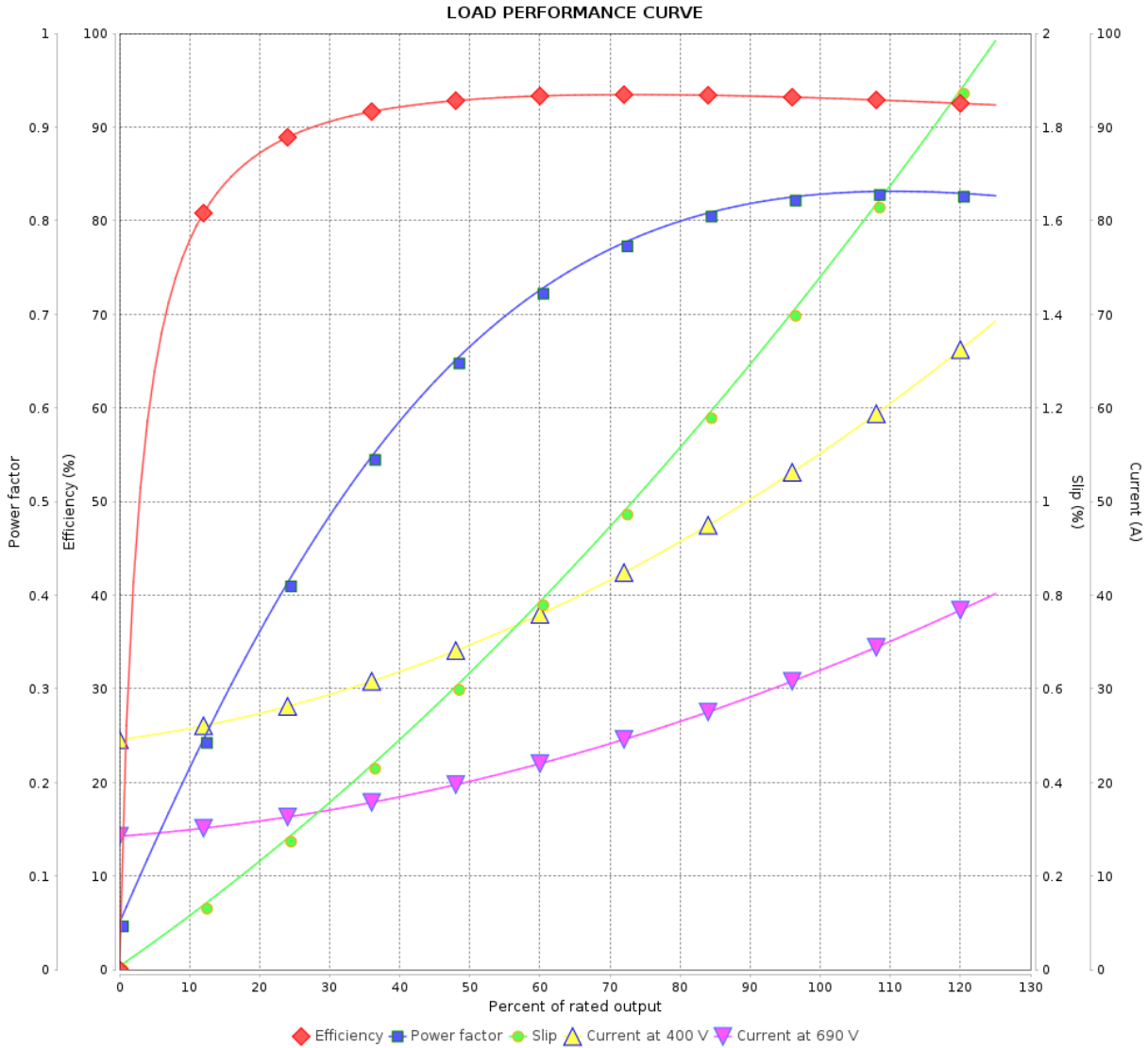
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THERMAL LIMIT CURVE

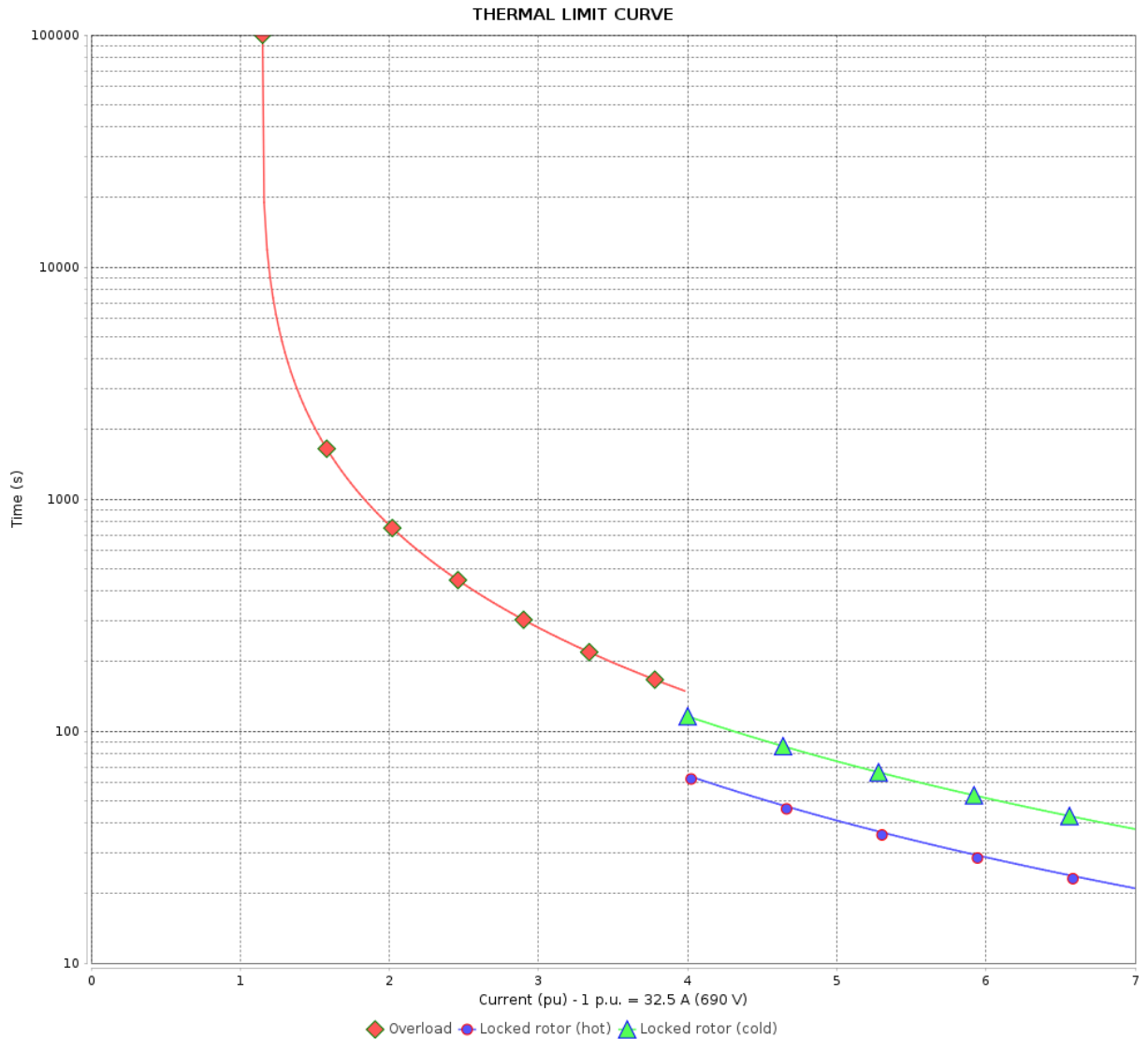
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Heating constant

Cooling constant

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VFD OPERATION CURVE

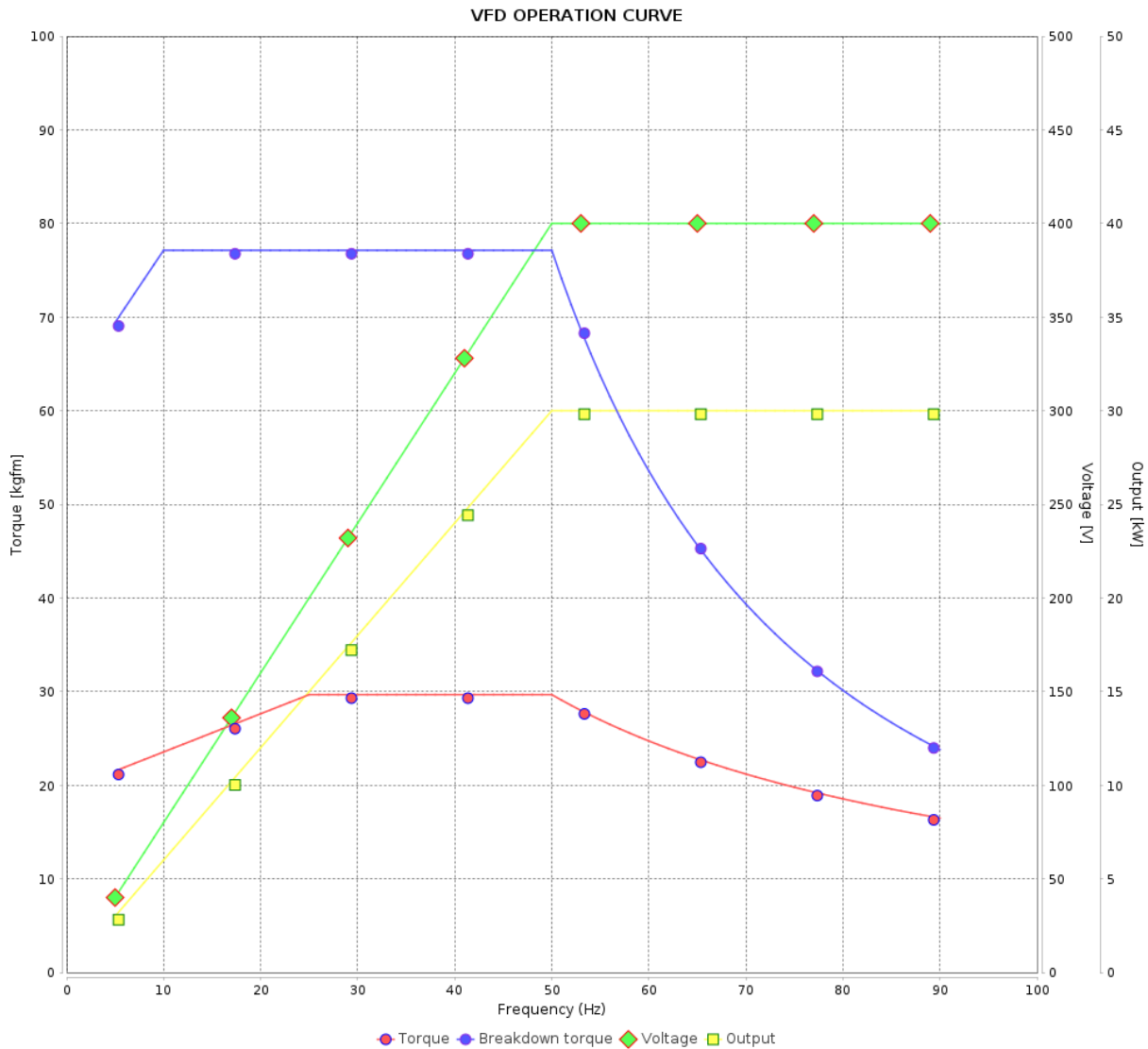
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