

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : IE3 Three-Phase

Product code : 12868215

Frame	: 132M/L	Locked rotor time	: 14s (cold) 8s (hot)
Output	: 9.2 kW (12.5 HP)	Temperature rise	: 80 K
Poles	: 4	Duty cycle	: S1
Frequency	: 50 Hz	Ambient temperature	: -20°C to +40°C
Rated voltage	: 400/690 V	Altitude	: 1000 m.a.s.l.
Rated current	: 17.8/10.3 A	Protection degree	: IP55
L. R. Amperes	: 153/88.7 A	Cooling method	: IC411 - TEFC
LRC	: 8.6	Mounting	: B5T
No load current	: 9.00/5.22 A	Rotation ¹	: Both (CW and CCW)
Rated speed	: 1465 rpm	Noise level ²	: 56.0 dB(A)
Slip	: 2.33 %	Starting method	: Direct On Line
Rated torque	: 6.12 kgfm	Approx. weight ³	: 90.3 kg
Locked rotor torque	: 280 %		
Breakdown torque	: 350 %		
Insulation class	: F		
Service factor	: 1.00		
Moment of inertia (J)	: 0.0698 kgm ²		
Design	: N		

Output	25%	50%	75%	100%	Foundation loads	
Efficiency (%)	0.000	89.0	90.5	91.0	Max. traction	: 367 kgf
Power Factor	0.00	0.64	0.76	0.82	Max. compression	: 457 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)
9.8	8.8	8.4	4.6	3.5	2.3	1.7

	Drive end	Non drive end
Bearing type	: 6308 ZZ	: 6207 ZZ
Sealing	: Oil Seal	: Lip Seal
Lubrication interval	: -	: -
Lubricant amount	: -	: -
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

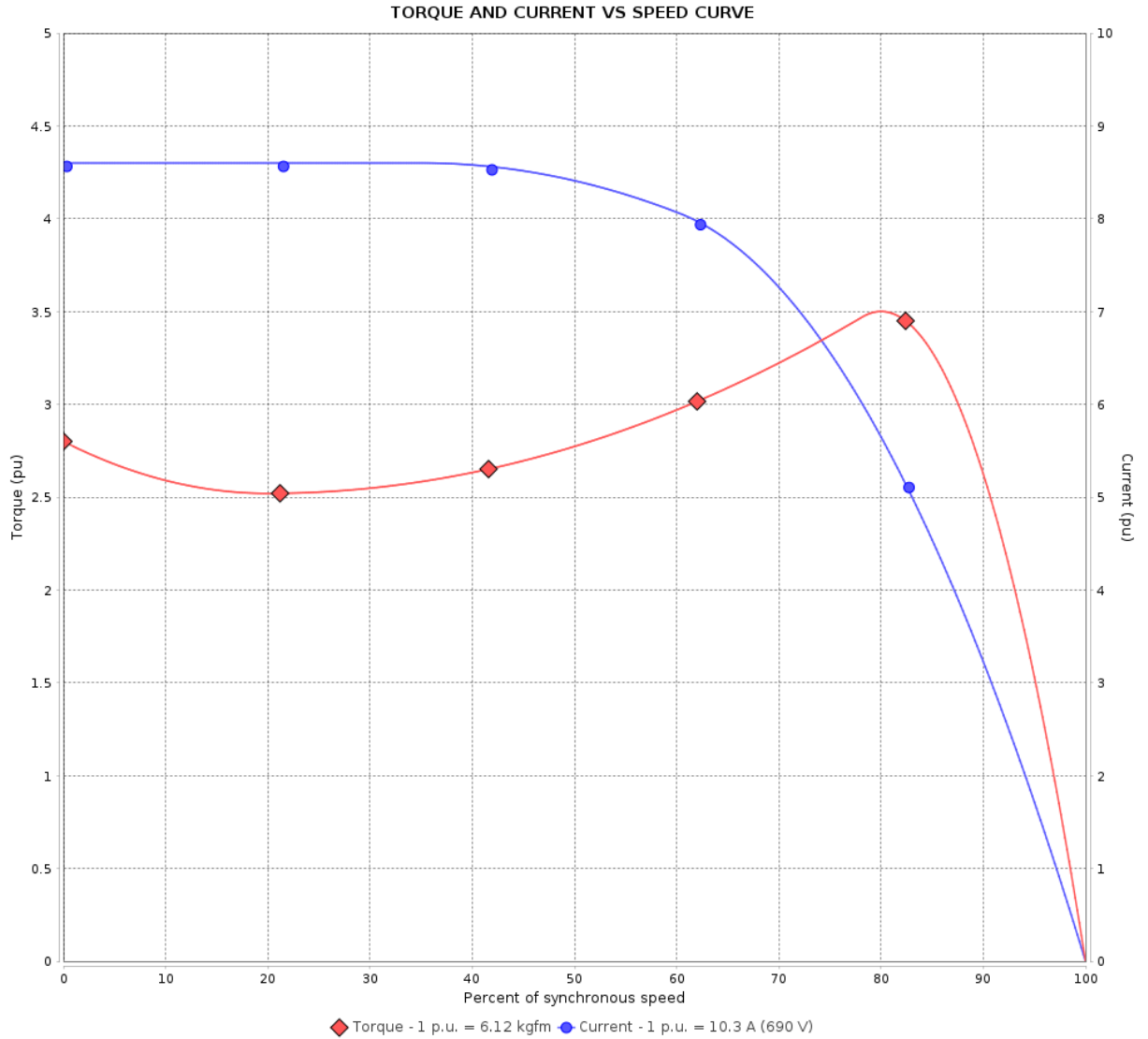


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 Breakdown torque : 350 %
 Rated speed : 1465 rpm

Moment of inertia (J) : 0.0698 kgm²
 Duty cycle : S1
 Insulation class : F
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 Temperature rise : 80 K
 Design : N

Locked rotor time : 14s (cold) 8s (hot)

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LOAD PERFORMANCE CURVE

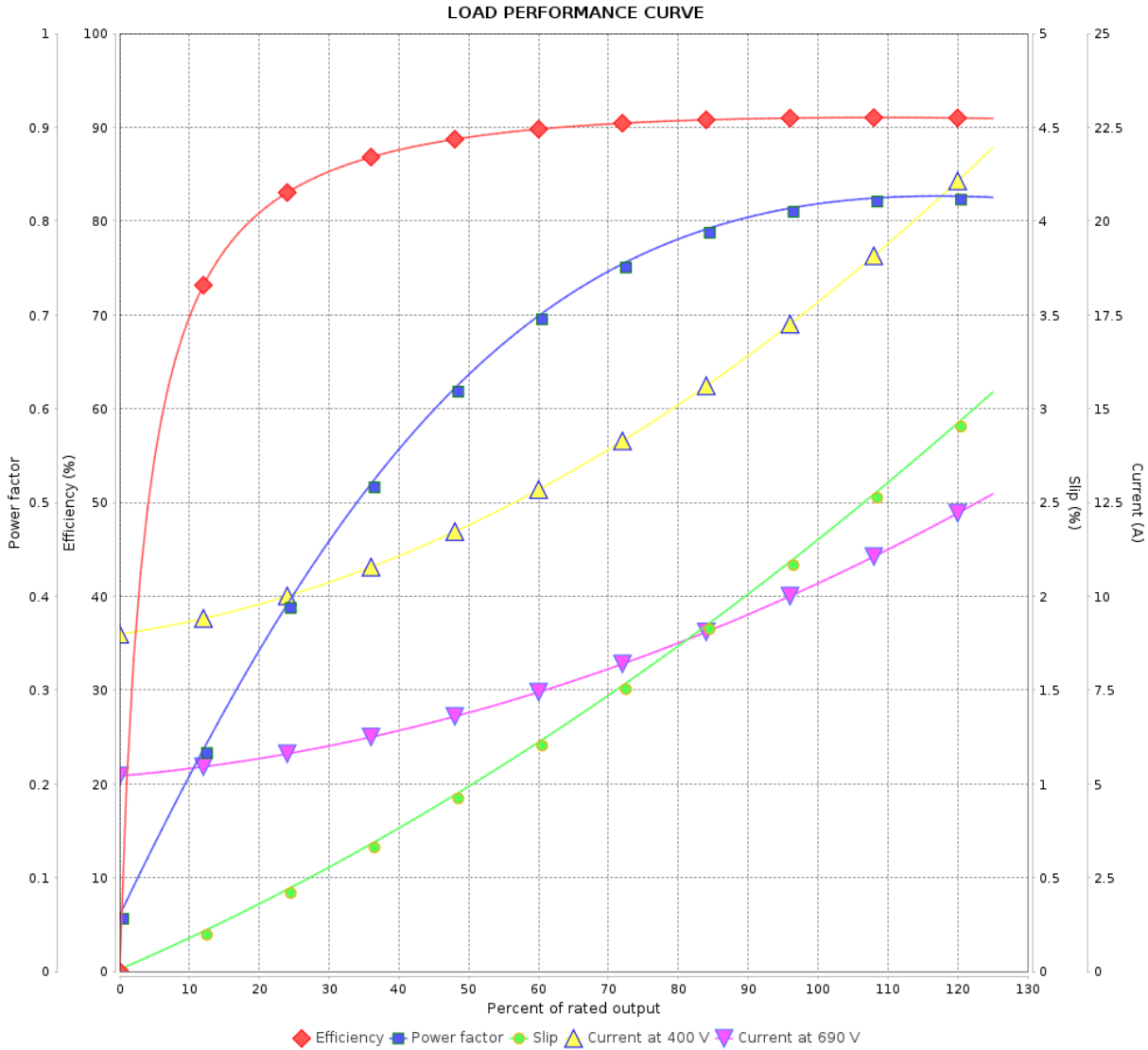
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THERMAL LIMIT CURVE

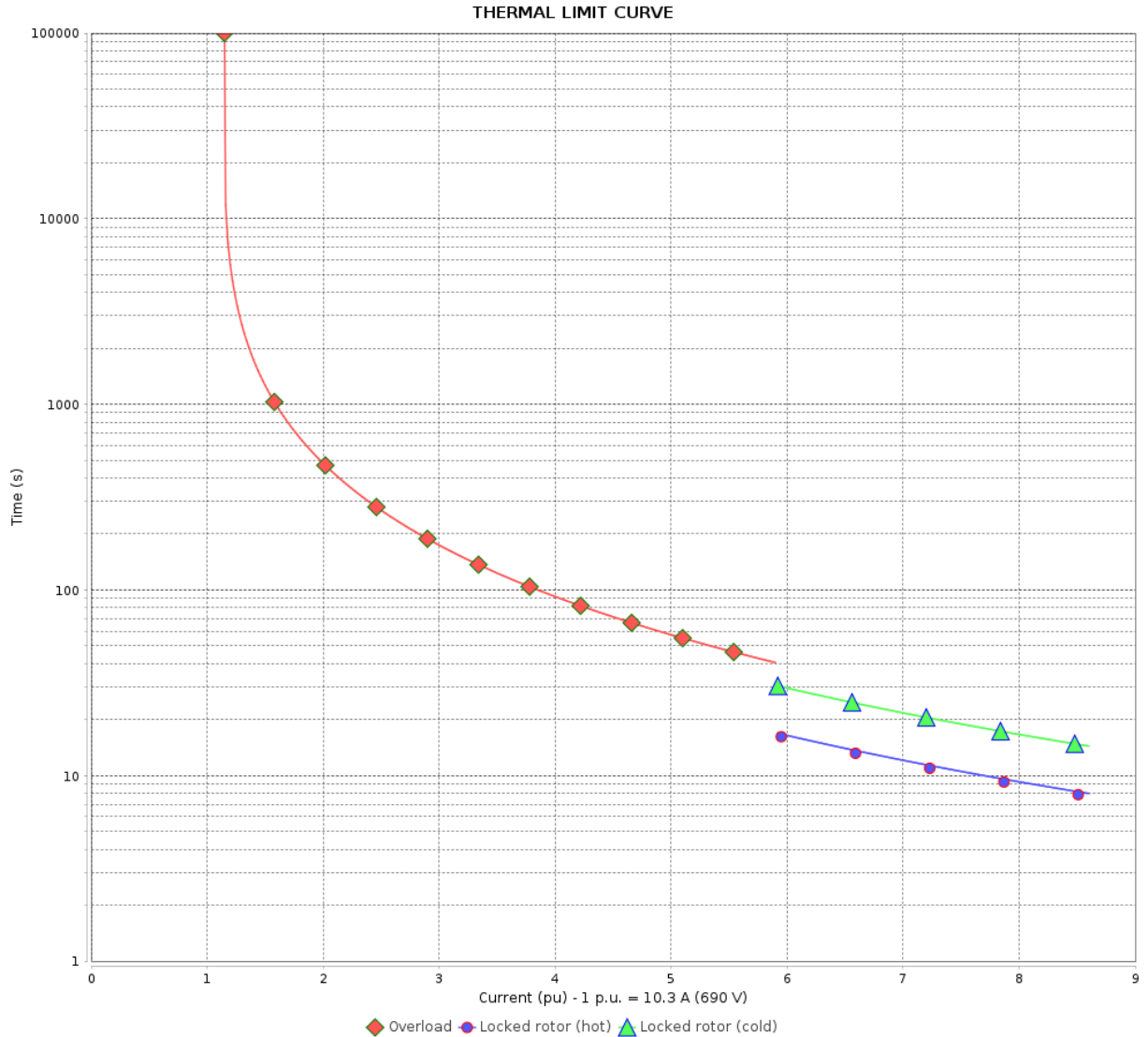
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Heating constant

Cooling constant

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VFD OPERATION CURVE

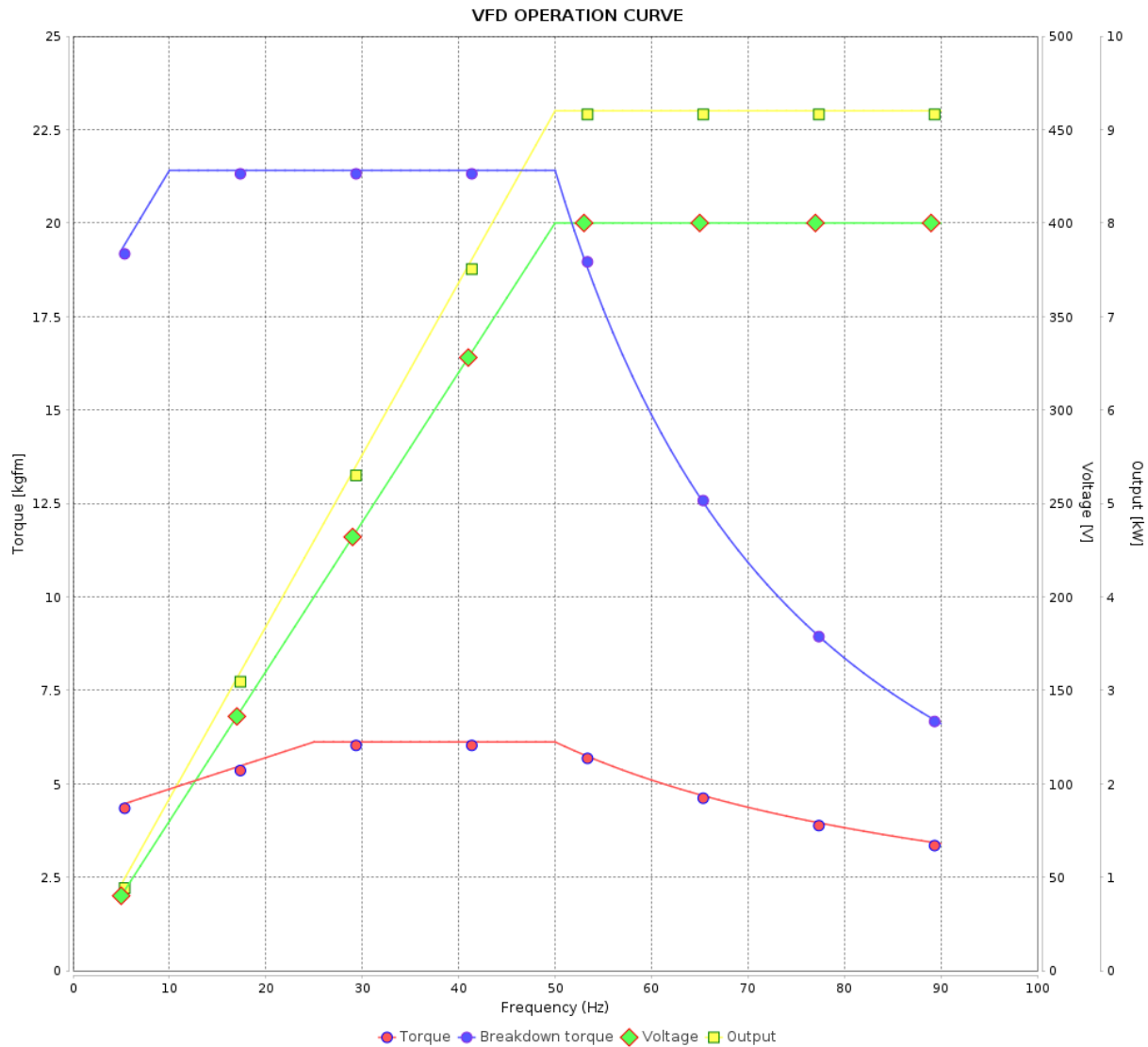
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