

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W12 IE2 Three-Phase

Product code : 16435512

Frame : 71
Output : 0.25 kW (0.33 HP)
Poles : 4
Frequency : 50 Hz
Rated voltage : 230/400 V
Rated current : 1.26/0.722 A
L. R. Amperes : 7.41/4.26 A
LRC : 5.9
No load current : 1.05/0.603 A
Rated speed : 1455 rpm
Slip : 3.00 %
Rated torque : 1.64 Nm
Locked rotor torque : 240 %
Breakdown torque : 320 %
Insulation class : F
Service factor : 1.00
Moment of inertia (J) : 0.0020 kgm²
Design : N

Locked rotor time : 43s (cold) 24s (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 : B5T
Rotation¹ : Both (CW and CCW)
Noise level² : 47.0 dB(A)
Starting method : Direct On Line

Output	50%	75%	100%
Efficiency (%)	64.0	68.5	68.5
Power Factor	0.51	0.63	0.73

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)
51.1	37.6	38.7	40.8	25.9	24.8	15.6

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).
(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

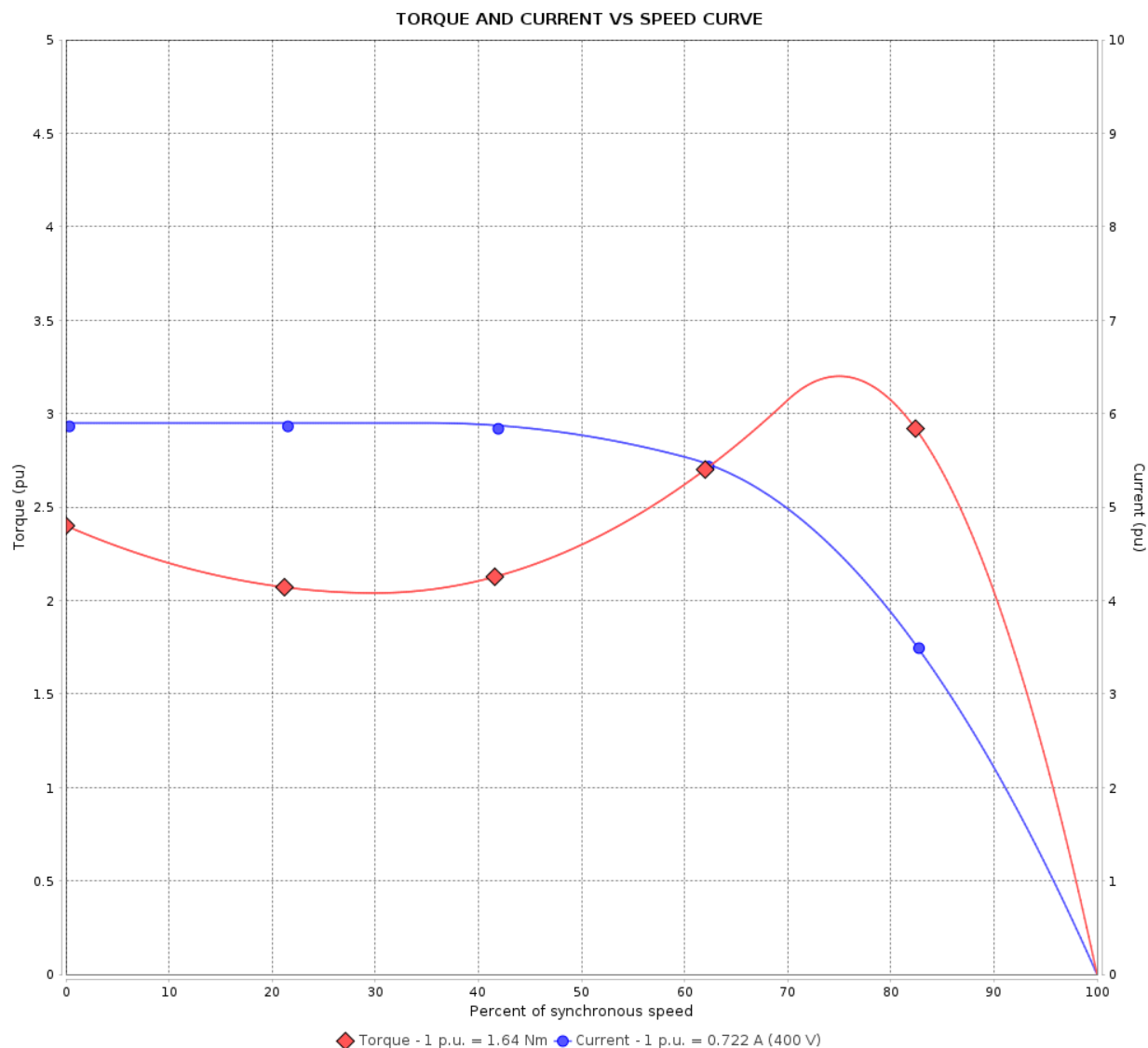
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LOAD PERFORMANCE CURVE

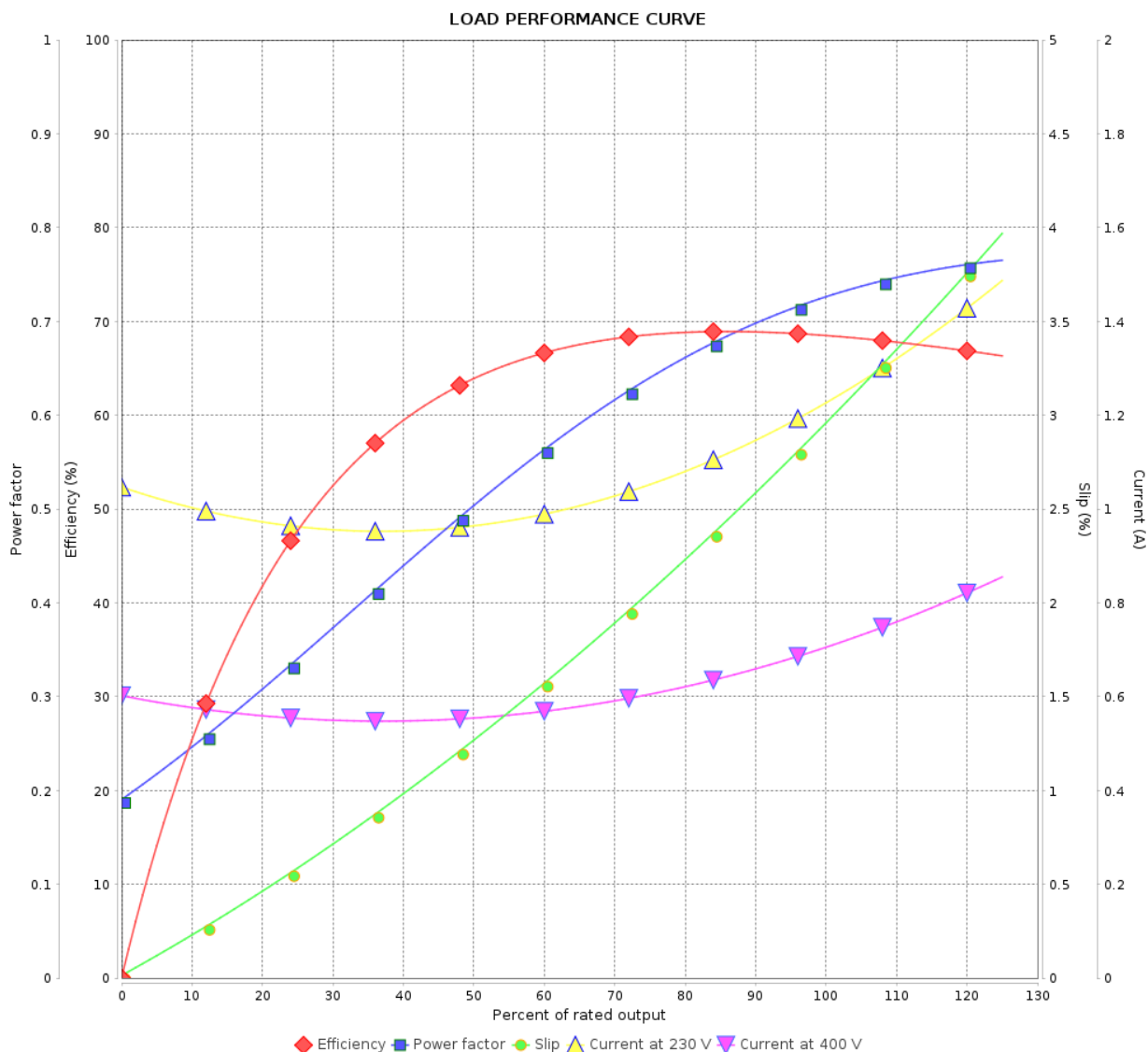
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THERMAL LIMIT CURVE

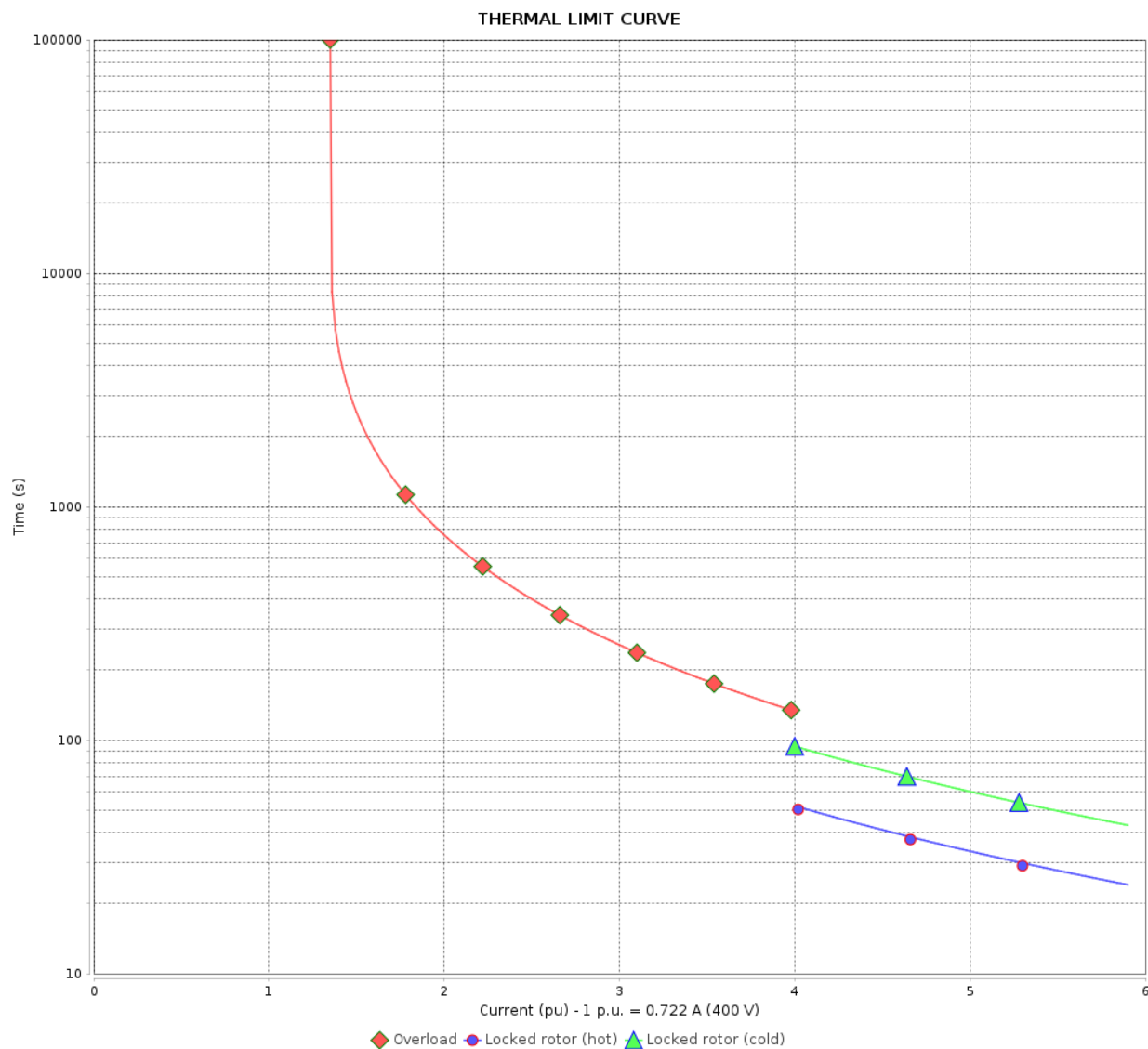
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Heating constant

Cooling constant

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VFD OPERATION CURVE

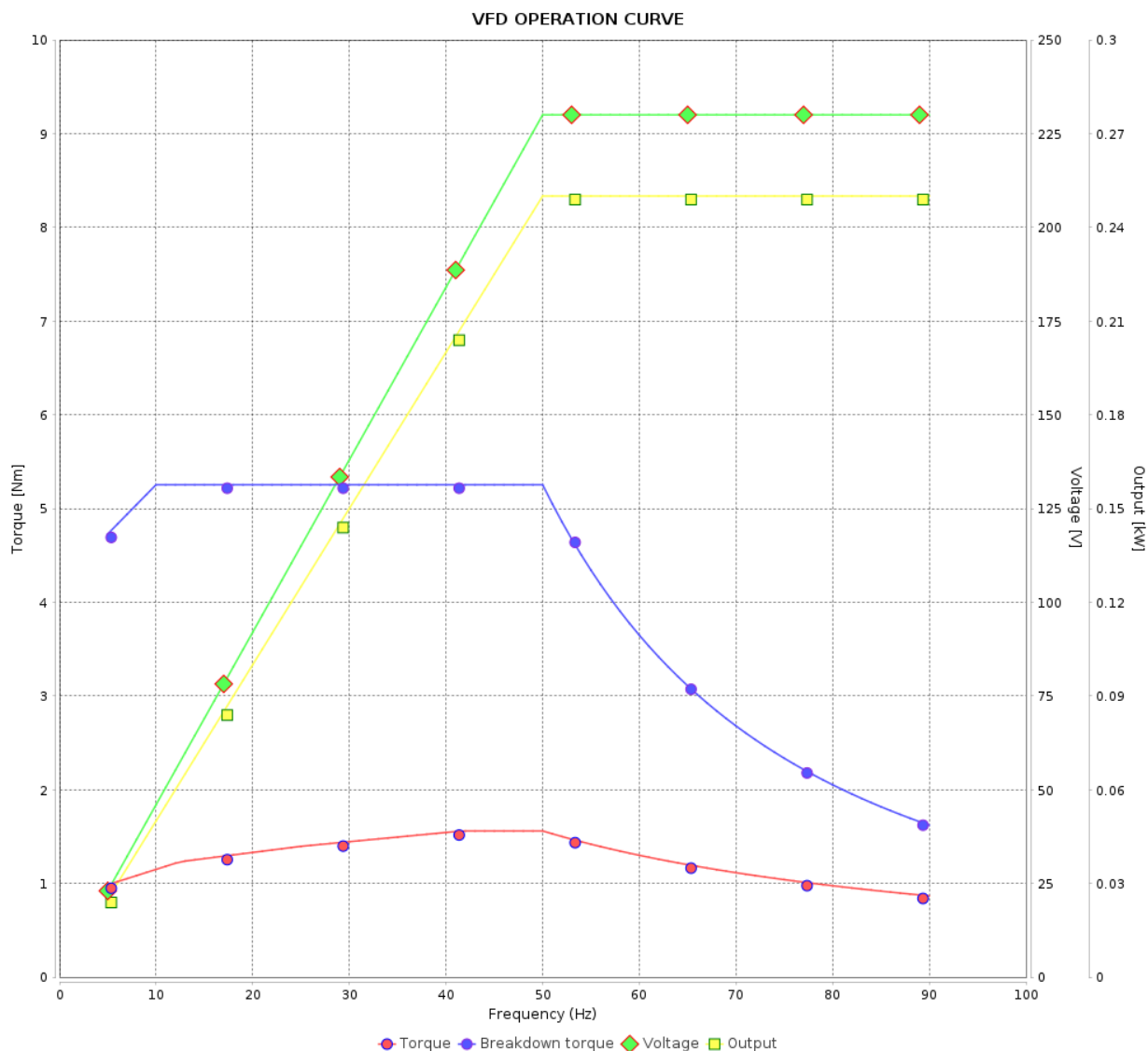
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