

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :						
Product line : IE3 Three-Phase	Product code : 12928451					
Frame : 80 Output : 0.75 kW (1 HP) Poles : 2 Frequency : 50 Hz Rated voltage : 230/400 V Rated current : 2.83/1.63 A L. R. Amperes : 21.3/12.2 A LRC : 7.5 No load current : 1.67/0.960 A Rated speed : 2870 rpm Slip : 4.33 % Rated torque : 0.255 kgfm Locked rotor torque : 330 % Breakdown torque : 340 % Insulation class : F Service factor : 1.00 Moment of inertia (J) : 0.0008 kgm ² Design : N	Locked rotor time : 45s (cold) 25s (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 : 59.0 dB(A) Starting method : Direct On Line Approx. weight ³ : 10.7 kg					
Output 50% 75% 100% Efficiency (%) 80.0 82.0 81.0 Power Factor 0.61 0.74 0.82	Foundation loads Max. traction : 24 kgf Max. compression : 34 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)
22.5	19.4	19.0	12.4	8.3	6.1	4.2
		<u>Drive end</u>			<u>Non drive end</u>	
Bearing type	:	6204 ZZ			6203 ZZ	
Sealing	:	V'Ring			V'Ring	
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

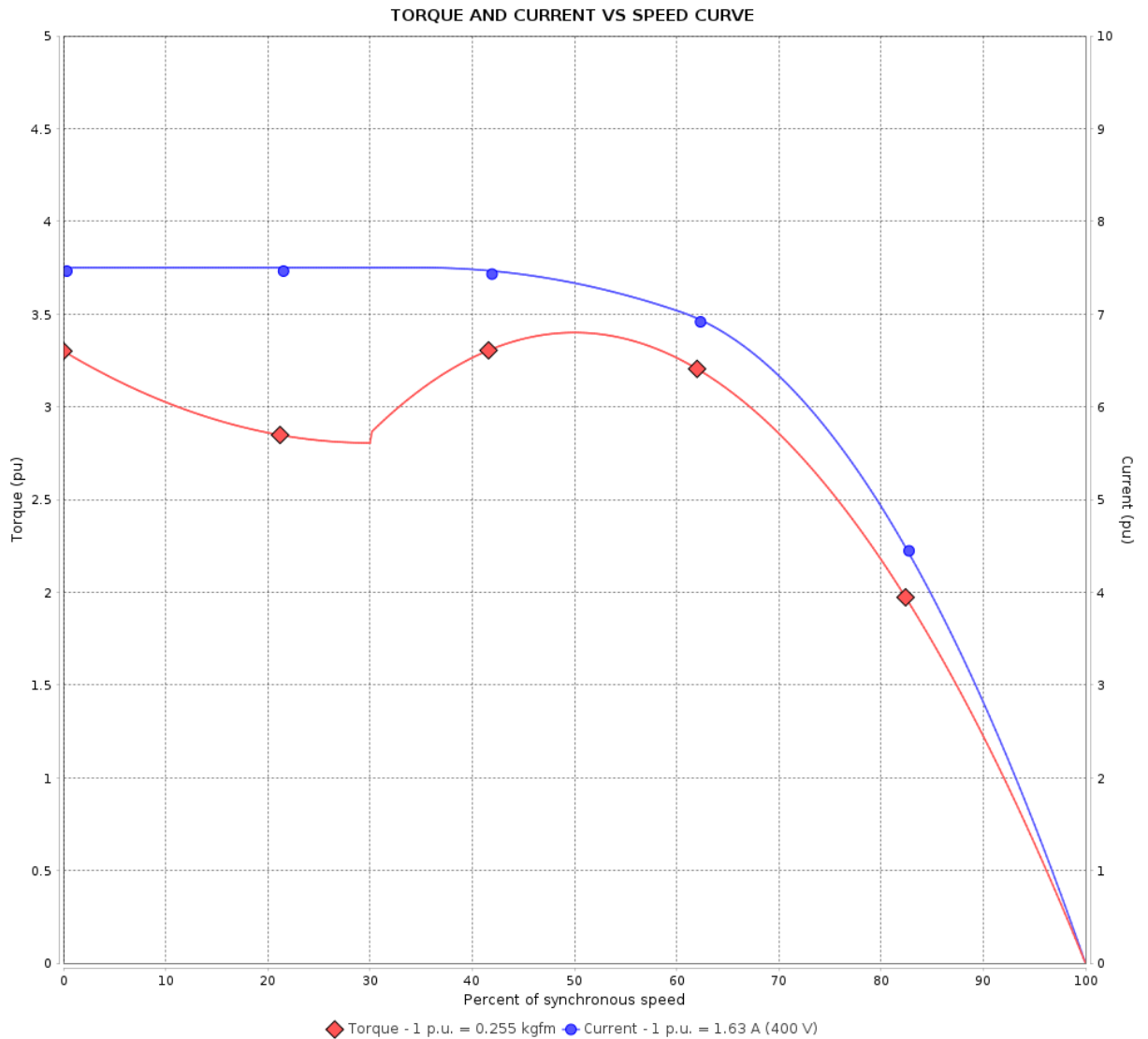
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Performance : 230/400 V 50 Hz 2P

Rated current	: 2.83/1.63 A	Moment of inertia (J)	: 0.0008 kgm ²
LRC	: 7.5	Duty cycle	: S1
Rated torque	: 0.255 kgfm	Insulation class	: F
Locked rotor torque	: 330 %	Service factor	: 1.00
Breakdown torque	: 340 %	Temperature rise	: 80 K
Rated speed	: 2870 rpm	Design	: N

Locked rotor time : 45s (cold) 25s (hot)

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LOAD PERFORMANCE CURVE

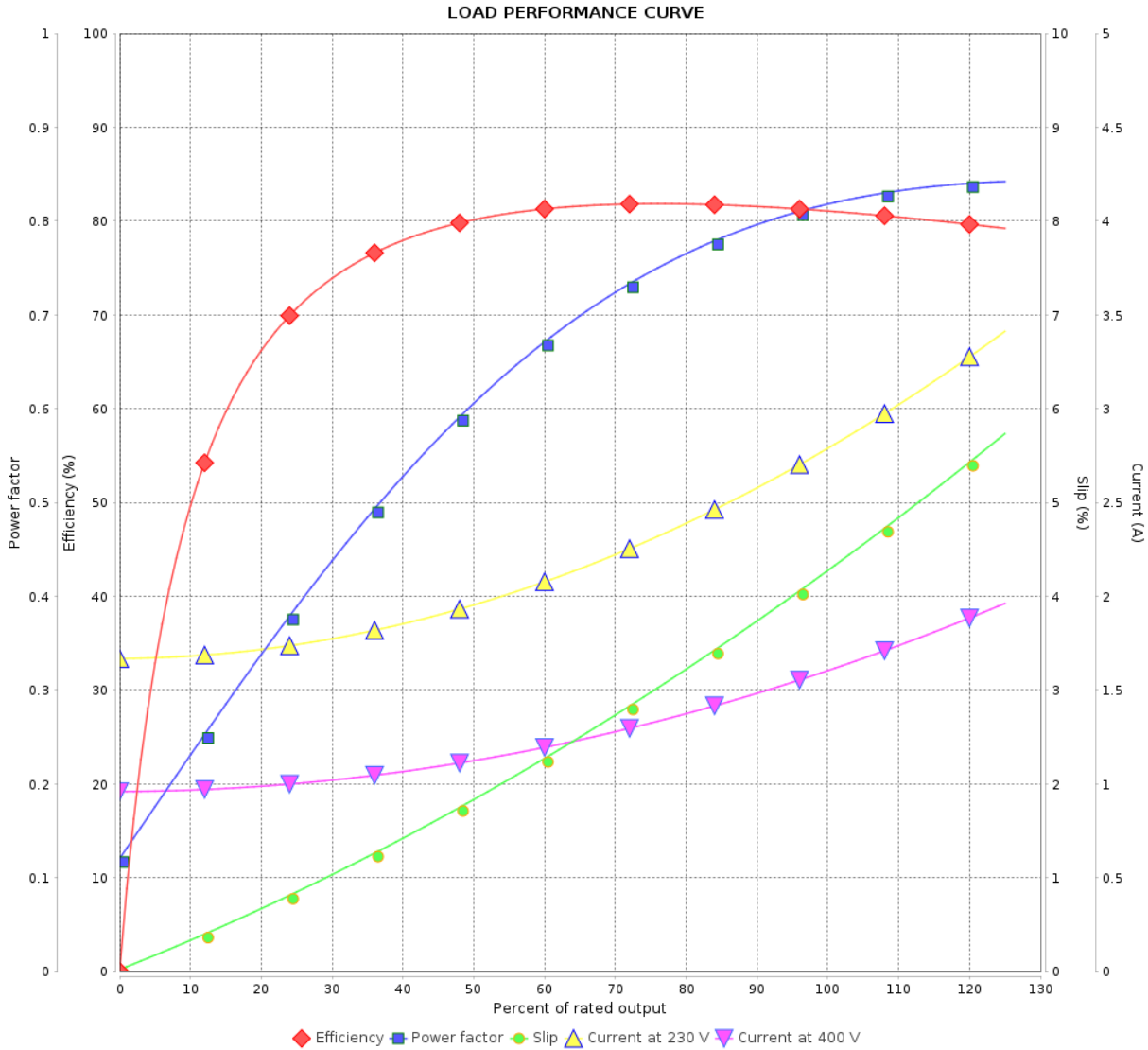
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 Breakdown torque : 340 %
 Rated speed : 2870 rpm

Moment of inertia (J) : 0.0008 kgm²
 Duty cycle : S1
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : N

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THERMAL LIMIT CURVE

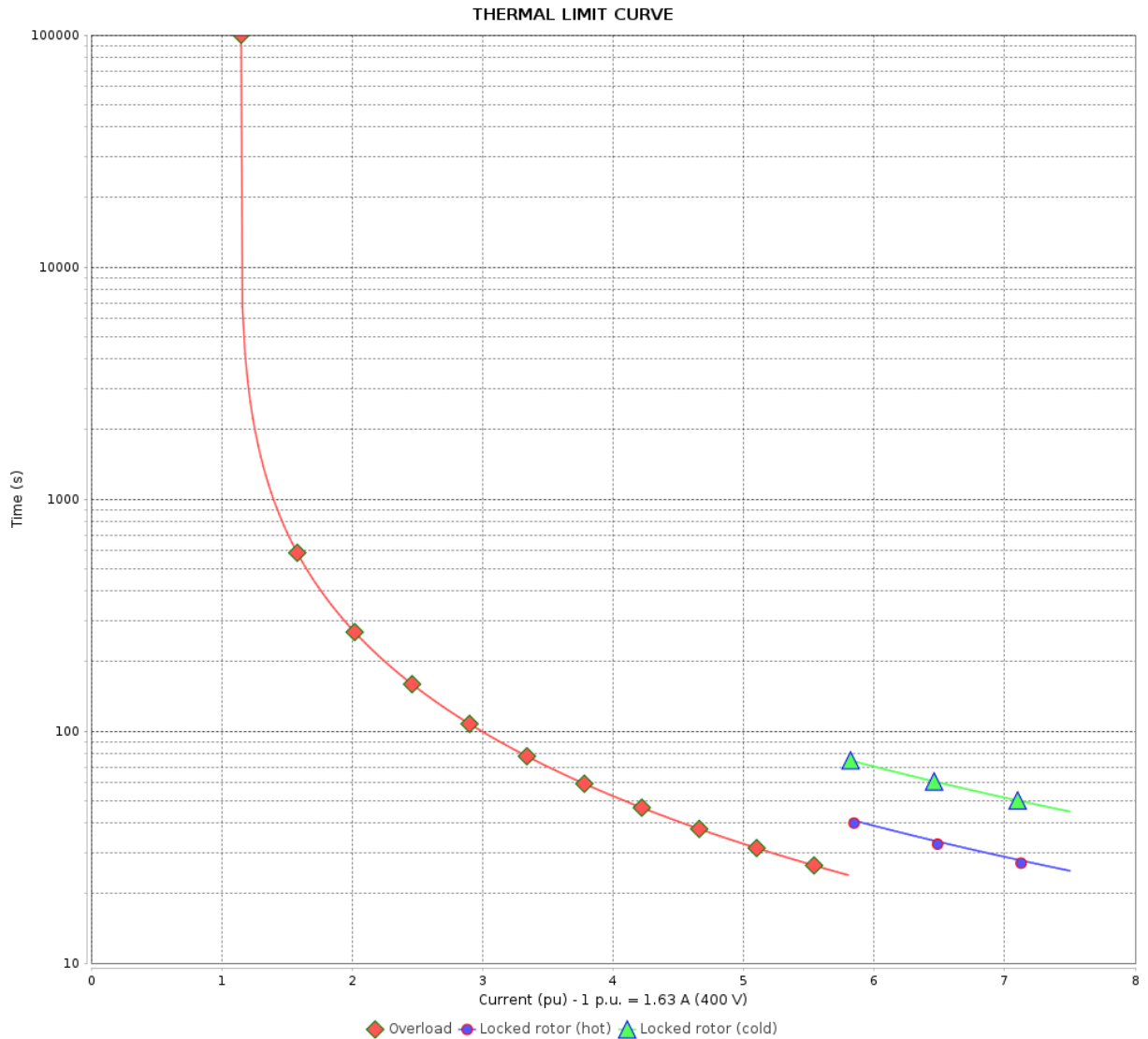
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 Design : N

Heating constant

Cooling constant

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VFD OPERATION CURVE

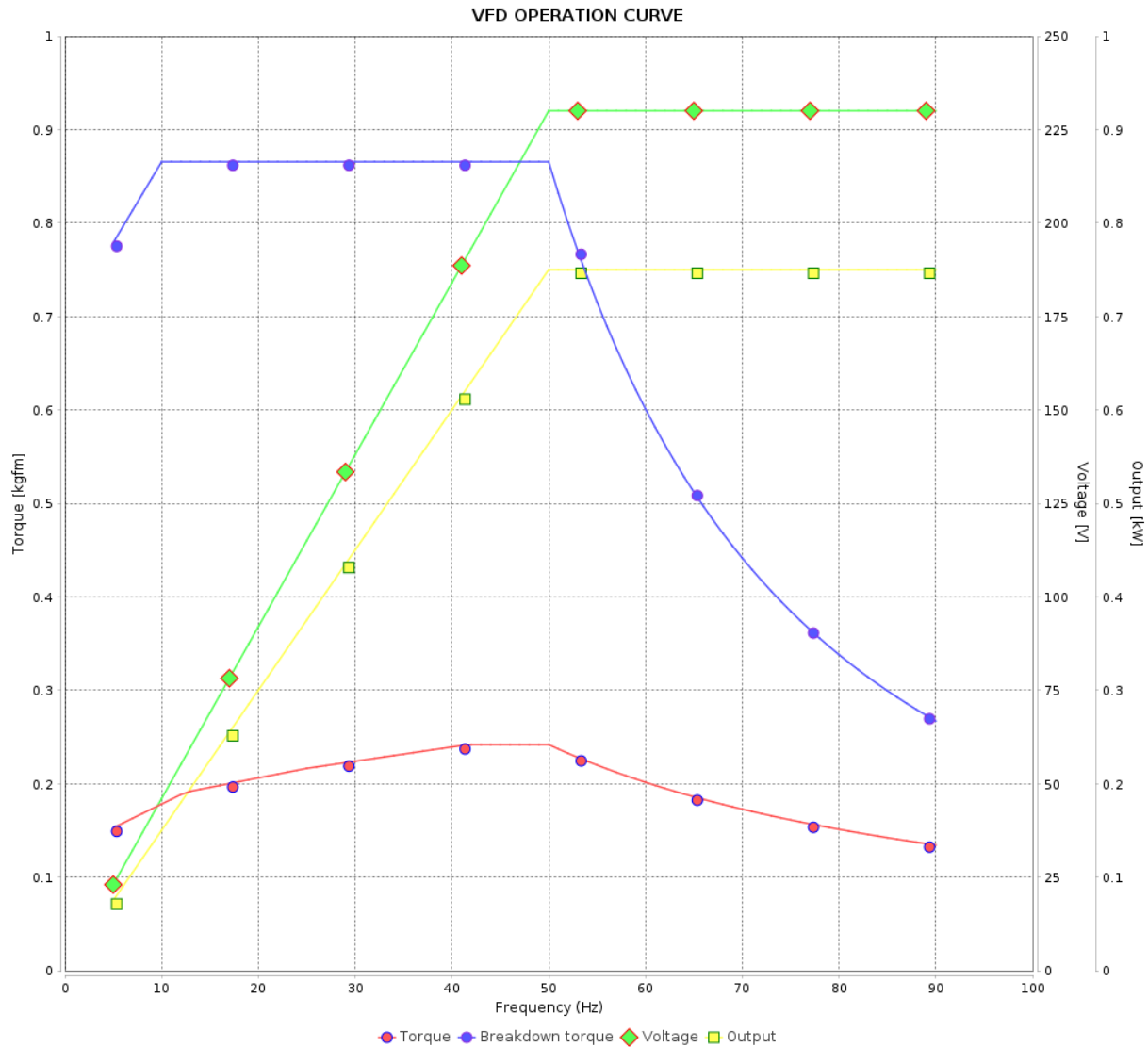
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 Service factor : 1.00
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