

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :						
Product line : IE3 Three-Phase			Product code : 13749618			
Frame : 71 Output : 0.37 kW (0.5 HP) Poles : 4 Frequency : 50 Hz Rated voltage : 230/400 V Rated current : 1.74/1.00 A L. R. Amperes : 8.35/4.80 A LRC : 4.8 No load current : 1.22/0.700 A Rated speed : 1395 rpm Slip : 7.00 % Rated torque : 0.258 kgfm Locked rotor torque : 290 % Breakdown torque : 300 % Insulation class : F Service factor : 1.00 Moment of inertia (J) : 0.0008 kgm ² Design : N			Locked rotor time : 54s (cold) 30s (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 : 43.0 dB(A) Starting method : Direct On Line Approx. weight ³ : 10.5 kg			
Output 50% 75% 100% Efficiency (%) 76.3 76.8 77.3 Power Factor 0.45 0.60 0.69			Foundation loads Max. traction : 22 kgf Max. compression : 33 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)
28.0	25.5	26.8	15.0	11.3	8.5	6.5
			<u>Drive end</u>		<u>Non drive end</u>	
Bearing type	:	6203 ZZ			6202 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.			
Rev.	Changes Summary			Performed	Checked	Date
Performed by						
Checked by					Page	Revision
Date	24/10/2022				1 / 6	

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Thermal protection

ID	Application	Type	Quantity	Sensing Temperature
1	Winding	Thermistor - 2 wires	1 x Phase	155 °C

Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by			Page	Revision
Date	24/10/2022		2 / 6	

TORQUE AND CURRENT VS SPEED CURVE

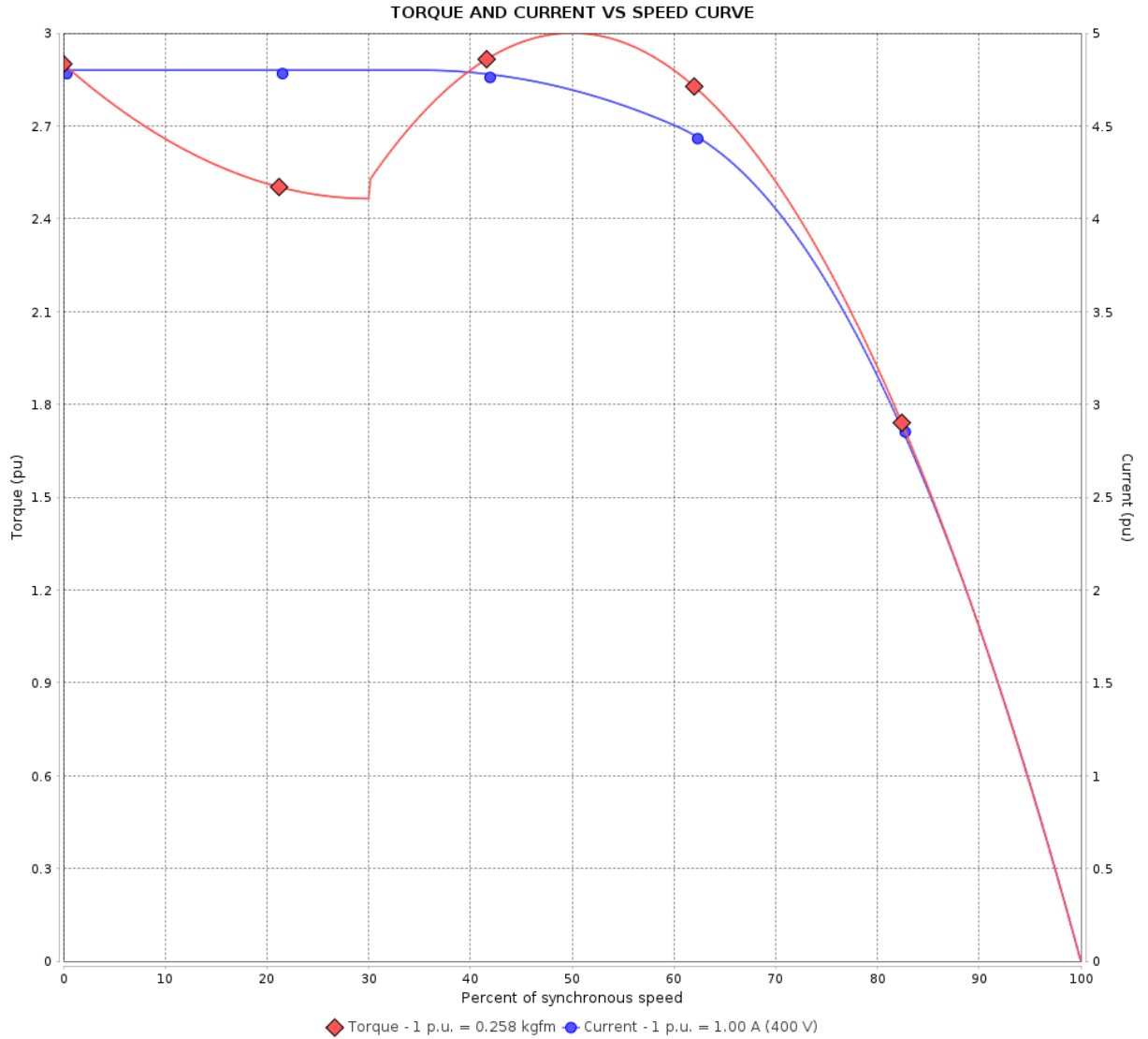
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Performance : 230/400 V 50 Hz 4P

Rated current	: 1.74/1.00 A	Moment of inertia (J)	: 0.0008 kgm ²
LRC	: 4.8	Duty cycle	: S1
Rated torque	: 0.258 kgfm	Insulation class	: F
Locked rotor torque	: 290 %	Service factor	: 1.00
Breakdown torque	: 300 %	Temperature rise	: 80 K
Rated speed	: 1395 rpm	Design	: N

Locked rotor time : 54s (cold) 30s (hot)

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 3 / 6	Revision
Checked by				
Date	24/10/2022			

LOAD PERFORMANCE CURVE

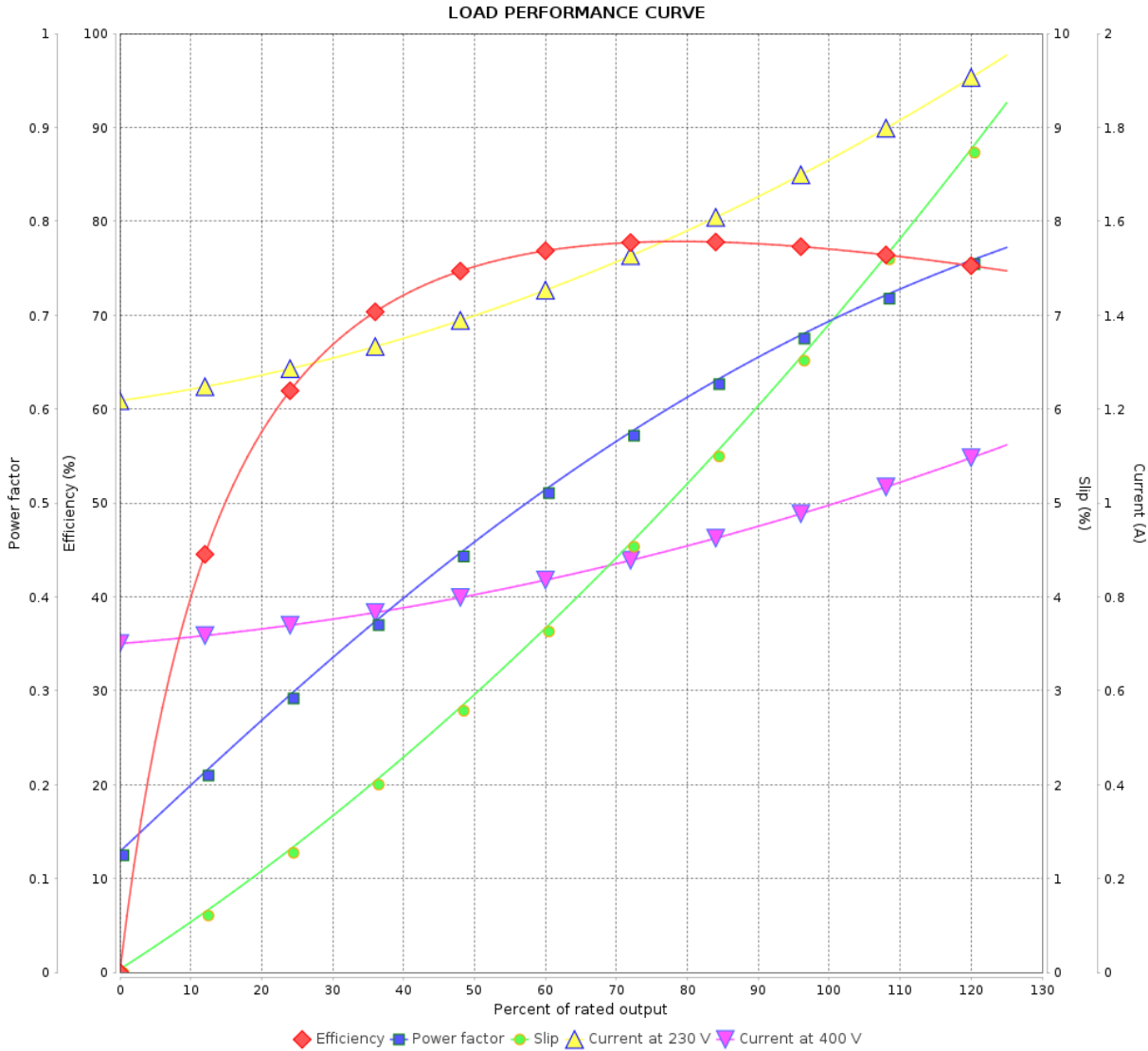
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 Duty cycle : S1
 Insulation class : F
 Service factor : 1.00
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Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 4 / 6	Revision
Checked by				
Date	24/10/2022			

THERMAL LIMIT CURVE

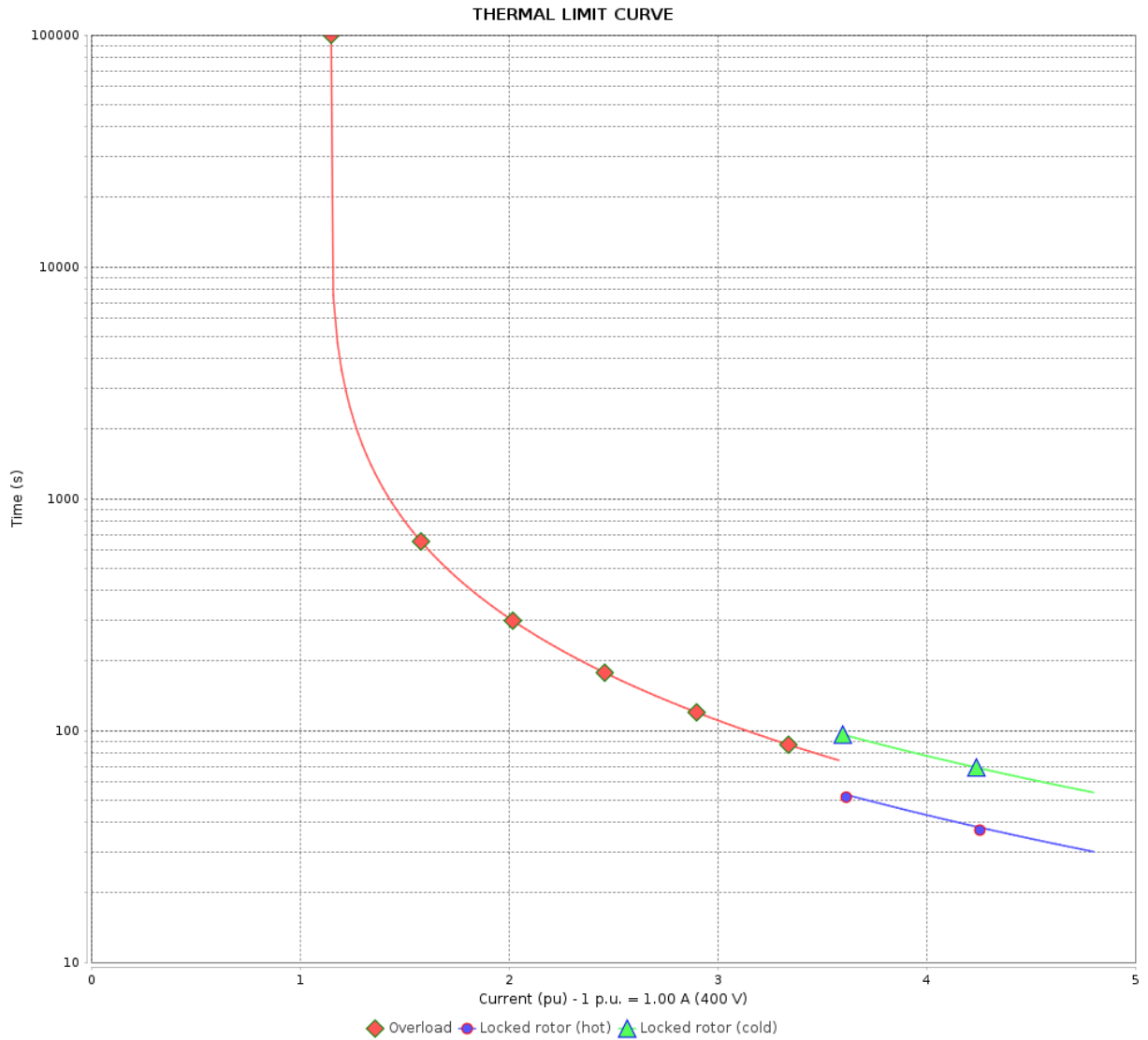
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Breakdown torque	: 300 %	Temperature rise	: 80 K
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Heating constant

Cooling constant

Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page		Revision
Checked by		5 / 6		
Date	24/10/2022			

VFD OPERATION CURVE

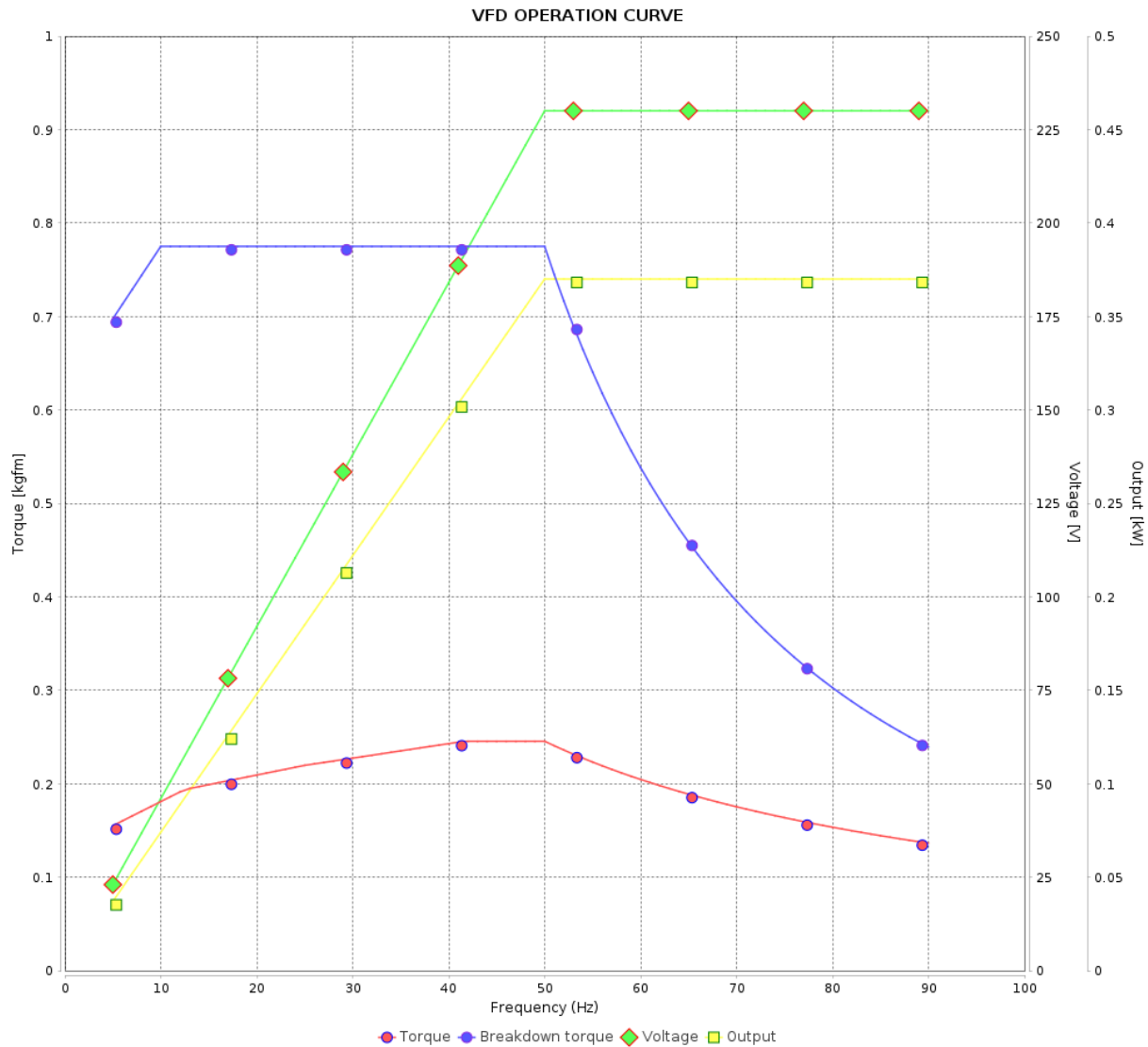
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 Insulation class : F
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Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 6 / 6	Revision
Checked by				
Date	24/10/2022			