

# DATA SHEET



## Three Phase Induction Motor - Squirrel Cage

Customer :					
Product line : IE2 Three-Phase		Product code : 11688820			
Frame	: L112M	Locked rotor time	: 19s (cold) 11s (hot)		
Output	: 5.5 kW (7.5 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	: 11.6/6.72 A	Protection degree	: IP55		
L. R. Amperes	: 82.4/47.7 A	Cooling method	: IC411 - TEFC		
LRC	: 7.1	Mounting	: B5T		
No load current	: 7.75/4.49 A	Rotation <sup>1</sup>	: Both (CW and CCW)		
Rated speed	: 1440 rpm	Noise level <sup>2</sup>	: 56.0 dB(A)		
Slip	: 4.00 %	Starting method	: Direct On Line		
Rated torque	: 3.72 kgfm	Approx. weight <sup>3</sup>	: 52.4 kg		
Locked rotor torque	: 270 %				
Breakdown torque	: 300 %				
Insulation class	: F				
Service factor	: 1.00				
Moment of inertia (J)	: 0.0208 kgm <sup>2</sup>				
Design	: N				
Output	50%	75%	100%	Foundation loads	
Efficiency (%)	87.0	87.7	87.7	Max. traction : 205 kgf	
Power Factor	0.55	0.68	0.76	Max. compression : 257 kgf	
		<u>Drive end</u>		<u>Non drive end</u>	
Bearing type	:	6207 ZZ		6206 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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# TORQUE AND CURRENT VS SPEED CURVE

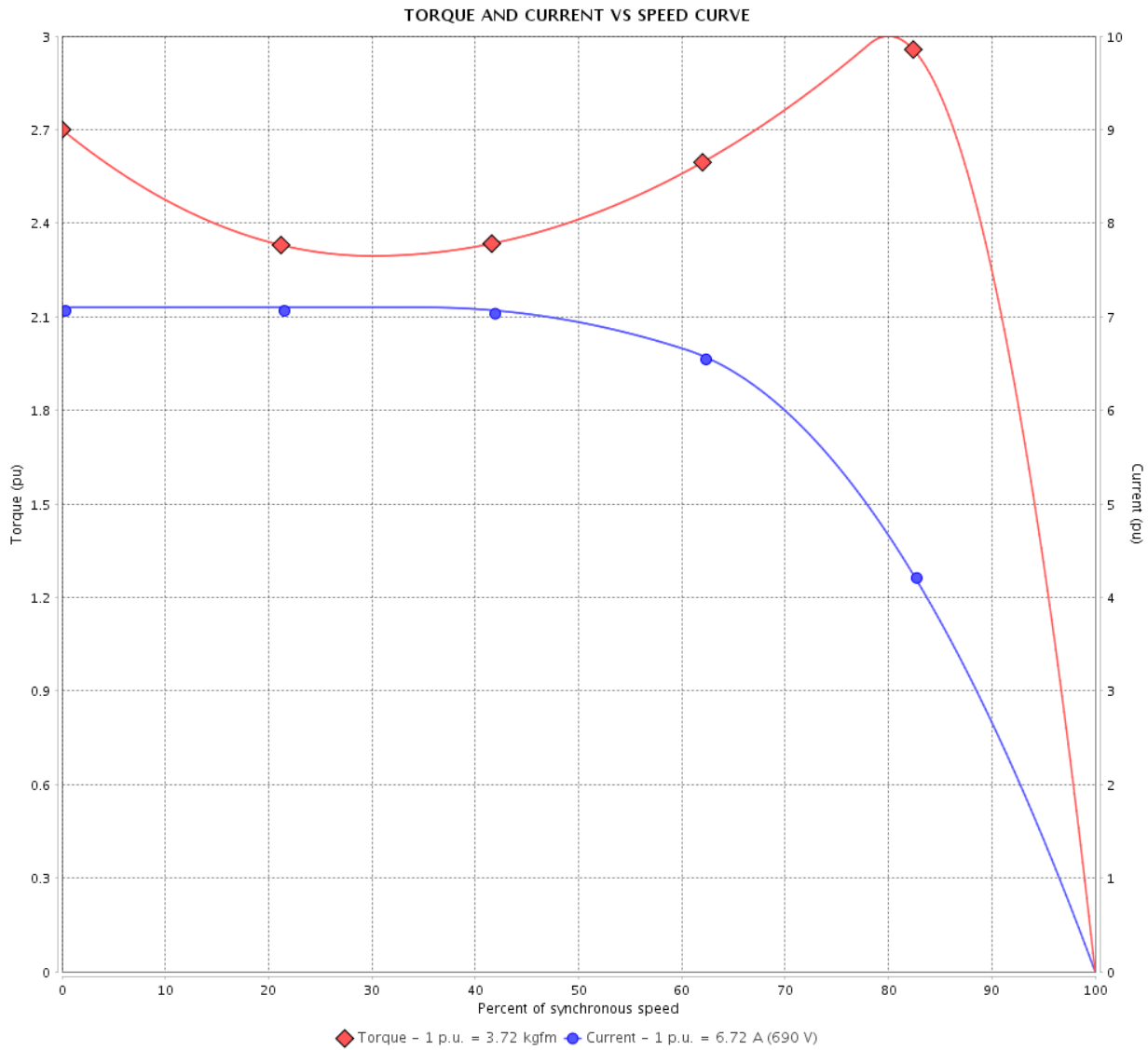
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : IE2 Three-Phase

Product code : 11688820



Performance : 400/690 V 50 Hz 4P

Rated current	: 11.6/6.72 A	Moment of inertia (J)	: 0.0208 kgm <sup>2</sup>
LRC	: 7.1	Duty cycle	: S1
Rated torque	: 3.72 kgfm	Insulation class	: F
Locked rotor torque	: 270 %	Service factor	: 1.00
Breakdown torque	: 300 %	Temperature rise	: 80 K
Rated speed	: 1440 rpm	Design	: N

Locked rotor time : 19s (cold) 11s (hot)

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# LOAD PERFORMANCE CURVE

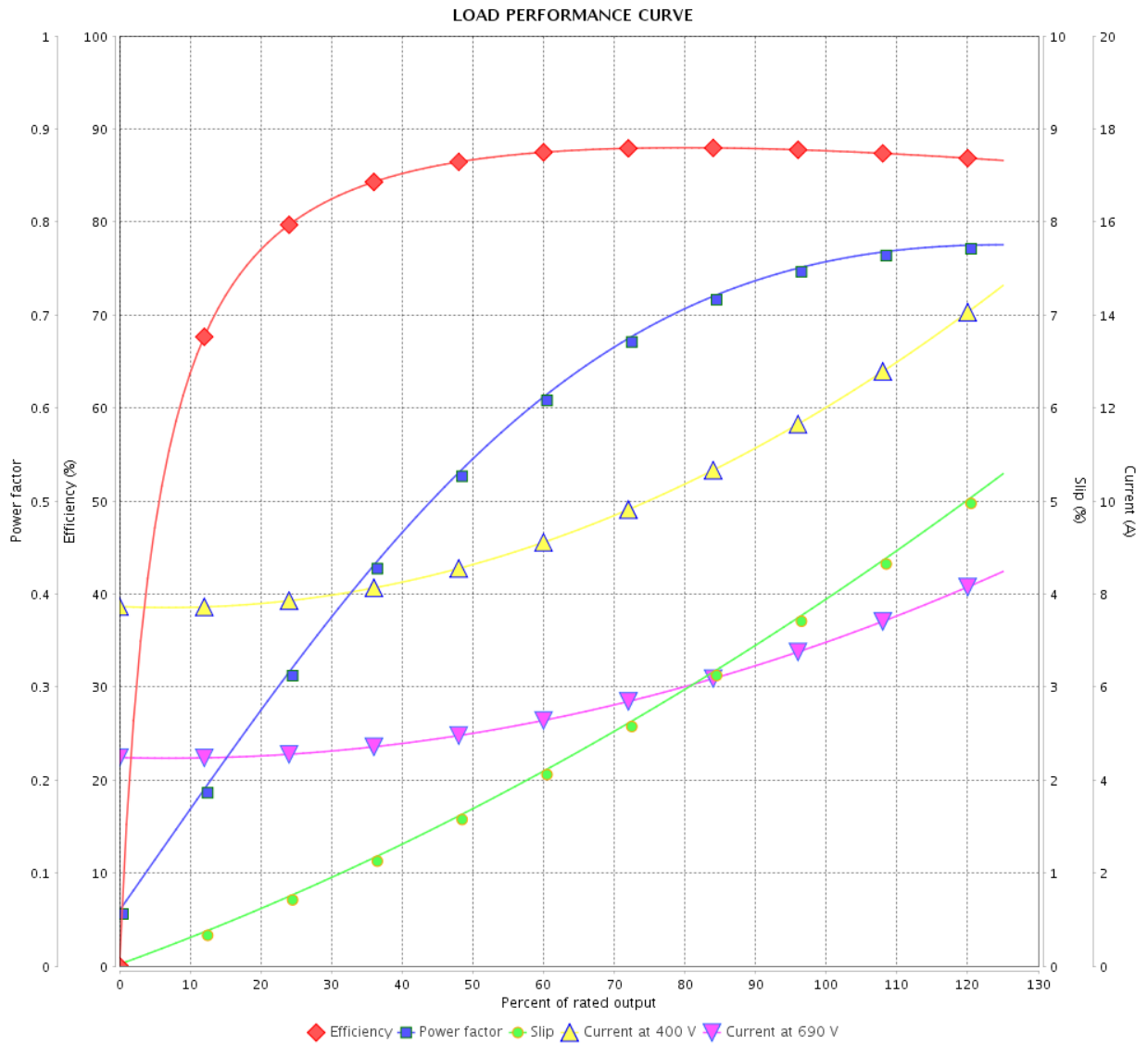
Three Phase Induction Motor - Squirrel Cage



Customer : \_\_\_\_\_

Product line : IE2 Three-Phase

Product code : 11688820



Performance : 400/690 V 50 Hz 4P

Rated current : 11.6/6.72 A  
 LRC : 7.1  
 Rated torque : 3.72 kgfm  
 Locked rotor torque : 270 %  
 Breakdown torque : 300 %  
 Rated speed : 1440 rpm

Moment of inertia (J) : 0.0208 kgm<sup>2</sup>  
 Duty cycle : S1  
 Insulation class : F  
 Service factor : 1.00  
 Temperature rise : 80 K  
 Design : N

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# THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage

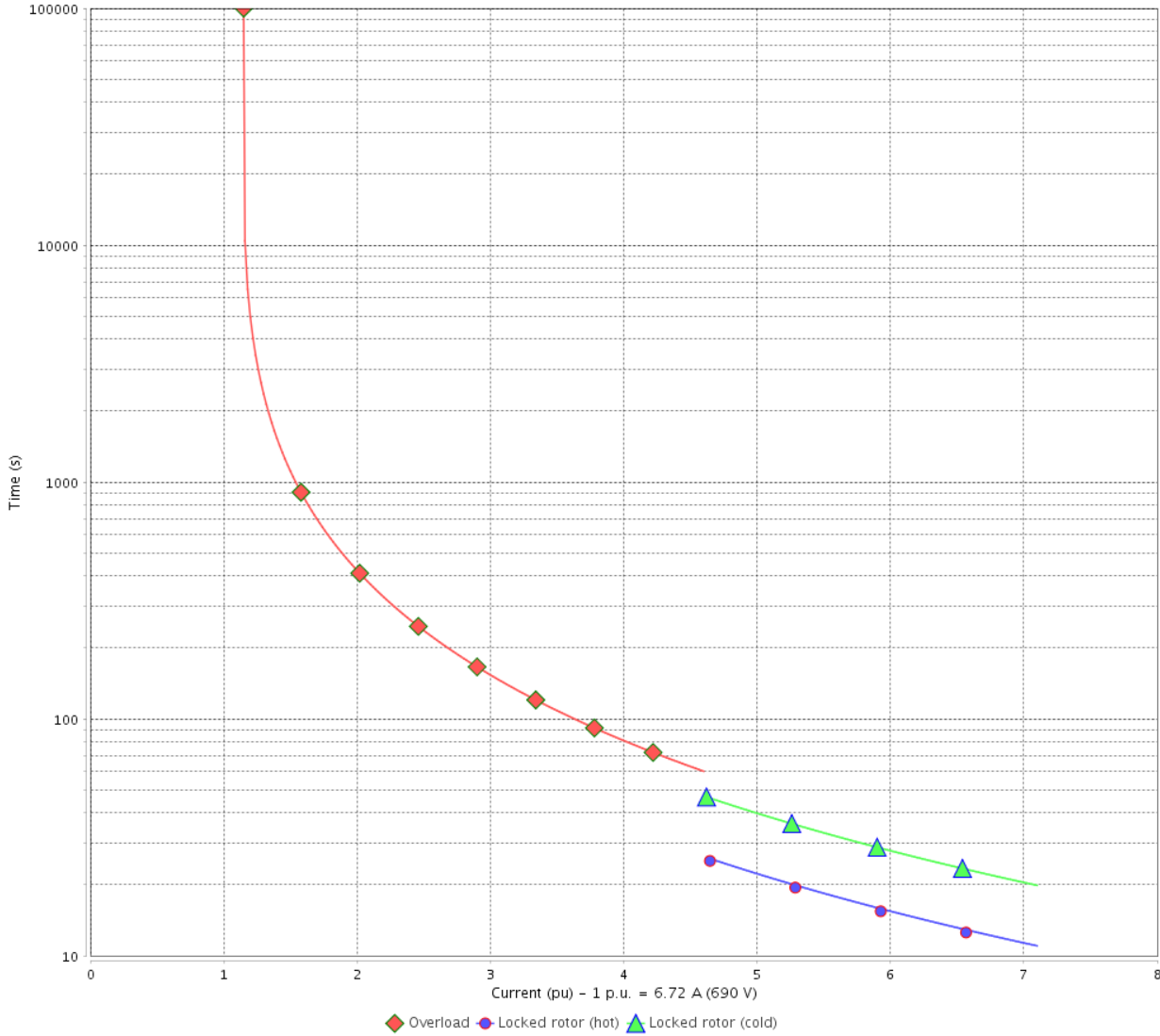


Customer :

Product line : IE2 Three-Phase

Product code : 11688820

THERMAL LIMIT CURVE



Performance : 400/690 V 50 Hz 4P

Rated current : 11.6/6.72 A  
 LRC : 7.1  
 Rated torque : 3.72 kgfm  
 Locked rotor torque : 270 %  
 Breakdown torque : 300 %  
 Rated speed : 1440 rpm

Moment of inertia (J) : 0.0208 kgm<sup>2</sup>  
 Duty cycle : S1  
 Insulation class : F  
 Service factor : 1.00  
 Temperature rise : 80 K  
 Design : N

Heating constant

Cooling constant

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# VFD OPERATION CURVE

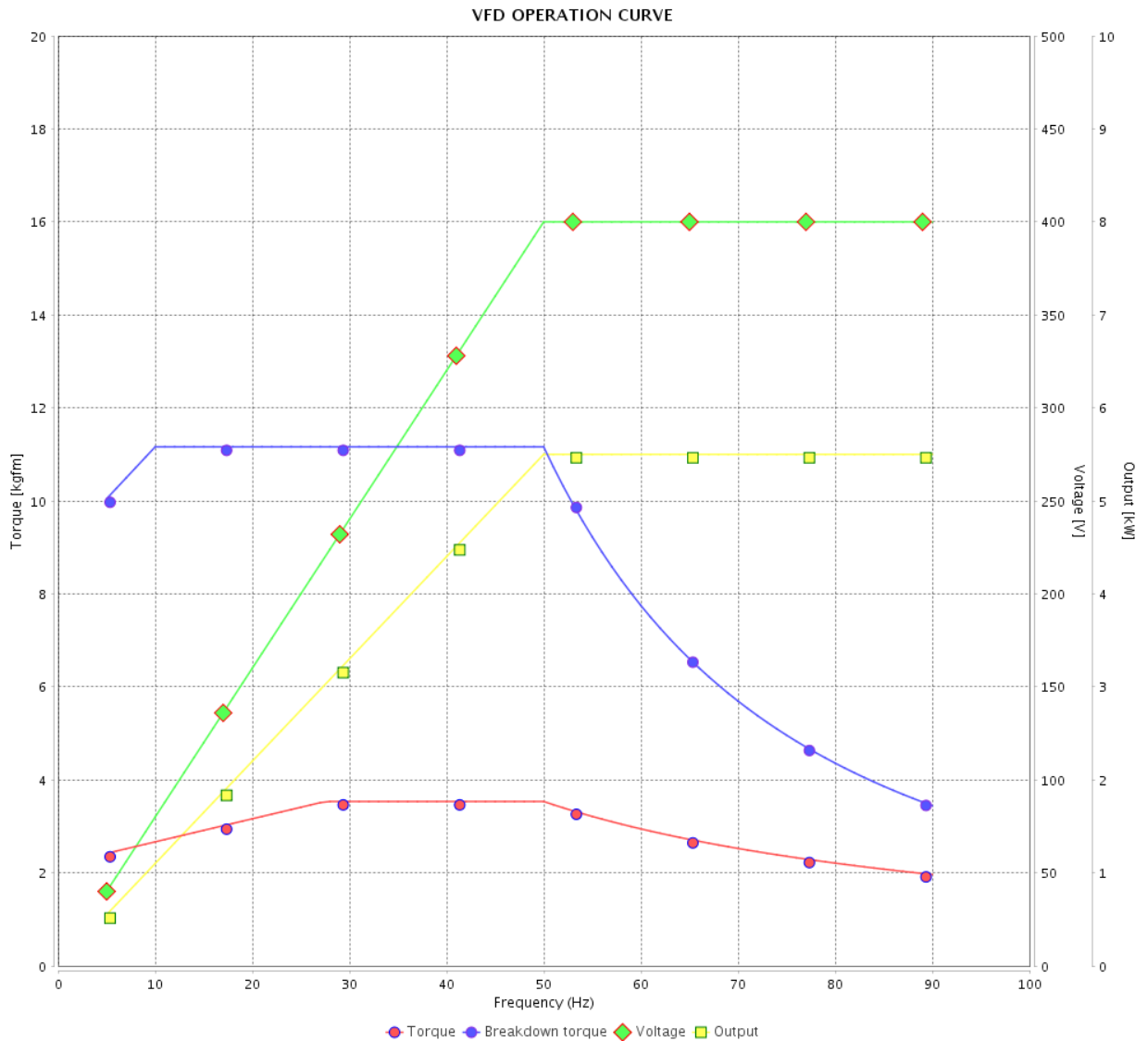
Three Phase Induction Motor - Squirrel Cage



Customer : \_\_\_\_\_

Product line : IE2 Three-Phase

Product code : 11688820



Performance : 400/690 V 50 Hz 4P

Rated current : 11.6/6.72 A  
 LRC : 7.1  
 Rated torque : 3.72 kgfm  
 Locked rotor torque : 270 %  
 Breakdown torque : 300 %  
 Rated speed : 1440 rpm

Moment of inertia (J) : 0.0208 kgm<sup>2</sup>  
 Duty cycle : S1  
 Insulation class : F  
 Service factor : 1.00  
 Temperature rise : 80 K  
 Design : N

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