

# DATA SHEET



## Three Phase Induction Motor - Squirrel Cage

Customer :							
Product line : W21 Explosion Proof NEMA Premium Efficiency Three-Phase			Product code : 14298049				
Frame	: 213/5TC		Locked rotor time	: 102s (cold) 57s (hot)			
Output	: 5 HP (3.7 kW)		Temperature rise	: 80 K			
Poles	: 6		Duty cycle	: Cont.(S1)			
Frequency	: 60 Hz		Ambient temperature	: -20°C to +40°C			
Rated voltage	: 575 V		Altitude	: 1000 m.a.s.l.			
Rated current	: 5.46 A		Protection degree	: IP55			
L. R. Amperes	: 37.2 A		Cooling method	: IC411 - TEFC			
LRC	: 6.8x(Code J)		Mounting	: F-1			
No load current	: 2.76 A		Rotation <sup>1</sup>	: Both (CW and CCW)			
Rated speed	: 1170 rpm		Noise level <sup>2</sup>	: 55.0 dB(A)			
Slip	: 2.50 %		Starting method	: Direct On Line			
Rated torque	: 3.10 kgfm		Approx. weight <sup>3</sup>	: 100 kg			
Locked rotor torque	: 170 %						
Breakdown torque	: 260 %						
Insulation class	: F						
Service factor	: 1.15						
Moment of inertia (J)	: 0.0620 kgm <sup>2</sup>						
Design	: B						
Output	50%	75%	100%	Foundation loads			
Efficiency (%)	88.5	89.5	89.5	Max. traction	: 99 kgf		
Power Factor	0.58	0.70	0.76	Max. compression	: 199 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)	
11.1	9.1	8.9	5.7	3.9	2.8	2.0	
		<u>Drive end</u>		<u>Non drive end</u>			
Bearing type	:	6308 2RS		6207 2RS			
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 NEMA MG-1.			
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### Thermal protection

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

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# LOAD PERFORMANCE CURVE

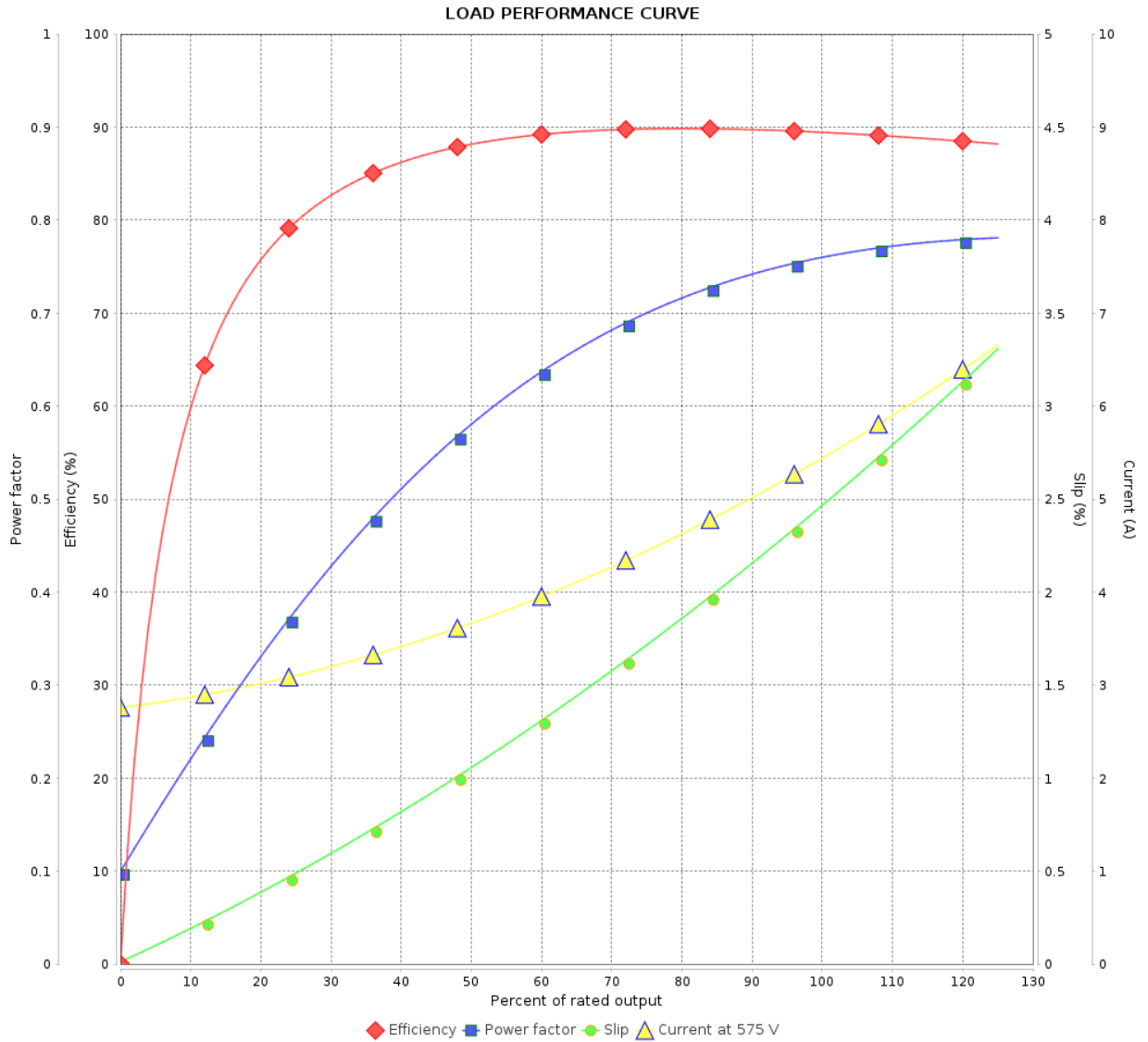
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Customer :

Product line : W21 Explosion Proof NEMA Premium  
Efficiency Three-Phase

Product code : 14298049



Performance : 575 V 60 Hz 6P

Rated current : 5.46 A  
 LRC : 6.8  
 Rated torque : 3.10 kgfm  
 Locked rotor torque : 170 %  
 Breakdown torque : 260 %  
 Rated speed : 1170 rpm

Moment of inertia (J) : 0.0620 kgm<sup>2</sup>  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.15  
 Temperature rise : 80 K  
 Design : B

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