

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W21 Explosion Proof NEMA Premium Efficiency Three-Phase Product code : 14189383

Frame	: 213/5T	Locked rotor time	: 41s (cold) 23s (hot)
Output	: 7.5 HP (5.5 kW)	Temperature rise	: 80 K
Poles	: 2	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	: 6.94 A	Protection degree	: IP55
L. R. Amperes	: 49.9 A	Cooling method	: IC411 - TEFC
LRC	: 7.2x(Code H)	Mounting	: F-1
No load current	: 2.00 A	Rotation <sup>1</sup>	: Both (CW and CCW)
Rated speed	: 3535 rpm	Noise level <sup>2</sup>	: 72.0 dB(A)
Slip	: 1.81 %	Starting method	: Direct On Line
Rated torque	: 1.54 kgfm	Approx. weight <sup>3</sup>	: 87.8 kg
Locked rotor torque	: 229 %		
Breakdown torque	: 300 %		
Insulation class	: F		
Service factor	: 1.15		
Moment of inertia (J)	: 0.0198 kgm <sup>2</sup>		
Design	: B		

Output	50%	75%	100%	Foundation loads	
Efficiency (%)	85.5	88.5	89.5	Max. traction	: 41 kgf
Power Factor	0.78	0.86	0.89	Max. compression	: 129 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)
10.7	7.3	6.5	6.2	3.1	2.1	1.1

		<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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Customer :

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

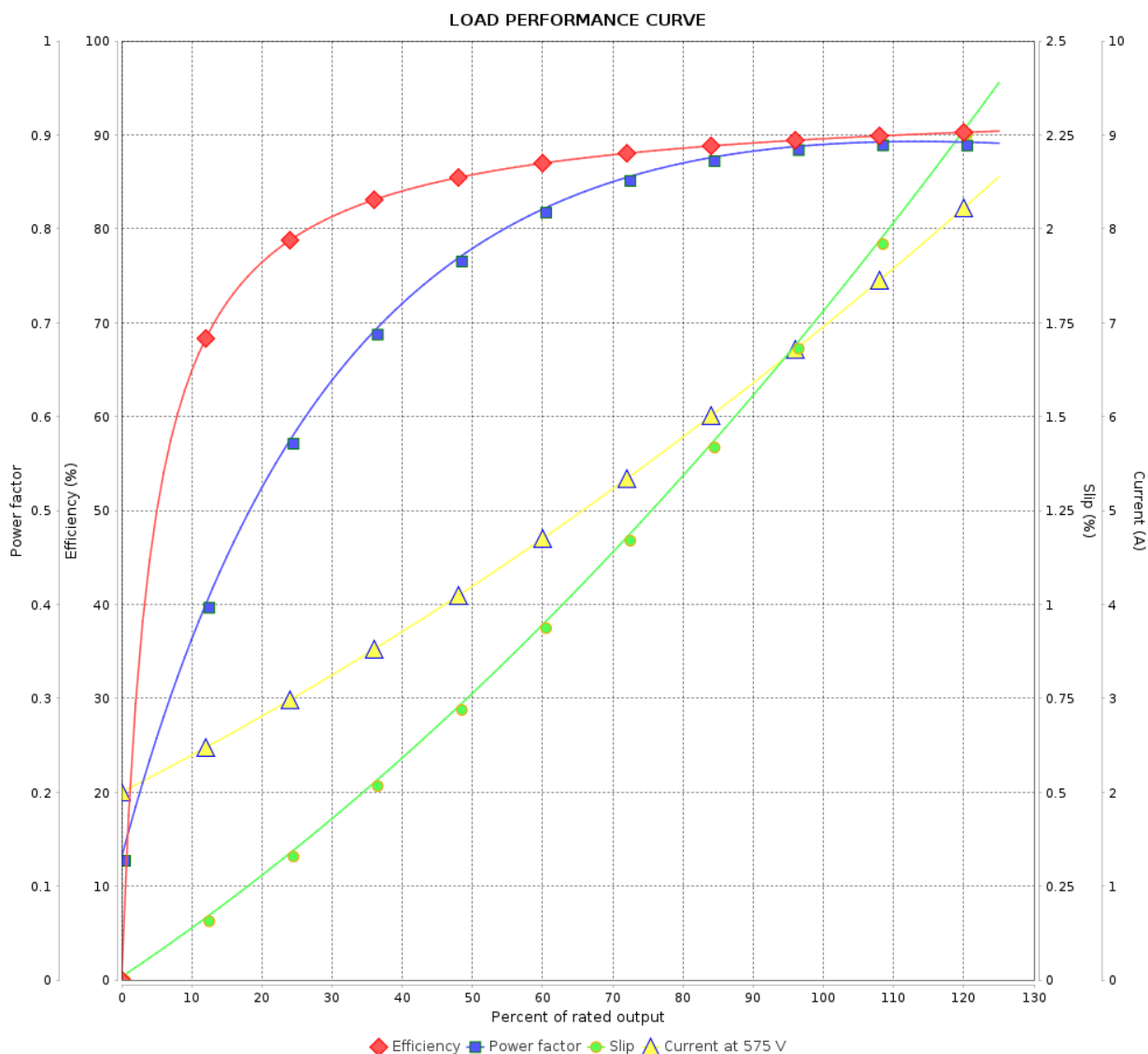
## Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 14189383



Performance : 575 V 60 Hz 2P

Rated current : 6.94 A  
LRC : 7.2  
Rated torque : 1.54 kgfm  
Locked rotor torque : 229 %  
Breakdown torque : 300 %  
Rated speed : 3535 rpm

Moment of inertia (J) : 0.0198 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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