

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W21 Explosion Proof NEMA Premium Efficiency Three-Phase Product code : 14283768

Frame	: 143/5TC	Locked rotor time	: 25s (cold) 14s (hot)
Output	: 1.5 HP (1.1 kW)	Temperature rise	: 80 K
Poles	: 4	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	: 1.64 A	Protection degree	: IP55
L. R. Amperes	: 14.6 A	Cooling method	: IC411 - TEFC
LRC	: 8.9x(Code L)	Mounting	: F-1
No load current	: 0.960 A	Rotation <sup>1</sup>	: Both (CW and CCW)
Rated speed	: 1755 rpm	Noise level <sup>2</sup>	: 51.0 dB(A)
Slip	: 2.50 %	Starting method	: Direct On Line
Rated torque	: 0.620 kgfm	Approx. weight <sup>3</sup>	: 33.1 kg
Locked rotor torque	: 270 %		
Breakdown torque	: 350 %		
Insulation class	: F		
Service factor	: 1.15		
Moment of inertia (J)	: 0.0055 kgm <sup>2</sup>		
Design	: B		

Output	50%	75%	100%	Foundation loads	
Efficiency (%)	81.5	85.5	86.5	Max. traction	: 44 kgf
Power Factor	0.58	0.70	0.78	Max. compression	: 79 kgf

	Drive end	Non drive end
Bearing type	: 6205 2RS	: 6204 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

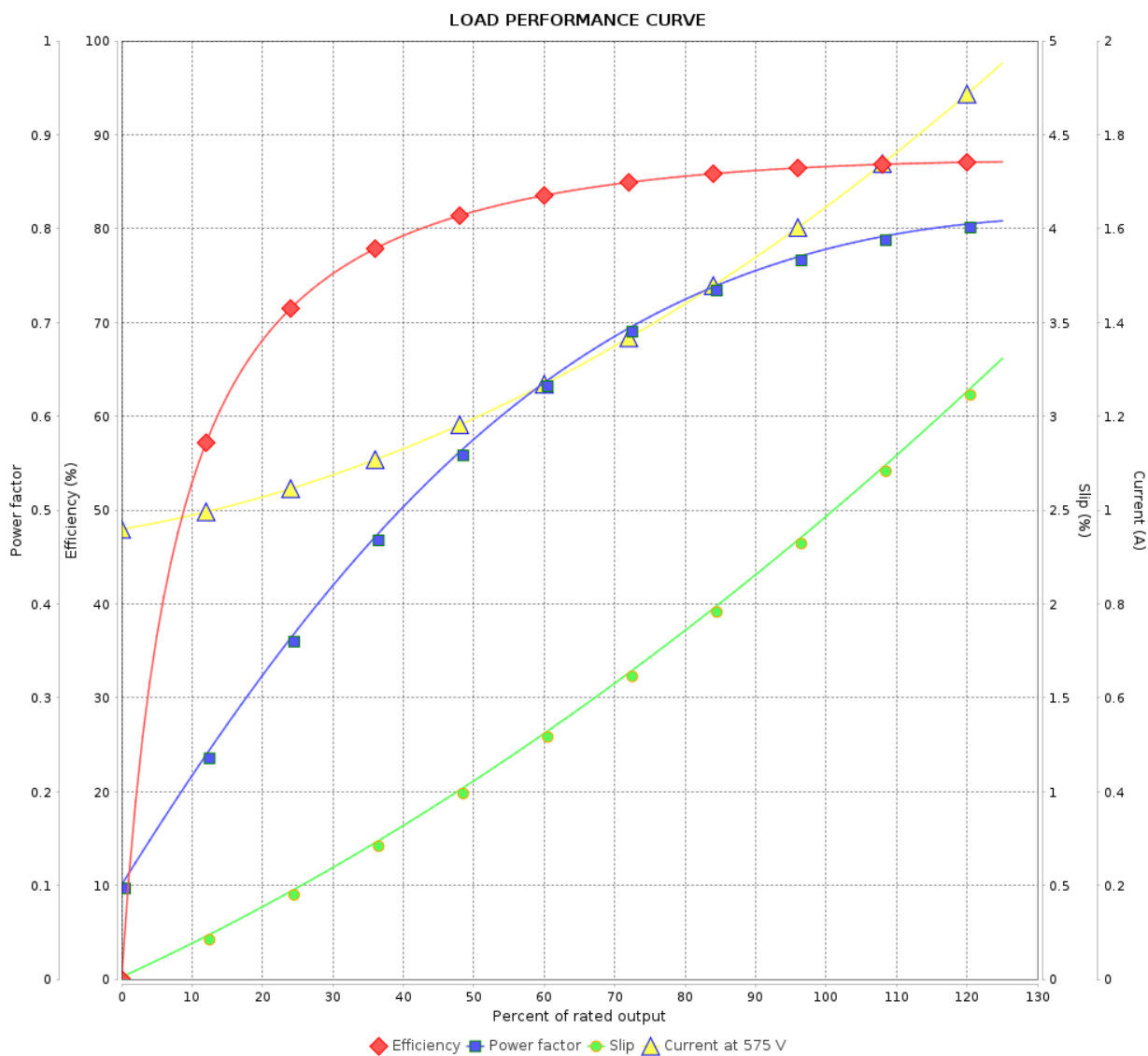
## Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 14283768



Performance : 575 V 60 Hz 4P

Rated current : 1.64 A  
LRC : 8.9  
Rated torque : 0.620 kgfm  
Locked rotor torque : 270 %  
Breakdown torque : 350 %  
Rated speed : 1755 rpm

Moment of inertia (J) : 0.0055 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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