

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W21 Explosion Proof NEMA Premium Efficiency Three-Phase Product code : 14407578

Frame	: 324TC	Locked rotor time	: 34s (cold) 19s (hot)
Output	: 40 HP (30 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	: 38.6 A	Protection degree	: IP55
L. R. Amperes	: 297 A	Cooling method	: IC411 - TEFC
LRC	: 7.7x(Code J)	Mounting	: F-1
No load current	: 18.4 A	Rotation <sup>1</sup>	: Both (CW and CCW)
Rated speed	: 1780 rpm	Noise level <sup>2</sup>	: 71.0 dB(A)
Slip	: 1.11 %	Starting method	: Direct On Line
Rated torque	: 16.4 kgfm	Approx. weight <sup>3</sup>	: 296 kg
Locked rotor torque	: 270 %		
Breakdown torque	: 300 %		
Insulation class	: F		
Service factor	: 1.15		
Moment of inertia (J)	: 0.3441 kgm <sup>2</sup>		
Design	: B		

Output	50%	75%	100%	Foundation loads	
Efficiency (%)	93.0	94.1	94.1	Max. traction	: 467 kgf
Power Factor	0.66	0.77	0.83	Max. compression	: 765 kgf

		<u>Drive end</u>	<u>Non drive end</u>
Bearing type	:	6312 C3	6212 C3
Sealing	:	Oil Seal	Lip Seal
Lubrication interval	:	20000 h	20000 h
Lubricant amount	:	21 g	13 g
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

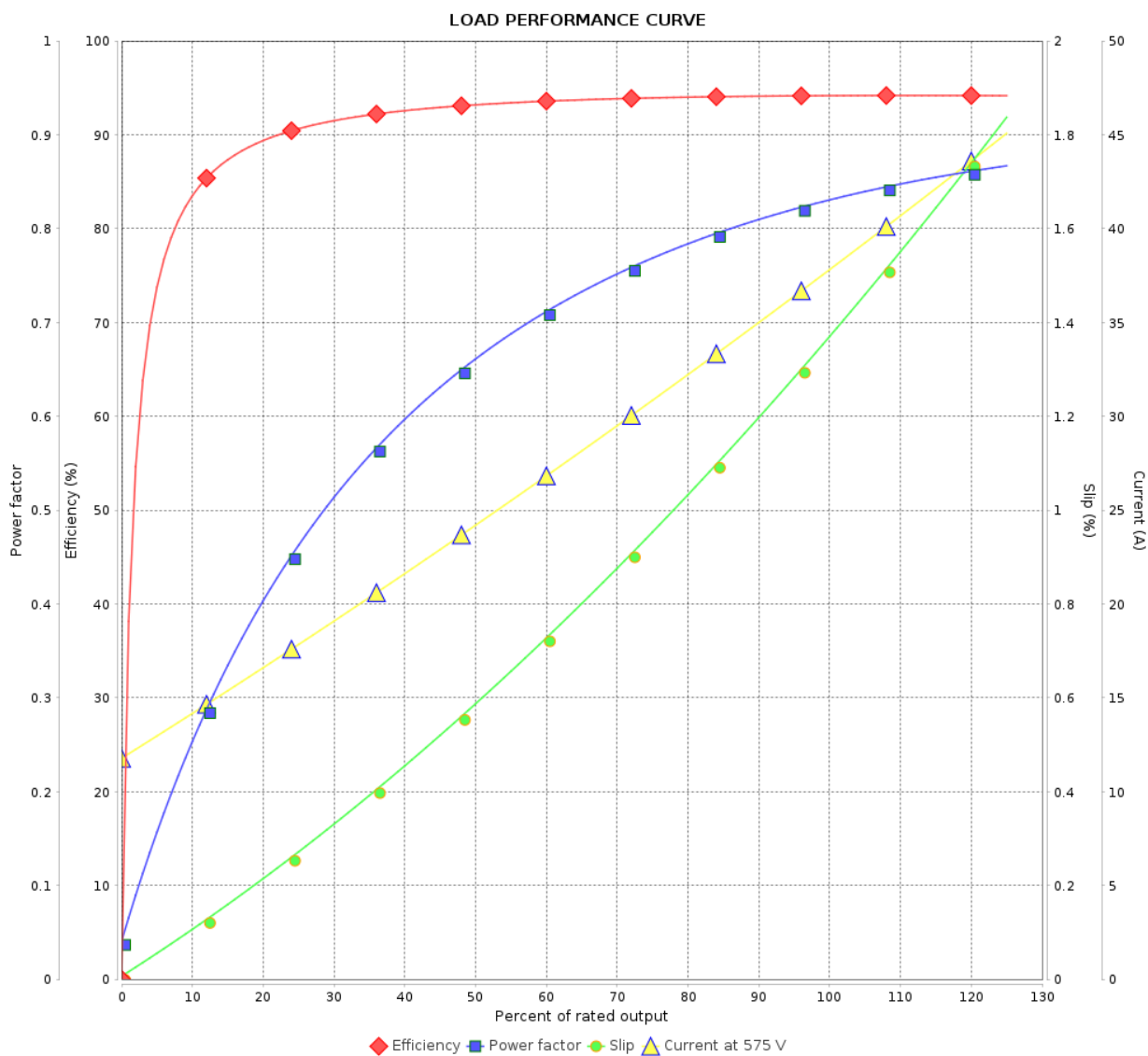
## Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 14407578



Performance : 575 V 60 Hz 4P

Rated current : 38.6 A  
LRC : 7.7  
Rated torque : 16.4 kgfm  
Locked rotor torque : 270 %  
Breakdown torque : 300 %  
Rated speed : 1780 rpm

Moment of inertia (J) : 0.3441 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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