

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W21 Explosion Proof NEMA Premium Efficiency Three-Phase Product code : 12097710

Frame	: 404/5TC	Locked rotor time	: 23s (cold) 13s (hot)
Output	: 100 HP (75 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	: 90.4 A	Protection degree	: IP55
L. R. Amperes	: 651 A	Cooling method	: IC411 - TEFC
LRC	: 7.2x(Code H)	Mounting	: F-1
No load current	: 31.2 A	Rotation <sup>1</sup>	: Both (CW and CCW)
Rated speed	: 1780 rpm	Noise level <sup>2</sup>	: 75.0 dB(A)
Slip	: 1.11 %	Starting method	: Direct On Line
Rated torque	: 40.8 kgfm	Approx. weight <sup>3</sup>	: 564 kg
Locked rotor torque	: 270 %		
Breakdown torque	: 280 %		
Insulation class	: F		
Service factor	: 1.15		
Moment of inertia (J)	: 1.11 kgm <sup>2</sup>		
Design	: B		

Output	50%	75%	100%	Foundation loads	
Efficiency (%)	94.5	95.0	95.4	Max. traction	: 842 kgf
Power Factor	0.72	0.82	0.87	Max. compression	: 1404 kgf

	Drive end	Non drive end
Bearing type	: 6217 C3	6314 C3
Sealing	: Oil Seal	Lip Seal
Lubrication interval	: 9149 h	9789 h
Lubricant amount	: 21 g	27 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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Revision

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

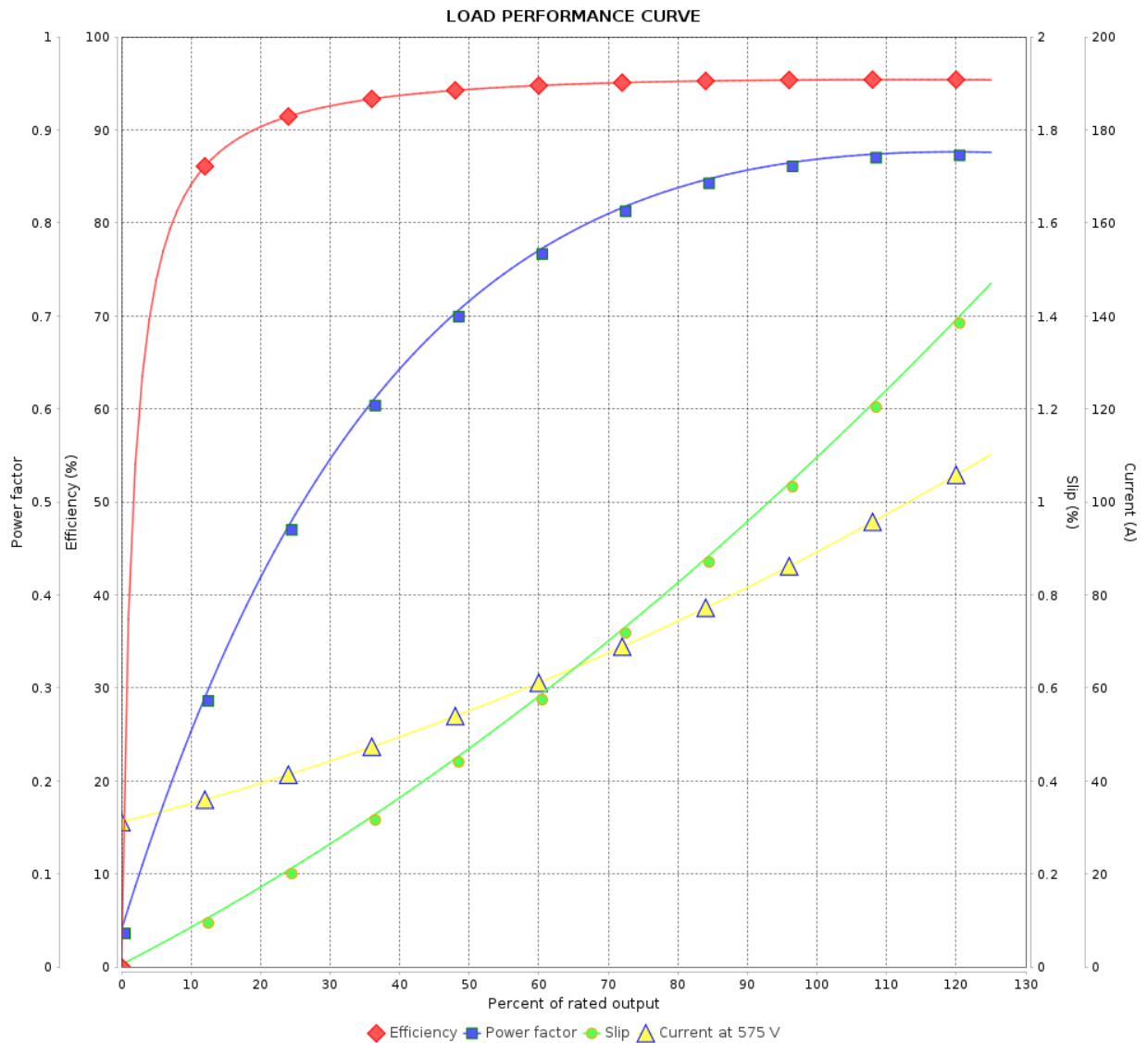
## Three Phase Induction Motor - Squirrel Cage



Customer :

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

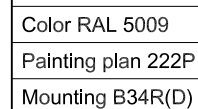
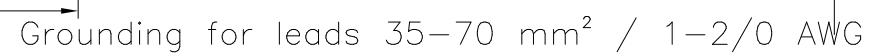
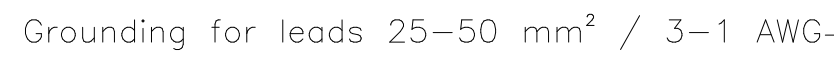
Product code : 12097710



Performance : 575 V 60 Hz 4P

Rated current	: 90.4 A	Moment of inertia (J)	: 1.11 kgm <sup>2</sup>
LRC	: 7.2	Duty cycle	: Cont.(S1)
Rated torque	: 40.8 kgfm	Insulation class	: F
Locked rotor torque	: 270 %	Service factor	: 1.15
Breakdown torque	: 280 %	Temperature rise	: 80 K
Rated speed	: 1780 rpm	Design	: B

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