

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W21 Explosion Proof NEMA Premium Efficiency Three-Phase Product code : 14407172

Frame	: 286T	Locked rotor time	: 30s (cold) 17s (hot)
Output	: 30 HP (22 kW)	Temperature rise	: 105 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	: 28.1 A	Protection degree	: IP55
L. R. Amperes	: 171 A	Cooling method	: IC411 - TEFC
LRC	: 6.1x(Code G)	Mounting	: F-1
No load current	: 9.84 A	Rotation <sup>1</sup>	: Both (CW and CCW)
Rated speed	: 1770 rpm	Noise level <sup>2</sup>	: 68.0 dB(A)
Slip	: 1.67 %	Starting method	: Direct On Line
Rated torque	: 12.3 kgfm	Approx. weight <sup>3</sup>	: 224 kg
Locked rotor torque	: 240 %		
Breakdown torque	: 240 %		
Insulation class	: F		
Service factor	: 1.15		
Moment of inertia (J)	: 0.2175 kgm <sup>2</sup>		
Design	: B		

Output	25%	50%	75%	100%	Foundation loads	
Efficiency (%)	92.3	93.0	93.0	93.6	Max. traction	: 310 kgf
Power Factor	0.46	0.70	0.80	0.84	Max. compression	: 534 kgf

		Drive end	Non drive end
Bearing type	:	6311 C3	6211 C3
Sealing	:	Oil Seal	Lip Seal
Lubrication interval	:	20000 h	20000 h
Lubricant amount	:	18 g	11 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 :

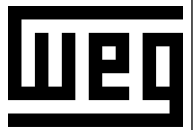
Thermal protection

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

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# LOAD PERFORMANCE CURVE

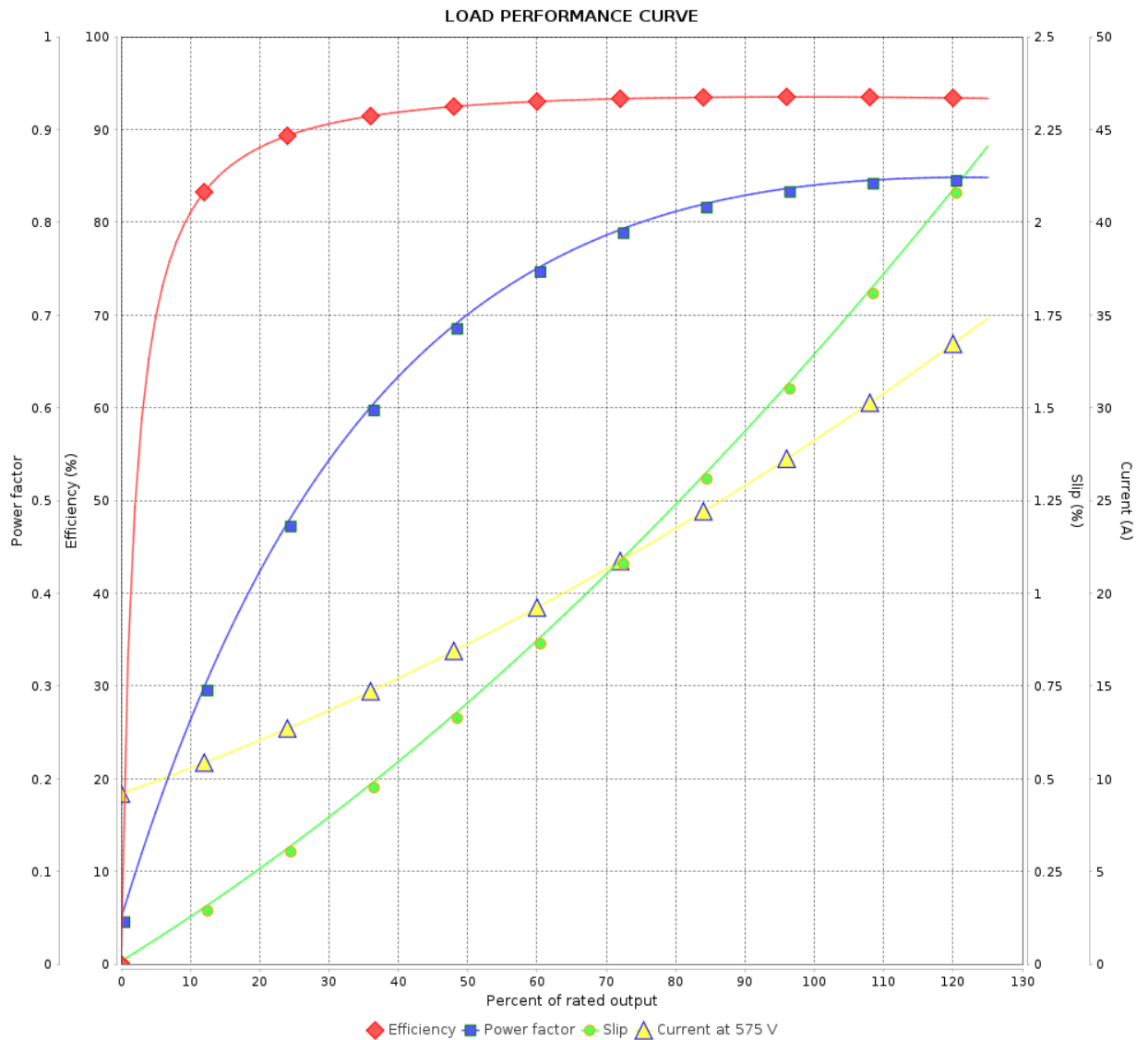
## Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 14407172



Performance : 575 V 60 Hz 4P

Rated current : 28.1 A  
LRC : 6.1  
Rated torque : 12.3 kgfm  
Locked rotor torque : 240 %  
Breakdown torque : 240 %  
Rated speed : 1770 rpm

Moment of inertia (J) : 0.2175 kgm<sup>2</sup>  
Duty cycle : Cont.(S1)  
Insulation class : F  
Service factor : 1.15  
Temperature rise : 105 K  
Design : B

Rev.	Changes Summary	Performed	Checked	Date
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