

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W21 Explosion Proof NEMA Premium Efficiency Three-Phase      Product code : 14077145

Frame	: 444/5TS	Locked rotor time	: 55s (cold) 31s (hot)
Output	: 150 HP (110 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	: 129 A	Protection degree	: IP55
L. R. Amperes	: 903 A	Cooling method	: IC411 - TEFC
LRC	: 7.0x(Code G)	Mounting	: F-1
No load current	: 31.2 A	Rotation <sup>1</sup>	: Both (CW and CCW)
Rated speed	: 3570 rpm	Noise level <sup>2</sup>	: 86.0 dB(A)
Slip	: 0.83 %	Starting method	: Direct On Line
Rated torque	: 30.5 kgfm	Approx. weight <sup>3</sup>	: 989 kg
Locked rotor torque	: 200 %		
Breakdown torque	: 250 %		
Insulation class	: F		
Service factor	: 1.15		
Moment of inertia (J)	: 1.65 kgm <sup>2</sup>		
Design	: B		

Output	50%	75%	100%	Foundation loads	
Efficiency (%)	93.6	95.0	95.4	Max. traction	: 172 kgf
Power Factor	0.85	0.89	0.90	Max. compression	: 1161 kgf

	Drive end	Non drive end
Bearing type	: 6314 C3	6314 C3
Sealing	: Oil Seal	Lip Seal
Lubrication interval	: 3604 h	3604 h
Lubricant amount	: 27 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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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

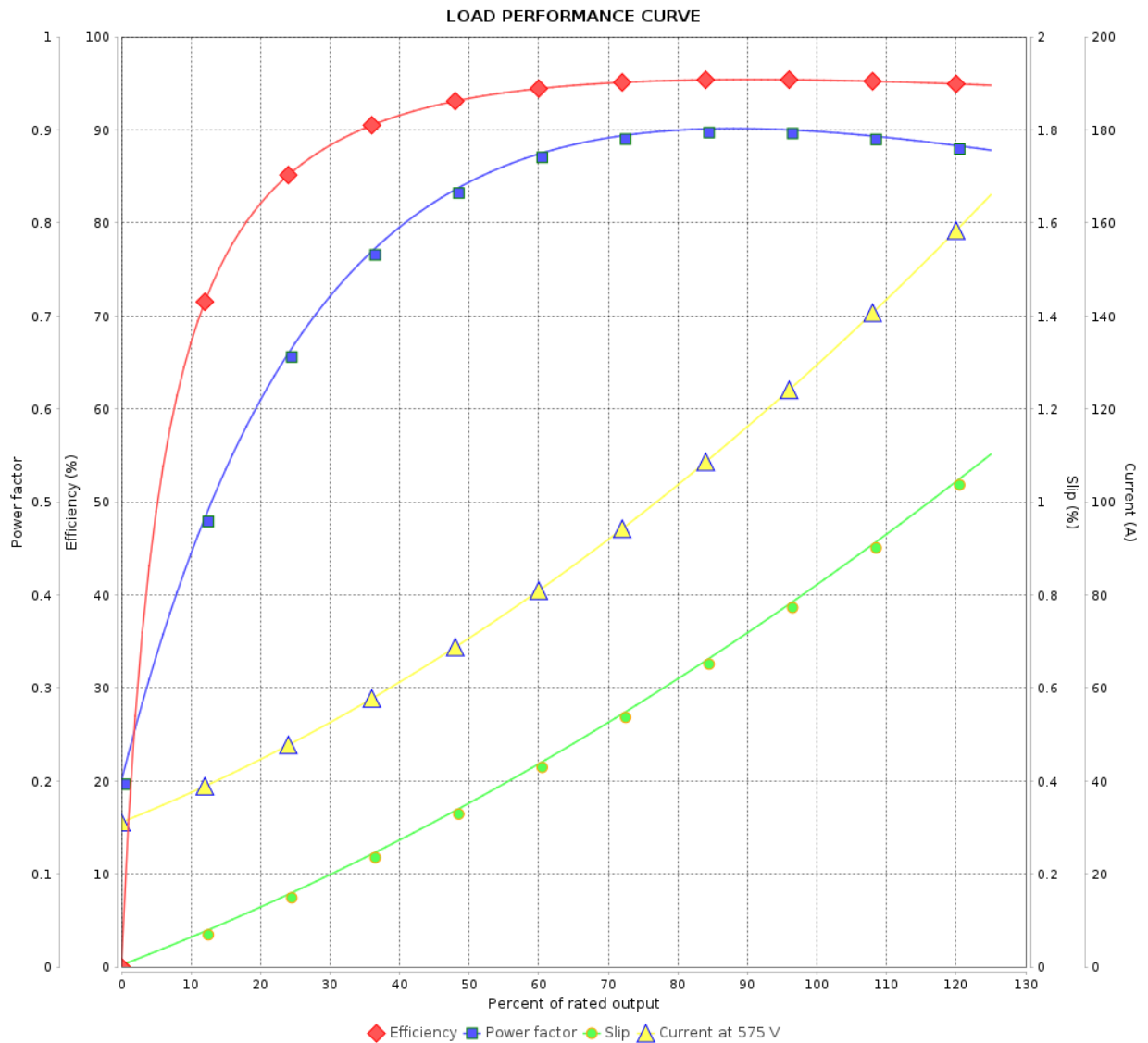
## Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 14077145



Performance : 575 V 60 Hz 2P

Rated current : 129 A  
LRC : 7.0  
Rated torque : 30.5 kgfm  
Locked rotor torque : 200 %  
Breakdown torque : 250 %  
Rated speed : 3570 rpm

Moment of inertia (J) : 1.65 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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