

# DATA SHEET



## Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : W21 Explosion Proof NEMA Premium Efficiency Three-Phase      Product code : 12697748

Frame	: 364/5TC	Locked rotor time	: 36s (cold) 20s (hot)
Output	: 60 HP (45 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	: 54.6 A	Protection degree	: IP55
L. R. Amperes	: 382 A	Cooling method	: IC411 - TEFC
LRC	: 7.0x(Code H)	Mounting	: F-1
No load current	: 17.6 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	: 24.5 kgfm	Approx. weight <sup>3</sup>	: 470 kg
Locked rotor torque	: 250 %		
Breakdown torque	: 250 %		
Insulation class	: F		
Service factor	: 1.15		
Moment of inertia (J)	: 0.8767 kgm <sup>2</sup>		
Design	: B		

Output	50%	75%	100%	Foundation loads	
Efficiency (%)	94.1	94.5	95.0	Max. traction	: 452 kgf
Power Factor	0.72	0.82	0.87	Max. compression	: 922 kgf

	<u>Drive end</u>	<u>Non drive end</u>
Bearing type	: 6314 C3	: 6314 C3
Sealing	: Oil Seal	: Lip Seal
Lubrication interval	: 9789 h	: 9789 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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### 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

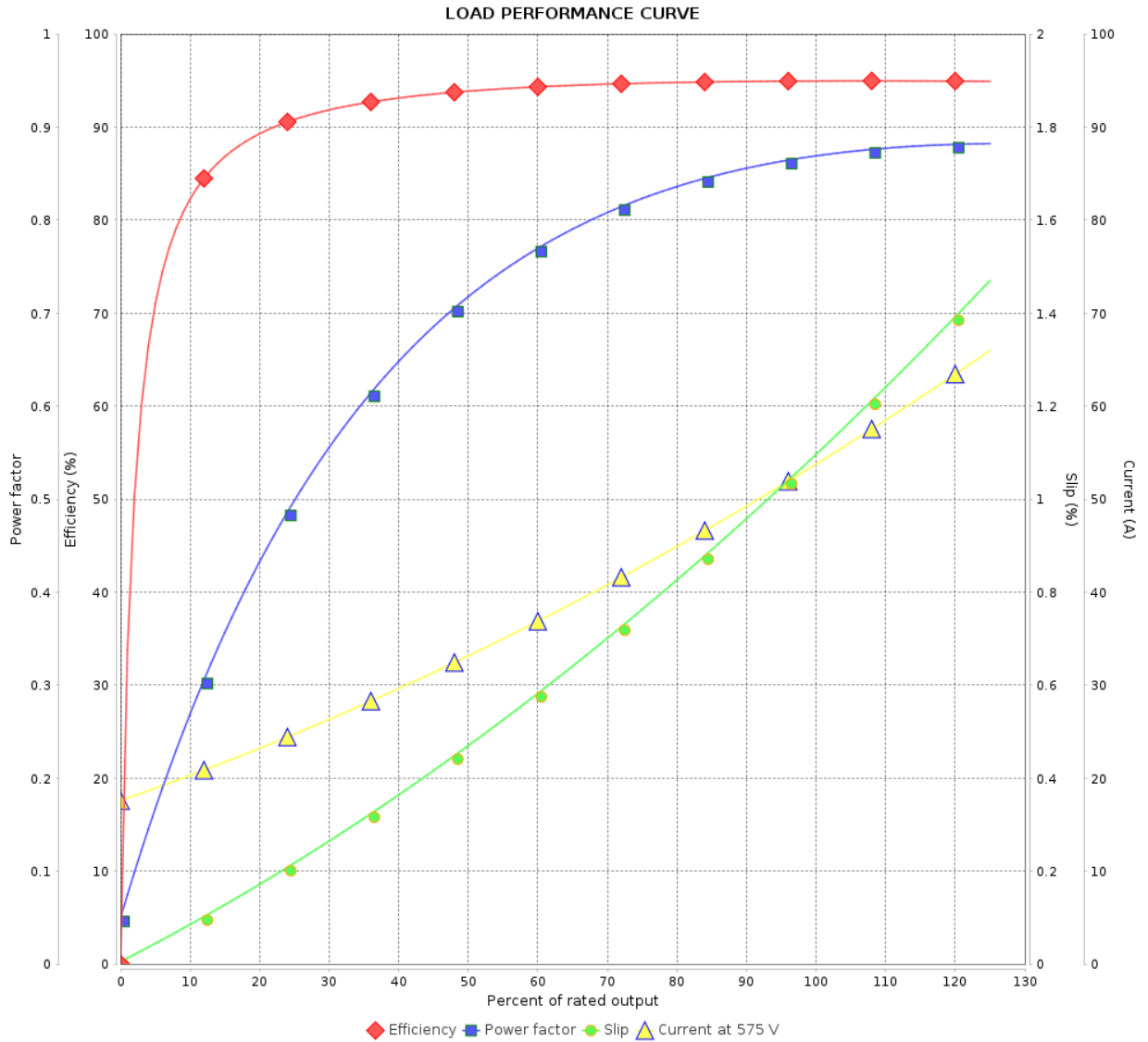
Three Phase Induction Motor - Squirrel Cage



Customer : \_\_\_\_\_

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

Product code : 12697748



Performance : 575 V 60 Hz 4P

Rated current : 54.6 A  
 LRC : 7.0  
 Rated torque : 24.5 kgfm  
 Locked rotor torque : 250 %  
 Breakdown torque : 250 %  
 Rated speed : 1780 rpm

Moment of inertia (J) : 0.8767 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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