

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W21 Explosion Proof NEMA Premium Efficiency Three-Phase Product code : 11724527

Frame	: 444/5T	Locked rotor time	: 88s (cold) 49s (hot)
Output	: 100 HP (75 kW)	Temperature rise	: 80 K
Poles	: 6	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	: 96.7 A	Protection degree	: IP55
L. R. Amperes	: 658 A	Cooling method	: IC411 - TEFC
LRC	: 6.8x(Code G)	Mounting	: F-1
No load current	: 39.0 A	Rotation <sup>1</sup>	: Both (CW and CCW)
Rated speed	: 1190 rpm	Noise level <sup>2</sup>	: 70.0 dB(A)
Slip	: 0.83 %	Starting method	: Direct On Line
Rated torque	: 61.2 kgfm	Approx. weight <sup>3</sup>	: 940 kg
Locked rotor torque	: 229 %		
Breakdown torque	: 260 %		
Insulation class	: F		
Service factor	: 1.15		
Moment of inertia (J)	: 3.68 kgm <sup>2</sup>		
Design	: B		

Output	50%	75%	100%	Foundation loads	
Efficiency (%)	94.1	95.0	95.0	Max. traction	: 917 kgf
Power Factor	0.66	0.76	0.82	Max. compression	: 1857 kgf

	Drive end	Non drive end
Bearing type	: NU-219 C3	: 6316 C3
Sealing	: Oil Seal	: Lip Seal
Lubrication interval	: 8864 h	: 12823 h
Lubricant amount	: 28 g	: 34 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.

Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by				
Date	21/10/2024			

Page 1 / 3  
Revision

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Customer :

Thermal protection

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

Rev.	Changes Summary		Performed	Checked	Date
Performed by				Page	Revision
Checked by				2 / 3	
Date	21/10/2024				

# LOAD PERFORMANCE CURVE

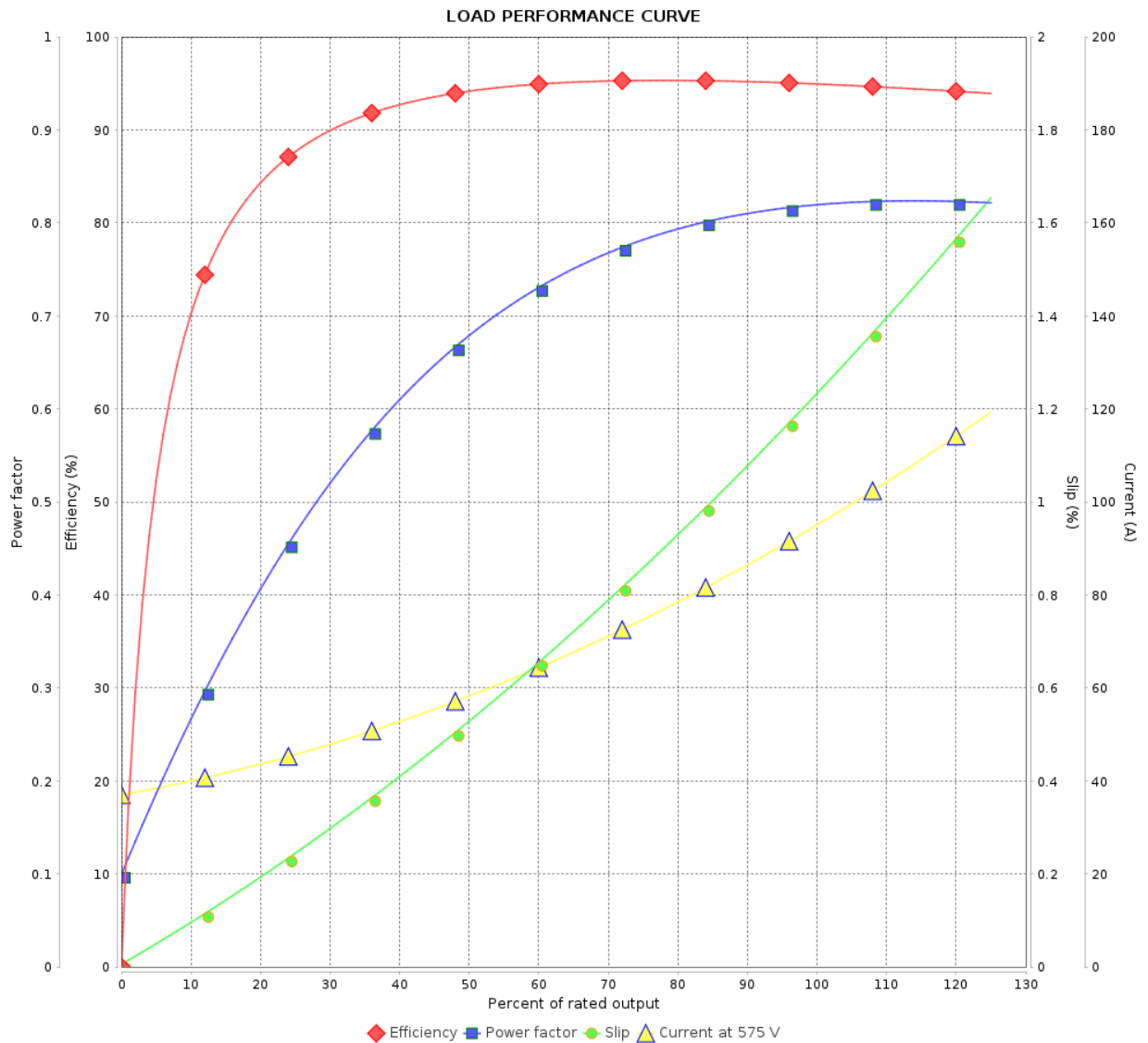
## Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 11724527



Performance : 575 V 60 Hz 6P

Rated current : 96.7 A  
LRC : 6.8  
Rated torque : 61.2 kgfm  
Locked rotor torque : 229 %  
Breakdown torque : 260 %  
Rated speed : 1190 rpm

Moment of inertia (J) : 3.68 kgm<sup>2</sup>  
Duty cycle : Cont.(S1)  
Insulation class : F  
Service factor : 1.15  
Temperature rise : 80 K  
Design : B

Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page 3 / 3Revision		
Checked by				
Date	21/10/2024			