

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W21 Explosion Proof NEMA Premium Efficiency Three-Phase Product code : 11873977

Frame	: 444/5T	Locked rotor time	: 75s (cold) 42s (hot)
Output	: 125 HP	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	: 111 A	Protection degree	: IP55
L. R. Amperes	: 756 A	Cooling method	: IC411 - TEFC
LRC	: 6.8x(Code G)	Mounting	: F-1
No load current	: 36.0 A	Rotation ¹	: Both (CW and CCW)
Rated speed	: 1785 rpm	Noise level ²	: 76.0 dB(A)
Slip	: 0.83 %	Starting method	: Direct On Line
Rated torque	: 50.8 kgfm	Approx. weight ³	: 898 kg
Locked rotor torque	: 200 %		
Breakdown torque	: 220 %		
Insulation class	: F		
Service factor	: 1.15		
Moment of inertia (J)	: 2.41 kgm ²		
Design	: B		

Output	50%	75%	100%	Foundation loads	
Efficiency (%)	94.3	95.2	95.4	Max. traction	: 529 kgf
Power Factor	0.75	0.82	0.85	Max. compression	: 1426 kgf

	Drive end	Non drive end
Bearing type	: NU-219 C3	6316 C3
Sealing	: Viton Oil Seal	Viton Seal
Lubrication interval	: 5526 h	8569 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	30/10/2024			

Page 1 / 3
Revision

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



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 2 / 3	Revision
Checked by					
Date	30/10/2024				

LOAD PERFORMANCE CURVE

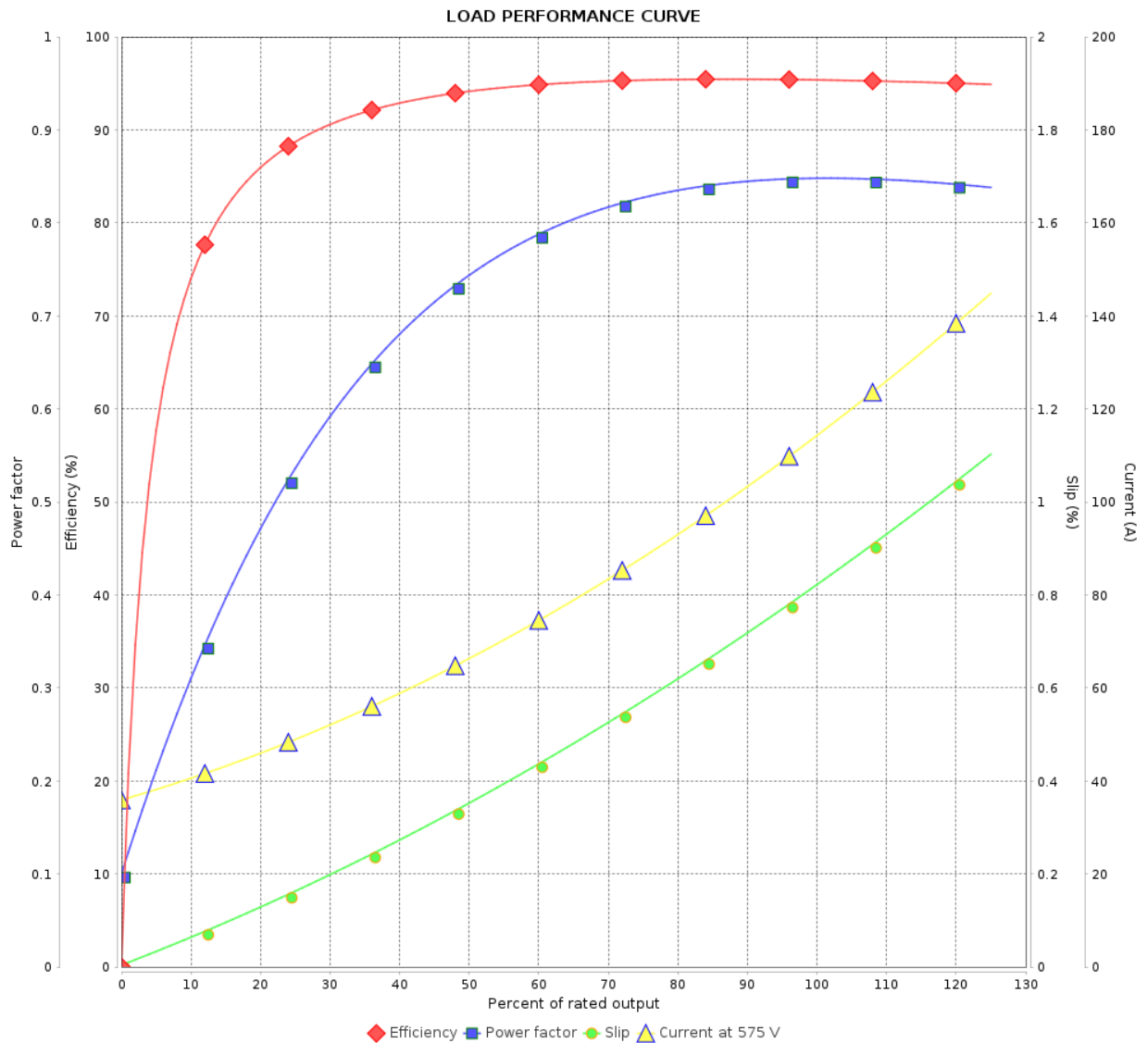
Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 11873977



Performance : 575 V 60 Hz 4P

Rated current : 111 A
LRC : 6.8
Rated torque : 50.8 kgfm
Locked rotor torque : 200 %
Breakdown torque : 220 %
Rated speed : 1785 rpm

Moment of inertia (J) : 2.41 kgm²
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	30/10/2024			