

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 IEEE 841 NEMA Premium Efficiency Three-Phase      Product code : 13906220

Frame	: 284/6TS	Locked rotor time	: 27s (cold) 15s (hot)
Output	: 30 HP (22 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	: 27.7 A	Protection degree	: IP56
L. R. Amperes	: 174 A	Cooling method	: IC411 - TEFC
LRC	: 6.3x(Code G)	Mounting	: F-1
No load current	: 7.92 A	Rotation <sup>1</sup>	: Both (CW and CCW)
Rated speed	: 3549 rpm	Noise level <sup>2</sup>	: 72.0 dB(A)
Slip	: 1.42 %	Starting method	: Direct On Line
Rated torque	: 6.13 kgfm	Approx. weight <sup>3</sup>	: 181 kg
Locked rotor torque	: 240 %		
Breakdown torque	: 250 %		
Insulation class	: F		
Service factor	: 1.25		
Moment of inertia (J)	: 0.1419 kgm <sup>2</sup>		
Design	: B		

Output	50%	75%	100%	Foundation loads	
Efficiency (%)	91.7	91.7	91.7	Max. traction	: 128 kgf
Power Factor	0.77	0.85	0.87	Max. compression	: 310 kgf

Losses at normative operating points (speed;torque), in percentage of rated output power

P1 (0,9;1,0)	P2 (0,5;1,0)	P3 (0,25;1,0)	P4 (0,9;0,5)	P5 (0,5;0,5)	P6 (0,5;0,25)	P7 (0,25;0,25)
8.5	6.7	6.4	4.2	2.5	1.6	1.0

	Drive end	Non drive end
Bearing type	: 6311 C3	6211 C3
Sealing	: Inpro/Seal	Inpro/Seal
Lubrication interval	: 14000 h	17000 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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# LOAD PERFORMANCE CURVE

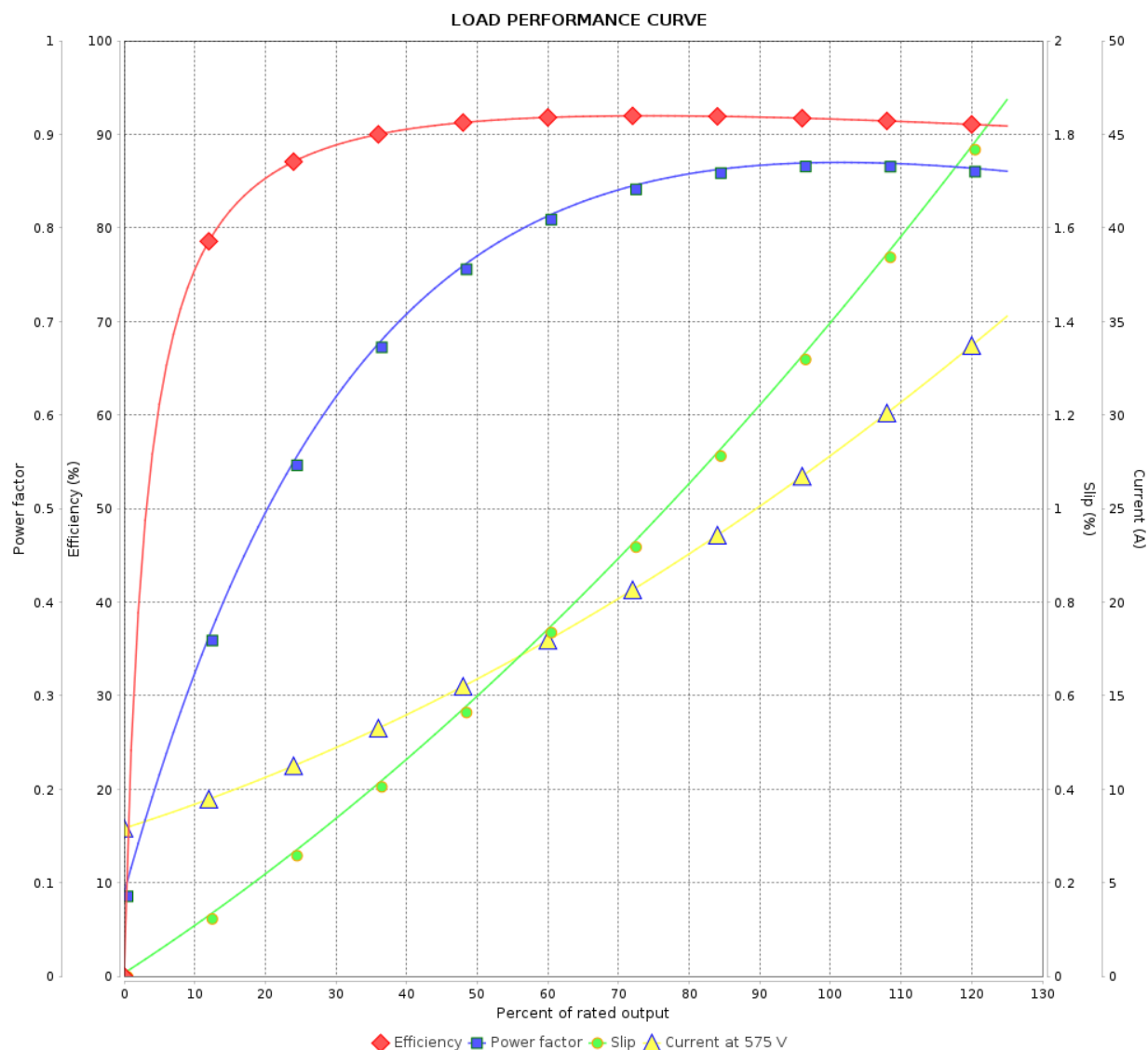
## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 IEEE 841 NEMA Premium  
Efficiency Three-Phase

Product code : 13906220



Performance : 575 V 60 Hz 2P

Rated current : 27.7 A  
LRC : 6.3  
Rated torque : 6.13 kgfm  
Locked rotor torque : 240 %  
Breakdown torque : 250 %  
Rated speed : 3549 rpm

Moment of inertia (J) : 0.1419 kgm<sup>2</sup>  
Duty cycle : Cont.(S1)  
Insulation class : F  
Service factor : 1.25  
Temperature rise : 80 K  
Design : B

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