

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 IEEE 841 NEMA Premium Efficiency Three-Phase Product code : 12148058

Frame	: 182/4TC	Locked rotor time	: 45s (cold) 25s (hot)
Output	: 5 HP (3.7 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	: 4.72 A	Protection degree	: IP56
L. R. Amperes	: 35.9 A	Cooling method	: IC411 - TEFC
LRC	: 7.6x(Code J)	Mounting	: F-1
No load current	: 1.60 A	Rotation <sup>1</sup>	: Both (CW and CCW)
Rated speed	: 3485 rpm	Noise level <sup>2</sup>	: 66.0 dB(A)
Slip	: 3.19 %	Starting method	: Direct On Line
Rated torque	: 1.04 kgfm	Approx. weight <sup>3</sup>	: 49.1 kg
Locked rotor torque	: 229 %		
Breakdown torque	: 350 %		
Insulation class	: F		
Service factor	: 1.25		
Moment of inertia (J)	: 0.0094 kgm <sup>2</sup>		
Design	: B		

Output	50%	75%	100%	Foundation loads	
Efficiency (%)	86.5	88.5	88.5	Max. traction	: 51 kgf
Power Factor	0.76	0.85	0.89	Max. compression	: 101 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)
12.4	9.9	8.9	6.2	3.7	2.3	1.4

		<u>Drive end</u>	<u>Non drive end</u>
Bearing type	:	6207 C3	6206 C3
Sealing	:	Inpro/Seal	Inpro/Seal
Lubrication interval	:	20000 h	20000 h
Lubricant amount	:	7 g	5 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

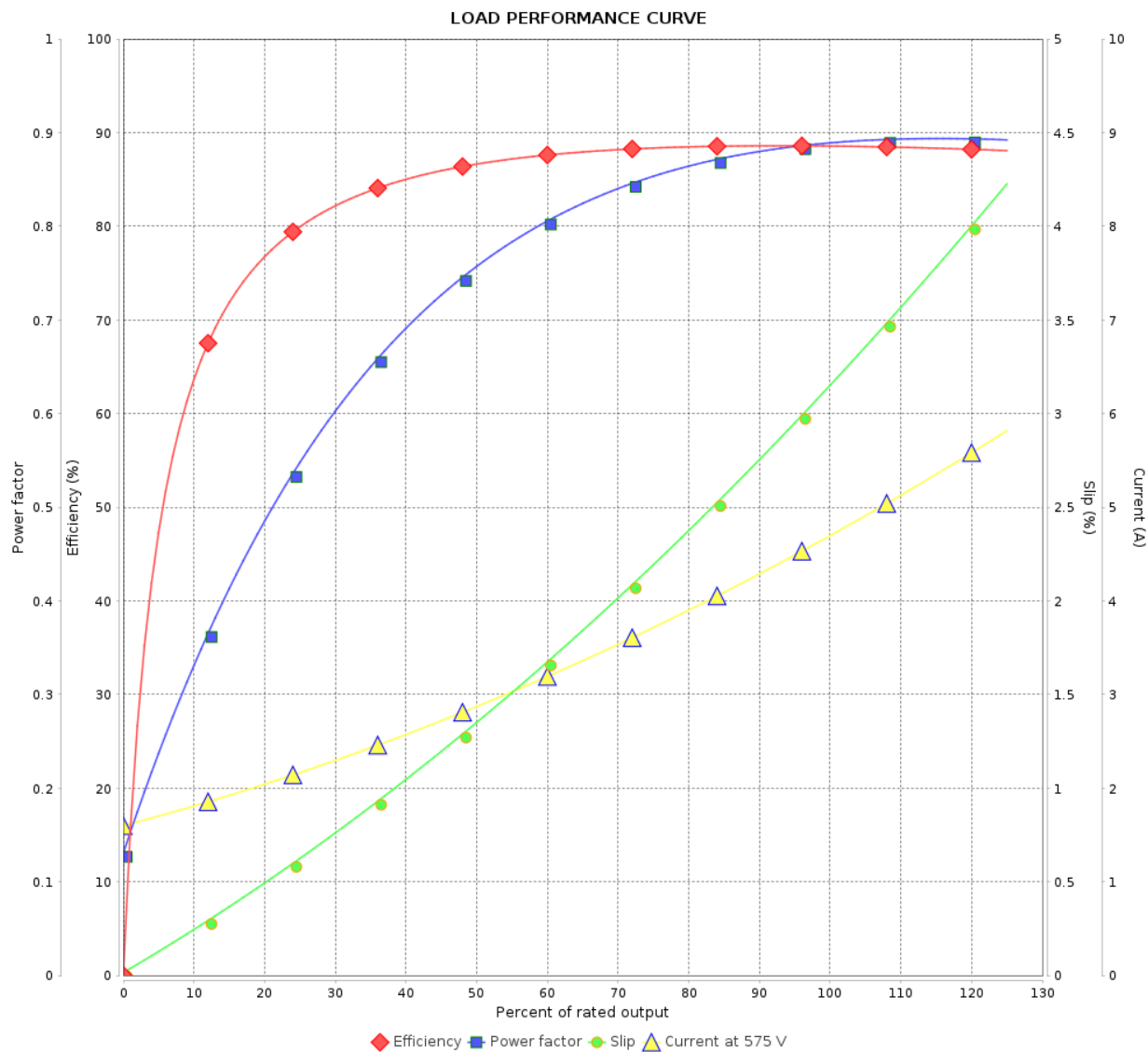
## Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 12148058



Performance : 575 V 60 Hz 2P

Rated current : 4.72 A  
LRC : 7.6  
Rated torque : 1.04 kgfm  
Locked rotor torque : 229 %  
Breakdown torque : 350 %  
Rated speed : 3485 rpm

Moment of inertia (J) : 0.0094 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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