

# DATA SHEET



## Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : W22 Close Coupled Pump JM NEMA Premium Efficiency Three-Phase      Product code : 12113105

Frame	: 254/6JM	Locked rotor time	: 25s (cold) 14s (hot)
Output	: 20 HP (15 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	: 18.6 A	Protection degree	: IP55
L. R. Amperes	: 113 A	Cooling method	: IC411 - TEFC
LRC	: 6.1x(Code G)	Mounting	: F-1
No load current	: 5.20 A	Rotation <sup>1</sup>	: Both (CW and CCW)
Rated speed	: 3525 rpm	Noise level <sup>2</sup>	: 72.0 dB(A)
Slip	: 2.08 %	Starting method	: Direct On Line
Rated torque	: 4.12 kgfm	Approx. weight <sup>3</sup>	: 120 kg
Locked rotor torque	: 200 %		
Breakdown torque	: 240 %		
Insulation class	: F		
Service factor	: 1.25		
Moment of inertia (J)	: 0.0647 kgm <sup>2</sup>		
Design	: B		

Output	25%	50%	75%	100%	Foundation loads	
Efficiency (%)	90.5	90.7	91.0	91.0	Max. traction	: 95 kgf
Power Factor	0.56	0.80	0.87	0.89	Max. compression	: 215 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)
9.0	6.6	6.2	4.9	2.7	1.8	1.0

		<u>Drive end</u>	<u>Non drive end</u>
Bearing type	:	6309 C3	6209 C3
Sealing	:	V'Ring	V'Ring
Lubrication interval	:	19000 h	20000 h
Lubricant amount	:	13 g	9 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				Page	Revision
Date	14/01/2024			1 / 2	

# LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

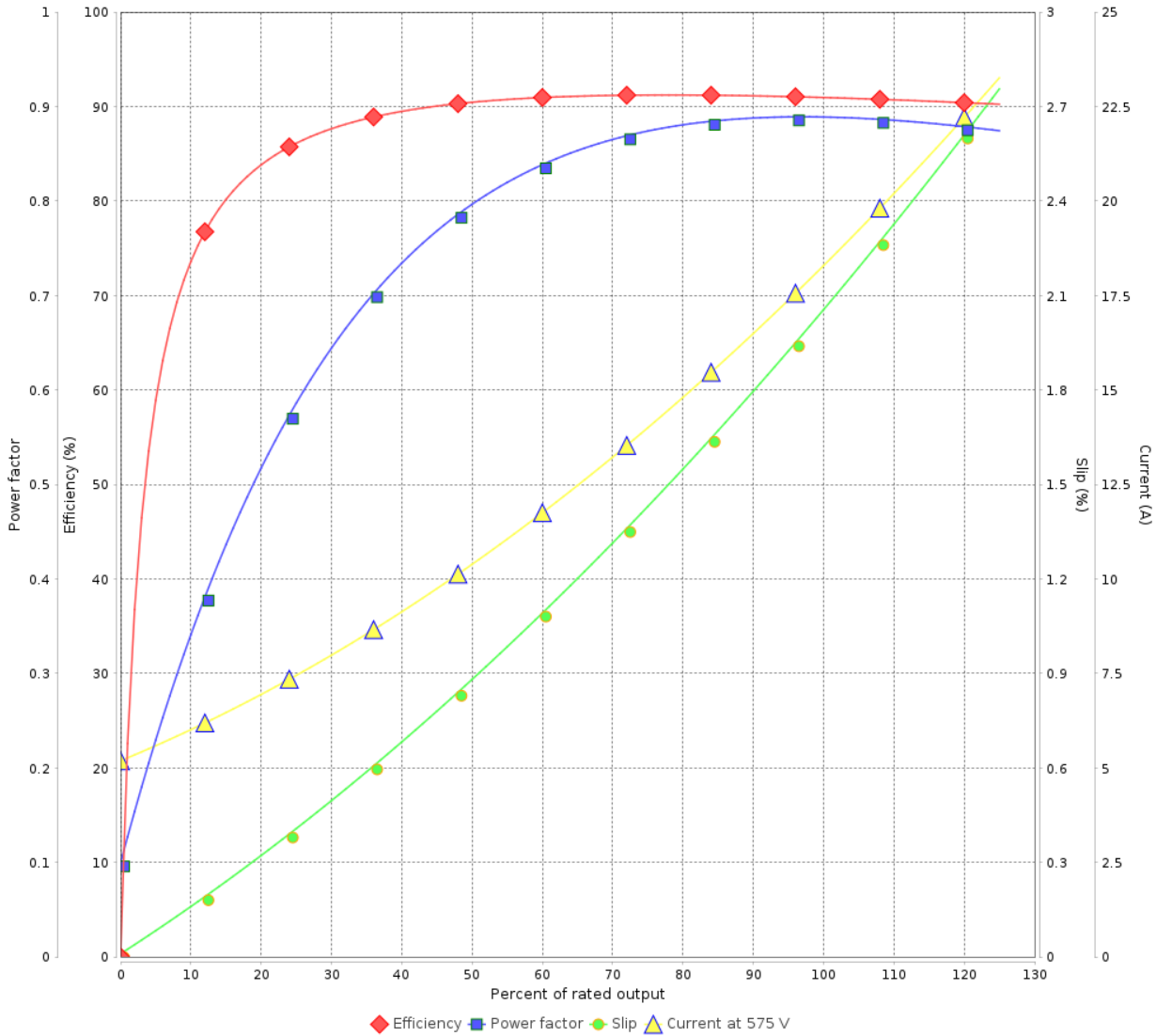


Customer :

Product line : W22 Close Coupled Pump JM NEMA  
Premium Efficiency Three-Phase

Product code : 12113105

LOAD PERFORMANCE CURVE



Performance : 575 V 60 Hz 2P

Rated current : 18.6 A  
LRC : 6.1  
Rated torque : 4.12 kgfm  
Locked rotor torque : 200 %  
Breakdown torque : 240 %  
Rated speed : 3525 rpm

Moment of inertia (J) : 0.0647 kgm<sup>2</sup>  
Duty cycle : Cont.(S1)  
Insulation class : F  
Service factor : 1.25  
Temperature rise : 80 K  
Design : B

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 2 / 2	Revision
Checked by				
Date	14/01/2024			