

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase Product code : 11616140

Frame	: 404/5TS	Locked rotor time	: 25s (cold) 14s (hot)
Output	: 100 HP (75 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	: 89.6 A	Protection degree	: IP55
L. R. Amperes	: 582 A	Cooling method	: IC411 - TEFC
LRC	: 6.5x(Code G)	Mounting	: F-1
No load current	: 20.8 A	Rotation <sup>1</sup>	: Both (CW and CCW)
Rated speed	: 3545 rpm	Noise level <sup>2</sup>	: 79.0 dB(A)
Slip	: 1.53 %	Starting method	: Direct On Line
Rated torque	: 20.5 kgfm	Approx. weight <sup>3</sup>	: 499 kg
Locked rotor torque	: 240 %		
Breakdown torque	: 260 %		
Insulation class	: F		
Service factor	: 1.25		
Moment of inertia (J)	: 0.5561 kgm <sup>2</sup>		
Design	: B		

Output	50%	75%	100%	Foundation loads	
Efficiency (%)	93.0	94.1	94.1	Max. traction	: 274 kgf
Power Factor	0.83	0.88	0.89	Max. compression	: 773 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)
5.9	4.6	4.4	2.8	1.6	0.9	0.5

	Drive end	Non drive end
Bearing type	: 6314 C3	6314 C3
Sealing	: WSeal	WSeal
Lubrication interval	: 4000 h	4000 h
Lubricant amount	: 27 g	27 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 / 2	Revision

# LOAD PERFORMANCE CURVE

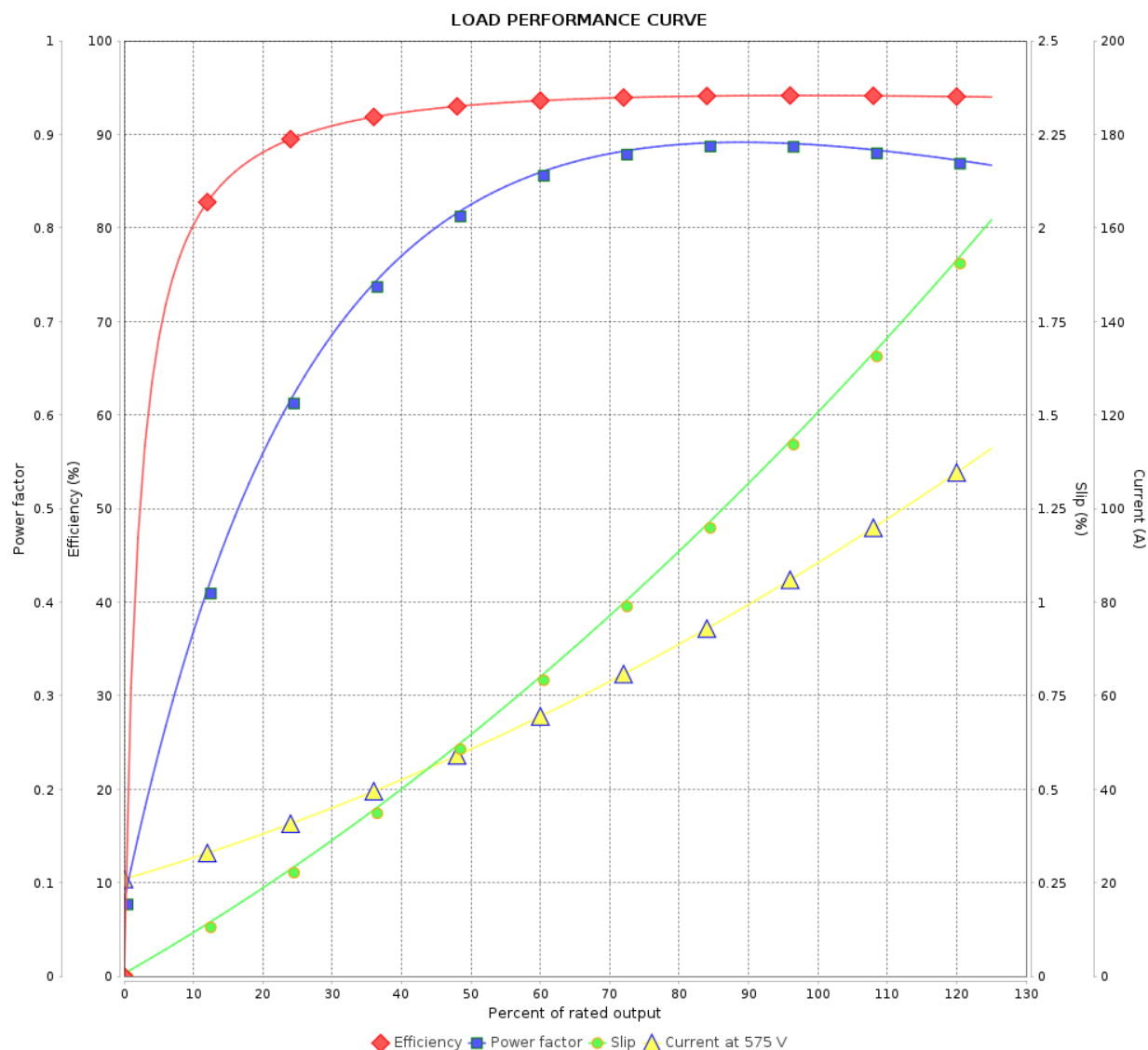
## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency  
Three-Phase

Product code : 11616140

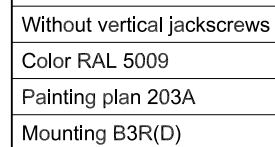
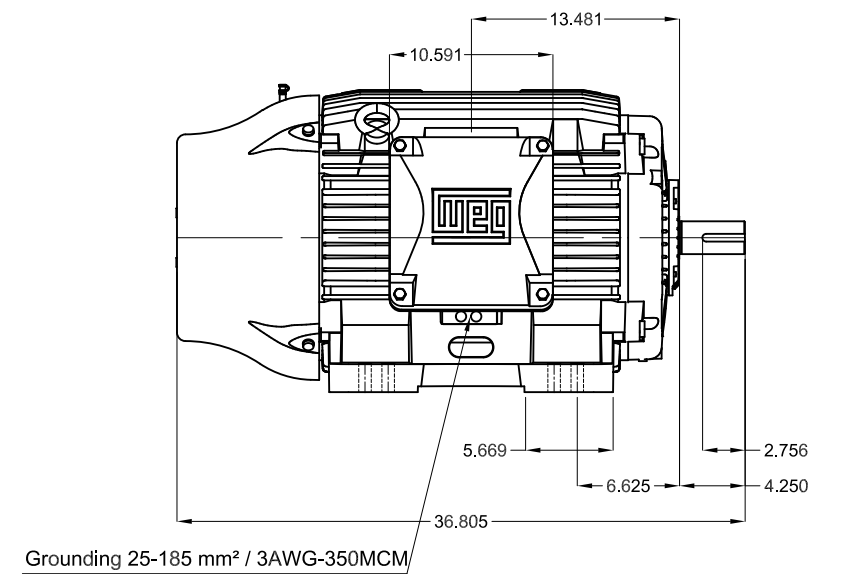




Performance : 575 V 60 Hz 2P

Rated current : 89.6 A  
LRC : 6.5  
Rated torque : 20.5 kgfm  
Locked rotor torque : 240 %  
Breakdown torque : 260 %  
Rated speed : 3545 rpm

Moment of inertia (J) : 0.5561 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
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Date					



100 HP 02 Poles 60 Hz											A
					HYBRISUSER						00
ECM		LOC	SUMMARY OF MODIFICATIONS				EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED		HYBRISUSER		THREE PH. MOTOR W22 NEMA PREM. EFF. FRAME 404/5TS IP55 TEFC				PREVIEW WDD   00			
CHECKED											
RELEASED											
REL. DATE											