

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase Product code : 11924002

Frame	: 324/6TSC	Locked rotor time	: 36s (cold) 20s (hot)
Output	: 50 HP (37 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	: 44.9 A	Protection degree	: IP55
L. R. Amperes	: 283 A	Cooling method	: IC411 - TEFC
LRC	: 6.3x(Code G)	Mounting	: F-1
No load current	: 11.2 A	Rotation <sup>1</sup>	: Both (CW and CCW)
Rated speed	: 3560 rpm	Noise level <sup>2</sup>	: 76.0 dB(A)
Slip	: 1.11 %	Starting method	: Direct On Line
Rated torque	: 10.2 kgfm	Approx. weight <sup>3</sup>	: 253 kg
Locked rotor torque	: 240 %		
Breakdown torque	: 240 %		
Insulation class	: F		
Service factor	: 1.25		
Moment of inertia (J)	: 0.2422 kgm <sup>2</sup>		
Design	: B		

Output	25%	50%	75%	100%	Foundation loads	
Efficiency (%)	0.000	93.0	93.0	93.0	Max. traction	: 181 kgf
Power Factor	0.00	0.81	0.87	0.89	Max. compression	: 434 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)
6.8	4.4	3.5	4.1	2.0	1.5	0.7

	Drive end	Non drive end
Bearing type	: 6312 C3	: 6212 C3
Sealing	: V'Ring	: V'Ring
Lubrication interval	: 12000 h	: 15000 h
Lubricant amount	: 21 g	: 13 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	19/10/2024		Page 1 / 2	Revision

# LOAD PERFORMANCE CURVE

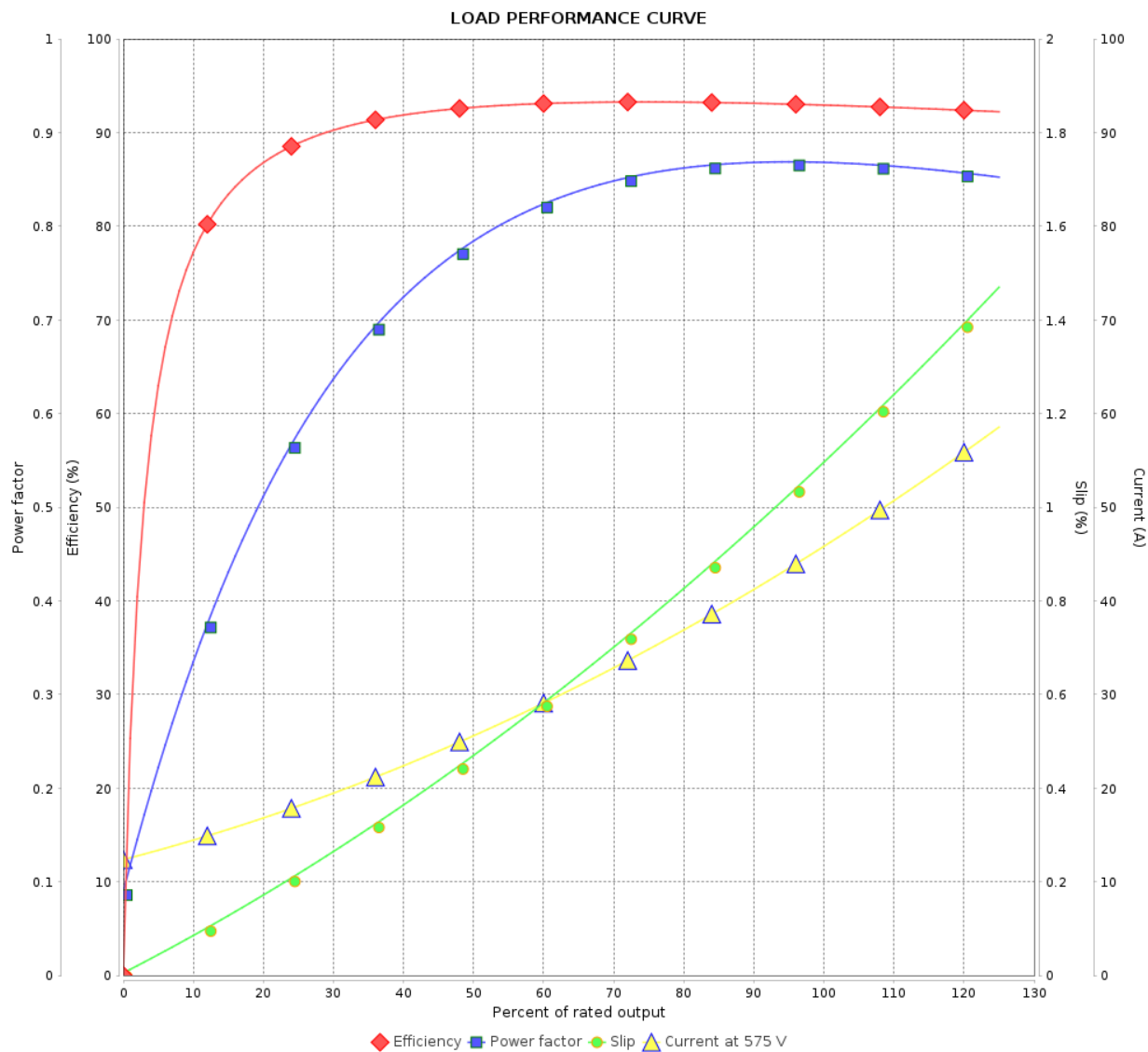
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Three-Phase

Product code : 11924002

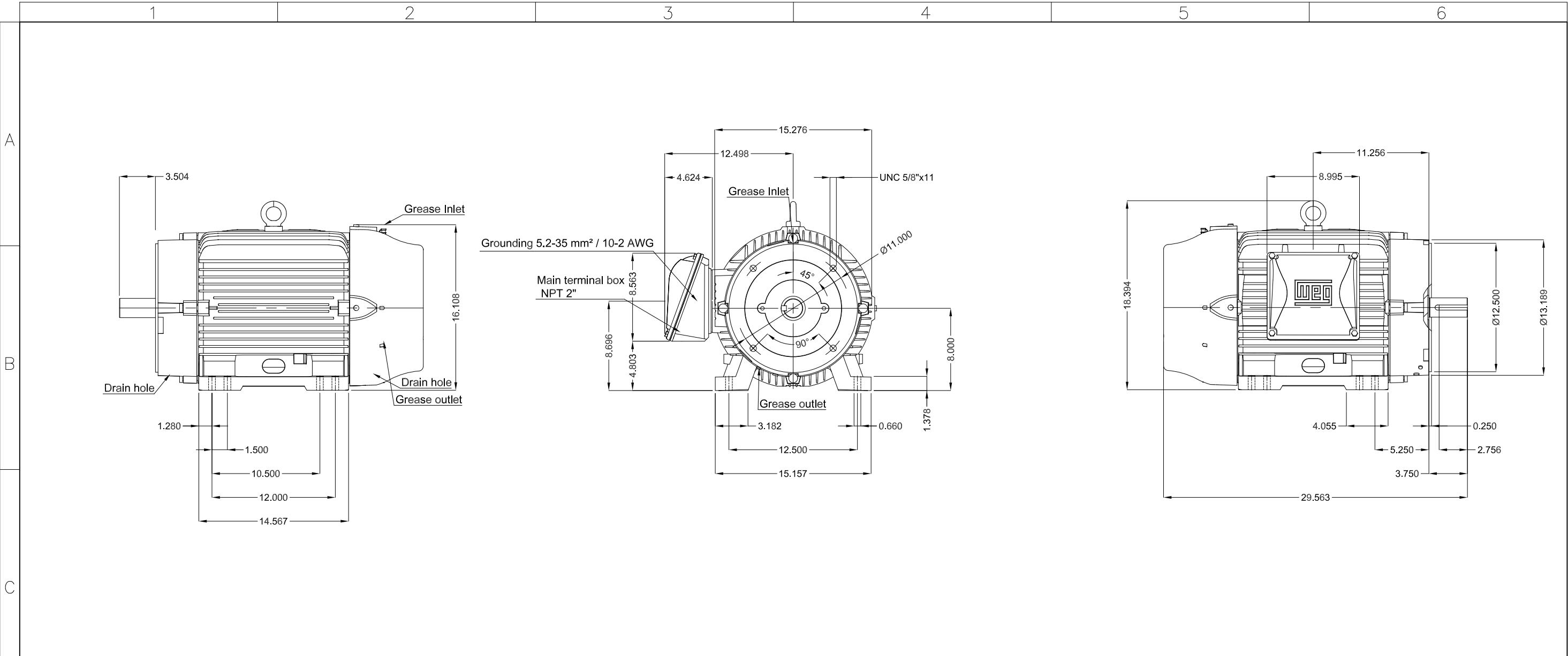


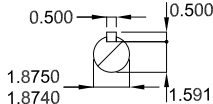
Performance : 575 V 60 Hz 2P

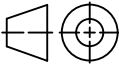

Rated current : 44.9 A  
LRC : 6.3  
Rated torque : 10.2 kgfm  
Locked rotor torque : 240 %  
Breakdown torque : 240 %  
Rated speed : 3560 rpm

Moment of inertia (J) : 0.2422 kgm<sup>2</sup>  
Duty cycle : Cont.(S1)  
Insulation class : F  
Service factor : 1.25  
Temperature rise : 80 K  
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D					50 HP 02 Poles 60 Hz										A
E	<div>DE Shaft End</div> <div></div>			50 HP 02 Poles 60 Hz										A	
Without vertical jackscrews															
Color RAL 5009															
Painting plan 203A															
Mounting B34R(D)															

EXECUTED		HYBRISUSER			THREE PH. MOTOR W22 NEMA PREM. EFF. FRAME 324/6TSC IP55 TEFC				PREVIEW		
CHECKED					EXECUTED		CHECKED		RELEASED		
RELEASED					DATE		VER				
REL. DATE					SHEET		/				