

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 IEEE 841 NEMA Premium Efficiency Three-Phase Product code : 14966713

Frame	: 324/6TC	Locked rotor time	: 48s (cold) 27s (hot)
Output	: 20 HP (15 kW)	Temperature rise	: 80 K
Poles	: 8	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	: 22.6 A	Protection degree	: IP56
L. R. Amperes	: 113 A	Cooling method	: IC411 - TEFC
LRC	: 5.0x(Code G)	Mounting	: F-1
No load current	: 12.8 A	Rotation ¹	: Both (CW and CCW)
Rated speed	: 880 rpm	Noise level ²	: 56.0 dB(A)
Slip	: 2.22 %	Starting method	: Direct On Line
Rated torque	: 16.5 kgfm	Approx. weight ³	: 241 kg
Locked rotor torque	: 190 %		
Breakdown torque	: 220 %		
Insulation class	: F		
Service factor	: 1.25		
Moment of inertia (J)	: 0.3946 kgm ²		
Design	: B		

Output	50%	75%	100%	Foundation loads	
Efficiency (%)	89.5	91.0	91.0	Max. traction	: 336 kgf
Power Factor	0.54	0.66	0.73	Max. compression	: 577 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)
9.5	8.0	7.7	5.2	3.7	2.8	2.0

	Drive end	Non drive end
Bearing type	: 6312 C3	6212 C3
Sealing	: Inpro/Seal	Inpro/Seal
Lubrication interval	: 20000 h	20000 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	29/10/2024		Page 1 / 2	Revision

LOAD PERFORMANCE CURVE

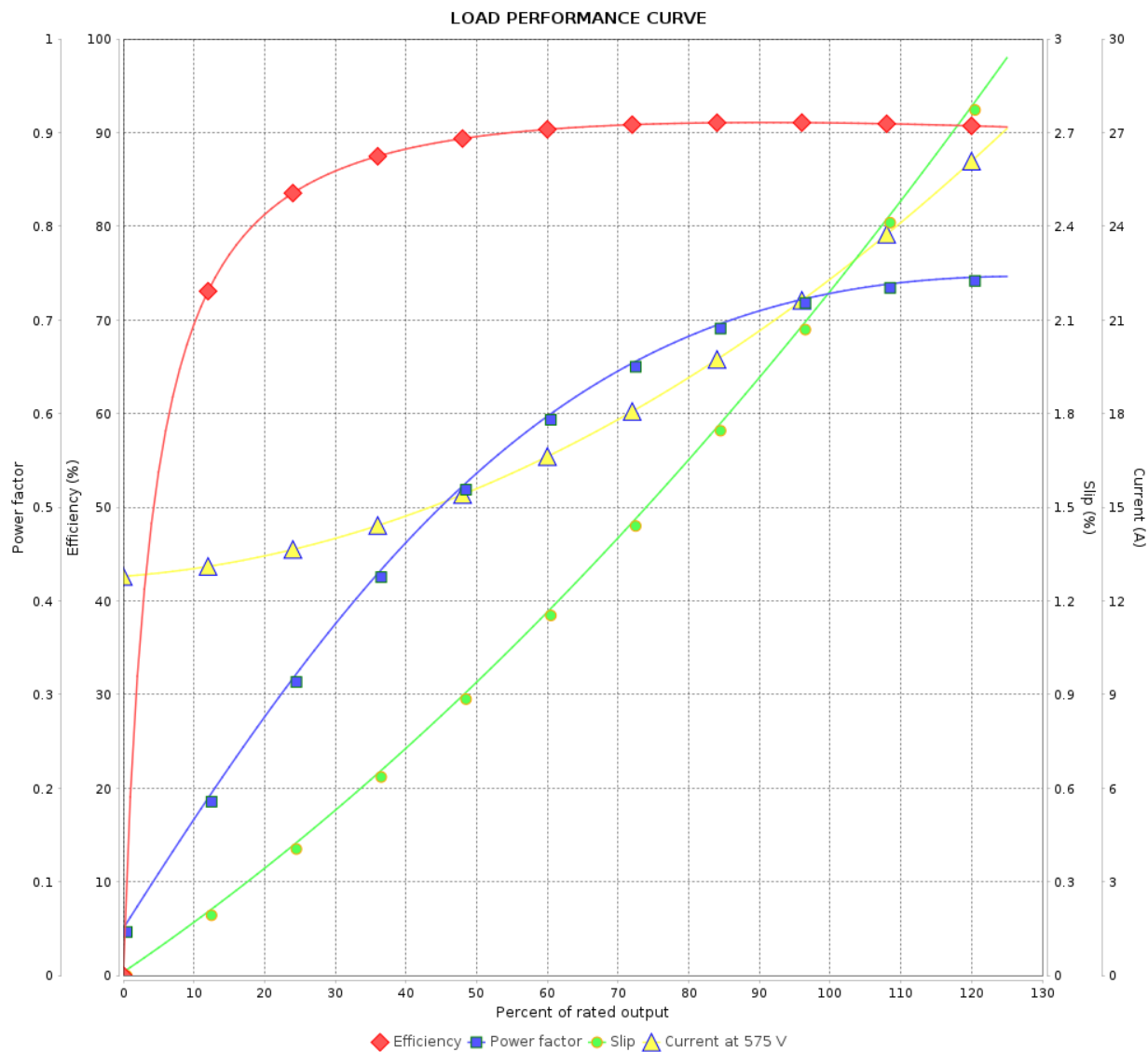
Three Phase Induction Motor - Squirrel Cage



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

Product code : 14966713

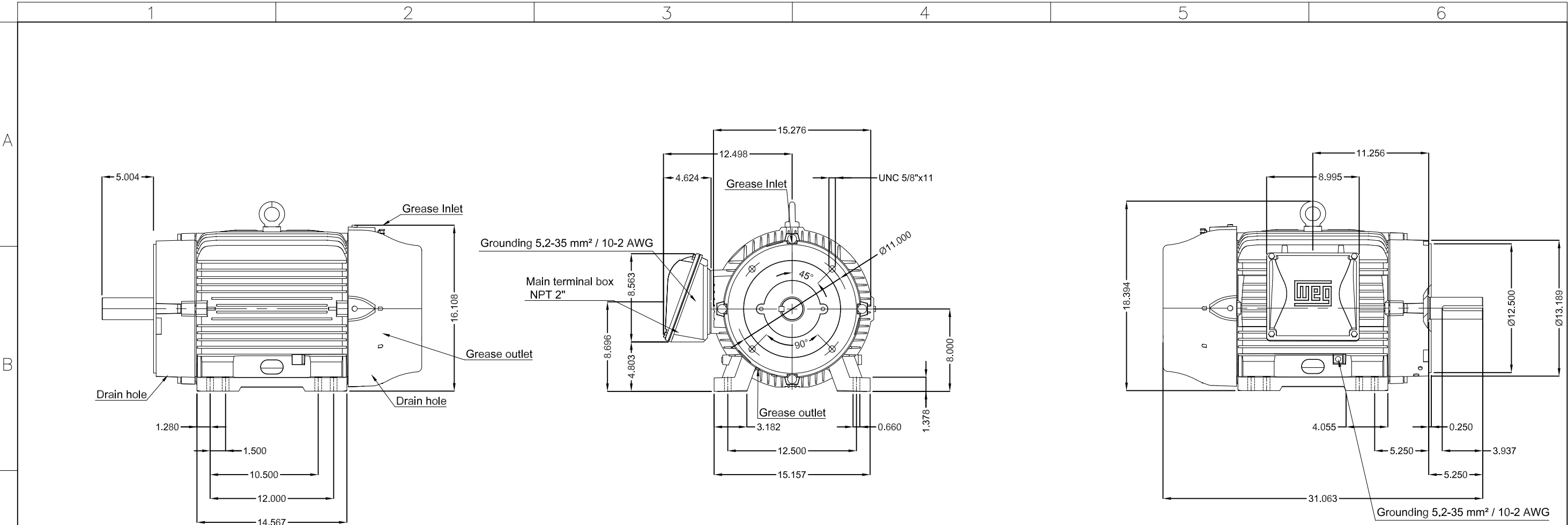


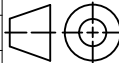
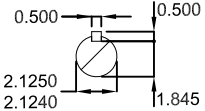
Performance : 575 V 60 Hz 8P

Rated current : 22.6 A
LRC : 5.0
Rated torque : 16.5 kgfm
Locked rotor torque : 190 %
Breakdown torque : 220 %
Rated speed : 880 rpm

Moment of inertia (J) : 0.3946 kgm²
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					



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					ECM	LOC	SUMMARY OF MODIFICATIONS				EXECUTED	CHECKED	RELEASED	DATE	VER				
					EXECUTED	HYBRISUSER			THREE PH. MOTOR IEEE 841 W22 NEMA PREM. EFF.				PREVIEW						
					CHECKED				FRAME 324/6TC IP56 TEFC				WDD	00					
					RELEASED														
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E																			
Grease outlet according to IEEE841				DE Shaft End 															
Color RAL 5009																			
Painting plan 222E																			
Mounting NEMA F-1																			
Mounting B34R(D)																			