

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase Product code : 11164525

Frame	: 404/5T	Locked rotor time	: 23s (cold) 13s (hot)
Output	: 100 HP (75 kW)	Temperature rise	: 80 K
Poles	: 4	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	: 90.4 A	Protection degree	: IP55
L. R. Amperes	: 660 A	Cooling method	: IC411 - TEFC
LRC	: 7.3x(Code H)	Mounting	: F-1
No load current	: 30.4 A	Rotation ¹	: Both (CW and CCW)
Rated speed	: 1780 rpm	Noise level ²	: 68.0 dB(A)
Slip	: 1.11 %	Starting method	: Direct On Line
Rated torque	: 40.8 kgfm	Approx. weight ³	: 532 kg
Locked rotor torque	: 240 %		
Breakdown torque	: 260 %		
Insulation class	: F		
Service factor	: 1.25		
Moment of inertia (J)	: 1.26 kgm ²		
Design	: B		

Output	25%	50%	75%	100%	Foundation loads	
Efficiency (%)	0.000	95.0	95.0	95.4	Max. traction	: 778 kgf
Power Factor	0.00	0.77	0.84	0.87	Max. compression	: 1310 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)
4.7	3.8	3.7	2.2	1.5	0.9	0.6

		<u>Drive end</u>	<u>Non drive end</u>
Bearing type	:	NU-316 C3	6314 C3
Sealing	:	WSeal	WSeal
Lubrication interval	:	7000 h	12000 h
Lubricant amount	:	34 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.

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LOAD PERFORMANCE CURVE

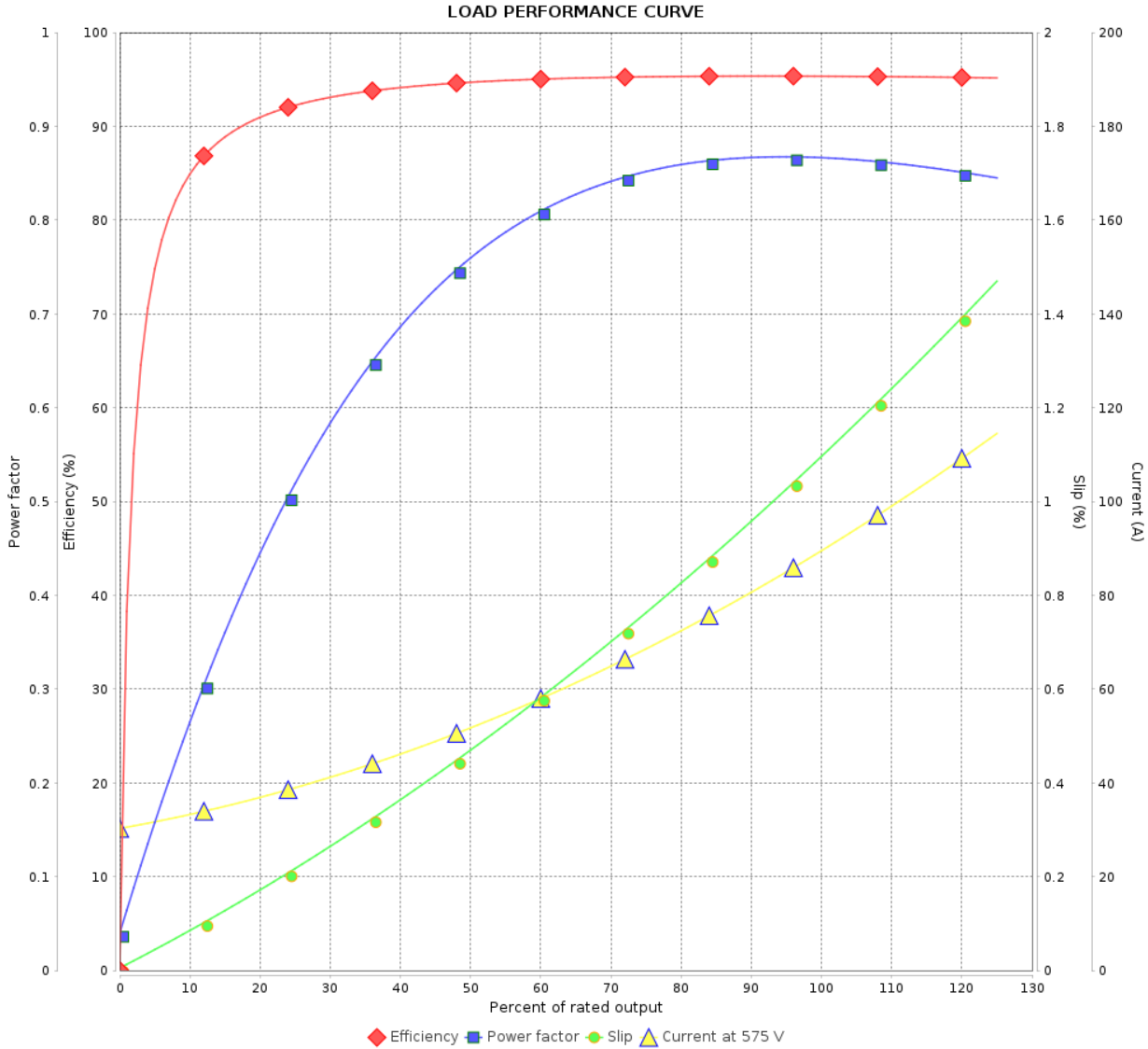
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Product line : W22 NEMA Premium Efficiency Three-Phase

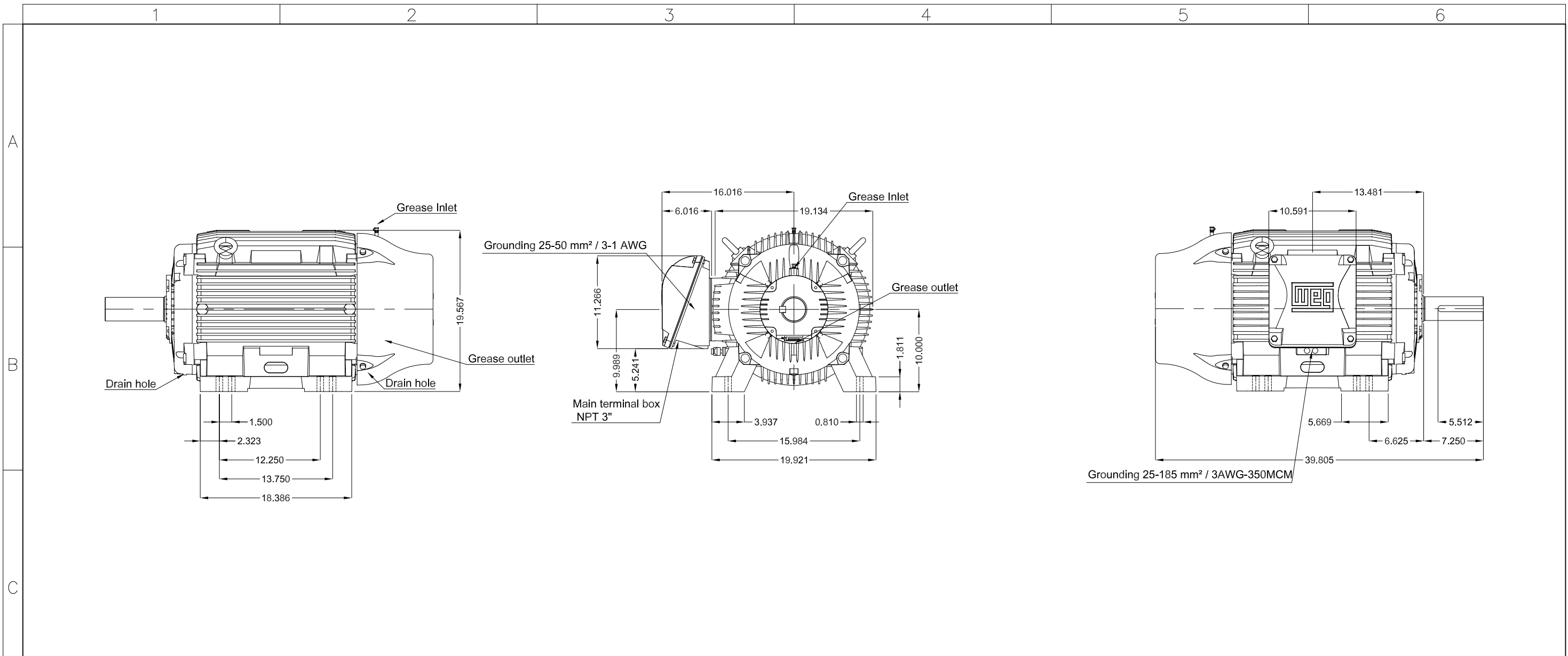
Product code : 11164525



Performance : 575 V 60 Hz 4P

Rated current	: 90.4 A	Moment of inertia (J)	: 1.26 kgm ²
LRC	: 7.3	Duty cycle	: Cont.(S1)
Rated torque	: 40.8 kgfm	Insulation class	: F
Locked rotor torque	: 240 %	Service factor	: 1.25
Breakdown torque	: 260 %	Temperature rise	: 80 K
Rated speed	: 1780 rpm	Design	: B

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Without vertical jackscrews		DE Shaft End		100 HP 04 Poles 60 Hz		A	
DE roller bearing		0.750 0.750					
Shaft locking device		2.8750 2.8740 12.449					
Shaft material - AISI/SAE 4140		DUNC 3/4"-10 WEG WPR-7339					
Color RAL 5009							
Painting plan 203A							
Mounting B3R(D)							

ECM		LOC		SUMMARY OF MODIFICATIONS		HYBRISUSER		00	
EXECUTED	HYBRISUSER	THREE PH. MOTOR W22 NEMA PREM. EFF.		EXECUTED	CHECKED	RELEASED	DATE	VER	
CHECKED		FRAME 404/5T IP55 TEFC		PREVIEW		WDD 00		SHEET /	
RELEASED									
REL. DATE									

