

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase Product code : 14188920

Frame	: 254/6TD	Locked rotor time	: 54s (cold) 30s (hot)
Output	: 20 HP (15 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	: 19.3 A	Protection degree	: IP55
L. R. Amperes	: 133 A	Cooling method	: IC411 - TEFC
LRC	: 6.9x(Code G)	Mounting	: F-1
No load current	: 7.68 A	Rotation ¹	: Both (CW and CCW)
Rated speed	: 1770 rpm	Noise level ²	: 64.0 dB(A)
Slip	: 1.67 %	Starting method	: Direct On Line
Rated torque	: 8.20 kgfm	Approx. weight ³	: 157 kg
Locked rotor torque	: 240 %		
Breakdown torque	: 260 %		
Insulation class	: F		
Service factor	: 1.25		
Moment of inertia (J)	: 0.1305 kgm ²		
Design	: B		

Output	50%	75%	100%	Foundation loads	
Efficiency (%)	91.7	92.4	93.0	Max. traction	: 257 kgf
Power Factor	0.68	0.79	0.84	Max. compression	: 414 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)
7.5	6.4	5.8	3.6	2.5	1.6	1.1

		<u>Drive end</u>	<u>Non drive end</u>
Bearing type	:	6309 C3	6209 C3
Sealing	:	V'Ring	V'Ring
Lubrication interval	:	20000 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		Page 1 / 2 Revision		
Checked by				
Date	20/10/2024			

LOAD PERFORMANCE CURVE

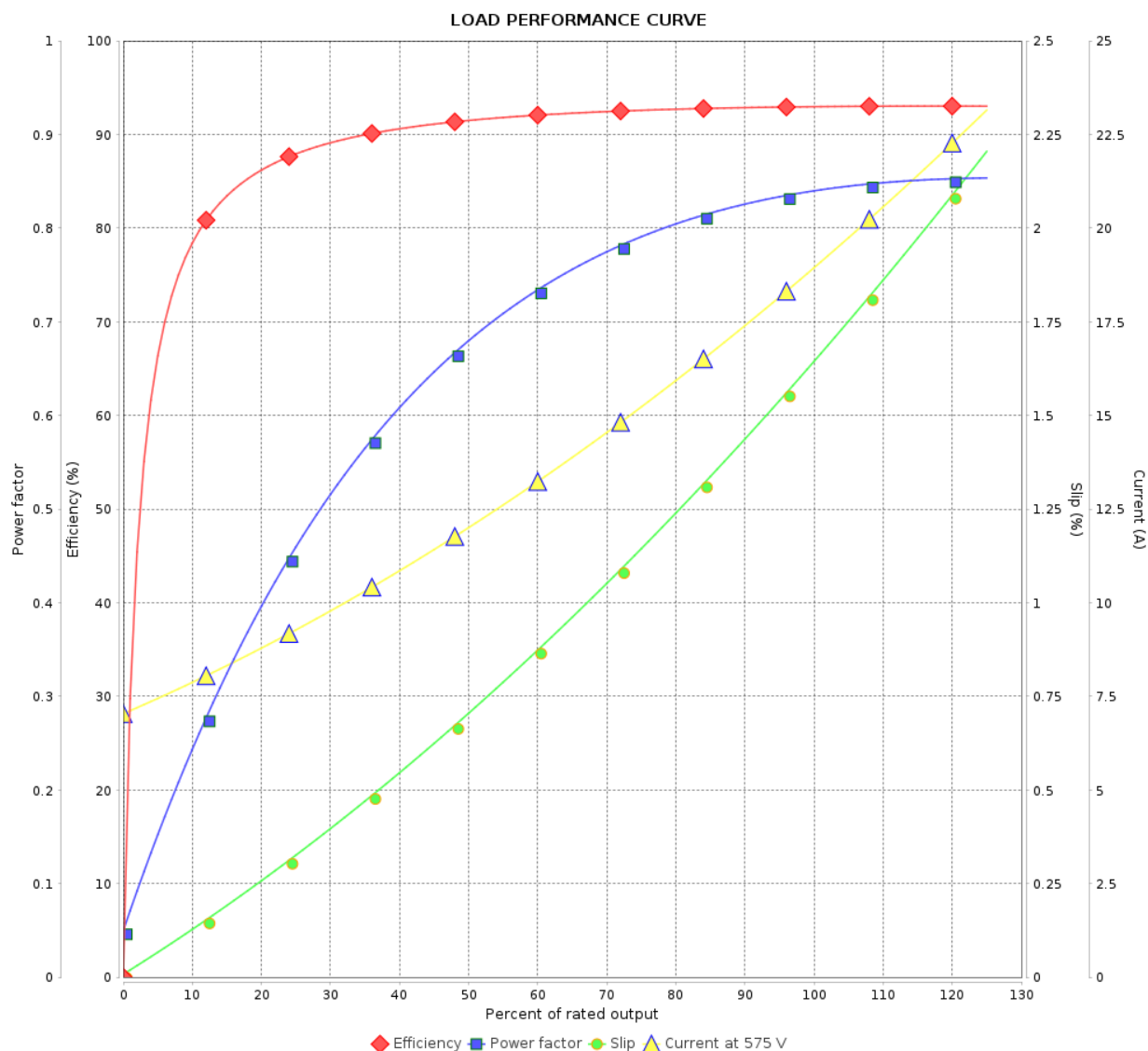
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Three-Phase

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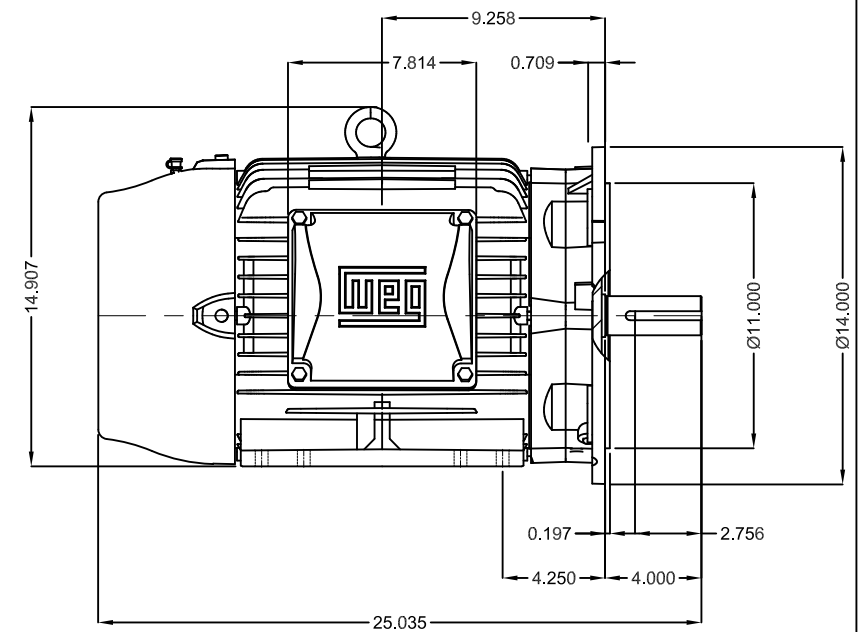
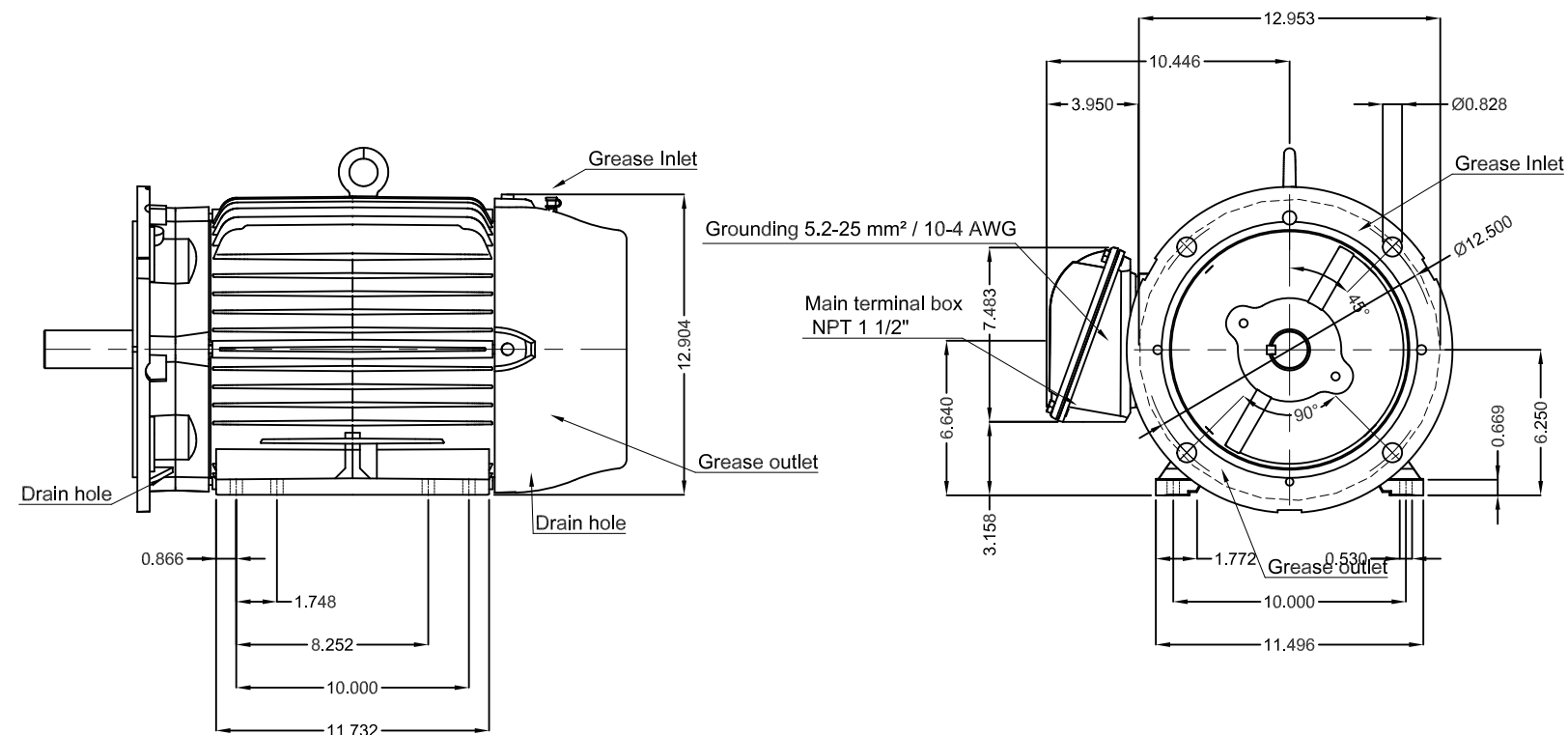


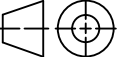

Performance : 575 V 60 Hz 4P

Rated current : 19.3 A
LRC : 6.9
Rated torque : 8.20 kgfm
Locked rotor torque : 240 %
Breakdown torque : 260 %
Rated speed : 1770 rpm

Moment of inertia (J) : 0.1305 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.25
Temperature rise : 80 K
Design : B

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20 HP 04 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 254/6TD IP55 TEFC				<div> <div>PREVIEW</div> <div>WDD 00</div> </div>			
CHECKED										
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REL. DATE										
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