

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 IEEE 841 NEMA Premium Efficiency Three-Phase Product code : 11919850

Frame	: 254/6T	Locked rotor time	: 34s (cold) 19s (hot)
Output	: 20 HP (15 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	: 18.6 A	Protection degree	: IP55
L. R. Amperes	: 113 A	Cooling method	: IC411 - TEFC
LRC	: 6.1x(Code G)	Mounting	: F-1
No load current	: 5.20 A	Rotation ¹	: Both (CW and CCW)
Rated speed	: 3520 rpm	Noise level ²	: 72.0 dB(A)
Slip	: 2.22 %	Starting method	: Direct On Line
Rated torque	: 4.12 kgfm	Approx. weight ³	: 131 kg
Locked rotor torque	: 220 %		
Breakdown torque	: 250 %		
Insulation class	: F		
Service factor	: 1.25		
Moment of inertia (J)	: 0.0647 kgm ²		
Design	: B		

Output	50%	75%	100%	Foundation loads	
Efficiency (%)	91.0	91.7	91.0	Max. traction	: 96 kgf
Power Factor	0.80	0.87	0.89	Max. compression	: 227 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)
9.0	7.0	6.8	4.6	2.6	1.6	0.9

		<u>Drive end</u>	<u>Non drive end</u>
Bearing type	:	6309 C3	6209 C3
Sealing	:	Taconite Labyrinth	Taconite Labyrinth
Lubrication interval	:	19000 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	22/10/2024			

LOAD PERFORMANCE CURVE

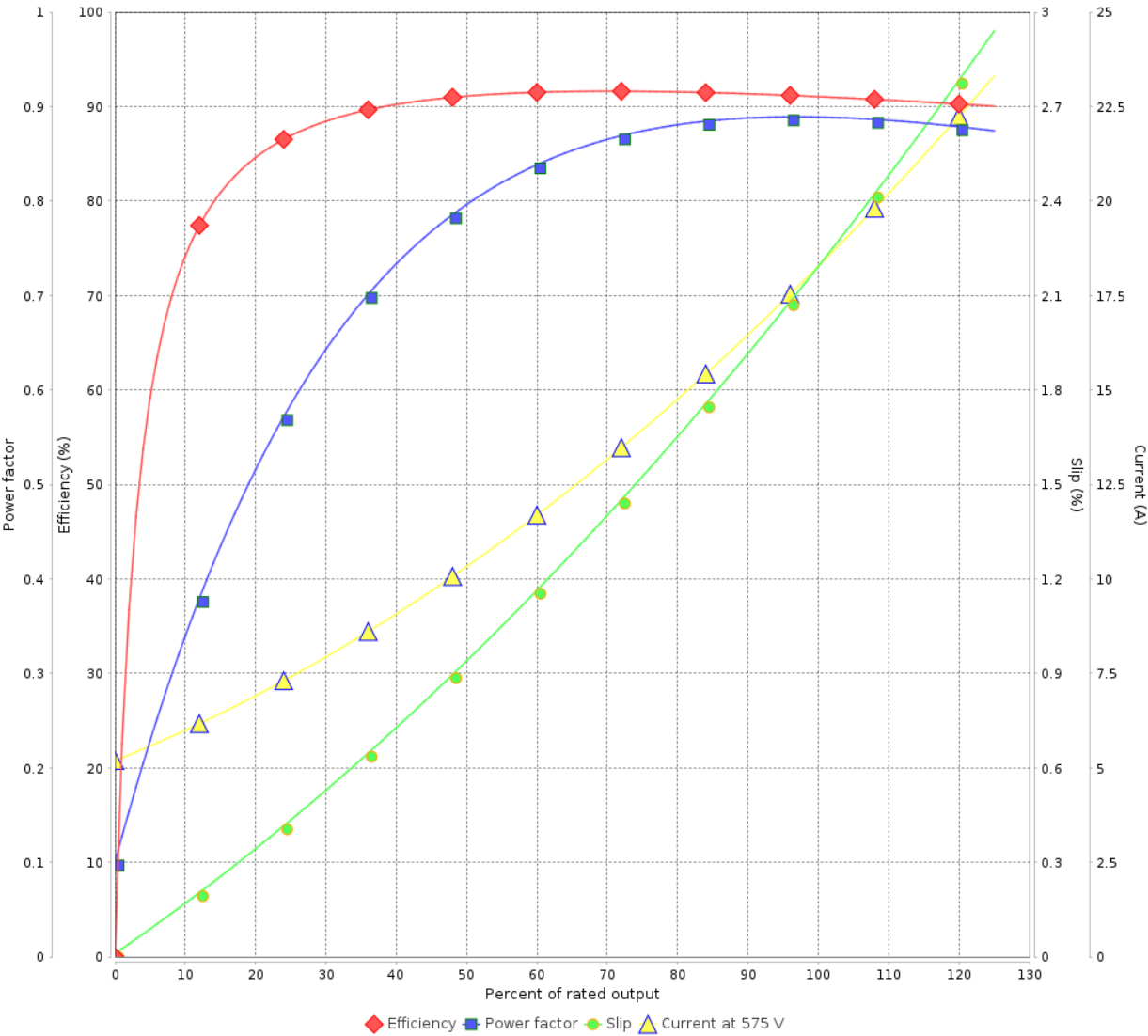
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Efficiency Three-Phase

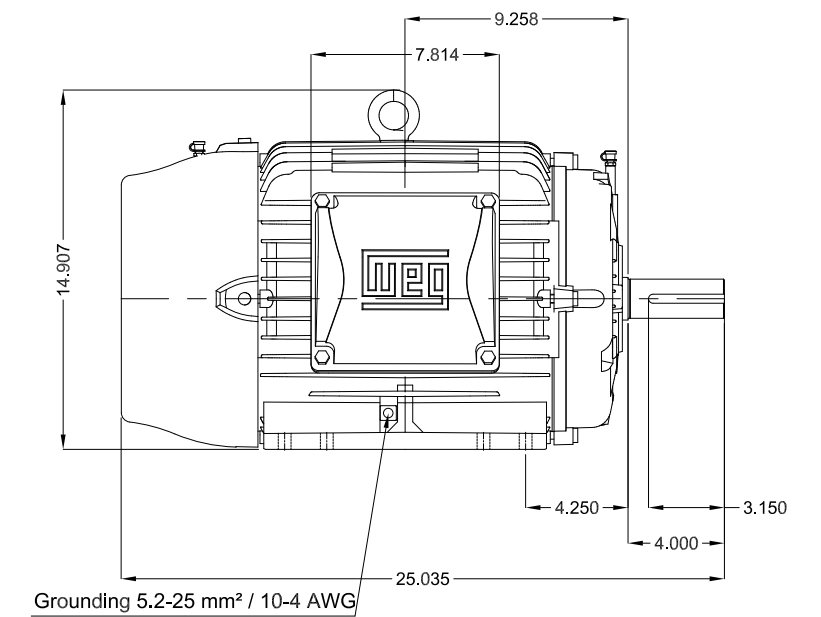
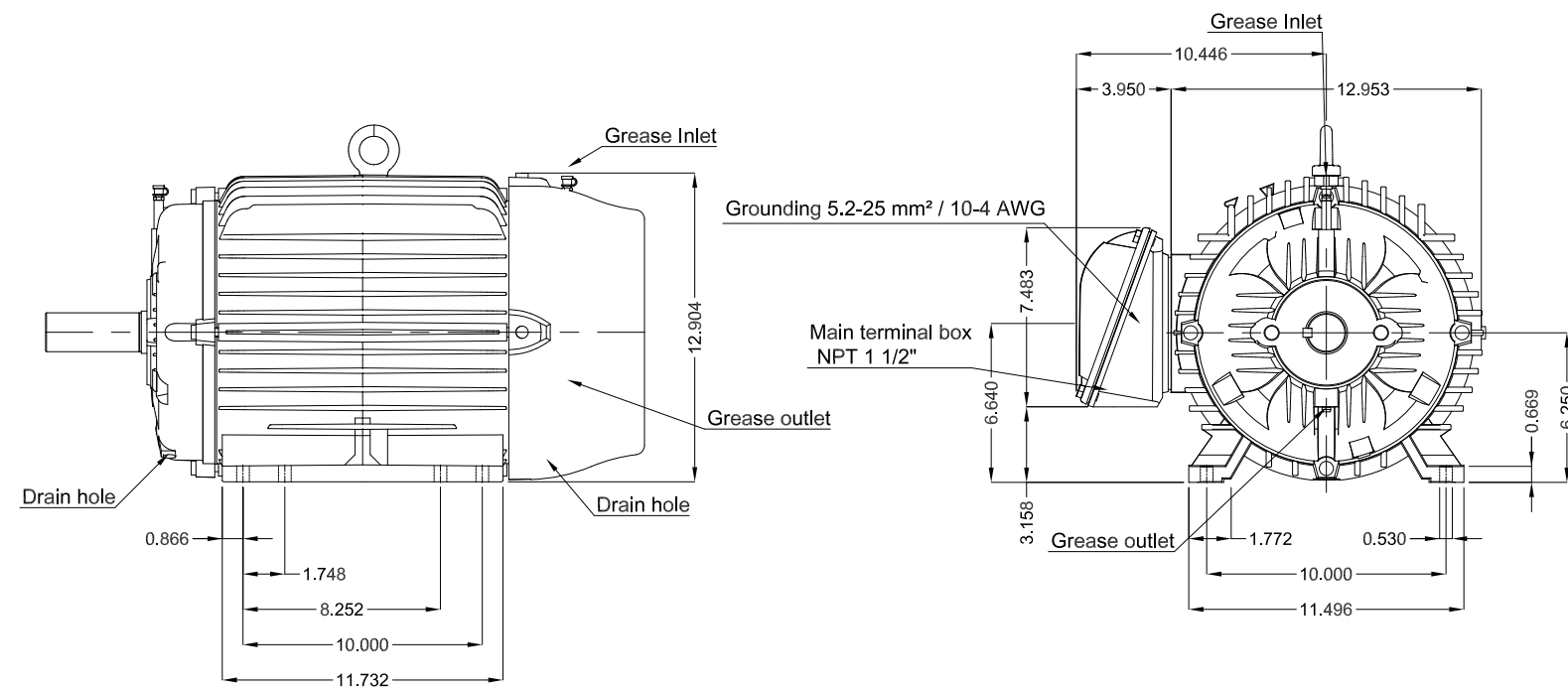
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Performance : 575 V 60 Hz 2P

Rated current	: 18.6 A	Moment of inertia (J)	: 0.0647 kgm ²
LRC	: 6.1	Duty cycle	: Cont.(S1)
Rated torque	: 4.12 kgfm	Insulation class	: F
Locked rotor torque	: 220 %	Service factor	: 1.25
Breakdown torque	: 250 %	Temperature rise	: 80 K
Rated speed	: 3520 rpm	Design	: B

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20 HP 02 Poles 60 Hz										A
					HYBRISUSER					
ECM		LOC		SUMMARY OF MODIFICATIONS			EXECUTED		CHECKED	
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EXECUTED		HYBRISUSER		 THREE PH. MOTOR IEEE 841 W22 NEMA PREM. EFF. FRAME 254/6T IP55 TEFC			PREVIEW WDD 00			
CHECKED										
RELEASED										
REL. DATE										
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