

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W21 Explosion Proof NEMA Premium Efficiency Three-Phase Product code : 14189464

Frame	: 213/5TC	Locked rotor time	: 21s (cold) 12s (hot)
Output	: 7.5 HP (5.5 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	: 7.53 A	Protection degree	: IP55
L. R. Amperes	: 50.4 A	Cooling method	: IC411 - TEFC
LRC	: 6.7x(Code H)	Mounting	: F-1
No load current	: 3.20 A	Rotation <sup>1</sup>	: Both (CW and CCW)
Rated speed	: 1765 rpm	Noise level <sup>2</sup>	: 58.0 dB(A)
Slip	: 1.94 %	Starting method	: Direct On Line
Rated torque	: 3.08 kgfm	Approx. weight <sup>3</sup>	: 93.3 kg
Locked rotor torque	: 240 %		
Breakdown torque	: 280 %		
Insulation class	: F		
Service factor	: 1.15		
Moment of inertia (J)	: 0.0582 kgm <sup>2</sup>		
Design	: B		

Output	50%	75%	100%	Foundation loads	
Efficiency (%)	90.2	91.0	91.7	Max. traction	: 111 kgf
Power Factor	0.60	0.73	0.80	Max. compression	: 208 kgf

		<u>Drive end</u>	<u>Non drive end</u>
Bearing type	:	6308 2RS	6207 2RS
Sealing	:	Oil Seal	Lip Seal
Lubrication interval	:	-	-
Lubricant amount	:	-	-
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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Date	28/10/2024			

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Customer :

Thermal protection

ID	Application	Type	Quantity	Sensing Temperature
1	Winding	Thermostat - 2 wires	1 x Phase	155 °C

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Performed by				Page 2 / 3Revision	
Checked by					
Date	28/10/2024				

# LOAD PERFORMANCE CURVE

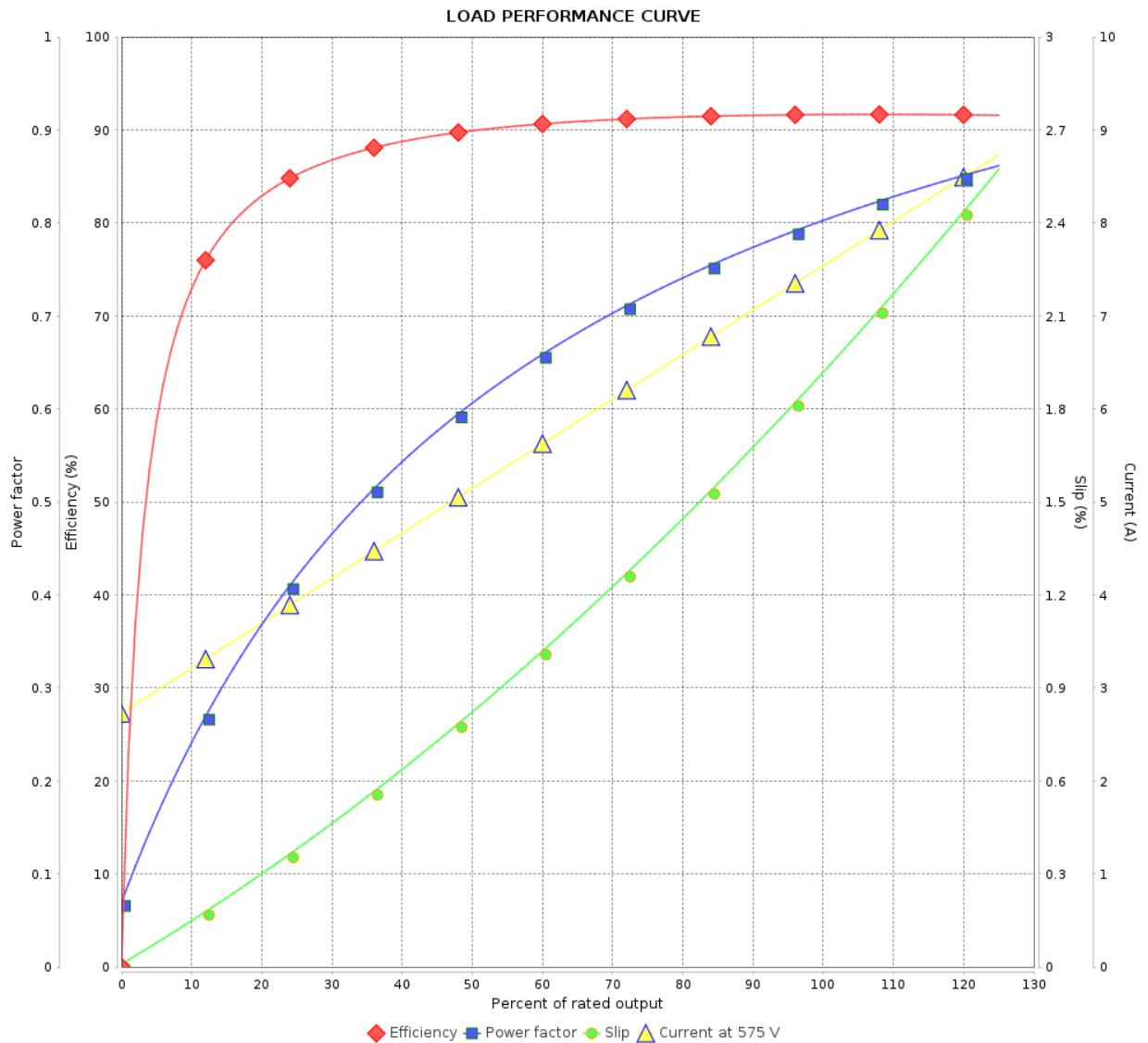
## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W21 Explosion Proof NEMA  
Premium Efficiency Three-Phase

Product code : 14189464

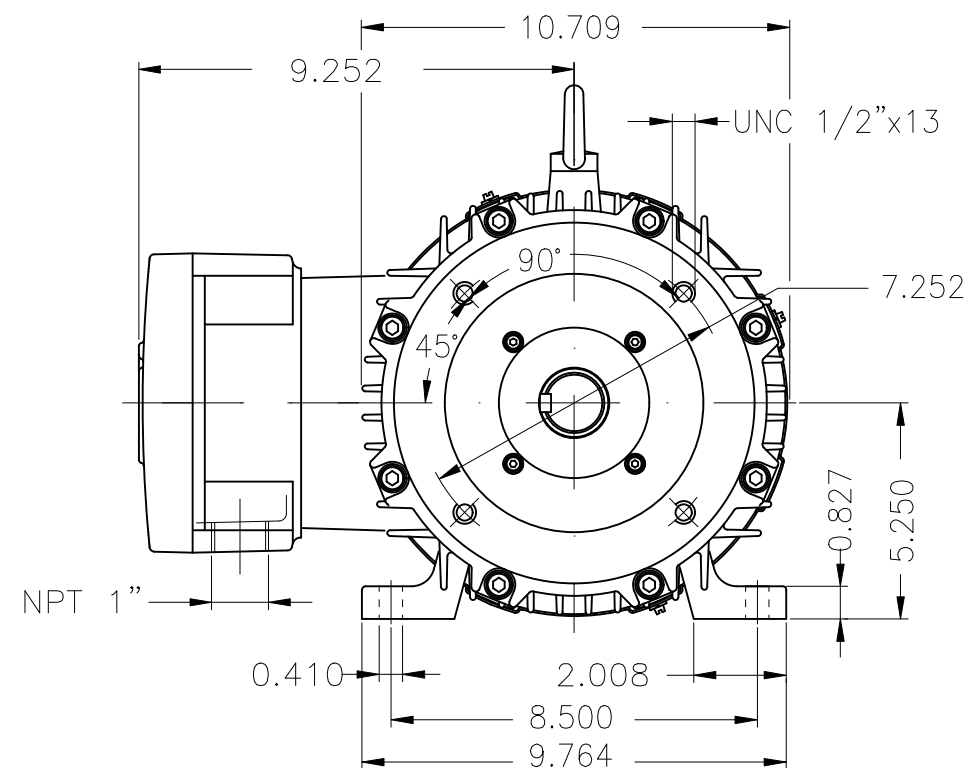


Performance : 575 V 60 Hz 4P

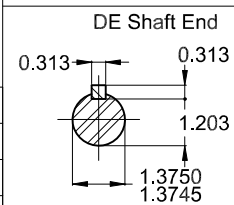
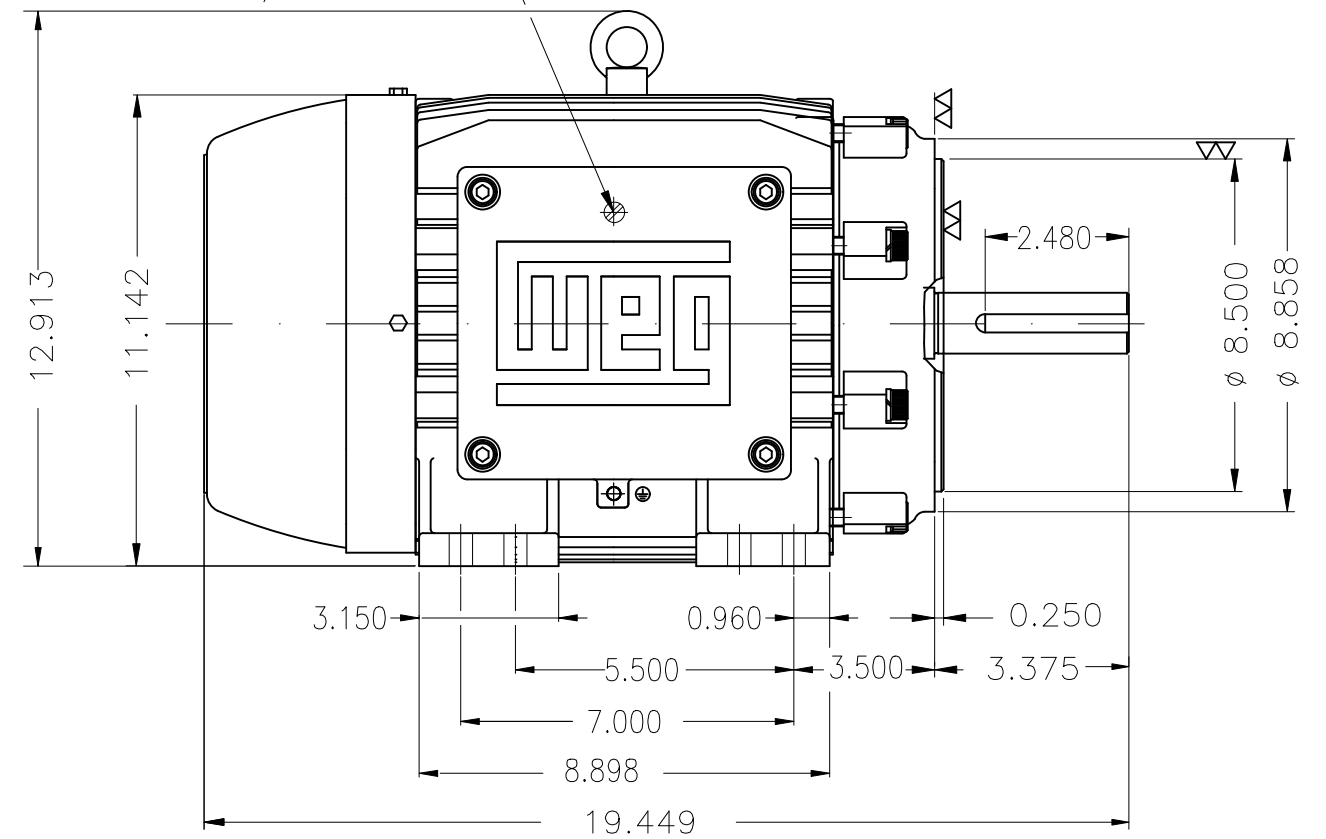
Rated current : 7.53 A  
LRC : 6.7  
Rated torque : 3.08 kgfm  
Locked rotor torque : 240 %  
Breakdown torque : 280 %  
Rated speed : 1765 rpm

Moment of inertia (J) : 0.0582 kgm<sup>2</sup>  
Duty cycle : Cont.(S1)  
Insulation class : F  
Service factor : 1.15  
Temperature rise : 80 K  
Design : B



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Grounding for leads 2–10 mm<sup>2</sup> / 14–7 AWG—



Color RAL 5009
Painting plan 202P
Mounting NEMA F-1
Mounting B34D

7.5 HP 04 Poles 60 Hz										A
						HYBRISUSER				00
ECM	LOC	SUMMARY OF MODIFICATIONS				EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	HYBRISUSER		THREE PH. MOTOR EXPLOSION PROOF NEMA PREM. EFF. FRAME 213/5TC IP55 TEFC				<div> <div>PREVIEW</div> <div>WDD   00</div> </div>			
CHECKED										
RELEASED										
REL. DATE		WMO	Jaragua do Sul	Product Engineering	SHEET	1	/	1		