

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : Rolled Steel NEMA Premium Efficiency Three-Phase Product code : 14802850

Frame	: 143/5TC	Locked rotor time	: 18s (cold) 10s (hot)
Output	: 3 HP (2.2 kW)	Temperature rise	: 80 K
Poles	: 2	Duty cycle	: Cont.(S1)
Frequency	: 60 Hz	Ambient temperature	: -20°C to +40°C
Rated voltage	: 230/460 V	Altitude	: 1000 m.a.s.l.
Rated current	: 7.02/3.51 A	Protection degree	: IP55
L. R. Amperes	: 66.7/33.3 A	Cooling method	: IC411 - TEFC
LRC	: 9.5x(Code K)	Mounting	: F-1
No load current	: 2.56/1.28 A	Rotation <sup>1</sup>	: Both (CW and CCW)
Rated speed	: 3500 rpm	Noise level <sup>2</sup>	: 68.0 dB(A)
Slip	: 2.78 %	Starting method	: Direct On Line
Rated torque	: 0.622 kgfm	Approx. weight <sup>3</sup>	: 22.8 kg
Locked rotor torque	: 300 %		
Breakdown torque	: 380 %		
Insulation class	: F		
Service factor	: 1.15		
Moment of inertia (J)	: 0.0070 kgm <sup>2</sup>		
Design	: B		

Output	50%	75%	100%	Foundation loads	
Efficiency (%)	84.0	86.5	86.5	Max. traction	: 61 kgf
Power Factor	0.78	0.87	0.91	Max. compression	: 84 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)
14.5	10.8	9.9	8.0	4.4	3.0	1.7

		<u>Drive end</u>	<u>Non drive end</u>
Bearing type	:	6205 ZZ	6203 ZZ
Sealing	:	V'Ring	Without Bearing Seal
Lubrication interval	:	-	-
Lubricant amount	:	-	-
Lubricant type	:	Mobil Polyrex EM	

### Notes

USABLE @208V 7.76A SF 1.00 SFA 7.76A

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 Revision 1 / 2		
Checked by				
Date	13/11/2025			

# LOAD PERFORMANCE CURVE

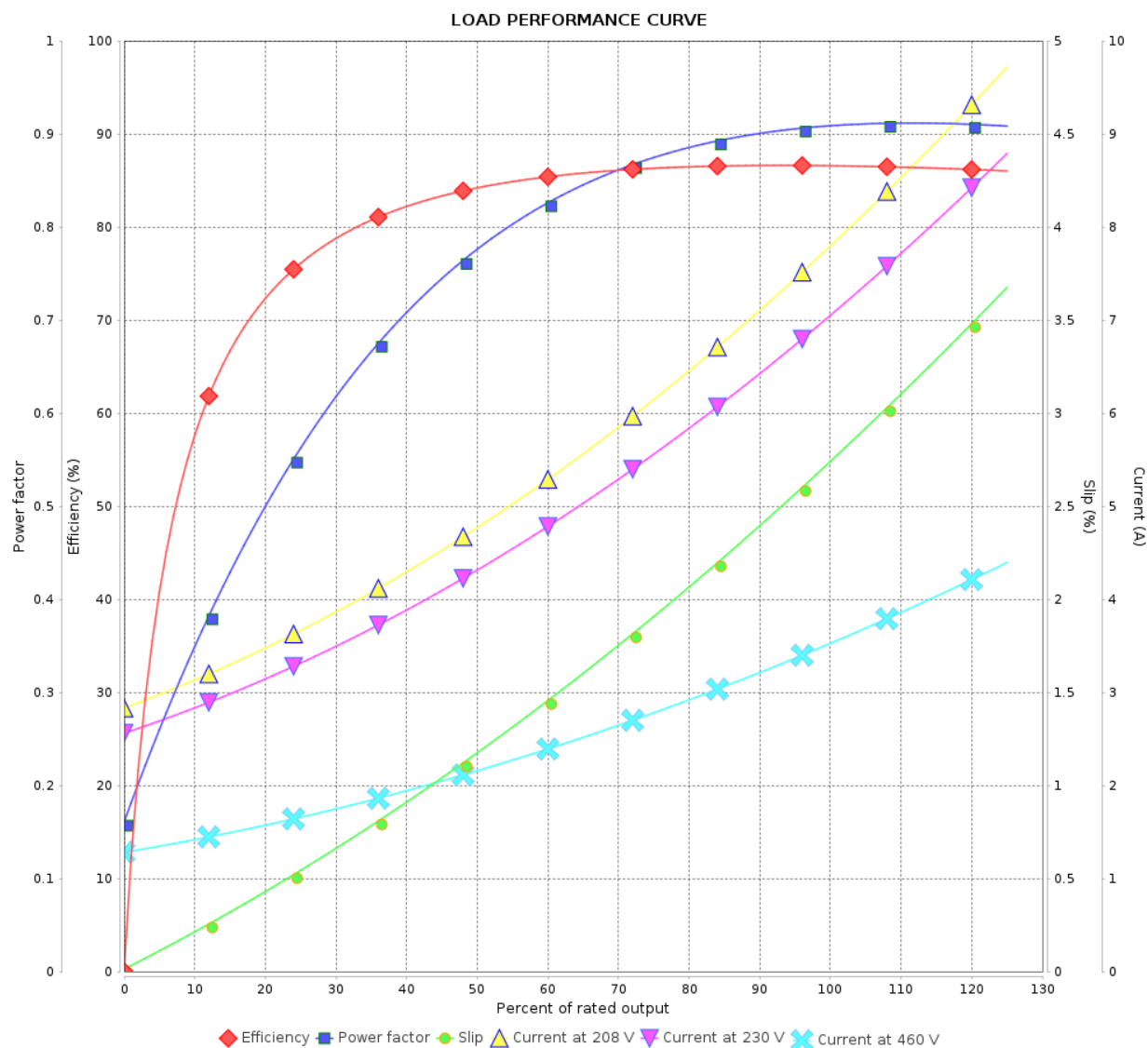
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Efficiency Three-Phase

Product code : 14802850

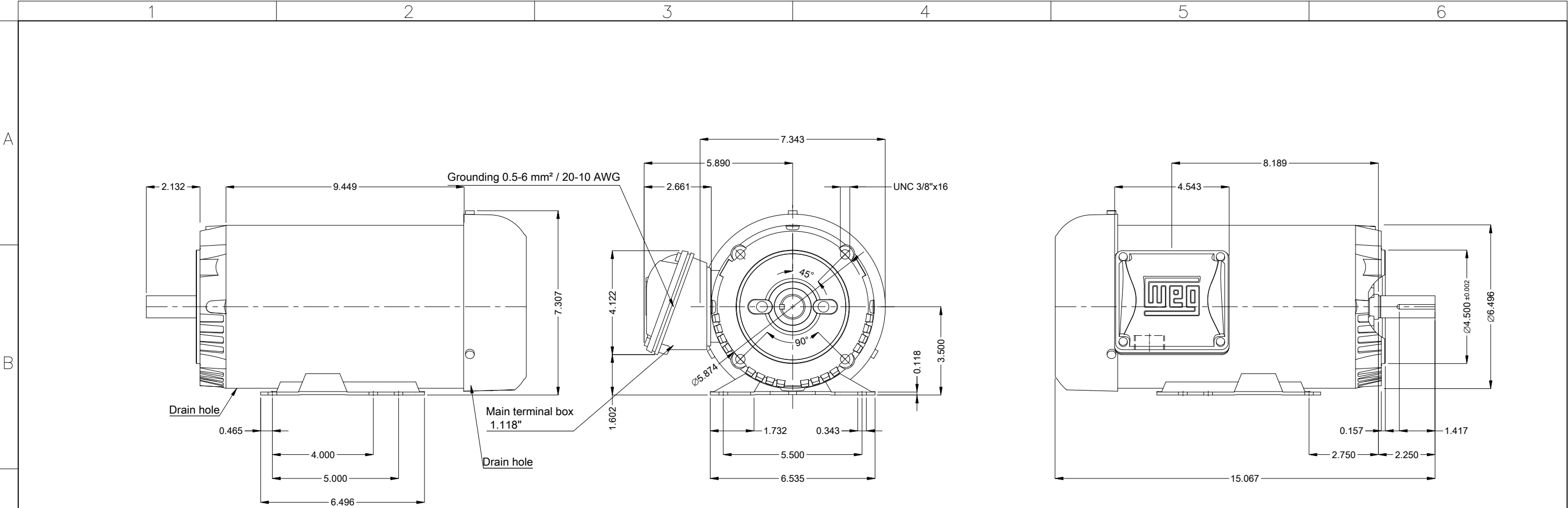


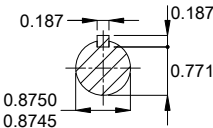
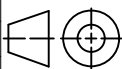

Performance : 230/460 V 60 Hz 2P

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LRC : 9.5  
Rated torque : 0.622 kgfm  
Locked rotor torque : 300 %  
Breakdown torque : 380 %  
Rated speed : 3500 rpm

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Service factor :  
Temperature rise : 80 K  
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D					3 HP 02 Poles 60 Hz										A					
					Scale 1 : 4															
E	Fan cover - steel plate	Color Munsell N 1 matte black	Painting plan 207N	Mounting MARKET F-1/B34R(D)	Mounting B34D	DE Shaft End				ECM		LOC	SUMMARY OF MODIFICATIONS			EXECUTED	CHECKED	RELEASED	DATE	VER
										EXECUTED		HYBRISUSER		THREE PH. MOTOR ROLLED STEEL NEMA PREM. EFF.			PREVIEW			
										CHECKED				FRAME 143/5TC IP55 TEFC			WDD 00			
										RELEASED										
										REL. DATE							SHEET 1 / 1			