

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : Premium Efficiency Three-Phase Product code : 13484346

Frame	: 56C	Cooling method	: IC411 - TEFC
Insulation class	: F	Mounting	: F-1
Duty cycle	: Cont.(S1)	Rotation <sup>1</sup>	: Both (CW and CCW)
Ambient temperature	: -20°C to +40°C	Starting method	: Direct On Line
Altitude	: 1000 m.a.s.l.	Approx. weight <sup>3</sup>	: 16.5 kg
Protection degree	: IP55	Moment of inertia (J)	: 0.0046 kgm <sup>2</sup>
Design	: B		

Output [HP]	1.5	1.5	1.5
Poles	4	4	4
Frequency [Hz]	60	50	50
Rated voltage [V]	230/460	190-220/380	415
Rated current [A]	4.04/2.02	4.82-4.16/2.41	2.27
L. R. Amperes [A]	33.1/16.6	29.4-25.4/14.7	16.3
LRC [A]	8.2x(Code K)	6.1x(Code H)	7.2x(Code J)
No load current [A]	2.17/1.08	2.13-1.84/1.07	1.26
Rated speed [RPM]	1750	1420	1435
Slip [%]	2.78	5.33	4.33
Rated torque [kgfm]	0.622	0.767	0.759
Locked rotor torque [%]	270	210	260
Breakdown torque [%]	300	250	300
Service factor		1.15	1.15
Temperature rise	80 K	80 K	80 K
Locked rotor time	37s (cold) 21s (hot)	36s (cold) 20s (hot)	32s (cold) 18s (hot)
Noise level <sup>2</sup>	52.0 dB(A)	49.0 dB(A)	49.0 dB(A)
Efficiency (%)	25%		
	50%	85.5	83.5
	75%	86.5	84.9
	100%	86.5	84.1
Power Factor	25%		
	50%	0.59	0.59
	75%	0.72	0.72
	100%	0.79	0.80

	<u>Drive end</u>	<u>Non drive end</u>	Foundation loads	
Bearing type	: 6204 ZZ	6202 ZZ	Max. traction	: 65 kgf
Sealing	: V'Ring	Without	Max. compression	: 81 kgf
		Bearing Seal		
Lubrication interval	: -	-		
Lubricant amount	: -	-		
Lubricant type	: Mobil Polyrex EM			

### Notes

USABLE @208V 4.47A SF 1.00 SFA 4.47A

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				
Checked by				
Date	11/05/2022			

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Revision

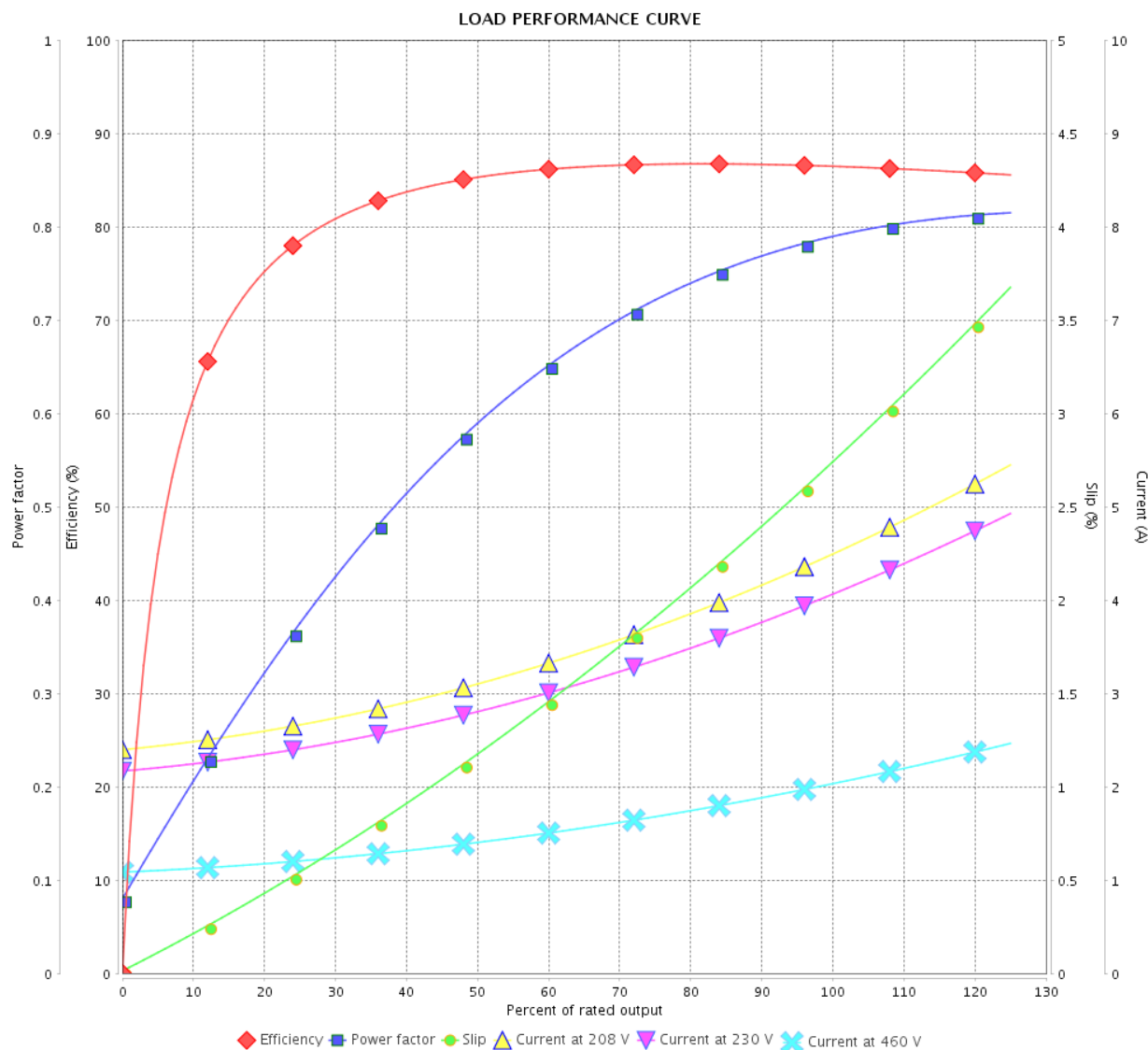
# LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : Premium Efficiency Three-Phase Product code : 13484346



Performance : 230/460 V 60 Hz 4P

Rated current : 4.04/2.02 A  
 LRC : 8.2  
 Rated torque : 0.622 kgfm  
 Locked rotor torque : 270 %  
 Breakdown torque : 300 %  
 Rated speed : 1750 rpm

Moment of inertia (J) : 0.0046 kgm<sup>2</sup>  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor :  
 Temperature rise : 80 K  
 Design : B

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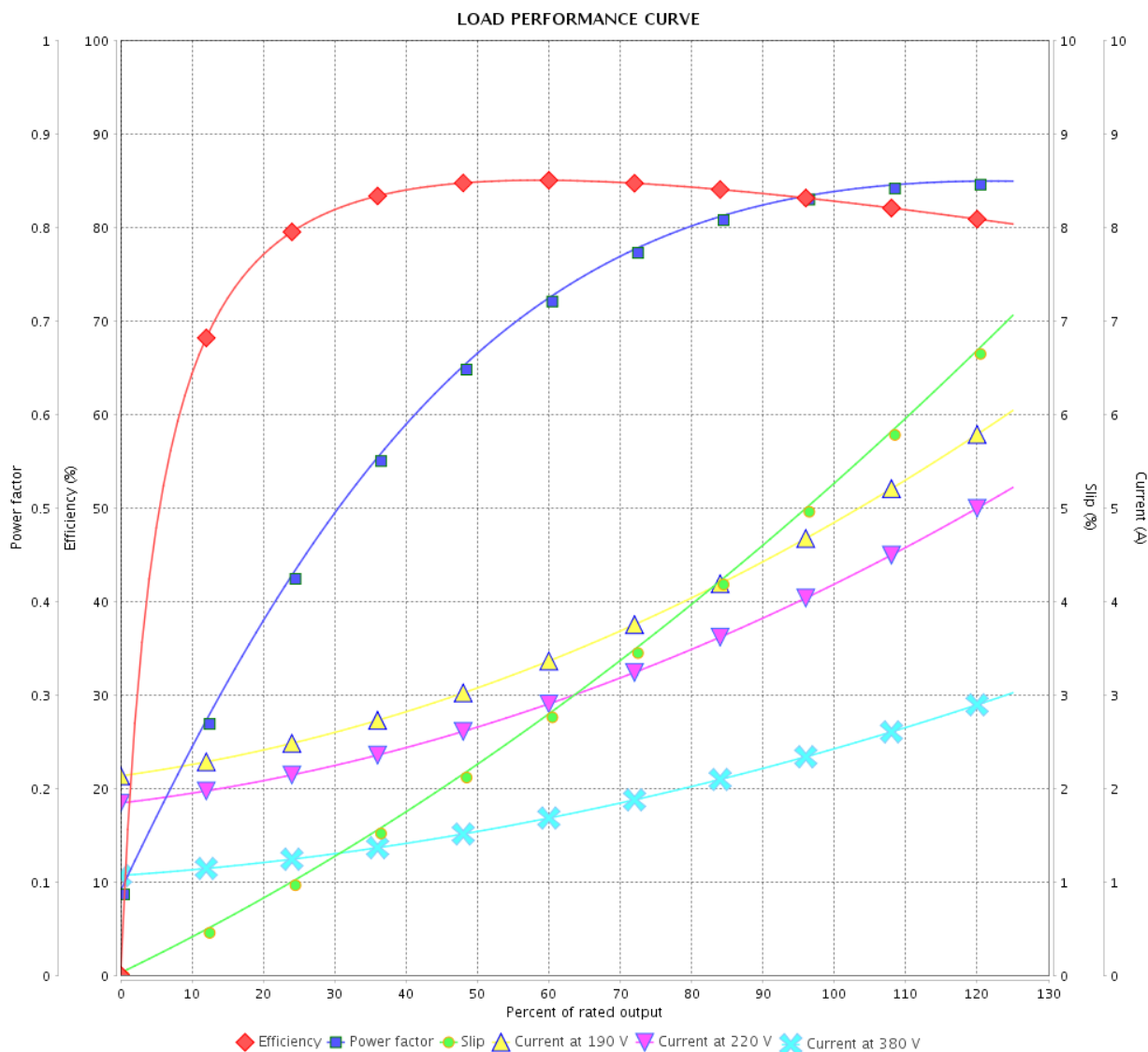
# LOAD PERFORMANCE CURVE

## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : Premium Efficiency Three-Phase Product code : 13484346



Performance : 190-220/380 V 50 Hz 4P

Rated current : 4.82-4.16/2.41 A  
 LRC : 6.1  
 Rated torque : 0.767 kgfm  
 Locked rotor torque : 210 %  
 Breakdown torque : 250 %  
 Rated speed : 1420 rpm

Moment of inertia (J) : 0.0046 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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Date	11/05/2022			

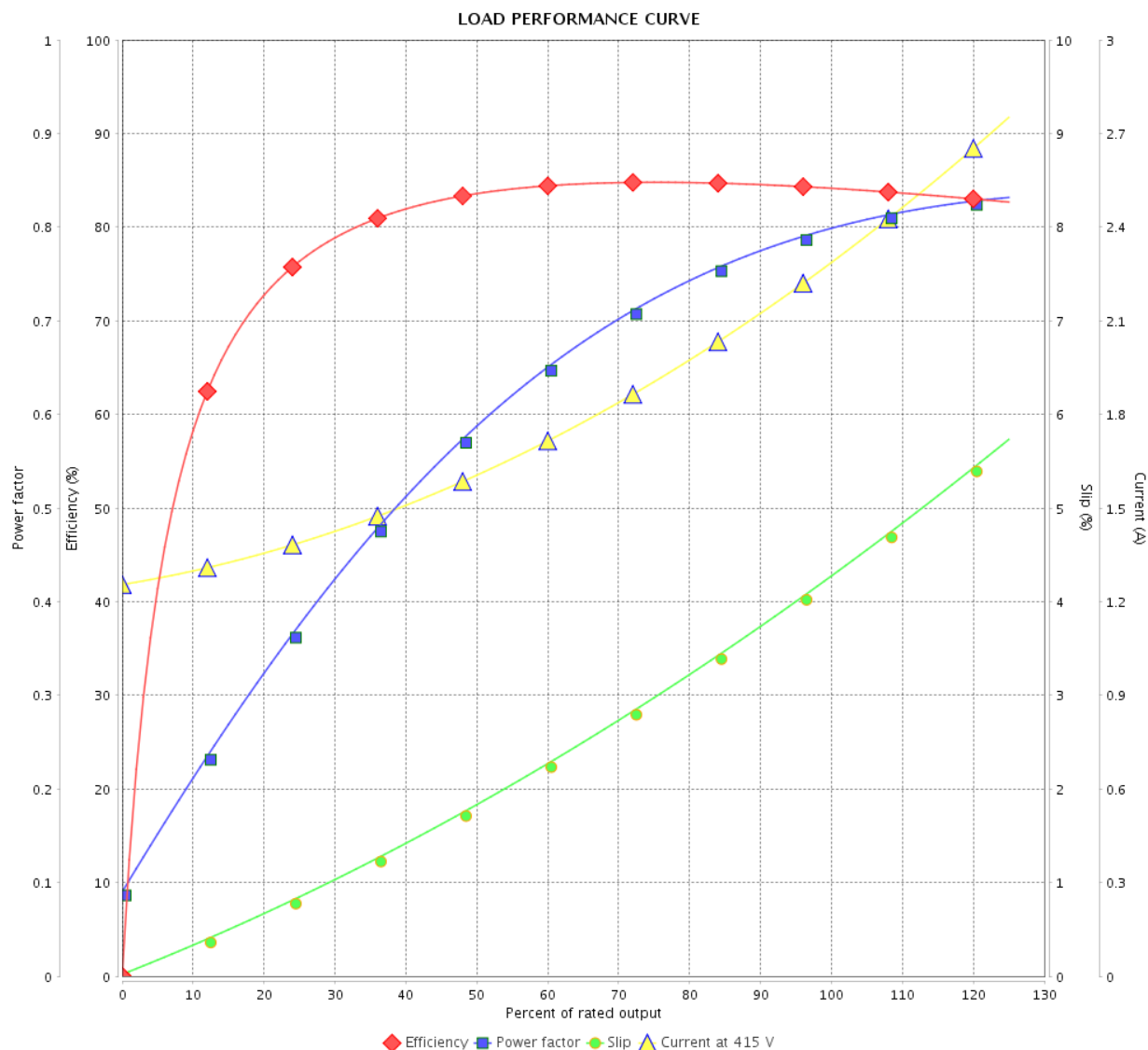
# LOAD PERFORMANCE CURVE

## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : Premium Efficiency Three-Phase Product code : 13484346

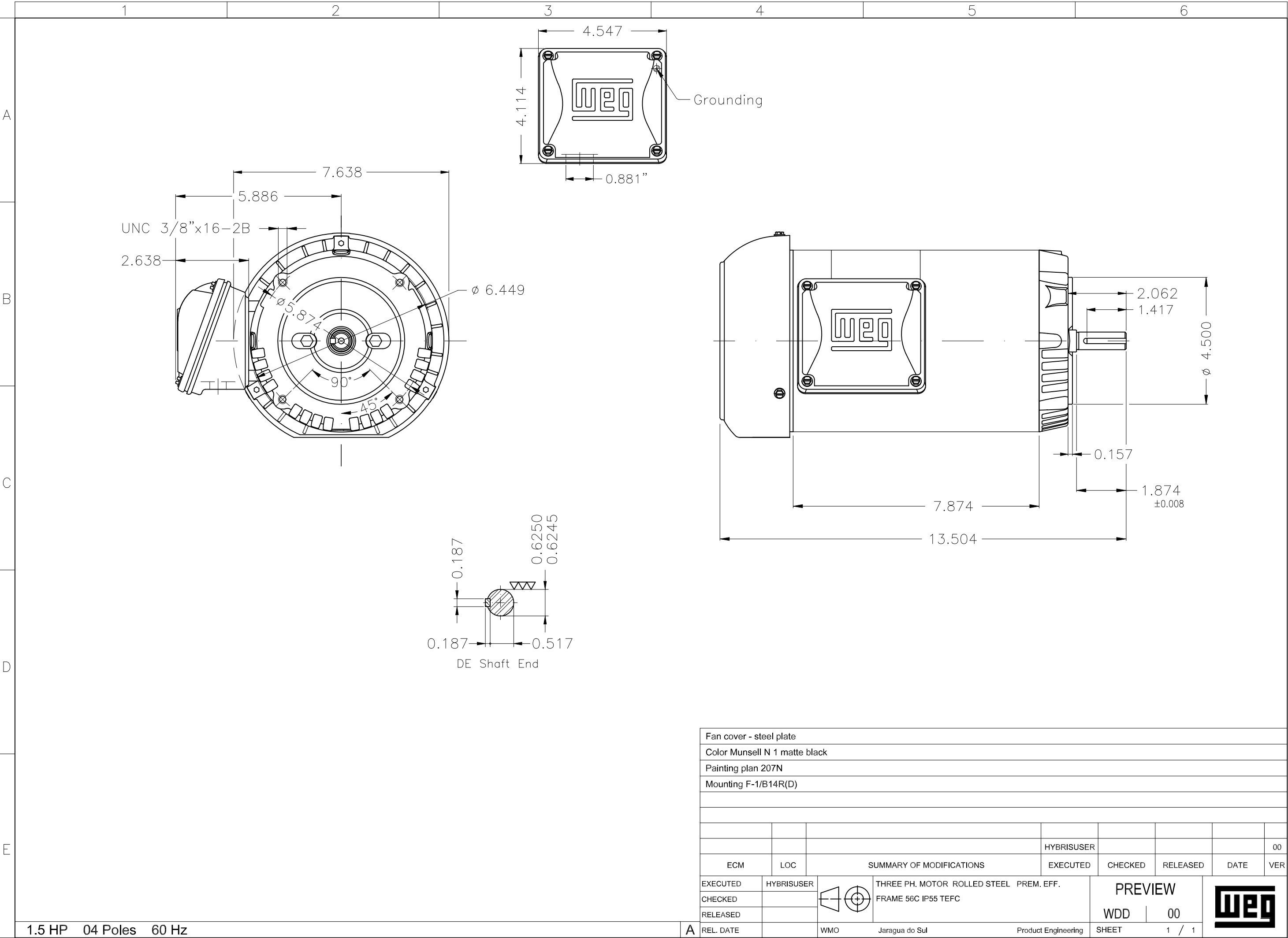


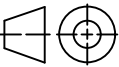

Performance : 415 V 50 Hz 4P

Rated current : 2.27 A  
 LRC : 7.2  
 Rated torque : 0.759 kgfm  
 Locked rotor torque : 260 %  
 Breakdown torque : 300 %  
 Rated speed : 1435 rpm

Moment of inertia (J) : 0.0046 kgm<sup>2</sup>  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.15  
 Temperature rise : 80 K  
 Design : B

Rev.	Changes Summary		Performed	Checked	Date
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Fan cover - steel plate									
Color Munsell N 1 matte black									
Painting plan 207N									
Mounting F-1/B14R(D)									
						HYBRISUSER			00
ECM	LOC	SUMMARY OF MODIFICATIONS				EXECUTED	CHECKED	RELEASED	DATE VER
EXECUTED	HYBRISUSER		THREE PH. MOTOR ROLLED STEEL PREM. EFF. FRAME 56C IP55 TEFC			PREVIEW			
CHECKED									
RELEASED									
REL. DATE									
		WMO	Jaragua do Sul	Product Engineering	SHEET	1 / 1			