

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : Three-Phase

Product code : 13702735

Frame	: 56HC	Cooling method	: IC01 - ODP
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>	: 17.4 kg
Design	: A	Moment of inertia (J)	: 0.0049 kgm <sup>2</sup>

Output [HP]	2	2	2
Poles	4	4	4
Frequency [Hz]	60	50	50
Rated voltage [V]	230/460	190/380	220/415
Rated current [A]	5.38/2.69	6.52/3.26	5.79/3.07
L. R. Amperes [A]	41.4/20.7	36.5/18.3	38.8/20.6
LRC [A]	7.7x(Code K)	5.6x(Code G)	6.7x(Code J)
No load current [A]	2.75/1.38	2.70/1.35	3.08/1.63
Rated speed [RPM]	1740	1410	1430
Slip [%]	3.33	6.00	4.67
Rated torque [kgfm]	0.834	1.03	1.02
Locked rotor torque [%]	260	200	250
Breakdown torque [%]	320	229	280
Service factor		1.00	1.00
Temperature rise	80 K	105 K	80 K
Locked rotor time	30s (cold) 17s (hot)	28s (cold) 16s (hot)	27s (cold) 15s (hot)
Noise level <sup>2</sup>	52.0 dB(A)	49.0 dB(A)	49.0 dB(A)
Efficiency (%)	25%		
	50%	85.5	84.6
	75%	86.5	85.2
	100%	86.5	83.8
Power Factor	25%		
	50%	0.61	0.61
	75%	0.74	0.74
	100%	0.81	0.81

Bearing type	: Drive end	Non drive end	Foundation loads
	: 6204 ZZ	6202 ZZ	
Sealing	: Without	Without	Max. traction : 83 kgf
	: Bearing Seal	Bearing Seal	
Lubrication interval	: -	-	Max. compression : 100 kgf
Lubricant amount	: -	-	
Lubricant type	: Mobil Polyrex EM		

### Notes

USABLE @208V 5.95A SF 1.00 SFA 5.95A

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	17/05/2022			

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Revision

# LOAD PERFORMANCE CURVE

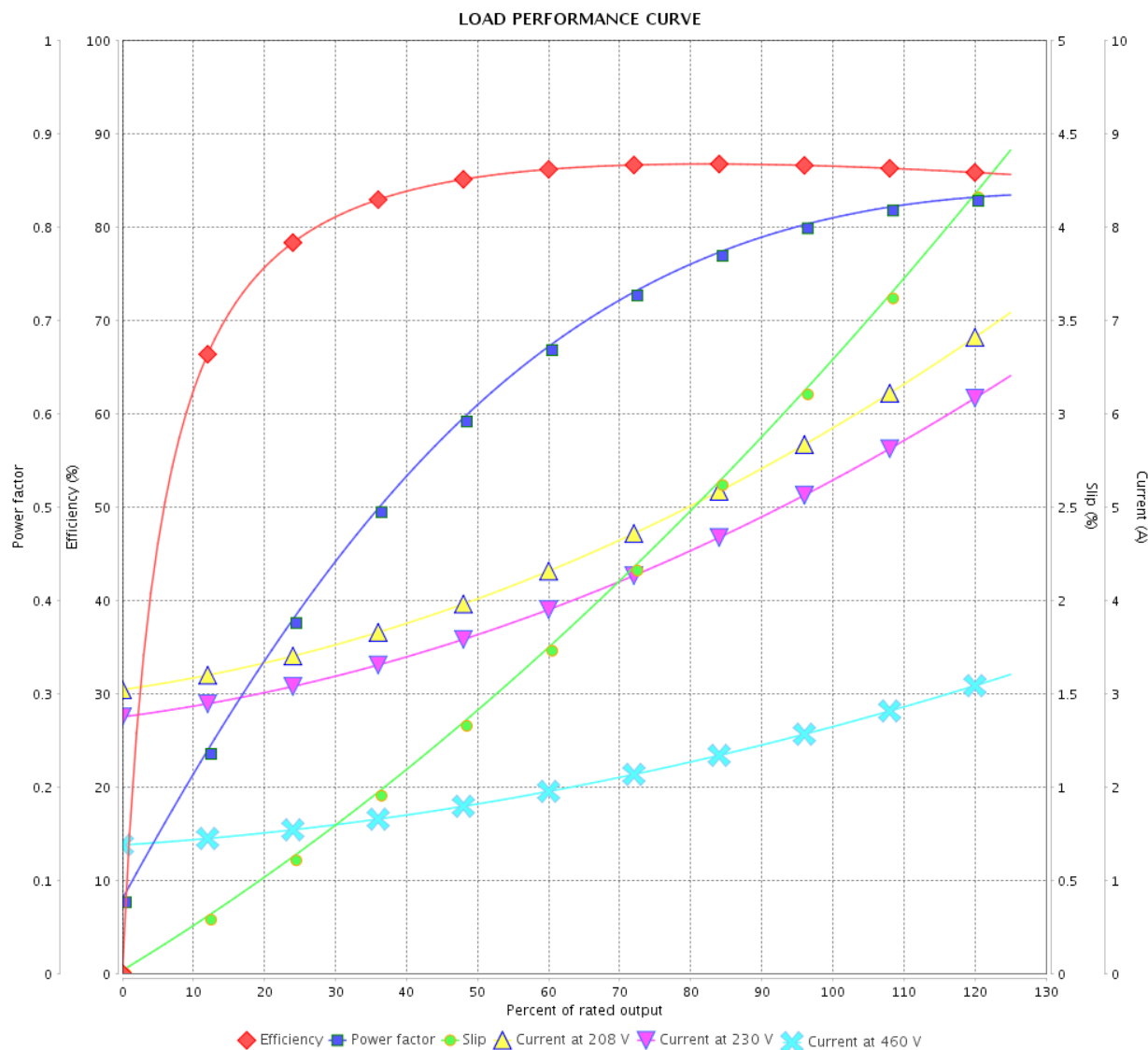
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : Three-Phase

Product code : 13702735



Performance : 230/460 V 60 Hz 4P

Rated current : 5.38/2.69 A  
 LRC : 7.7  
 Rated torque : 0.834 kgfm  
 Locked rotor torque : 260 %  
 Breakdown torque : 320 %  
 Rated speed : 1740 rpm

Moment of inertia (J) : 0.0049 kgm<sup>2</sup>  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor :  
 Temperature rise : 80 K  
 Design : A

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# LOAD PERFORMANCE CURVE

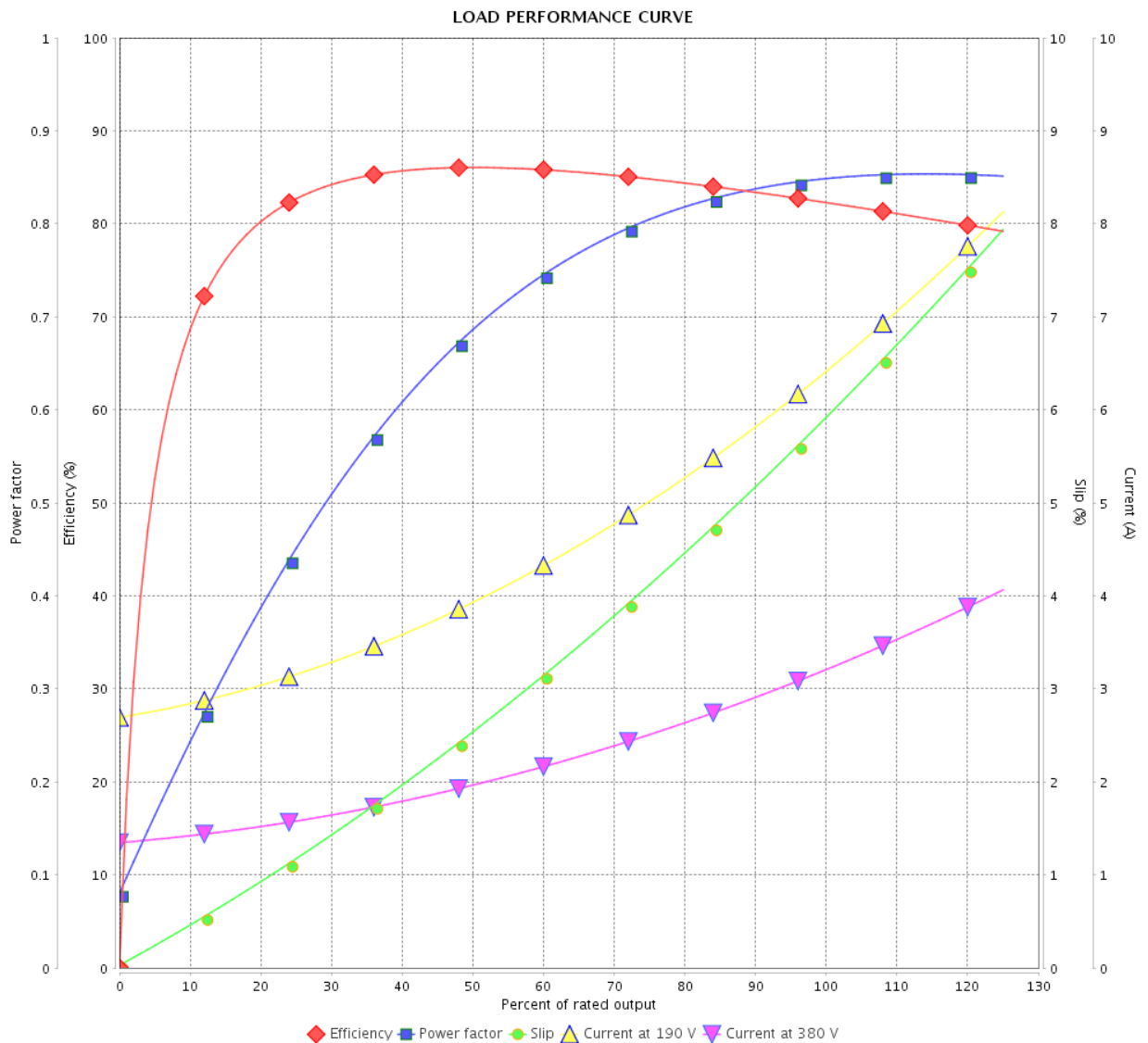
## Three Phase Induction Motor - Squirrel Cage



Customer : \_\_\_\_\_

Product line : Three-Phase

Product code : 13702735



Performance : 190/380 V 50 Hz 4P

Rated current : 6.52/3.26 A  
 LRC : 5.6  
 Rated torque : 1.03 kgfm  
 Locked rotor torque : 200 %  
 Breakdown torque : 229 %  
 Rated speed : 1410 rpm

Moment of inertia (J) : 0.0049 kgm<sup>2</sup>  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.00  
 Temperature rise : 105 K  
 Design : A

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# LOAD PERFORMANCE CURVE

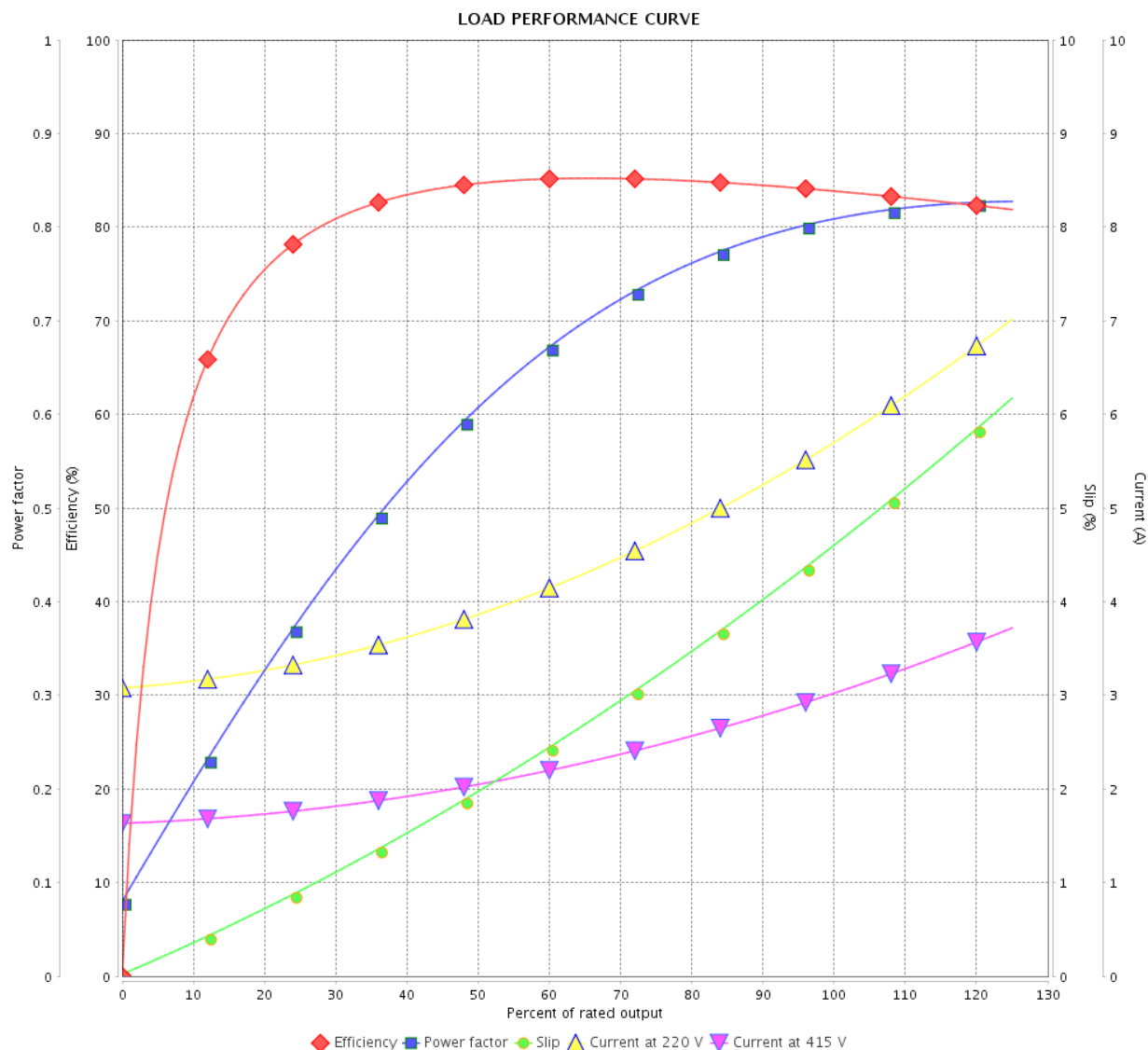
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : Three-Phase

Product code : 13702735

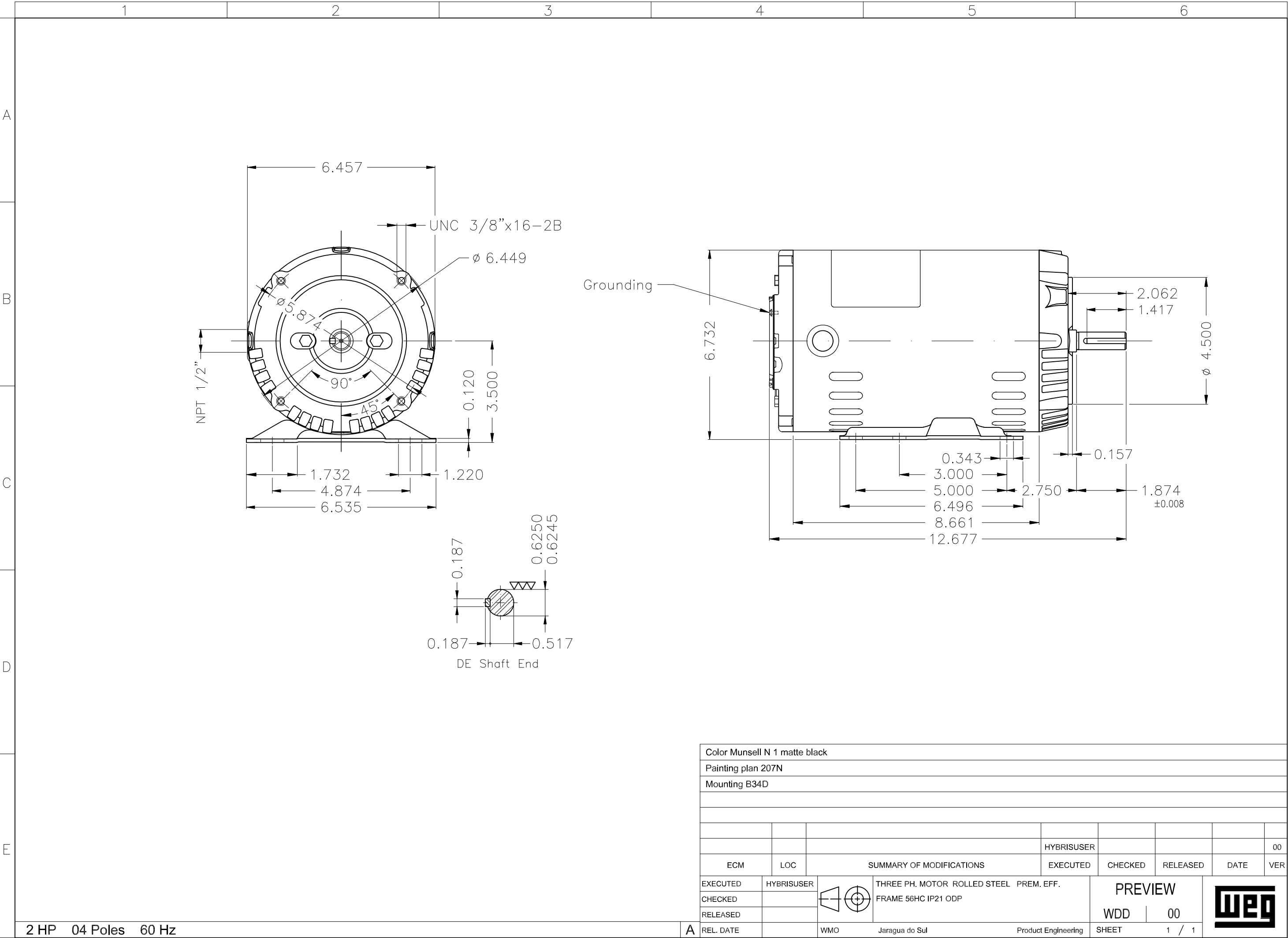


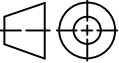

Performance : 220/415 V 50 Hz 4P

Rated current : 5.79/3.07 A  
 LRC : 6.7  
 Rated torque : 1.02 kgfm  
 Locked rotor torque : 250 %  
 Breakdown torque : 280 %  
 Rated speed : 1430 rpm

Moment of inertia (J) : 0.0049 kgm<sup>2</sup>  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.00  
 Temperature rise : 80 K  
 Design : A

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Color Munsell N 1 matte black									
Painting plan 207N									
Mounting B34D									
						HYBRISUSER			00
ECM	LOC	SUMMARY OF MODIFICATIONS				EXECUTED	CHECKED	RELEASED	DATE VER
EXECUTED	HYBRISUSER	 THREE PH. MOTOR ROLLED STEEL PREM. EFF. FRAME 56HC IP21 ODP				PREVIEW			
CHECKED						WDD   00			
RELEASED									
REL. DATE		WMO	Jaragua do Sul	Product Engineering	SHEET	1 / 1			