

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : Three-Phase

Product code : 13737454

Frame	: 56	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>	: 12.3 kg
Design	: A	Moment of inertia (J)	: 0.0036 kgm <sup>2</sup>

Output [HP]	1	1	1
Poles	4	4	4
Frequency [Hz]	60	50	50
Rated voltage [V]	230/460	190/380	220/415
Rated current [A]	3.14/1.57	3.54/1.77	3.34/1.77
L. R. Amperes [A]	23.9/11.9	20.9/10.4	22.0/11.7
LRC [A]	7.6x(Code L)	5.9x(Code H)	6.6x(Code K)
No load current [A]	2.20/1.10	2.09/1.05	2.42/1.28
Rated speed [RPM]	1760	1440	1450
Slip [%]	2.22	4.00	3.33
Rated torque [kgfm]	0.412	0.504	0.501
Locked rotor torque [%]	280	180	229
Breakdown torque [%]	320	250	300
Service factor		1.15	1.15
Temperature rise	80 K	80 K	80 K
Locked rotor time	30s (cold) 17s (hot)	32s (cold) 18s (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%	78.5	76.1
	75%	82.5	79.9
	100%	83.5	80.6
Power Factor	25%		
	50%	0.49	0.49
	75%	0.63	0.64
	100%	0.72	0.73

		<u>Drive end</u>	<u>Non drive end</u>	Foundation loads	
Bearing type	:	6204 ZZ	6202 ZZ	Max. traction	: 42 kgf
Sealing	:	Without	Without	Max. compression	: 54 kgf
		Bearing Seal	Bearing Seal		
Lubrication interval	:	-	-		
Lubricant amount	:	-	-		
Lubricant type	:	Mobil Polyrex EM			

### Notes

USABLE @208V 3.47A SF 1.00 SFA 3.47A

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		Page 1 / 4		
Checked by				
Date	17/05/2022			
			Revision	

# LOAD PERFORMANCE CURVE

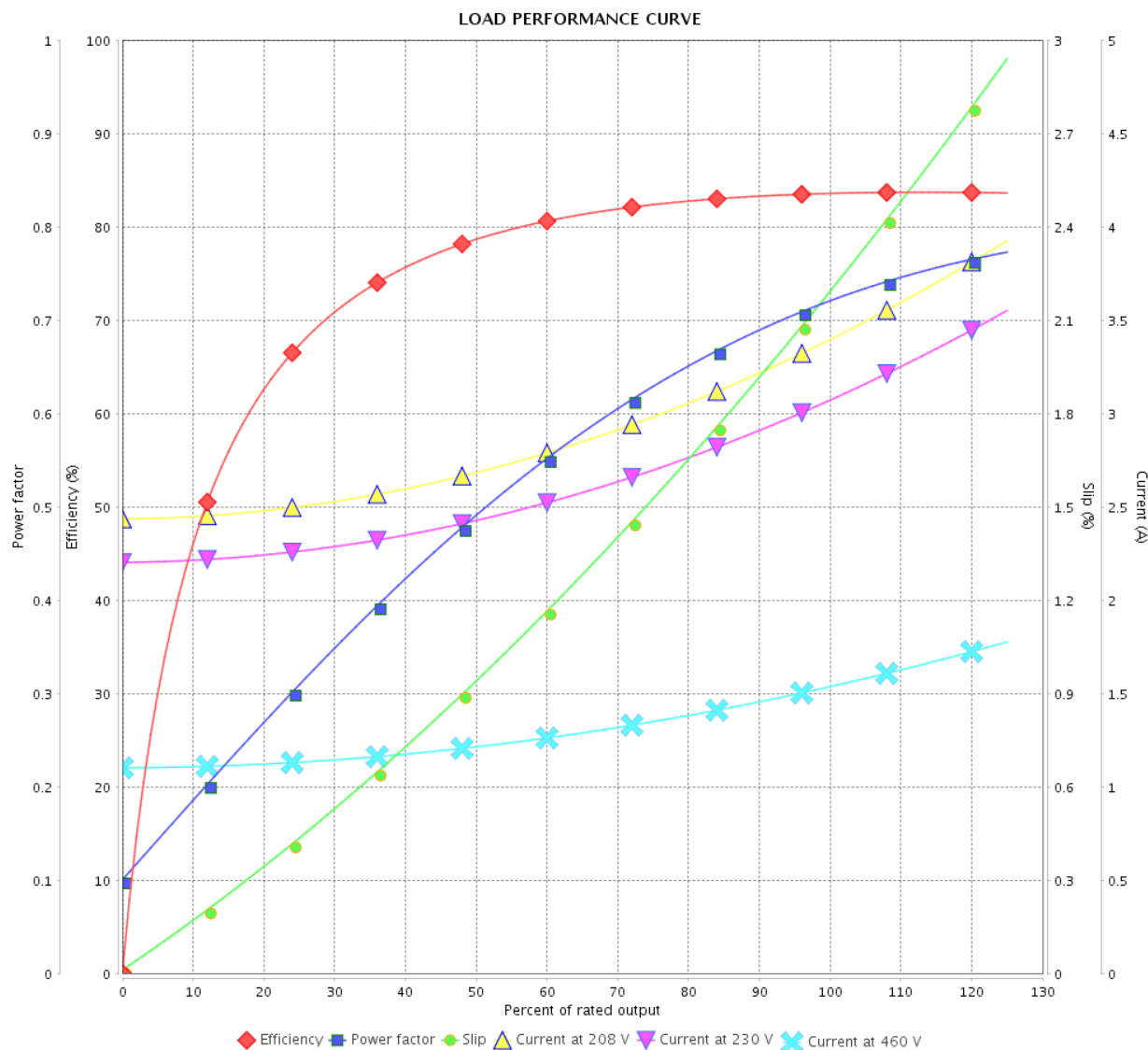
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : Three-Phase

Product code : 13737454



Performance : 230/460 V 60 Hz 4P

Rated current : 3.14/1.57 A  
 LRC : 7.6  
 Rated torque : 0.412 kgfm  
 Locked rotor torque : 280 %  
 Breakdown torque : 320 %  
 Rated speed : 1760 rpm

Moment of inertia (J) : 0.0036 kgm<sup>2</sup>  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor :  
 Temperature rise : 80 K  
 Design : A

Rev.	Changes Summary		Performed	Checked	Date
Performed by				Page	Revision
Checked by				2 / 4	
Date					

# LOAD PERFORMANCE CURVE

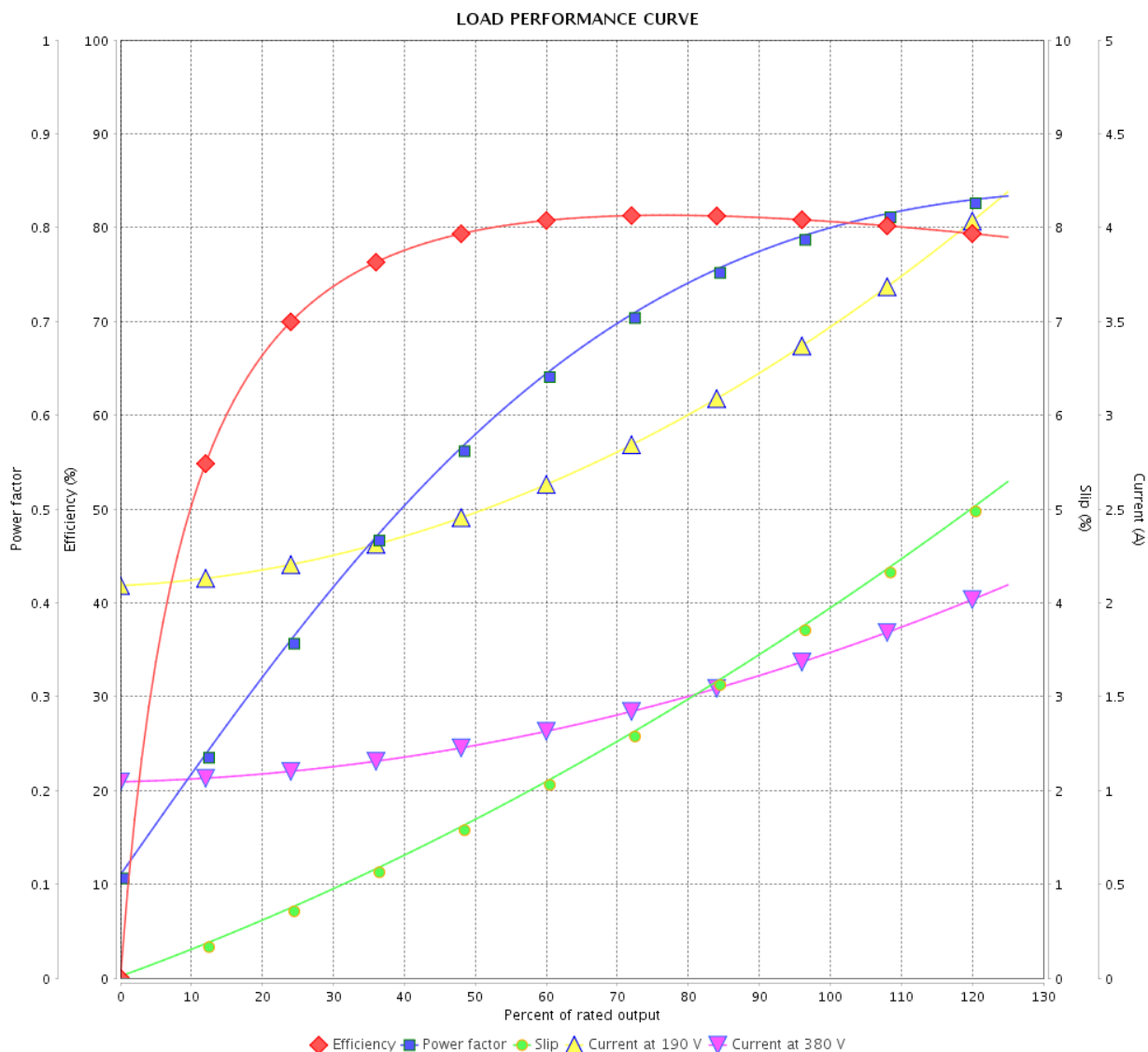
## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : Three-Phase

Product code : 13737454



Performance : 190/380 V 50 Hz 4P

Rated current : 3.54/1.77 A  
 LRC : 5.9  
 Rated torque : 0.504 kgfm  
 Locked rotor torque : 180 %  
 Breakdown torque : 250 %  
 Rated speed : 1440 rpm

Moment of inertia (J) : 0.0036 kgm<sup>2</sup>  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.15  
 Temperature rise : 80 K  
 Design : A

Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page 3 / 4Revision		
Checked by				
Date	17/05/2022			

# LOAD PERFORMANCE CURVE

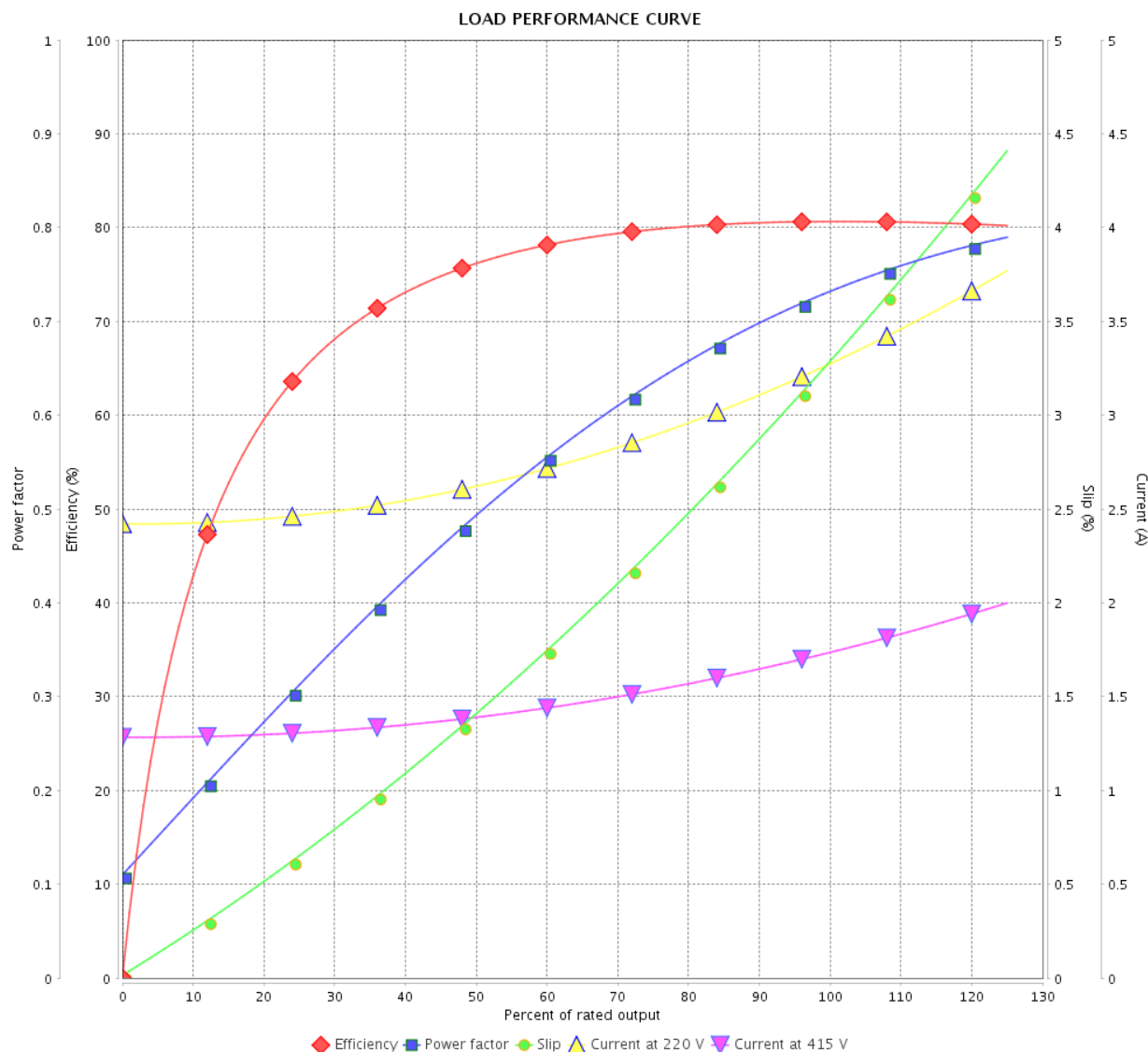
## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : Three-Phase

Product code : 13737454

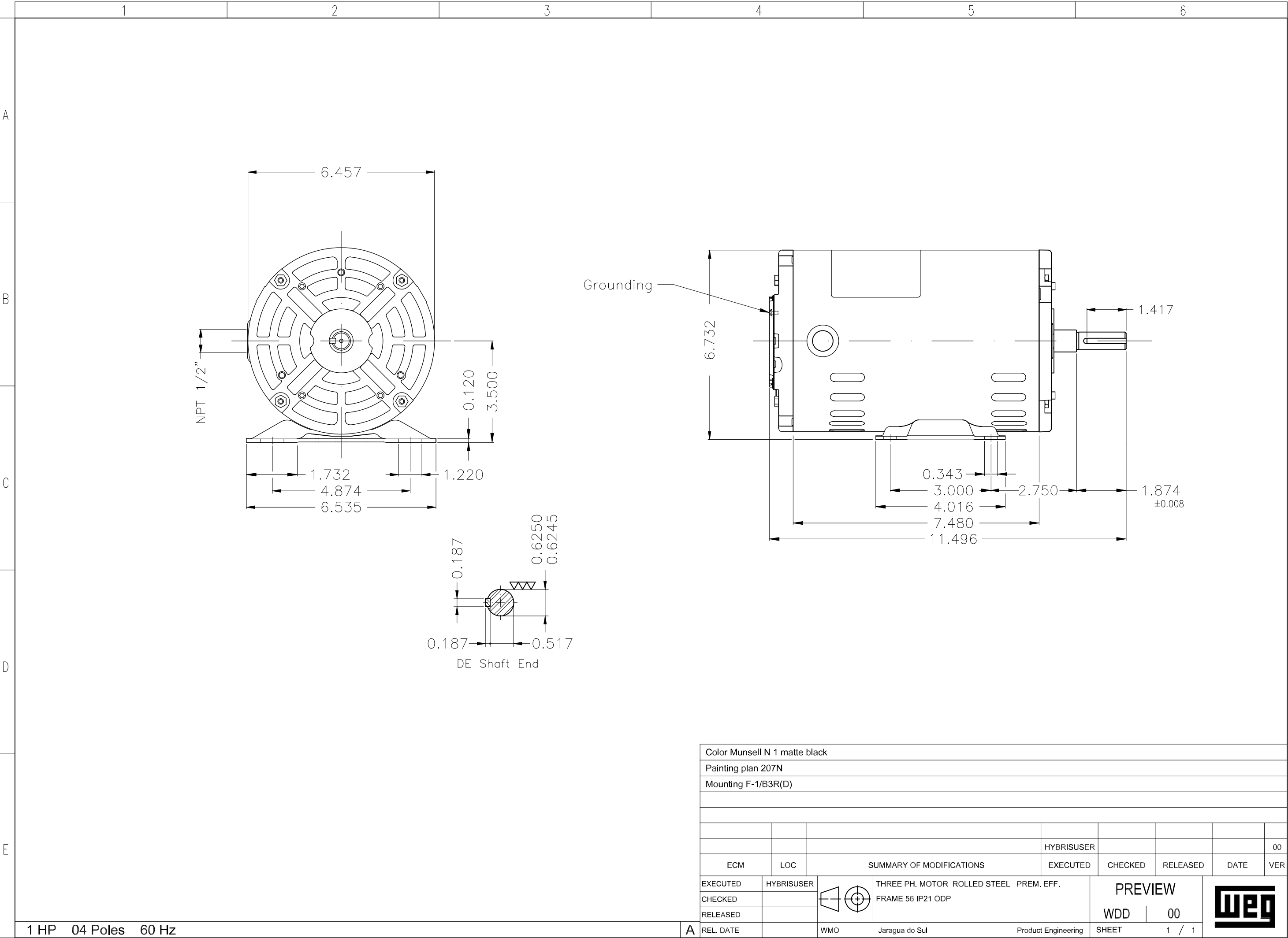


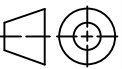

Performance : 220/415 V 50 Hz 4P

Rated current : 3.34/1.77 A  
 LRC : 6.6  
 Rated torque : 0.501 kgfm  
 Locked rotor torque : 229 %  
 Breakdown torque : 300 %  
 Rated speed : 1450 rpm

Moment of inertia (J) : 0.0036 kgm<sup>2</sup>  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.15  
 Temperature rise : 80 K  
 Design : A

Rev.	Changes Summary		Performed	Checked	Date
Performed by				Page	Revision
Checked by				4 / 4	
Date					



Color Munsell N 1 matte black									
Painting plan 207N									
Mounting F-1/B3R(D)									
				HYBRISUSER					00
ECM	LOC	SUMMARY OF MODIFICATIONS			EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	HYBRISUSER	 THREE PH. MOTOR ROLLED STEEL PREM. EFF. FRAME 56 IP21 ODP			PREVIEW				
CHECKED					WDD	00			
RELEASED									
REL. DATE		WMO	Jaragua do Sul	Product Engineering	SHEET	1 / 1			

1 HP 04 Poles 60 Hz

A