

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : Three-Phase

Product code : 14709245

Frame	: W56C	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>	: 8.4 kg
Protection degree	: IP55	Moment of inertia (J)	: 0.0008 kgm <sup>2</sup>

Output [HP]	0.5	0.5	0.5
Poles	2	2	2
Frequency [Hz]	60	50	50
Rated voltage [V]	208-230/460	190/380	220/415
Rated current [A]	1.73-1.57/0.784	1.77/0.885	1.61/0.852
L. R. Amperes [A]	13.3-12.1/6.04	10.3/5.13	10.3/5.45
LRC [A]	7.7x(Code L)	5.8x(Code H)	6.4x(Code J)
No load current [A]	0.719-0.834/0.417	0.816/0.408	0.830/0.440
Rated speed [RPM]	3435	2780	2810
Slip [%]	4.58	7.33	6.33
Rated torque [kgfm]	0.106	0.131	0.129
Locked rotor torque [%]	330	240	280
Breakdown torque [%]	360	250	280
Service factor		1.15	1.15
Temperature rise	80 K	80 K	80 K
Locked rotor time	32s (cold) 18s (hot)	32s (cold) 18s (hot)	28s (cold) 16s (hot)
Noise level <sup>2</sup>	65.0 dB(A)	64.0 dB(A)	64.0 dB(A)
Efficiency (%)	25%		
	50%	68.0	72.0
	75%	72.0	75.0
	100%	74.0	74.7
Power Factor	25%		
	50%	0.64	0.70
	75%	0.75	0.81
	100%	0.80	0.85

	<u>Drive end</u>	<u>Non drive end</u>	Foundation loads
Bearing type	: 6203 ZZ	6202 ZZ	Max. traction : 7 kgf
Sealing	: V'Ring	V'Ring	Max. compression : 15 kgf
Lubrication interval	: -	-	
Lubricant amount	: -	-	
Lubricant type	: Mobil Polyrex EM		

Notes  
USABLE @208V SF 1.00

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			

Page  
1 / 4  
Revision

# LOAD PERFORMANCE CURVE

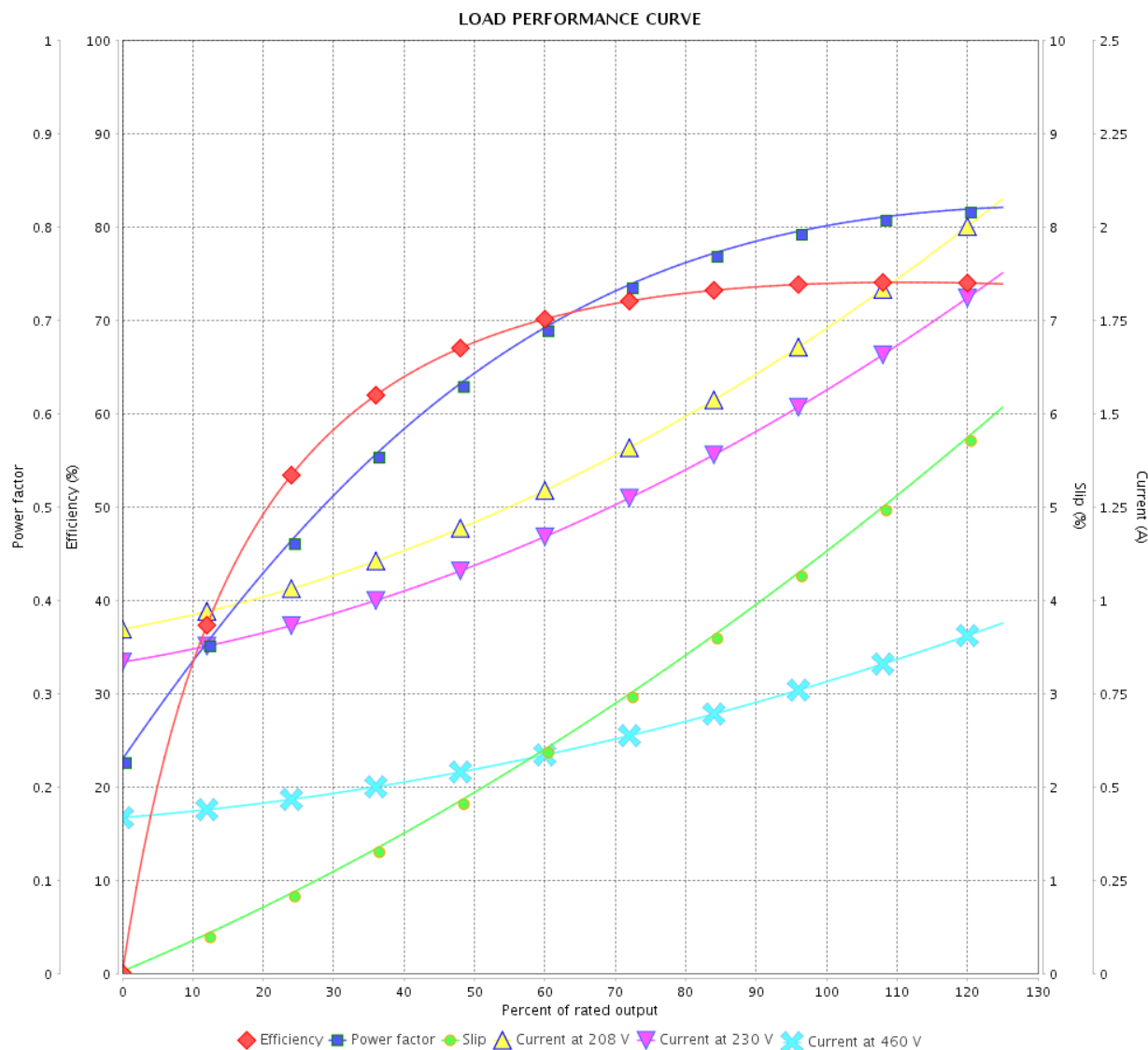
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : Three-Phase

Product code : 14709245



Performance : 208-230/460 V 60 Hz 2P

Rated current : 1.73-1.57/0.784 A  
 LRC : 7.7  
 Rated torque : 0.106 kgfm  
 Locked rotor torque : 330 %  
 Breakdown torque : 360 %  
 Rated speed : 3435 rpm

Moment of inertia (J) : 0.0008 kgm<sup>2</sup>  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor :  
 Temperature rise : 80 K

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

# LOAD PERFORMANCE CURVE

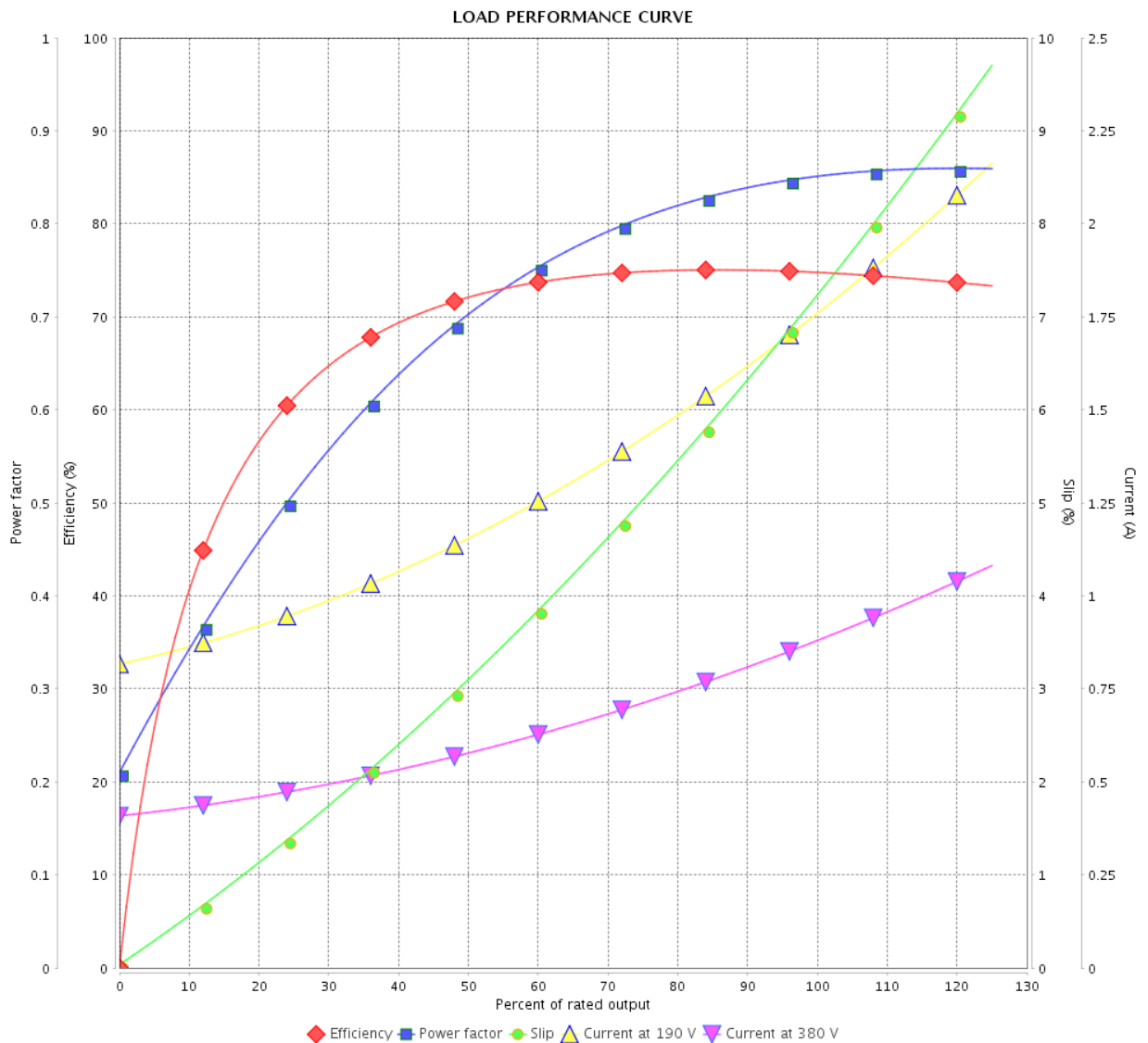
## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : Three-Phase

Product code : 14709245



Performance : 190/380 V 50 Hz 2P

Rated current : 1.77/0.885 A  
 LRC : 5.8  
 Rated torque : 0.131 kgfm  
 Locked rotor torque : 240 %  
 Breakdown torque : 250 %  
 Rated speed : 2780 rpm

Moment of inertia (J) : 0.0008 kgm<sup>2</sup>  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.15  
 Temperature rise : 80 K

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

# LOAD PERFORMANCE CURVE

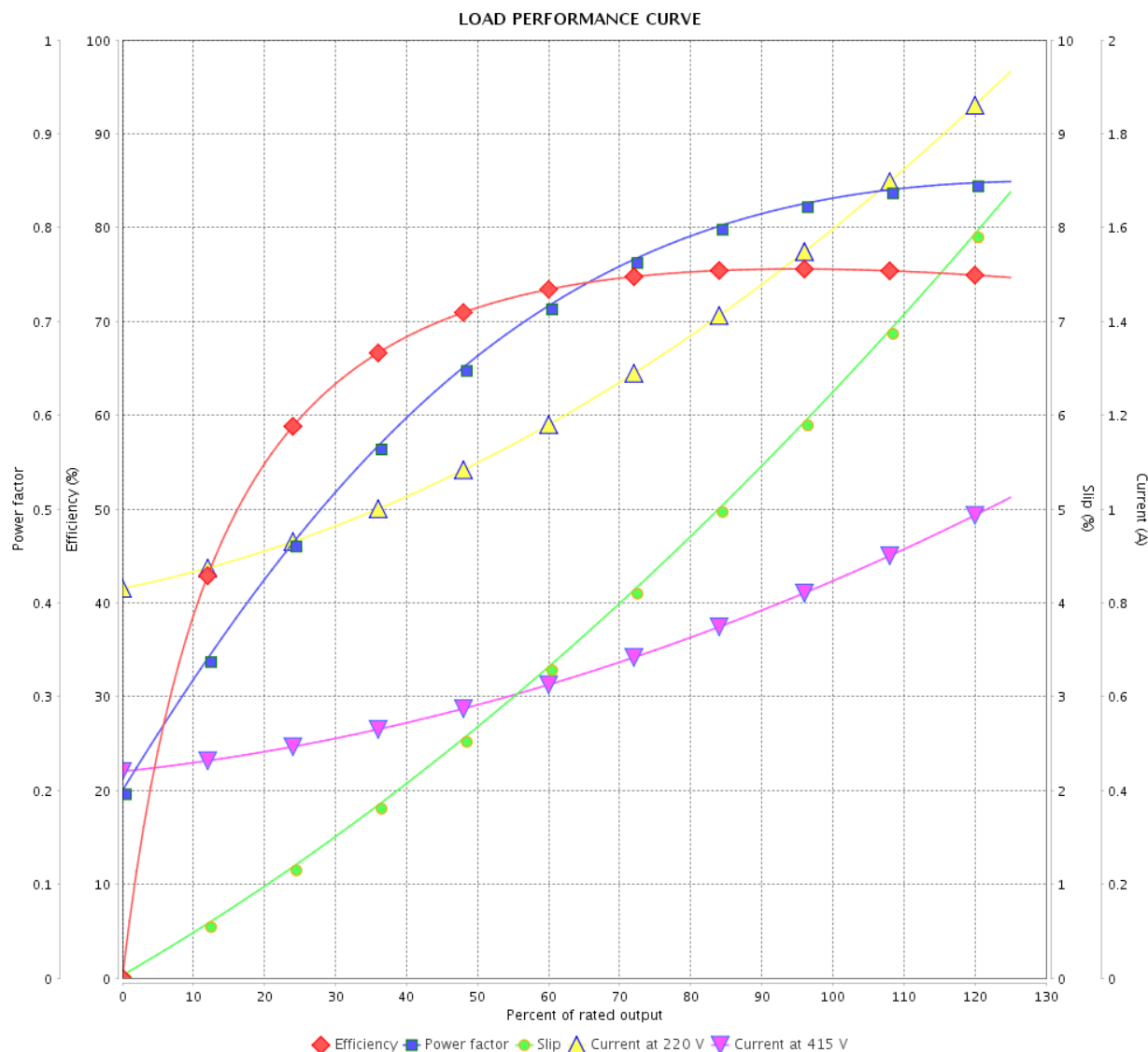
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : Three-Phase

Product code : 14709245

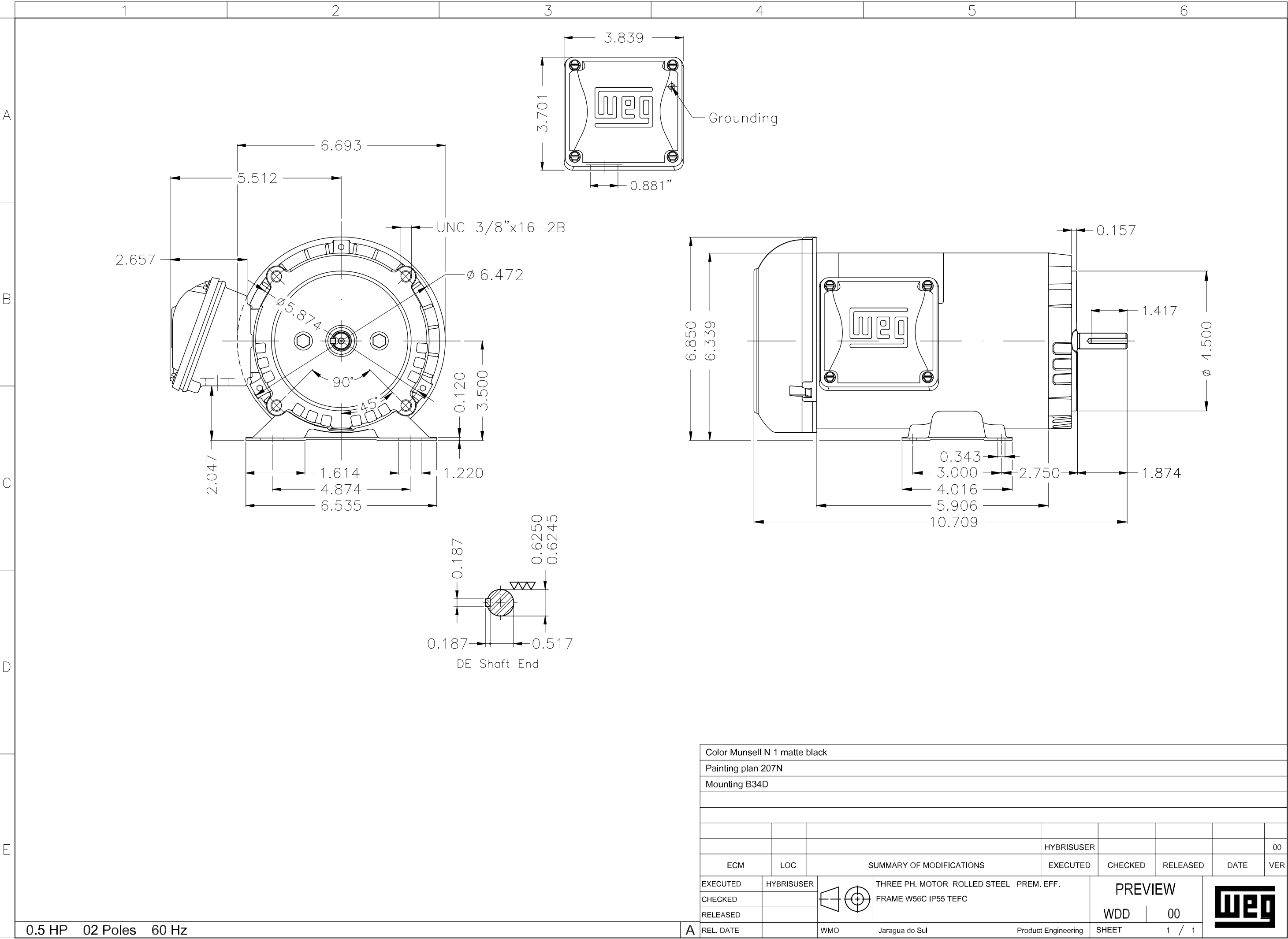




Performance : 220/415 V 50 Hz 2P

Rated current : 1.61/0.852 A  
 LRC : 6.4  
 Rated torque : 0.129 kgfm  
 Locked rotor torque : 280 %  
 Breakdown torque : 280 %  
 Rated speed : 2810 rpm

Moment of inertia (J) : 0.0008 kgm<sup>2</sup>  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.15  
 Temperature rise : 80 K

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 B34D									
				HYBRISUSER				00	
ECM	LOC	SUMMARY OF MODIFICATIONS			EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	HYBRISUSER	 THREE PH. MOTOR ROLLED STEEL PREM. EFF. FRAME W56C IP55 TEFC				PREVIEW			
CHECKED									
RELEASED									
REL. DATE		WMO	Jaragua do Sul	Product Engineering	SHEET	1	/	1	