

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : NEMA Premium Efficiency Three-Phase Product code : 12674849

Frame	: 213/5T	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>	: 53.1 kg
Design	: B	Moment of inertia (J)	: 0.0433 kgm <sup>2</sup>

Output [HP]	7.5	7.5	7.5
Poles	4	4	4
Frequency [Hz]	60	50	50
Rated voltage [V]	230/460	190/380	220/415
Rated current [A]	18.5/9.25	22.2/11.1	20.0/10.6
L. R. Amperes [A]	133/66.6	129/64.4	130/68.9
LRC [A]	7.2x(Code H)	5.8x(Code G)	6.5x(Code H)
No load current [A]	8.79/4.39	8.64/4.32	8.88/4.71
Rated speed [RPM]	1770	1455	1460
Slip [%]	1.67	3.00	2.67
Rated torque [kgfm]	3.08	3.74	3.73
Locked rotor torque [%]	240	170	190
Breakdown torque [%]	320	229	250
Service factor	1.15	1.15	1.15
Temperature rise	80 K	80 K	80 K
Locked rotor time	23s (cold) 13s (hot)	0s (cold) 0s (hot)	0s (cold) 0s (hot)
Noise level <sup>2</sup>	59.0 dB(A)	56.0 dB(A)	56.0 dB(A)
Efficiency (%)	25%	88.6	90.4
	50%	89.5	88.9
	75%	90.2	88.5
	100%	91.0	86.7
Power Factor	25%	0.39	0.46
	50%	0.65	0.73
	75%	0.77	0.83
	100%	0.82	0.87

	<u>Drive end</u>	<u>Non drive end</u>	
Bearing type	: 6208 ZZ	6206 ZZ	Foundation loads
Sealing	: Without	Without	Max. traction : 146 kgf
	Bearing Seal	Bearing Seal	Max. compression : 199 kgf
Lubrication interval	: -	-	
Lubricant amount	: -	-	
Lubricant type	: Mobil Polyrex EM		

Notes  
USABLE @208V 20.5A SF 1.00 SFA 20.5A

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	13/05/2022			

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Revision

# LOAD PERFORMANCE CURVE

## Three Phase Induction Motor - Squirrel Cage



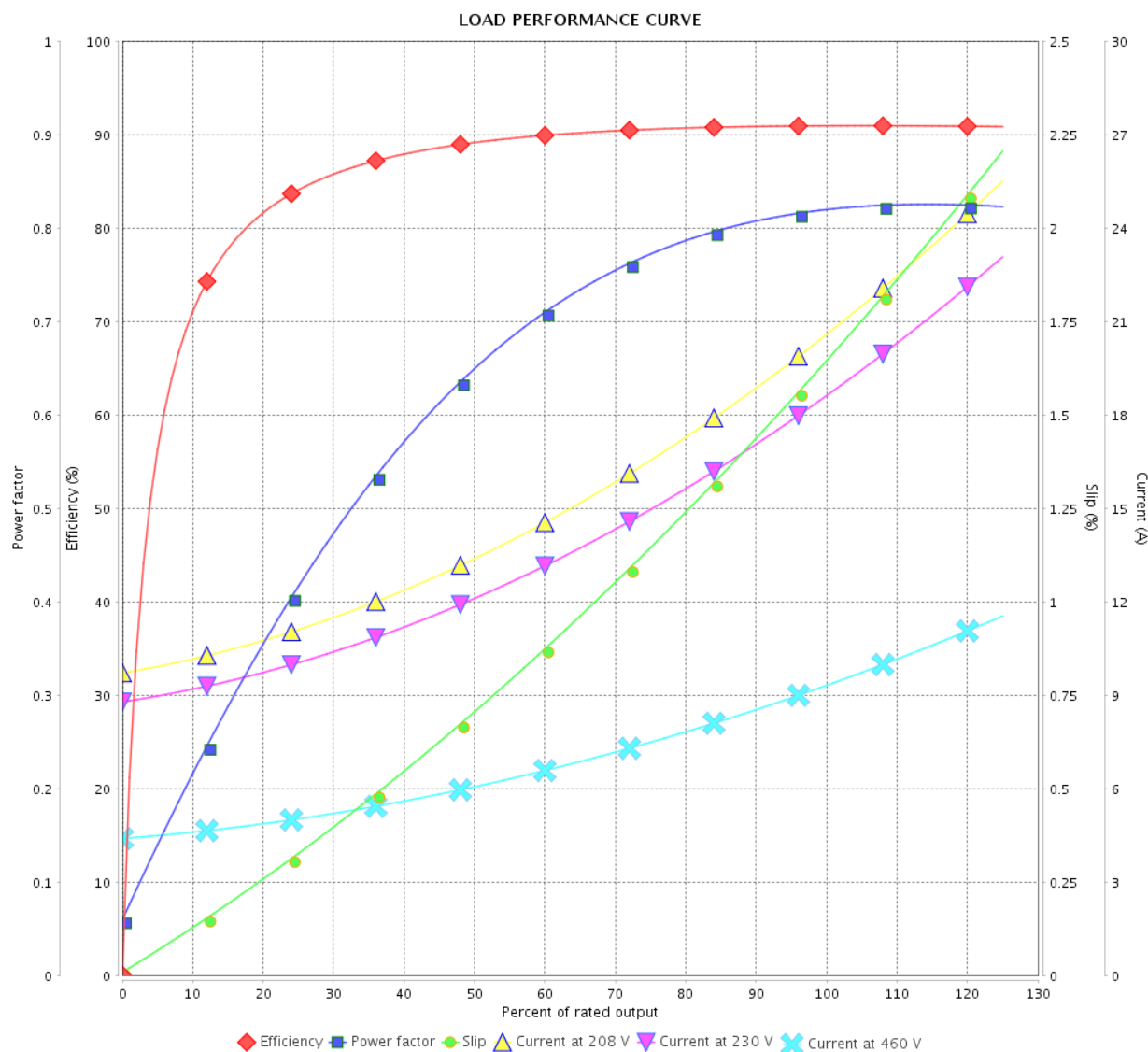
Customer :

Product line

: NEMA Premium Efficiency Three-Phase

Product code :

12674849



Performance : 230/460 V 60 Hz 4P

Rated current : 18.5/9.25 A  
 LRC : 7.2  
 Rated torque : 3.08 kgfm  
 Locked rotor torque : 240 %  
 Breakdown torque : 320 %  
 Rated speed : 1770 rpm

Moment of inertia (J) : 0.0433 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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# LOAD PERFORMANCE CURVE

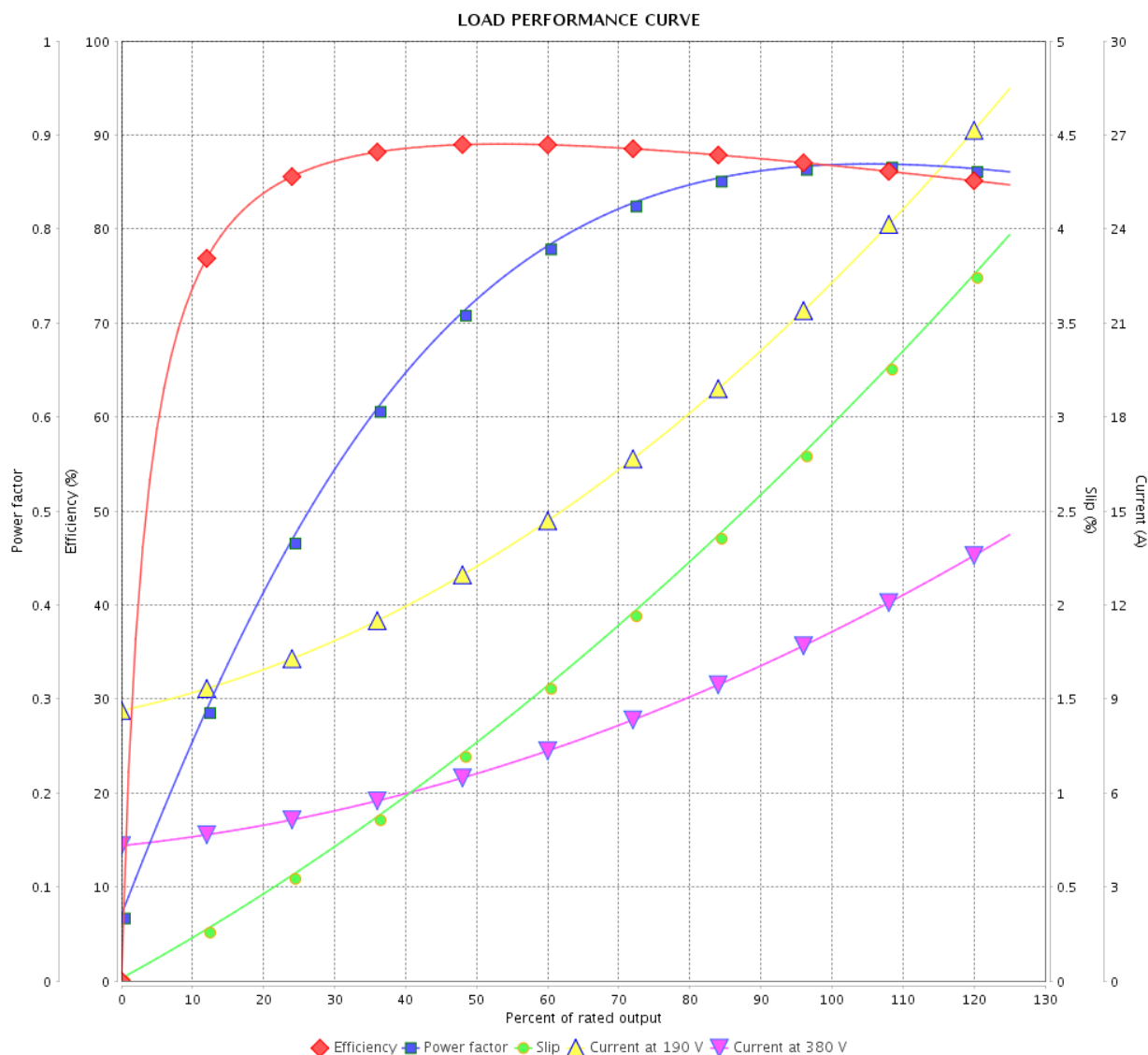
## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12674849



Performance : 190/380 V 50 Hz 4P

Rated current : 22.2/11.1 A  
 LRC : 5.8  
 Rated torque : 3.74 kgfm  
 Locked rotor torque : 170 %  
 Breakdown torque : 229 %  
 Rated speed : 1455 rpm

Moment of inertia (J) : 0.0433 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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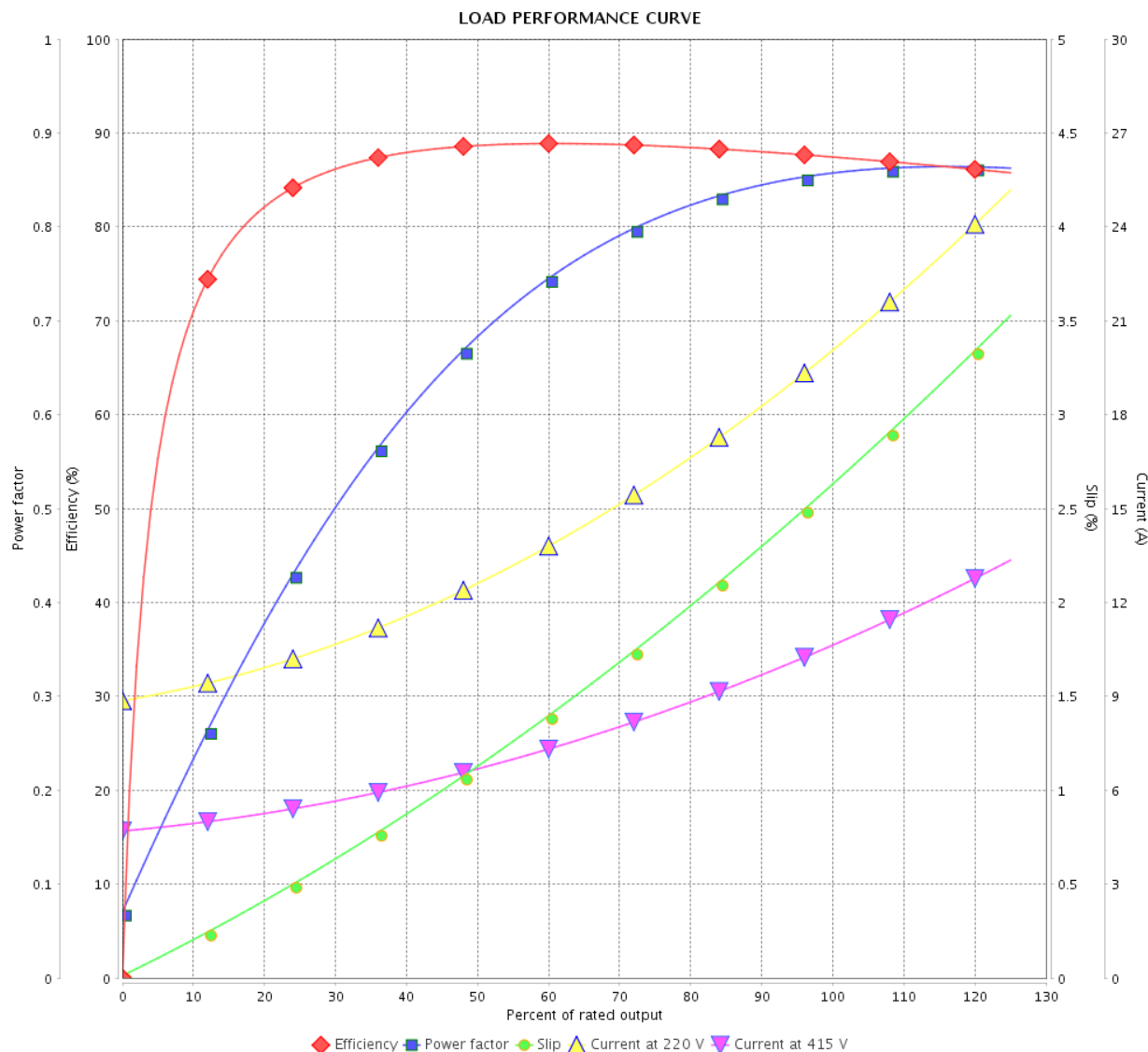
# LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : NEMA Premium Efficiency Three-Phase      Product code : 12674849

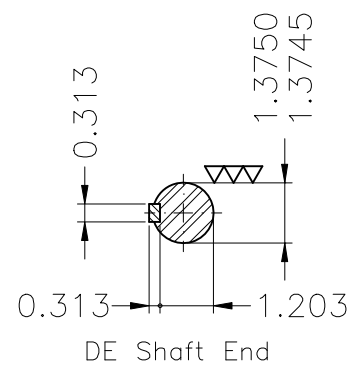
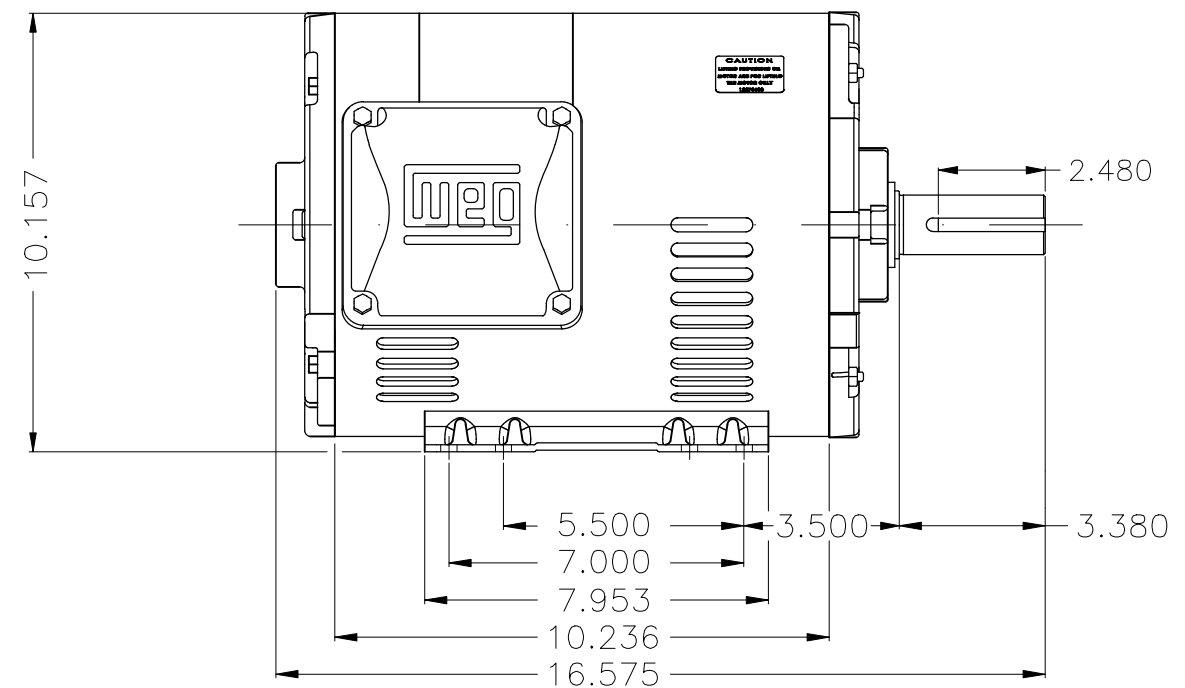
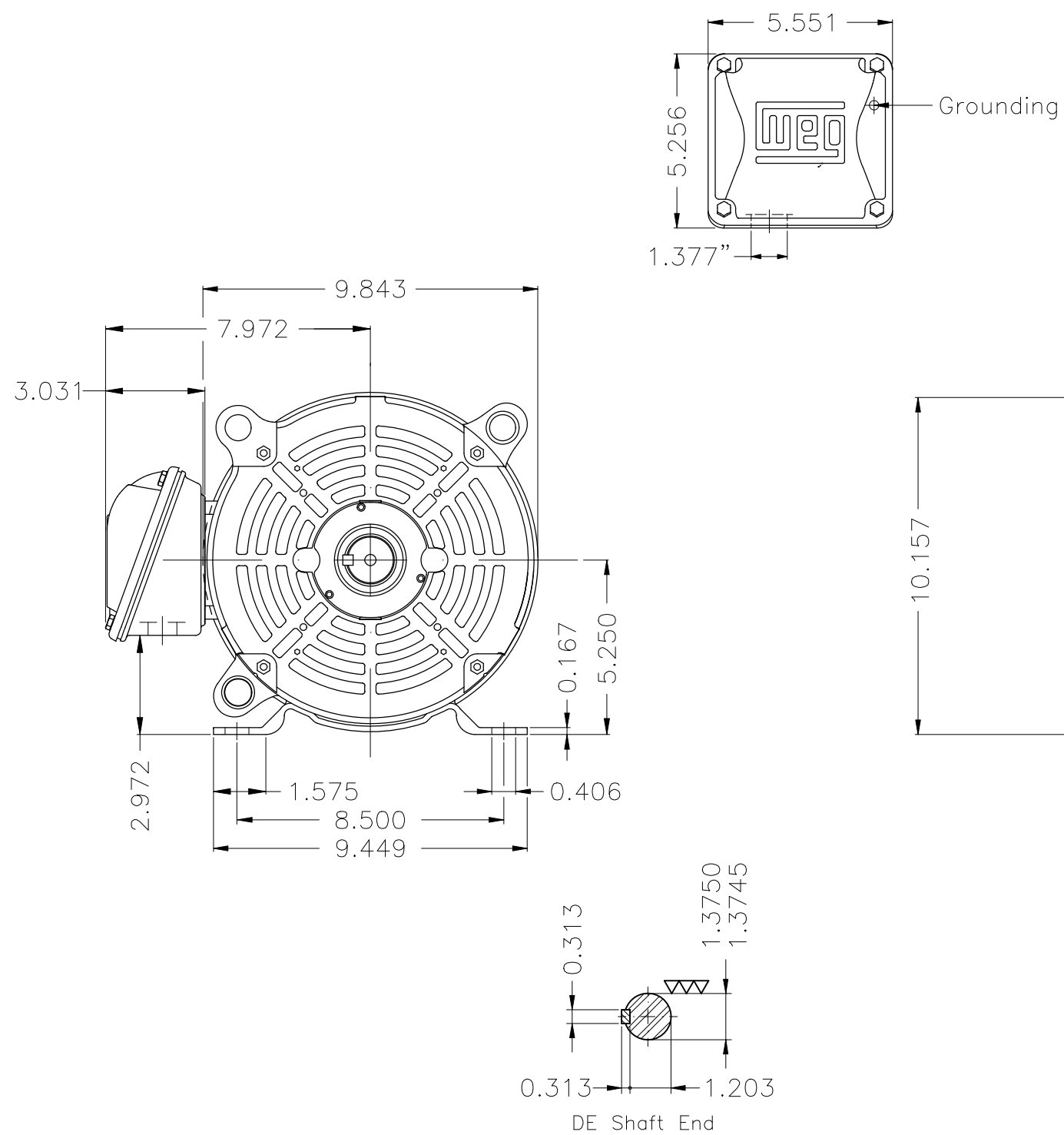




Performance : 220/415 V 50 Hz 4P

Rated current : 20.0/10.6 A  
 LRC : 6.5  
 Rated torque : 3.73 kgfm  
 Locked rotor torque : 190 %  
 Breakdown torque : 250 %  
 Rated speed : 1460 rpm

Moment of inertia (J) : 0.0433 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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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 NEMA PREM. EFF. FRAME 213/5T IP21 ODP			<div>PREVIEW</div> <div>WDD   00</div>			
CHECKED									
RELEASED									
REL. DATE		WMO	Jaragua do Sul	Product Engineering	SHEET	1 / 1			