

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : Premium Efficiency Three-Phase Product code : 15311780

Frame	: 56C	Cooling method	: IC411 - TEFC
Insulation class	: F	Mounting	: F-1
Duty cycle	: Cont.(S1)	Rotation ¹	: Both (CW and CCW)
Ambient temperature	: -20°C to +40°C	Starting method	: Direct On Line
Altitude	: 1000 m.a.s.l.	Approx. weight ³	: 12.5 kg
Protection degree	: IP55	Moment of inertia (J)	: 0.0036 kgm ²

Output [HP]	0.75	0.75	0.75
Poles	4	4	4
Frequency [Hz]	60	50	50
Rated voltage [V]	208-230/460	190-220/380	415
Rated current [A]	2.63-2.38/1.19	2.64-2.28/1.32	1.31
L. R. Amperes [A]	20.3-18.3/9.16	16.1-13.9/8.05	8.91
LRC [A]	7.7x(Code L)	6.1x(Code H)	6.8x(Code K)
No load current [A]	1.42-1.64/0.822	1.62-1.40/0.809	0.950
Rated speed [RPM]	1760	1450	1460
Slip [%]	2.22	3.33	2.67
Rated torque [kgfm]	0.309	0.375	0.373
Locked rotor torque [%]	240	180	220
Breakdown torque [%]	360	250	310
Service factor		1.15	1.15
Temperature rise	80 K	80 K	80 K
Locked rotor time	28s (cold) 16s (hot)	27s (cold) 15s (hot)	23s (cold) 13s (hot)
Noise level ²	52.0 dB(A)	49.0 dB(A)	49.0 dB(A)
Efficiency (%)	25%		
	50%	75.5	75.1
	75%	80.0	79.2
	100%	81.5	80.2
Power Factor	25%		
	50%	0.49	0.49
	75%	0.62	0.63
	100%	0.71	0.73

	<u>Drive end</u>	<u>Non drive end</u>	Foundation loads	
Bearing type	: 6203 ZZ	6202 ZZ	Max. traction	: 31 kgf
Sealing	: V'Ring	Without	Max. compression	: 43 kgf
		Bearing Seal		
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

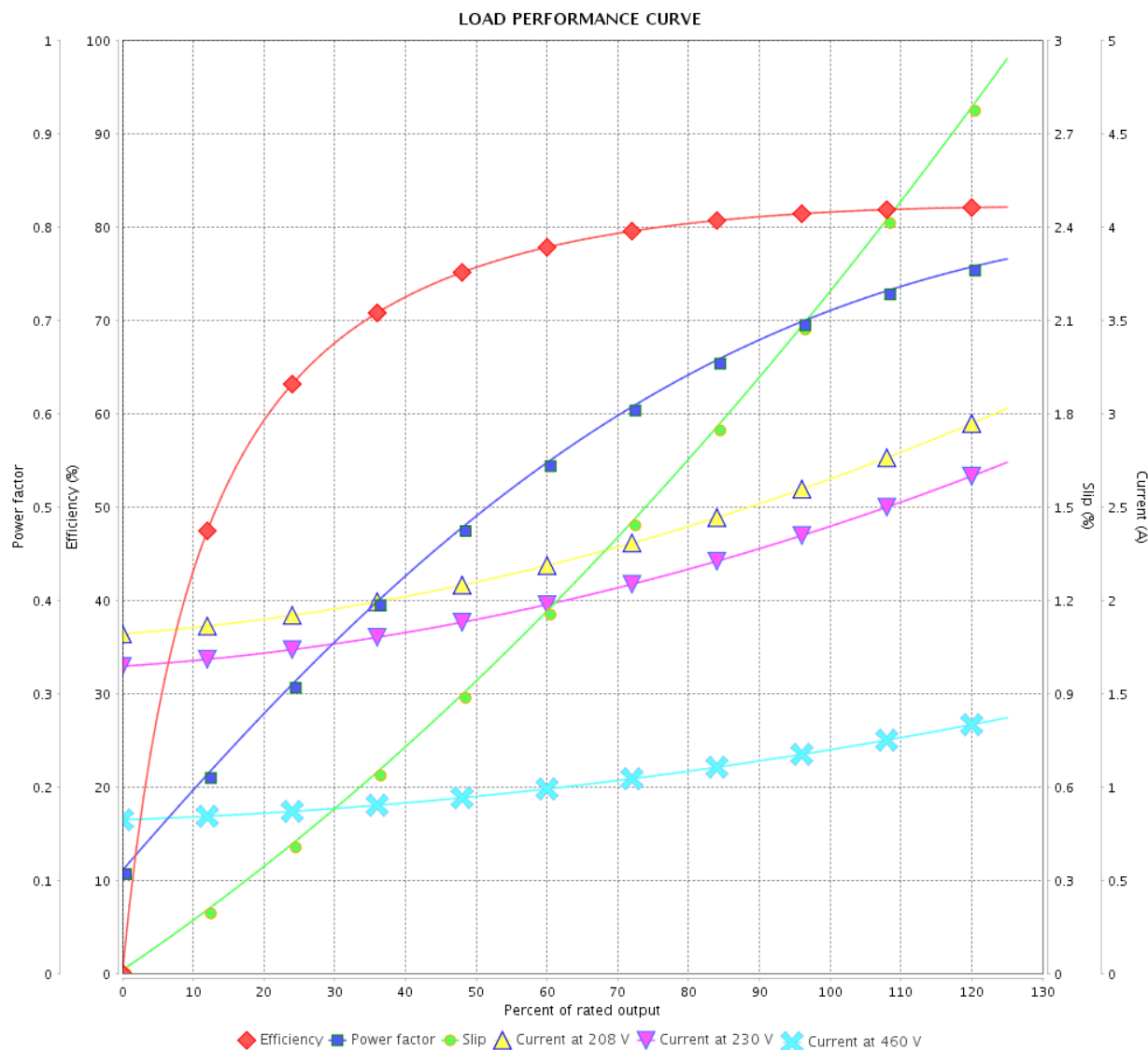
LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : Premium Efficiency Three-Phase Product code : 15311780



Performance : 208-230/460 V 60 Hz 4P

Rated current : 2.63-2.38/1.19 A
 LRC : 7.7
 Rated torque : 0.309 kgfm
 Locked rotor torque : 240 %
 Breakdown torque : 360 %
 Rated speed : 1760 rpm

Moment of inertia (J) : 0.0036 kgm²
 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					

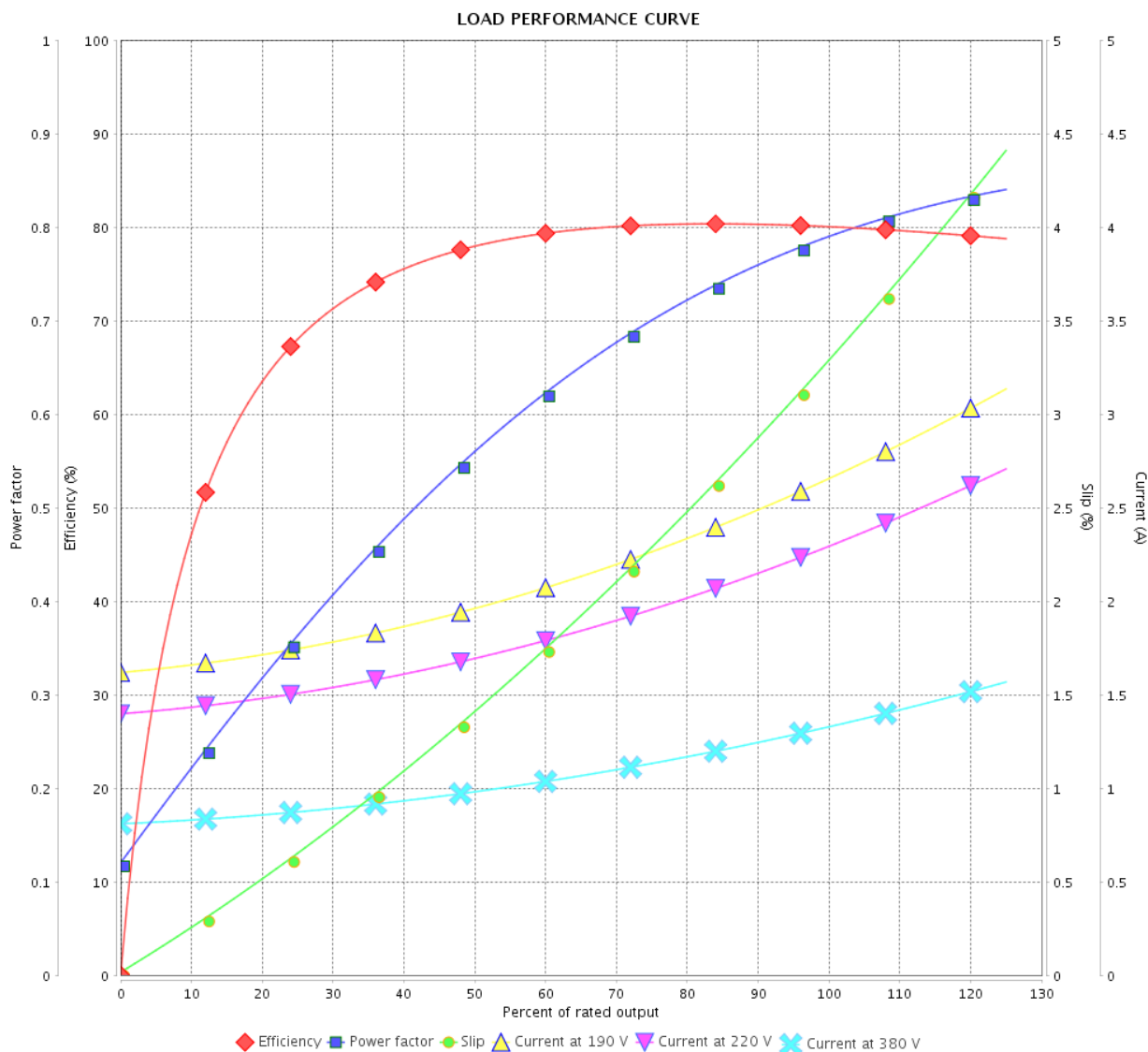
LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : Premium Efficiency Three-Phase Product code : 15311780



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

Rated current : 2.64-2.28/1.32 A
 LRC : 6.1
 Rated torque : 0.375 kgfm
 Locked rotor torque : 180 %
 Breakdown torque : 250 %
 Rated speed : 1450 rpm

Moment of inertia (J) : 0.0036 kgm²
 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			

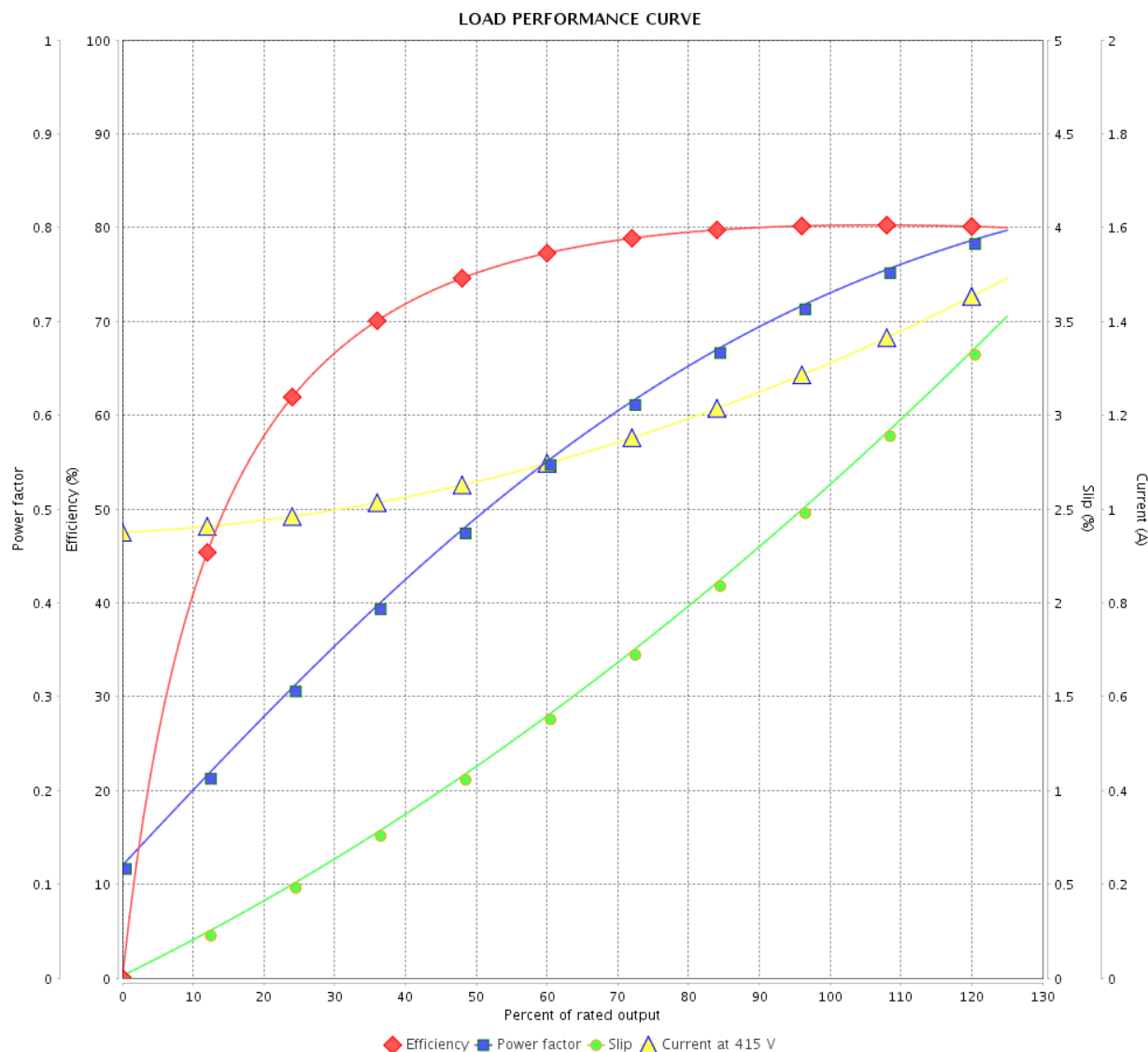
LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : Premium Efficiency Three-Phase Product code : 15311780

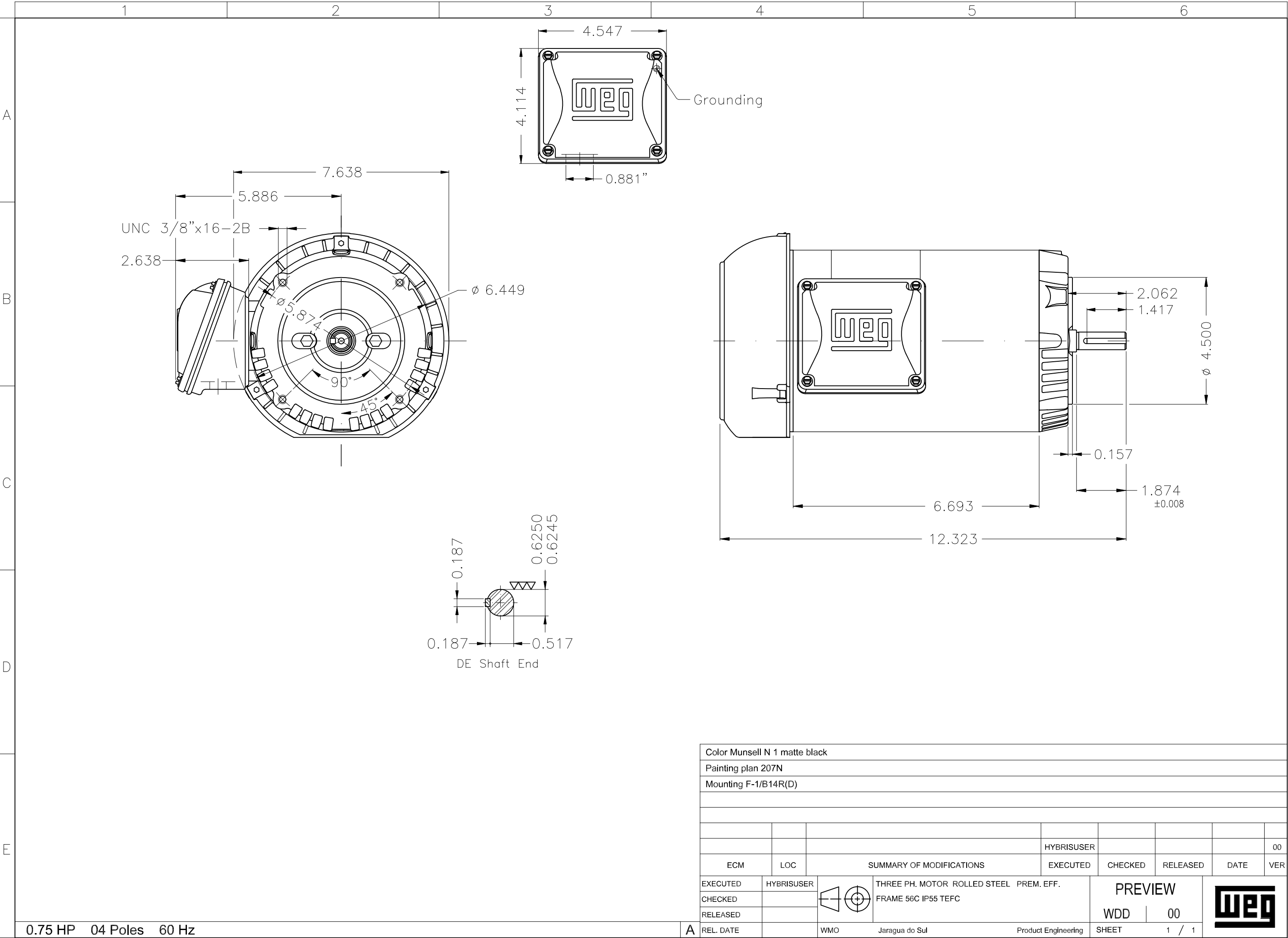


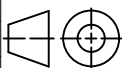

Performance : 415 V 50 Hz 4P

Rated current : 1.31 A
 LRC : 6.8
 Rated torque : 0.373 kgfm
 Locked rotor torque : 220 %
 Breakdown torque : 310 %
 Rated speed : 1460 rpm

Moment of inertia (J) : 0.0036 kgm²
 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 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 WDD 00			
CHECKED									
RELEASED									
REL. DATE		WMO	Jaragua do Sul	Product Engineering	SHEET	1 / 1			