

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :				
Product line		: JM Pump NEMA Premium Efficiency Three-Phase	Product code : 12789072	
Frame : 254/6JM		Cooling method : IC01 - ODP		
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 : 103 kg		
Design : B		Moment of inertia (J) : 0.0939 kgm ²		
Output [HP]	20	20	20	
Poles	4	4	4	
Frequency [Hz]	60	50	50	
Rated voltage [V]	230/460	190/380	220/415	
Rated current [A]	50.0/25.0	59.8/29.9	54.0/28.6	
L. R. Amperes [A]	315/158	311/155	313/166	
LRC [A]	6.3x(Code G)	5.2x(Code F)	5.8x(Code G)	
No load current [A]	22.9/11.4	22.4/11.2	23.6/12.5	
Rated speed [RPM]	1770	1460	1465	
Slip [%]	1.67	2.67	2.33	
Rated torque [kgfm]	8.20	9.94	9.91	
Locked rotor torque [%]	240	180	200	
Breakdown torque [%]	290	220	250	
Service factor	1.15	1.15	1.15	
Temperature rise	80 K	80 K	80 K	
Locked rotor time	27s (cold) 15s (hot)	0s (cold) 0s (hot)	0s (cold) 0s (hot)	
Noise level ²	64.0 dB(A)	62.0 dB(A)	62.0 dB(A)	
Efficiency (%)	25%	91.7	93.0	92.2
	50%	92.4	91.8	91.4
	75%	92.4	91.2	91.3
	100%	93.0	89.7	90.2
Power Factor	25%	0.38	0.46	0.41
	50%	0.63	0.72	0.68
	75%	0.74	0.82	0.79
	100%	0.81	0.85	0.84
Bearing type : Drive end 6309 Z C3 Non drive end 6208 Z C3 Sealing : Without Without Bearing Seal Bearing Seal Lubrication interval : 20000 h 20000 h Lubricant amount : 13 g 8 g Lubricant type : Mobil Polyrex EM		Foundation loads Max. traction : 338 kgf Max. compression : 441 kgf		
Notes USABLE @208V 55.3A SF 1.00 SFA 55.3A				
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
Performed by				
Checked by			Page	Revision
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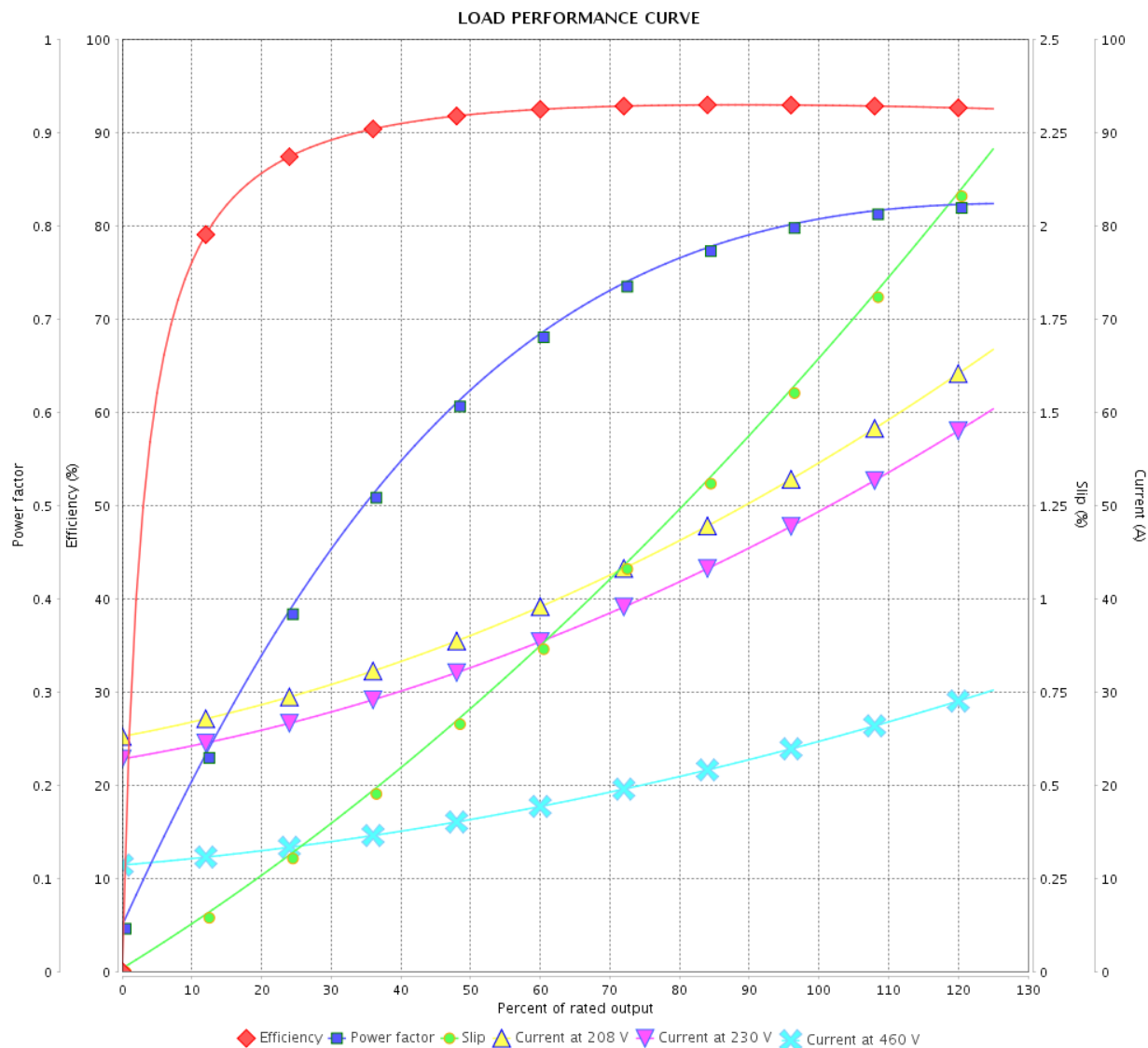
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : JM Pump NEMA Premium
Efficiency Three-Phase

Product code : 12789072



Performance : 230/460 V 60 Hz 4P

Rated current : 50.0/25.0 A
 LRC : 6.3
 Rated torque : 8.20 kgfm
 Locked rotor torque : 240 %
 Breakdown torque : 290 %
 Rated speed : 1770 rpm

Moment of inertia (J) : 0.0939 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

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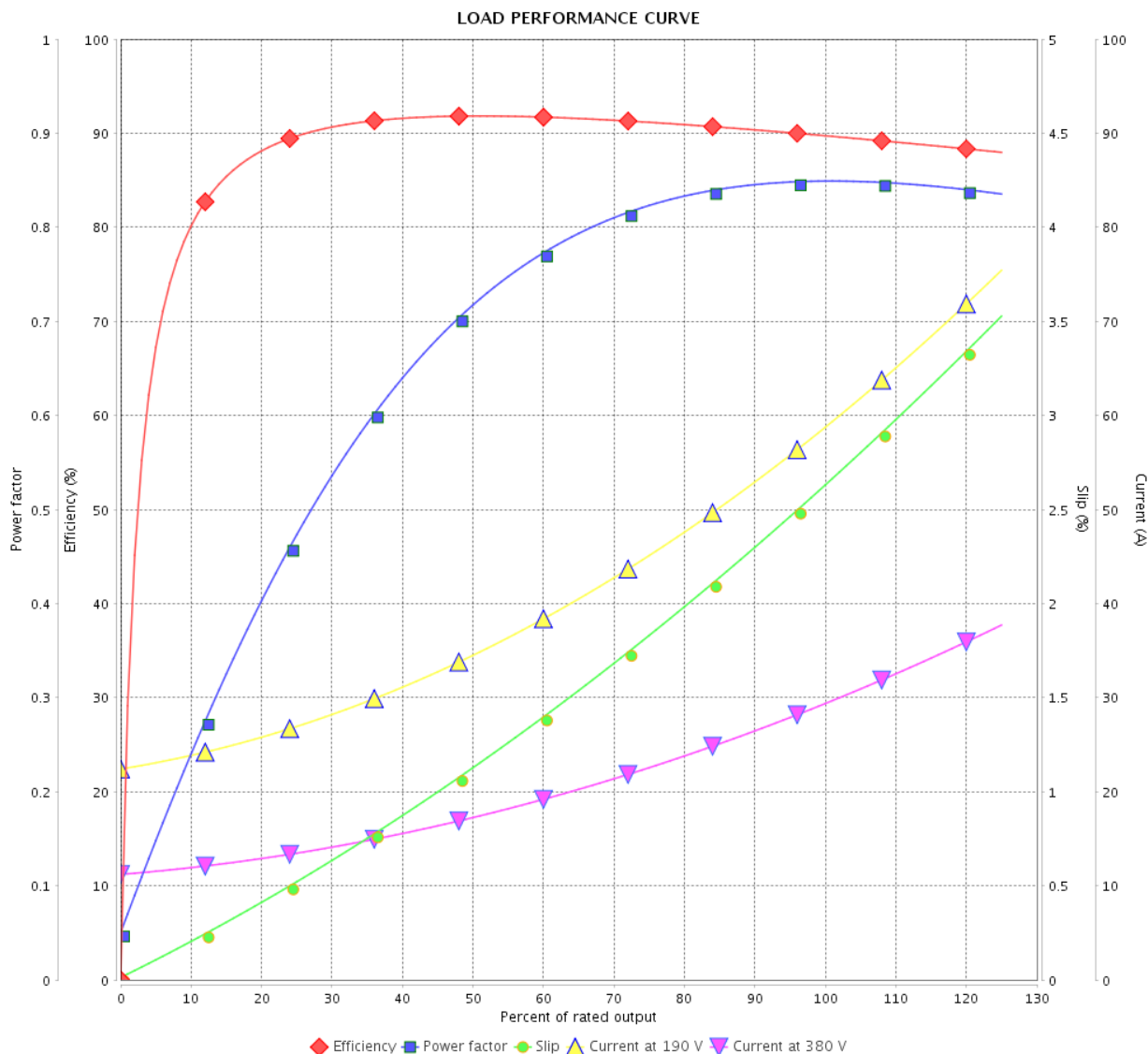
Three Phase Induction Motor - Squirrel Cage



Customer :

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Performance : 190/380 V 50 Hz 4P

Rated current : 59.8/29.9 A
LRC : 5.2
Rated torque : 9.94 kgfm
Locked rotor torque : 180 %
Breakdown torque : 220 %
Rated speed : 1460 rpm

Moment of inertia (J) : 0.0939 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.15
Temperature rise : 80 K
Design : B

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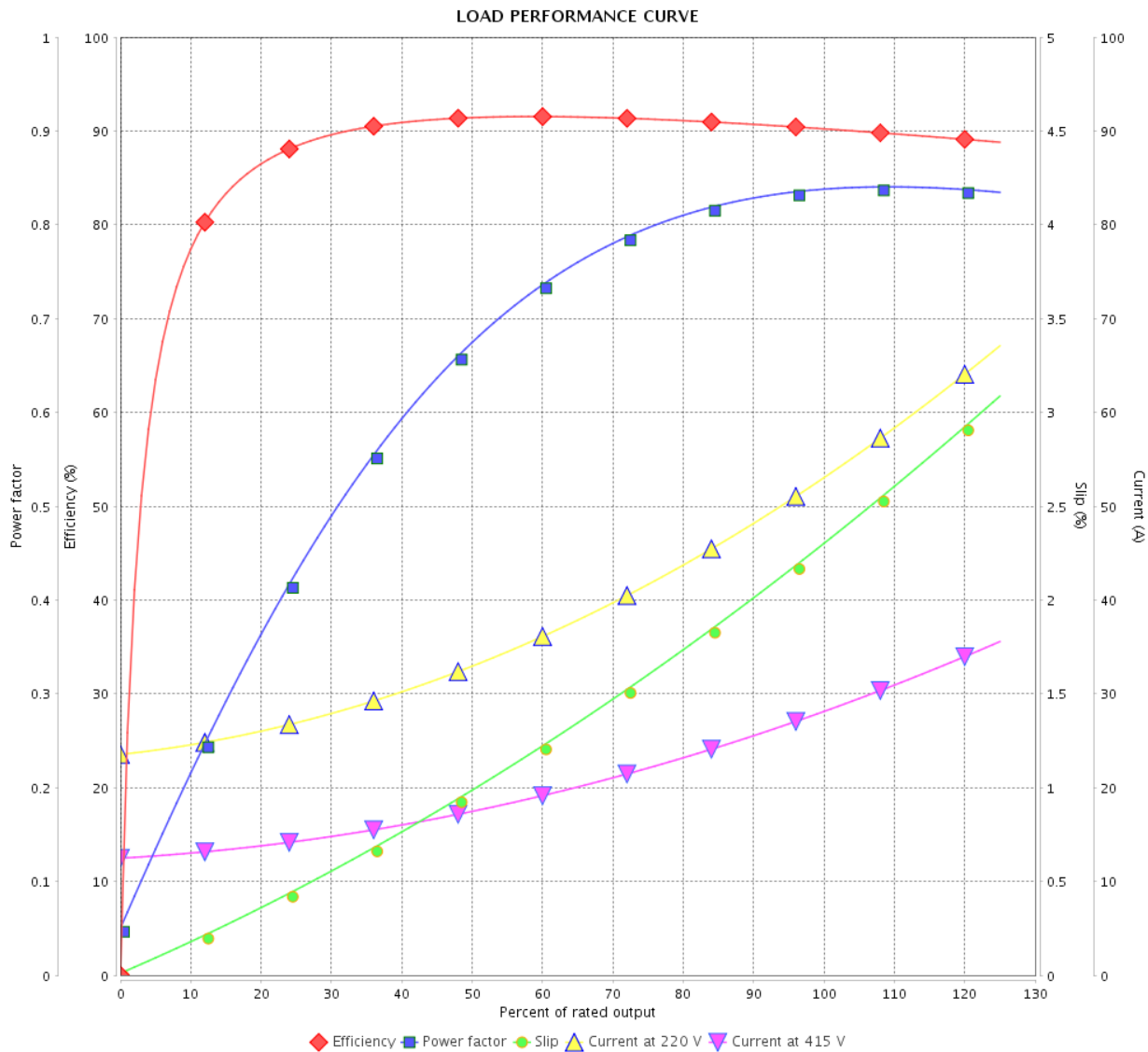
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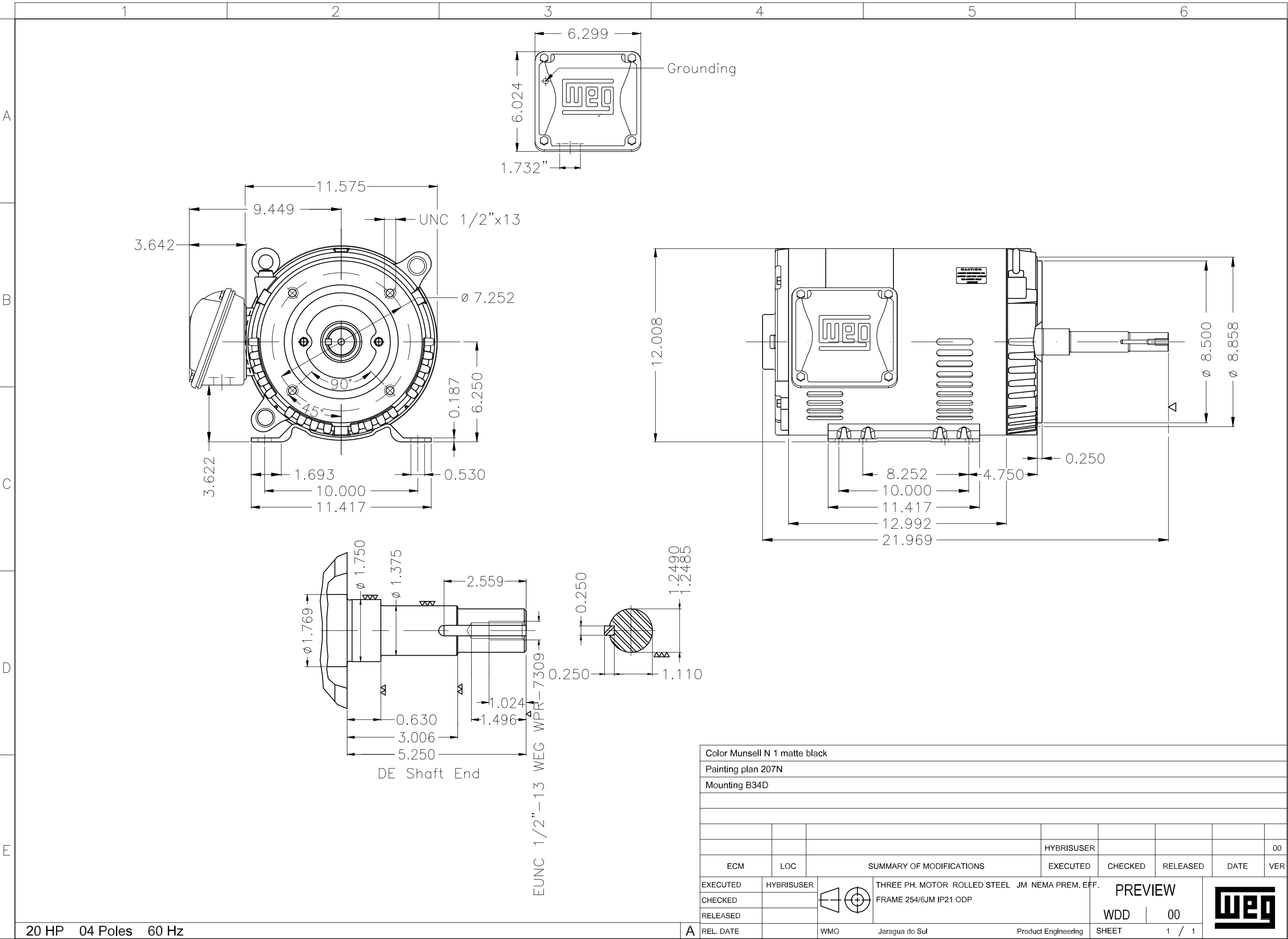


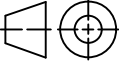
Performance : 220/415 V 50 Hz 4P

Rated current : 54.0/28.6 A
LRC : 5.8
Rated torque : 9.91 kgfm
Locked rotor torque : 200 %
Breakdown torque : 250 %
Rated speed : 1465 rpm

Moment of inertia (J) : 0.0939 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.15
Temperature rise : 80 K
Design : B

Rev.	Changes Summary		Performed	Checked	Date
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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 JM NEMA PREM. EFF.			PREVIEW			
CHECKED			FRAME 254/6JM IP21 ODP						
RELEASED									
REL. DATE			WMO Jaragua do Sul Product Engineering			SHEET	1 / 1		