

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :					
Product line		: Jet Pump - J type Three-Phase	Product code :	14103892	
Frame	: 56J	Cooling method	: IC411 - TEFC		
Insulation class	: F	Mounting	: F-1		
Duty cycle	: Cont.(S1)	Rotation <sup>1</sup>	: CCW		
Ambient temperature	: -20°C to +40°C	Starting method	: Direct On Line		
Altitude	: 1000 m.a.s.l.	Approx. weight <sup>3</sup>	: 18.5 kg		
Protection degree	: IP55	Moment of inertia (J)	: 0.0055 kgm <sup>2</sup>		
Design	: B				
Output [HP]	2	2	2		
Poles	4	4	4		
Frequency [Hz]	60	50	50		
Rated voltage [V]	230/460	190/380	220/415		
Rated current [A]	5.44/2.72	6.50/3.25	5.79/3.07		
L. R. Amperes [A]	44.6/22.3	39.0/19.5	41.1/21.8		
LRC [A]	8.2x(Code K)	6.0x(Code H)	7.1x(Code J)		
No load current [A]	2.80/1.40	2.75/1.37	3.09/1.64		
Rated speed [RPM]	1745	1415	1435		
Slip [%]	3.06	5.67	4.33		
Rated torque [kgfm]	0.832	1.03	1.01		
Locked rotor torque [%]	270	210	270		
Breakdown torque [%]	300	240	300		
Service factor		1.15	1.00		
Temperature rise	80 K	80 K	80 K		
Locked rotor time	27s (cold) 15s (hot)	25s (cold) 14s (hot)	21s (cold) 12s (hot)		
Noise level <sup>2</sup>	52.0 dB(A)	49.0 dB(A)	49.0 dB(A)		
Efficiency (%)	25%				
	50%	85.5	85.4	84.2	
	75%	87.5	84.9	85.1	
	100%	86.5	82.6	84.0	
Power Factor	25%				
	50%	0.60	0.68	0.60	
	75%	0.73	0.80	0.73	
	100%	0.80	0.85	0.81	
Bearing type	: Drive end : 6203 ZZ Non drive end : 6202 ZZ	Foundation loads			
Sealing	: V'Ring V'Ring	Max. traction	: 88 kgf		
Lubrication interval	: - -	Max. compression	: 107 kgf		
Lubricant amount	: - -				
Lubricant type	: Mobil Polyrex EM				
Notes USABLE @208V 6.02A SF 1.00 SFA 6.02A					
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				Page	Revision
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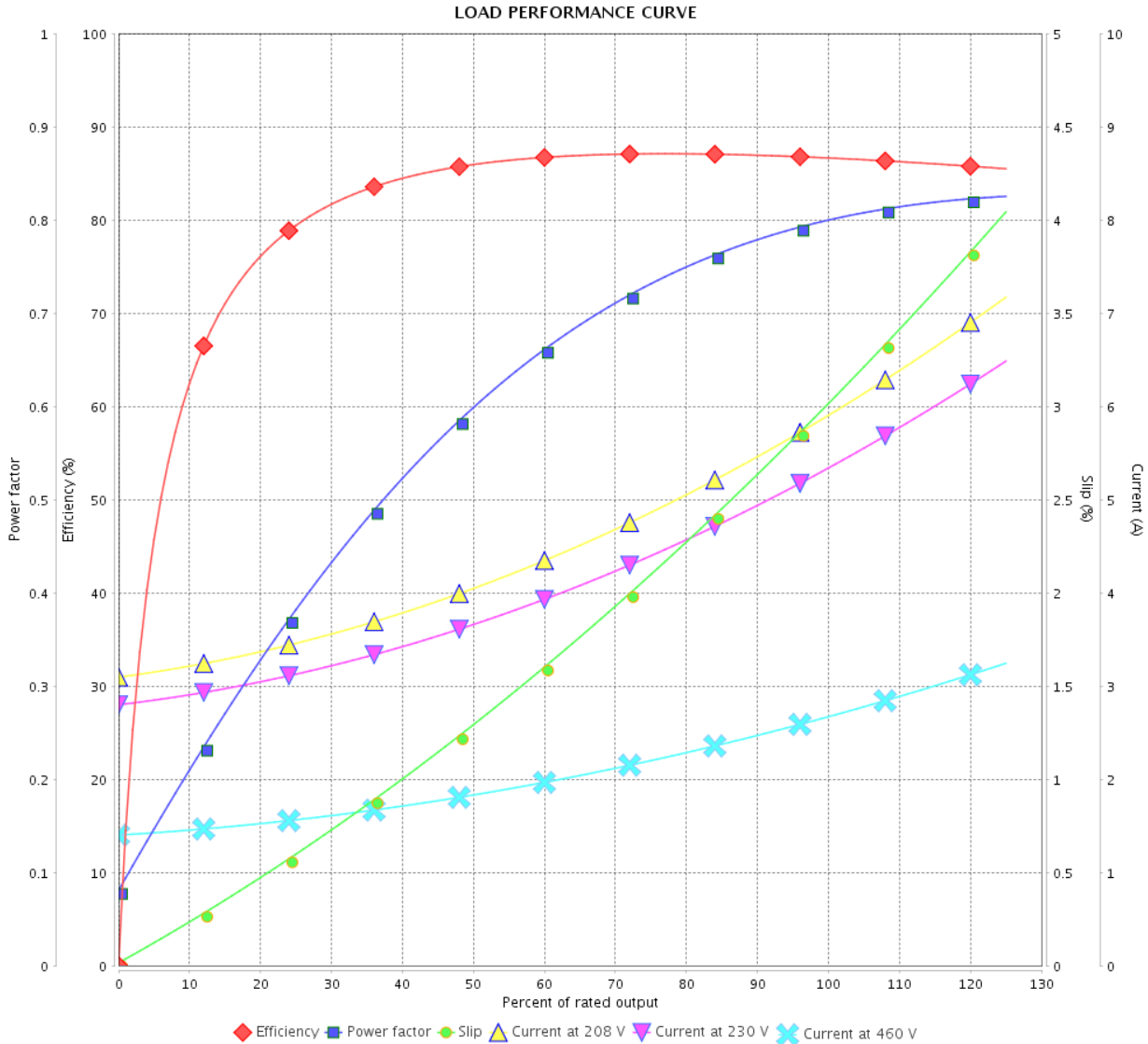
# LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : Jet Pump - J type Three-Phase      Product code : 14103892



Performance : 230/460 V 60 Hz 4P

Rated current : 5.44/2.72 A  
 LRC : 8.2  
 Rated torque : 0.832 kgfm  
 Locked rotor torque : 270 %  
 Breakdown torque : 300 %  
 Rated speed : 1745 rpm

Moment of inertia (J) : 0.0055 kgm<sup>2</sup>  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor :  
 Temperature rise : 80 K  
 Design : B

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page	Revision
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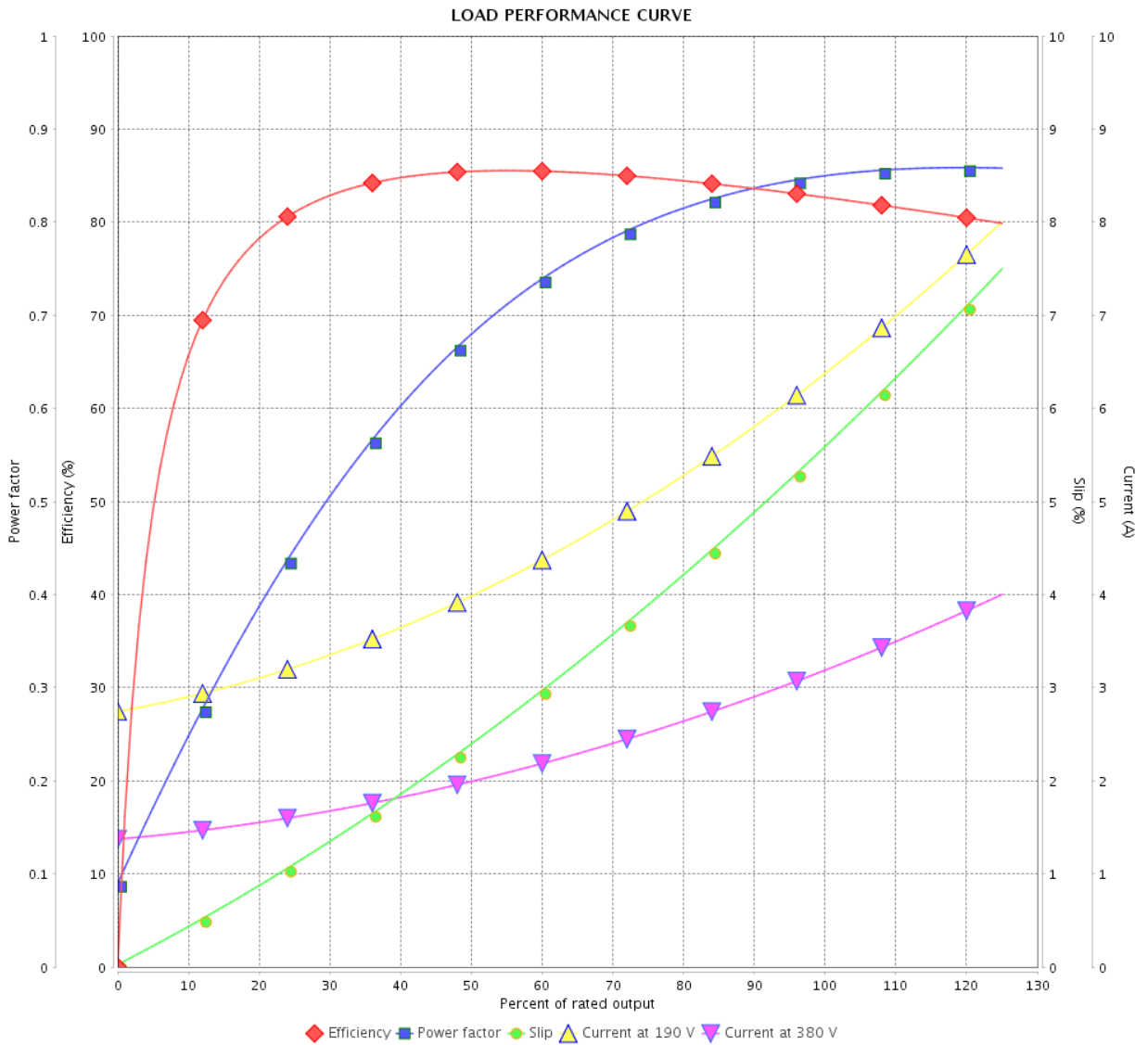
# LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : \_\_\_\_\_

Product line : Jet Pump - J type Three-Phase      Product code : 14103892



Performance : 190/380 V 50 Hz 4P

Rated current : 6.50/3.25 A  
 LRC : 6.0  
 Rated torque : 1.03 kgfm  
 Locked rotor torque : 210 %  
 Breakdown torque : 240 %  
 Rated speed : 1415 rpm

Moment of inertia (J) : 0.0055 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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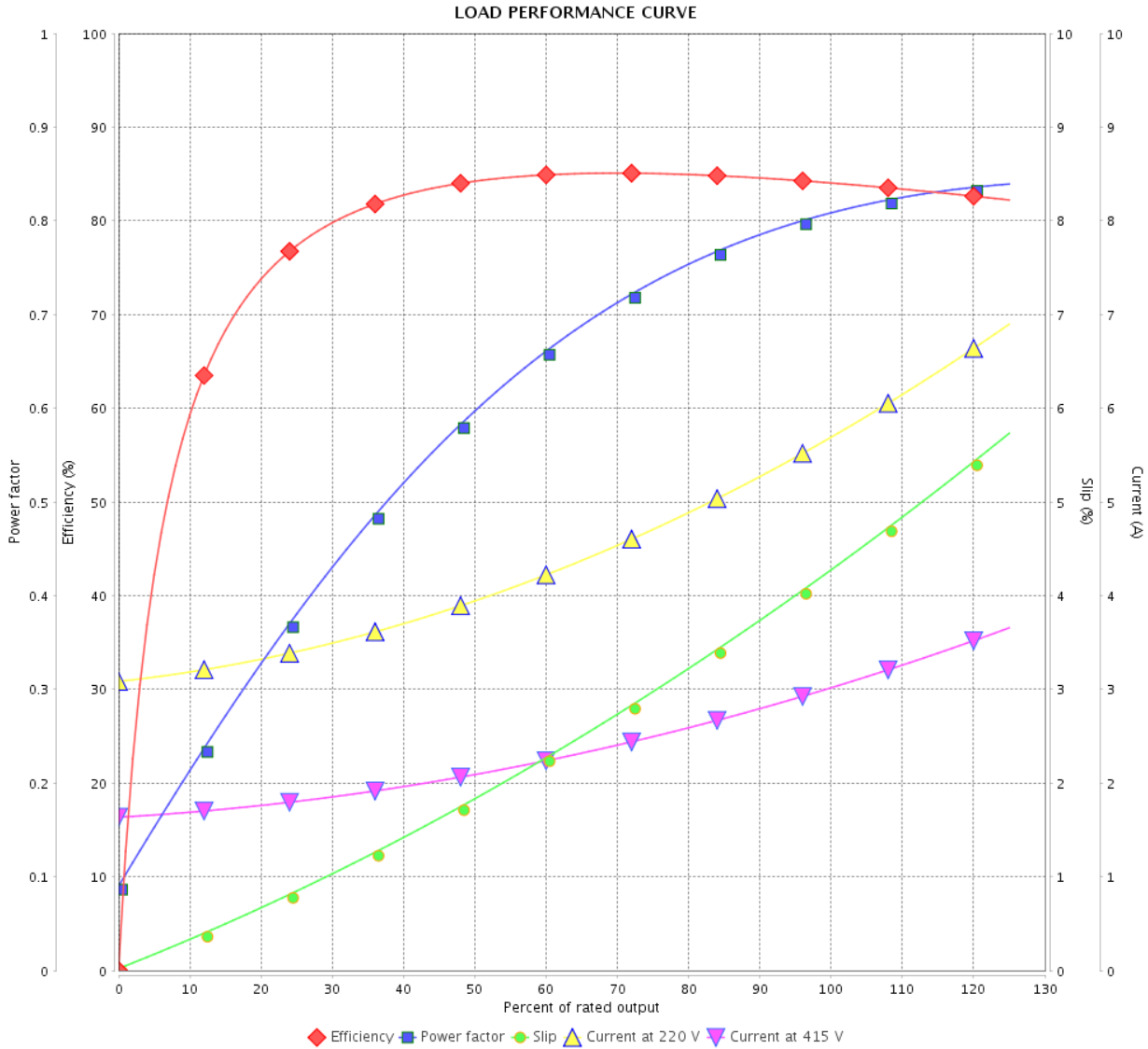
# LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : Jet Pump - J type Three-Phase      Product code : 14103892



Performance : 220/415 V 50 Hz 4P

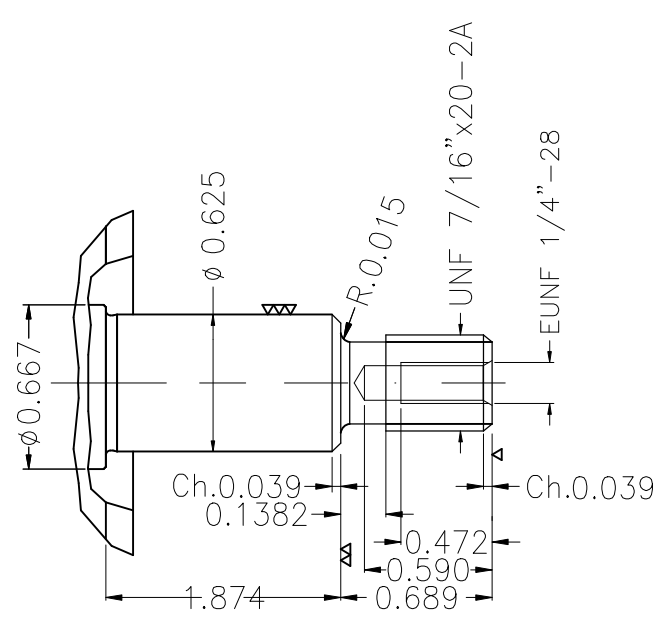
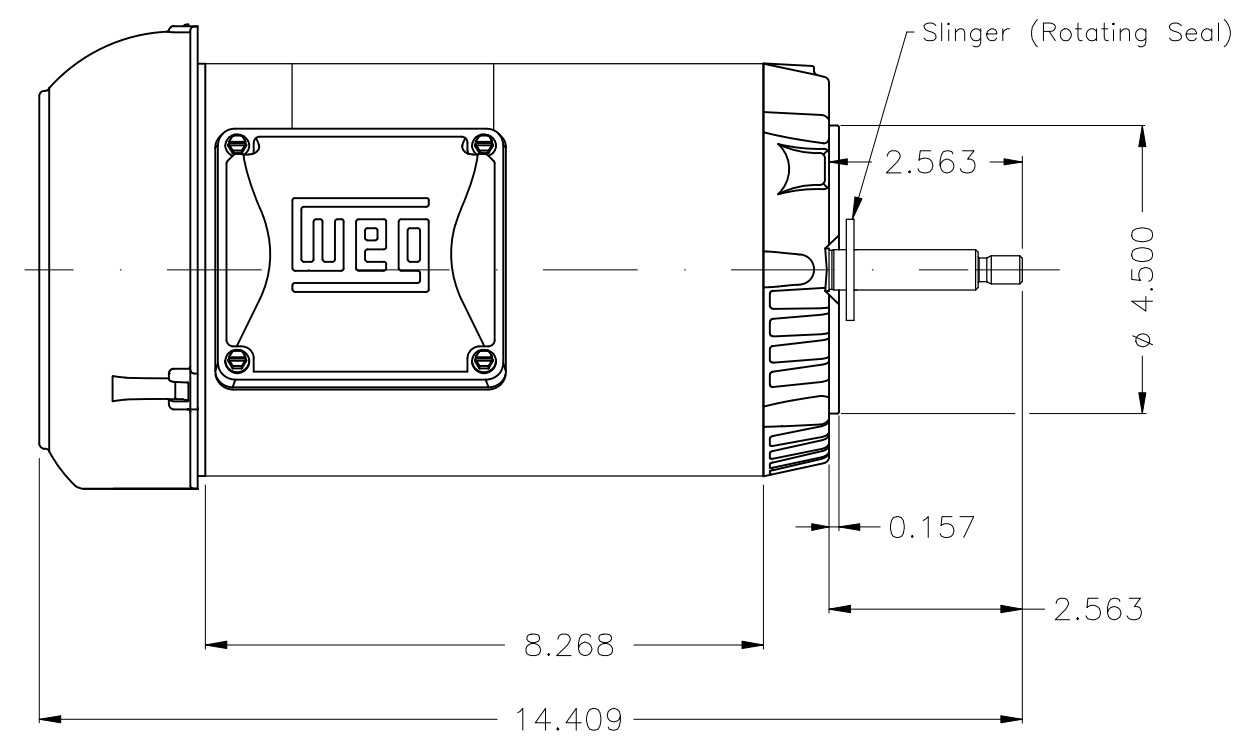
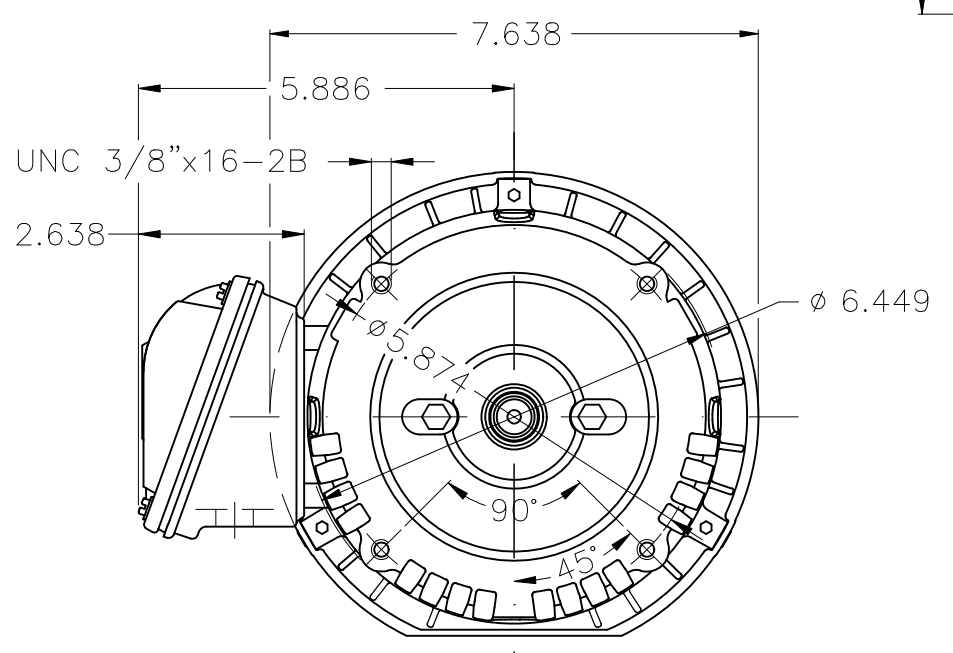
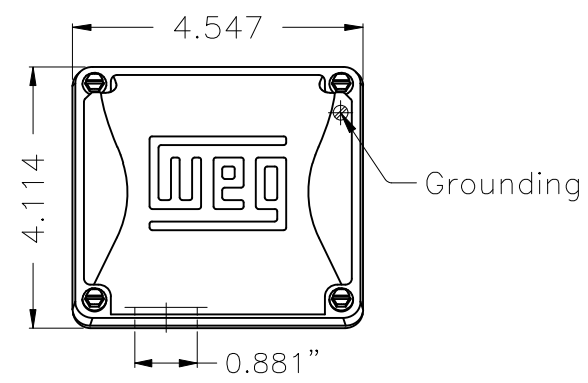
Rated current : 5.79/3.07 A  
 LRC : 7.1  
 Rated torque : 1.01 kgfm  
 Locked rotor torque : 270 %  
 Breakdown torque : 300 %  
 Rated speed : 1435 rpm

Moment of inertia (J) : 0.0055 kgm<sup>2</sup>  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.00  
 Temperature rise : 80 K  
 Design : B

Rev.	Changes Summary	Performed	Checked	Date
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1 2 3 4 5 6

A  
B  
C  
D  
E



Color Munsell N 1 matte black  
Painting plan 207N  
Mounting F-1/B14R(D)

ECM	LOC	SUMMARY OF MODIFICATIONS	EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	HYBRISUSER	THREE PH. MOTOR ROLLED STEEL JET PUMP THREADED PREL. SET					00
CHECKED		FRAME 56J IP55 TEFC					
RELEASED							
REL. DATE	WMO	Jaragua do Sul	Product Engineering	WDD	00		

2 HP 04 Poles 60 Hz

A

