

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : JM Pump NEMA Premium  
Efficiency Three-Phase

Product code : 13680185

Frame	: 143/5JM	Cooling method	: IC01 - ODP
Insulation class	: F	Mounting	: W-6
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>2</sup>	: 18.7 kg
Design	: B	Moment of inertia (J)	: 0.0054 kgm <sup>2</sup>

Output [HP]	3	3	3
Poles	2	2	2
Frequency [Hz]	60	50	50
Rated voltage [V]	230/460	190/380	220/415
Rated current [A]	7.18/3.59	8.78/4.39	7.56/4.01
L. R. Amperes [A]	57.4/28.7	53.6/26.8	56.0/29.7
LRC [A]	8.0x(Code J)	6.1x(Code G)	7.4x(Code J)
No load current [A]	2.60/1.30	2.60/1.30	2.91/1.54
Rated speed [RPM]	3480	2825	2860
Slip [%]	3.33	5.83	4.67
Rated torque [kgfm]	0.626	0.771	0.761
Locked rotor torque [%]	229	190	240
Breakdown torque [%]	300	229	270
Service factor		1.00	1.00
Temperature rise	80 K	105 K	105 K
Locked rotor time	16s (cold) 9s (hot)	0s (cold) 0s (hot)	0s (cold) 0s (hot)
Noise level <sup>2</sup>	62.0 dB(A)	60.0 dB(A)	60.0 dB(A)
Efficiency (%)	25%		
	50%	84.0	86.2
	75%	85.5	85.9
	100%	85.5	83.9
Power Factor	25%		
	50%	0.76	0.76
	75%	0.86	0.86
	100%	0.90	0.91

	<u>Drive end</u>	<u>Non drive end</u>	
Bearing type	: 6206 ZZ	6203 ZZ	Foundation loads
Sealing	: Without	Without	Max. traction : 49 kgf
	Bearing Seal	Bearing Seal	Max. compression : 68 kgf
Lubrication interval	: -	-	
Lubricant amount	: -	-	
Lubricant type	: Mobil Polyrex EM		

Notes  
USABLE @208V 7.94A SF 1.00 SFA 7.94A

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	16/05/2022			

Page 1 / 4  
Revision

# LOAD PERFORMANCE CURVE

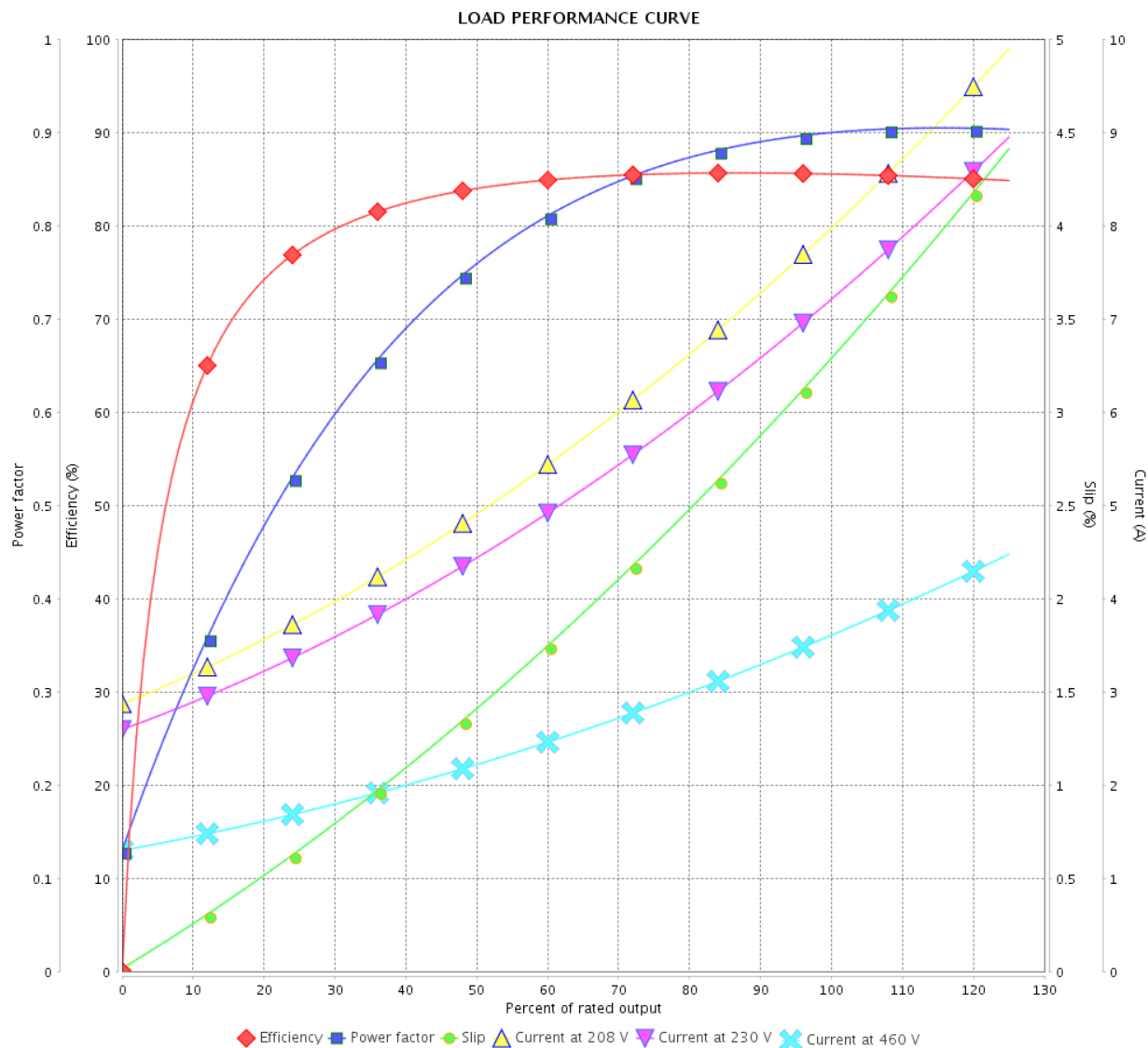
## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : JM Pump NEMA Premium  
Efficiency Three-Phase

Product code : 13680185



Performance : 230/460 V 60 Hz 2P

Rated current : 7.18/3.59 A  
 LRC : 8.0  
 Rated torque : 0.626 kgfm  
 Locked rotor torque : 229 %  
 Breakdown torque : 300 %  
 Rated speed : 3480 rpm

Moment of inertia (J) : 0.0054 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
Checked by				2 / 4	
Date					

# LOAD PERFORMANCE CURVE

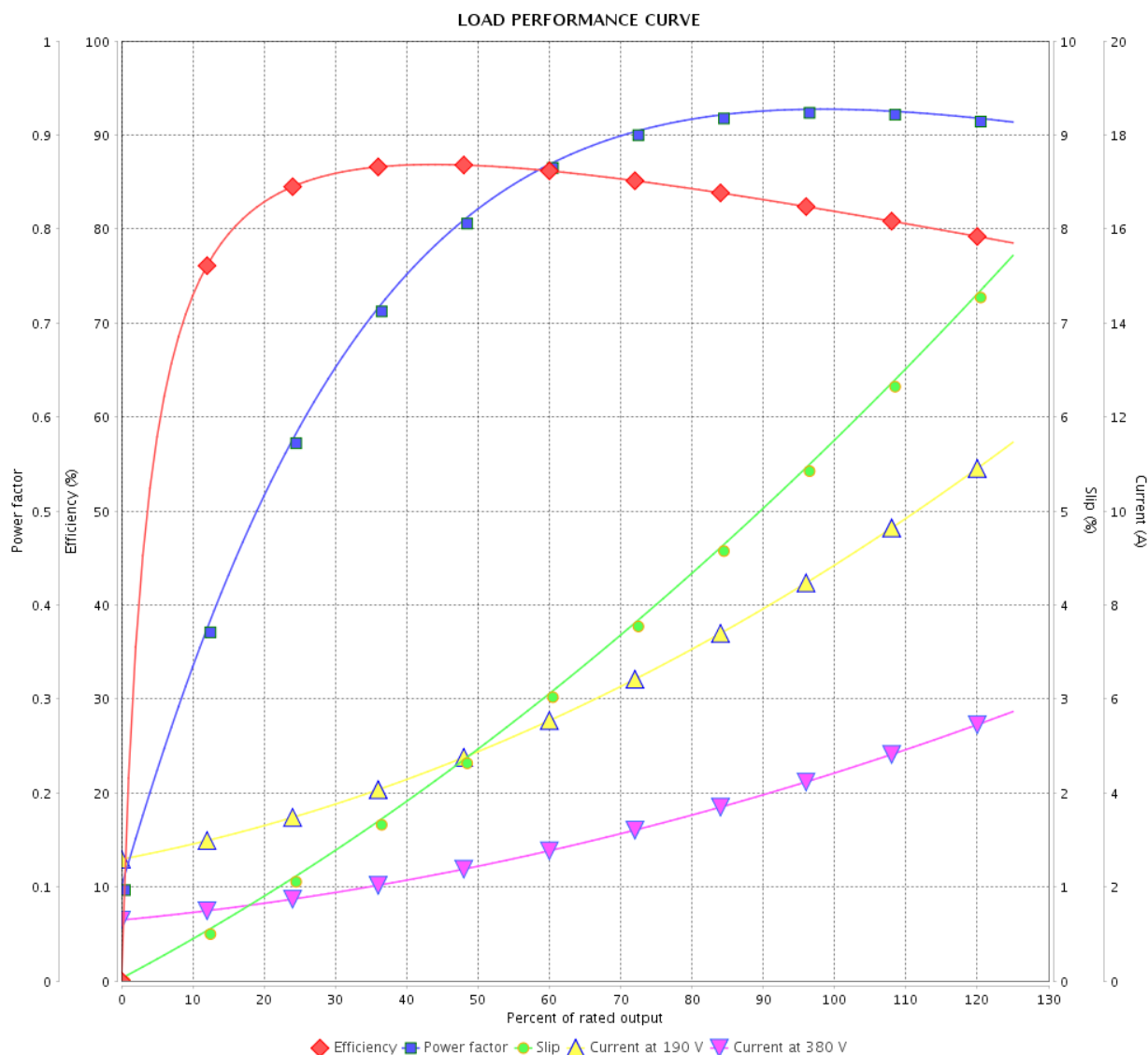
## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : JM Pump NEMA Premium  
Efficiency Three-Phase

Product code : 13680185



Performance : 190/380 V 50 Hz 2P

Rated current : 8.78/4.39 A  
LRC : 6.1  
Rated torque : 0.771 kgfm  
Locked rotor torque : 190 %  
Breakdown torque : 229 %  
Rated speed : 2825 rpm

Moment of inertia (J) : 0.0054 kgm<sup>2</sup>  
Duty cycle : Cont.(S1)  
Insulation class : F  
Service factor : 1.00  
Temperature rise : 105 K  
Design : B

Rev.	Changes Summary		Performed	Checked	Date
Performed by		Page 3 / 4			Revision
Checked by					
Date	16/05/2022				

# LOAD PERFORMANCE CURVE

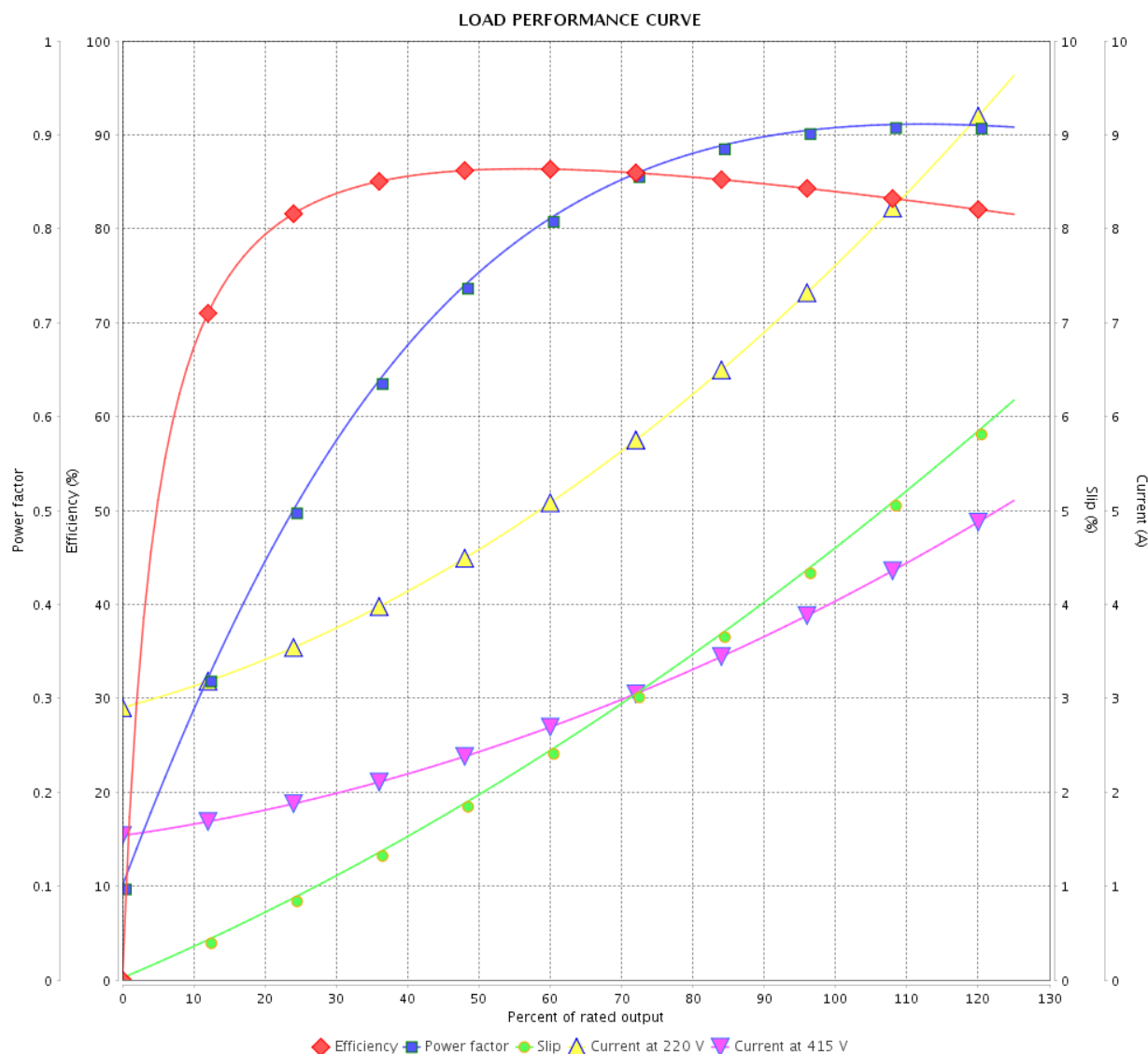
## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : JM Pump NEMA Premium  
Efficiency Three-Phase

Product code : 13680185

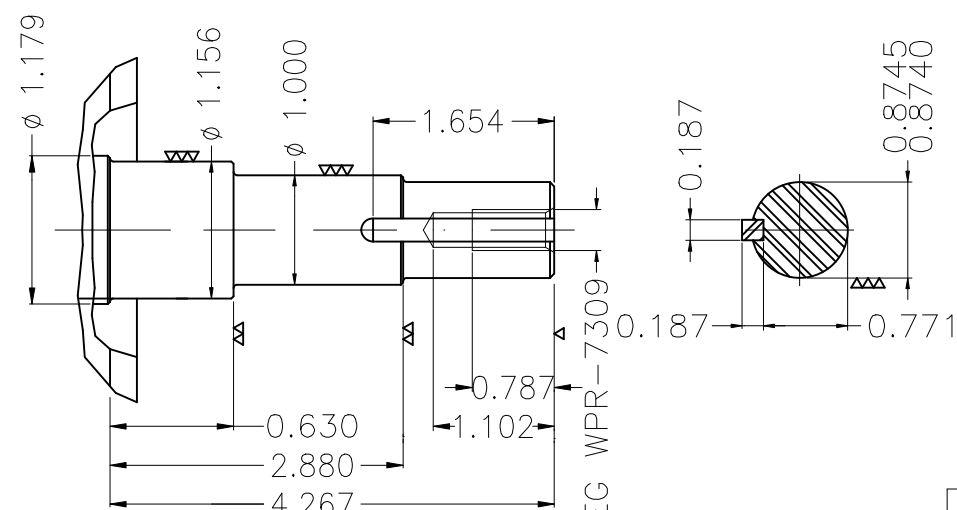
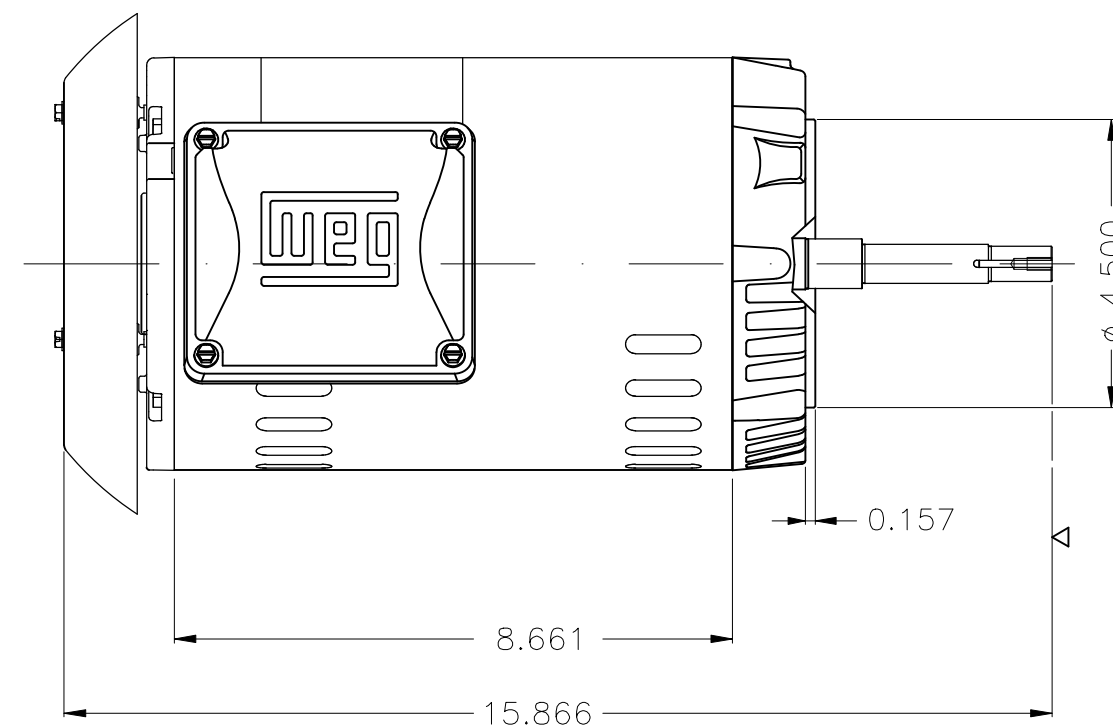


Performance : 220/415 V 50 Hz 2P

Rated current : 7.56/4.01 A  
LRC : 7.4  
Rated torque : 0.761 kgfm  
Locked rotor torque : 240 %  
Breakdown torque : 270 %  
Rated speed : 2860 rpm



Moment of inertia (J) : 0.0054 kgm<sup>2</sup>  
Duty cycle : Cont.(S1)  
Insulation class : F  
Service factor : 1.00  
Temperature rise : 105 K  
Design : B

Rev.	Changes Summary		Performed	Checked	Date
Performed by				Page 4 / 4	Revision
Checked by					
Date	16/05/2022				



DE Shaft End

EUNC 3/8"-16 WEG WPR-7309-

Color Munsell N 1 matte black									
Painting plan 207N									
Mounting W-6/V18R(D)									
					HYBRISUSER				00
ECM	LOC	SUMMARY OF MODIFICATIONS			EXECUTED	CHECKED	RELEASED	DATE	VE
EXECUTED	HYBRISUSER		THREE PH. MOTOR ROLLED STEEL JM NEMA PREM.EFF. FRAME 143/5JM IP21 ODP			PREVIEW WDD   00			
CHECKED									
RELEASED									
REL. DATE		WMO	Jaraqua do Sul	Product Engineering	SHEET	1 / 1			

Dimensions in inches

XME A3