

# DATA SHEET



## Three Phase Induction Motor - Squirrel Cage

Customer :				
Product line	: JM Pump NEMA Premium Efficiency Three-Phase	Product code :	13180600	
Frame	: 143/5JM	Cooling method	: IC411 - TEFC	
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>2</sup>	: 18.3 kg	
Protection degree	: IP55	Moment of inertia (J)	: 0.0046 kgm <sup>2</sup>	
Design	: B			
Output [HP]	1.5	1.5	1.5	
Poles	4	4	4	
Frequency [Hz]	60	50	50	
Rated voltage [V]	230/460	190/380	220/415	
Rated current [A]	4.04/2.02	4.82/2.41	4.38/2.32	
L. R. Amperes [A]	33.1/16.6	29.4/14.7	29.3/15.5	
LRC [A]	8.2x(Code K)	6.1x(Code H)	6.7x(Code J)	
No load current [A]	2.17/1.08	2.13/1.07	2.20/1.17	
Rated speed [RPM]	1750	1420	1430	
Slip [%]	2.78	5.33	4.67	
Rated torque [kgfm]	0.622	0.767	0.761	
Locked rotor torque [%]	270	210	240	
Breakdown torque [%]	300	250	280	
Service factor		1.15	1.15	
Temperature rise	80 K	105 K	80 K	
Locked rotor time	37s (cold) 21s (hot)	0s (cold) 0s (hot)	0s (cold) 0s (hot)	
Noise level <sup>2</sup>	52.0 dB(A)	49.0 dB(A)	49.0 dB(A)	
Efficiency (%)	25%	85.2	85.0	
	50%	85.5	84.2	
	75%	86.5	84.9	
	100%	86.5	83.6	
Power Factor	25%	0.35	0.37	
	50%	0.59	0.62	
	75%	0.72	0.75	
	100%	0.79	0.82	
Bearing type	: <u>Drive end</u> 6206 ZZ <u>Non drive end</u> 6203 ZZ	Foundation loads		
Sealing	: V'Ring Without Bearing Seal	Max. traction	: 51 kgf	
		Max. compression	: 70 kgf	
Lubrication interval	: -			
Lubricant amount	: -			
Lubricant type	: Mobil Polyrex EM			
Notes USABLE @208V 4.47A SF 1.00 SFA 4.47A				
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.		
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# LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

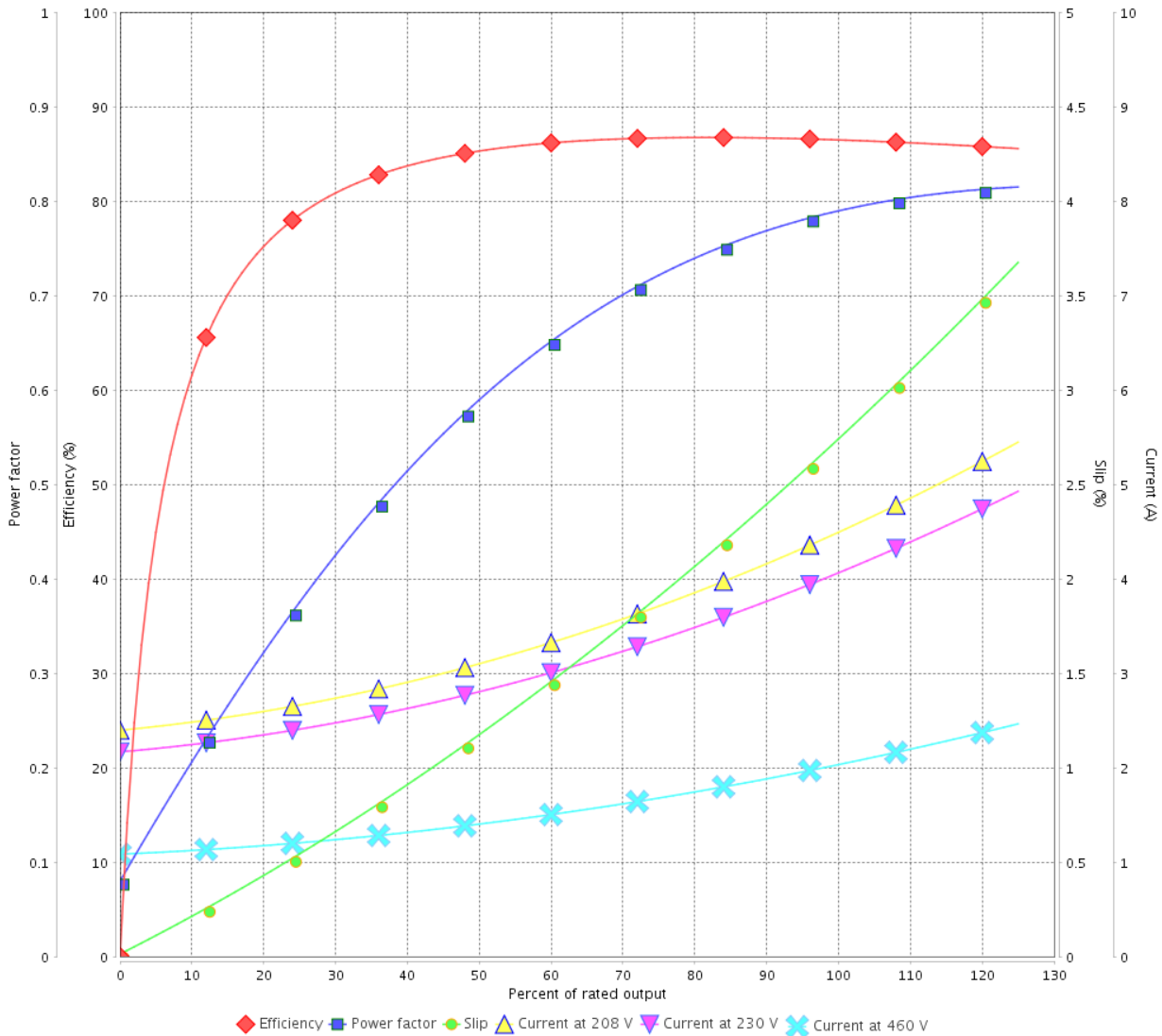


Customer :

Product line : JM Pump NEMA Premium  
Efficiency Three-Phase

Product code : 13180600

LOAD PERFORMANCE CURVE



Performance : 230/460 V 60 Hz 4P

Rated current : 4.04/2.02 A  
 LRC : 8.2  
 Rated torque : 0.622 kgfm  
 Locked rotor torque : 270 %  
 Breakdown torque : 300 %  
 Rated speed : 1750 rpm

Moment of inertia (J) : 0.0046 kgm<sup>2</sup>  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor :  
 Temperature rise : 80 K  
 Design : B

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# LOAD PERFORMANCE CURVE

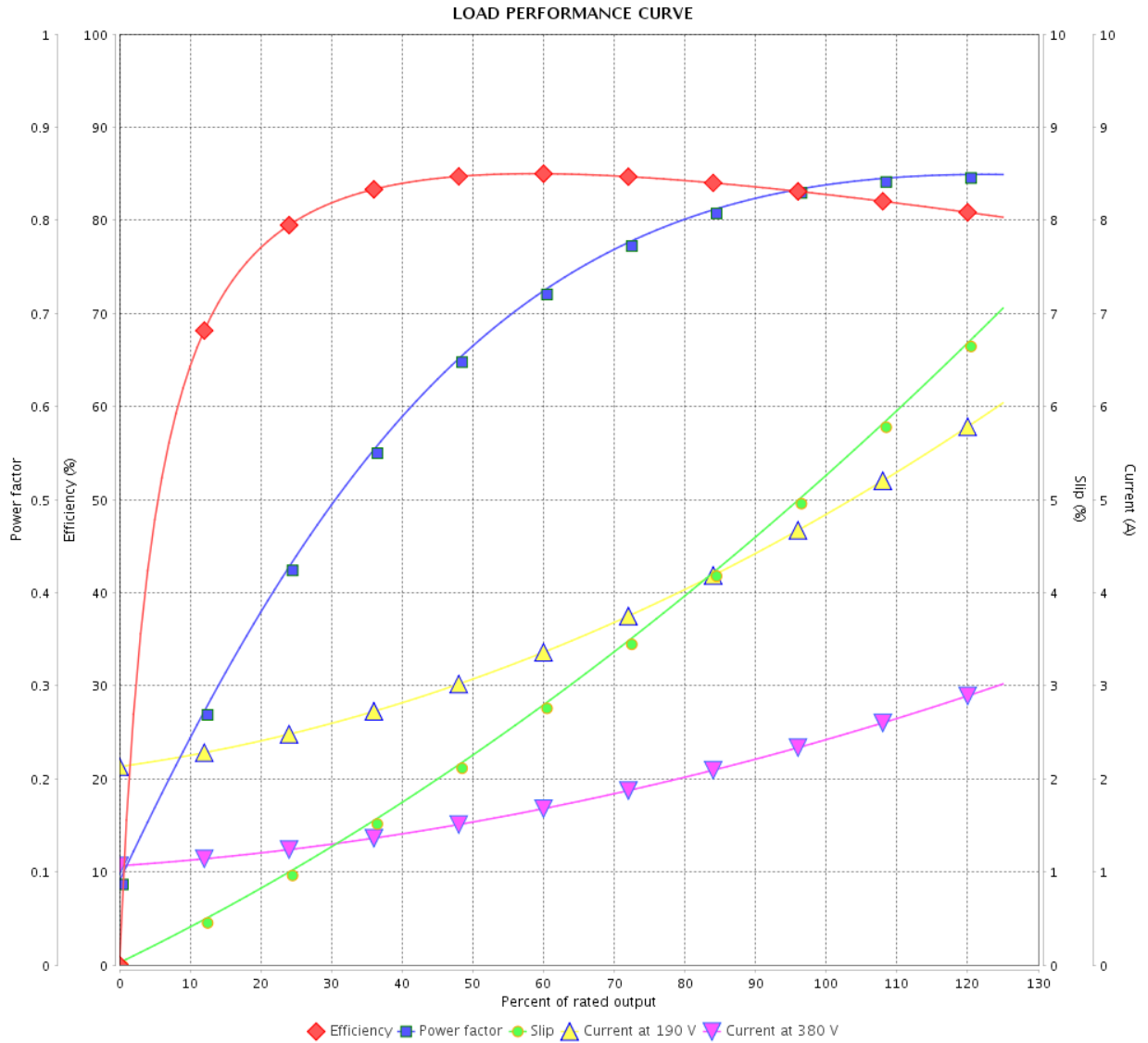
## Three Phase Induction Motor - Squirrel Cage



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

Product line : JM Pump NEMA Premium  
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Performance : 190/380 V 50 Hz 4P

Rated current : 4.82/2.41 A  
 LRC : 6.1  
 Rated torque : 0.767 kgfm  
 Locked rotor torque : 210 %  
 Breakdown torque : 250 %  
 Rated speed : 1420 rpm

Moment of inertia (J) : 0.0046 kgm<sup>2</sup>  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.15  
 Temperature rise : 105 K  
 Design : B

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# LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

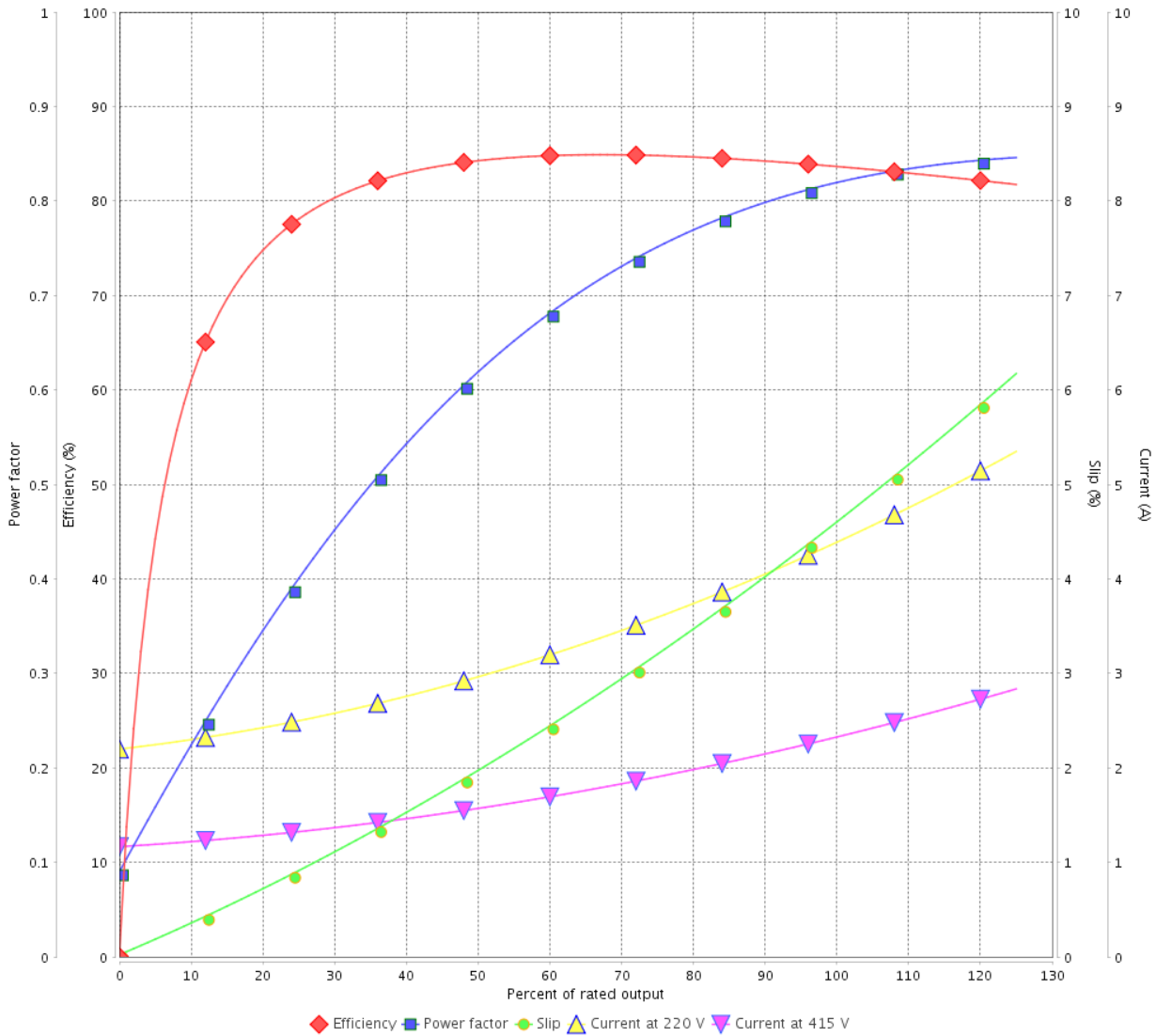


Customer :

Product line : JM Pump NEMA Premium  
Efficiency Three-Phase

Product code : 13180600

LOAD PERFORMANCE CURVE



Performance : 220/415 V 50 Hz 4P

Rated current : 4.38/2.32 A  
LRC : 6.7  
Rated torque : 0.761 kgfm  
Locked rotor torque : 240 %  
Breakdown torque : 280 %  
Rated speed : 1430 rpm

Moment of inertia (J) : 0.0046 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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