

# 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 <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>3</sup>	: 103 kg	
Design	: B	Moment of inertia (J)	: 0.0939 kgm <sup>2</sup>	
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 <sup>2</sup>	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	Foundation loads		
Sealing	: Without Without Bearing Seal Bearing Seal	Max. traction	: 338 kgf	
Lubrication interval	: 20000 h 20000 h	Max. compression	: 441 kgf	
Lubricant amount	: 13 g 8 g			
Lubricant type	: Mobil Polyrex EM			
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.		
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# LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

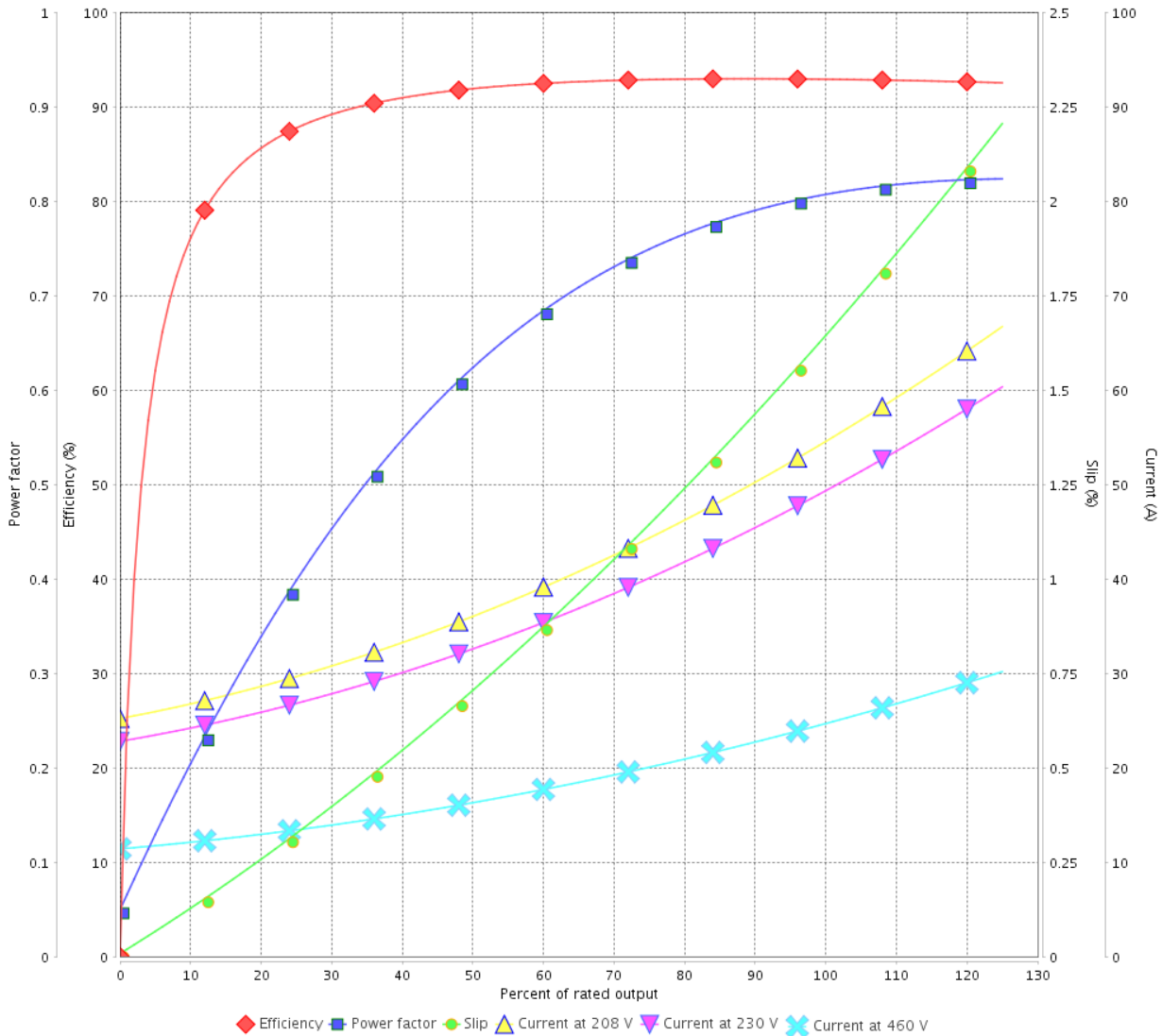


Customer :

Product line : JM Pump NEMA Premium  
Efficiency Three-Phase

Product code : 12789072

LOAD PERFORMANCE CURVE



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 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

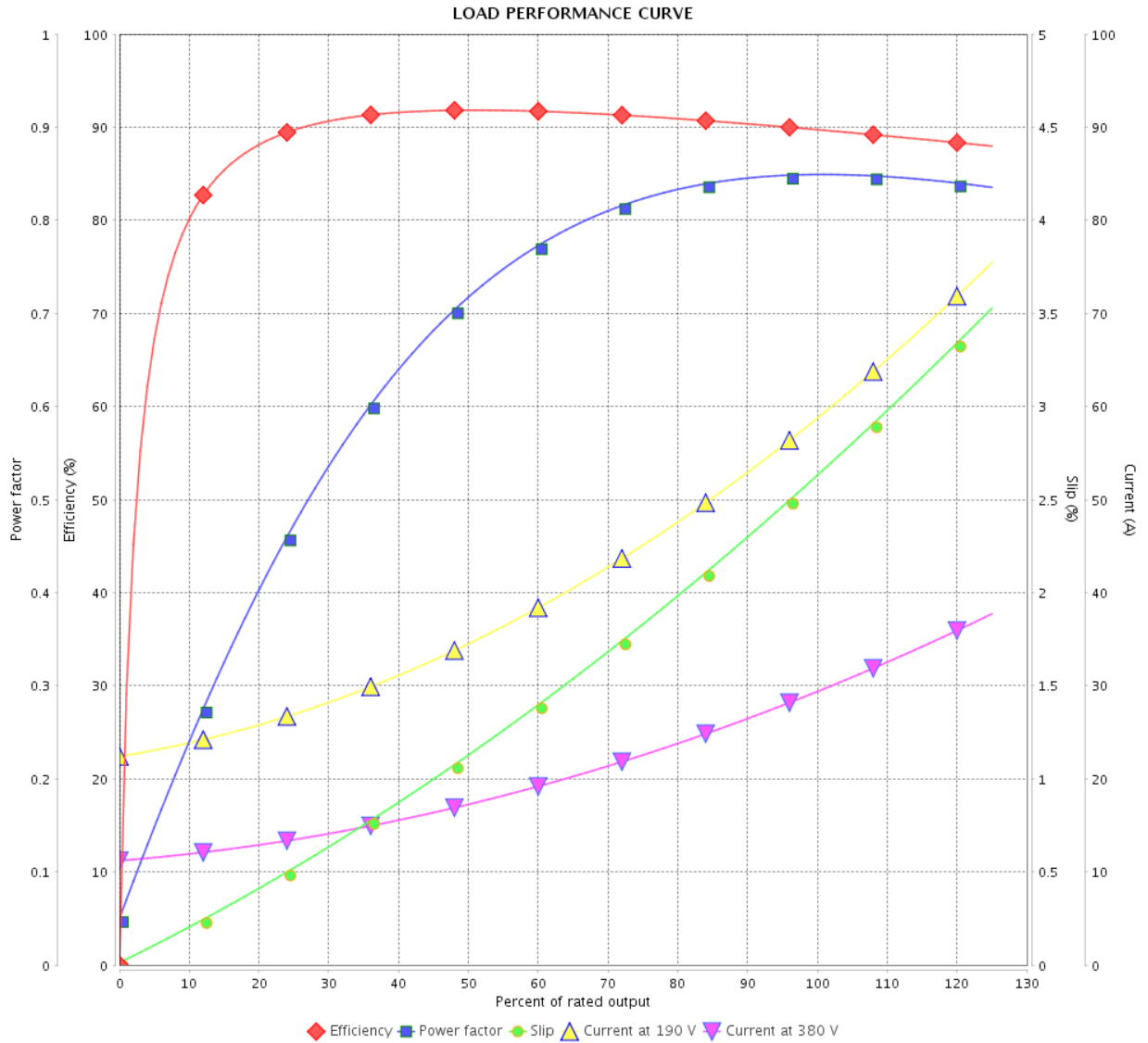
## Three Phase Induction Motor - Squirrel Cage



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

Product line : JM Pump NEMA Premium  
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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 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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Three Phase Induction Motor - Squirrel Cage

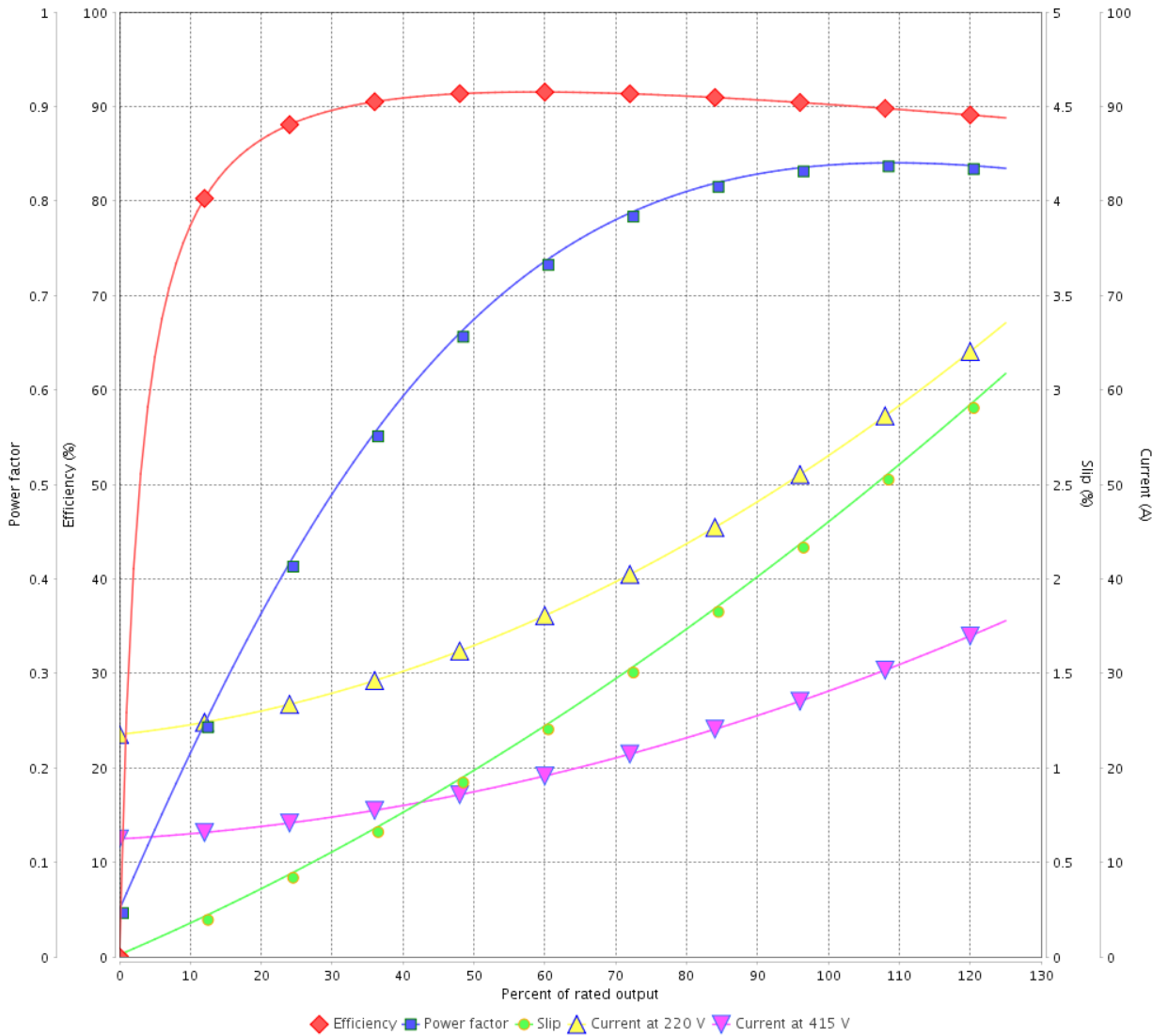


Customer : \_\_\_\_\_

Product line : JM Pump NEMA Premium  
Efficiency Three-Phase

Product code : 12789072

LOAD PERFORMANCE CURVE



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 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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