

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :			
Product line	: JM Pump NEMA Premium Efficiency Three-Phase	Product code :	13180573
Frame	: 254/6JM	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>3</sup>	: 103 kg
Protection degree	: IP55	Moment of inertia (J)	: 0.0904 kgm <sup>2</sup>
Design	: B		
Output [HP]	15	15	15
Poles	4	4	4
Frequency [Hz]	60	50	50
Rated voltage [V]	230/460	190-220/380	415
Rated current [A]	36.4/18.2	43.8-37.8/21.9	20.6
L. R. Amperes [A]	237/118	241-208/120	134
LRC [A]	6.5x(Code G)	5.5x(Code F)	6.5x(Code H)
No load current [A]	17.3/8.65	17.1-14.7/8.53	9.86
Rated speed [RPM]	1770	1455	1465
Slip [%]	1.67	3.00	2.33
Rated torque [kgfm]	6.15	7.48	7.43
Locked rotor torque [%]	250	190	229
Breakdown torque [%]	300	229	280
Service factor	1.15	1.00	1.00
Temperature rise	80 K	105 K	105 K
Locked rotor time	34s (cold) 19s (hot)	0s (cold) 0s (hot)	0s (cold) 0s (hot)
Noise level <sup>2</sup>	68.0 dB(A)	65.0 dB(A)	65.0 dB(A)
Efficiency (%)	25%		
	50%	91.0	91.5
	75%	92.4	91.2
	100%	92.4	89.9
Power Factor	25%		
	50%	0.64	0.71
	75%	0.76	0.81
	100%	0.82	0.85
Bearing type	: <u>Drive end</u> 6309 Z C3 <u>Non drive end</u> 6208 Z C3	Foundation loads	
Sealing	: V'Ring Without Bearing Seal	Max. traction	: 276 kgf
Lubrication interval	: 20000 h 20000 h	Max. compression	: 379 kgf
Lubricant amount	: 13 g 8 g		
Lubricant type	: Mobil Polyrex EM		
Notes USABLE @208V 40.2A SF 1.00 SFA 40.2A			
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			
Date	16/05/2022		
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# LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

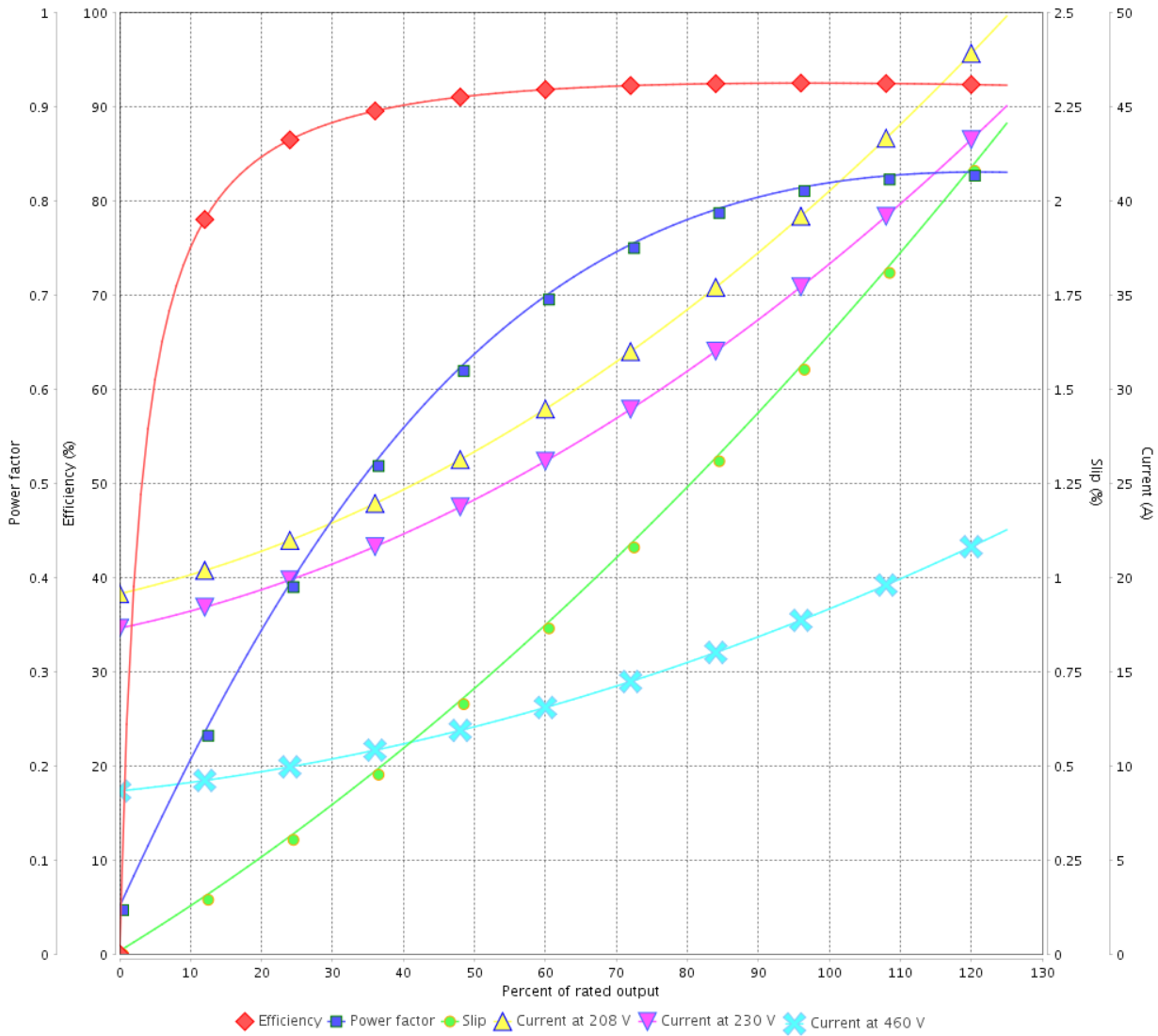


Customer : \_\_\_\_\_

Product line : JM Pump NEMA Premium  
Efficiency Three-Phase

Product code : 13180573

LOAD PERFORMANCE CURVE



Performance : 230/460 V 60 Hz 4P

Rated current : 36.4/18.2 A  
 LRC : 6.5  
 Rated torque : 6.15 kgfm  
 Locked rotor torque : 250 %  
 Breakdown torque : 300 %  
 Rated speed : 1770 rpm

Moment of inertia (J) : 0.0904 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

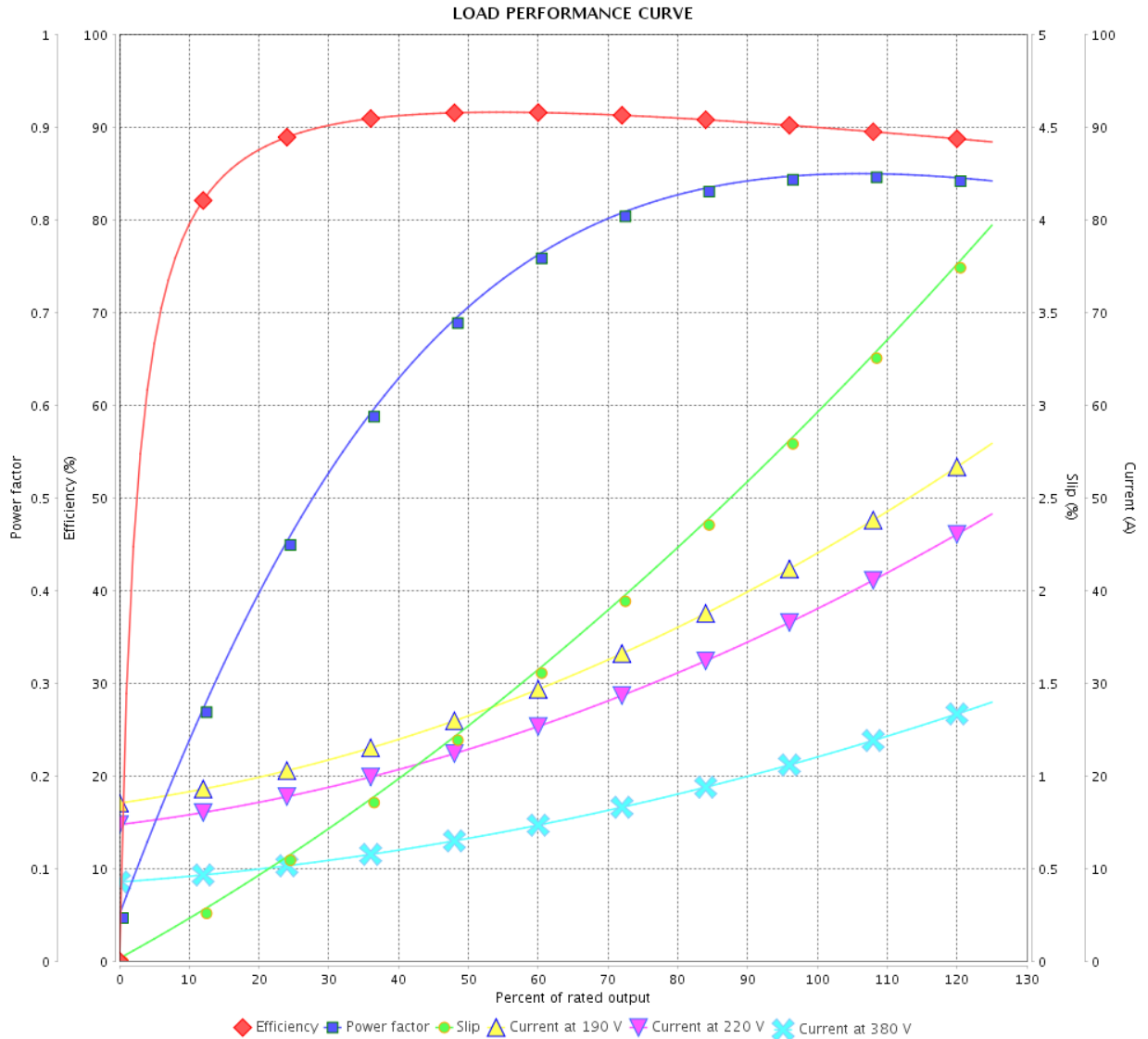
## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : JM Pump NEMA Premium Efficiency Three-Phase

Product code : 13180573



Performance : 190-220/380 V 50 Hz 4P

Rated current : 43.8-37.8/21.9 A  
 LRC : 5.5  
 Rated torque : 7.48 kgfm  
 Locked rotor torque : 190 %  
 Breakdown torque : 229 %  
 Rated speed : 1455 rpm

Moment of inertia (J) : 0.0904 kgm<sup>2</sup>  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.00  
 Temperature rise : 105 K  
 Design : B

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Three Phase Induction Motor - Squirrel Cage

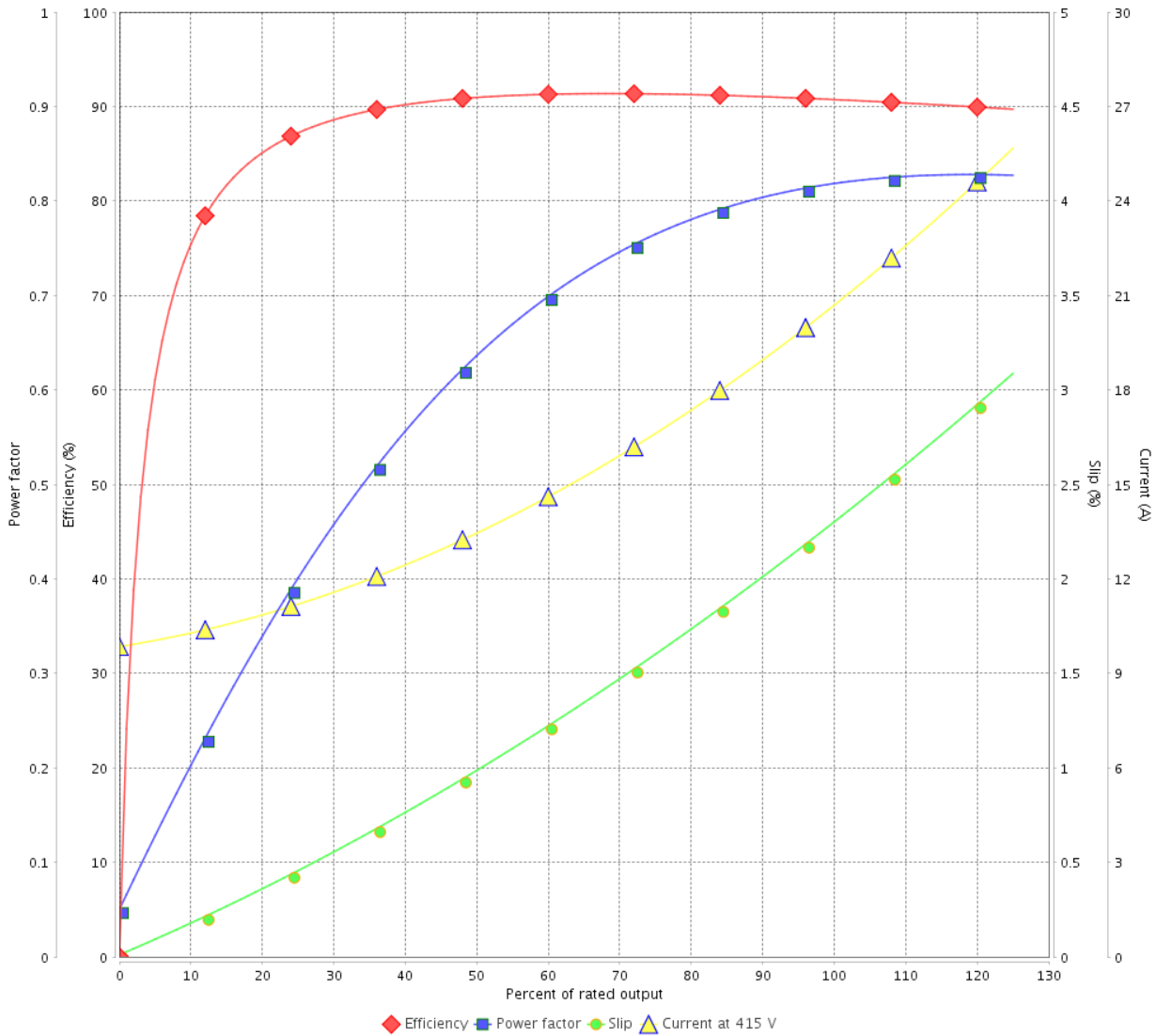


Customer :

Product line : JM Pump NEMA Premium  
Efficiency Three-Phase

Product code : 13180573

LOAD PERFORMANCE CURVE



Performance : 415 V 50 Hz 4P

Rated current : 20.6 A  
LRC : 6.5  
Rated torque : 7.43 kgfm  
Locked rotor torque : 229 %  
Breakdown torque : 280 %  
Rated speed : 1465 rpm

Moment of inertia (J) : 0.0904 kgm<sup>2</sup>  
Duty cycle : Cont.(S1)  
Insulation class : F  
Service factor : 1.00  
Temperature rise : 105 K  
Design : B

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