

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 ¹	: Both (CW and CCW)
Ambient temperature	: -20°C to +40°C	Starting method	: Direct On Line
Altitude	: 1000 m.a.s.l.	Approx. weight ³	: 18.3 kg
Protection degree	: IP55	Moment of inertia (J)	: 0.0046 kgm ²
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 ²	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

	<u>Drive end</u>	<u>Non drive end</u>	Foundation loads	
Bearing type	: 6206 ZZ	6203 ZZ	Max. traction	: 51 kgf
Sealing	: V'Ring	Without Bearing Seal	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.

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

Page 1 / 4
Revision

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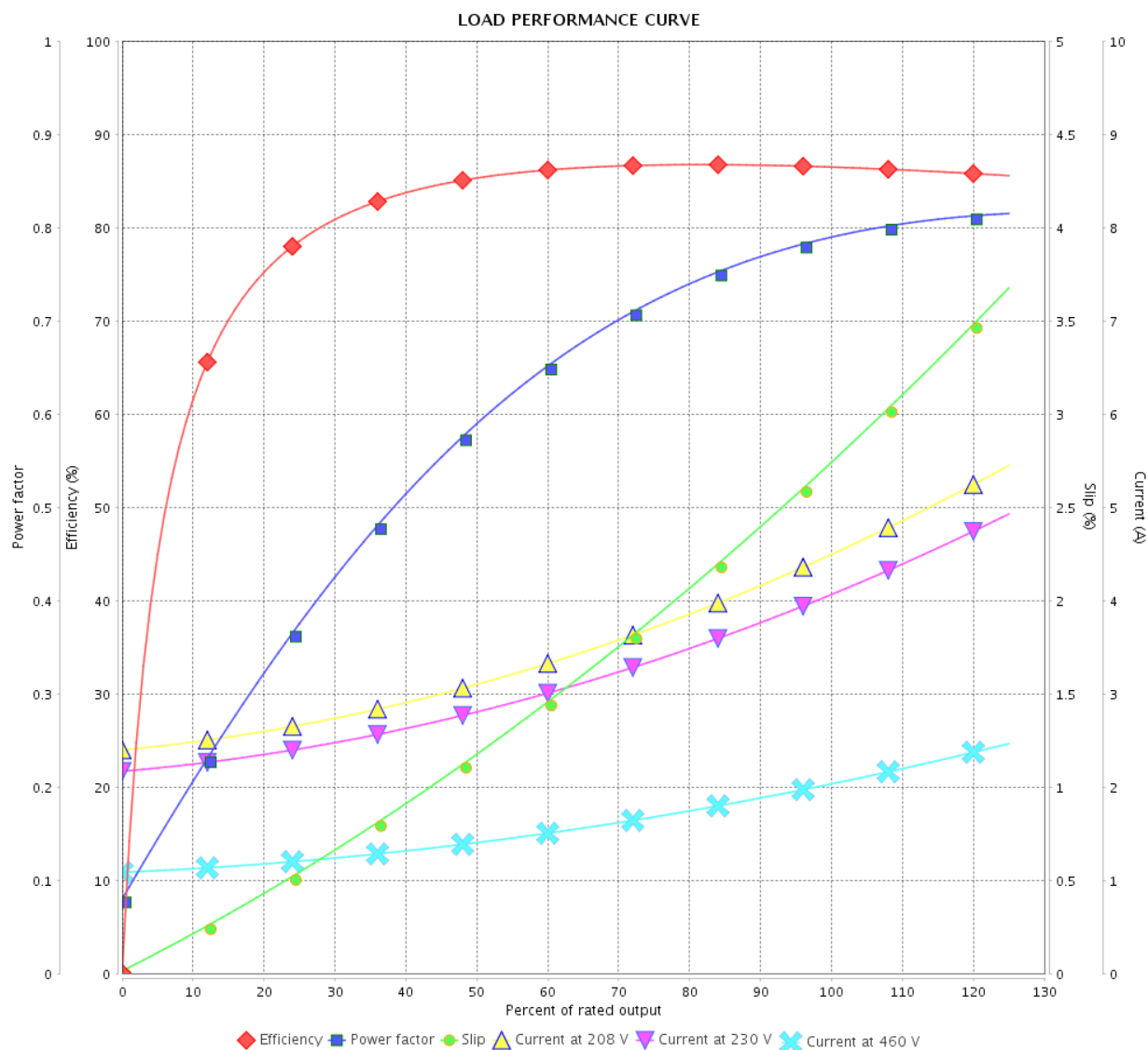
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : JM Pump NEMA Premium
Efficiency Three-Phase

Product code : 13180600



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 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor :
Temperature rise : 80 K
Design : B

Rev.	Changes Summary		Performed	Checked	Date
Performed by				Page 2 / 4	Revision
Checked by					
Date	16/05/2022				

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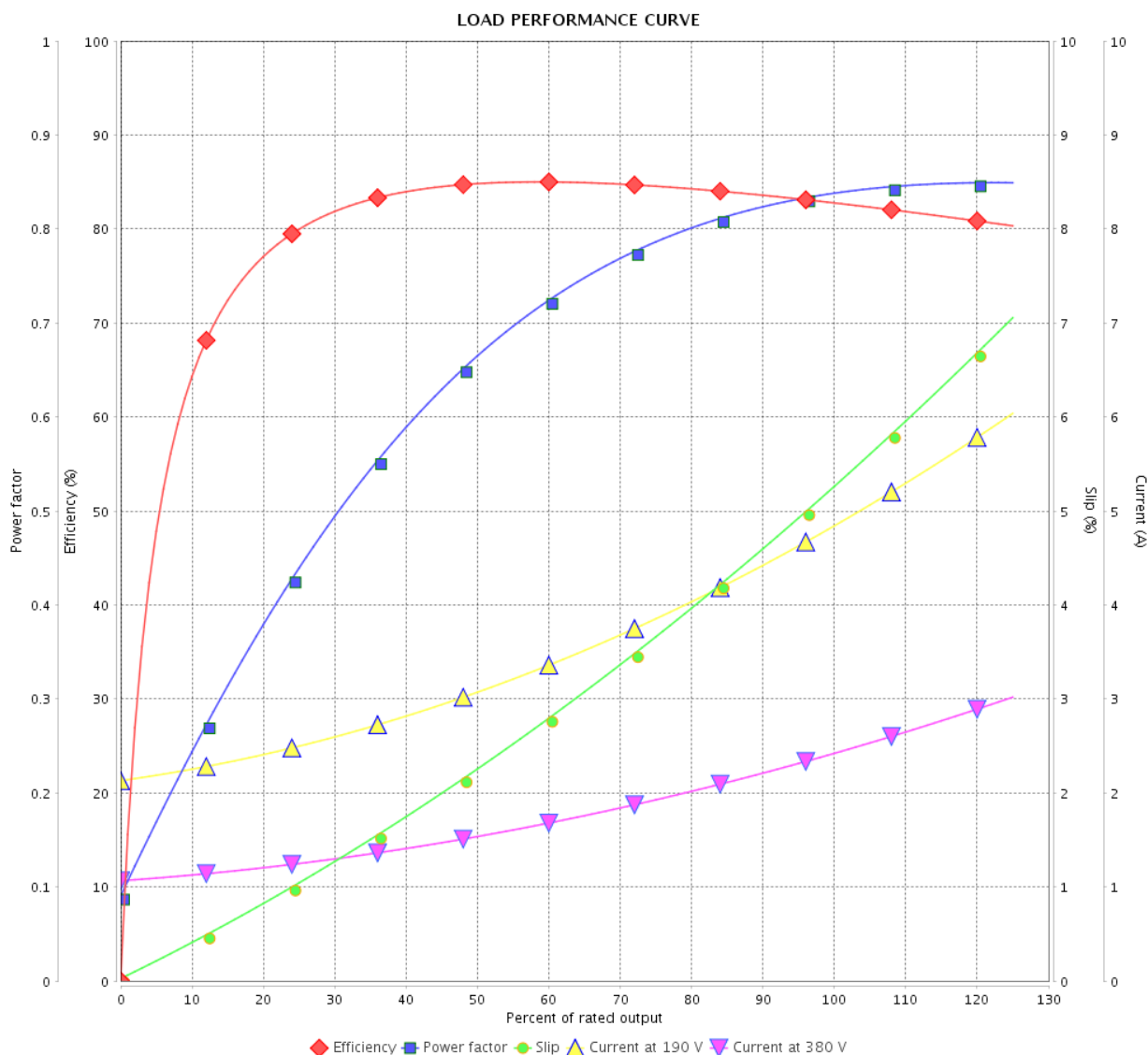
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : JM Pump NEMA Premium
Efficiency Three-Phase

Product code : 13180600



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 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.15
Temperature rise : 105 K
Design : B

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

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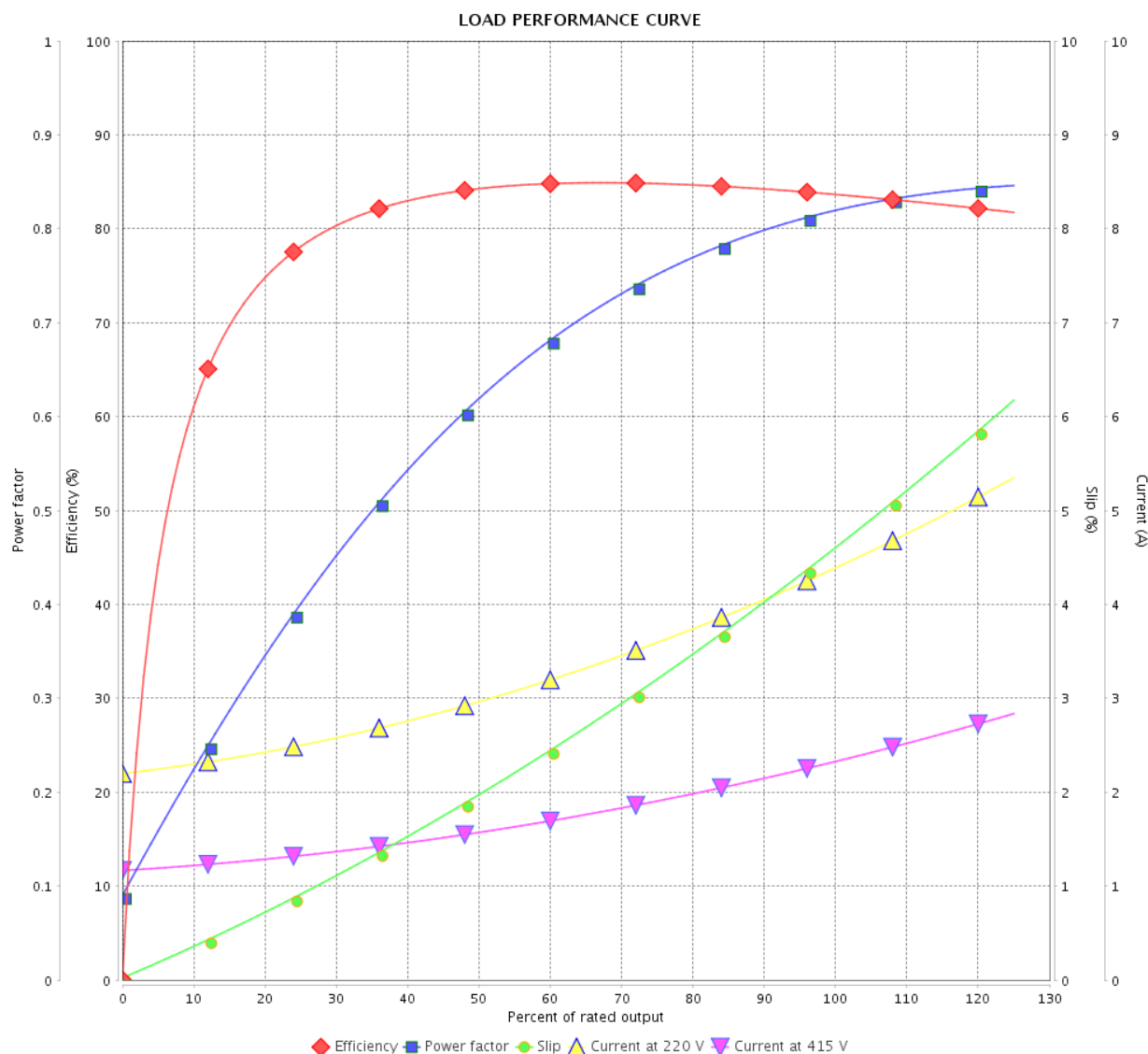
Three Phase Induction Motor - Squirrel Cage



Customer :

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Efficiency Three-Phase

Product code : 13180600



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 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.15
Temperature rise : 80 K
Design : B

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

