

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : JM Pump NEMA Premium Efficiency Three-Phase Product code : 13181453

Frame	: 213/5JM	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	: 75.9 kg
Protection degree	: IP55	Moment of inertia (J)	: 0.0267 kgm ²
Design	: A		

Output [HP]	15	10	10
Poles	2	2	2
Frequency [Hz]	60	50	50
Rated voltage [V]	230/460	190/380	220/415
Rated current [A]	34.0/17.0	28.8/14.4	26.2/13.9
L. R. Amperes [A]	279/139	251/125	244/129
LRC [A]	8.2x(Code J)	8.7x(Code K)	9.3x(Code K)
No load current [A]	12.4/6.22	12.2/6.11	12.8/6.77
Rated speed [RPM]	3520	2935	2940
Slip [%]	2.22	2.17	2.00
Rated torque [kgfm]	3.09	2.47	2.47
Locked rotor torque [%]	280	320	350
Breakdown torque [%]	330	370	420
Service factor	1.15	1.15	1.15
Temperature rise	80 K	80 K	80 K
Locked rotor time	19s (cold) 11s (hot)	25s (cold) 14s (hot)	23s (cold) 13s (hot)
Noise level ²	70.0 dB(A)	67.0 dB(A)	67.0 dB(A)
Efficiency (%)	25%	90.0	89.9
	50%	90.2	90.1
	75%	91.0	91.3
	100%	91.0	91.3
Power Factor	25%	0.49	0.39
	50%	0.76	0.66
	75%	0.85	0.78
	100%	0.89	0.85

	<u>Drive end</u>	<u>Non drive end</u>	Foundation loads
Bearing type	: 6209 ZZ	6206 ZZ	Max. traction : 154 kgf
Sealing	: V'Ring	Without Bearing Seal	Max. compression : 230 kgf
Lubrication interval	: -	-	
Lubricant amount	: -	-	
Lubricant type	: Mobil Polyrex EM		

Notes

USABLE @208V 37.6A SF 1.00 SFA 37.6A

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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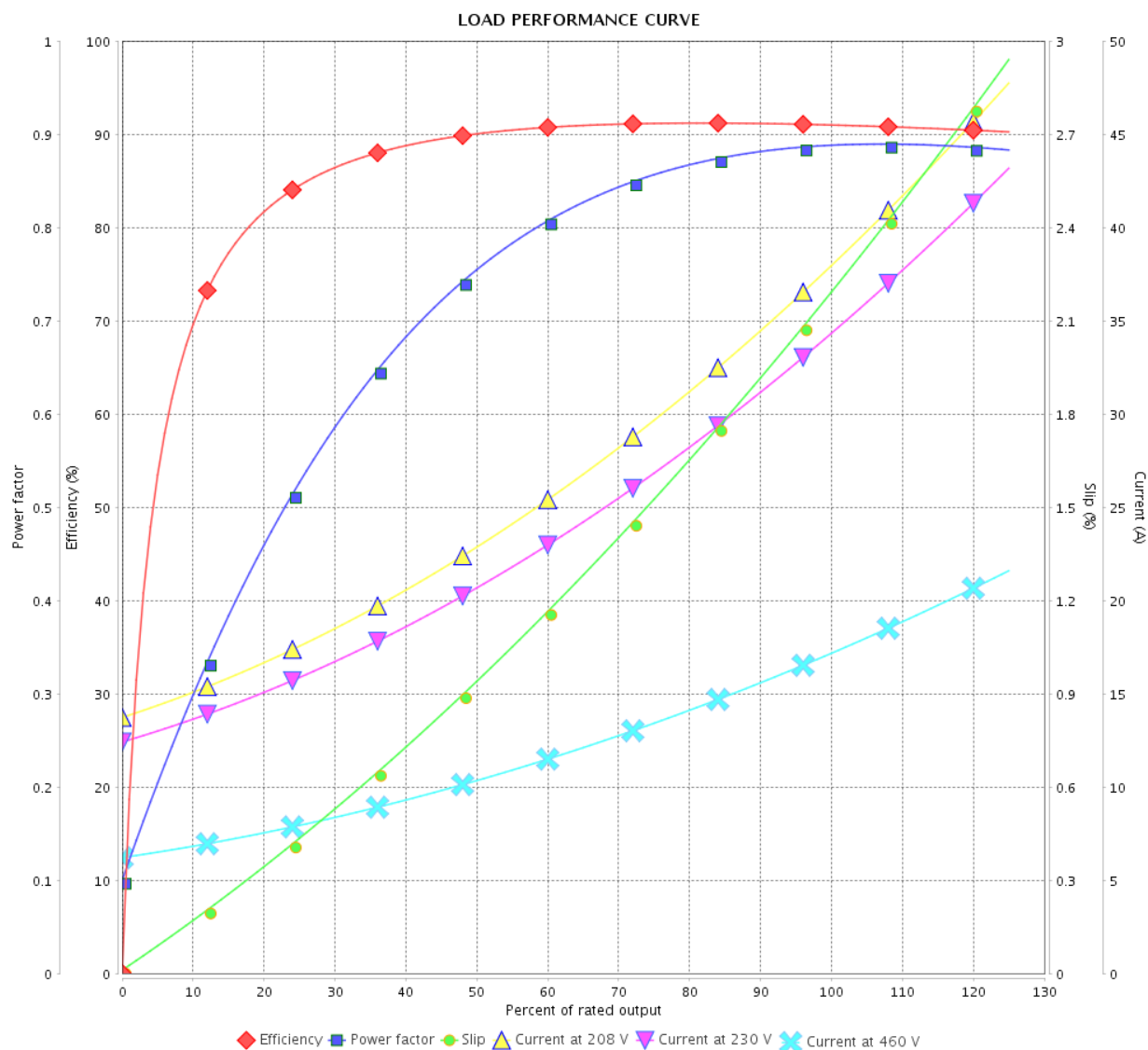
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : JM Pump NEMA Premium
Efficiency Three-Phase

Product code : 13181453



Performance : 230/460 V 60 Hz 2P

Rated current : 34.0/17.0 A
 LRC : 8.2
 Rated torque : 3.09 kgfm
 Locked rotor torque : 280 %
 Breakdown torque : 330 %
 Rated speed : 3520 rpm

Moment of inertia (J) : 0.0267 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : A

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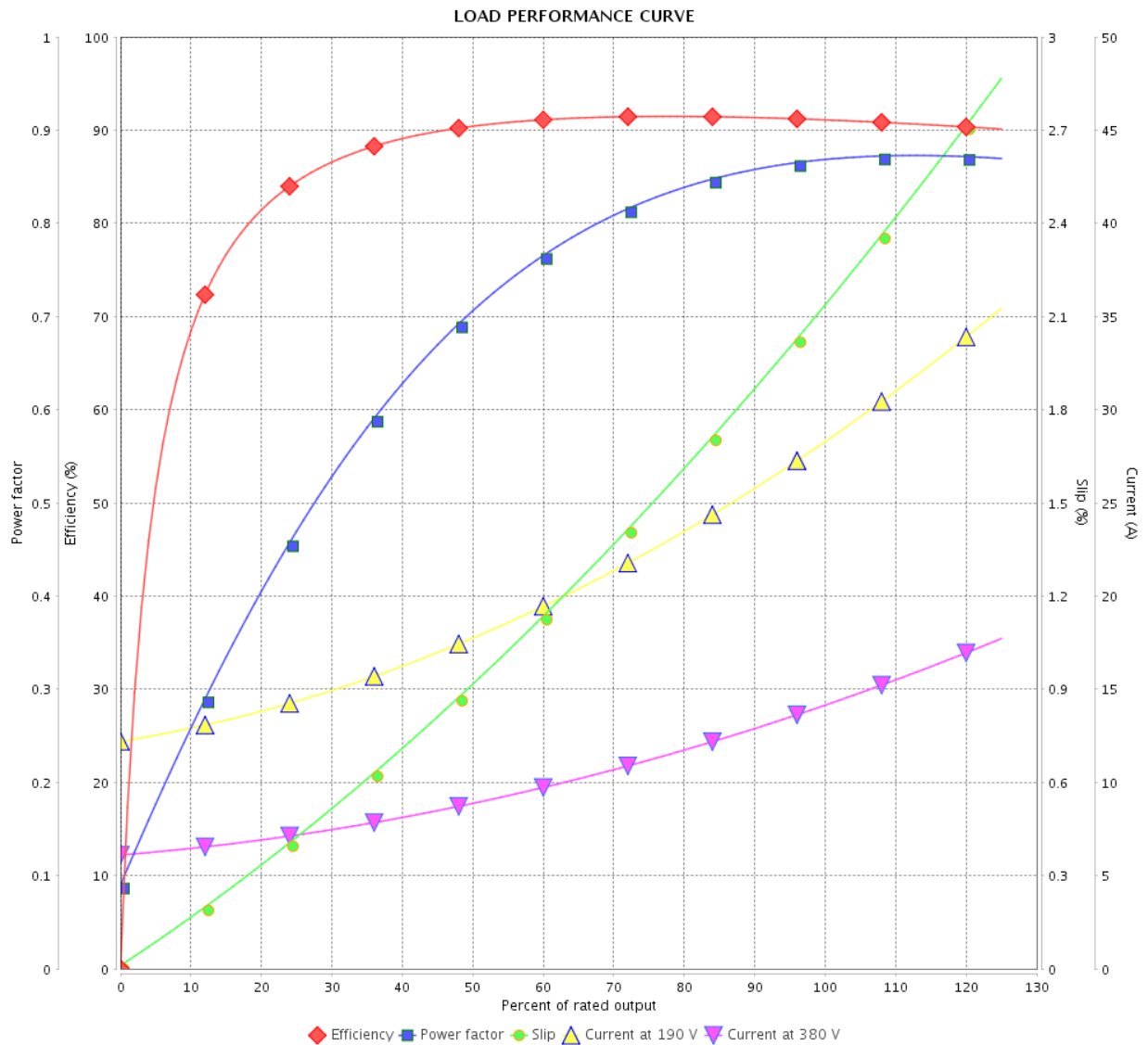
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : JM Pump NEMA Premium
Efficiency Three-Phase

Product code : 13181453



Performance : 190/380 V 50 Hz 2P

Rated current : 28.8/14.4 A
LRC : 8.7
Rated torque : 2.47 kgfm
Locked rotor torque : 320 %
Breakdown torque : 370 %
Rated speed : 2935 rpm

Moment of inertia (J) : 0.0267 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.15
Temperature rise : 80 K
Design : A

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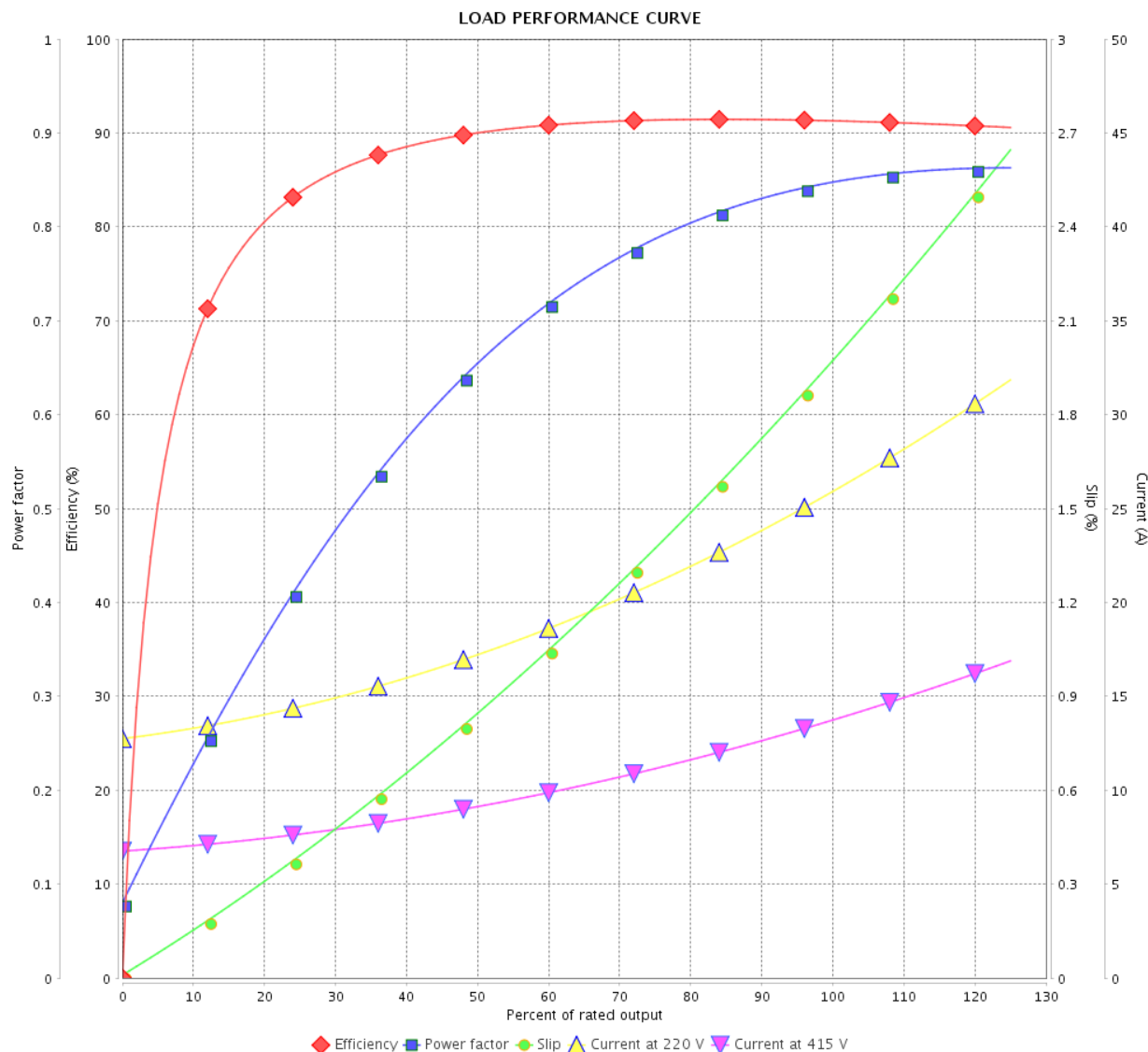
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : JM Pump NEMA Premium
Efficiency Three-Phase

Product code : 13181453



Performance : 220/415 V 50 Hz 2P

Rated current : 26.2/13.9 A
 LRC : 9.3
 Rated torque : 2.47 kgfm
 Locked rotor torque : 350 %
 Breakdown torque : 420 %
 Rated speed : 2940 rpm

Moment of inertia (J) : 0.0267 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : A

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