

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : NEMA Premium Efficiency Three-Phase Product code : 12837721

Frame	: 143/5TC	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 ²	: 22.6 kg
Protection degree	: IP55	Moment of inertia (J)	: 0.0070 kgm ²
Design	: B		

Output [HP]	3	3	3
Poles	2	2	2
Frequency [Hz]	60	50	50
Rated voltage [V]	230/460	190-220/380	415
Rated current [A]	7.02/3.51	8.50-7.34/4.25	3.91
L. R. Amperes [A]	66.7/33.3	62.9-54.3/31.5	34.8
LRC [A]	9.5x(Code K)	7.4x(Code H)	8.9x(Code K)
No load current [A]	2.56/1.28	2.52-2.18/1.26	1.44
Rated speed [RPM]	3500	2870	2895
Slip [%]	2.78	4.33	3.50
Rated torque [kgfm]	0.622	0.759	0.752
Locked rotor torque [%]	300	229	290
Breakdown torque [%]	380	280	340
Service factor		1.15	1.15
Temperature rise	80 K	80 K	80 K
Locked rotor time	18s (cold) 10s (hot)	16s (cold) 9s (hot)	14s (cold) 8s (hot)
Noise level ²	68.0 dB(A)	65.0 dB(A)	65.0 dB(A)
Efficiency (%)	25%		
	50%	84.0	86.2
	75%	86.5	87.0
	100%	86.5	86.0
Power Factor	25%		
	50%	0.78	0.78
	75%	0.87	0.87
	100%	0.91	0.91

	<u>Drive end</u>	<u>Non drive end</u>	Foundation loads	
Bearing type	: 6205 ZZ	6203 ZZ	Max. traction	: 61 kgf
Sealing	: V'Ring	Without Bearing Seal	Max. compression	: 84 kgf
Lubrication interval	: -	-		
Lubricant amount	: -	-		
Lubricant type	: Mobil Polyrex EM			

Notes

USABLE @208V 7.76A SF 1.00 SFA 7.76A

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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Revision

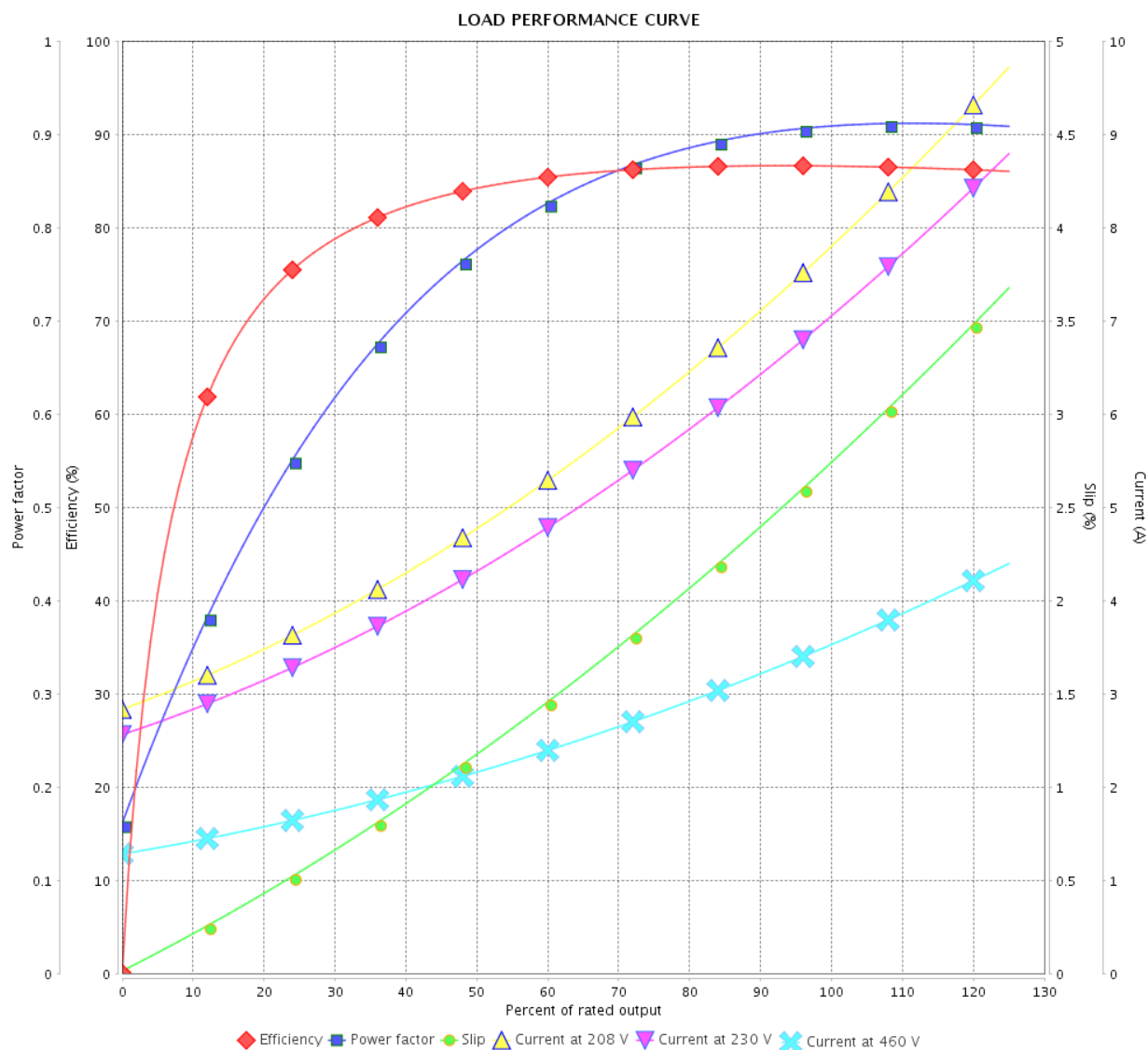
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Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : NEMA Premium Efficiency Three-Phase Product code : 12837721



Performance : 230/460 V 60 Hz 2P

Rated current : 7.02/3.51 A
LRC : 9.5
Rated torque : 0.622 kgfm
Locked rotor torque : 300 %
Breakdown torque : 380 %
Rated speed : 3500 rpm

Moment of inertia (J) : 0.0070 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor :
Temperature rise : 80 K
Design : B

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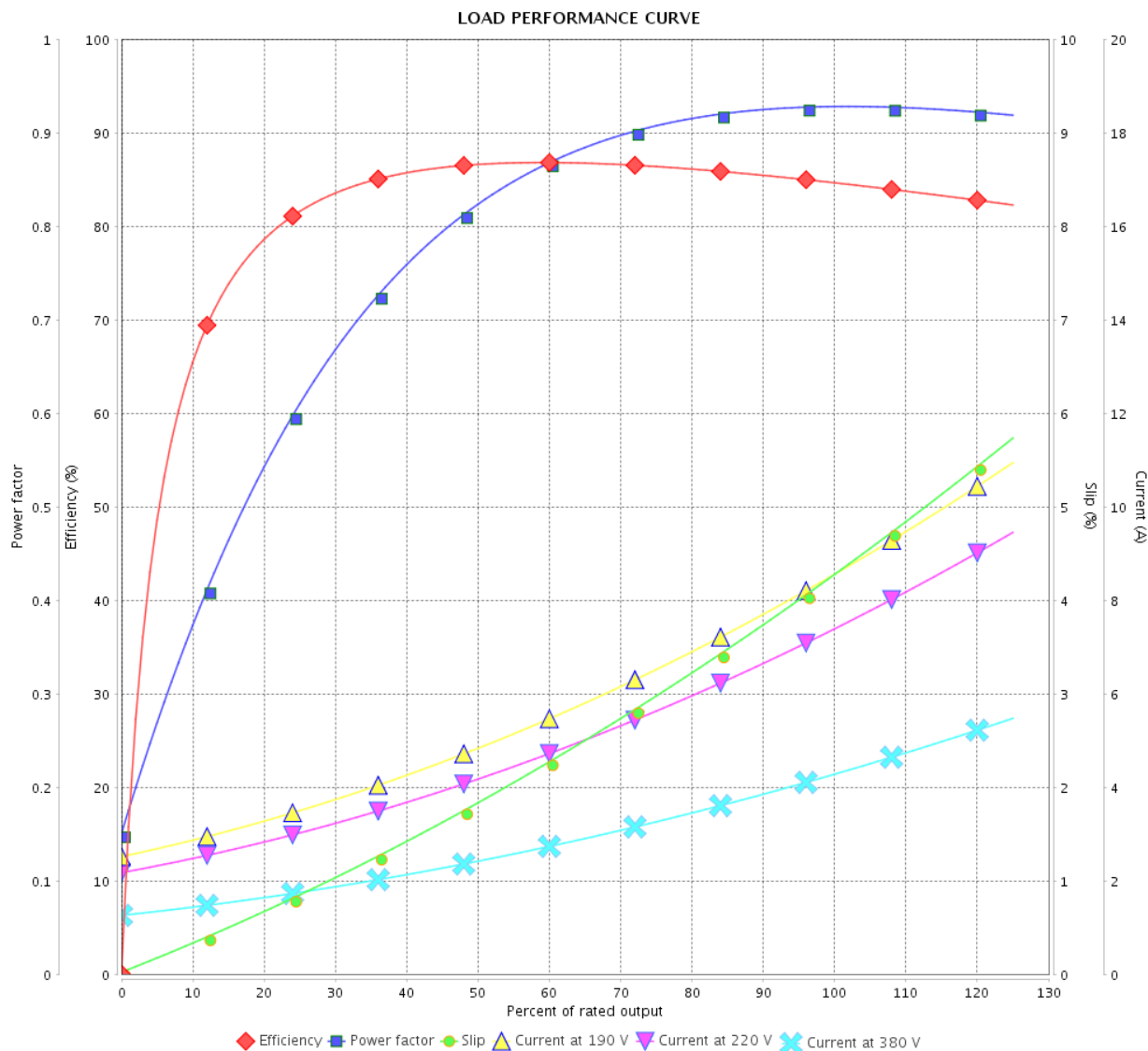
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12837721



Performance : 190-220/380 V 50 Hz 2P

Rated current : 8.50-7.34/4.25 A
 LRC : 7.4
 Rated torque : 0.759 kgfm
 Locked rotor torque : 229 %
 Breakdown torque : 280 %
 Rated speed : 2870 rpm

Moment of inertia (J) : 0.0070 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

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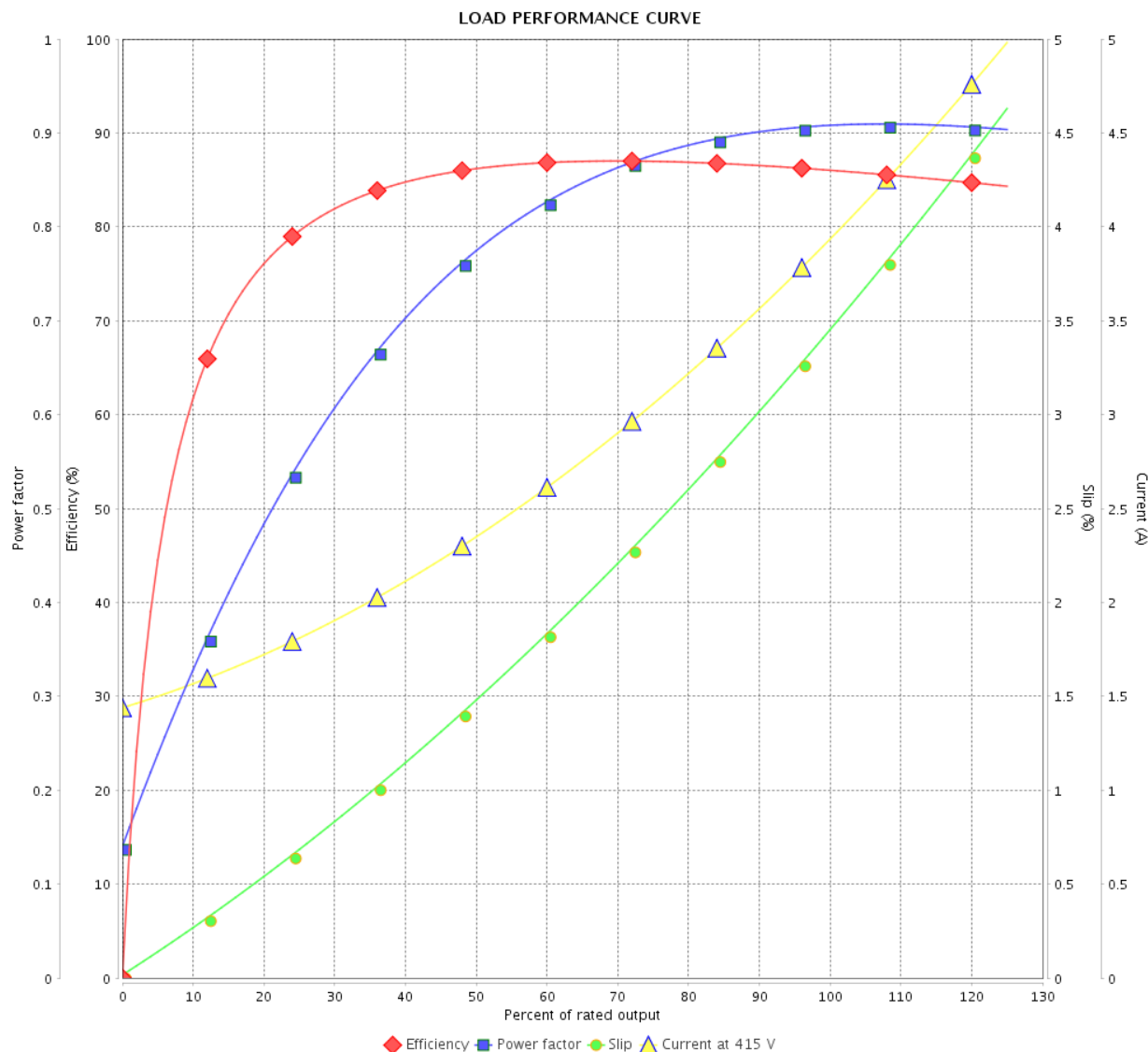
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Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : NEMA Premium Efficiency Three-Phase Product code : 12837721



Performance : 415 V 50 Hz 2P

Rated current	: 3.91 A	Moment of inertia (J)	: 0.0070 kgm ²
LRC	: 8.9	Duty cycle	: Cont.(S1)
Rated torque	: 0.752 kgfm	Insulation class	: F
Locked rotor torque	: 290 %	Service factor	: 1.15
Breakdown torque	: 340 %	Temperature rise	: 80 K
Rated speed	: 2895 rpm	Design	: B

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