

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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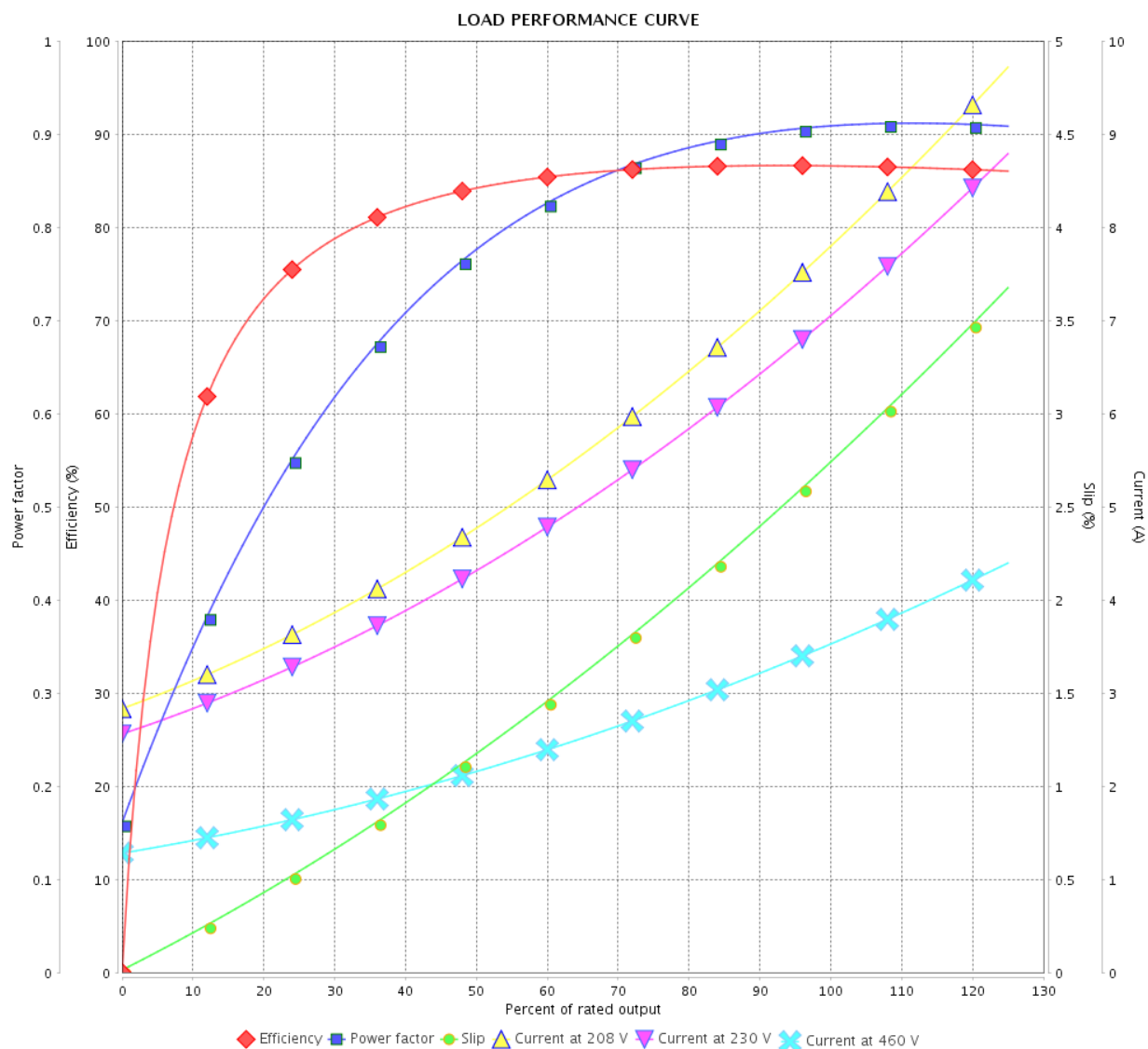
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Three Phase Induction Motor - Squirrel Cage



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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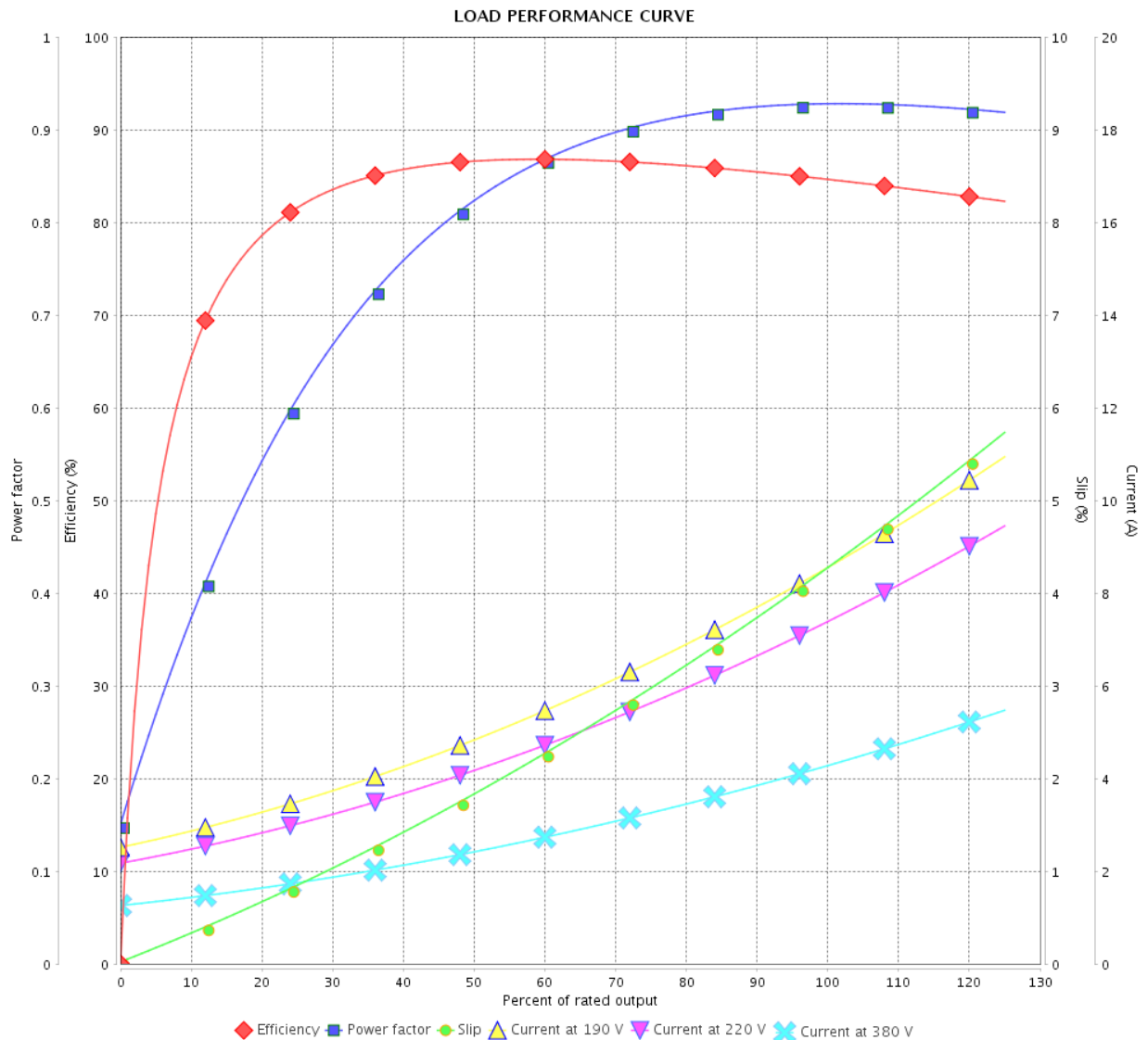
Three Phase Induction Motor - Squirrel Cage



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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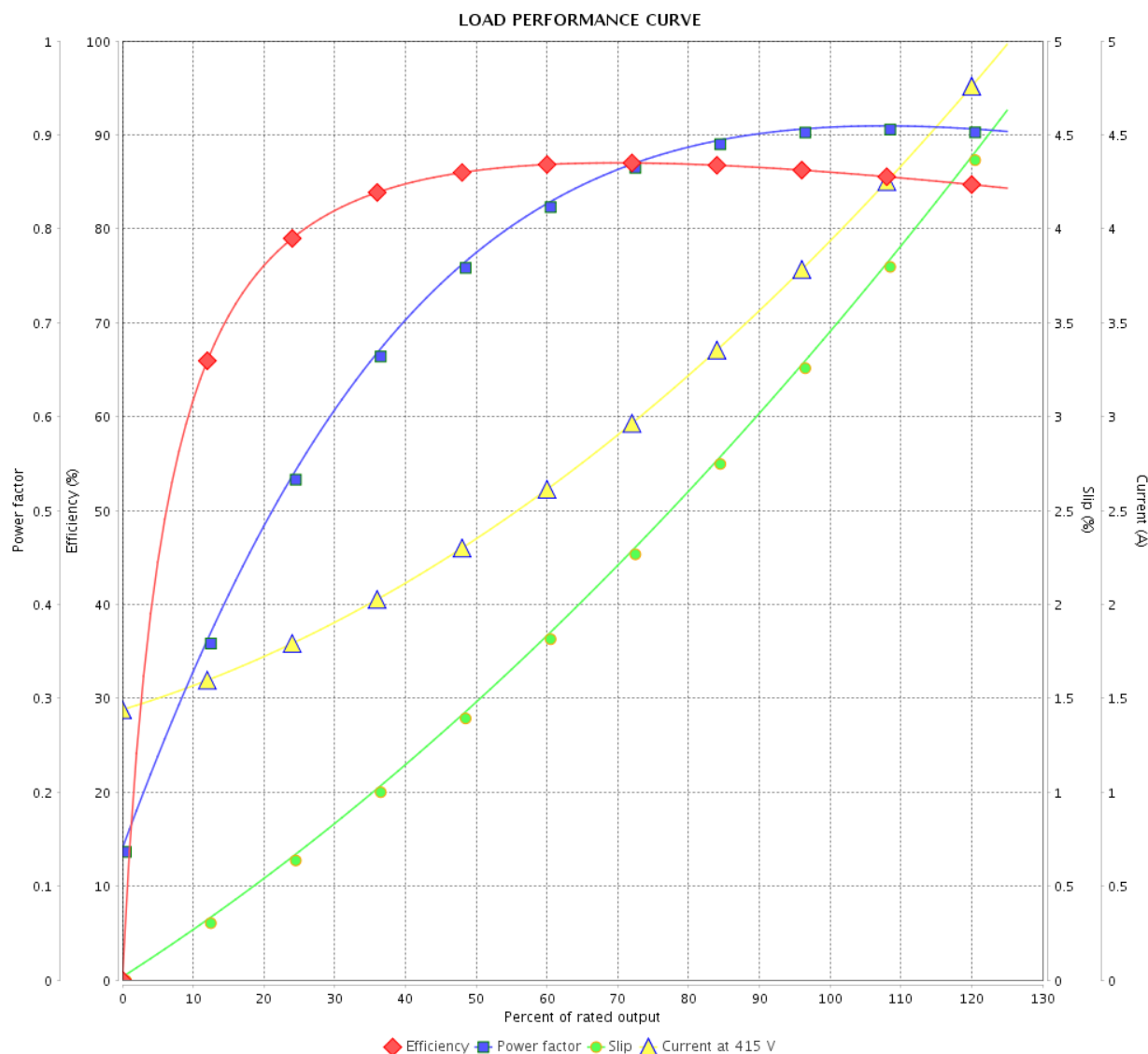
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Three Phase Induction Motor - Squirrel Cage



Customer :

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



Performance : 415 V 50 Hz 2P

Rated current : 3.91 A
LRC : 8.9
Rated torque : 0.752 kgfm
Locked rotor torque : 290 %
Breakdown torque : 340 %
Rated speed : 2895 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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