

# DATA SHEET



## Three Phase Induction Motor - Squirrel Cage

Customer :				
Product line	: NEMA Premium Efficiency Three-Phase	Product code :	14019506	
Frame	: 143/5TC	Cooling method	: IC01 - ODP	
Insulation class	: F	Mounting	: W-6	
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>	: 16.5 kg	
Design	: B	Moment of inertia (J)	: 0.0049 kgm <sup>2</sup>	
Output [HP]	2	2	2	
Poles	2	2	2	
Frequency [Hz]	60	50	50	
Rated voltage [V]	230/460	190/380	220/415	
Rated current [A]	4.84/2.42	5.82/2.91	5.26/2.79	
L. R. Amperes [A]	43.1/21.5	40.2/20.1	40.0/21.2	
LRC [A]	8.9x(Code K)	6.9x(Code H)	7.6x(Code J)	
No load current [A]	1.83/0.917	1.81/0.906	1.84/0.978	
Rated speed [RPM]	3510	2890	2900	
Slip [%]	2.50	3.67	3.33	
Rated torque [kgfm]	0.414	0.502	0.501	
Locked rotor torque [%]	220	180	200	
Breakdown torque [%]	330	250	280	
Service factor		1.15	1.15	
Temperature rise	80 K	80 K	80 K	
Locked rotor time	25s (cold) 14s (hot)	0s (cold) 0s (hot)	0s (cold) 0s (hot)	
Noise level <sup>2</sup>	62.0 dB(A)	60.0 dB(A)	60.0 dB(A)	
Efficiency (%)	25%	83.7	85.5	85.4
	50%	84.0	85.0	84.7
	75%	85.5	85.1	85.4
	100%	85.5	84.2	84.3
Power Factor	25%	0.49	0.56	0.52
	50%	0.77	0.83	0.80
	75%	0.86	0.90	0.88
	100%	0.91	0.93	0.92
Bearing type	: Drive end 6205 ZZ Non drive end 6203 ZZ	Foundation loads		
Sealing	: Without Without Bearing Seal Bearing Seal	Max. traction	: 31 kgf	
		Max. compression	: 48 kgf	
Lubrication interval	: - -			
Lubricant amount	: - -			
Lubricant type	: Mobil Polyrex EM			
Notes USABLE @208V 5.35A SF 1.00 SFA 5.35A				
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
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# LOAD PERFORMANCE CURVE

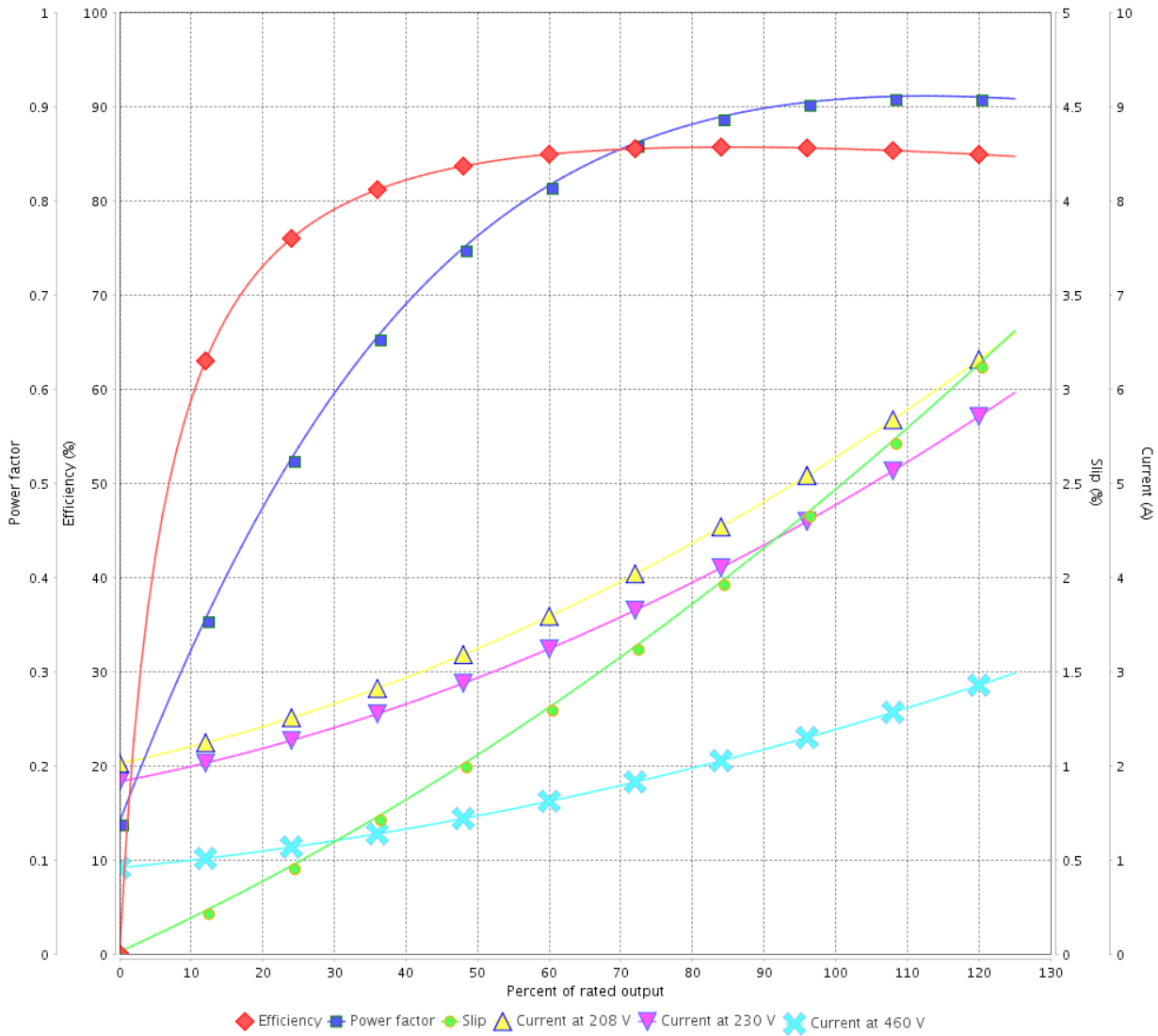
Three Phase Induction Motor - Squirrel Cage



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

Product line : NEMA Premium Efficiency Three-Phase      Product code : 14019506

LOAD PERFORMANCE CURVE



Performance : 230/460 V 60 Hz 2P

Rated current : 4.84/2.42 A  
 LRC : 8.9  
 Rated torque : 0.414 kgfm  
 Locked rotor torque : 220 %  
 Breakdown torque : 330 %  
 Rated speed : 3510 rpm

Moment of inertia (J) : 0.0049 kgm<sup>2</sup>  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor :  
 Temperature rise : 80 K  
 Design : B

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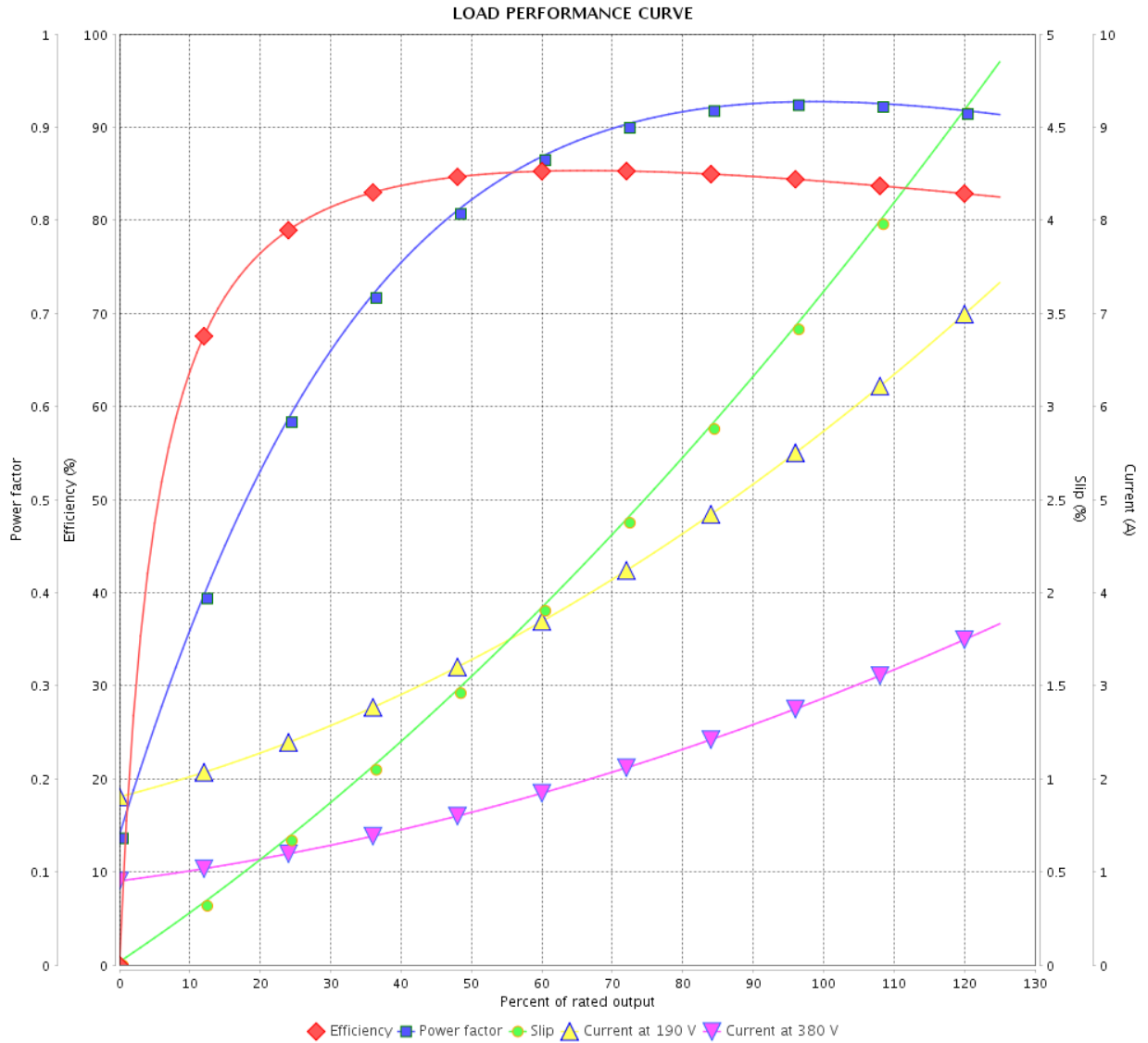
# LOAD PERFORMANCE CURVE

## Three Phase Induction Motor - Squirrel Cage



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

Product line : NEMA Premium Efficiency Three-Phase      Product code : 14019506



Performance : 190/380 V 50 Hz 2P

Rated current : 5.82/2.91 A  
 LRC : 6.9  
 Rated torque : 0.502 kgfm  
 Locked rotor torque : 180 %  
 Breakdown torque : 250 %  
 Rated speed : 2890 rpm

Moment of inertia (J) : 0.0049 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

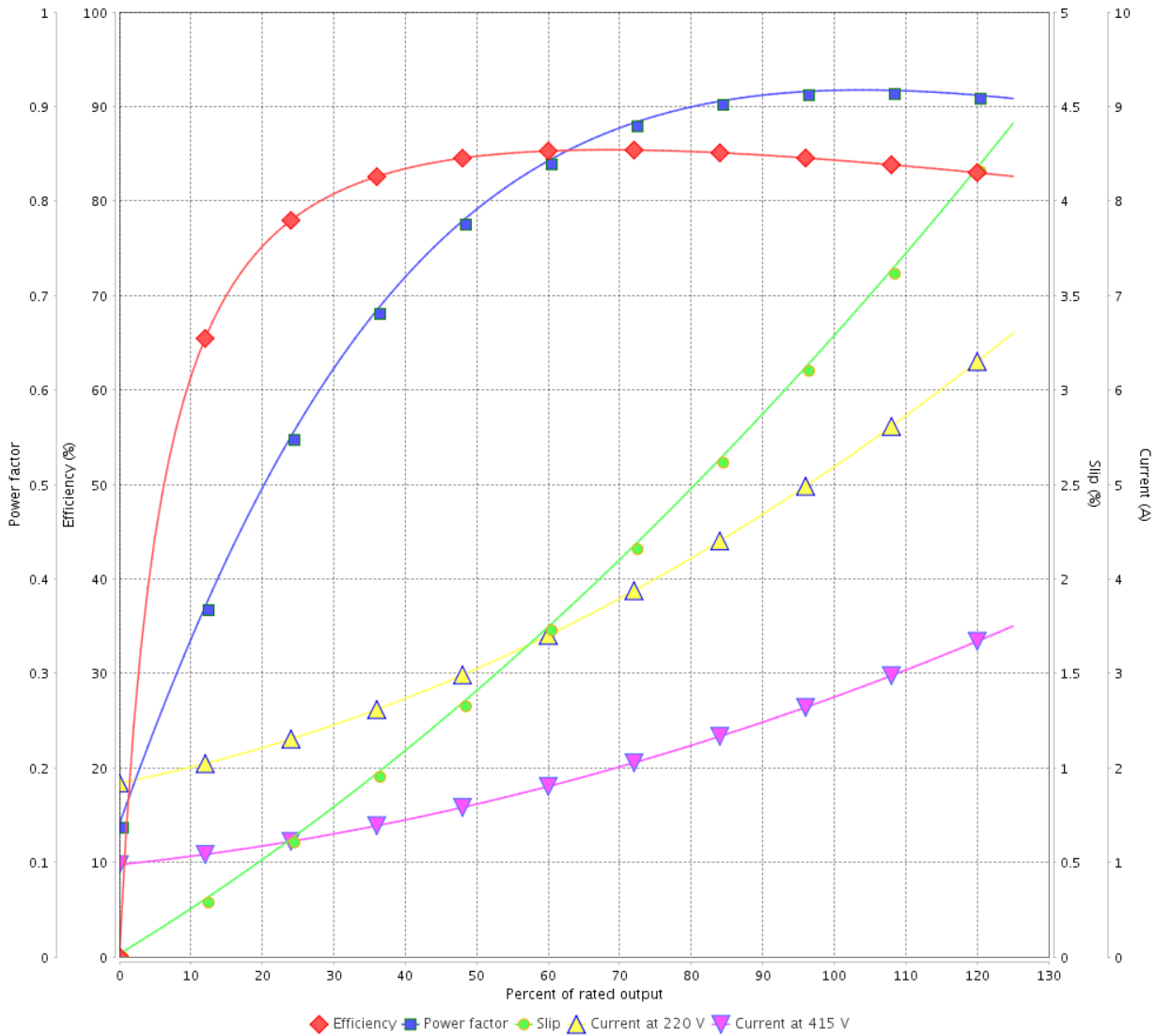
Three Phase Induction Motor - Squirrel Cage



Customer :

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LOAD PERFORMANCE CURVE



Performance : 220/415 V 50 Hz 2P

Rated current : 5.26/2.79 A  
 LRC : 7.6  
 Rated torque : 0.501 kgfm  
 Locked rotor torque : 200 %  
 Breakdown torque : 280 %  
 Rated speed : 2900 rpm

Moment of inertia (J) : 0.0049 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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