

# DATA SHEET



## Three Phase Induction Motor - Squirrel Cage

Customer :			
Product line	: NEMA Premium Efficiency Three-Phase	Product code :	12502647
Frame	: 254/6T	Cooling method	: IC411 - TEFC
Insulation class	: F	Mounting	: F-1
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>2</sup>	: 95.7 kg
Protection degree	: IP55	Moment of inertia (J)	: 0.0904 kgm <sup>2</sup>
Design	: B		
Output [HP]	15	15	15
Poles	4	4	4
Frequency [Hz]	60	50	50
Rated voltage [V]	230/460	190/380	220/415
Rated current [A]	36.4/18.2	43.8/21.9	39.4/20.9
L. R. Amperes [A]	237/118	241/120	240/127
LRC [A]	6.5x(Code G)	5.5x(Code F)	6.1x(Code G)
No load current [A]	17.3/8.65	17.1/8.53	17.5/9.28
Rated speed [RPM]	1770	1455	1460
Slip [%]	1.67	3.00	2.67
Rated torque [kgfm]	6.15	7.48	7.46
Locked rotor torque [%]	250	190	210
Breakdown torque [%]	300	229	260
Service factor	1.15	1.00	1.00
Temperature rise	80 K	105 K	105 K
Locked rotor time	34s (cold) 19s (hot)	0s (cold) 0s (hot)	0s (cold) 0s (hot)
Noise level <sup>2</sup>	68.0 dB(A)	65.0 dB(A)	65.0 dB(A)
Efficiency (%)	25%	90.8	91.9
	50%	91.0	91.2
	75%	92.4	91.4
	100%	92.4	90.4
Power Factor	25%	0.39	0.41
	50%	0.64	0.67
	75%	0.76	0.78
	100%	0.82	0.84
Bearing type	: <u>Drive end</u> 6309 Z C3 <u>Non drive end</u> 6208 Z C3	Foundation loads	
Sealing	: V'Ring Without Bearing Seal	Max. traction	: 257 kgf
Lubrication interval	: 20000 h 20000 h	Max. compression	: 353 kgf
Lubricant amount	: 13 g 8 g		
Lubricant type	: Mobil Polyrex EM		
Notes USABLE @208V 40.2A SF 1.00 SFA 40.2A			
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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# LOAD PERFORMANCE CURVE

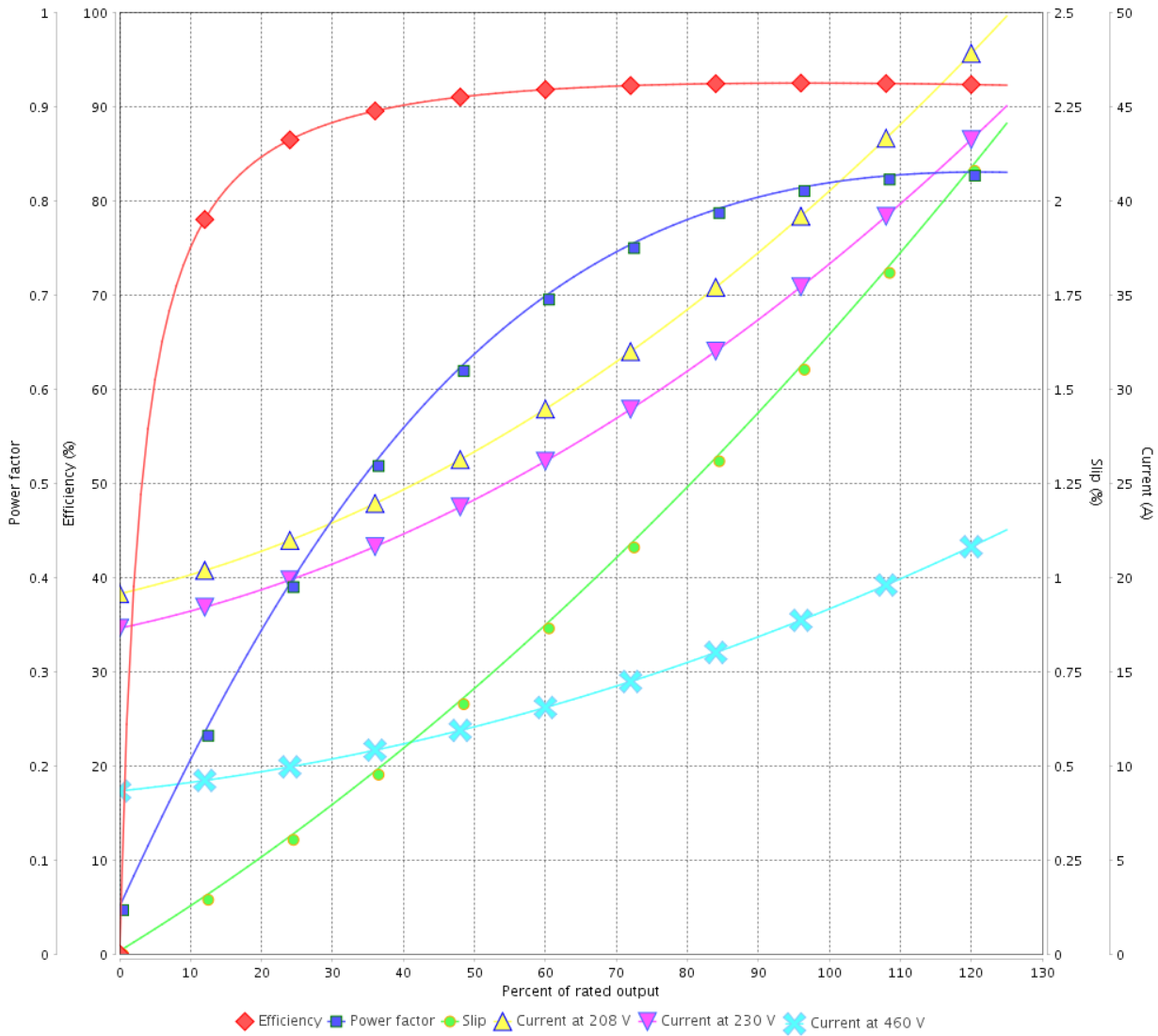
Three Phase Induction Motor - Squirrel Cage



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

Product line : NEMA Premium Efficiency Three-Phase      Product code : 12502647

LOAD PERFORMANCE CURVE



Performance : 230/460 V 60 Hz 4P

Rated current : 36.4/18.2 A  
 LRC : 6.5  
 Rated torque : 6.15 kgfm  
 Locked rotor torque : 250 %  
 Breakdown torque : 300 %  
 Rated speed : 1770 rpm

Moment of inertia (J) : 0.0904 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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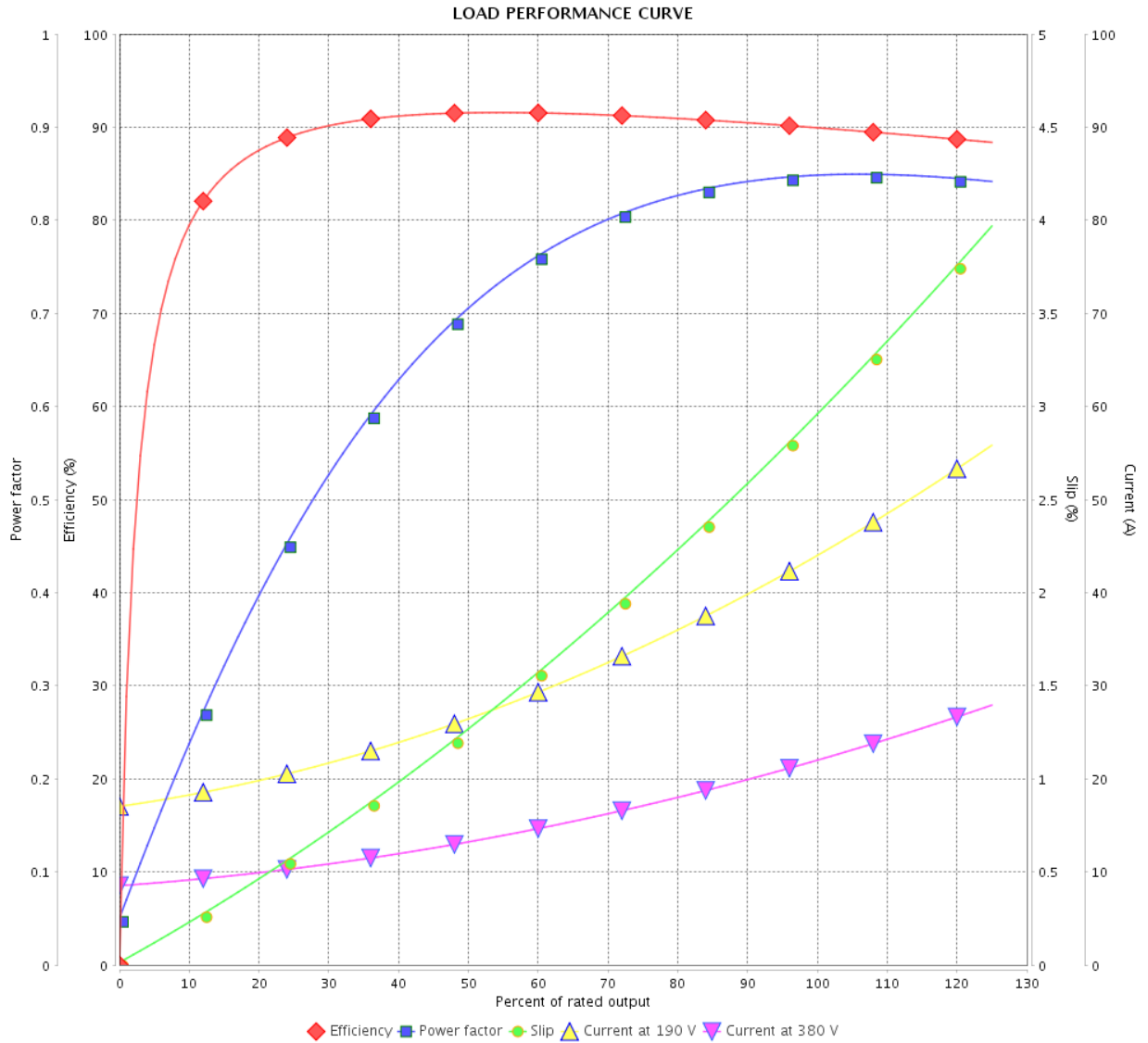
# LOAD PERFORMANCE CURVE

## Three Phase Induction Motor - Squirrel Cage



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

Product line : NEMA Premium Efficiency Three-Phase      Product code : 12502647



Performance : 190/380 V 50 Hz 4P

Rated current : 43.8/21.9 A  
 LRC : 5.5  
 Rated torque : 7.48 kgfm  
 Locked rotor torque : 190 %  
 Breakdown torque : 229 %  
 Rated speed : 1455 rpm

Moment of inertia (J) : 0.0904 kgm<sup>2</sup>  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.00  
 Temperature rise : 105 K  
 Design : B

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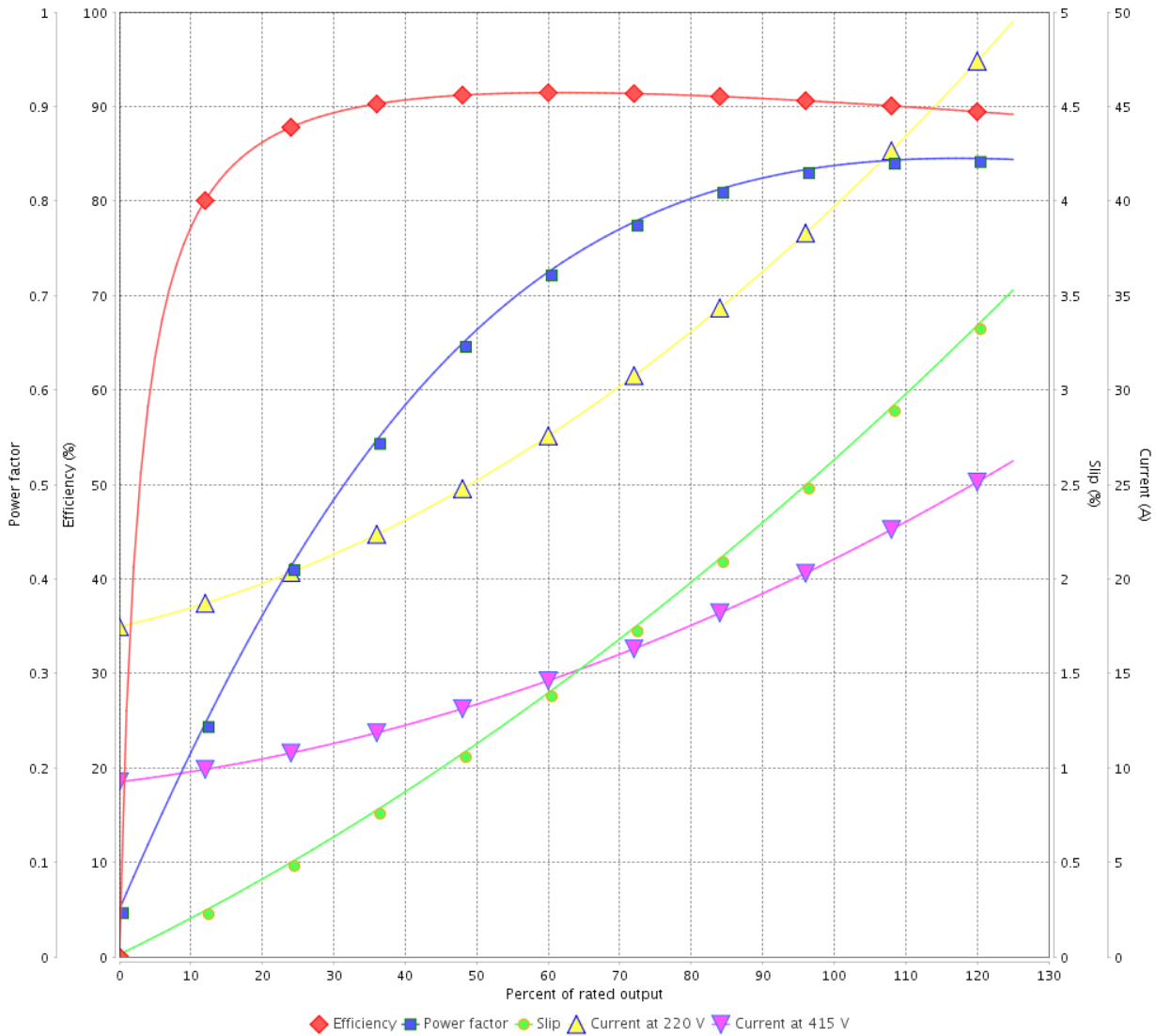
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : NEMA Premium Efficiency Three-Phase      Product code : 12502647

LOAD PERFORMANCE CURVE



Performance : 220/415 V 50 Hz 4P

Rated current : 39.4/20.9 A  
 LRC : 6.1  
 Rated torque : 7.46 kgfm  
 Locked rotor torque : 210 %  
 Breakdown torque : 260 %  
 Rated speed : 1460 rpm

Moment of inertia (J) : 0.0904 kgm<sup>2</sup>  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.00  
 Temperature rise : 105 K  
 Design : B

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