

# DATA SHEET



## Three Phase Induction Motor - Squirrel Cage

Customer :					
Product line		: W40 NEMA Premium Efficiency Three-Phase		Product code : 16246863	
Frame	: 444/5T	Cooling method	: IC01 - ODP		
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>3</sup>	: 635 kg		
Protection degree	: IP23	Moment of inertia (J)	: 1.96 kgm <sup>2</sup>		
Design	: B				
Output [HP]	200	175	175	175	
Poles	4	4	4	4	
Frequency [Hz]	60	50	50	50	
Rated voltage [V]	230/460	380	400	415	
Rated current [A]	468/234	247	237	234	
L. R. Amperes [A]	3089/1544	1630	1635	1568	
LRC [A]	6.6x(Code G)	6.6x(Code G)	6.9x(Code H)	6.7x(Code H)	
No load current [A]	173/86.5	85.2	93.6	101	
Rated speed [RPM]	1783	1480	1480	1485	
Slip [%]	0.94	1.33	1.33	1.00	
Rated torque [kgfm]	81.4	85.8	85.8	85.5	
Locked rotor torque [%]	210	190	210	229	
Breakdown torque [%]	250	220	250	270	
Service factor	1.15	1.00	1.00	1.00	
Temperature rise	80 K	80 K	80 K	80 K	
Locked rotor time	25s (cold) 14s (hot)	21s (cold) 12s (hot)	23s (cold) 13s (hot)	25s (cold) 14s (hot)	
Noise level <sup>2</sup>	78.0 dB(A)				
Efficiency (%)	25%				
	50%	95.4	95.2	95.4	
	75%	95.8	95.6	95.6	
	100%	95.8	95.6	95.6	
Power Factor	25%				
	50%	0.72	0.74	0.70	
	75%	0.80	0.82	0.80	
	100%	0.84	0.85	0.84	
Bearing type	: <u>Drive end</u> 6319 C3	<u>Non drive end</u> 6212 Z C3	Foundation loads		
Sealing	: Without	Without	Max. traction	: 1702 kgf	
	Bearing Seal	Bearing Seal	Max. compression	: 2337 kgf	
Lubrication interval	: 20000 h	20000 h			
Lubricant amount	: 45 g	13 g			
Lubricant type	: Mobil Polyrex EM				
Notes USABLE @208V 518A SF 1.00 SFA 518A					
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

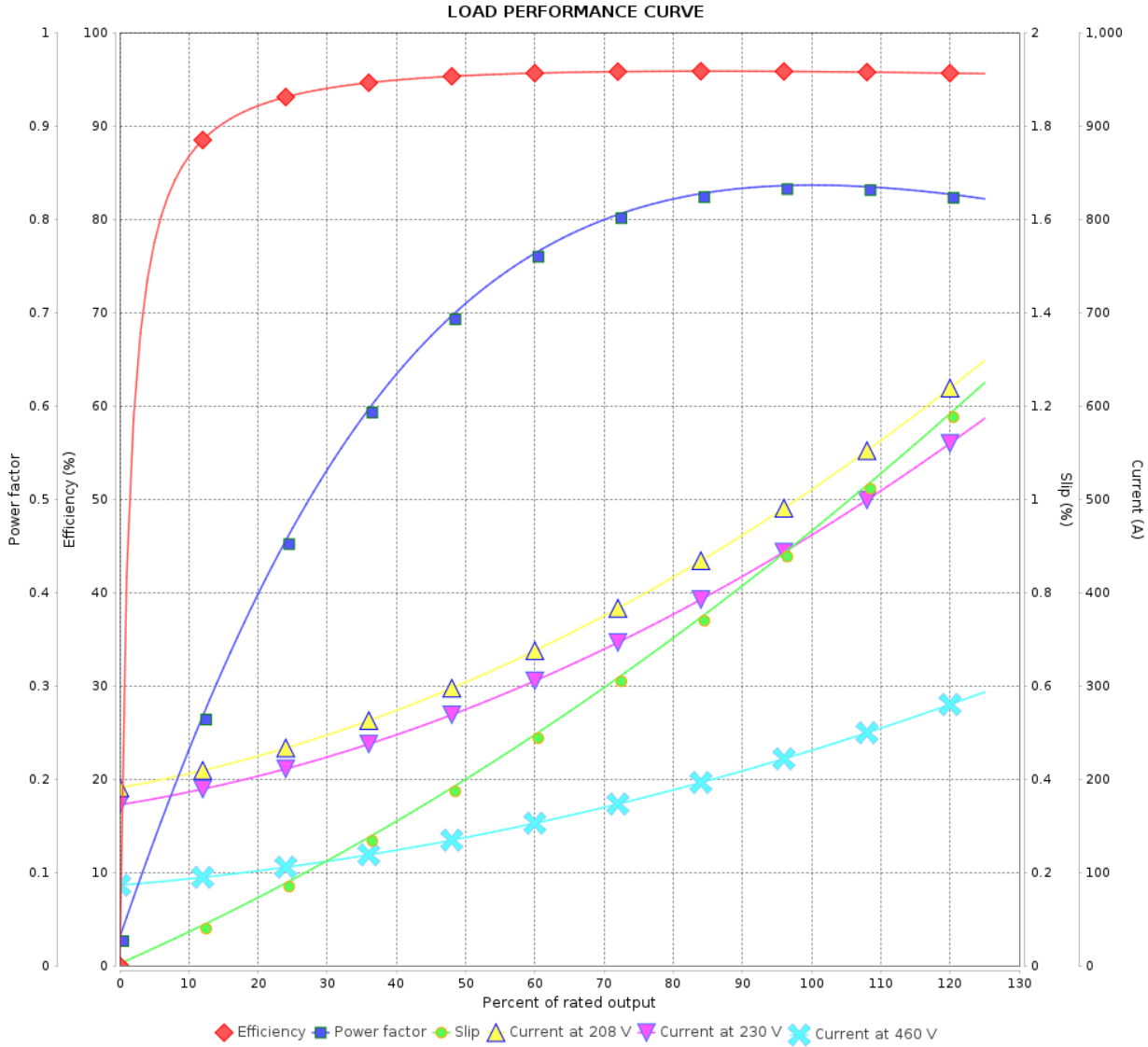
Three Phase Induction Motor - Squirrel Cage



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

Product line : W40 NEMA Premium Efficiency Three-Phase

Product code : 16246863



Performance : 230/460 V 60 Hz 4P

Rated current : 468/234 A  
 LRC : 6.6  
 Rated torque : 81.4 kgfm  
 Locked rotor torque : 210 %  
 Breakdown torque : 250 %  
 Rated speed : 1783 rpm

Moment of inertia (J) : 1.96 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

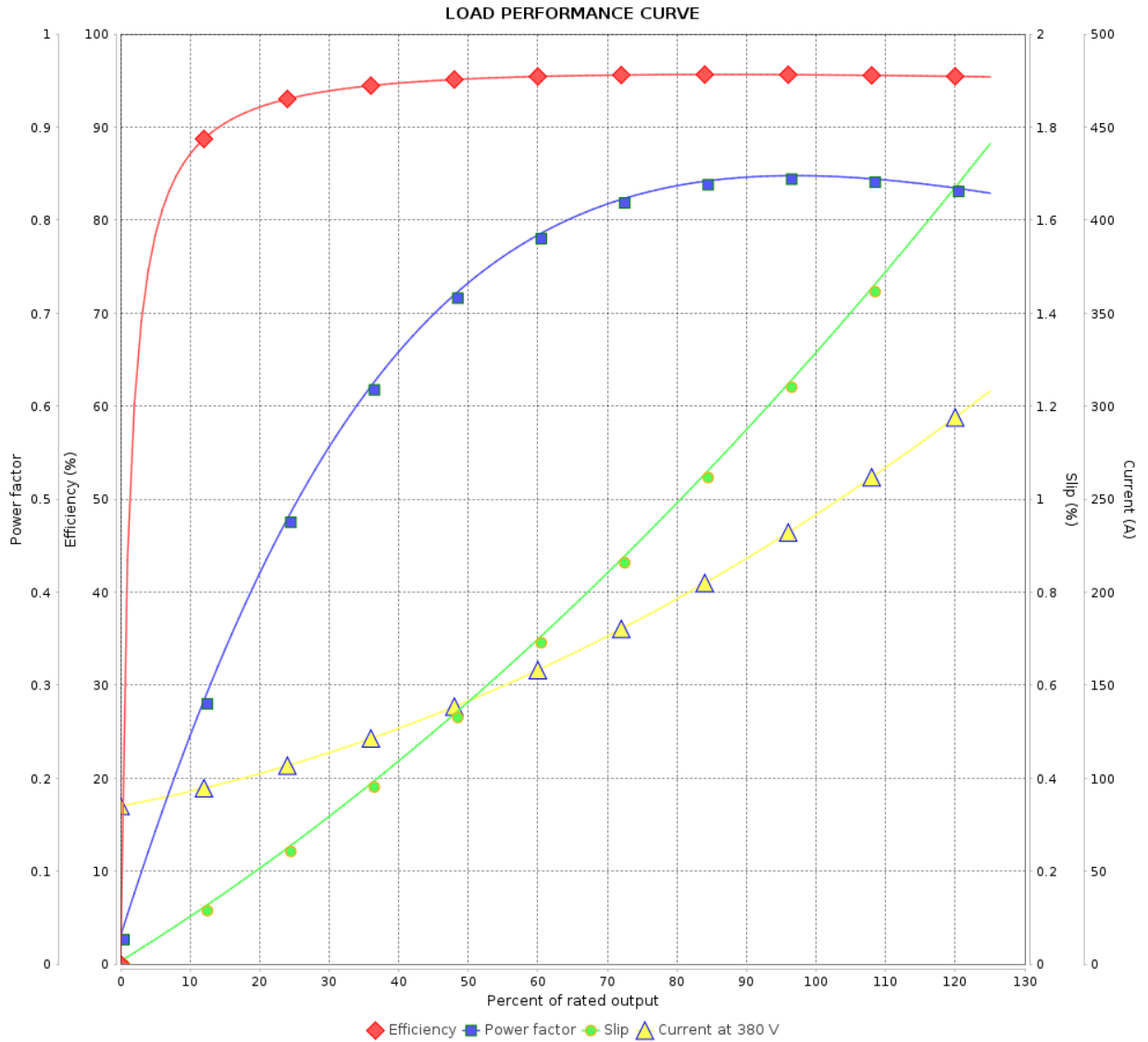
## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W40 NEMA Premium Efficiency Three-Phase

Product code : 16246863



Performance : 380 V 50 Hz 4P IE3

Rated current : 247 A  
 LRC : 6.6  
 Rated torque : 85.8 kgfm  
 Locked rotor torque : 190 %  
 Breakdown torque : 220 %  
 Rated speed : 1480 rpm

Moment of inertia (J) : 1.96 kgm<sup>2</sup>  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.00  
 Temperature rise : 80 K  
 Design : B

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# LOAD PERFORMANCE CURVE

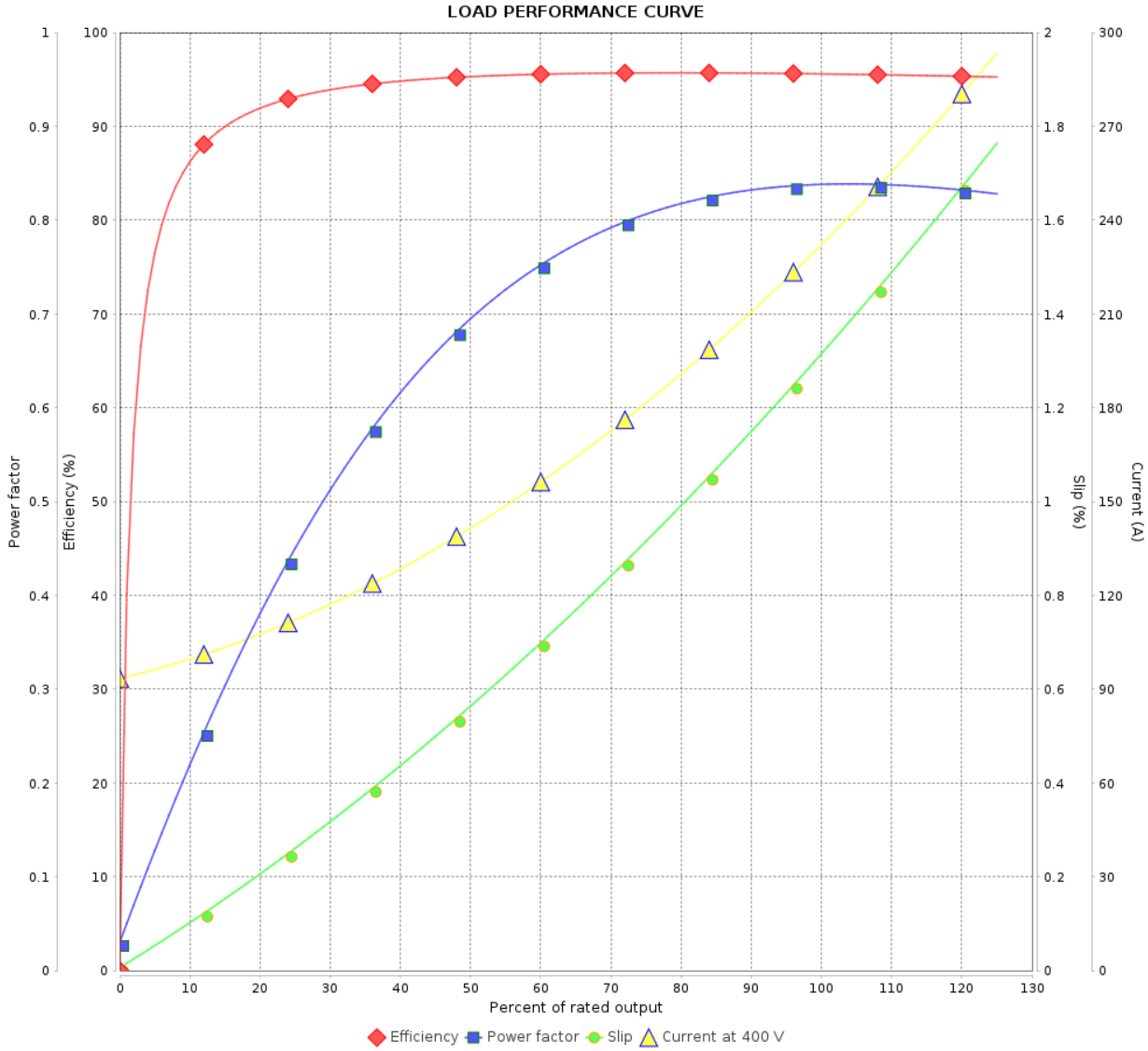
Three Phase Induction Motor - Squirrel Cage



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

Product line : W40 NEMA Premium Efficiency Three-Phase

Product code : 16246863



Performance : 400 V 50 Hz 4P IE3

Rated current : 237 A  
 LRC : 6.9  
 Rated torque : 85.8 kgfm  
 Locked rotor torque : 210 %  
 Breakdown torque : 250 %  
 Rated speed : 1480 rpm

Moment of inertia (J) : 1.96 kgm<sup>2</sup>  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.00  
 Temperature rise : 80 K  
 Design : B

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# LOAD PERFORMANCE CURVE

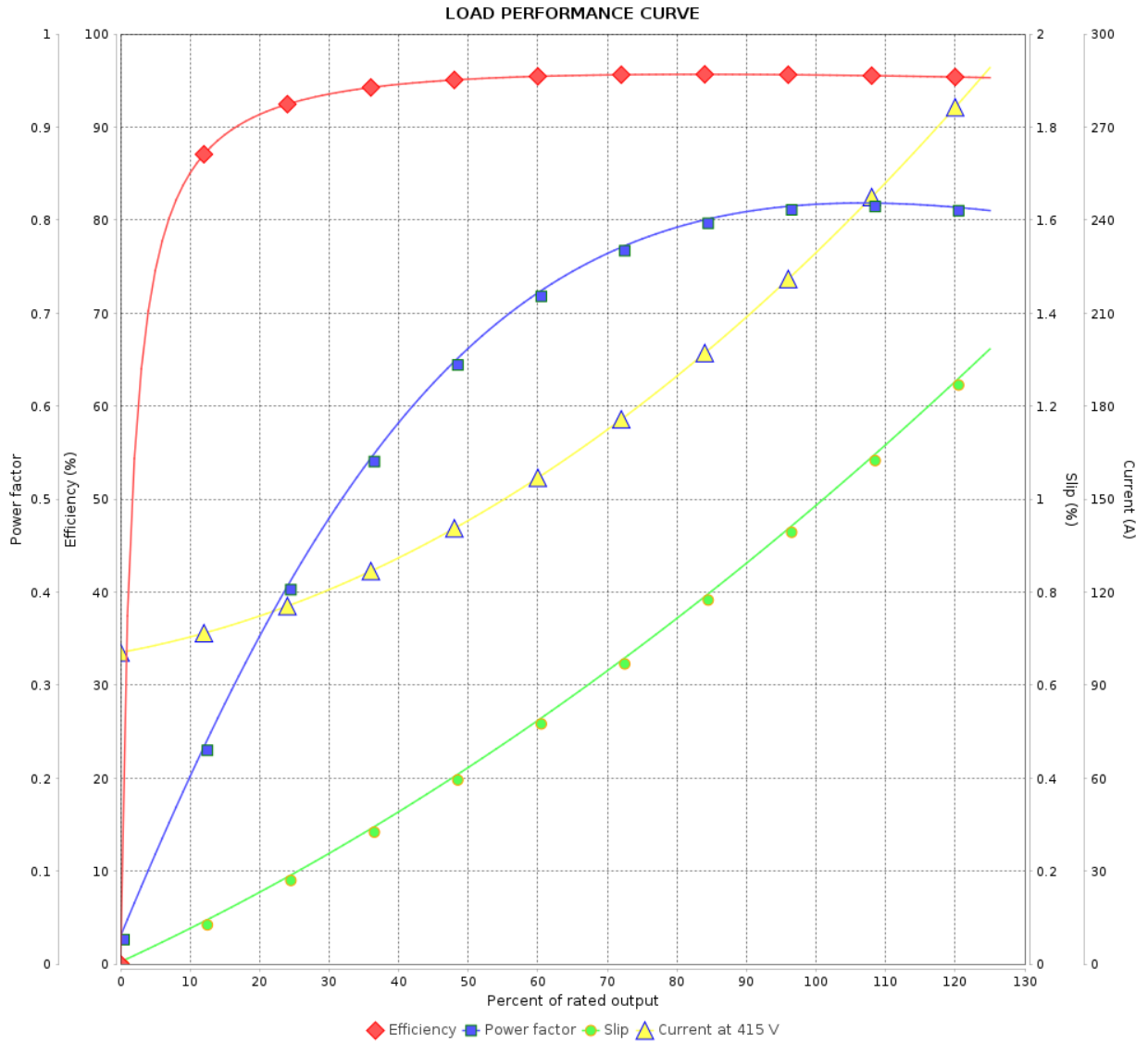
## Three Phase Induction Motor - Squirrel Cage



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

Product line : W40 NEMA Premium Efficiency Three-Phase

Product code : 16246863



Performance : 415 V 50 Hz 4P IE3

Rated current : 234 A  
 LRC : 6.7  
 Rated torque : 85.5 kgfm  
 Locked rotor torque : 229 %  
 Breakdown torque : 270 %  
 Rated speed : 1485 rpm

Moment of inertia (J) : 1.96 kgm<sup>2</sup>  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.00  
 Temperature rise : 80 K  
 Design : B

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