

# DATA SHEET



## Three Phase Induction Motor - Squirrel Cage

Customer :					
Product line : W40 NEMA Premium Efficiency Three-Phase		Product code : 14448257			
Frame : 444/5T	Insulation class : F	Duty cycle : Cont.(S1)	Ambient temperature : -20°C to +40°C	Altitude : 1000 m.a.s.l.	
Protection degree : IP23	Design : B	Cooling method : IC01 - ODP	Mounting : F-1	Rotation <sup>1</sup> : Both (CW and CCW)	
		Starting method : Direct On Line	Approx. weight <sup>3</sup> : 688 kg	Moment of inertia (J) : 2.14 kgm <sup>2</sup>	
Output [HP]	250	200	200	200	
Poles	4	4	4	4	
Frequency [Hz]	60	50	50	50	
Rated voltage [V]	230/460	380	400	415	
Rated current [A]	578/289	283	272	269	
L. R. Amperes [A]	3699/1850	1953	1986	1991	
LRC [A]	6.4x(Code G)	6.9x(Code H)	7.3x(Code H)	7.4x(Code J)	
No load current [A]	212/106	105	115	125	
Rated speed [RPM]	1780	1480	1480	1485	
Slip [%]	1.11	1.33	1.33	1.00	
Rated torque [kgfm]	102	98.1	98.1	97.7	
Locked rotor torque [%]	210	200	229	250	
Breakdown torque [%]	240	220	240	270	
Service factor	1.15	1.00	1.00	1.00	
Temperature rise	80 K	80 K	80 K	80 K	
Locked rotor time	16s (cold) 9s (hot)	14s (cold) 8s (hot)	14s (cold) 8s (hot)	14s (cold) 8s (hot)	
Noise level <sup>2</sup>	78.0 dB(A)				
Efficiency (%)	25%				
	50%	95.4	95.5	95.3	
	75%	95.8	95.6	95.5	
	100%	95.8	95.8	95.8	
Power Factor	25%				
	50%	0.72	0.72	0.67	
	75%	0.80	0.81	0.78	
	100%	0.84	0.84	0.83	
Bearing type	: Drive end : 6319 C3	: Non drive end : 6212 Z C3	Foundation loads		
Sealing	: Without	: Without	Max. traction	: 1964 kgf	
	: Bearing Seal	: Bearing Seal	Max. compression	: 2652 kgf	
Lubrication interval	: 20000 h	: 20000 h			
Lubricant amount	: 45 g	: 13 g			
Lubricant type	: Mobil Polyrex EM				
Notes USABLE @208V 639A SF 1.00 SFA 639A					
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

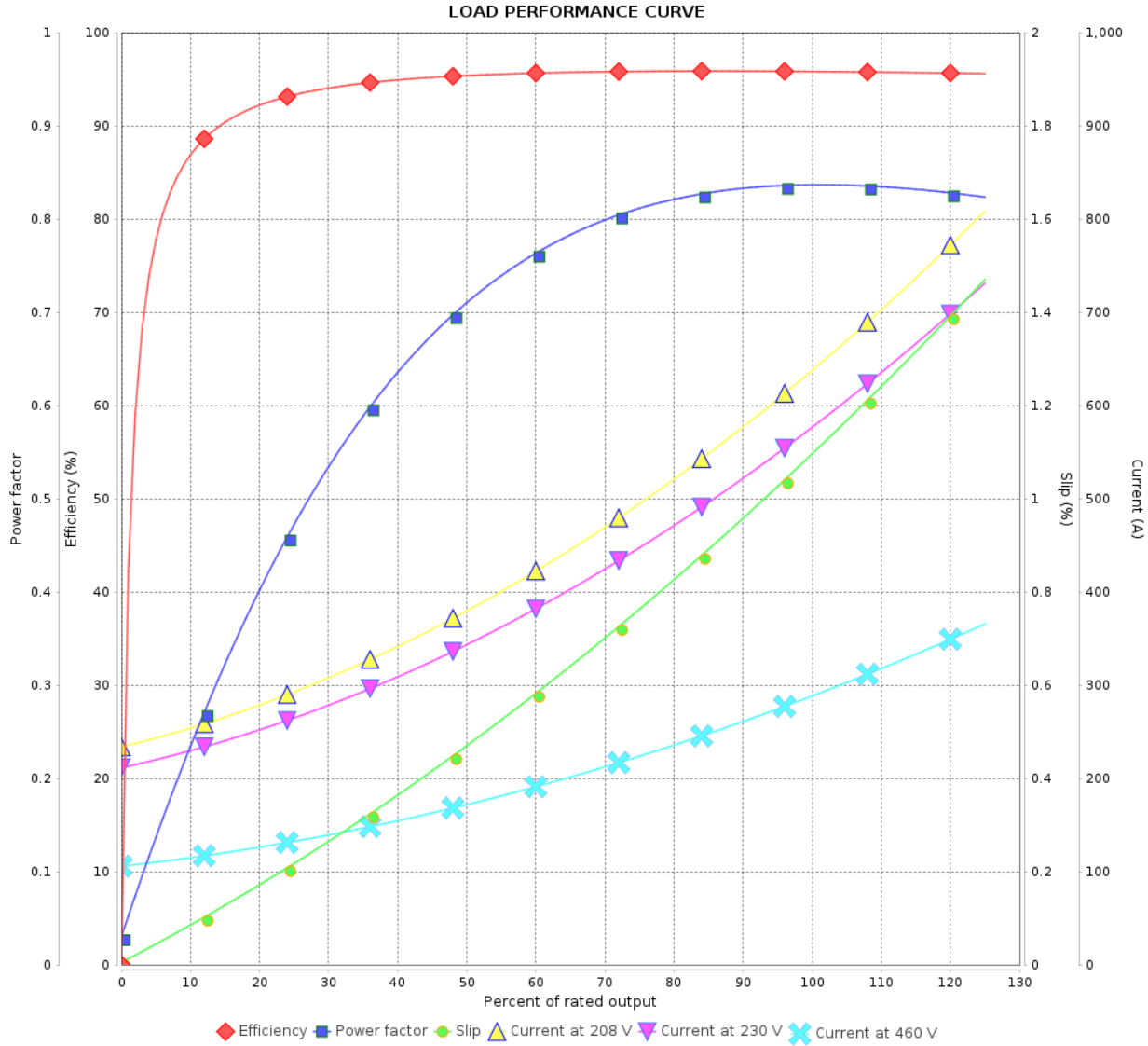
Three Phase Induction Motor - Squirrel Cage



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

Product line : W40 NEMA Premium Efficiency Three-Phase

Product code : 14448257



Performance : 230/460 V 60 Hz 4P

Rated current : 578/289 A  
 LRC : 6.4  
 Rated torque : 102 kgfm  
 Locked rotor torque : 210 %  
 Breakdown torque : 240 %  
 Rated speed : 1780 rpm

Moment of inertia (J) : 2.14 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

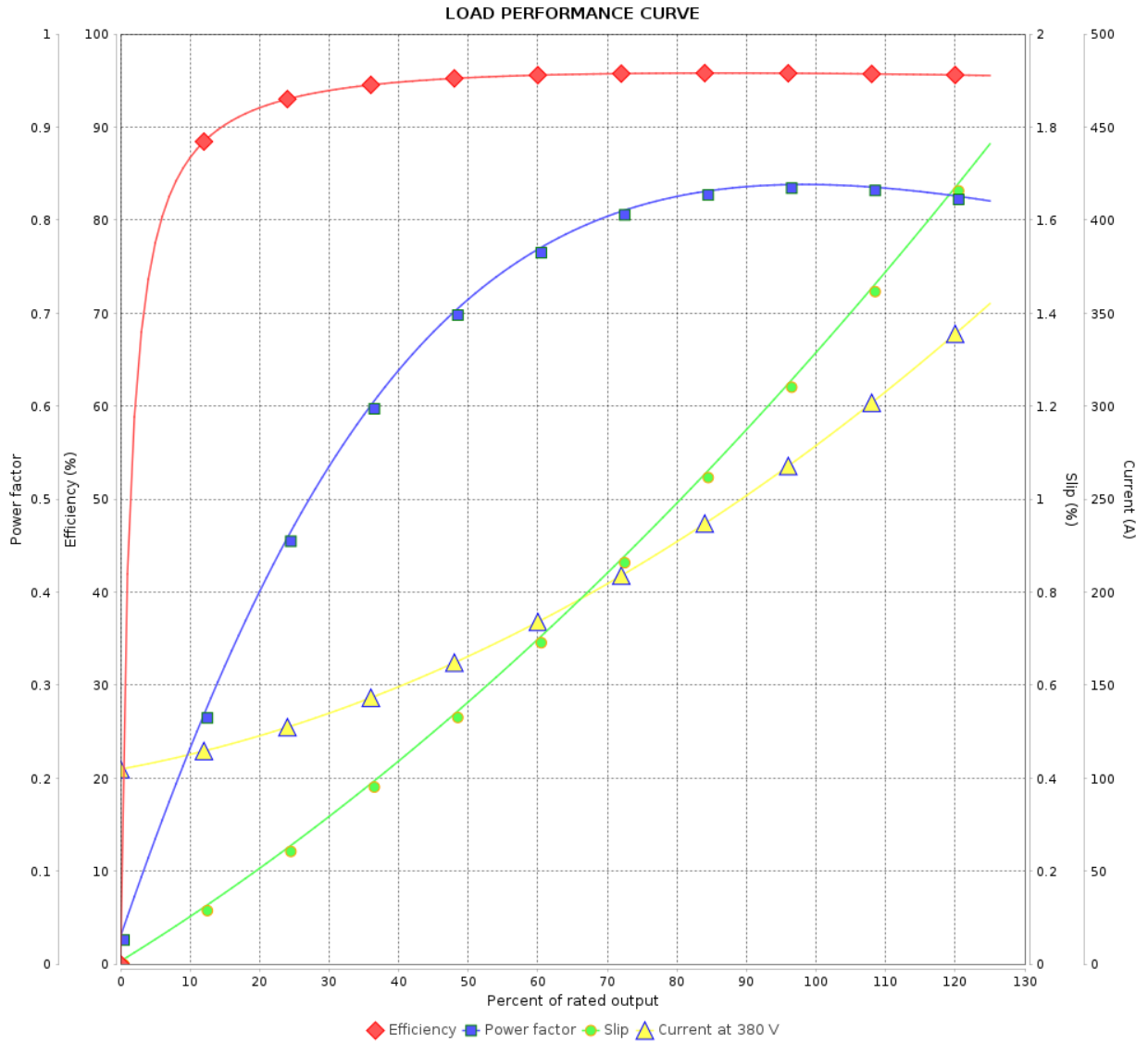
## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W40 NEMA Premium Efficiency Three-Phase

Product code : 14448257



Performance : 380 V 50 Hz 4P IE3

Rated current : 283 A  
 LRC : 6.9  
 Rated torque : 98.1 kgfm  
 Locked rotor torque : 200 %  
 Breakdown torque : 220 %  
 Rated speed : 1480 rpm

Moment of inertia (J) : 2.14 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

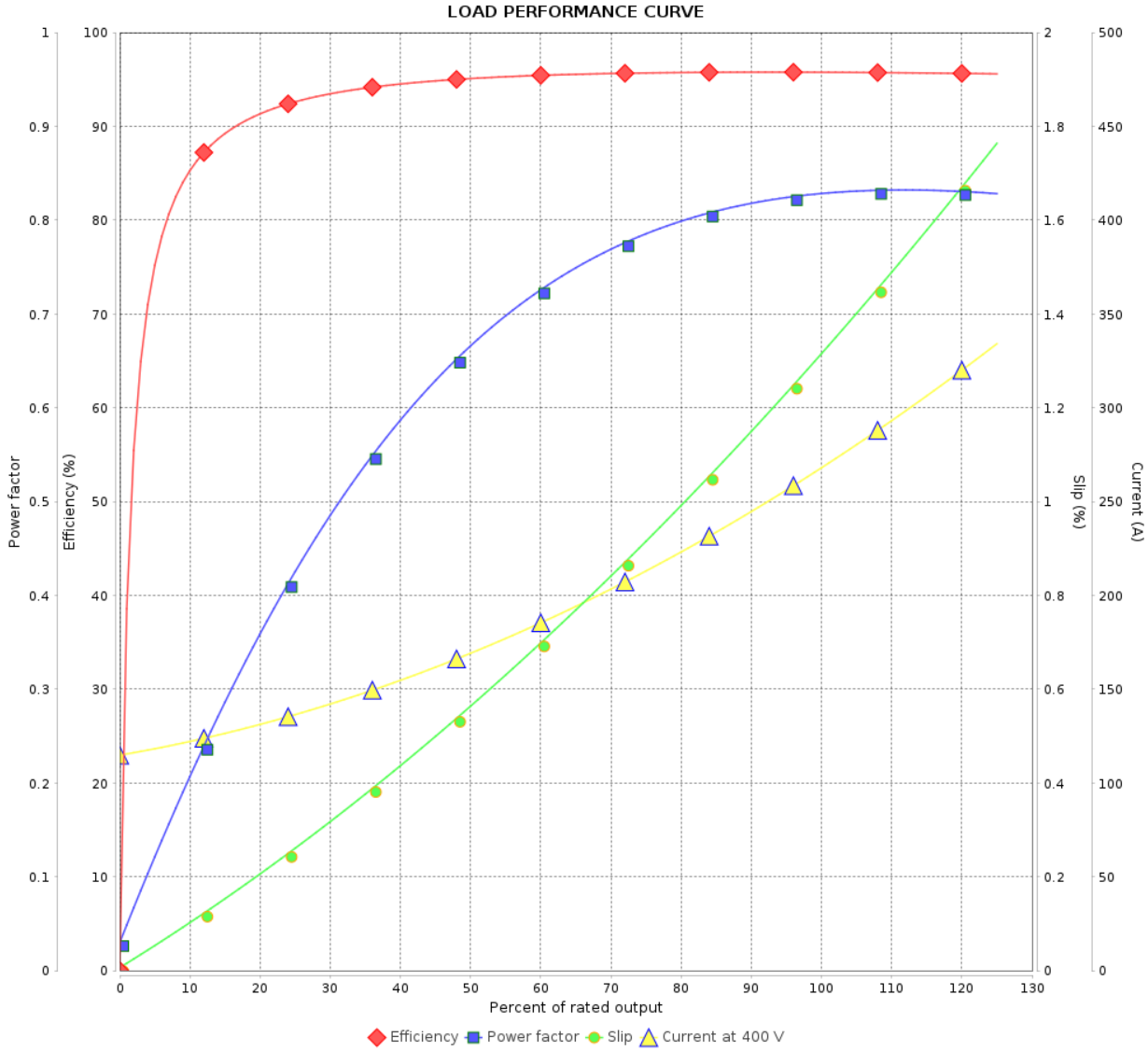
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W40 NEMA Premium Efficiency Three-Phase

Product code : 14448257



Performance : 400 V 50 Hz 4P IE3

Rated current	: 272 A	Moment of inertia (J)	: 2.14 kgm <sup>2</sup>
LRC	: 7.3	Duty cycle	: Cont.(S1)
Rated torque	: 98.1 kgfm	Insulation class	: F
Locked rotor torque	: 229 %	Service factor	: 1.00
Breakdown torque	: 240 %	Temperature rise	: 80 K
Rated speed	: 1480 rpm	Design	: B

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# LOAD PERFORMANCE CURVE

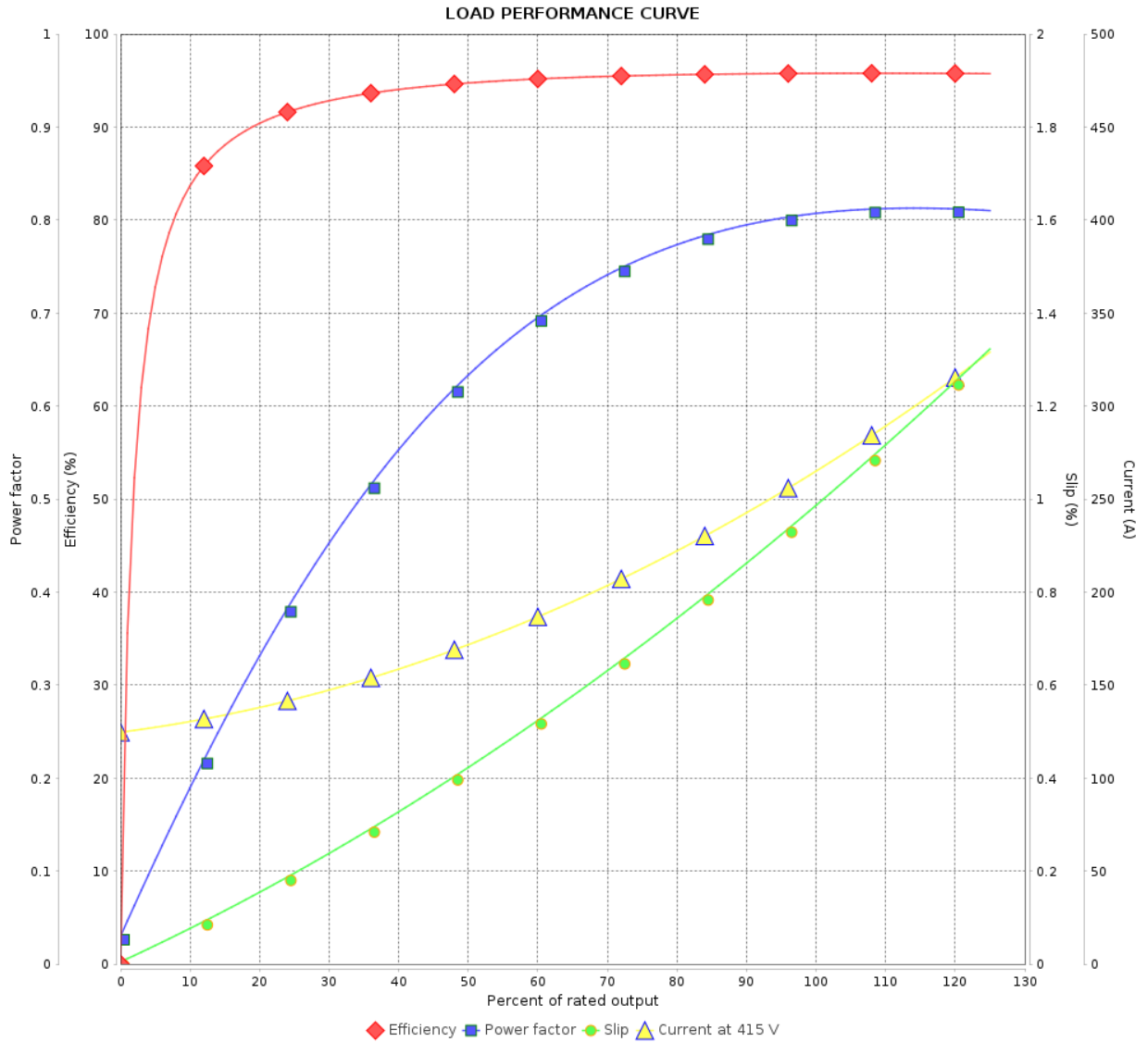
## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W40 NEMA Premium Efficiency Three-Phase

Product code : 14448257



Performance : 415 V 50 Hz 4P IE3

Rated current : 269 A  
 LRC : 7.4  
 Rated torque : 97.7 kgfm  
 Locked rotor torque : 250 %  
 Breakdown torque : 270 %  
 Rated speed : 1485 rpm

Moment of inertia (J) : 2.14 kgm<sup>2</sup>  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.00  
 Temperature rise : 80 K  
 Design : B

Rev.	Changes Summary	Performed	Checked	Date
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