

# DATA SHEET



## Three Phase Induction Motor - Squirrel Cage

Customer :					
Product line : W40 NEMA Premium Efficiency Three-Phase		Product code : 14429855			
Frame : 364/5TS	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> : 332 kg	Moment of inertia (J) : 0.3034 kgm <sup>2</sup>	
Output [HP]	100	75	75	75	
Poles	2	2	2	2	
Frequency [Hz]	60	50	50	50	
Rated voltage [V]	230/460	380	400	415	
Rated current [A]	232/116	103	100	97.8	
L. R. Amperes [A]	1531/766	773	800	773	
LRC [A]	6.6x(Code G)	7.5x(Code H)	8.0x(Code J)	7.9x(Code J)	
No load current [A]	59.0/29.5	28.5	32.5	35.0	
Rated speed [RPM]	3555	2960	2964	2967	
Slip [%]	1.25	1.33	1.20	1.10	
Rated torque [kgfm]	20.4	18.4	18.4	18.3	
Locked rotor torque [%]	180	220	240	250	
Breakdown torque [%]	229	260	280	320	
Service factor	1.25	1.00	1.00	1.00	
Temperature rise	80 K	80 K	80 K	80 K	
Locked rotor time	23s (cold) 13s (hot)	19s (cold) 11s (hot)	18s (cold) 10s (hot)	19s (cold) 11s (hot)	
Noise level <sup>2</sup>	84.0 dB(A)				
Efficiency (%)	25%				
	50%	92.4	90.2	90.3	
	75%	93.6	91.9	92.0	
	100%	93.6	94.3	94.3	
Power Factor	25%				
	50%	0.77	0.74	0.69	
	75%	0.84	0.83	0.78	
	100%	0.87	0.86	0.84	
Bearing type	: <u>Drive end</u> 6314 C3	<u>Non drive end</u> 6212 Z C3	Foundation loads		
Sealing	: Without	Without	Max. traction	: 494 kgf	
	Bearing Seal	Bearing Seal	Max. compression	: 826 kgf	
Lubrication interval	: 14418 h	20000 h			
Lubricant amount	: 27 g	13 g			
Lubricant type	: Mobil Polyrex EM				
Notes USABLE @208V 257A SF 1.15 SFA 295A					
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

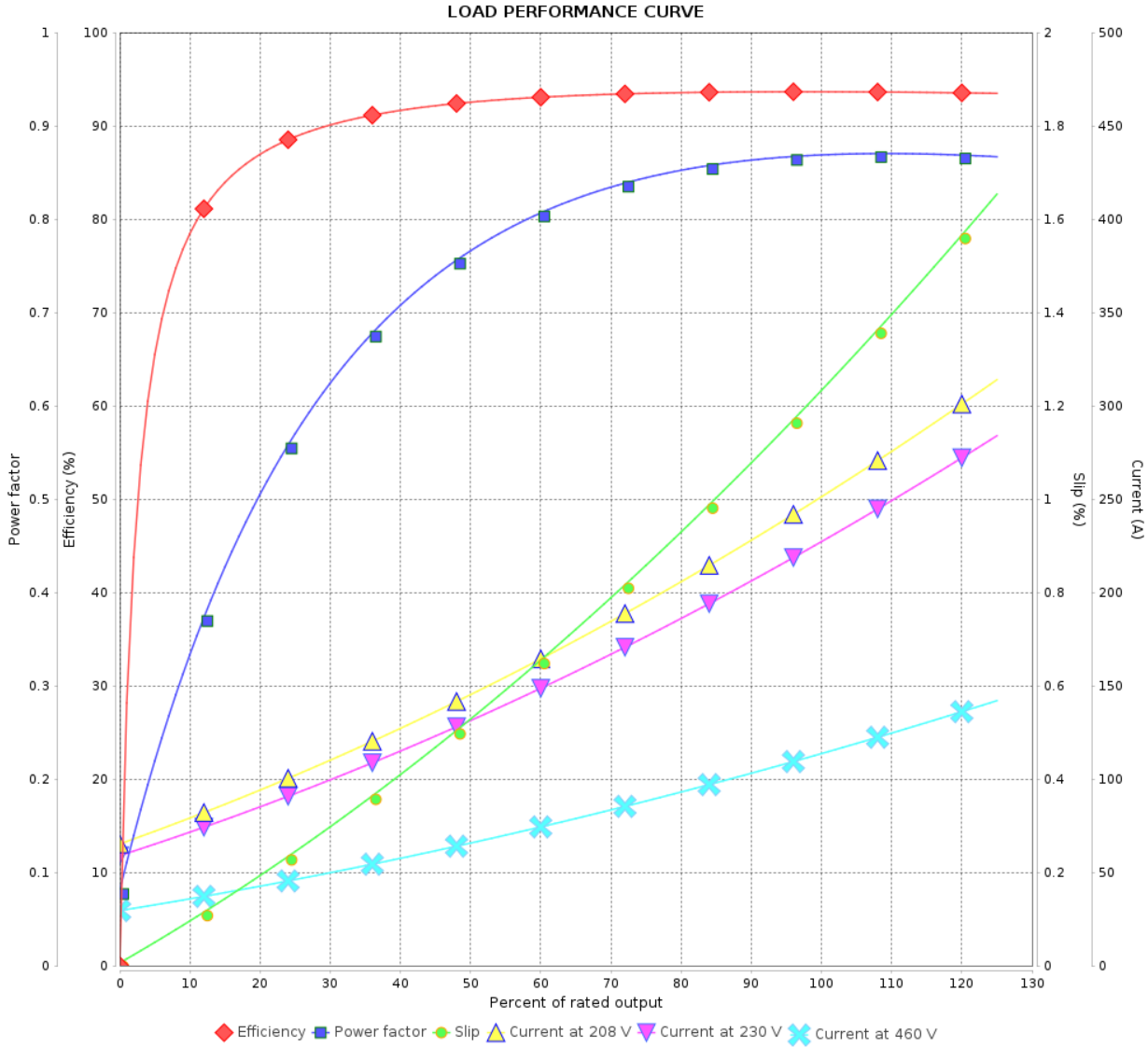
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W40 NEMA Premium Efficiency Three-Phase

Product code : 14429855



Performance : 230/460 V 60 Hz 2P

Rated current : 232/116 A  
 LRC : 6.6  
 Rated torque : 20.4 kgfm  
 Locked rotor torque : 180 %  
 Breakdown torque : 229 %  
 Rated speed : 3555 rpm

Moment of inertia (J) : 0.3034 kgm<sup>2</sup>  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.25  
 Temperature rise : 80 K  
 Design : B

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# LOAD PERFORMANCE CURVE

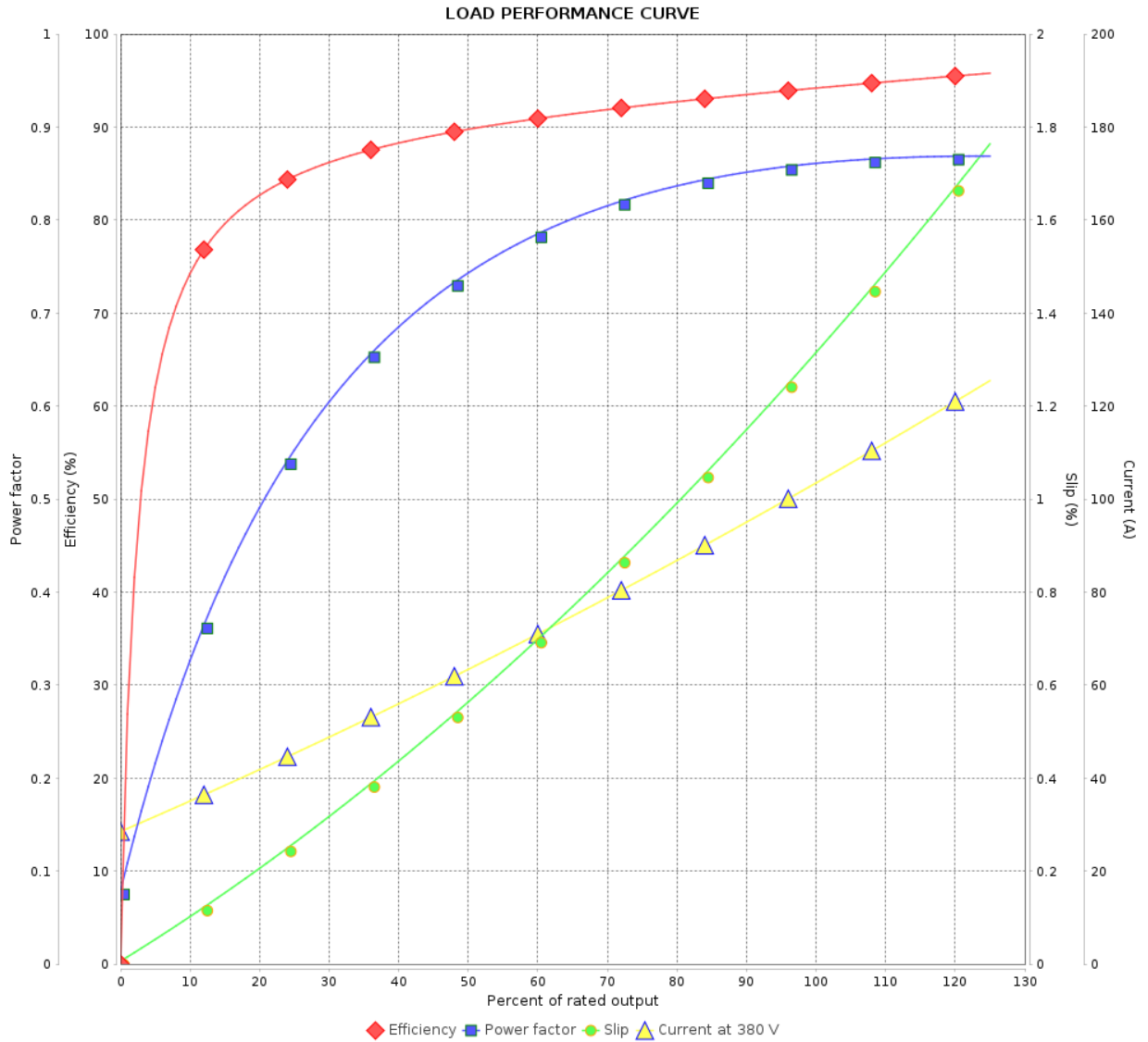
## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W40 NEMA Premium Efficiency Three-Phase

Product code : 14429855



Performance : 380 V 50 Hz 2P IE3

Rated current : 103 A  
 LRC : 7.5  
 Rated torque : 18.4 kgfm  
 Locked rotor torque : 220 %  
 Breakdown torque : 260 %  
 Rated speed : 2960 rpm

Moment of inertia (J) : 0.3034 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

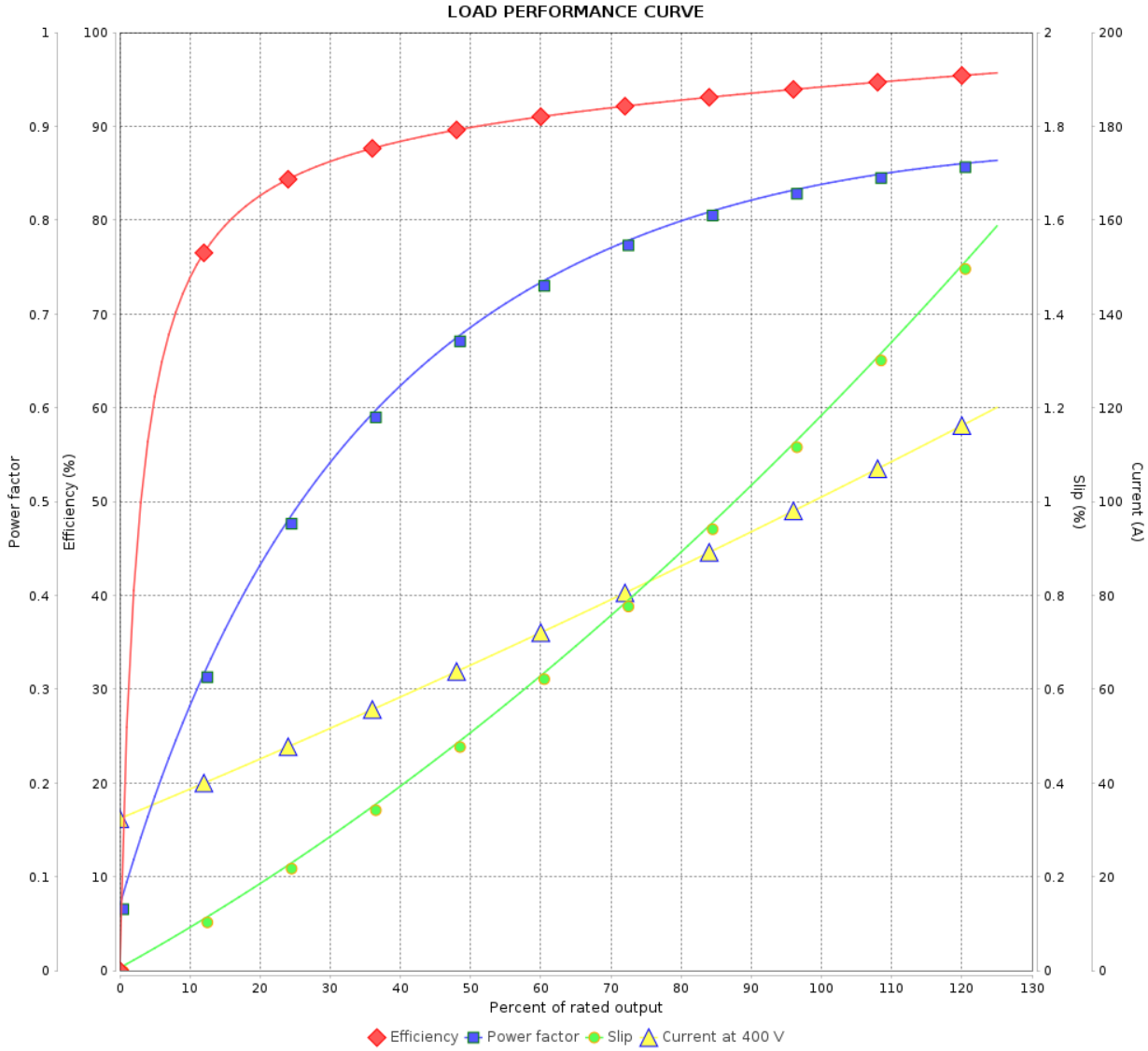
Three Phase Induction Motor - Squirrel Cage



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

Product line : W40 NEMA Premium Efficiency Three-Phase

Product code : 14429855



Performance : 400 V 50 Hz 2P IE3

Rated current : 100 A  
 LRC : 8.0  
 Rated torque : 18.4 kgfm  
 Locked rotor torque : 240 %  
 Breakdown torque : 280 %  
 Rated speed : 2964 rpm

Moment of inertia (J) : 0.3034 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

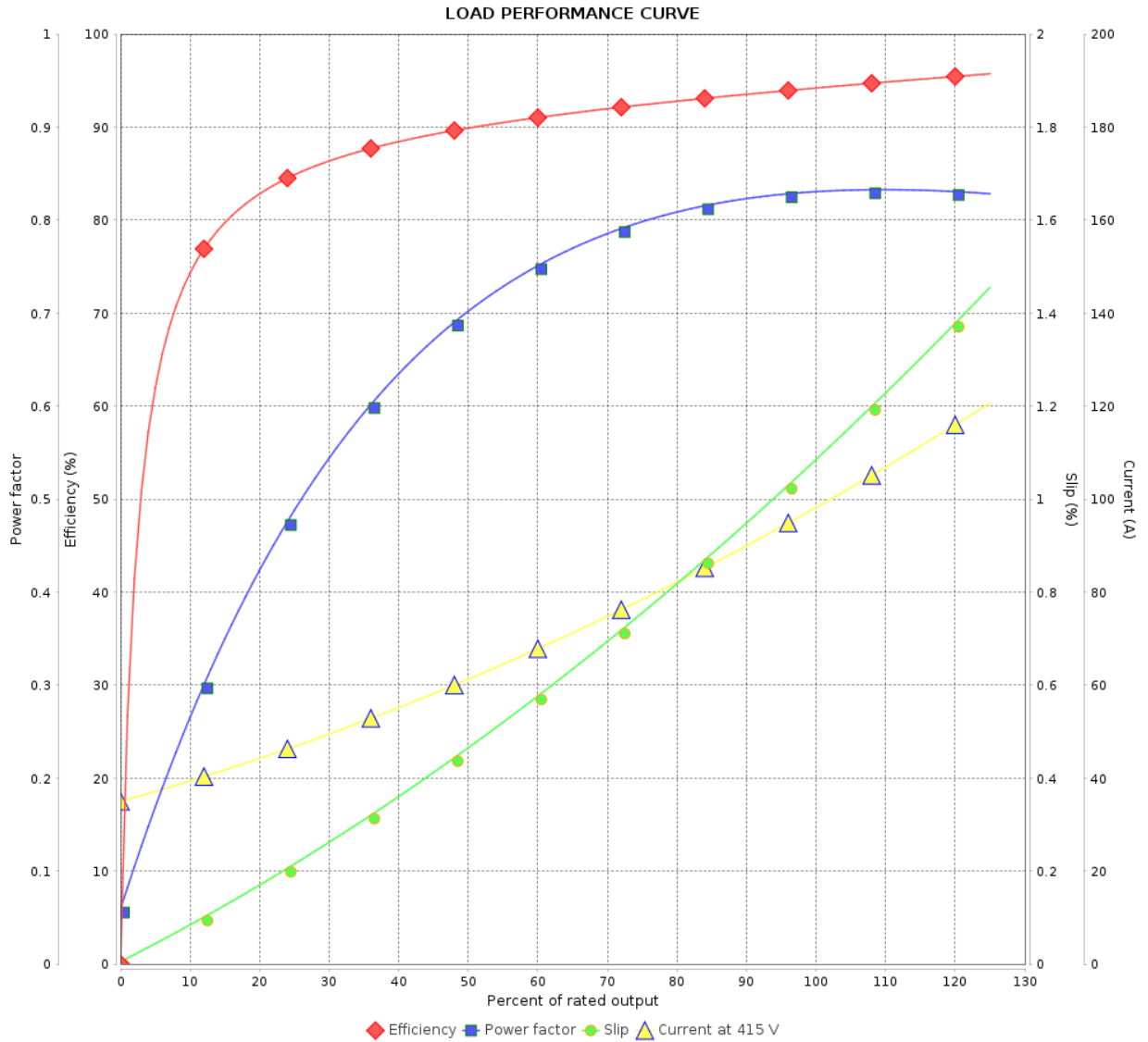
## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W40 NEMA Premium Efficiency Three-Phase

Product code : 14429855



Performance : 415 V 50 Hz 2P IE3

Rated current : 97.8 A  
 LRC : 7.9  
 Rated torque : 18.3 kgfm  
 Locked rotor torque : 250 %  
 Breakdown torque : 320 %  
 Rated speed : 2967 rpm

Moment of inertia (J) : 0.3034 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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