

# DATA SHEET



## Three Phase Induction Motor - Squirrel Cage

Customer :					
Product line : W40 NEMA Premium Efficiency Three-Phase		Product code : 14429569			
Frame : 364/5T	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> : 338 kg	Moment of inertia (J) : 0.6555 kgm <sup>2</sup>	
Output [HP]	60	50	50	50	
Poles	4	4	4	4	
Frequency [Hz]	60	50	50	50	
Rated voltage [V]	230/460	380	400	415	
Rated current [A]	140/69.9	69.6	66.9	65.3	
L. R. Amperes [A]	909/454	473	482	457	
LRC [A]	6.5x(Code G)	6.8x(Code G)	7.2x(Code H)	7.0x(Code H)	
No load current [A]	49.4/24.7	24.4	26.2	27.7	
Rated speed [RPM]	1780	1480	1480	1485	
Slip [%]	1.11	1.33	1.33	1.00	
Rated torque [kgfm]	24.5	24.5	24.5	24.4	
Locked rotor torque [%]	200	200	220	240	
Breakdown torque [%]	240	229	250	270	
Service factor	1.25	1.00	1.00	1.00	
Temperature rise	80 K	80 K	80 K	80 K	
Locked rotor time	34s (cold) 19s (hot)	32s (cold) 18s (hot)	30s (cold) 17s (hot)	28s (cold) 16s (hot)	
Noise level <sup>2</sup>	69.0 dB(A)				
Efficiency (%)	25%				
	50%	94.5	93.5	93.5	
	75%	95.0	93.9	93.9	
	100%	95.0	93.9	93.9	
Power Factor	25%				
	50%	0.73	0.74	0.71	
	75%	0.82	0.83	0.81	
	100%	0.85	0.86	0.85	
Bearing type	: <u>Drive end</u> 6314 C3	<u>Non drive end</u> 6212 Z C3	Foundation loads		
Sealing	: Without	Without	Max. traction	: 572 kgf	
	Bearing Seal	Bearing Seal	Max. compression	: 911 kgf	
Lubrication interval	: 20000 h	20000 h			
Lubricant amount	: 27 g	13 g			
Lubricant type	: Mobil Polyrex EM				
Notes USABLE @208V 155A SF 1.15 SFA 178A					
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

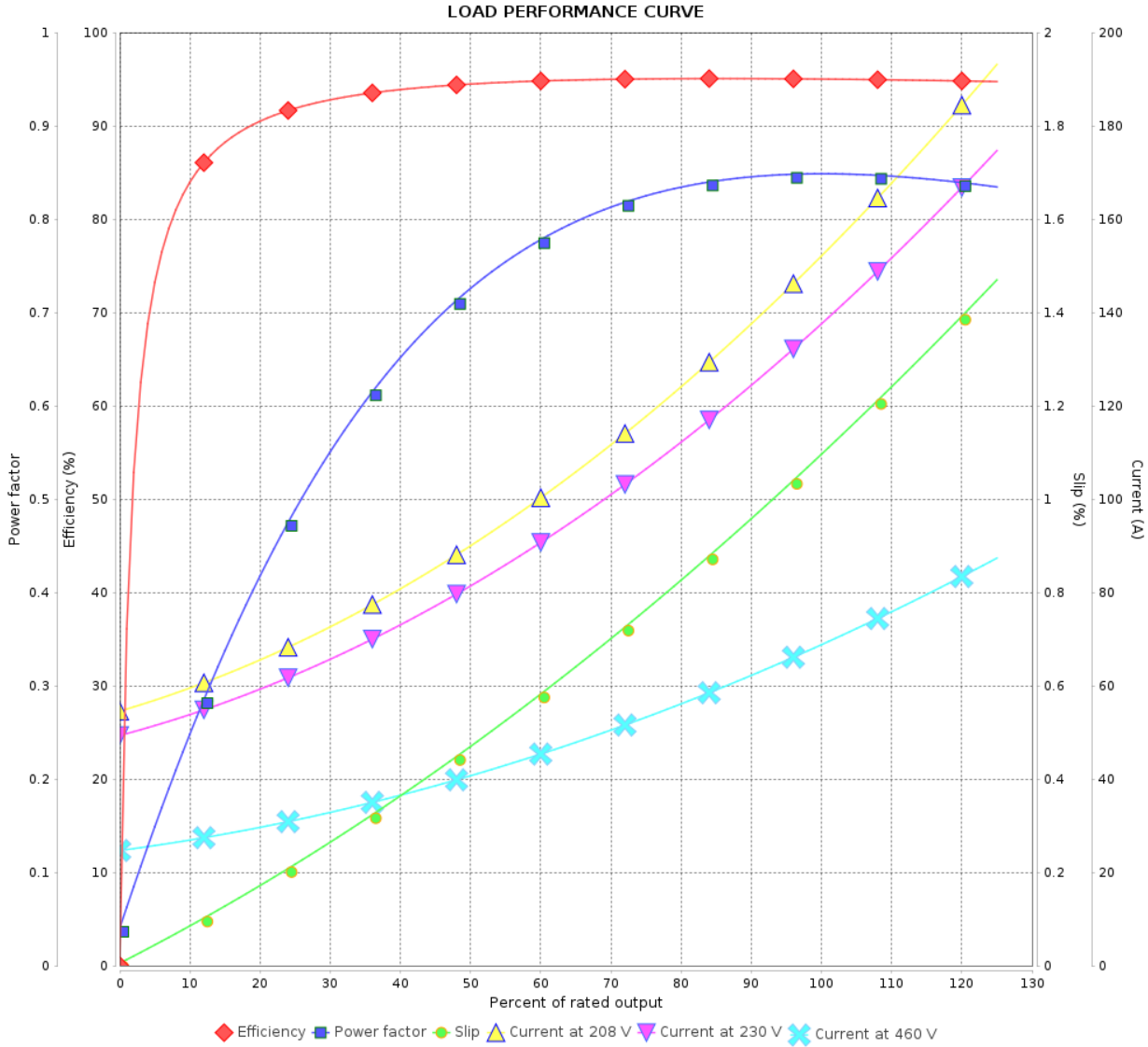
Three Phase Induction Motor - Squirrel Cage



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

Product line : W40 NEMA Premium Efficiency Three-Phase

Product code : 14429569



Performance : 230/460 V 60 Hz 4P

Rated current : 140/69.9 A  
 LRC : 6.5  
 Rated torque : 24.5 kgfm  
 Locked rotor torque : 200 %  
 Breakdown torque : 240 %  
 Rated speed : 1780 rpm

Moment of inertia (J) : 0.6555 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

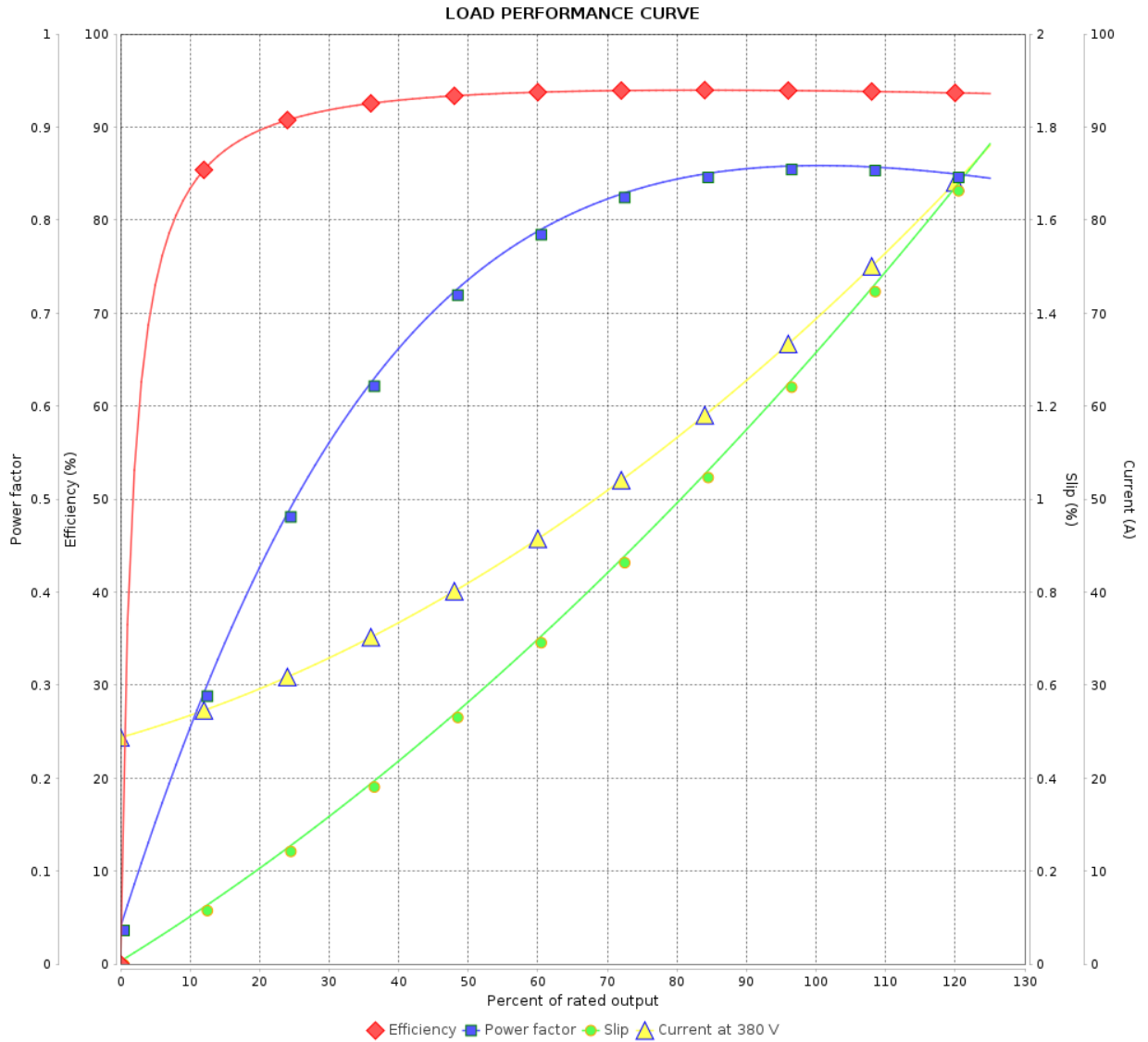
## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W40 NEMA Premium Efficiency Three-Phase

Product code : 14429569



Performance : 380 V 50 Hz 4P IE3

Rated current : 69.6 A  
 LRC : 6.8  
 Rated torque : 24.5 kgfm  
 Locked rotor torque : 200 %  
 Breakdown torque : 229 %  
 Rated speed : 1480 rpm

Moment of inertia (J) : 0.6555 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

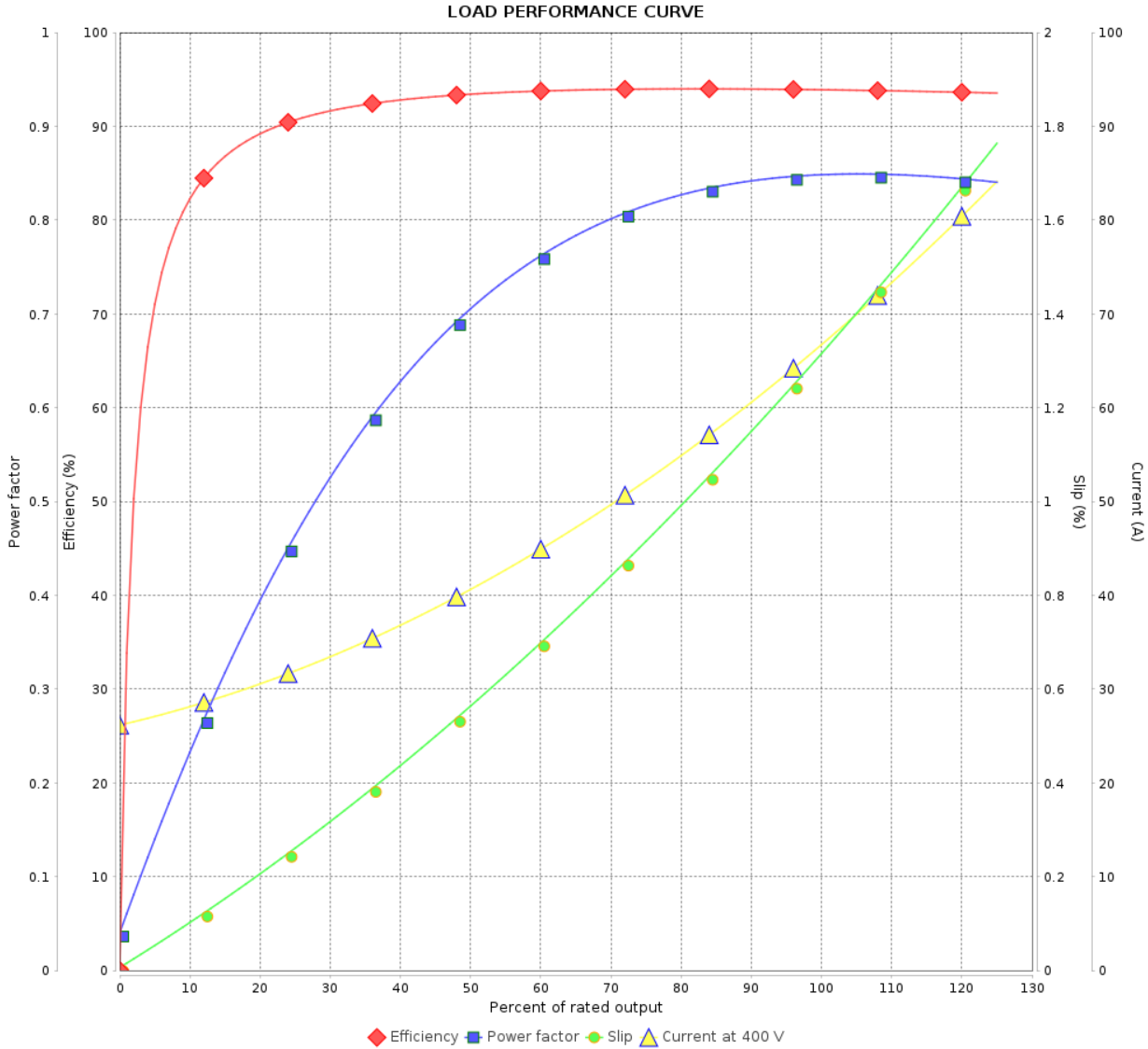
Three Phase Induction Motor - Squirrel Cage



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

Product line : W40 NEMA Premium Efficiency Three-Phase

Product code : 14429569



Performance : 400 V 50 Hz 4P IE3

Rated current : 66.9 A  
 LRC : 7.2  
 Rated torque : 24.5 kgfm  
 Locked rotor torque : 220 %  
 Breakdown torque : 250 %  
 Rated speed : 1480 rpm

Moment of inertia (J) : 0.6555 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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Date				

# LOAD PERFORMANCE CURVE

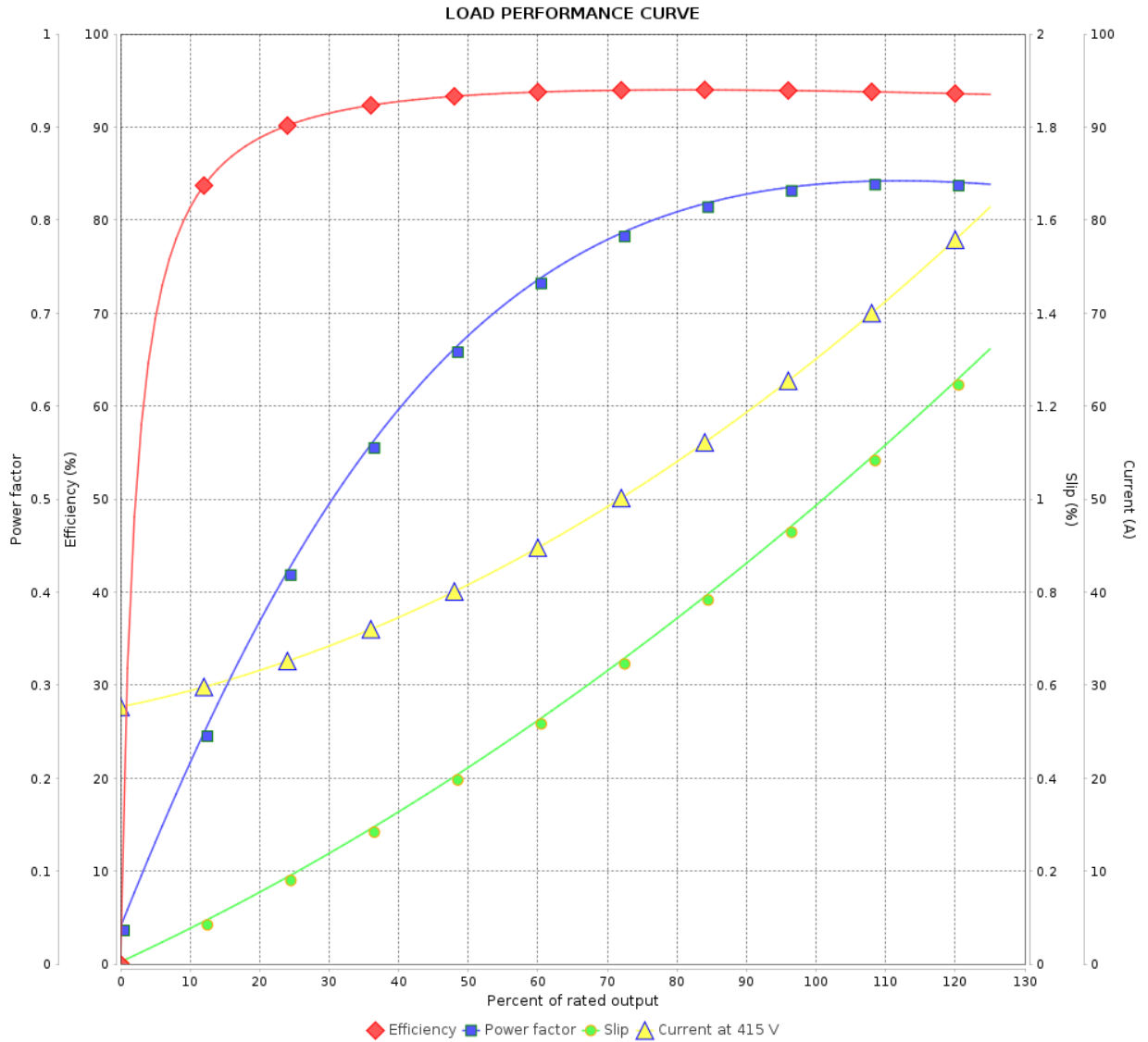
## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W40 NEMA Premium Efficiency Three-Phase

Product code : 14429569



Performance : 415 V 50 Hz 4P IE3

Rated current : 65.3 A  
 LRC : 7.0  
 Rated torque : 24.4 kgfm  
 Locked rotor torque : 240 %  
 Breakdown torque : 270 %  
 Rated speed : 1485 rpm

Moment of inertia (J) : 0.6555 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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