

# DATA SHEET



## Three Phase Induction Motor - Squirrel Cage

Customer :					
Product line		: W40 NEMA Premium Efficiency Three-Phase		Product code : 15280587	
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>	: 615 kg		
Protection degree	: IP23	Moment of inertia (J)	: 1.77 kgm <sup>2</sup>		
Design	: B				
Output [HP]	150	125	125	125	
Poles	4	4	4	4	
Frequency [Hz]	60	50	50	50	
Rated voltage [V]	230/460	380	400	415	
Rated current [A]	340/170	169	162	158	
L. R. Amperes [A]	2210/1105	1183	1199	1138	
LRC [A]	6.5x(Code G)	7.0x(Code G)	7.4x(Code H)	7.2x(Code H)	
No load current [A]	116/58.0	57.7	62.5	66.5	
Rated speed [RPM]	1784	1485	1485	1485	
Slip [%]	0.89	1.00	1.00	1.00	
Rated torque [kgfm]	61.0	61.1	61.1	61.1	
Locked rotor torque [%]	200	190	220	240	
Breakdown torque [%]	240	240	270	290	
Service factor	1.25	1.00	1.00	1.00	
Temperature rise	80 K	80 K	80 K	80 K	
Locked rotor time	39s (cold) 22s (hot)	37s (cold) 21s (hot)	36s (cold) 20s (hot)	39s (cold) 22s (hot)	
Noise level <sup>2</sup>	78.0 dB(A)				
Efficiency (%)	25%				
	50%	95.4	94.9	94.9	
	75%	95.8	95.3	95.3	
	100%	95.8	95.3	95.3	
Power Factor	25%				
	50%	0.74	0.74	0.70	
	75%	0.82	0.82	0.80	
	100%	0.85	0.85	0.84	
Bearing type	: <u>Drive end</u> NU-319 C3	<u>Non drive end</u> 6314 C3	Foundation loads		
Sealing	: Without	Without	Max. traction	: 1242 kgf	
	Bearing Seal	Bearing Seal	Max. compression	: 1857 kgf	
Lubrication interval	: 18825 h	20000 h			
Lubricant amount	: 45 g	27 g			
Lubricant type	: Mobil Polyrex EM				
Notes USABLE @208V 376A SF 1.15 SFA 432A					
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

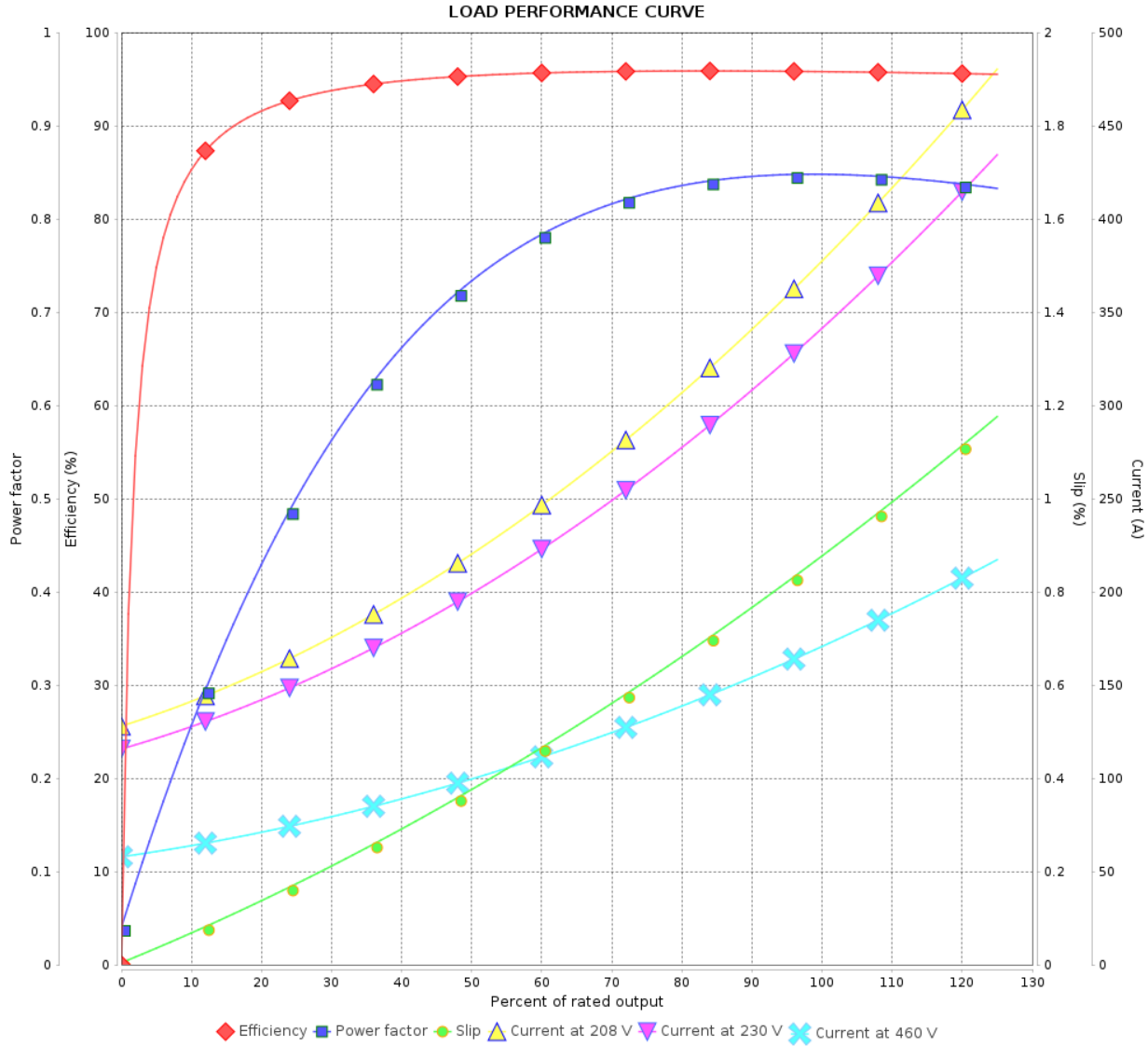
Three Phase Induction Motor - Squirrel Cage



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

Product line : W40 NEMA Premium Efficiency Three-Phase

Product code : 15280587



Performance : 230/460 V 60 Hz 4P

Rated current : 340/170 A  
 LRC : 6.5  
 Rated torque : 61.0 kgfm  
 Locked rotor torque : 200 %  
 Breakdown torque : 240 %  
 Rated speed : 1784 rpm

Moment of inertia (J) : 1.77 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

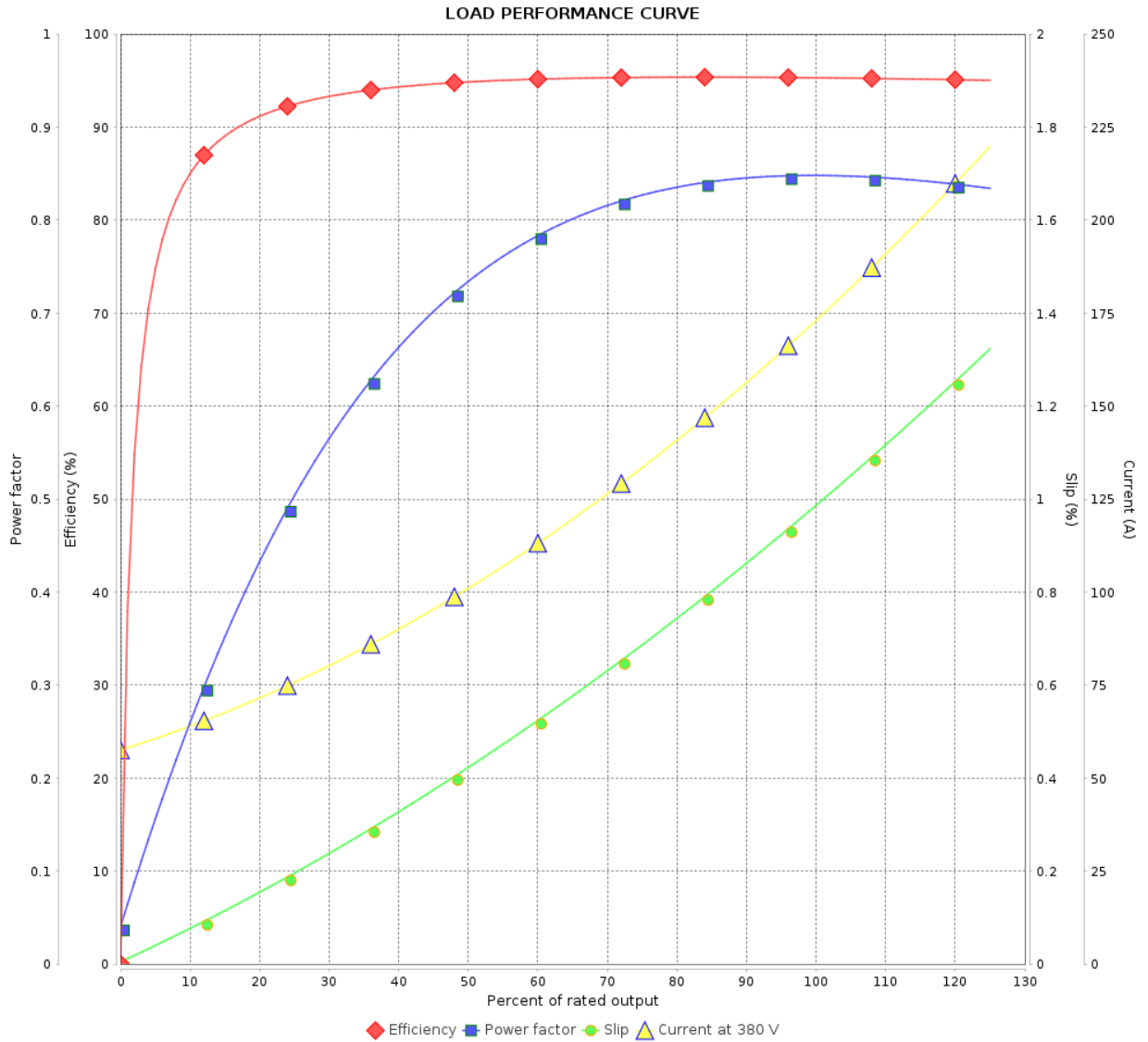
## Three Phase Induction Motor - Squirrel Cage



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

Product line : W40 NEMA Premium Efficiency Three-Phase

Product code : 15280587



Performance : 380 V 50 Hz 4P IE3

Rated current : 169 A  
 LRC : 7.0  
 Rated torque : 61.1 kgfm  
 Locked rotor torque : 190 %  
 Breakdown torque : 240 %  
 Rated speed : 1485 rpm

Moment of inertia (J) : 1.77 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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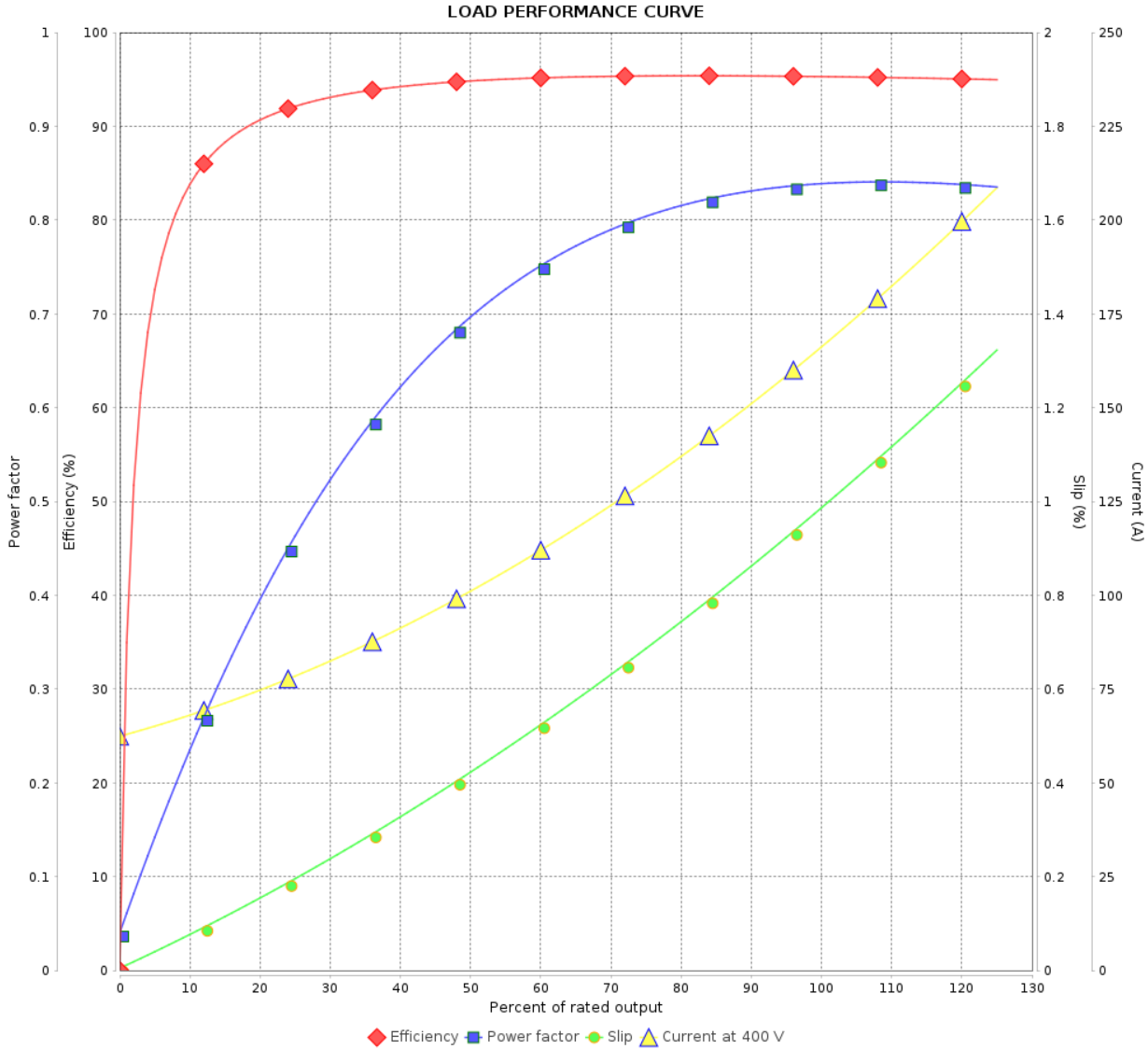
Three Phase Induction Motor - Squirrel Cage



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

Product line : W40 NEMA Premium Efficiency Three-Phase

Product code : 15280587



Performance : 400 V 50 Hz 4P IE3

Rated current : 162 A	Moment of inertia (J) : 1.77 kgm <sup>2</sup>
LRC : 7.4	Duty cycle : Cont.(S1)
Rated torque : 61.1 kgfm	Insulation class : F
Locked rotor torque : 220 %	Service factor : 1.00
Breakdown torque : 270 %	Temperature rise : 80 K
Rated speed : 1485 rpm	Design : B

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# LOAD PERFORMANCE CURVE

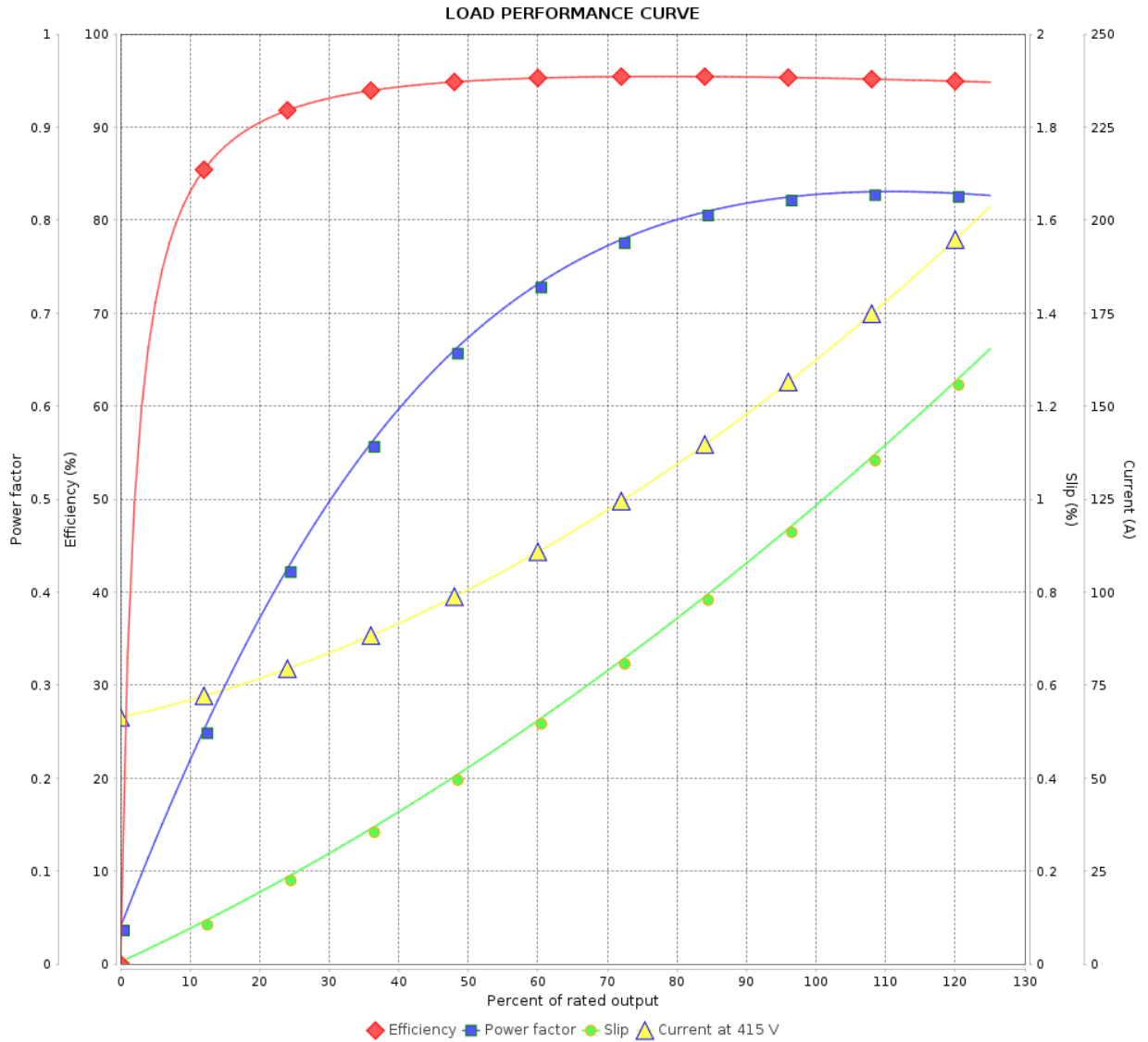
## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W40 NEMA Premium Efficiency Three-Phase

Product code : 15280587



Performance : 415 V 50 Hz 4P IE3

Rated current : 158 A  
 LRC : 7.2  
 Rated torque : 61.1 kgfm  
 Locked rotor torque : 240 %  
 Breakdown torque : 290 %  
 Rated speed : 1485 rpm

Moment of inertia (J) : 1.77 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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