

# DATA SHEET



## Three Phase Induction Motor - Squirrel Cage

Customer :					
Product line		: W21 Explosion Proof NEMA Premium Efficiency Three-Phase		Product code : 13826854	
Frame	: 444/5T	Cooling method	: IC411 - TEFC		
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>	: 1031 kg		
Protection degree	: IP55	Moment of inertia (J)	: 4.37 kgm <sup>2</sup>		
Design	: B				
Output [HP]	125	100	100	100	
Poles	6	6	6	6	
Frequency [Hz]	60	50	50	50	
Rated voltage [V]	230/460	380	400	415	
Rated current [A]	300/150	147	141	140	
L. R. Amperes [A]	2220/1110	1014	1086	1162	
LRC [A]	7.4x(Code H)	6.9x(Code H)	7.7x(Code J)	8.3x(Code K)	
No load current [A]	130/65.0	65.0	69.0	72.3	
Rated speed [RPM]	1185	985	985	985	
Slip [%]	1.25	1.50	1.50	1.50	
Rated torque [kgfm]	76.6	73.7	73.7	73.7	
Locked rotor torque [%]	229	210	229	250	
Breakdown torque [%]	240	229	260	280	
Service factor	1.15	1.00	1.00	1.00	
Temperature rise	80 K	80 K	80 K	80 K	
Locked rotor time	73s (cold) 41s (hot)	36s (cold) 20s (hot)	36s (cold) 20s (hot)	36s (cold) 20s (hot)	
Noise level <sup>2</sup>	70.0 dB(A)	66.0 dB(A)	66.0 dB(A)	66.0 dB(A)	
Efficiency (%)	25%				
	50%	94.5	94.5	94.0	
	75%	95.0	94.5	94.5	
	100%	95.0	94.5	94.5	
Power Factor	25%				
	50%	0.67	0.68	0.64	
	75%	0.76	0.77	0.74	
	100%	0.82	0.82	0.81	
Bearing type	: <u>Drive end</u> NU-219 C3	<u>Non drive end</u> 6316 C3	Foundation loads		
Sealing	: Viton	Viton Seal	Max. traction	: 1289 kgf	
	Oil Seal		Max. compression	: 2320 kgf	
Lubrication interval	: 8864 h	12823 h			
Lubricant amount	: 28 g	34 g			
Lubricant type	: Mobil Polyrex EM				
Notes USABLE @208V 332A SF 1.00 SFA 332A					
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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## Three Phase Induction Motor - Squirrel Cage



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

### Thermal protection

ID	Application	Type	Quantity	Sensing Temperature
1	Winding	Thermostat - 2 wires	1 x Phase	155 °C

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# LOAD PERFORMANCE CURVE

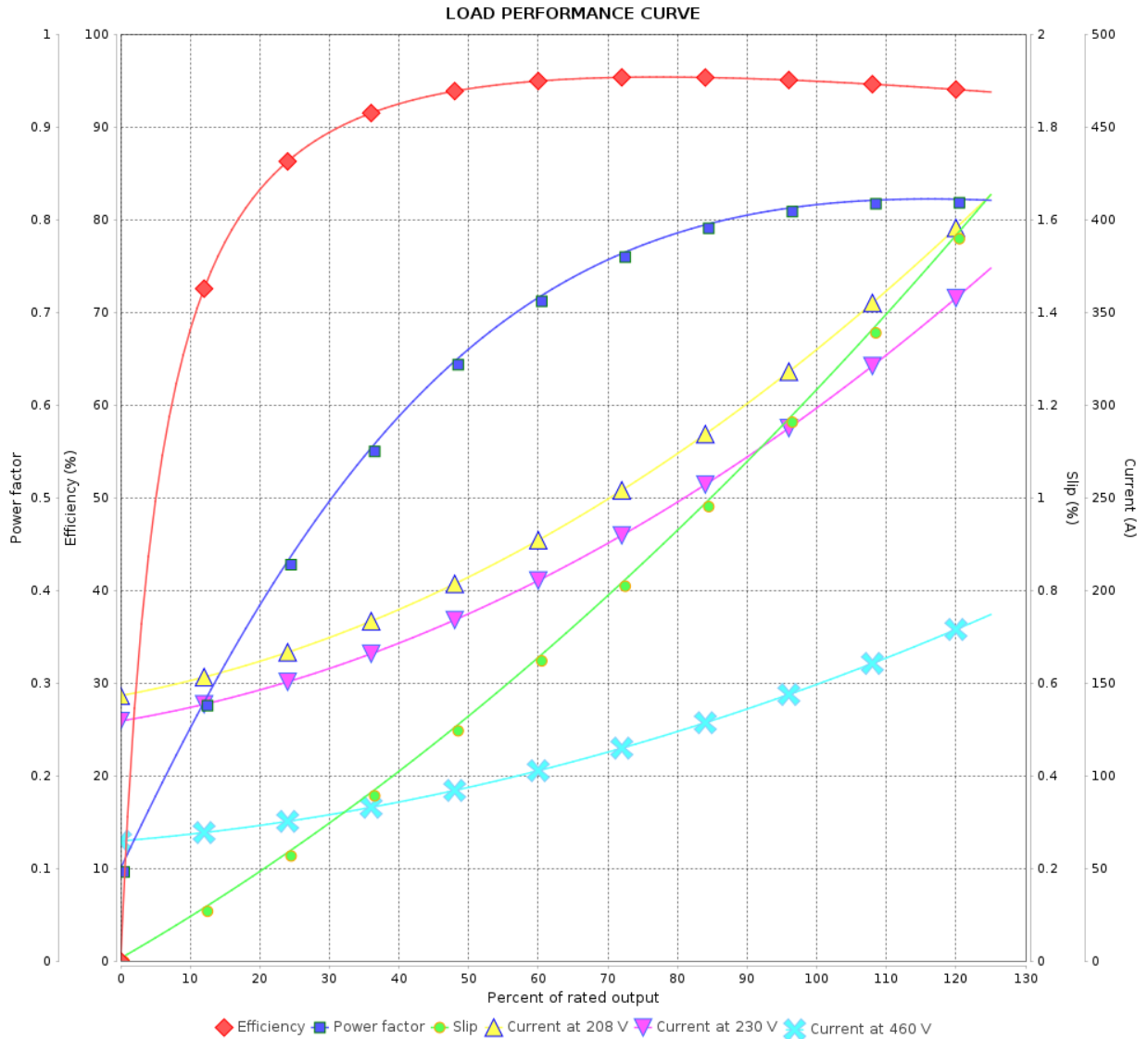
## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W21 Explosion Proof NEMA Premium Efficiency Three-Phase

Product code : 13826854



Performance : 230/460 V 60 Hz 6P

Rated current : 300/150 A  
 LRC : 7.4  
 Rated torque : 76.6 kgfm  
 Locked rotor torque : 229 %  
 Breakdown torque : 240 %  
 Rated speed : 1185 rpm

Moment of inertia (J) : 4.37 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

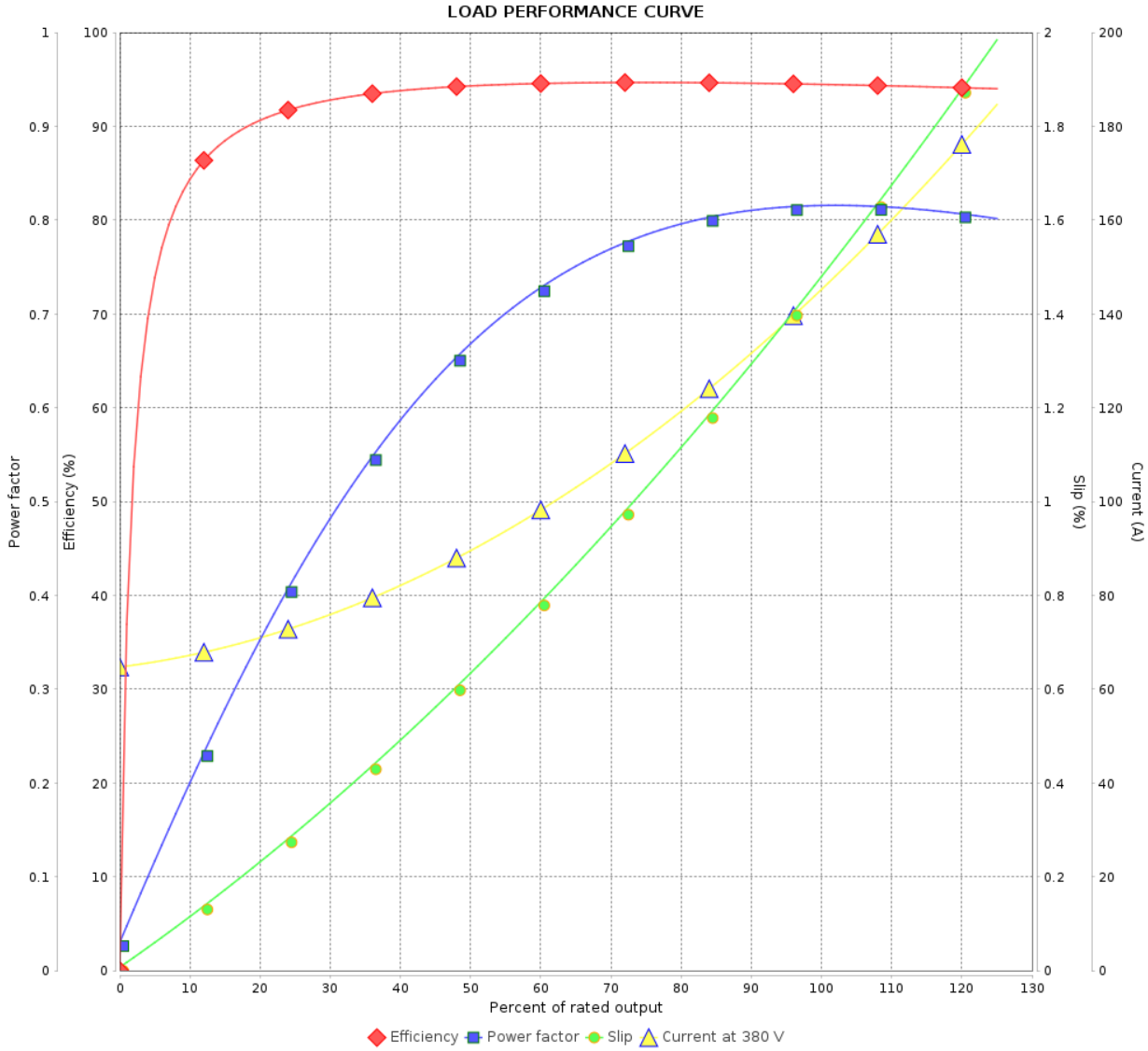
Three Phase Induction Motor - Squirrel Cage



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

Product line : W21 Explosion Proof NEMA Premium  
Efficiency Three-Phase

Product code : 13826854



Performance : 380 V 50 Hz 6P IE2

Rated current	: 147 A	Moment of inertia (J)	: 4.37 kgm <sup>2</sup>
LRC	: 6.9	Duty cycle	: Cont.(S1)
Rated torque	: 73.7 kgfm	Insulation class	: F
Locked rotor torque	: 210 %	Service factor	: 1.00
Breakdown torque	: 229 %	Temperature rise	: 80 K
Rated speed	: 985 rpm	Design	: B

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# LOAD PERFORMANCE CURVE

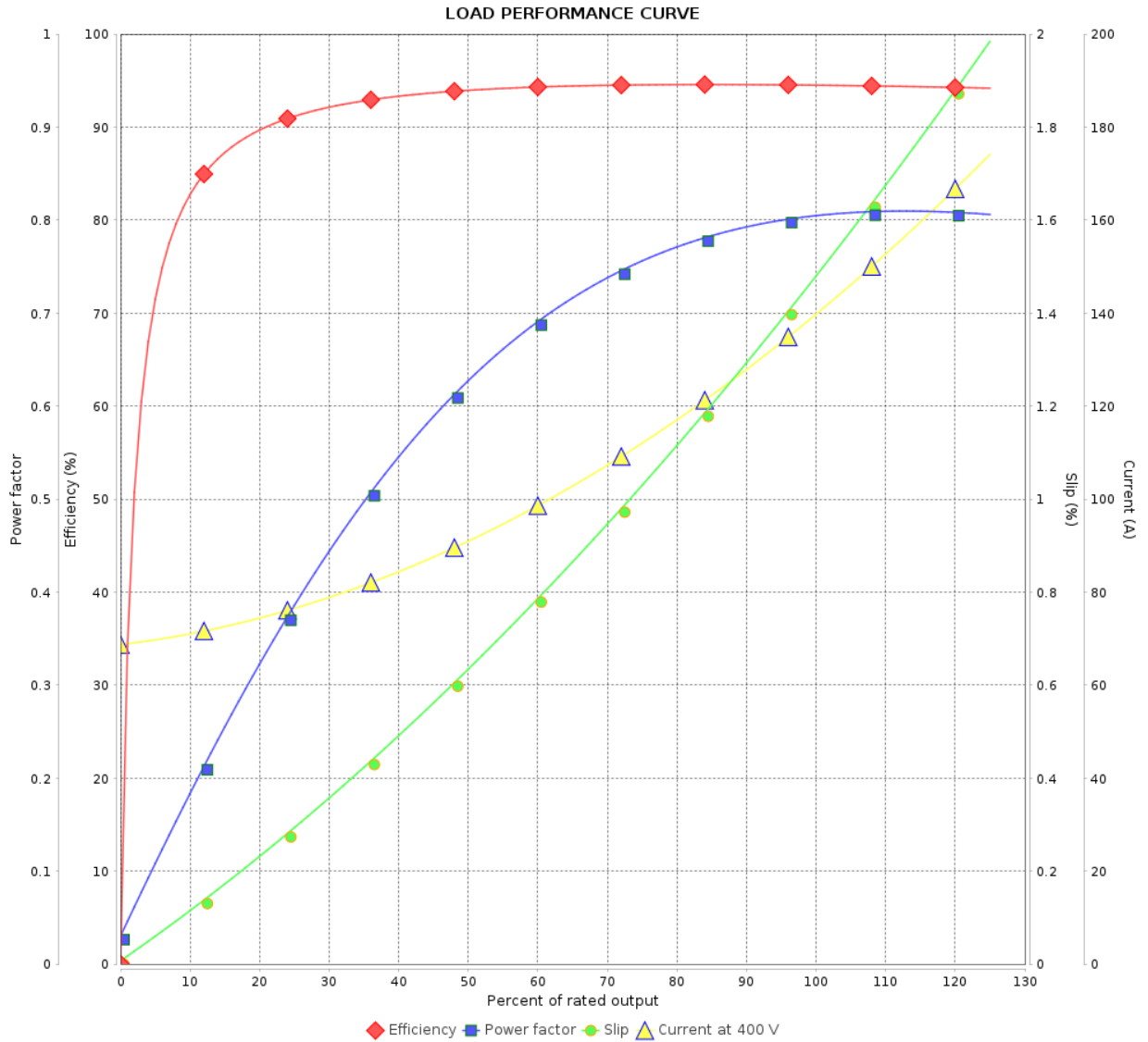
Three Phase Induction Motor - Squirrel Cage



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

Product line : W21 Explosion Proof NEMA Premium  
Efficiency Three-Phase

Product code : 13826854



Performance : 400 V 50 Hz 6P IE2

Rated current : 141 A  
LRC : 7.7  
Rated torque : 73.7 kgfm  
Locked rotor torque : 229 %  
Breakdown torque : 260 %  
Rated speed : 985 rpm

Moment of inertia (J) : 4.37 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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Date				

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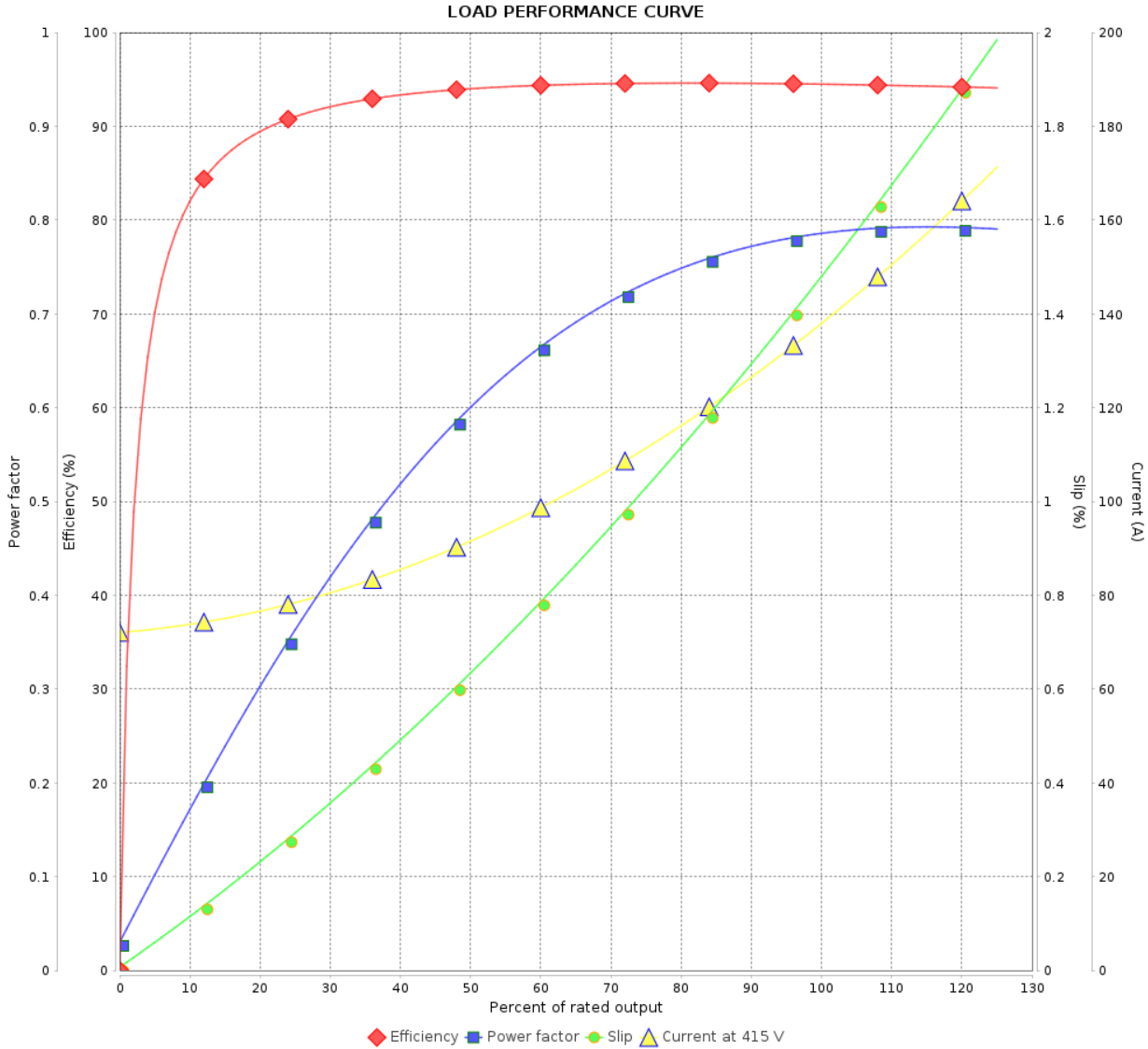
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W21 Explosion Proof NEMA Premium  
Efficiency Three-Phase

Product code : 13826854



Performance : 415 V 50 Hz 6P IE2

Rated current	: 140 A	Moment of inertia (J)	: 4.37 kgm <sup>2</sup>
LRC	: 8.3	Duty cycle	: Cont.(S1)
Rated torque	: 73.7 kgfm	Insulation class	: F
Locked rotor torque	: 250 %	Service factor	: 1.00
Breakdown torque	: 280 %	Temperature rise	: 80 K
Rated speed	: 985 rpm	Design	: B

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