

# DATA SHEET



## Three Phase Induction Motor - Squirrel Cage

Customer :					
Product line : W21 Explosion Proof NEMA Premium Efficiency Three-Phase		Product code : 11341754			
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 : IP55 Design : B		Cooling method : IC411 - TEFC Mounting : F-1 Rotation <sup>1</sup> : Both (CW and CCW) Starting method : Direct On Line Approx. weight <sup>2</sup> : 467 kg Moment of inertia (J) : 1.24 kgm <sup>2</sup>			
Output [HP]	50	50	50	50	
Poles	6	6	6	6	
Frequency [Hz]	60	50	50	50	
Rated voltage [V]	230/460	380	400	415	
Rated current [A]	116/58.1	71.3	67.2	65.1	
L. R. Amperes [A]	860/430	414	430	449	
LRC [A]	7.4x(Code H)	5.8x(Code F)	6.4x(Code G)	6.9x(Code H)	
No load current [A]	42.0/21.0	21.0	22.0	23.0	
Rated speed [RPM]	1182	977	980	982	
Slip [%]	1.50	2.30	2.00	1.80	
Rated torque [kgfm]	30.7	37.1	37.0	37.0	
Locked rotor torque [%]	229	190	220	240	
Breakdown torque [%]	250	200	240	260	
Service factor	1.15	1.00	1.00	1.00	
Temperature rise	80 K	80 K	80 K	80 K	
Locked rotor time	36s (cold) 20s (hot)	27s (cold) 15s (hot)	27s (cold) 15s (hot)	27s (cold) 15s (hot)	
Noise level <sup>2</sup>	65.0 dB(A)	61.0 dB(A)	61.0 dB(A)	61.0 dB(A)	
Efficiency (%)	25%	93.4	92.9	93.4	
	50%	93.6	92.4	93.0	
	75%	94.1	92.4	93.0	
	100%	94.1	91.7	92.4	
Power Factor	25%	0.46	0.52	0.48	
	50%	0.71	0.76	0.73	
	75%	0.81	0.83	0.81	
	100%	0.85	0.86	0.86	
Bearing type : <u>Drive end</u> 6314 C3 <u>Non drive end</u> 6314 C3 Sealing : Oil Seal Lip Seal Lubrication interval : 14267 h 14267 h Lubricant amount : 27 g 27 g Lubricant type : Mobil Polyrex EM		Foundation loads Max. traction : 847 kgf Max. compression : 1314 kgf			
Notes USABLE @208V 128A SF 1.00 SFA 128A					
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

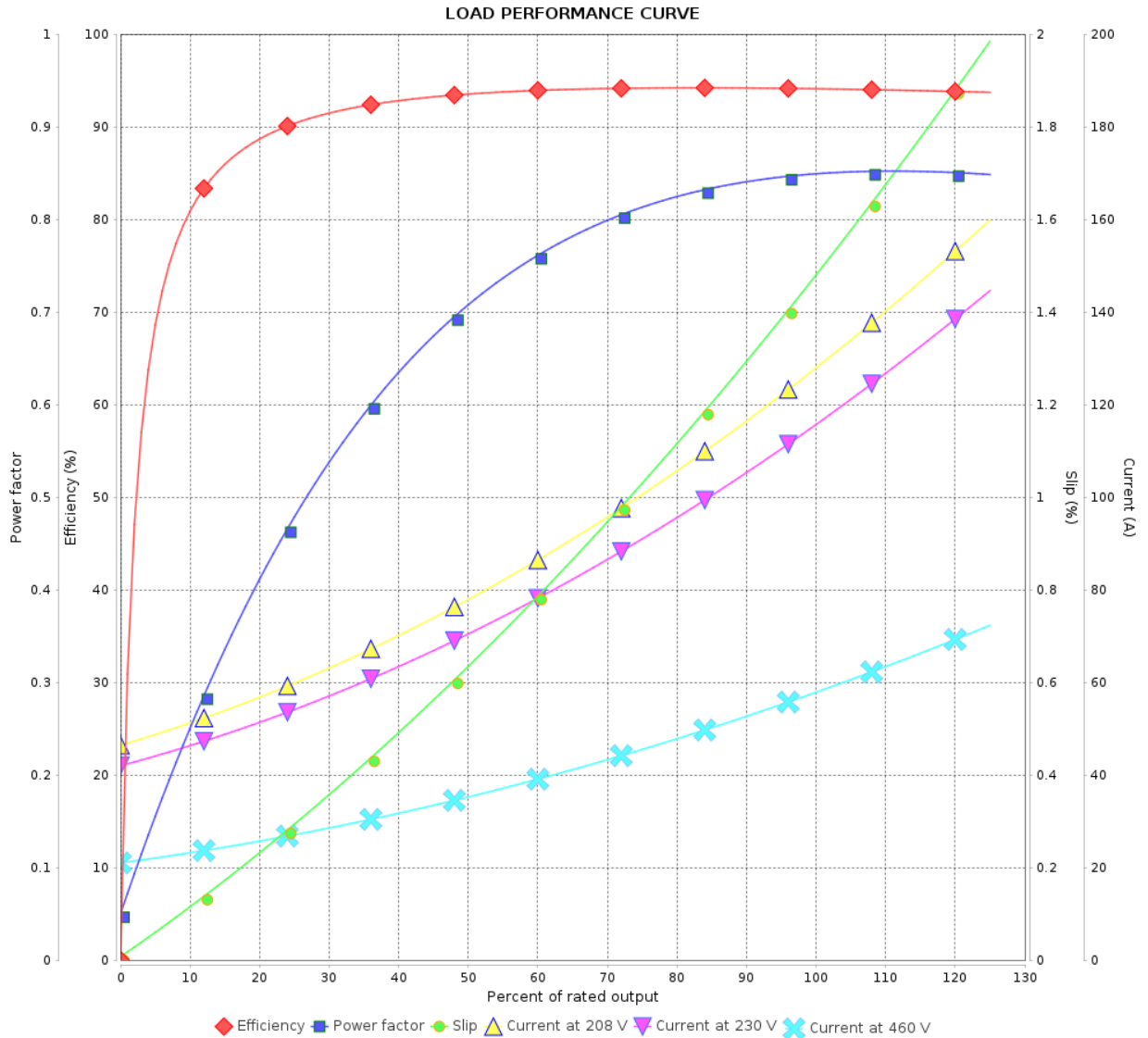
## Three Phase Induction Motor - Squirrel Cage



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

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

Product code : 11341754



Performance : 230/460 V 60 Hz 6P

Rated current : 116/58.1 A  
 LRC : 7.4  
 Rated torque : 30.7 kgfm  
 Locked rotor torque : 229 %  
 Breakdown torque : 250 %  
 Rated speed : 1182 rpm

Moment of inertia (J) : 1.24 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

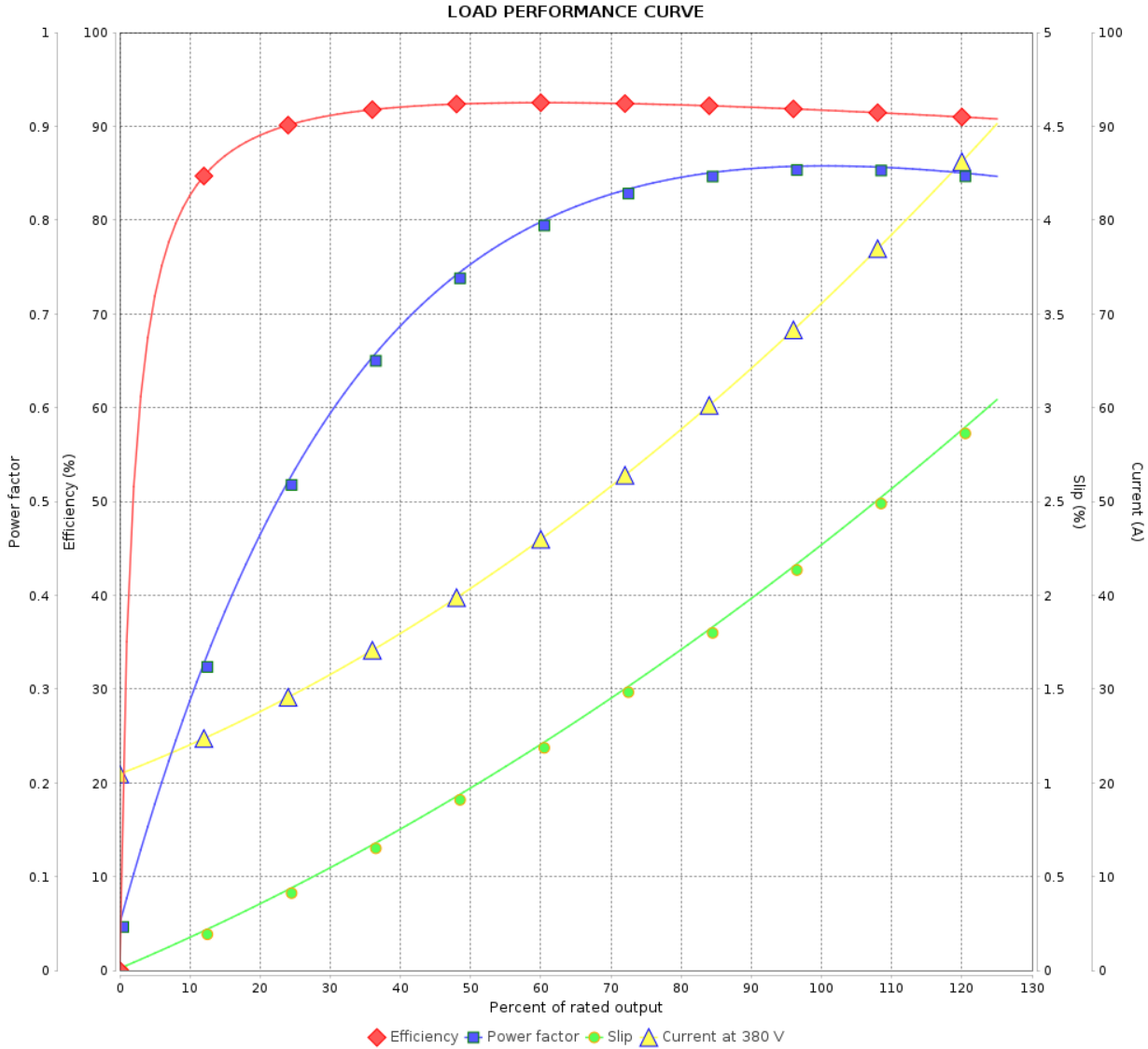
Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 11341754



Performance : 380 V 50 Hz 6P IE1

Rated current	: 71.3 A	Moment of inertia (J)	: 1.24 kgm <sup>2</sup>
LRC	: 5.8	Duty cycle	: Cont.(S1)
Rated torque	: 37.1 kgfm	Insulation class	: F
Locked rotor torque	: 190 %	Service factor	: 1.00
Breakdown torque	: 200 %	Temperature rise	: 80 K
Rated speed	: 977 rpm	Design	: B

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# LOAD PERFORMANCE CURVE

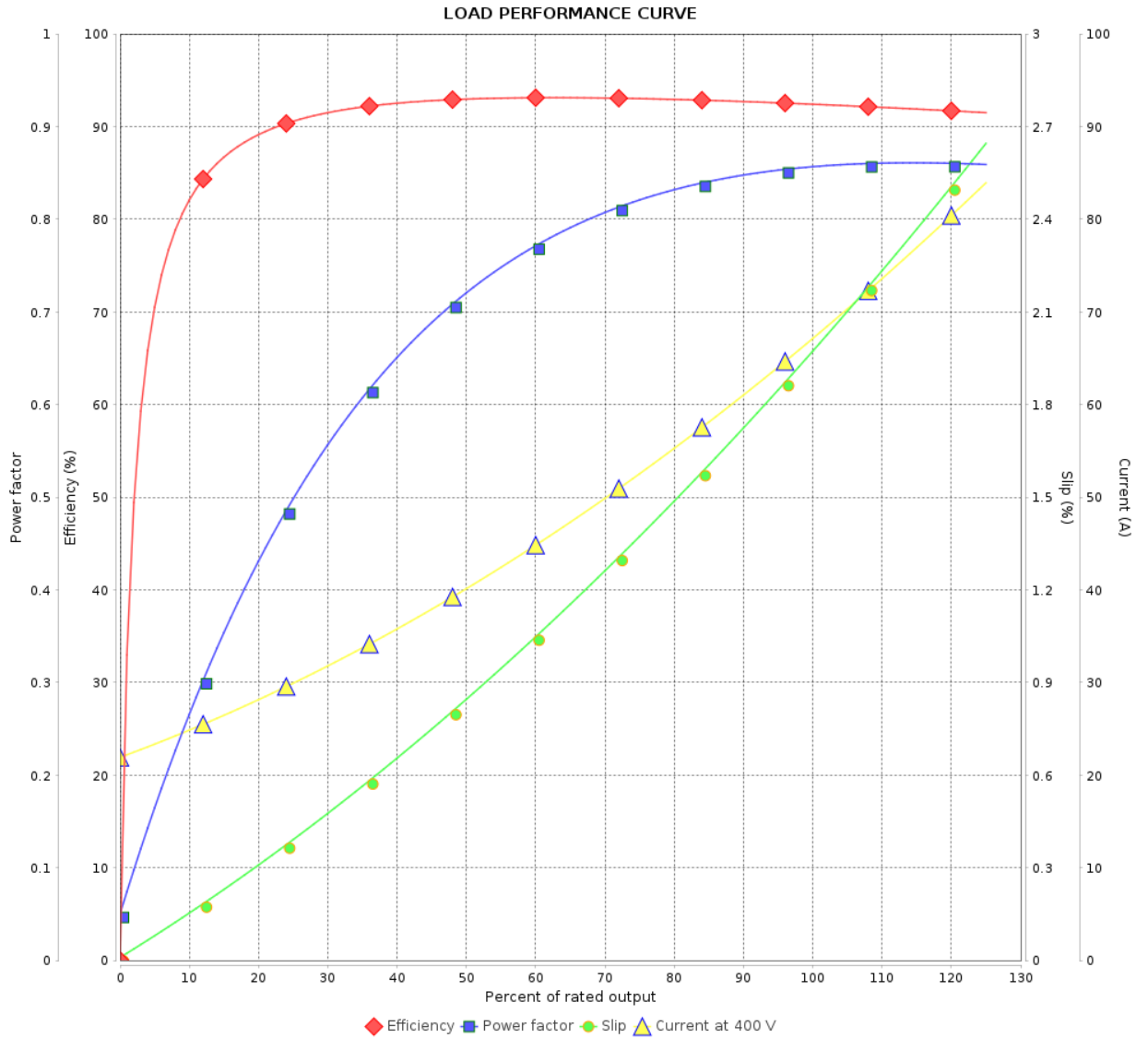
Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 11341754



Performance : 400 V 50 Hz 6P IE2

Rated current : 67.2 A  
 LRC : 6.4  
 Rated torque : 37.0 kgfm  
 Locked rotor torque : 220 %  
 Breakdown torque : 240 %  
 Rated speed : 980 rpm

Moment of inertia (J) : 1.24 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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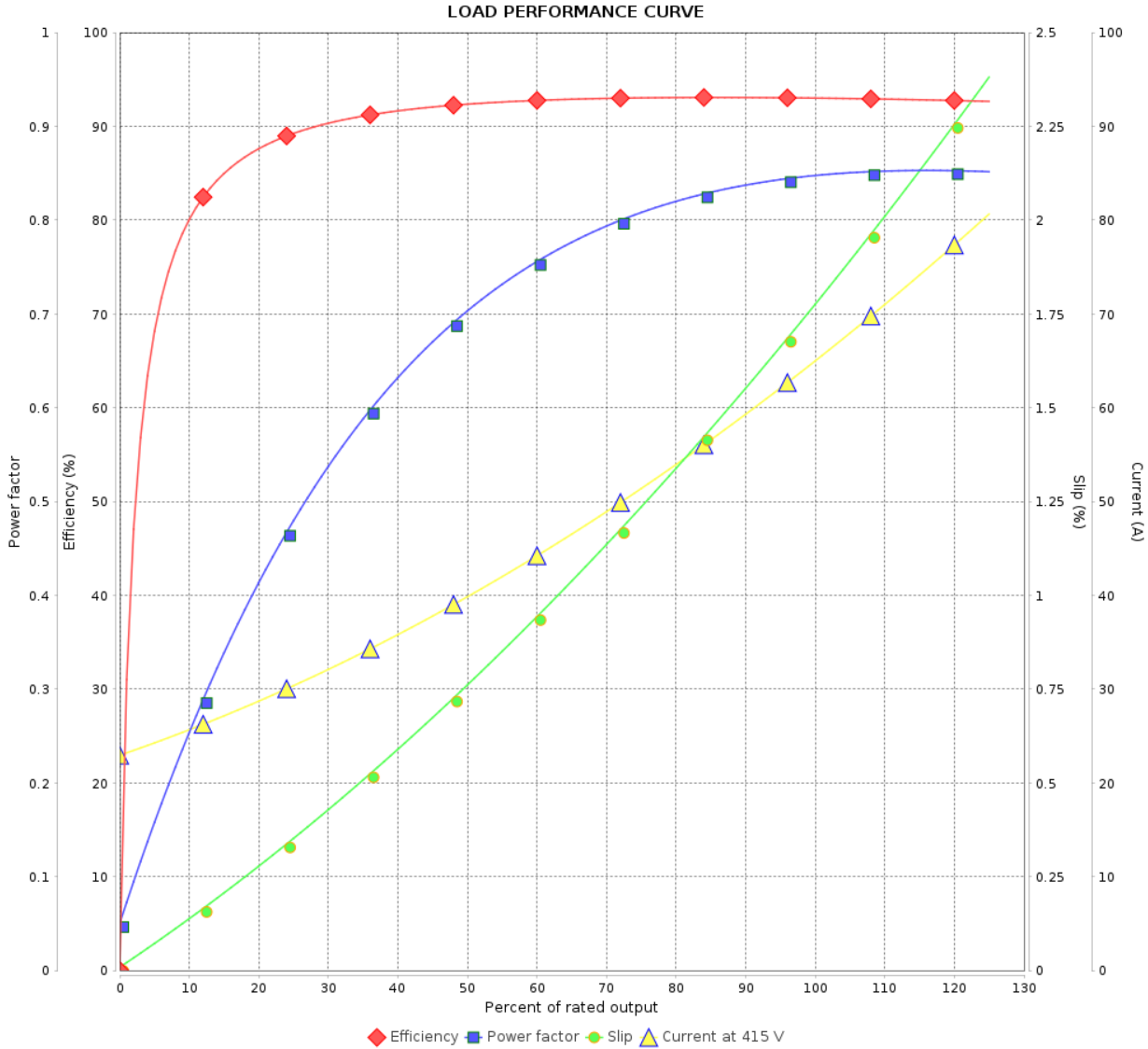
Three Phase Induction Motor - Squirrel Cage



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

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

Product code : 11341754



Performance : 415 V 50 Hz 6P IE2

Rated current : 65.1 A  
 LRC : 6.9  
 Rated torque : 37.0 kgfm  
 Locked rotor torque : 240 %  
 Breakdown torque : 260 %  
 Rated speed : 982 rpm

Moment of inertia (J) : 1.24 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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