

# DATA SHEET



## Three Phase Induction Motor - Squirrel Cage

Customer :				
Product line		: W21 Explosion Proof NEMA Premium Efficiency Three-Phase		Product code : 14337972
Frame	: 213/5TC	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>	: 95.0 kg	
Protection degree	: IP55	Moment of inertia (J)	: 0.0504 kgm <sup>2</sup>	
Design	: B			
Output [HP]	3	3	3	3
Poles	6	6	6	6
Frequency [Hz]	60	50	50	50
Rated voltage [V]	230/460	380	400	415
Rated current [A]	8.82/4.41	5.28	5.15	5.11
L. R. Amperes [A]	61.7/30.9	31.7	33.5	35.8
LRC [A]	7.0x(Code K)	6.0x(Code H)	6.5x(Code J)	7.0x(Code K)
No load current [A]	5.20/2.60	2.40	2.75	2.90
Rated speed [RPM]	1180	970	975	980
Slip [%]	1.67	3.00	2.50	2.00
Rated torque [kgfm]	1.85	2.24	2.23	2.23
Locked rotor torque [%]	180	140	180	210
Breakdown torque [%]	290	229	250	270
Service factor	1.15	1.00	1.00	1.00
Temperature rise	80 K	80 K	80 K	80 K
Locked rotor time	104s (cold) 58s (hot)	72s (cold) 40s (hot)	72s (cold) 40s (hot)	72s (cold) 40s (hot)
Noise level <sup>2</sup>	55.0 dB(A)	53.0 dB(A)	53.0 dB(A)	53.0 dB(A)
Efficiency (%)	25%			
	50%	86.5	84.0	84.0
	75%	88.5	84.0	84.0
	100%	89.5	84.4	84.4
Power Factor	25%			
	50%	0.50	0.57	0.53
	75%	0.62	0.70	0.66
	100%	0.70	0.75	0.73
Bearing type	: <u>Drive end</u> 6308 2RS <u>Non drive end</u> 6207 2RS	Foundation loads		
Sealing	: Oil Seal Lip Seal	Max. traction	: 63 kgf	
Lubrication interval	: - -	Max. compression	: 158 kgf	
Lubricant amount	: - -			
Lubricant type	: Mobil Polyrex EM			
Notes USABLE @208V 9.75A SF 1.15 SFA 11.2A				
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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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

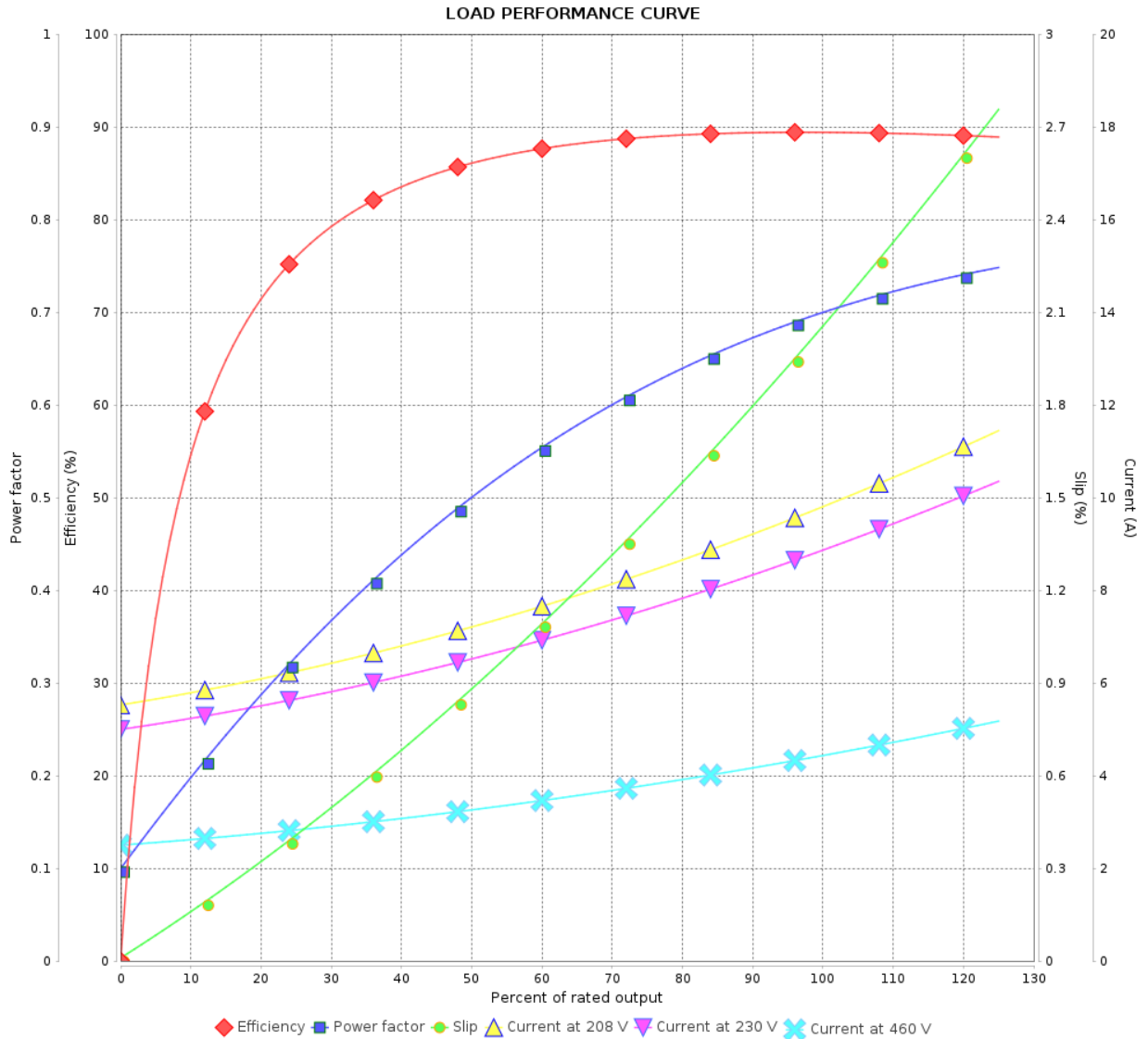
## Three Phase Induction Motor - Squirrel Cage



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

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

Product code : 14337972



Performance : 230/460 V 60 Hz 6P

Rated current : 8.82/4.41 A  
LRC : 7.0  
Rated torque : 1.85 kgfm  
Locked rotor torque : 180 %  
Breakdown torque : 290 %  
Rated speed : 1180 rpm

Moment of inertia (J) : 0.0504 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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Three Phase Induction Motor - Squirrel Cage

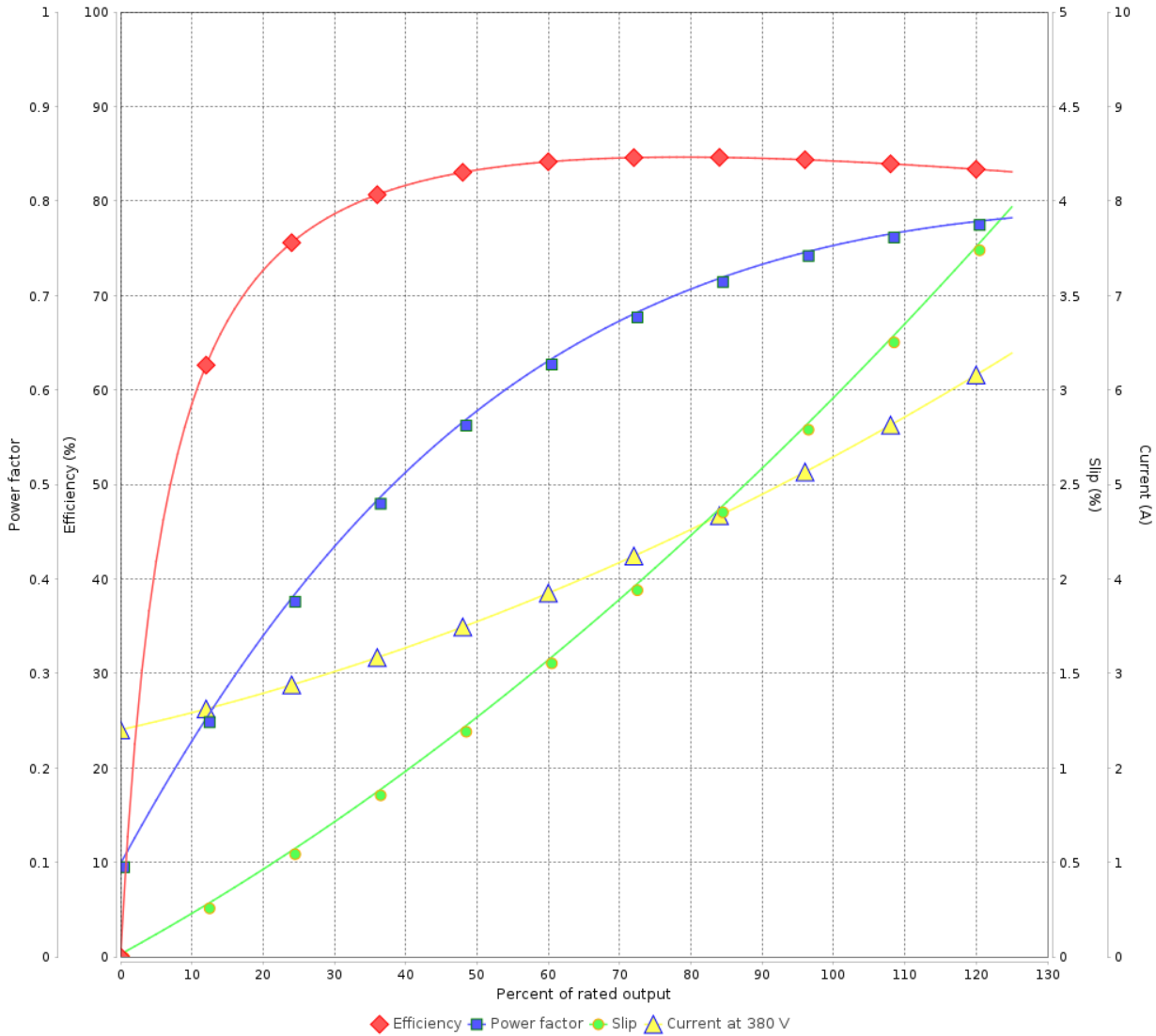


Customer :

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

Product code : 14337972

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Performance : 380 V 50 Hz 6P IE3

Rated current : 5.28 A  
 LRC : 6.0  
 Rated torque : 2.24 kgfm  
 Locked rotor torque : 140 %  
 Breakdown torque : 229 %  
 Rated speed : 970 rpm

Moment of inertia (J) : 0.0504 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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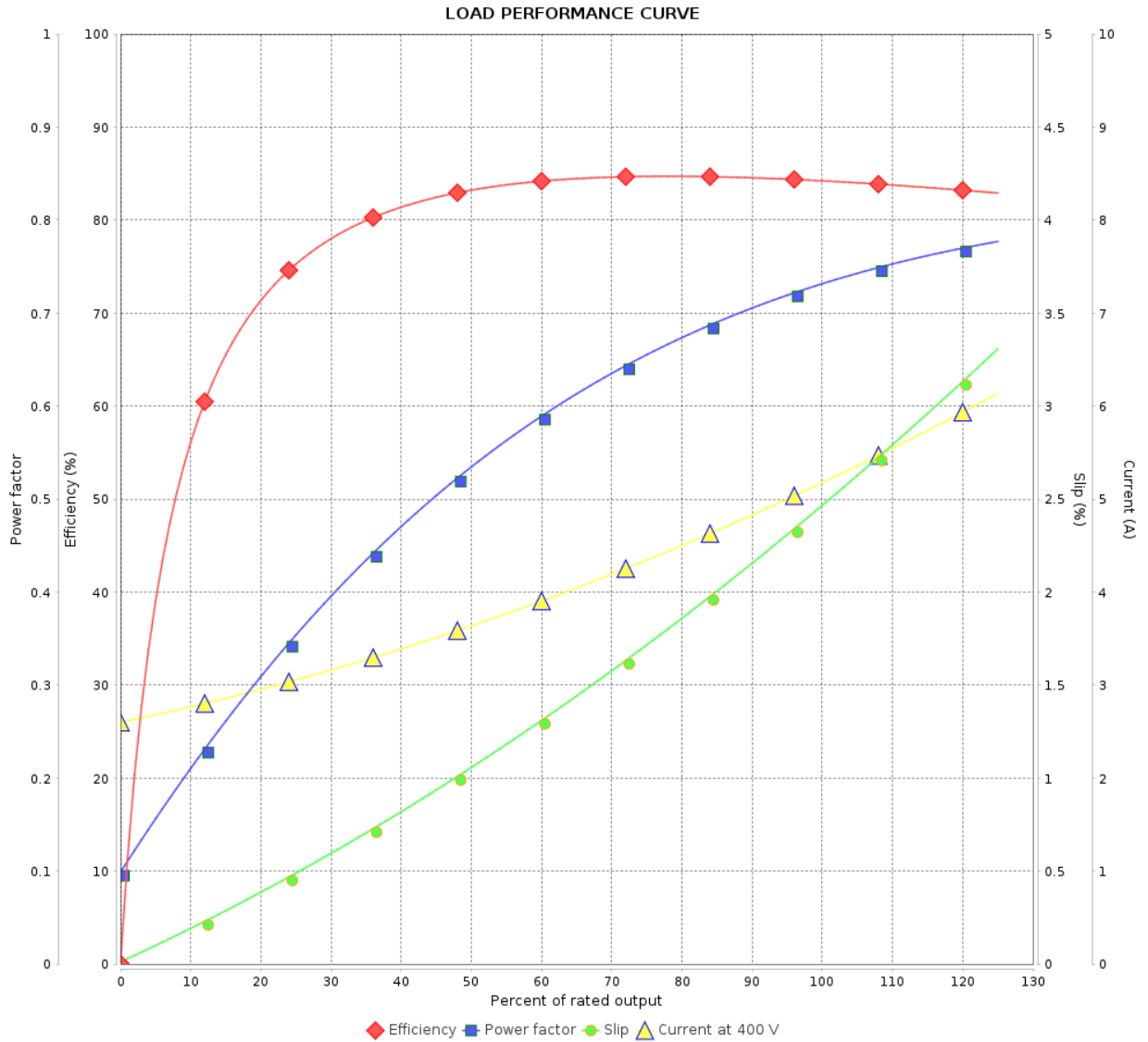
## Three Phase Induction Motor - Squirrel Cage



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

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

Product code : 14337972



Performance : 400 V 50 Hz 6P IE3

Rated current : 5.15 A  
LRC : 6.5  
Rated torque : 2.23 kgfm  
Locked rotor torque : 180 %  
Breakdown torque : 250 %  
Rated speed : 975 rpm

Moment of inertia (J) : 0.0504 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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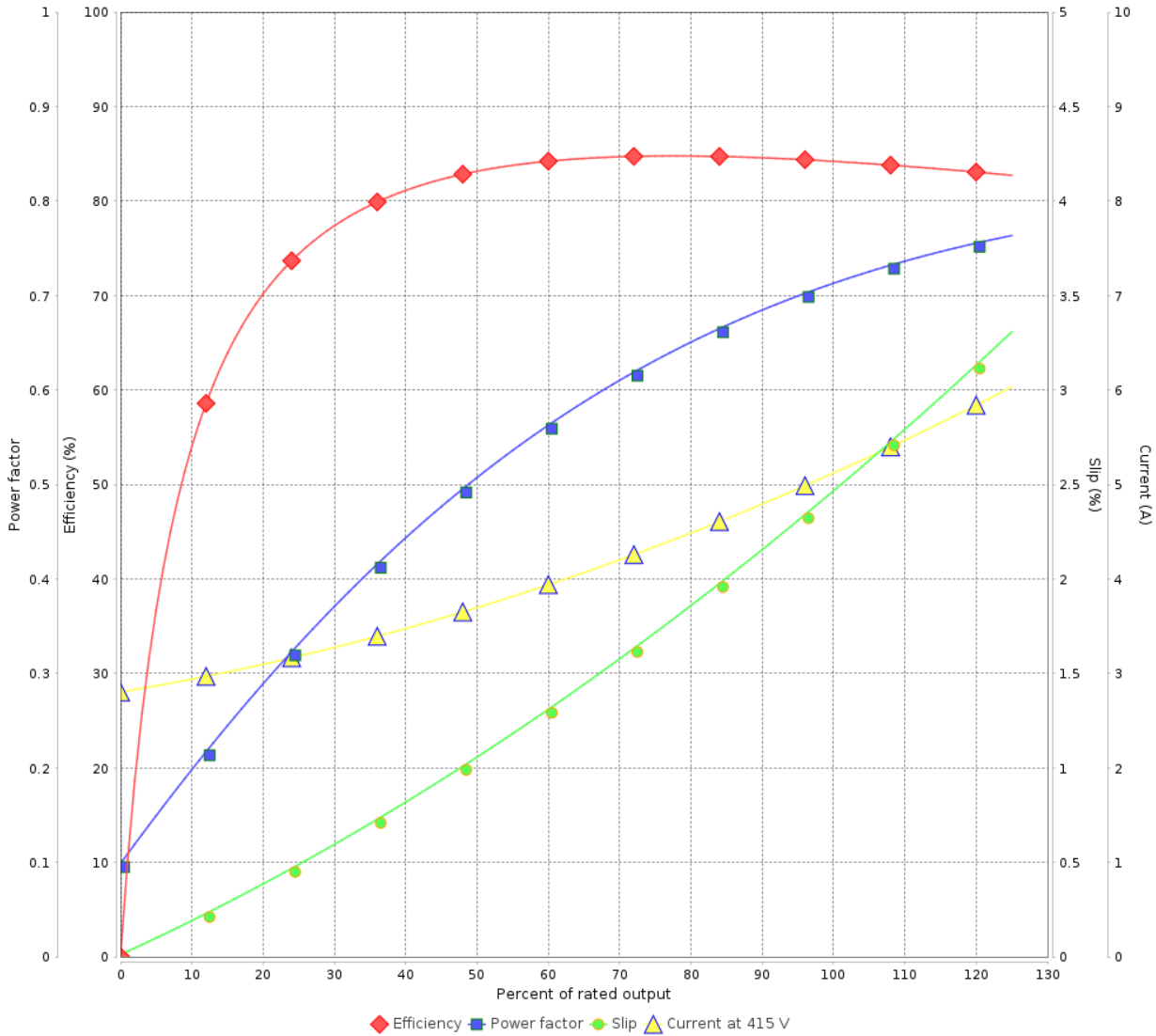


Customer : \_\_\_\_\_

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

Product code : 14337972

LOAD PERFORMANCE CURVE



Performance : 415 V 50 Hz 6P IE3

Rated current : 5.11 A  
LRC : 7.0  
Rated torque : 2.23 kgfm  
Locked rotor torque : 210 %  
Breakdown torque : 270 %  
Rated speed : 980 rpm

Moment of inertia (J) : 0.0504 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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