

# 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> : 94.6 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	0.50
	75%	0.62	0.70	0.64
	100%	0.70	0.75	0.71

	<u>Drive end</u>	<u>Non drive end</u>	Foundation loads
Bearing type :	6308 2RS	6207 2RS	Max. traction : 63 kgf
Sealing :	Oil Seal	Lip Seal	Max. compression : 158 kgf
Lubrication interval :	-	-	
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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Revision

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

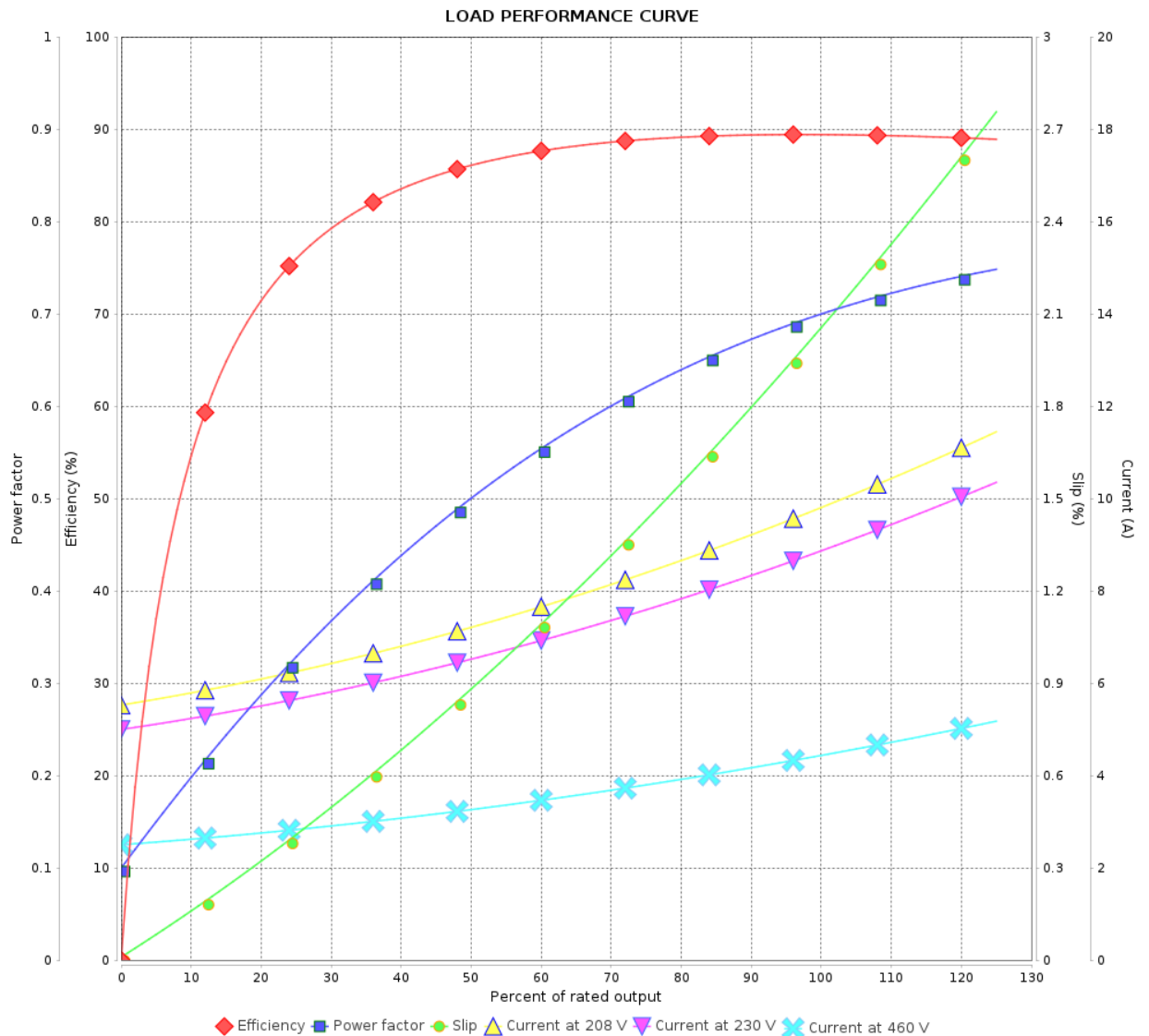
## Three Phase Induction Motor - Squirrel Cage



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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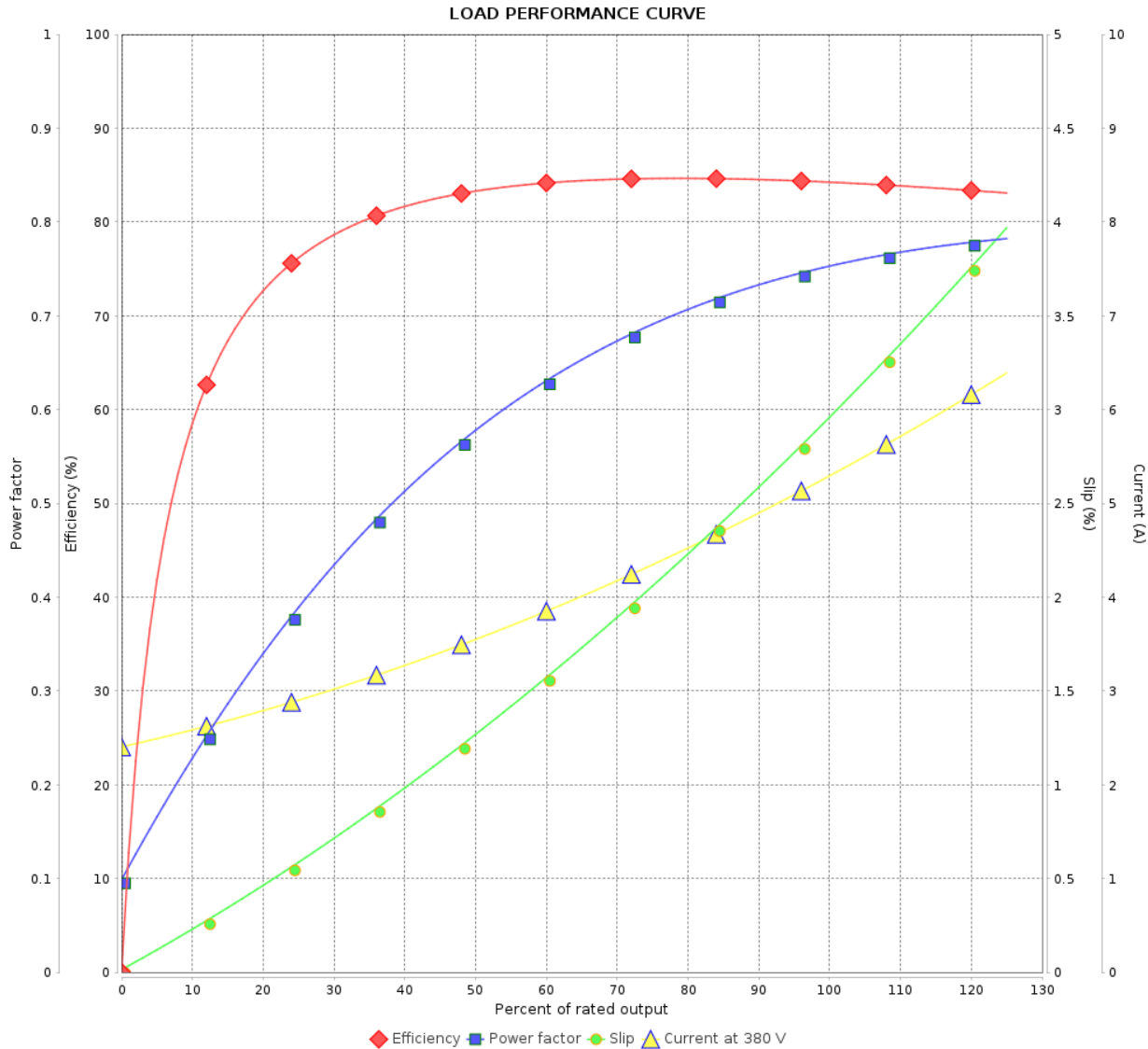
## Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 14337972



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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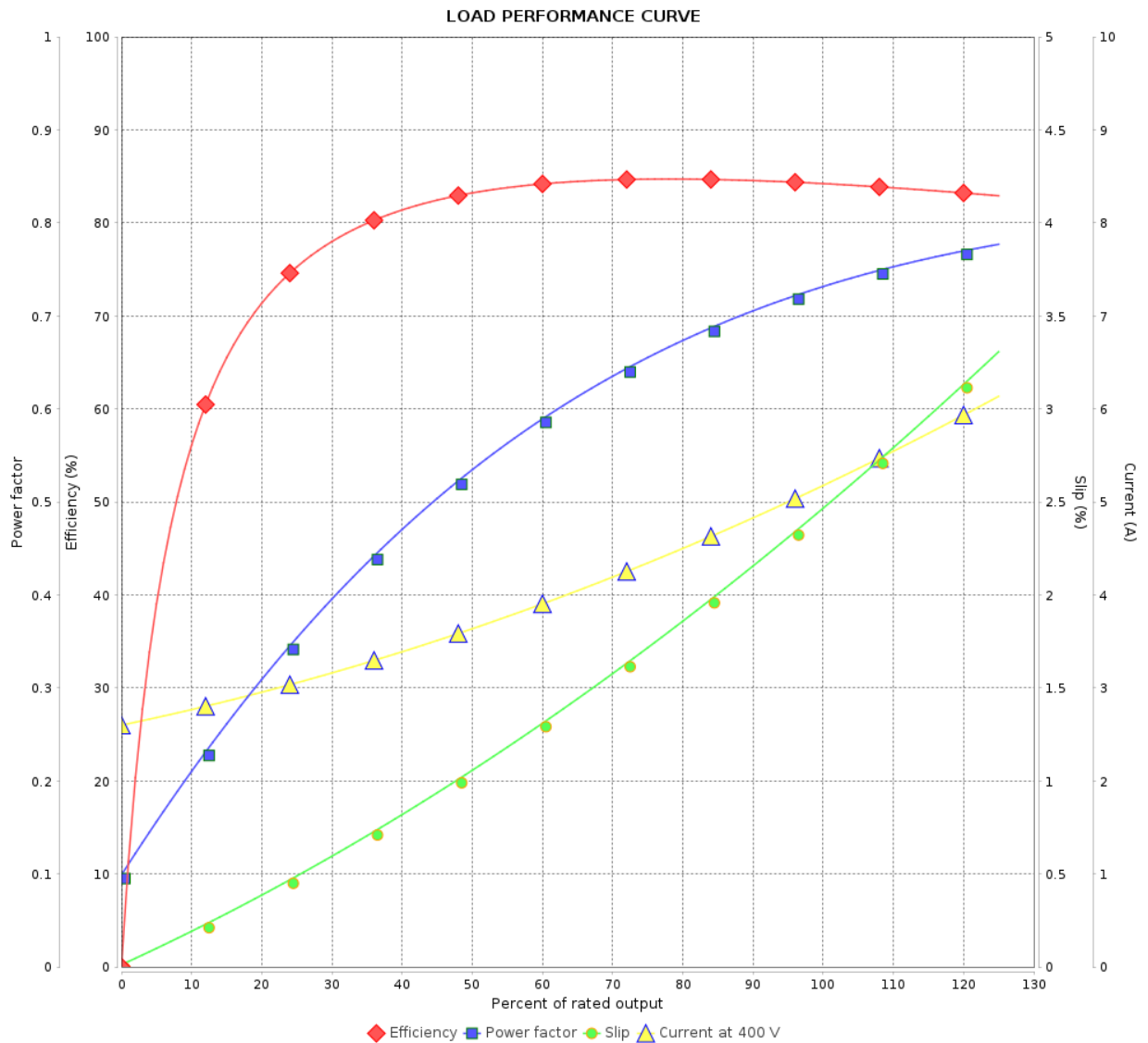
## Three Phase Induction Motor - Squirrel Cage



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	Moment of inertia (J)	: 0.0504 kgm <sup>2</sup>
LRC	: 6.5	Duty cycle	: Cont.(S1)
Rated torque	: 2.23 kgfm	Insulation class	: F
Locked rotor torque	: 180 %	Service factor	: 1.00
Breakdown torque	: 250 %	Temperature rise	: 80 K
Rated speed	: 975 rpm	Design	: B

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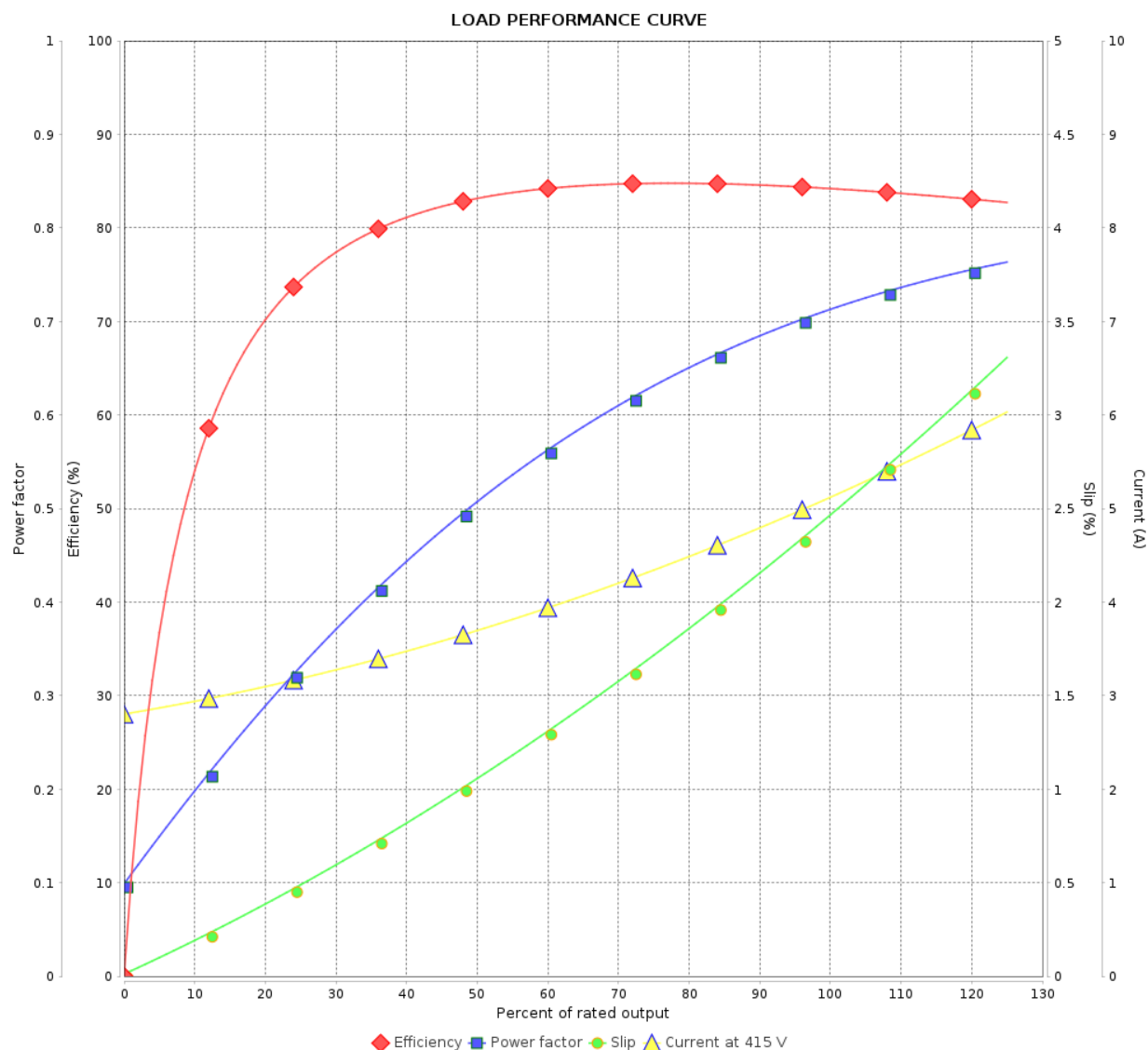
## Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 14337972



Performance : 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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