

# DATA SHEET



## Three Phase Induction Motor - Squirrel Cage

Customer :					
Product line		: W21 Explosion Proof NEMA Premium Efficiency Three-Phase		Product code : 14751226	
Frame	: 254T	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>	: 144 kg		
Protection degree	: IP55	Moment of inertia (J)	: 0.0500 kgm <sup>2</sup>		
Design	: B				
Output [HP]	15		15		
Poles	2		2		
Frequency [Hz]	60		50		
Rated voltage [V]	230/460		380		
Rated current [A]	34.8/17.4		21.0		
L. R. Amperes [A]	237/118		113		
LRC [A]	6.8x(Code G)		5.4x(Code E)		
No load current [A]	12.0/6.00		5.90		
Rated speed [RPM]	3540		2915		
Slip [%]	1.67		2.83		
Rated torque [kgfm]	3.08		3.73		
Locked rotor torque [%]	200		150		
Breakdown torque [%]	270		210		
Service factor	1.15		1.00		
Temperature rise	80 K		80 K		
Locked rotor time	55s (cold) 31s (hot)		55s (cold) 31s (hot)		
Noise level <sup>2</sup>	75.0 dB(A)		70.0 dB(A)		
Efficiency (%)	25%	0.000	0.000		
	50%	90.0	91.0		
	75%	90.5	90.2		
	100%	91.0	89.5		
Power Factor	25%	0.00	0.00		
	50%	0.74	0.80		
	75%	0.83	0.86		
	100%	0.87	0.89		
Bearing type	: <u>Drive end</u> 6309 C3	<u>Non drive end</u> 6209 C3	Foundation loads		
Sealing	: Oil Seal	Lip Seal	Max. traction	: 51 kgf	
Lubrication interval	: 15797 h	18447 h	Max. compression	: 195 kgf	
Lubricant amount	: 13 g	9 g			
Lubricant type	: Mobil Polyrex EM				
Notes					
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

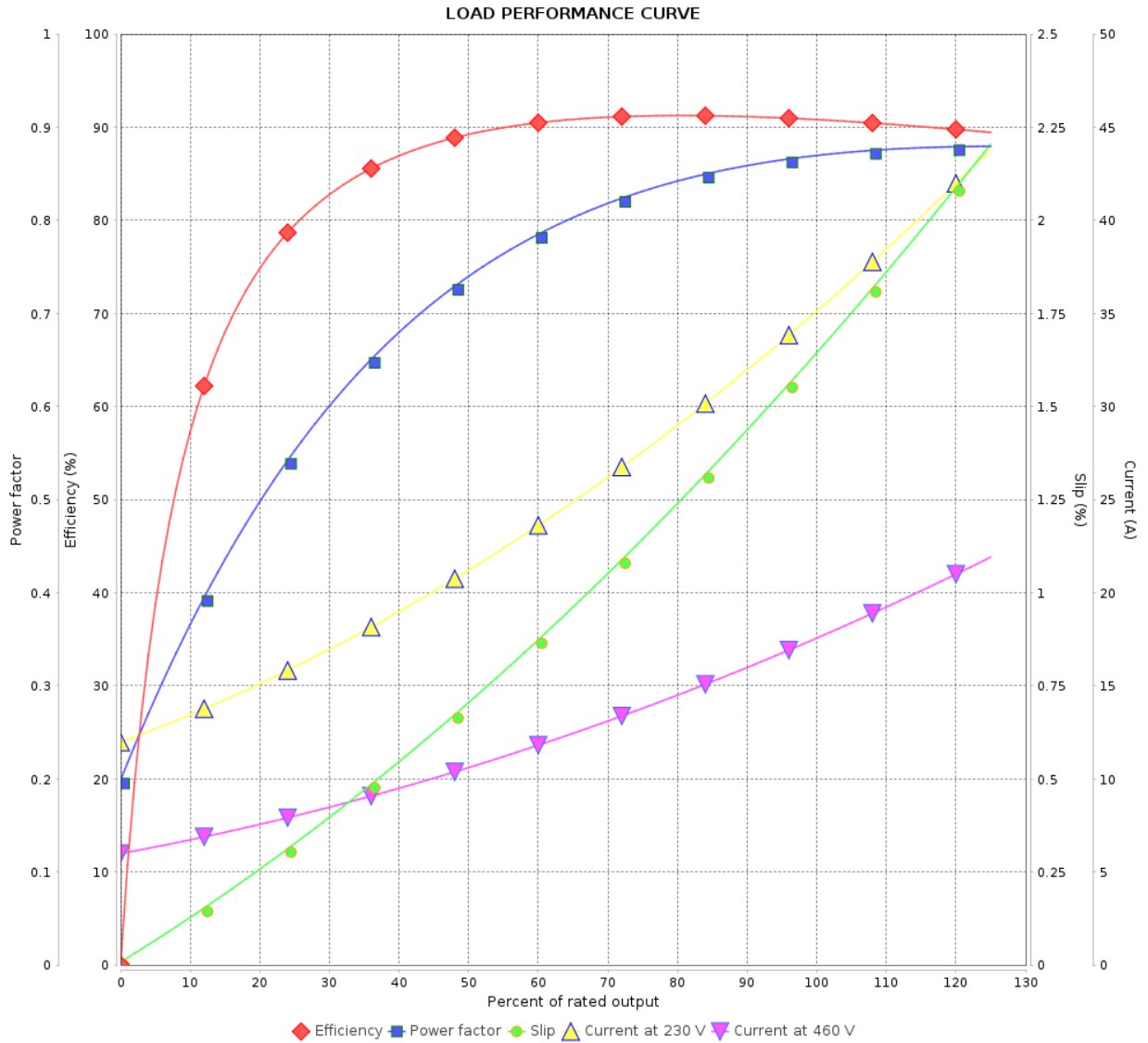
## Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 14751226



Performance : 230/460 V 60 Hz 2P

Rated current : 34.8/17.4 A  
LRC : 6.8  
Rated torque : 3.08 kgfm  
Locked rotor torque : 200 %  
Breakdown torque : 270 %  
Rated speed : 3540 rpm

Moment of inertia (J) : 0.0500 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

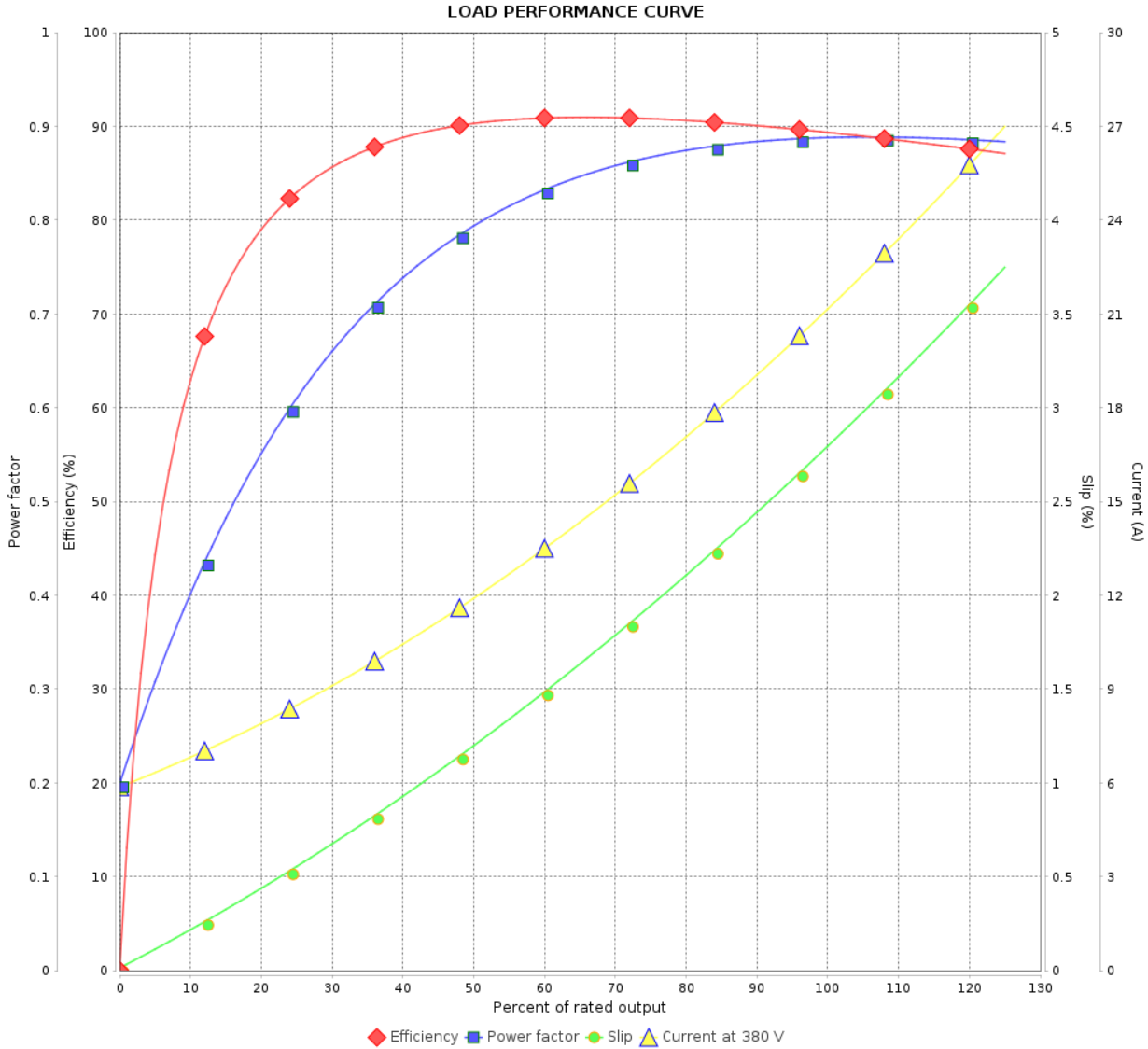
Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 14751226



Performance : 380 V 50 Hz 2P

Rated current	: 21.0 A	Moment of inertia (J)	: 0.0500 kgm <sup>2</sup>
LRC	: 5.4	Duty cycle	: Cont.(S1)
Rated torque	: 3.73 kgfm	Insulation class	: F
Locked rotor torque	: 150 %	Service factor	: 1.00
Breakdown torque	: 210 %	Temperature rise	: 80 K
Rated speed	: 2915 rpm	Design	: B

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