

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 14363085

Frame	: L215T	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>2</sup>	: 102 kg
Protection degree	: IP55	Moment of inertia (J)	: 0.0563 kgm <sup>2</sup>
Design	: B		

Output [HP]	10	10	10	10
Poles	4	4	4	4
Frequency [Hz]	60	50	50	50
Rated voltage [V]	230/460	380	400	415
Rated current [A]	25.4/12.7	15.3	14.6	14.3
L. R. Amperes [A]	165/82.5	87.2	93.4	91.5
LRC [A]	6.5x(Code H)	5.7x(Code G)	6.4x(Code H)	6.4x(Code H)
No load current [A]	11.0/5.50	5.30	5.60	6.00
Rated speed [RPM]	1765	1450	1455	1460
Slip [%]	1.94	3.33	3.00	2.67
Rated torque [kgfm]	4.11	5.01	4.99	4.97
Locked rotor torque [%]	210	165	190	210
Breakdown torque [%]	270	220	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	27s (cold) 15s (hot)	36s (cold) 20s (hot)	36s (cold) 20s (hot)	36s (cold) 20s (hot)
Noise level <sup>2</sup>	58.0 dB(A)	56.0 dB(A)	56.0 dB(A)	56.0 dB(A)
Efficiency (%)	25%			
	50%	90.2	90.2	89.5
	75%	91.0	89.5	90.2
	100%	91.7	89.5	90.2
Power Factor	25%			
	50%	0.62	0.70	0.66
	75%	0.75	0.80	0.78
	100%	0.81	0.84	0.83

	<u>Drive end</u>	<u>Non drive end</u>	Foundation loads	
Bearing type	: 6308 2RS	6207 2RS	Max. traction	: 197 kgf
Sealing	: Oil Seal	Lip Seal	Max. compression	: 299 kgf
Lubrication interval	: -	-		
Lubricant amount	: -	-		
Lubricant type	: Mobil Polyrex EM			

### Notes

USABLE @208V 28.1A SF 1.15 SFA 32.3A

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

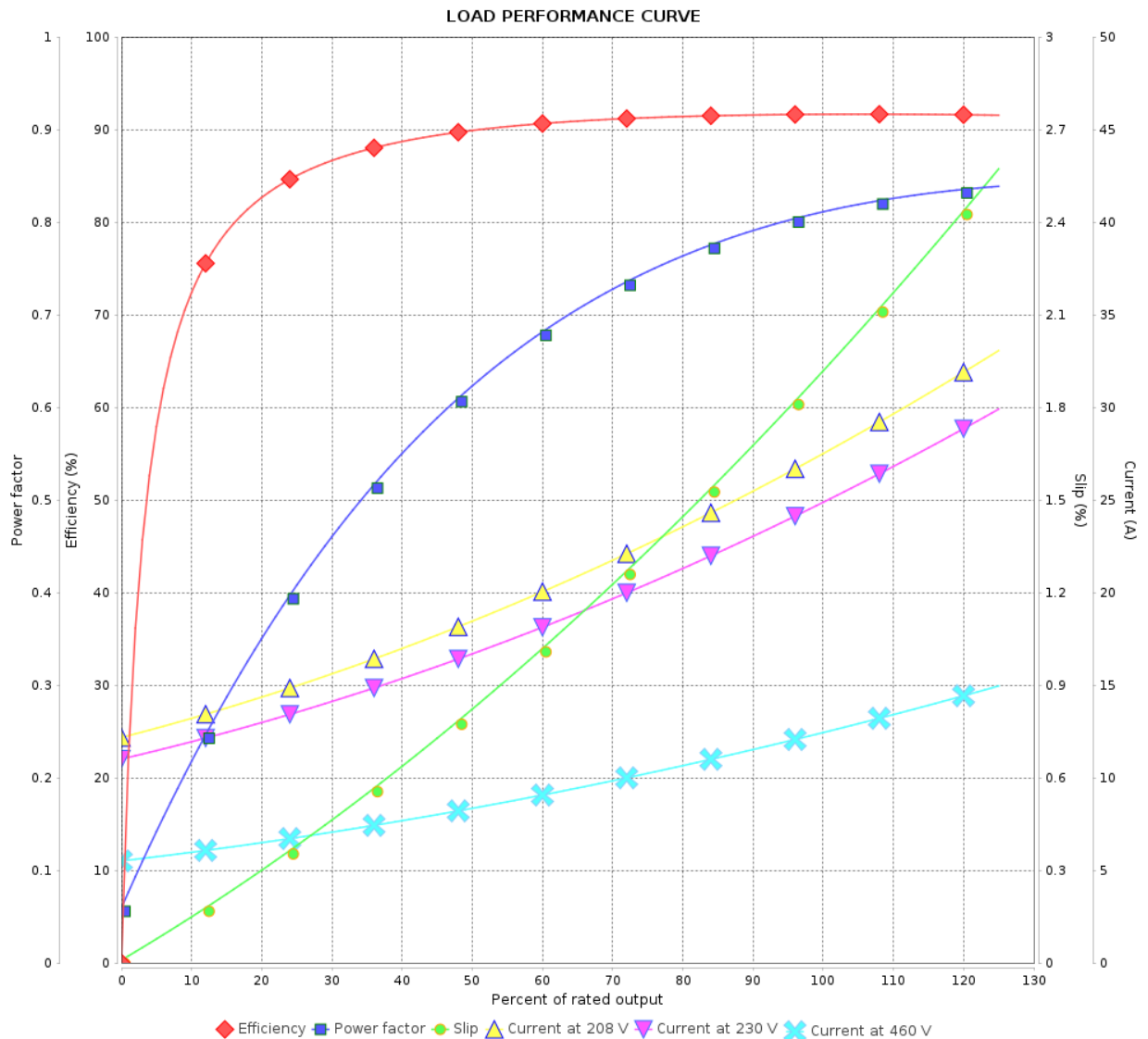
## Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 14363085



Performance : 230/460 V 60 Hz 4P

Rated current : 25.4/12.7 A  
LRC : 6.5  
Rated torque : 4.11 kgfm  
Locked rotor torque : 210 %  
Breakdown torque : 270 %  
Rated speed : 1765 rpm

Moment of inertia (J) : 0.0563 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

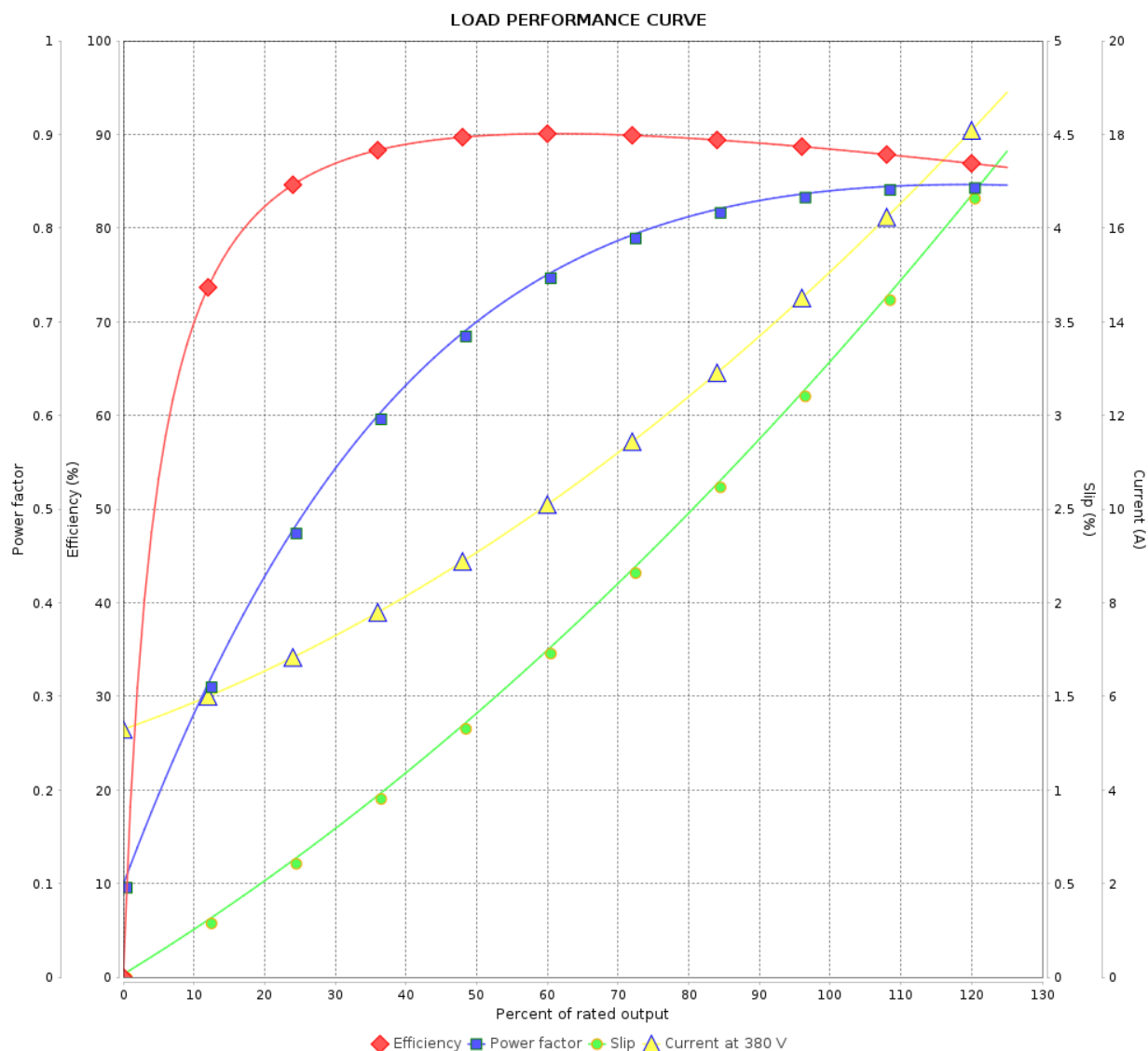
## Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 14363085



Performance : 380 V 50 Hz 4P IE1

Rated current : 15.3 A  
LRC : 5.7  
Rated torque : 5.01 kgfm  
Locked rotor torque : 165 %  
Breakdown torque : 220 %  
Rated speed : 1450 rpm

Moment of inertia (J) : 0.0563 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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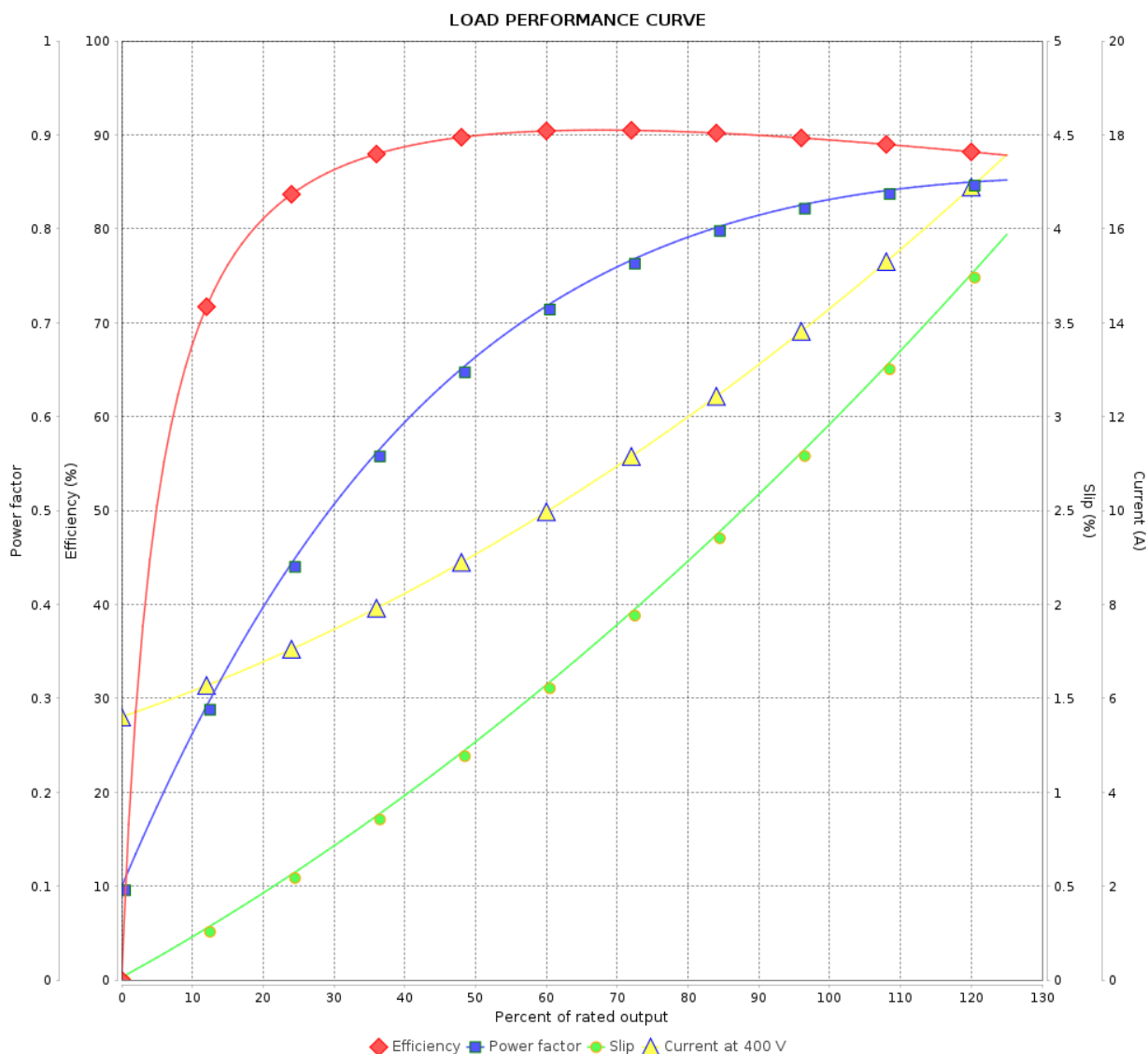
## Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 14363085



Performance : 400 V 50 Hz 4P IE2

Rated current : 14.6 A  
LRC : 6.4  
Rated torque : 4.99 kgfm  
Locked rotor torque : 190 %  
Breakdown torque : 250 %  
Rated speed : 1455 rpm

Moment of inertia (J) : 0.0563 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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# LOAD PERFORMANCE CURVE

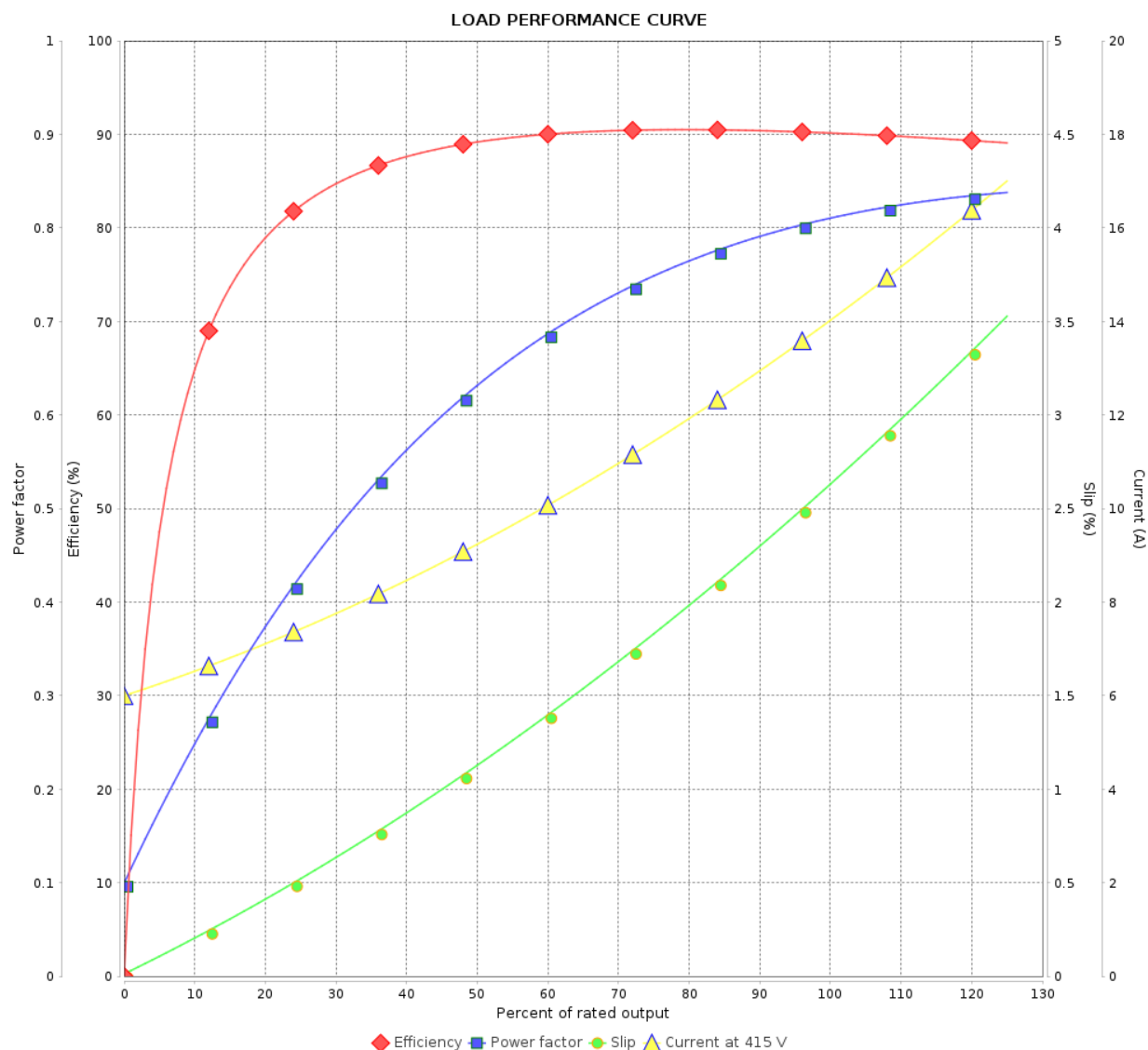
## Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 14363085



Performance : 415 V 50 Hz 4P IE2

Rated current : 14.3 A  
LRC : 6.4  
Rated torque : 4.97 kgfm  
Locked rotor torque : 210 %  
Breakdown torque : 270 %  
Rated speed : 1460 rpm

Moment of inertia (J) : 0.0563 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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