

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W21 Explosion Proof NEMA Premium Efficiency Three-Phase Product code : 11341752

Frame : 364/5T	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> : 459 kg
Protection degree : IP55	Moment of inertia (J) : 1.22 kgm <sup>2</sup>
Design : B	

Output [HP]	40	40	40	40
Poles	6	6	6	6
Frequency [Hz]	60	50	50	50
Rated voltage [V]	230/460	380	400	415
Rated current [A]	94.2/47.1	56.7	54.5	52.8
L. R. Amperes [A]	659/330	306	332	348
LRC [A]	7.0x(Code H)	5.4x(Code F)	6.1x(Code G)	6.6x(Code G)
No load current [A]	35.0/17.5	17.3	18.5	19.4
Rated speed [RPM]	1185	970	970	975
Slip [%]	1.25	3.00	3.00	2.50
Rated torque [kgfm]	24.5	29.9	29.9	29.8
Locked rotor torque [%]	229	180	200	220
Breakdown torque [%]	229	180	200	220
Service factor	1.15	1.00	1.00	1.00
Temperature rise	80 K	80 K	80 K	80 K
Locked rotor time	43s (cold) 24s (hot)	36s (cold) 20s (hot)	36s (cold) 20s (hot)	36s (cold) 20s (hot)
Noise level <sup>2</sup>	65.0 dB(A)	61.0 dB(A)	61.0 dB(A)	61.0 dB(A)
Efficiency (%)	25%	93.5	94.0	93.3
	50%	93.6	93.6	93.0
	75%	94.1	93.0	93.6
	100%	94.1	92.4	93.0
Power Factor	25%	0.46	0.52	0.46
	50%	0.72	0.78	0.72
	75%	0.80	0.83	0.80
	100%	0.85	0.87	0.85

	<u>Drive end</u>	<u>Non drive end</u>	Foundation loads
Bearing type :	6314 C3	6314 C3	Max. traction : 507 kgf
Sealing :	Oil Seal	Lip Seal	Max. compression : 966 kgf
Lubrication interval :	14267 h	14267 h	
Lubricant amount :	27 g	27 g	
Lubricant type :	Mobil Polyrex EM		

Notes  
USABLE @208V 104A SF 1.00 SFA 104A

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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Checked by				
Date	30/10/2024			

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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

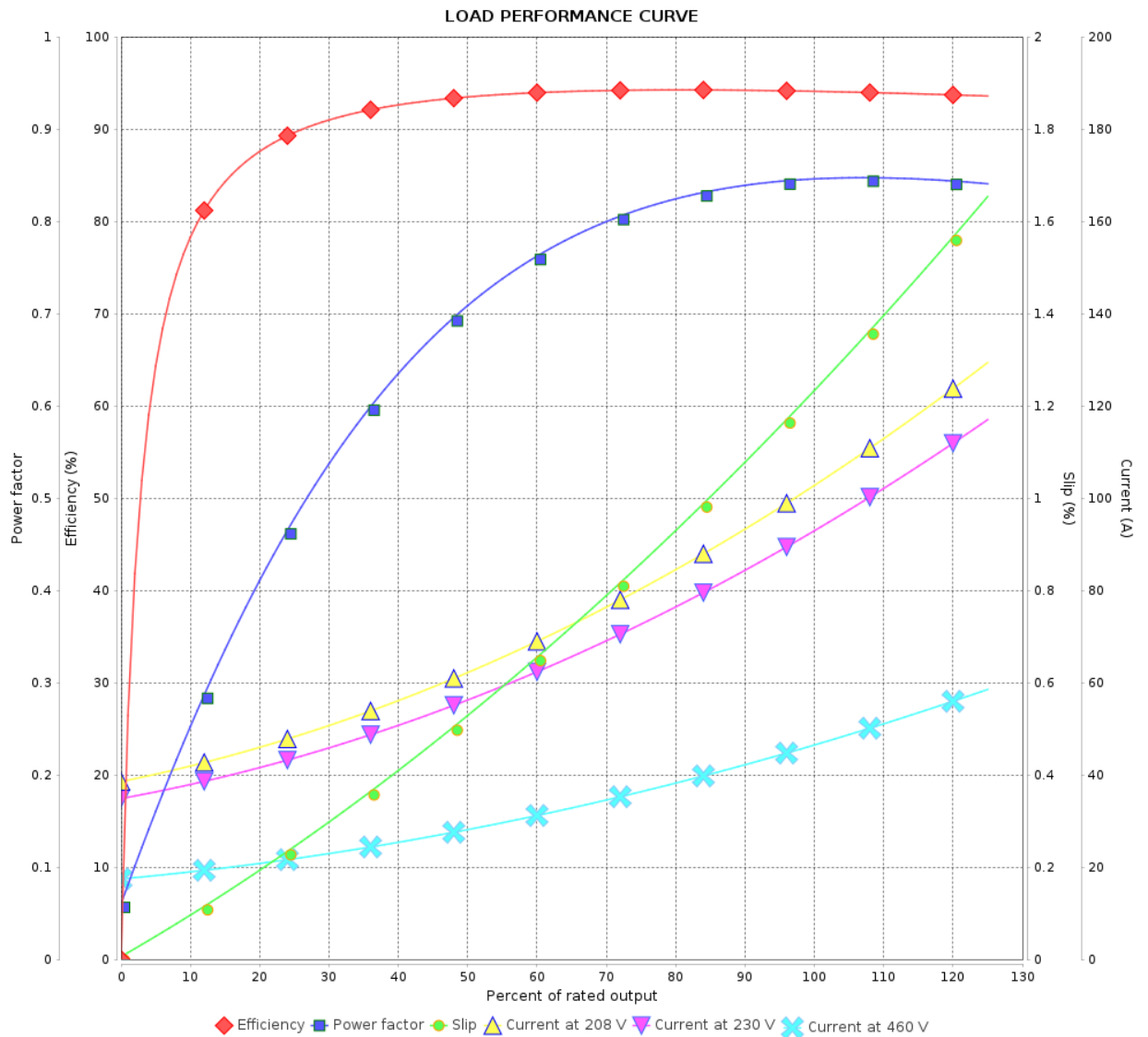
## Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 11341752



Performance : 230/460 V 60 Hz 6P

Rated current : 94.2/47.1 A  
LRC : 7.0  
Rated torque : 24.5 kgfm  
Locked rotor torque : 229 %  
Breakdown torque : 229 %  
Rated speed : 1185 rpm

Moment of inertia (J) : 1.22 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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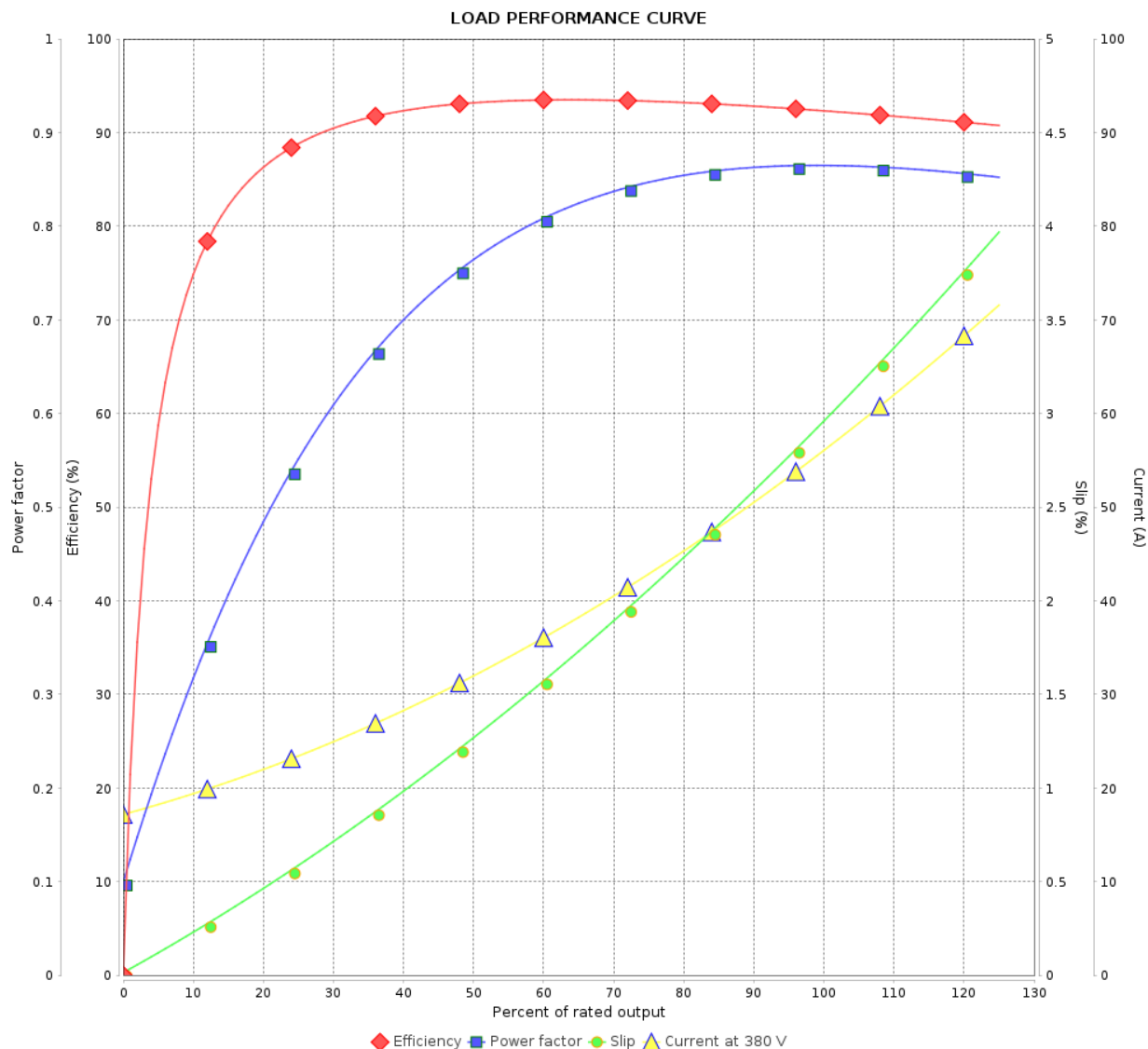
## Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 11341752



Performance : 380 V 50 Hz 6P IE2

Rated current	: 56.7 A	Moment of inertia (J)	: 1.22 kgm <sup>2</sup>
LRC	: 5.4	Duty cycle	: Cont.(S1)
Rated torque	: 29.9 kgfm	Insulation class	: F
Locked rotor torque	: 180 %	Service factor	: 1.00
Breakdown torque	: 180 %	Temperature rise	: 80 K
Rated speed	: 970 rpm	Design	: B

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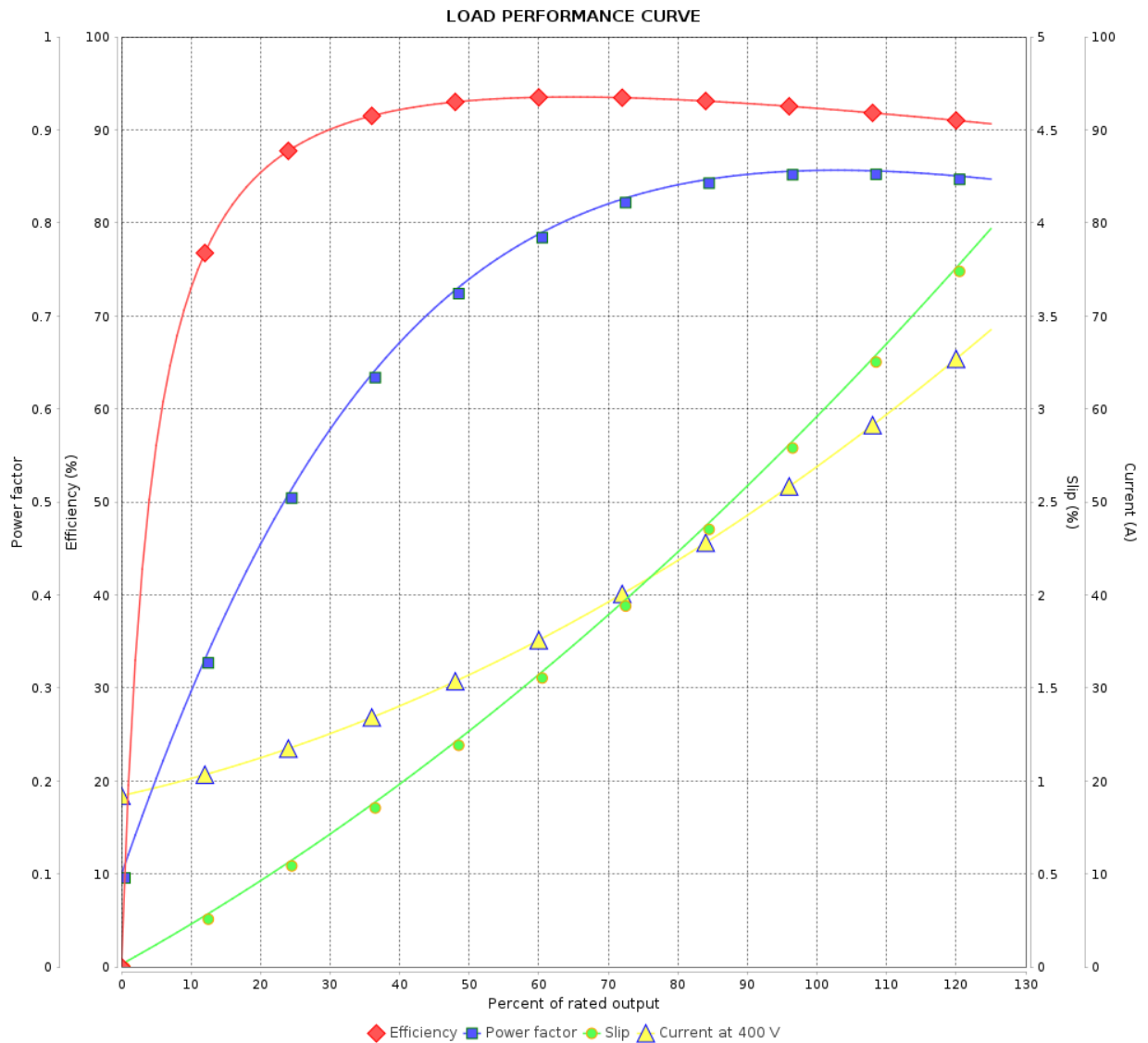
## Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 11341752



Performance : 400 V 50 Hz 6P IE2

Rated current : 54.5 A  
LRC : 6.1  
Rated torque : 29.9 kgfm  
Locked rotor torque : 200 %  
Breakdown torque : 200 %  
Rated speed : 970 rpm

Moment of inertia (J) : 1.22 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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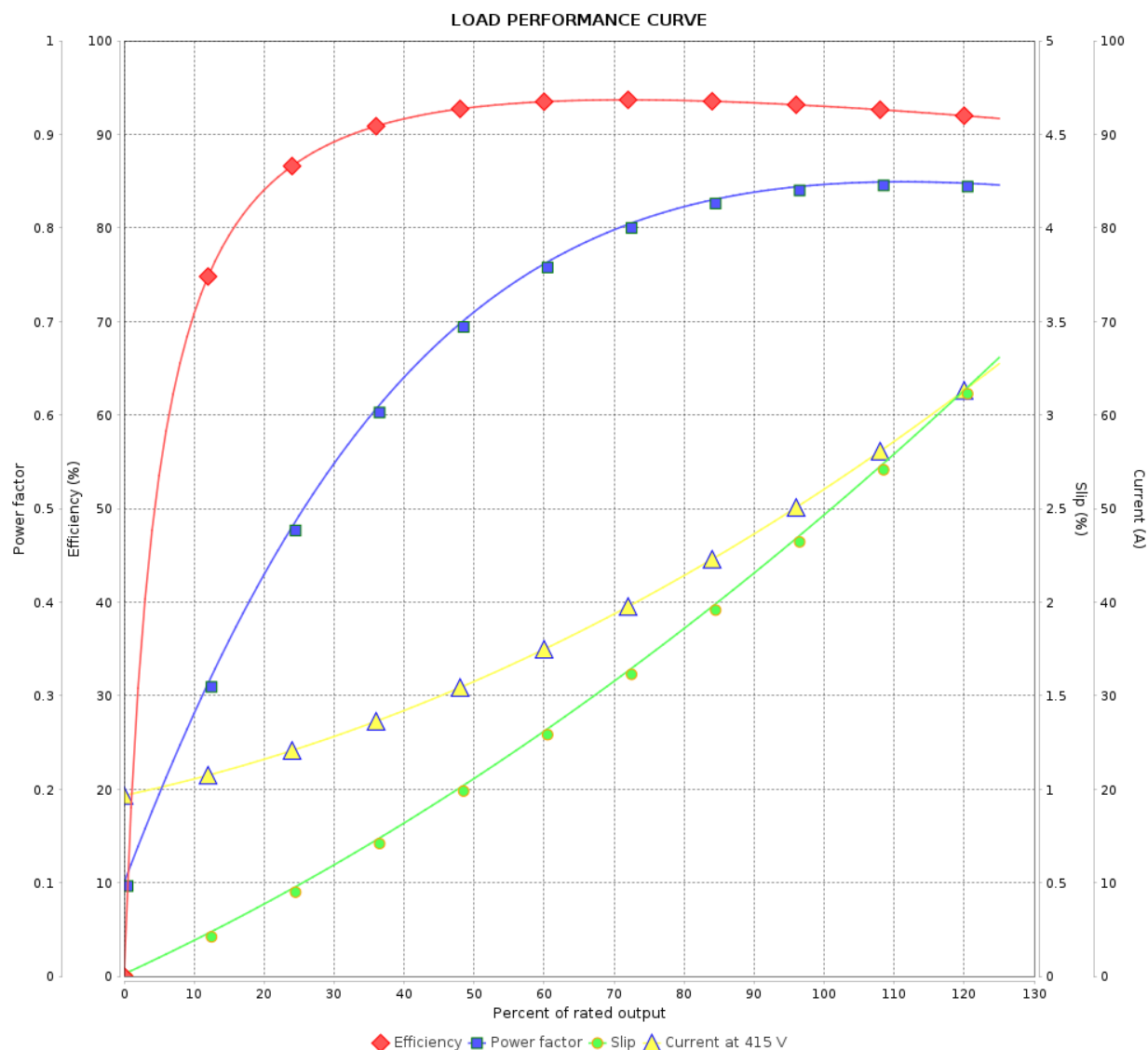
## Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 11341752



Performance : 415 V 50 Hz 6P IE3

Rated current : 52.8 A  
LRC : 6.6  
Rated torque : 29.8 kgfm  
Locked rotor torque : 220 %  
Breakdown torque : 220 %  
Rated speed : 975 rpm

Moment of inertia (J) : 1.22 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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