

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W21 Explosion Proof NEMA Premium Efficiency Three-Phase Product code : 15895649

Frame : 324T	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> : 283 kg
Protection degree : IP55	Moment of inertia (J) : 0.4555 kgm <sup>2</sup>
Design : B	

Output [HP]	25	25	25	25
Poles	6	6	6	6
Frequency [Hz]	60	50	50	50
Rated voltage [V]	230/460	380	400	415
Rated current [A]	61.6/30.8	36.8	35.1	34.2
L. R. Amperes [A]	382/191	180	190	198
LRC [A]	6.2x(Code G)	4.9x(Code E)	5.4x(Code F)	5.8x(Code G)
No load current [A]	28.0/14.0	13.2	14.2	14.9
Rated speed [RPM]	1180	975	980	980
Slip [%]	1.67	2.50	2.00	2.00
Rated torque [kgfm]	15.4	18.6	18.5	18.5
Locked rotor torque [%]	210	160	180	200
Breakdown torque [%]	260	200	229	250
Service factor	1.15	1.00	1.00	1.00
Temperature rise	80 K	80 K	80 K	80 K
Locked rotor time	45s (cold) 25s (hot)	54s (cold) 30s (hot)	54s (cold) 30s (hot)	54s (cold) 30s (hot)
Noise level <sup>2</sup>	62.0 dB(A)	58.0 dB(A)	58.0 dB(A)	58.0 dB(A)
Efficiency (%)	25%			
	50%	92.4	91.7	91.7
	75%	93.0	92.4	92.4
	100%	93.0	91.7	91.7
Power Factor	25%			
	50%	0.65	0.71	0.65
	75%	0.77	0.81	0.77
	100%	0.81	0.84	0.83

	<u>Drive end</u>	<u>Non drive end</u>	
Bearing type :	6312	6212	Foundation loads
	2RS C3	2RS C3	Max. traction : 451 kgf
Sealing :	Oil Seal	Lip Seal	Max. compression : 714 kgf
Lubrication interval :	-	-	
Lubricant amount :	-	-	
Lubricant type :	Mobil Polyrex EM		

Notes  
USABLE @208V 67.2A SF 1.15 SFA 77.3A

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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Date	30/10/2024			

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Customer :

Thermal protection

ID	Application	Type	Quantity	Sensing Temperature
1	Winding	Thermostat - 2 wires	1 x Phase	130 °C
2	Winding	Thermostat - 2 wires	1 x Phase	155 °C

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# LOAD PERFORMANCE CURVE

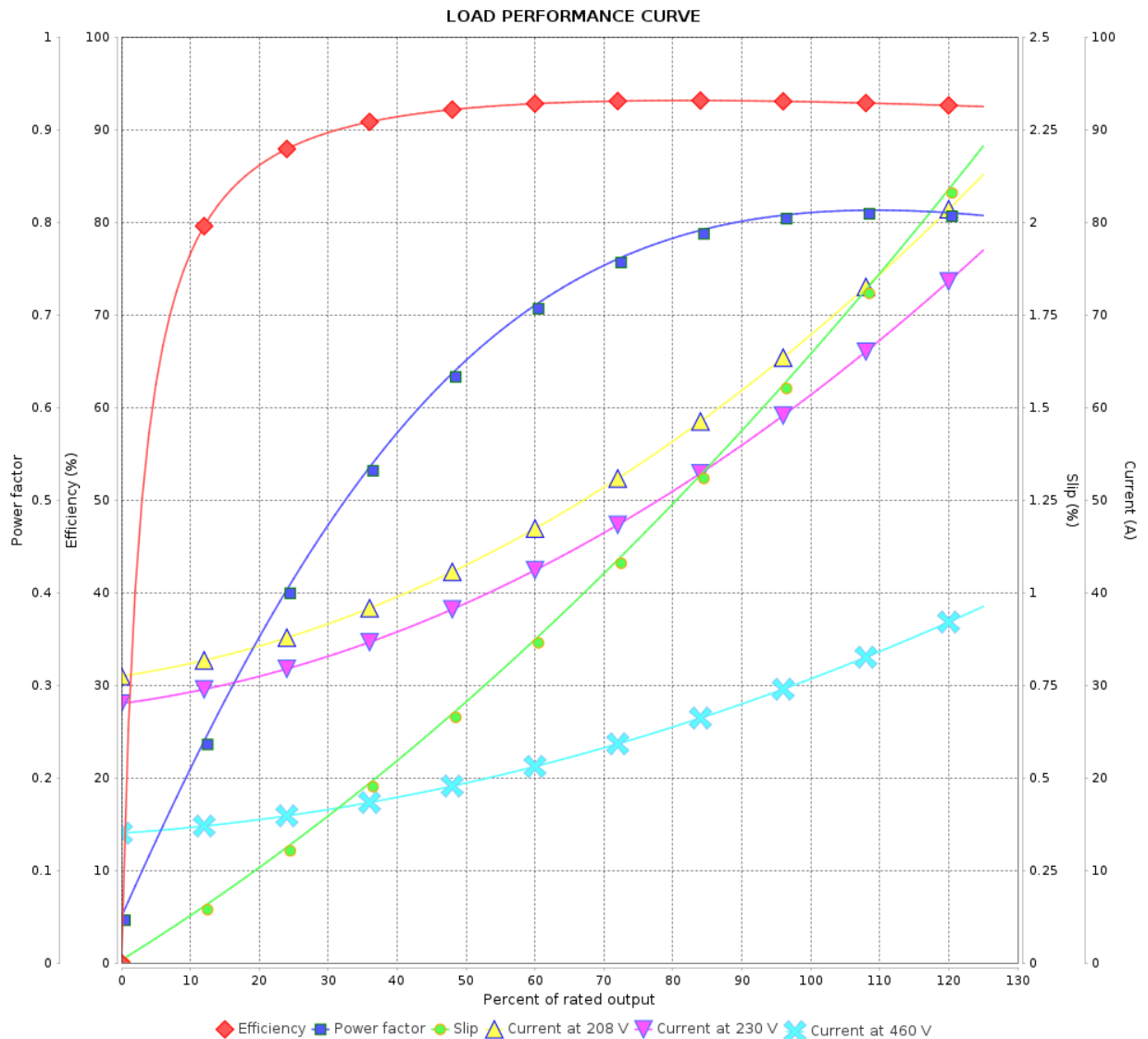
## Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 15895649



Performance : 230/460 V 60 Hz 6P

Rated current : 61.6/30.8 A  
LRC : 6.2  
Rated torque : 15.4 kgfm  
Locked rotor torque : 210 %  
Breakdown torque : 260 %  
Rated speed : 1180 rpm

Moment of inertia (J) : 0.4555 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

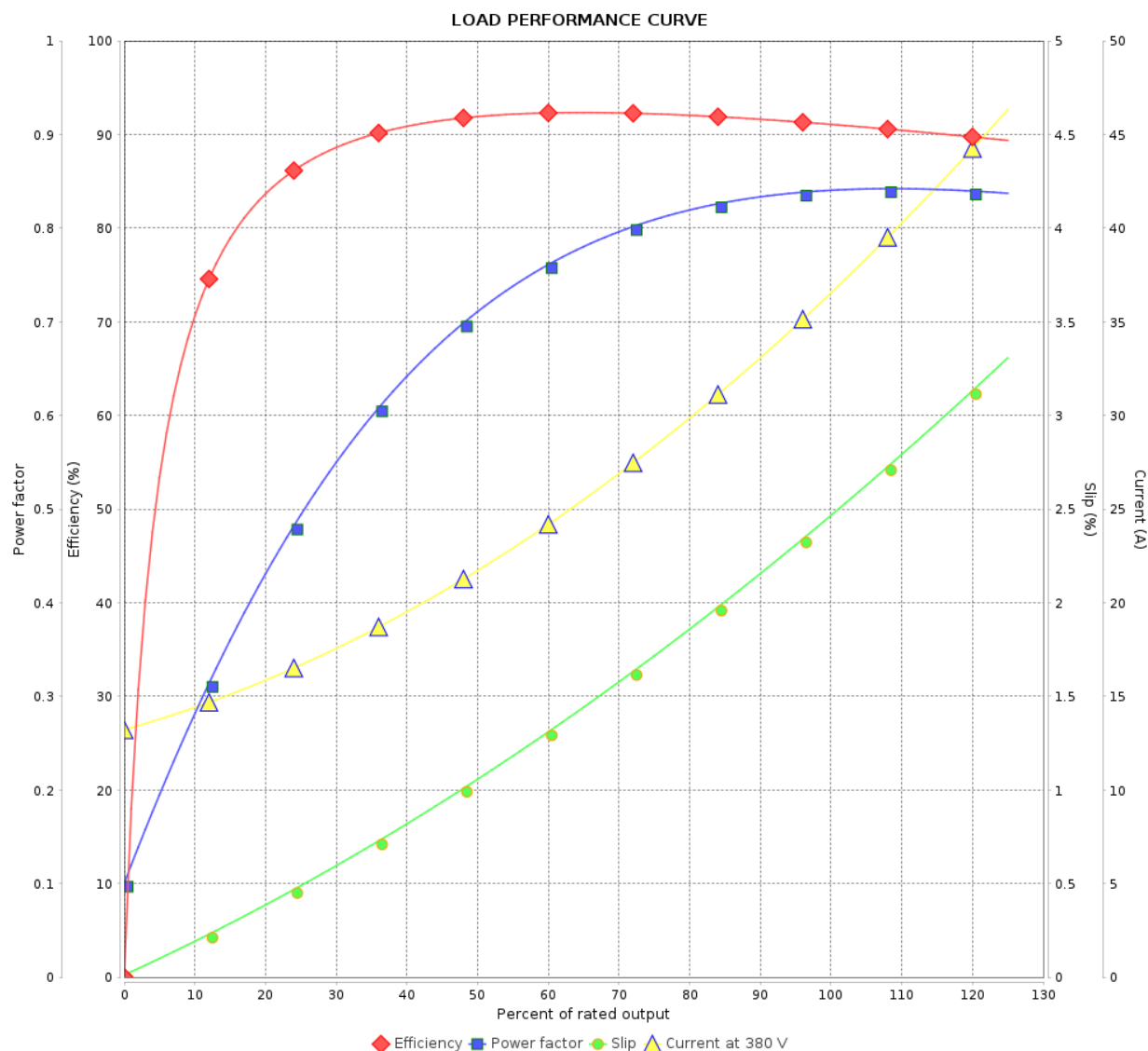
## Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 15895649



Performance : 380 V 50 Hz 6P IE2

Rated current : 36.8 A  
LRC : 4.9  
Rated torque : 18.6 kgfm  
Locked rotor torque : 160 %  
Breakdown torque : 200 %  
Rated speed : 975 rpm

Moment of inertia (J) : 0.4555 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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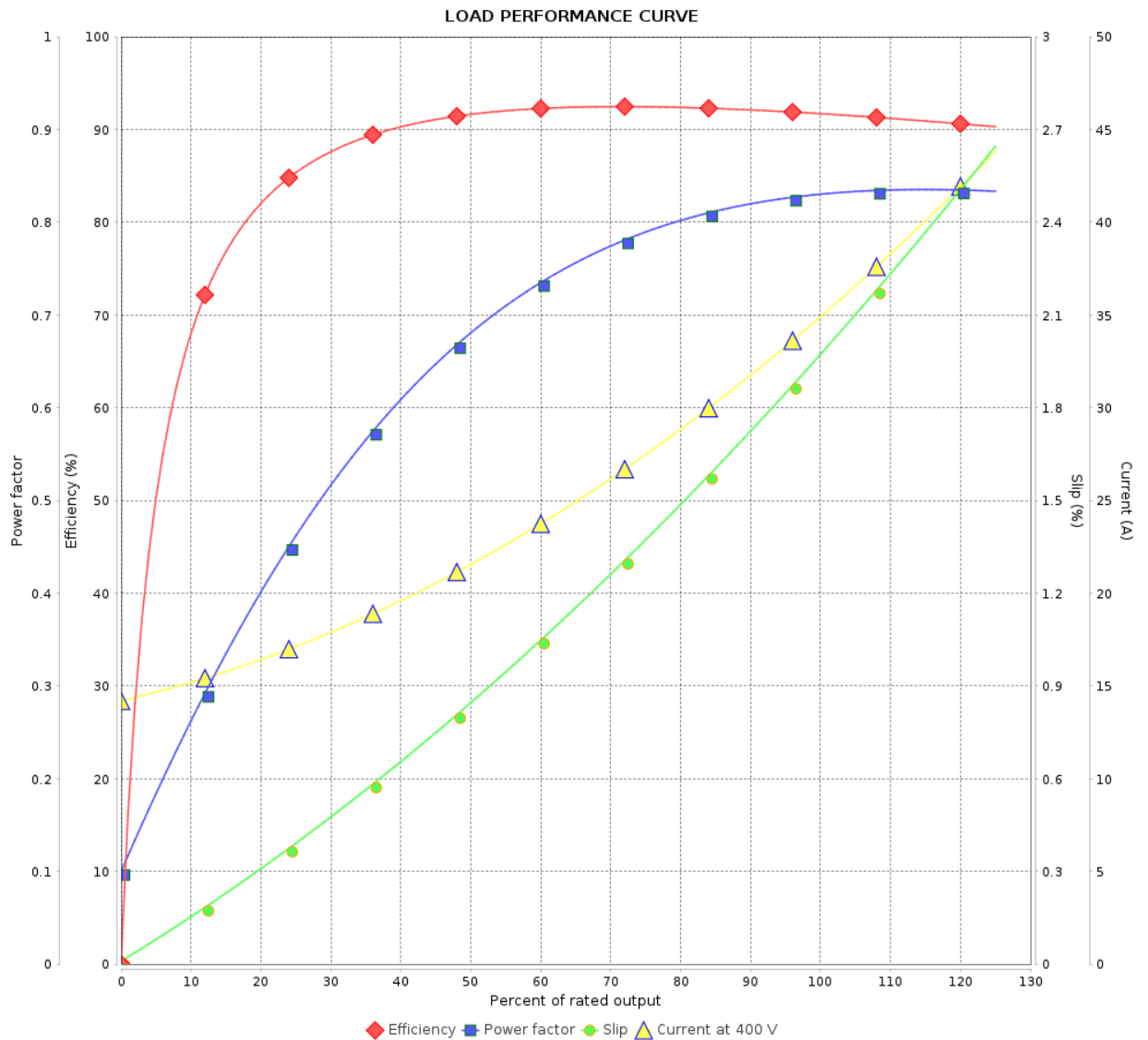
## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W21 Explosion Proof NEMA  
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Product code : 15895649



Performance : 400 V 50 Hz 6P IE3

Rated current	: 35.1 A	Moment of inertia (J)	: 0.4555 kgm <sup>2</sup>
LRC	: 5.4	Duty cycle	: Cont.(S1)
Rated torque	: 18.5 kgfm	Insulation class	: F
Locked rotor torque	: 180 %	Service factor	: 1.00
Breakdown torque	: 229 %	Temperature rise	: 80 K
Rated speed	: 980 rpm	Design	: B

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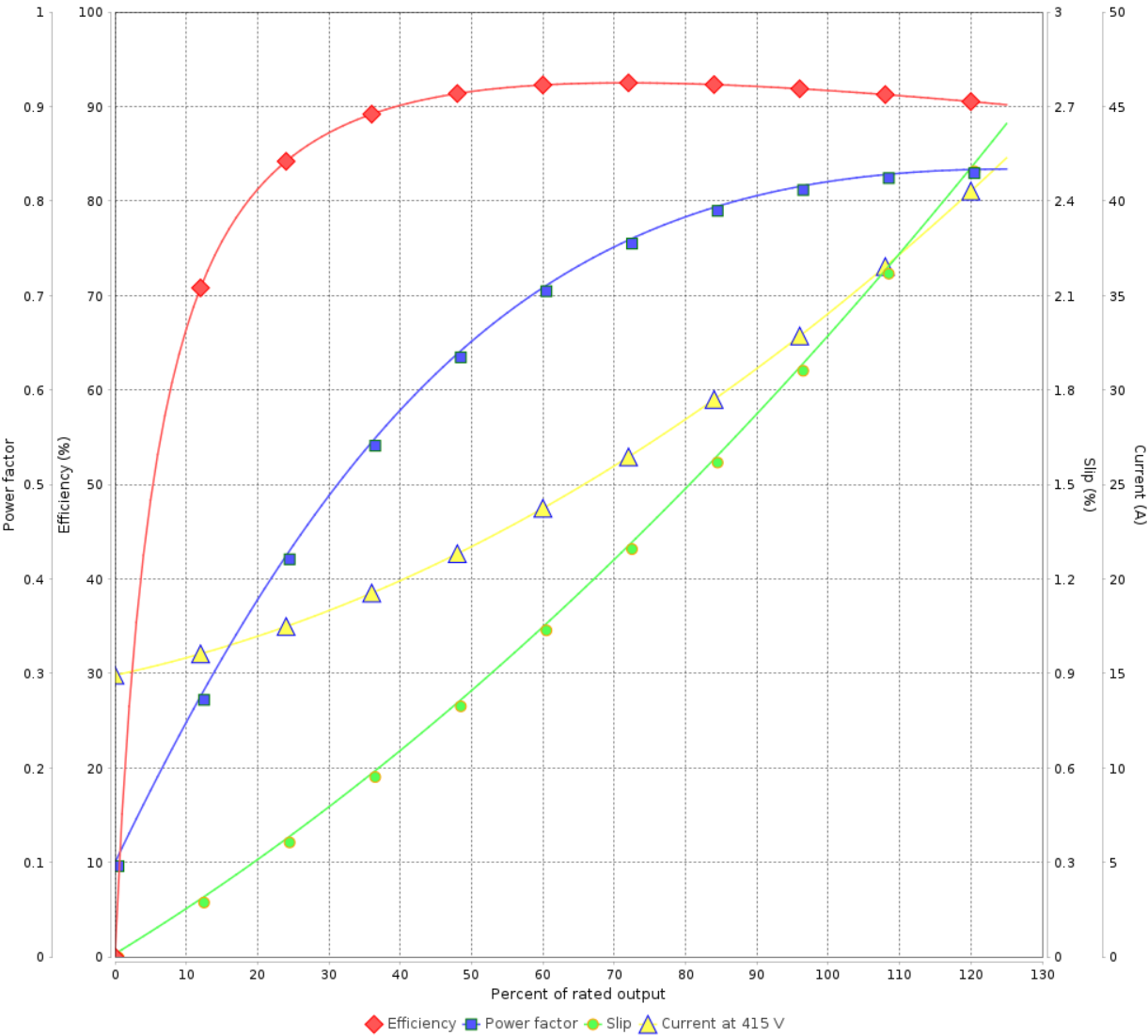


Customer :

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Premium Efficiency Three-Phase

Product code : 15895649

LOAD PERFORMANCE CURVE



Performance : 415 V 50 Hz 6P IE3

Rated current	: 34.2 A	Moment of inertia (J)	: 0.4555 kgm <sup>2</sup>
LRC	: 5.8	Duty cycle	: Cont.(S1)
Rated torque	: 18.5 kgfm	Insulation class	: F
Locked rotor torque	: 200 %	Service factor	: 1.00
Breakdown torque	: 250 %	Temperature rise	: 80 K
Rated speed	: 980 rpm	Design	: B

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