

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W21 Explosion Proof NEMA Premium Efficiency Three-Phase Product code : 11889522

Frame : 404/5T	Cooling method : IC411 - TEFC
Insulation class : F	Mounting : F-1
Duty cycle : Cont.(S1)	Rotation ¹ : Both (CW and CCW)
Ambient temperature : -20°C to +40°C	Starting method : Direct On Line
Altitude : 1000 m.a.s.l.	Approx. weight ³ : 550 kg
Protection degree : IP55	Moment of inertia (J) : 1.69 kgm ²
Design : B	

Output [HP]	75	60	60	60
Poles	6	6	6	6
Frequency [Hz]	60	50	50	50
Rated voltage [V]	230/460	380	400	415
Rated current [A]	174/87.0	86.6	84.3	81.8
L. R. Amperes [A]	1340/670	624	666	687
LRC [A]	7.7x(Code J)	7.2x(Code H)	7.9x(Code J)	8.4x(Code K)
No load current [A]	62.5/31.3	31.0	33.6	36.0
Rated speed [RPM]	1185	985	987	988
Slip [%]	1.25	1.50	1.30	1.20
Rated torque [kgfm]	45.9	44.2	44.1	44.1
Locked rotor torque [%]	250	229	260	280
Breakdown torque [%]	260	250	280	300
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)	27s (cold) 15s (hot)	27s (cold) 15s (hot)	27s (cold) 15s (hot)
Noise level ²	65.0 dB(A)	61.0 dB(A)	61.0 dB(A)	61.0 dB(A)
Efficiency (%)	25%			
	50%	94.1	94.0	93.6
	75%	95.0	94.0	94.5
	100%	94.5	94.0	94.5
Power Factor	25%			
	50%	0.72	0.72	0.68
	75%	0.81	0.81	0.76
	100%	0.84	0.84	0.81

	<u>Drive end</u>	<u>Non drive end</u>	Foundation loads
Bearing type	: NU-217 C3	6314 C3	Max. traction : 1026 kgf
Sealing	: Oil Seal	Lip Seal	Max. compression : 1576 kgf
Lubrication interval	: 10272 h	14267 h	
Lubricant amount	: 21 g	27 g	
Lubricant type	: Mobil Polyrex EM		

Notes
USABLE @208V 192A SF 1.00 SFA 192A

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

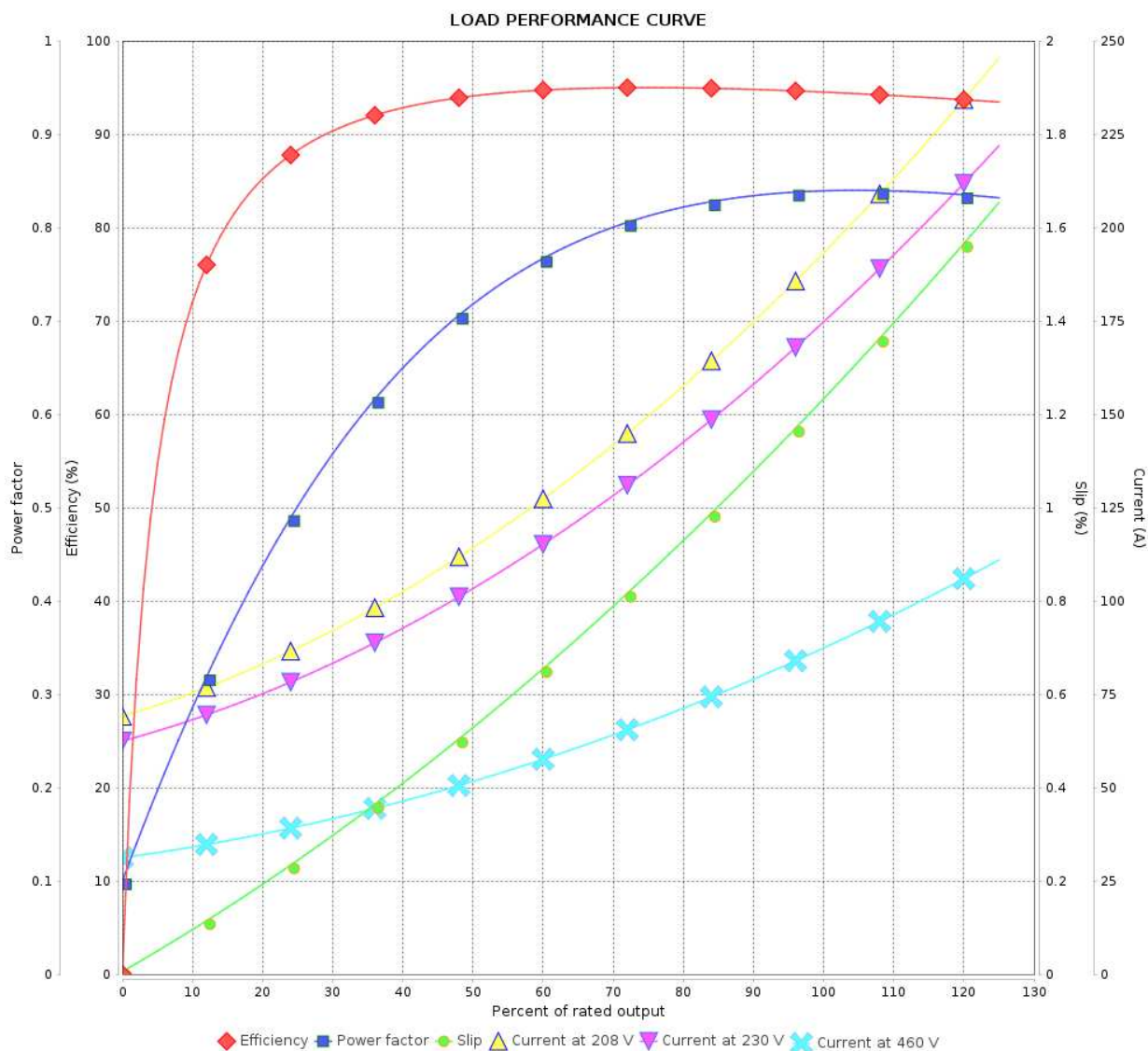
Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 11889522



Performance : 230/460 V 60 Hz 6P

Rated current : 174/87.0 A
LRC : 7.7
Rated torque : 45.9 kgfm
Locked rotor torque : 250 %
Breakdown torque : 260 %
Rated speed : 1185 rpm

Moment of inertia (J) : 1.69 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.15
Temperature rise : 80 K
Design : B

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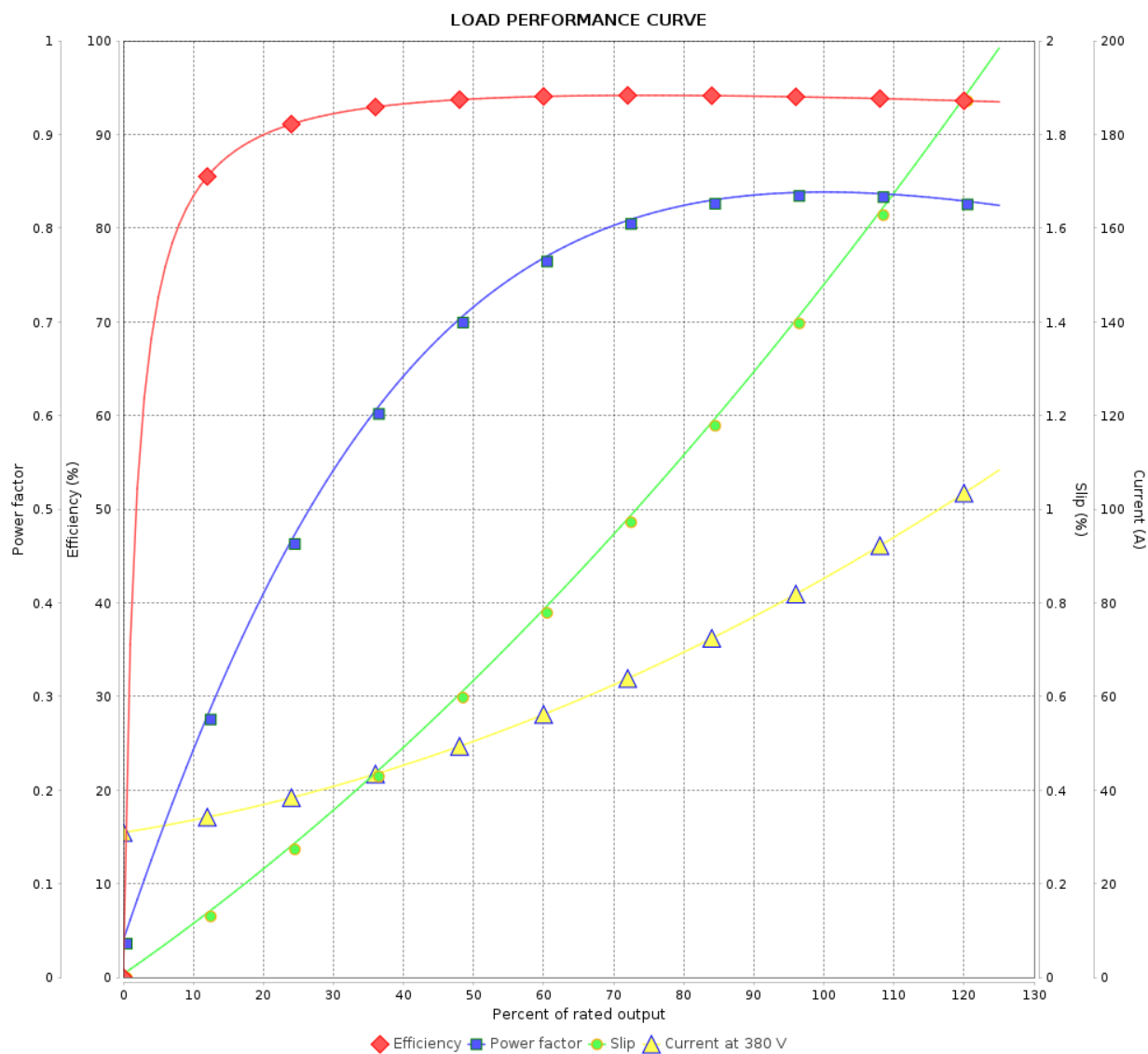
Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 11889522



Performance : 380 V 50 Hz 6P IE3

Rated current	: 86.6 A	Moment of inertia (J)	: 1.69 kgm ²
LRC	: 7.2	Duty cycle	: Cont.(S1)
Rated torque	: 44.2 kgfm	Insulation class	: F
Locked rotor torque	: 229 %	Service factor	: 1.00
Breakdown torque	: 250 %	Temperature rise	: 80 K
Rated speed	: 985 rpm	Design	: B

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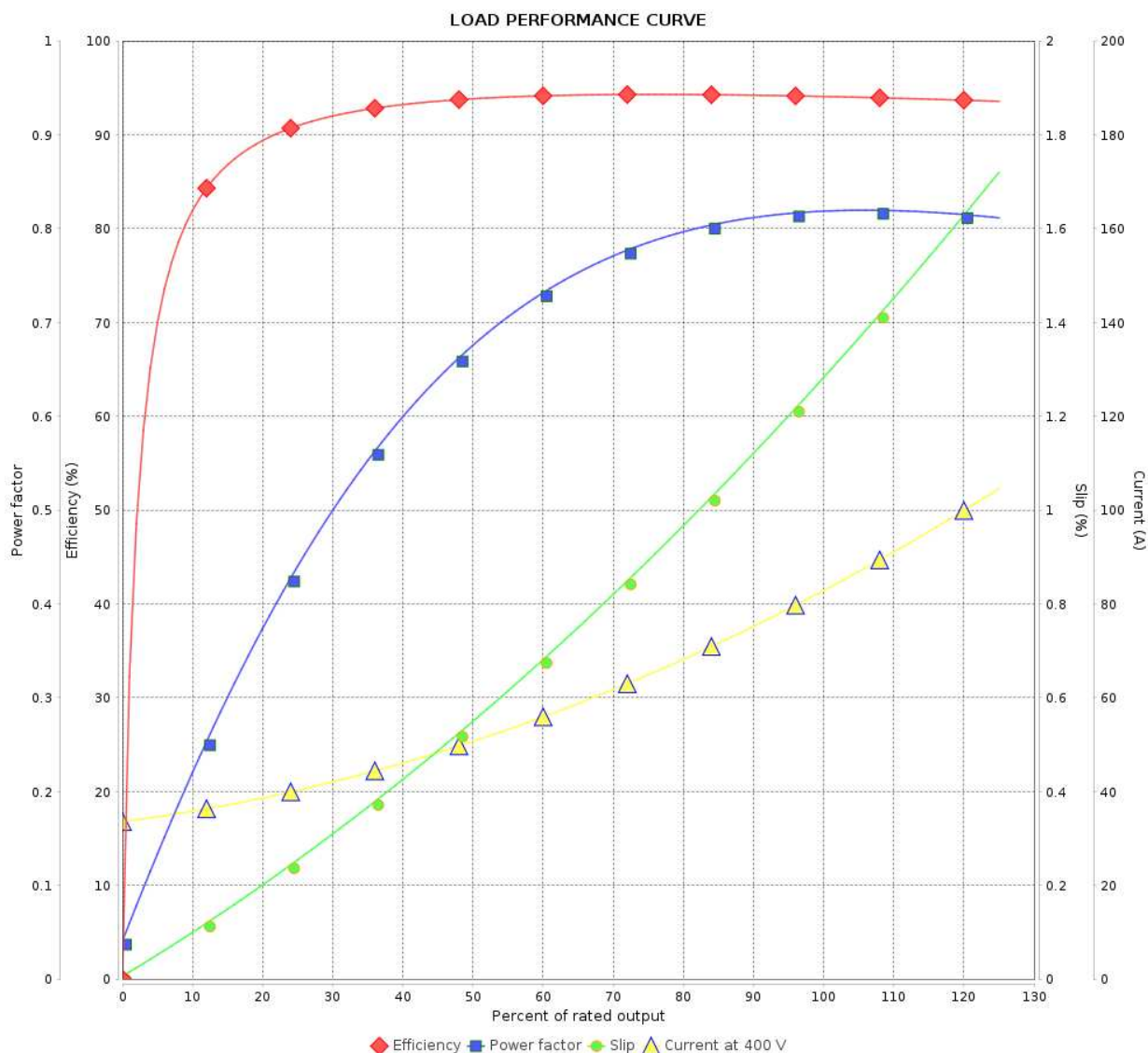
Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 11889522



Performance : 400 V 50 Hz 6P IE3

Rated current : 84.3 A
LRC : 7.9
Rated torque : 44.1 kgfm
Locked rotor torque : 260 %
Breakdown torque : 280 %
Rated speed : 987 rpm

Moment of inertia (J) : 1.69 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.00
Temperature rise : 80 K
Design : B

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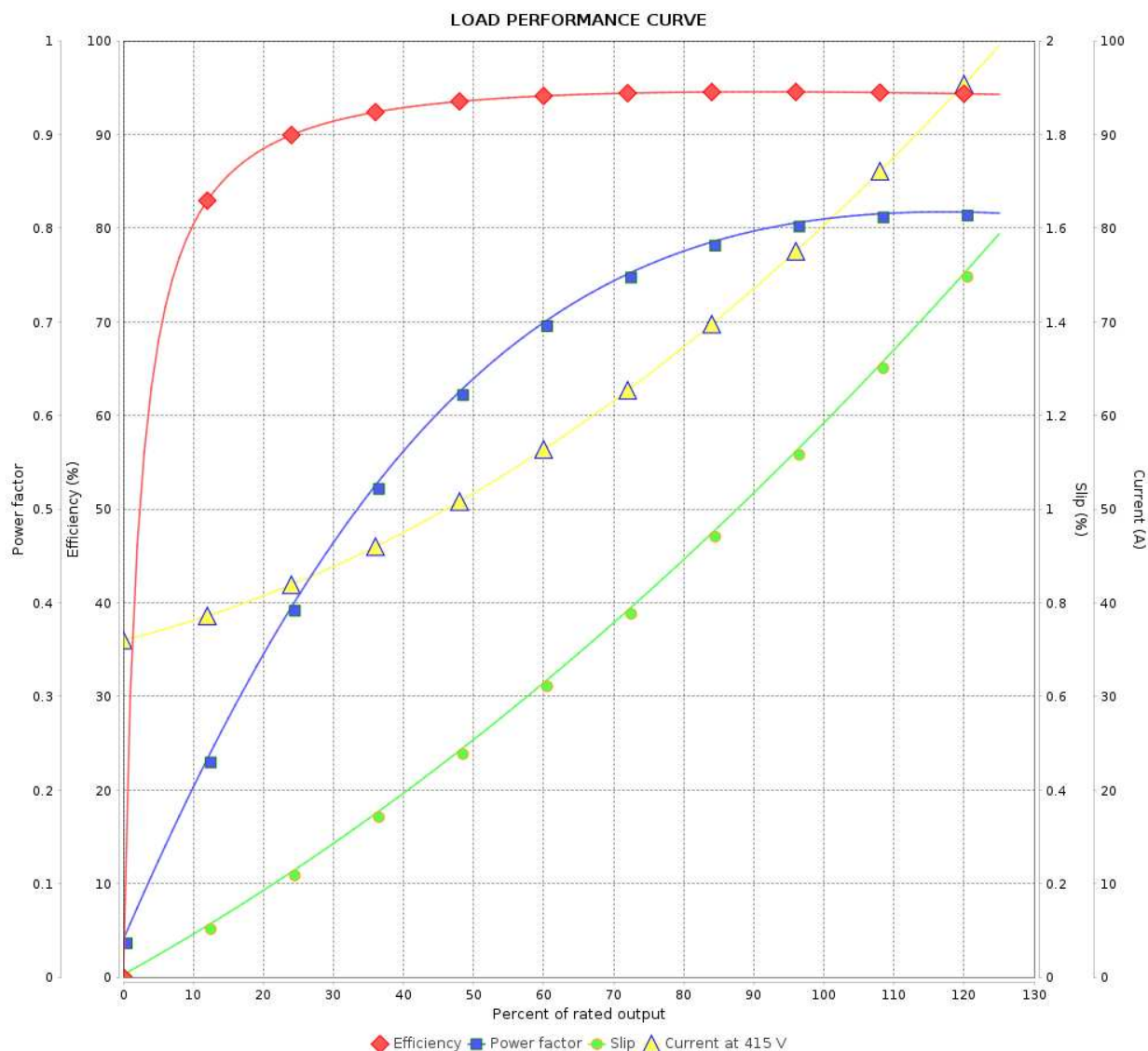
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W21 Explosion Proof NEMA
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Performance : 415 V 50 Hz 6P IE3

Rated current	: 81.8 A	Moment of inertia (J)	: 1.69 kgm ²
LRC	: 8.4	Duty cycle	: Cont.(S1)
Rated torque	: 44.1 kgfm	Insulation class	: F
Locked rotor torque	: 280 %	Service factor	: 1.00
Breakdown torque	: 300 %	Temperature rise	: 80 K
Rated speed	: 988 rpm	Design	: B

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