

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :					
Product line		: W21 Explosion Proof NEMA Premium Efficiency Three-Phase		Product code : 11697831	
Frame	: 444/5T	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	: 971 kg		
Protection degree	: IP55	Moment of inertia (J)	: 2.81 kgm ²		
Design	: B				
Output [HP]	150	125	125	125	
Poles	4	4	4	4	
Frequency [Hz]	60	50	50	50	
Rated voltage [V]	230/460	380	400	415	
Rated current [A]	340/170	169	163	158	
L. R. Amperes [A]	2210/1105	1082	1141	1185	
LRC [A]	6.5x(Code G)	6.4x(Code G)	7.0x(Code H)	7.5x(Code H)	
No load current [A]	108/54.0	53.0	56.0	59.0	
Rated speed [RPM]	1783	1483	1486	1487	
Slip [%]	0.94	1.13	0.93	0.87	
Rated torque [kgfm]	61.1	61.2	61.0	61.0	
Locked rotor torque [%]	200	190	210	229	
Breakdown torque [%]	220	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	66s (cold) 37s (hot)	77s (cold) 43s (hot)	72s (cold) 40s (hot)	68s (cold) 38s (hot)	
Noise level ²	76.0 dB(A)	72.0 dB(A)	72.0 dB(A)	72.0 dB(A)	
Efficiency (%)	25%				
	50%	95.0	94.5	95.0	
	75%	95.8	95.0	95.0	
	100%	95.8	95.0	95.0	
Power Factor	25%				
	50%	0.72	0.72	0.69	
	75%	0.81	0.81	0.79	
	100%	0.85	0.85	0.84	
Bearing type	: <u>Drive end</u> NU-219 C3	<u>Non drive end</u> 6316 C3	Foundation loads		
Sealing	: Viton	Viton Seal	Max. traction	: 955 kgf	
	Oil Seal		Max. compression	: 1926 kgf	
Lubrication interval	: 5526 h	8569 h			
Lubricant amount	: 28 g	34 g			
Lubricant type	: Mobil Polyrex EM				
Notes USABLE @208V 376A SF 1.00 SFA 376A					
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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Thermal protection

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

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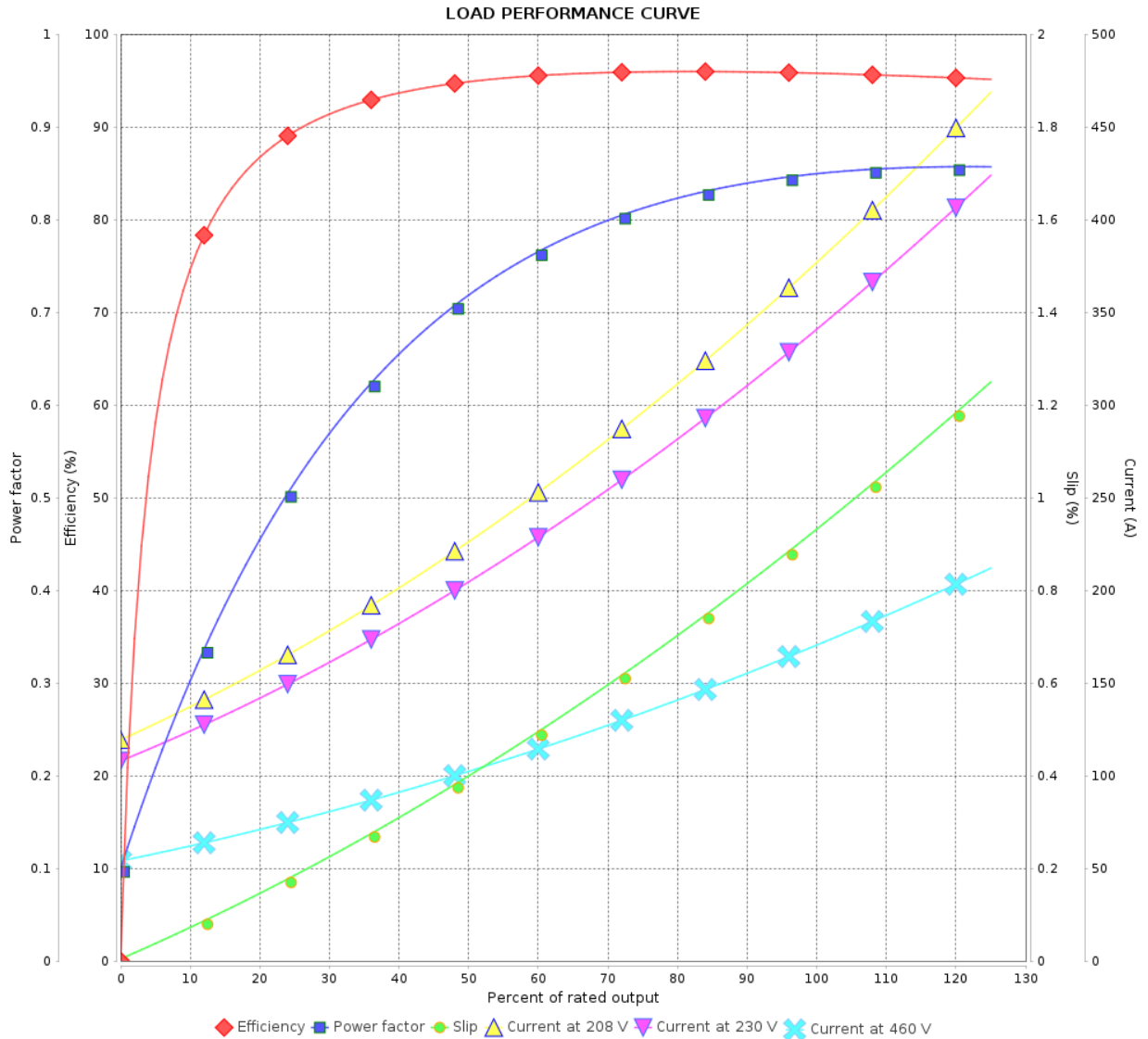
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Performance : 230/460 V 60 Hz 4P

Rated current : 340/170 A
LRC : 6.5
Rated torque : 61.1 kgfm
Locked rotor torque : 200 %
Breakdown torque : 220 %
Rated speed : 1783 rpm

Moment of inertia (J) : 2.81 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.15
Temperature rise : 80 K
Design : B

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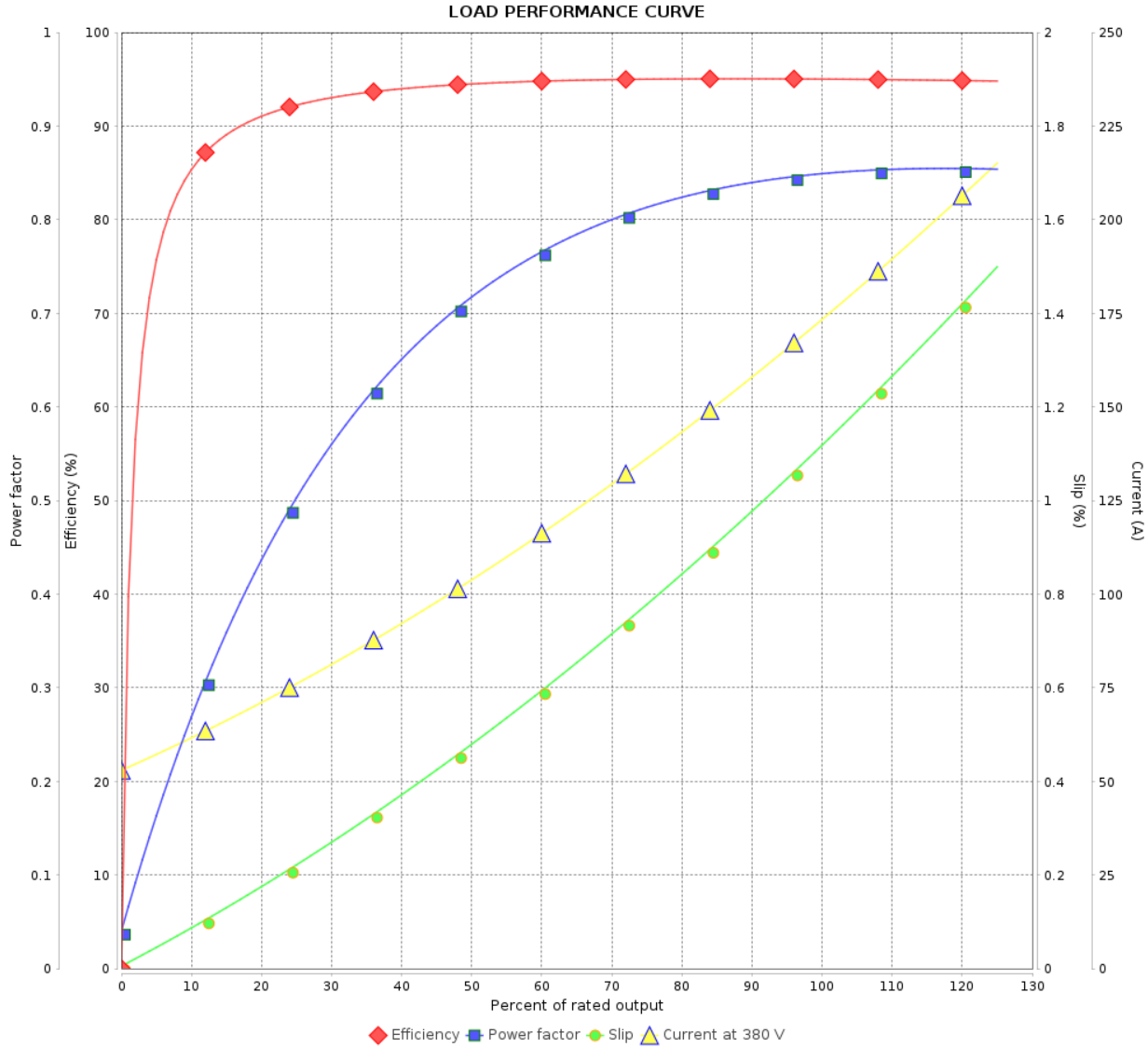
Three Phase Induction Motor - Squirrel Cage



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Performance : 380 V 50 Hz 4P IE2

Rated current	: 169 A	Moment of inertia (J)	: 2.81 kgm ²
LRC	: 6.4	Duty cycle	: Cont.(S1)
Rated torque	: 61.2 kgfm	Insulation class	: F
Locked rotor torque	: 190 %	Service factor	: 1.00
Breakdown torque	: 220 %	Temperature rise	: 80 K
Rated speed	: 1483 rpm	Design	: B

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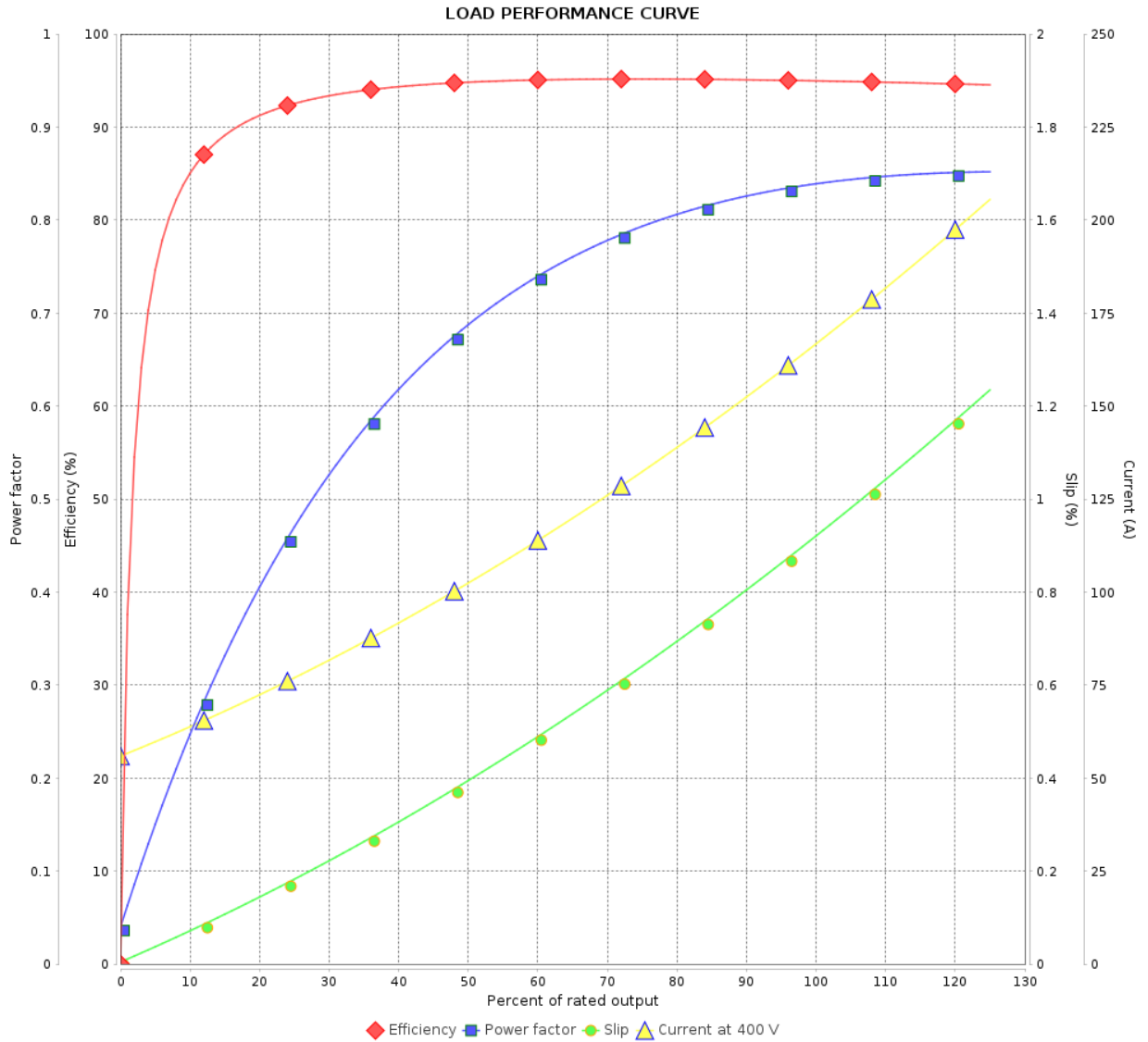
Three Phase Induction Motor - Squirrel Cage



Customer :

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Performance : 400 V 50 Hz 4P IE2

Rated current : 163 A
LRC : 7.0
Rated torque : 61.0 kgfm
Locked rotor torque : 210 %
Breakdown torque : 250 %
Rated speed : 1486 rpm

Moment of inertia (J) : 2.81 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.00
Temperature rise : 80 K
Design : B

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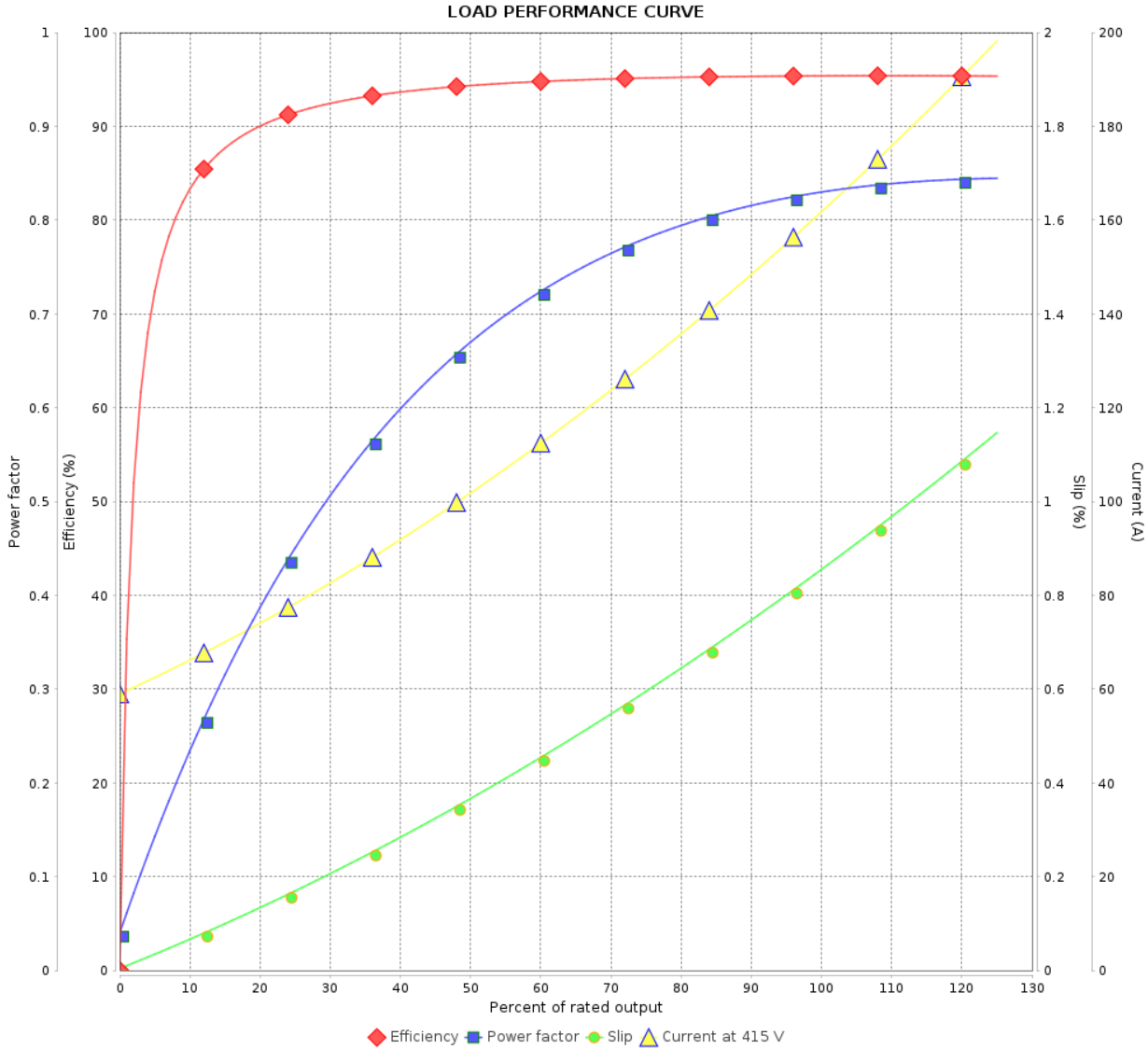
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Performance : 415 V 50 Hz 4P IE3

Rated current : 158 A
LRC : 7.5
Rated torque : 61.0 kgfm
Locked rotor torque : 229 %
Breakdown torque : 270 %
Rated speed : 1487 rpm

Moment of inertia (J) : 2.81 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.00
Temperature rise : 80 K
Design : B

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