

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :					
Product line		: W21 Explosion Proof NEMA Premium Efficiency Three-Phase		Product code : 13176144	
Frame	: 447T	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	: 1137 kg		
Protection degree	: IP55	Moment of inertia (J)	: 3.21 kgm ²		
Design	: B				
Output [HP]	200	150	150	150	
Poles	4	4	4	4	
Frequency [Hz]	60	50	50	50	
Rated voltage [V]	230/460	380	400	415	
Rated current [A]	460/230	208	202	197	
L. R. Amperes [A]	3128/1564	1518	1535	1576	
LRC [A]	6.8x(Code G)	7.3x(Code H)	7.6x(Code H)	8.0x(Code J)	
No load current [A]	148/74.0	73.0	77.0	81.0	
Rated speed [RPM]	1782	1485	1487	1488	
Slip [%]	1.00	1.00	0.87	0.80	
Rated torque [kgfm]	81.5	73.3	73.2	73.2	
Locked rotor torque [%]	210	220	250	280	
Breakdown torque [%]	229	250	280	310	
Service factor	1.15	1.00	1.00	1.00	
Temperature rise	80 K	80 K	80 K	80 K	
Locked rotor time	52s (cold) 29s (hot)	70s (cold) 39s (hot)	66s (cold) 37s (hot)	63s (cold) 35s (hot)	
Noise level ²	82.0 dB(A)	82.0 dB(A)	82.0 dB(A)	82.0 dB(A)	
Efficiency (%)	25%				
	50%	95.8	95.4	95.4	
	75%	96.2	95.4	95.8	
	100%	96.2	95.8	95.8	
Power Factor	25%				
	50%	0.72	0.70	0.65	
	75%	0.80	0.78	0.75	
	100%	0.85	0.84	0.82	
Bearing type	: <u>Drive end</u> NU-319 C3	<u>Non drive end</u> 6316 C3	Foundation loads		
Sealing	: Viton	Viton Seal	Max. traction	: 1415 kgf	
	Oil Seal		Max. compression	: 2552 kgf	
Lubrication interval	: 4706 h	8569 h			
Lubricant amount	: 45 g	34 g			
Lubricant type	: Mobil Polyrex EM				
Notes USABLE @208V 509A SF 1.00 SFA 509A					
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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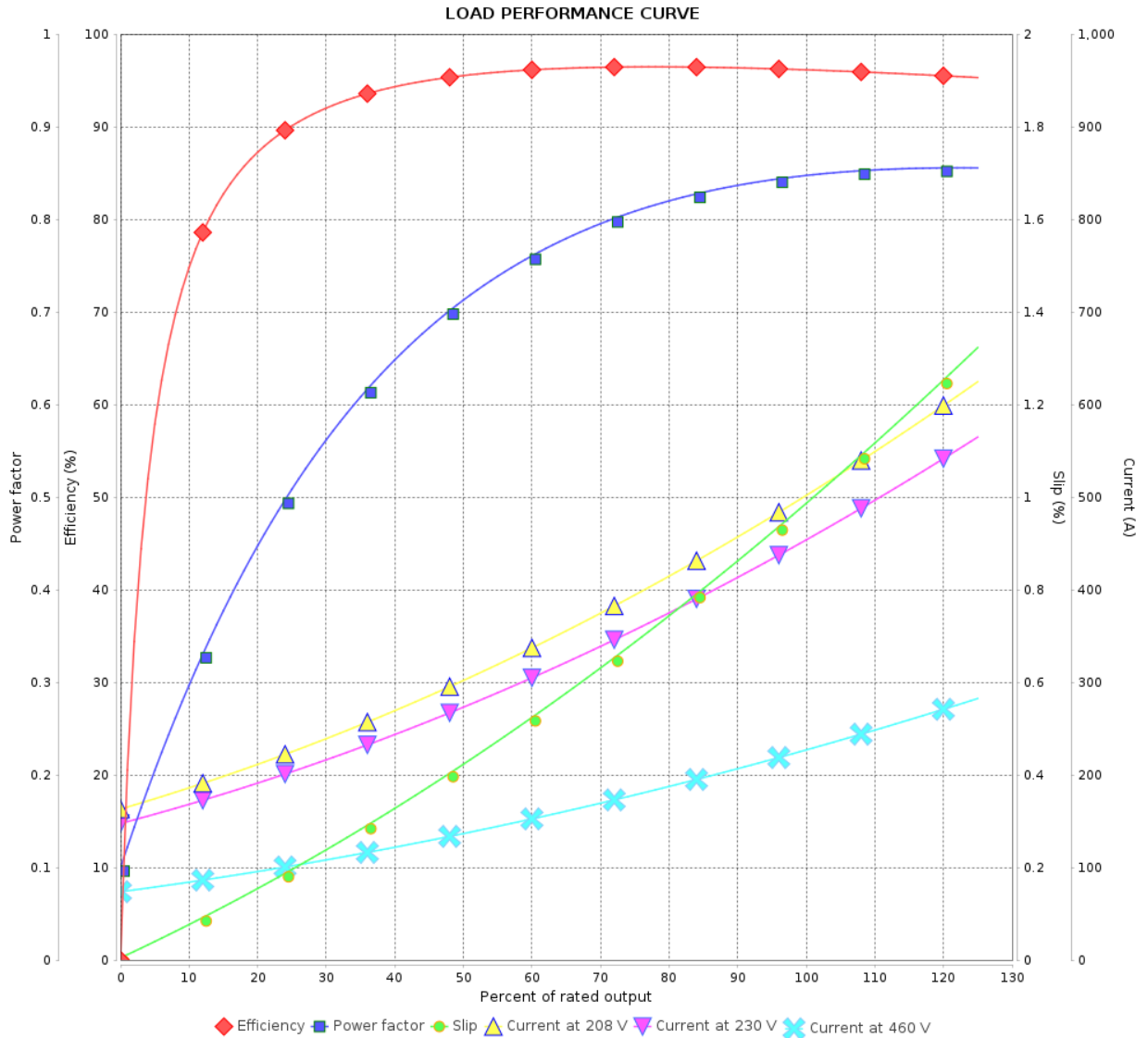
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Performance : 230/460 V 60 Hz 4P

Rated current : 460/230 A
 LRC : 6.8
 Rated torque : 81.5 kgfm
 Locked rotor torque : 210 %
 Breakdown torque : 229 %
 Rated speed : 1782 rpm

Moment of inertia (J) : 3.21 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

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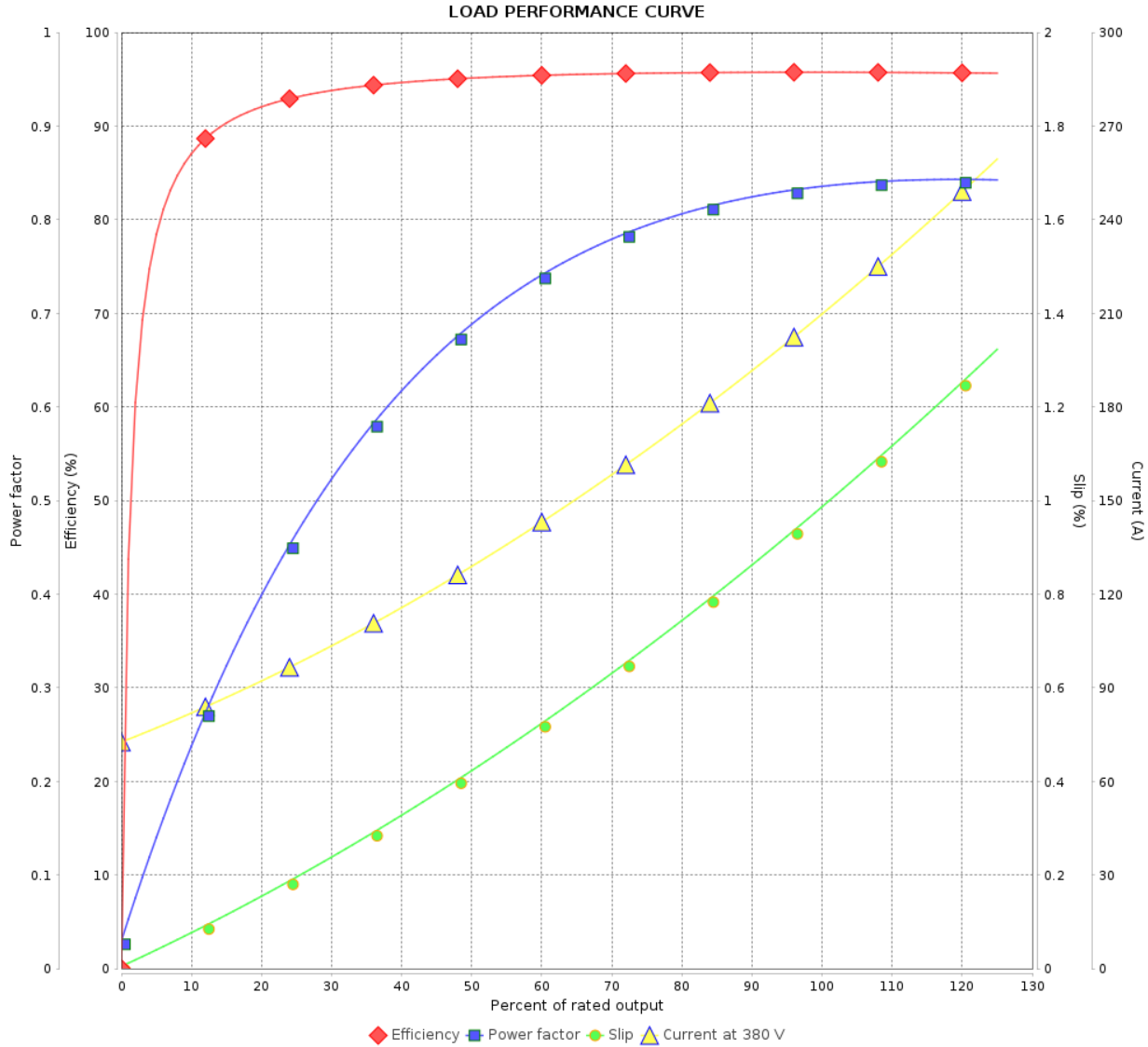
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Performance : 380 V 50 Hz 4P IE3

Rated current : 208 A
LRC : 7.3
Rated torque : 73.3 kgfm
Locked rotor torque : 220 %
Breakdown torque : 250 %
Rated speed : 1485 rpm

Moment of inertia (J) : 3.21 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.00
Temperature rise : 80 K
Design : B

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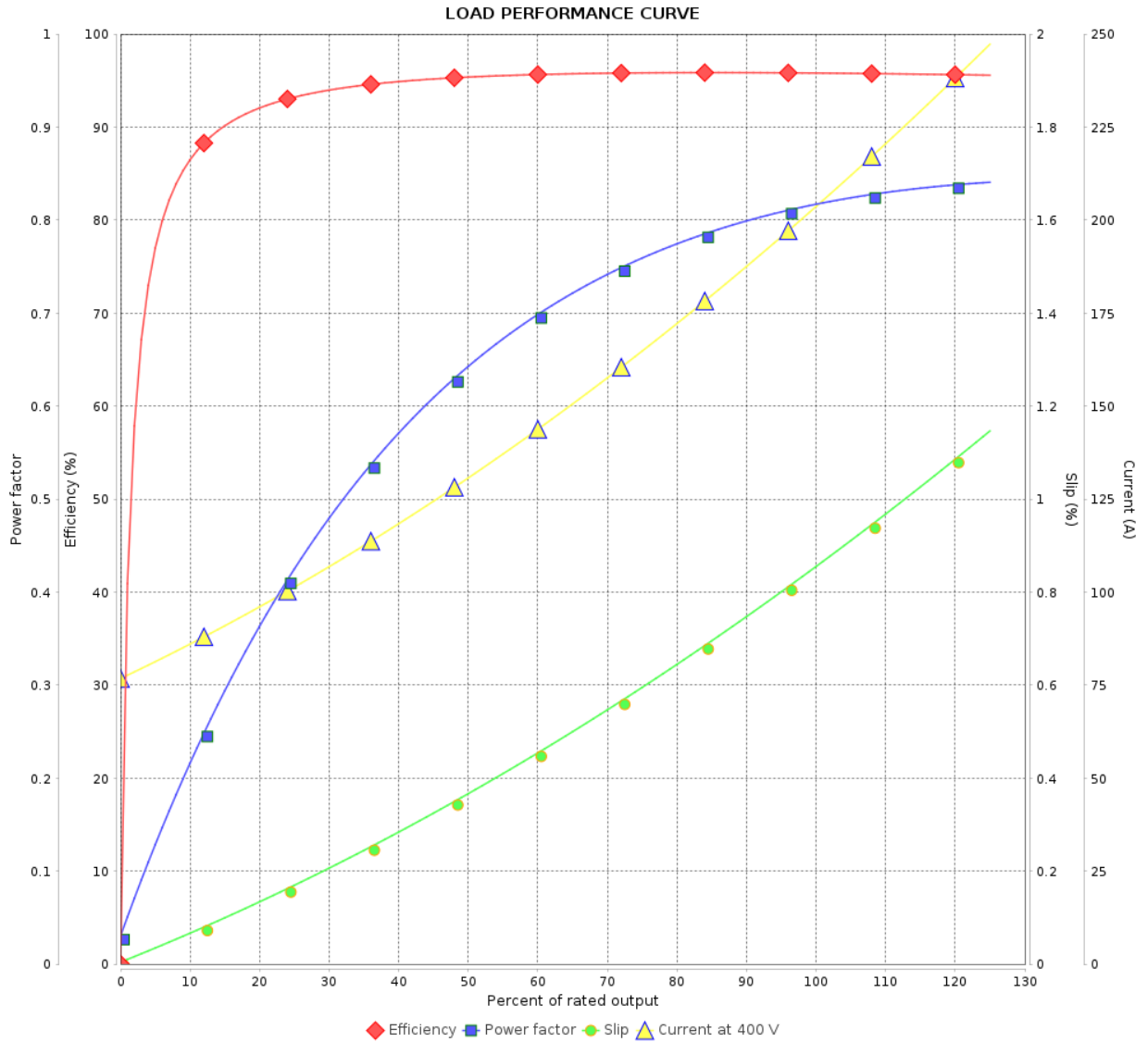
Three Phase Induction Motor - Squirrel Cage



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Performance : 400 V 50 Hz 4P IE3

Rated current : 202 A
 LRC : 7.6
 Rated torque : 73.2 kgfm
 Locked rotor torque : 250 %
 Breakdown torque : 280 %
 Rated speed : 1487 rpm

Moment of inertia (J) : 3.21 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : B

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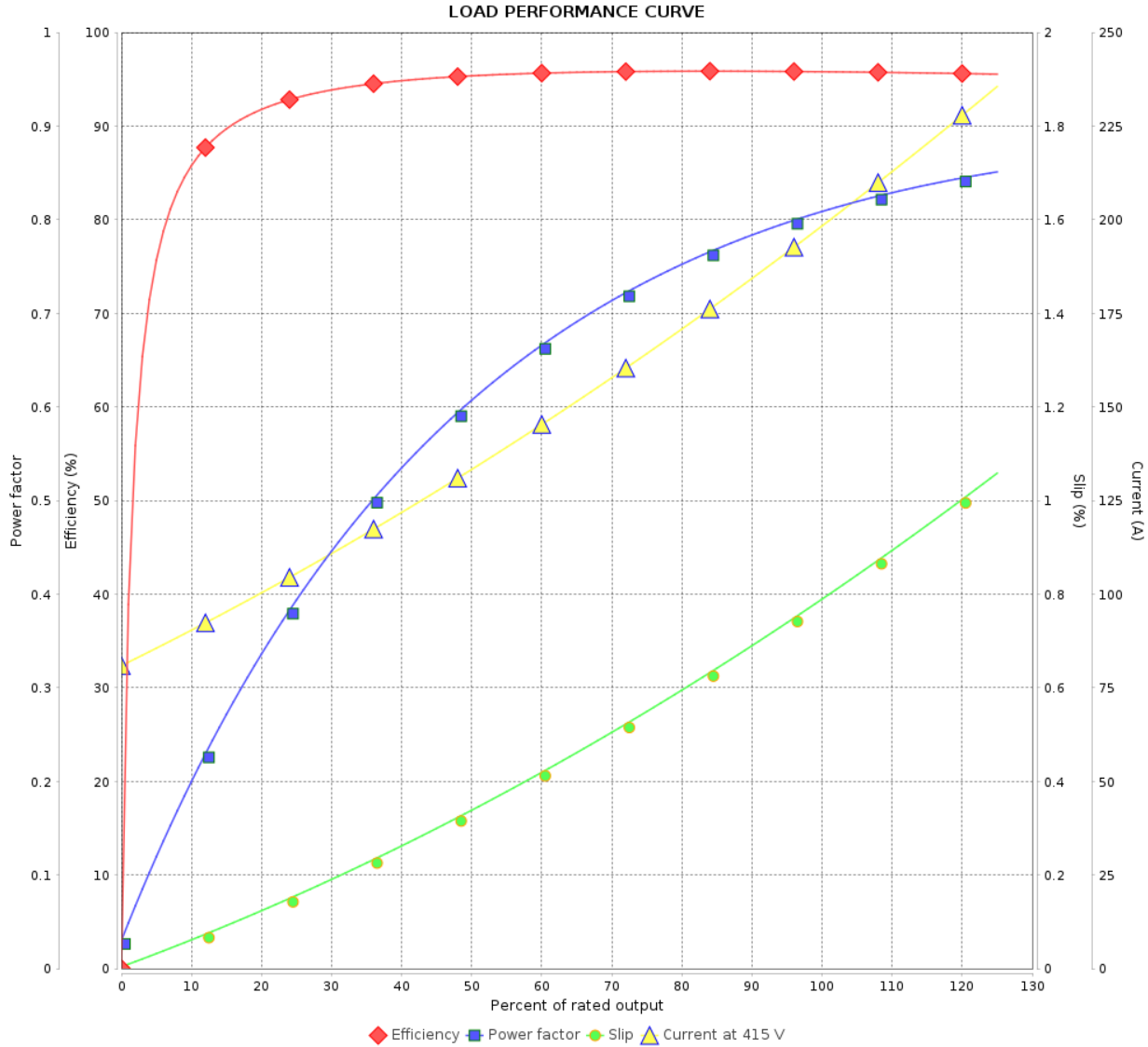
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Performance : 415 V 50 Hz 4P IE3

Rated current	: 197 A	Moment of inertia (J)	: 3.21 kgm ²
LRC	: 8.0	Duty cycle	: Cont.(S1)
Rated torque	: 73.2 kgfm	Insulation class	: F
Locked rotor torque	: 280 %	Service factor	: 1.00
Breakdown torque	: 310 %	Temperature rise	: 80 K
Rated speed	: 1488 rpm	Design	: B

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