

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :				
Product line		: W22 IEEE 841 NEMA Premium Efficiency Three-Phase		Product code : 11431673
Frame	: 445/7T	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	: 1000 kg	
Protection degree	: IP56	Moment of inertia (J)	: 3.21 kgm ²	
Design	: B			
Output [HP]	200	200	200	200
Poles	4	4	4	4
Frequency [Hz]	60	50	50	50
Rated voltage [V]	460	380	400	415
Rated current [A]	230	279	264	257
L. R. Amperes [A]	1564	1423	1478	1568
LRC [A]	6.8x(Code G)	5.1x(Code E)	5.6x(Code F)	6.1x(Code G)
No load current [A]	70.0	69.0	75.0	79.0
Rated speed [RPM]	1785	1475	1480	1480
Slip [%]	0.83	1.67	1.33	1.33
Rated torque [kgfm]	81.3	98.4	98.1	98.1
Locked rotor torque [%]	229	170	190	210
Breakdown torque [%]	250	200	220	240
Service factor	1.15	1.00	1.00	1.00
Temperature rise	80 K	105 K	105 K	105 K
Locked rotor time	28s (cold) 16s (hot)	18s (cold) 10s (hot)	18s (cold) 10s (hot)	18s (cold) 10s (hot)
Noise level ²	73.0 dB(A)			
Efficiency (%)	25%	95.7	94.3	94.9
	50%	95.8	94.5	95.0
	75%	96.2	95.0	95.4
	100%	96.2	95.0	95.4
Power Factor	25%	0.50	0.56	0.53
	50%	0.73	0.78	0.76
	75%	0.82	0.85	0.84
	100%	0.85	0.86	0.86
Losses at normative operating points (speed;torque), in percentage of rated output power				
Losses (%)	P1 (0,9;1,0)	4.0	4.0	4.0
	P2 (0,5;1,0)	3.2	3.2	3.2
	P3 (0,25;1,0)	2.9	2.9	2.9
	P4 (0,9;0,5)	2.0	2.0	2.0
	P5 (0,5;0,5)	1.3	1.3	1.3
	P6 (0,5;0,25)	0.9	0.9	0.9
	P7 (0,25;0,25)	0.5	0.5	0.5
Bearing type	: Drive end 6319 C3 Non drive end 6316 C3	Foundation loads		
Sealing	: Inpro/Seal Inpro/Seal	Max. traction : 1559 kgf		
Lubrication interval	: 8000 h 10000 h	Max. compression : 2559 kgf		
Lubricant amount	: 45 g 34 g			
Lubricant type	: Mobil Polyrex EM			
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.		These are average values based on tests with sinusoidal power supply, subject to the tolerances stipulated in NEMA MG-1.		
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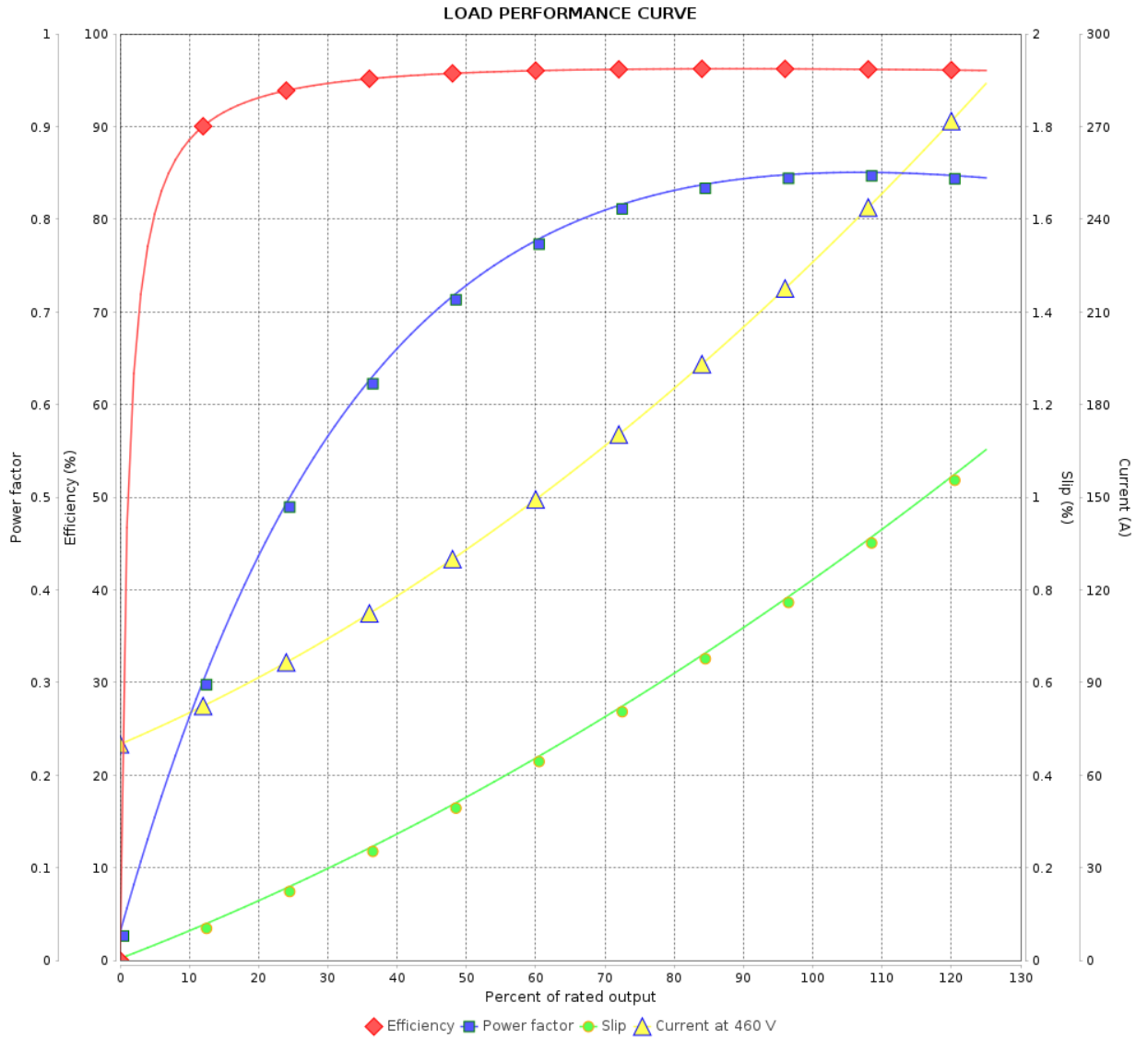
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Performance : 460 V 60 Hz 4P

Rated current : 230 A
 LRC : 6.8
 Rated torque : 81.3 kgfm
 Locked rotor torque : 229 %
 Breakdown torque : 250 %
 Rated speed : 1785 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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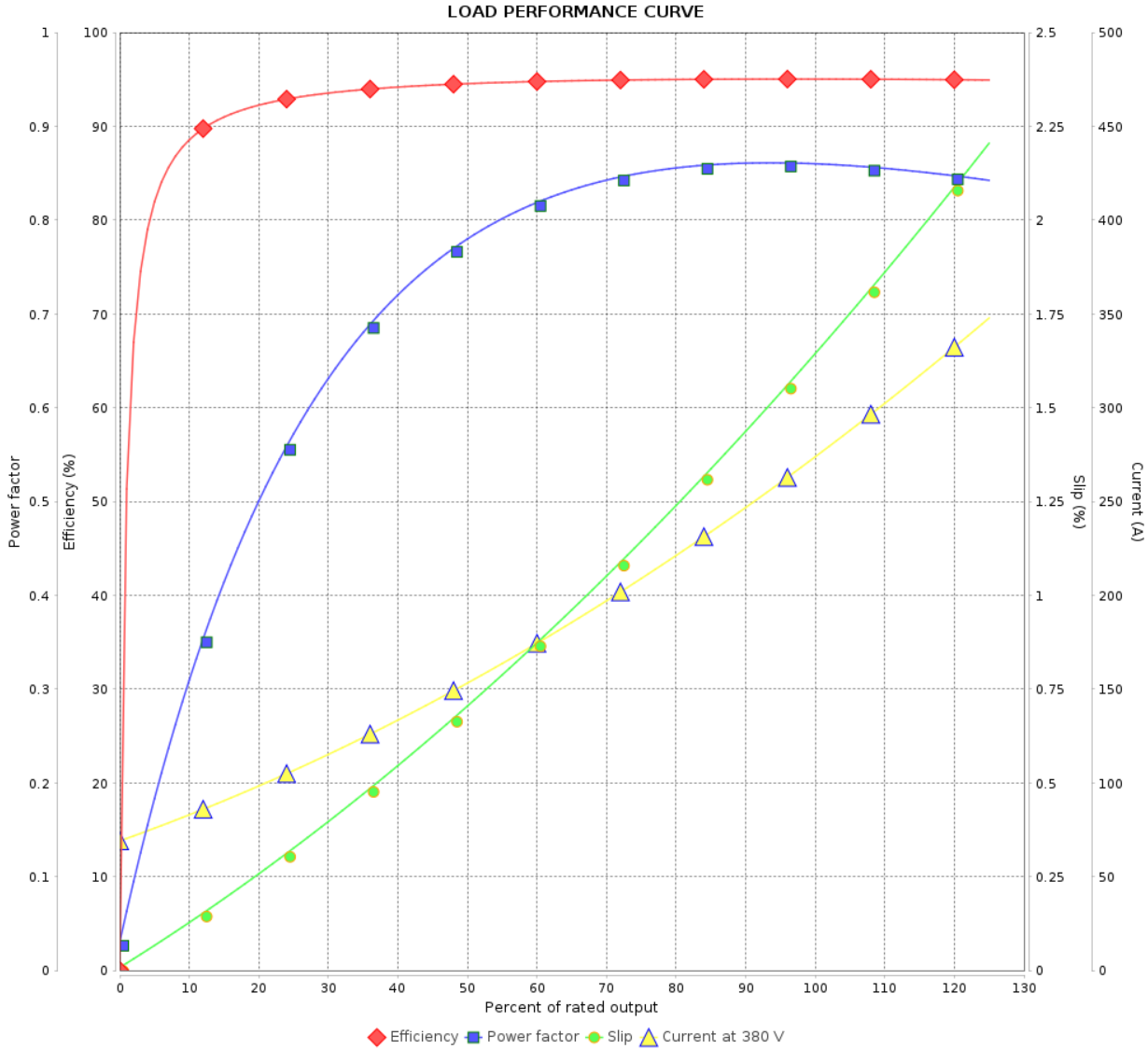
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Performance : 380 V 50 Hz 4P IE2

Rated current	: 279 A	Moment of inertia (J)	: 3.21 kgm ²
LRC	: 5.1	Duty cycle	: Cont.(S1)
Rated torque	: 98.4 kgfm	Insulation class	: F
Locked rotor torque	: 170 %	Service factor	: 1.00
Breakdown torque	: 200 %	Temperature rise	: 105 K
Rated speed	: 1475 rpm	Design	: B

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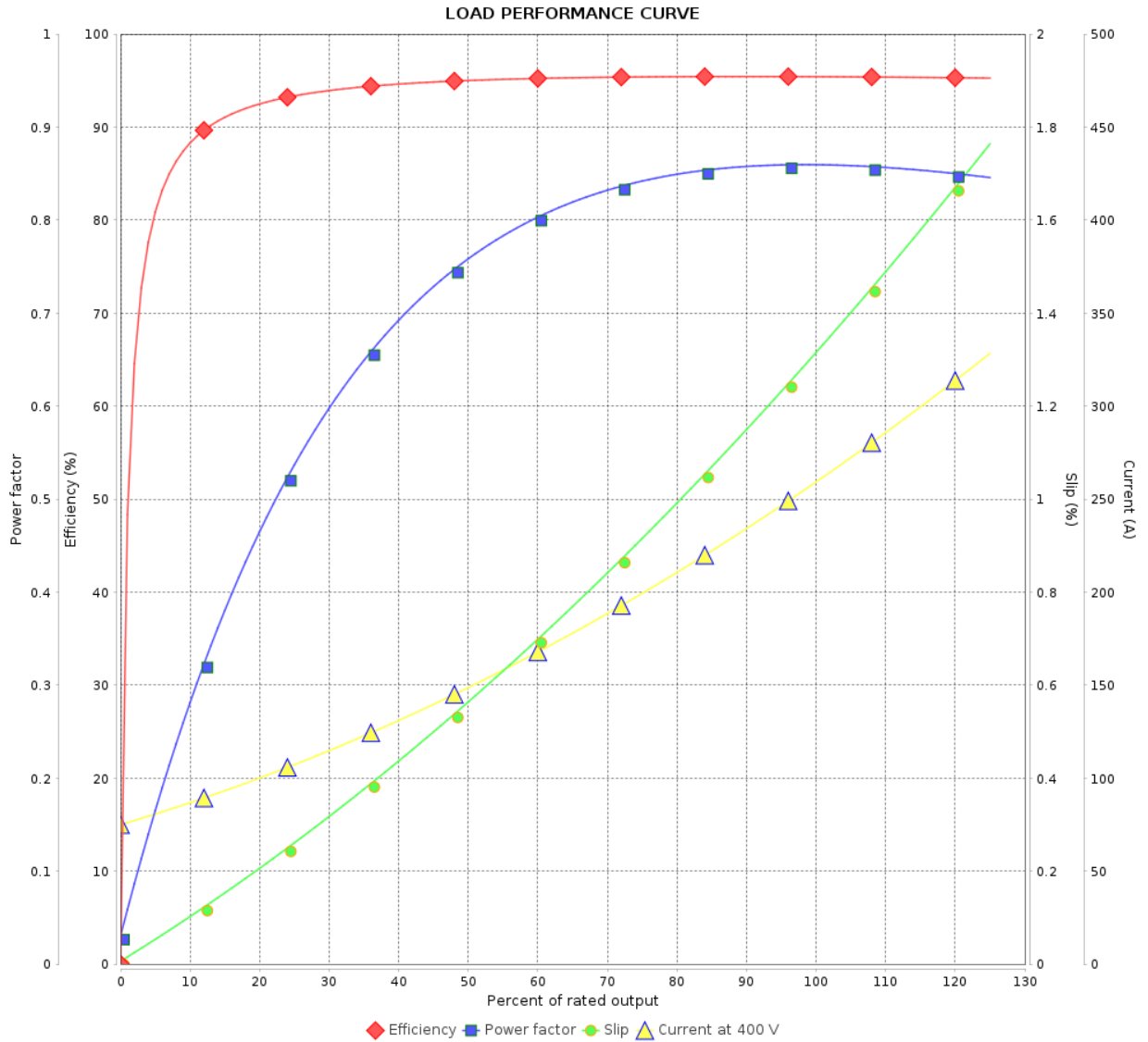
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Performance : 400 V 50 Hz 4P IE2

Rated current : 264 A
 LRC : 5.6
 Rated torque : 98.1 kgfm
 Locked rotor torque : 190 %
 Breakdown torque : 220 %
 Rated speed : 1480 rpm

Moment of inertia (J) : 3.21 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 105 K
 Design : B

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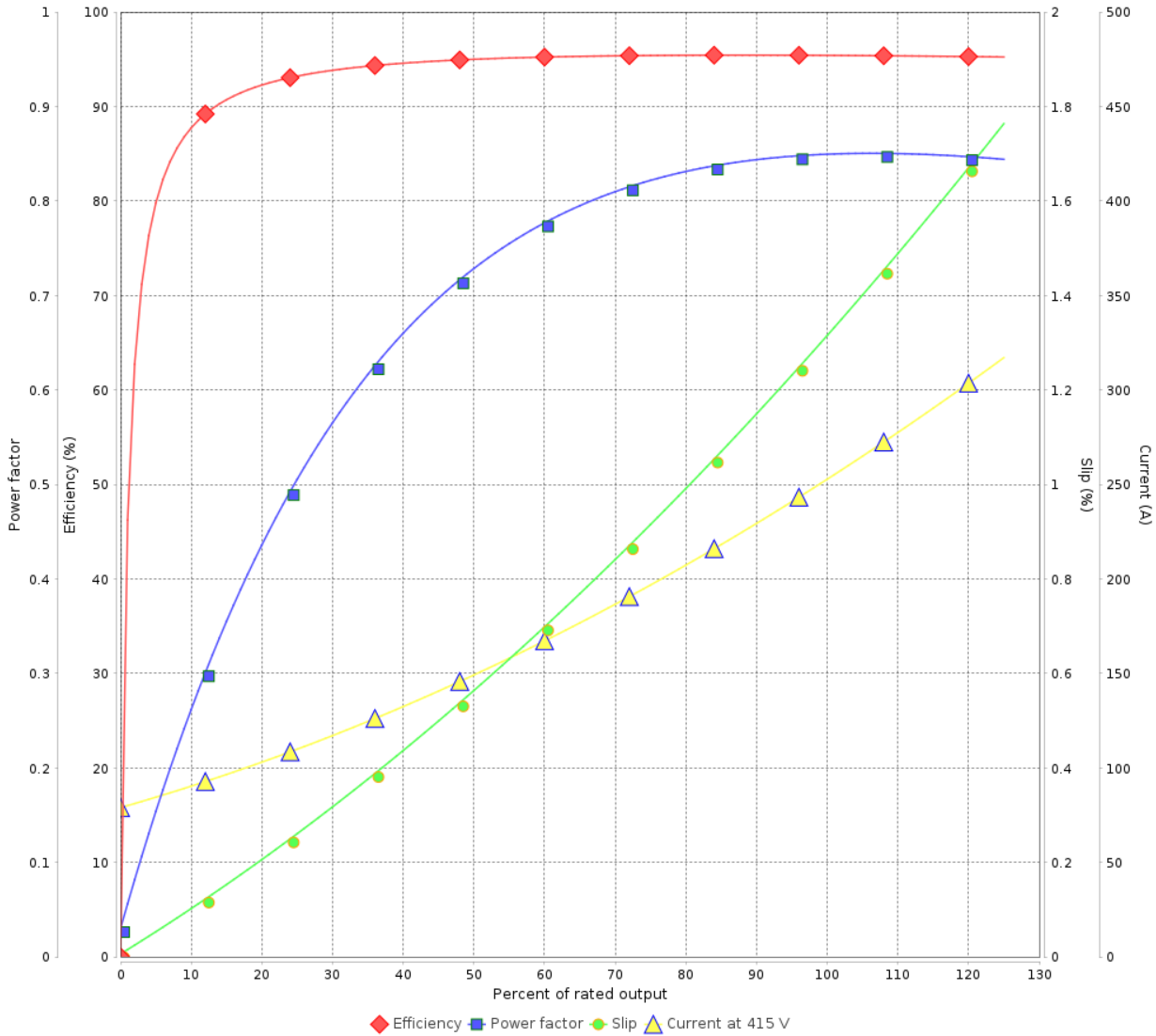
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Performance : 415 V 50 Hz 4P IE2

Rated current	: 257 A	Moment of inertia (J)	: 3.21 kgm ²
LRC	: 6.1	Duty cycle	: Cont.(S1)
Rated torque	: 98.1 kgfm	Insulation class	: F
Locked rotor torque	: 210 %	Service factor	: 1.00
Breakdown torque	: 240 %	Temperature rise	: 105 K
Rated speed	: 1480 rpm	Design	: B

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