

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :					
Product line	: W22 IEEE 841 NEMA Premium Efficiency Three-Phase	Product code :	11937251		
Frame	: 182/4T	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	: 0.0 kg		
Protection degree	: IP55	Moment of inertia (J)	: 0.0243 kgm ²		
Design	: B				
Output [HP]	1.5	1.5	1.5	1.5	
Poles	8	8	8	8	
Frequency [Hz]	60	50	50	50	
Rated voltage [V]	460	380	400	415	
Rated current [A]	2.84	3.10	3.13	3.11	
L. R. Amperes [A]	16.8	15.5	17.2	18.7	
LRC [A]	5.9x(Code K)	5.0x(Code H)	5.5x(Code J)	6.0x(Code K)	
No load current [A]	2.10	2.00	2.30	2.50	
Rated speed [RPM]	860	700	705	710	
Slip [%]	4.44	6.67	6.00	5.33	
Rated torque [kgfm]	1.27	1.56	1.54	1.53	
Locked rotor torque [%]	229	210	240	260	
Breakdown torque [%]	290	220	240	270	
Service factor	1.25	1.00	1.00	1.00	
Temperature rise	80 K	80 K	80 K	80 K	
Locked rotor time	30s (cold) 17s (hot)	30s (cold) 17s (hot)	30s (cold) 17s (hot)	30s (cold) 17s (hot)	
Noise level ²	50.0 dB(A)	46.0 dB(A)	46.0 dB(A)	46.0 dB(A)	
Efficiency (%)	25%				
	50%	76.0	74.0	74.5	
	75%	78.0	76.0	76.0	
	100%	78.5	77.0	76.9	
Power Factor	25%				
	50%	0.43	0.51	0.47	
	75%	0.54	0.62	0.58	
	100%	0.62	0.70	0.66	
Losses at normative operating points (speed;torque), in percentage of rated output power					
Losses (%)	P1 (0,9;1,0)	25.9	28.3	28.4	28.4
	P2 (0,5;1,0)	20.5	22.4	22.5	22.5
	P3 (0,25;1,0)	18.6	20.3	20.4	20.4
	P4 (0,9;0,5)	18.4	20.1	20.2	20.2
	P5 (0,5;0,5)	13.2	14.4	14.4	14.4
	P6 (0,5;0,25)	11.6	12.7	12.8	12.8
	P7 (0,25;0,25)	8.8	9.6	9.7	9.7
Bearing type	Drive end	6207 C3	Non drive end	6206 C3	Foundation loads
	Sealing	Taconite	Taconite		
Lubrication interval	Labyrinth	Labyrinth			Max. compression : 86 kgf
	Lubricant amount	20000 h	20000 h		
Lubricant type	7 g	5 g			
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).			These are average values based on tests with sinusoidal power supply, subject to the tolerances stipulated in NEMA MG-1.		
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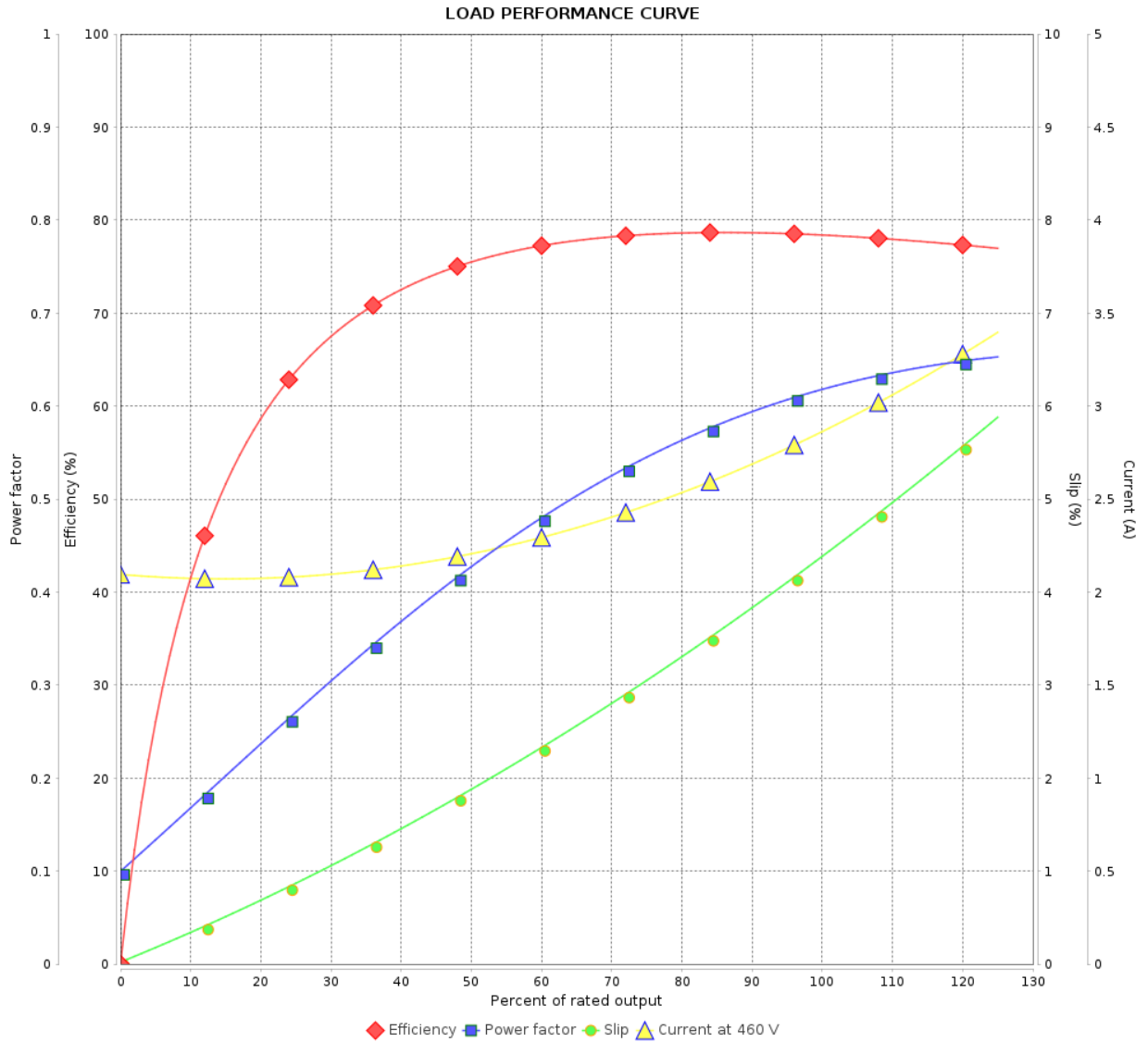
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Performance : 460 V 60 Hz 8P

Rated current : 2.84 A
 LRC : 5.9
 Rated torque : 1.27 kgfm
 Locked rotor torque : 229 %
 Breakdown torque : 290 %
 Rated speed : 860 rpm

Moment of inertia (J) : 0.0243 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.25
 Temperature rise : 80 K
 Design : B

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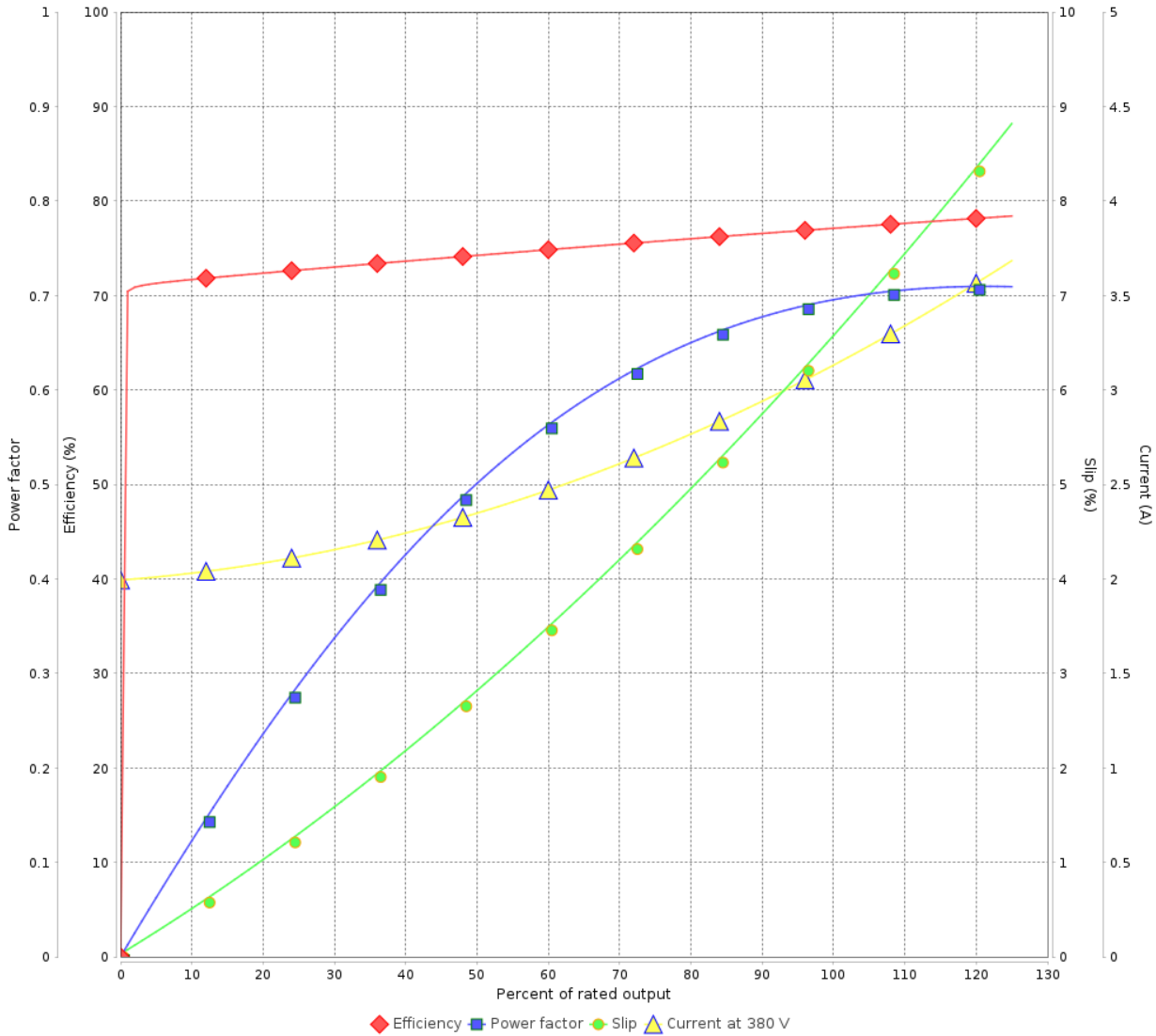
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Performance : 380 V 50 Hz 8P IE2

Rated current	: 3.10 A	Moment of inertia (J)	: 0.0243 kgm ²
LRC	: 5.0	Duty cycle	: Cont.(S1)
Rated torque	: 1.56 kgfm	Insulation class	: F
Locked rotor torque	: 210 %	Service factor	: 1.00
Breakdown torque	: 220 %	Temperature rise	: 80 K
Rated speed	: 700 rpm	Design	: B

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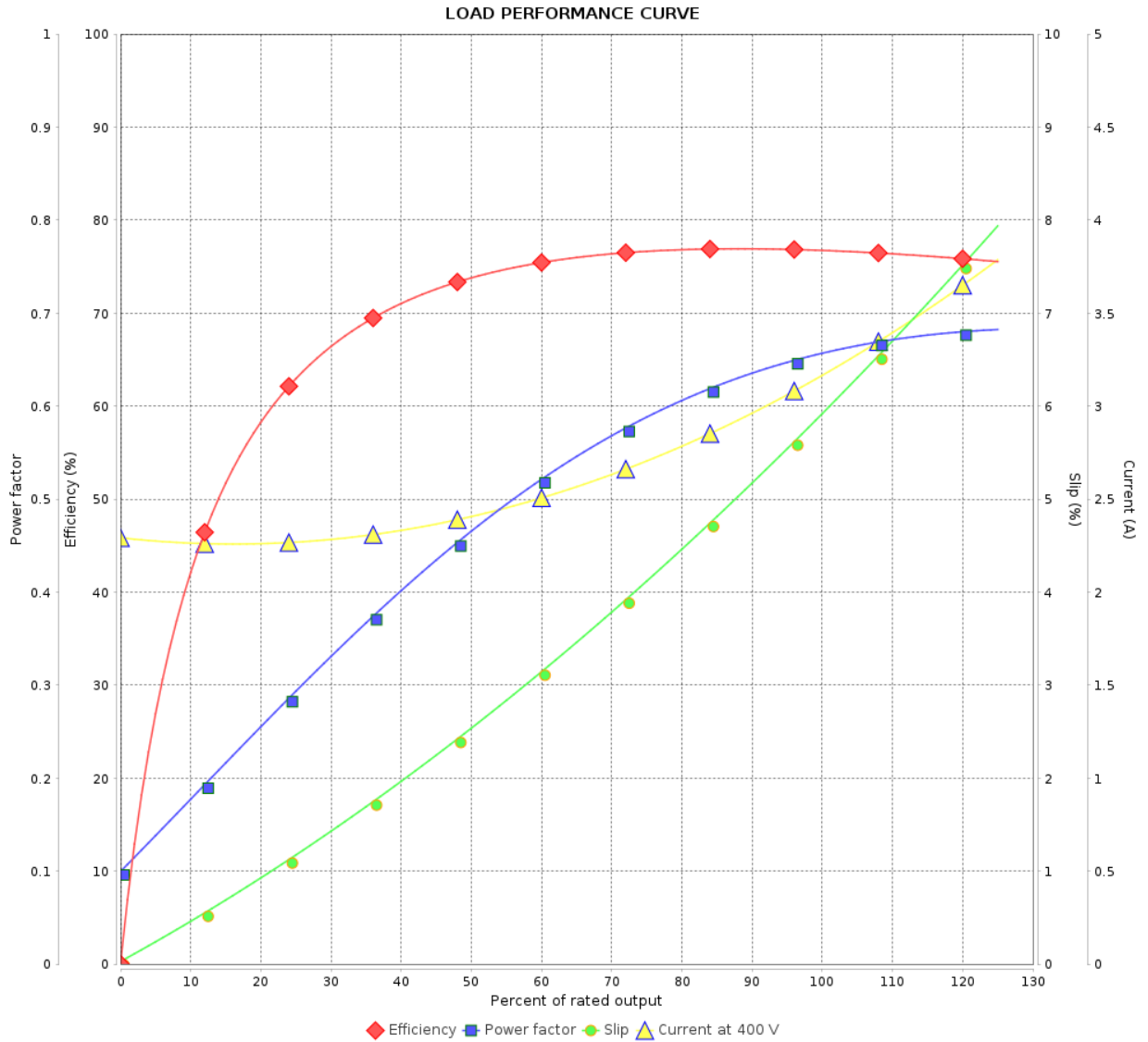
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Performance : 400 V 50 Hz 8P IE2

Rated current	: 3.13 A	Moment of inertia (J)	: 0.0243 kgm ²
LRC	: 5.5	Duty cycle	: Cont.(S1)
Rated torque	: 1.54 kgfm	Insulation class	: F
Locked rotor torque	: 240 %	Service factor	: 1.00
Breakdown torque	: 240 %	Temperature rise	: 80 K
Rated speed	: 705 rpm	Design	: B

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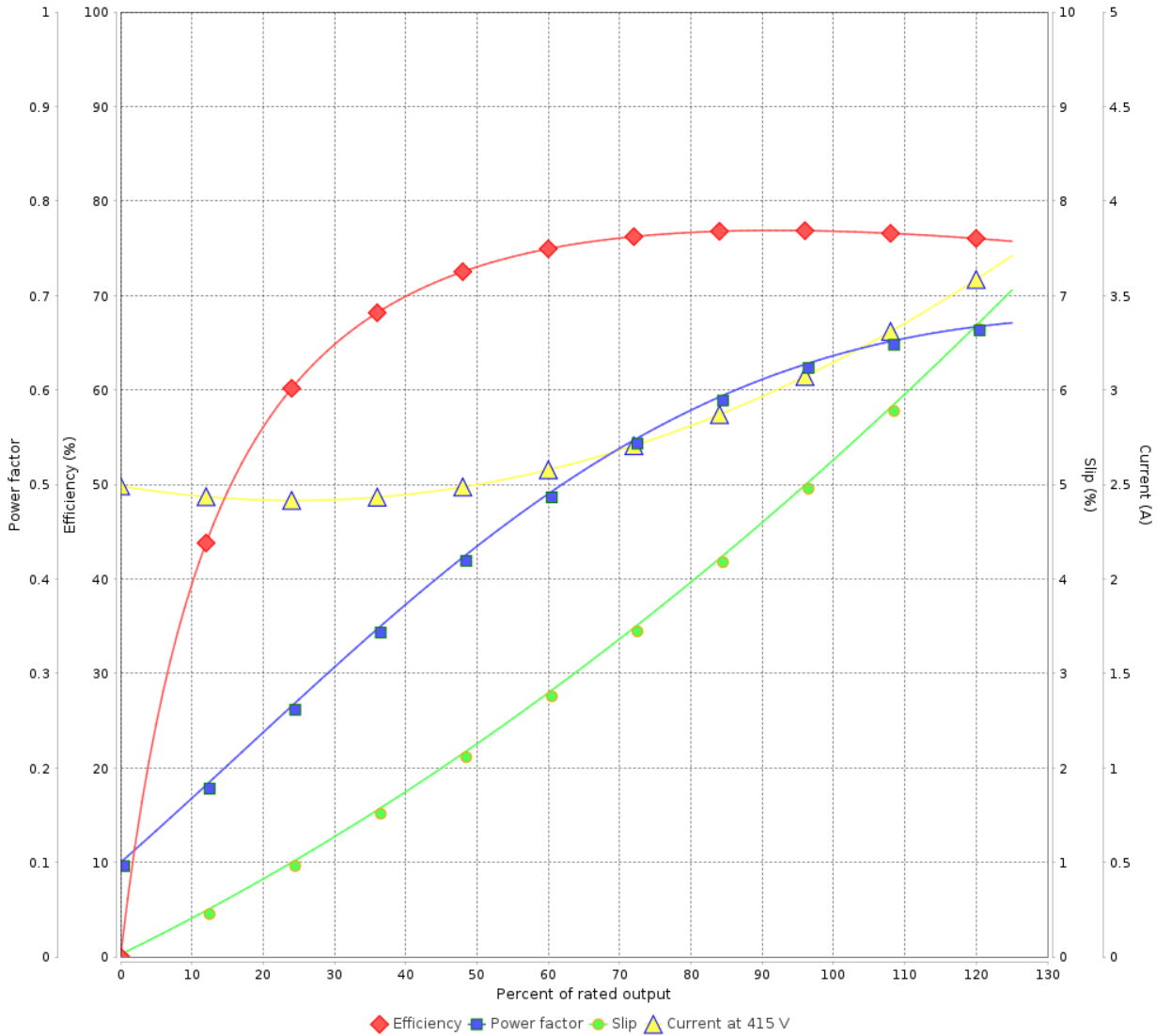
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Performance : 415 V 50 Hz 8P IE2

Rated current	: 3.11 A	Moment of inertia (J)	: 0.0243 kgm ²
LRC	: 6.0	Duty cycle	: Cont.(S1)
Rated torque	: 1.53 kgfm	Insulation class	: F
Locked rotor torque	: 260 %	Service factor	: 1.00
Breakdown torque	: 270 %	Temperature rise	: 80 K
Rated speed	: 710 rpm	Design	: B

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