

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : W22 IEEE 841 NEMA Premium Efficiency Three-Phase Product code : 11514036

Frame	: 254/6T	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 ²	: 131 kg
Protection degree	: IP55	Moment of inertia (J)	: 0.1867 kgm ²
Design	: B		

Output [HP]	10	10	10	10
Poles	6	6	6	6
Frequency [Hz]	60	50	50	50
Rated voltage [V]	460	380	400	415
Rated current [A]	12.9	15.4	14.8	14.4
L. R. Amperes [A]	80.0	73.9	79.9	83.5
LRC [A]	6.2x(Code H)	4.8x(Code E)	5.4x(Code F)	5.8x(Code G)
No load current [A]	6.00	4.90	6.30	6.60
Rated speed [RPM]	1175	965	970	975
Slip [%]	2.08	3.50	3.00	2.50
Rated torque [kgfm]	6.18	7.52	7.48	7.44
Locked rotor torque [%]	220	160	190	210
Breakdown torque [%]	270	210	229	250
Service factor	1.25	1.00	1.15	1.15
Temperature rise	80 K	105 K	105 K	80 K
Locked rotor time	46s (cold) 26s (hot)	39s (cold) 22s (hot)	39s (cold) 22s (hot)	39s (cold) 22s (hot)
Noise level ²	59.0 dB(A)	57.0 dB(A)	57.0 dB(A)	57.0 dB(A)
Efficiency (%)	25%			
	50%	90.2	90.2	89.5
	75%	91.0	89.5	90.2
	100%	91.0	89.1	89.5
Power Factor	25%			
	50%	0.63	0.70	0.66
	75%	0.74	0.79	0.77
	100%	0.80	0.83	0.82

Losses at normative operating points (speed;torque), in percentage of rated output power

Losses (%)	P1 (0,9;1,0)	10.9	13.6	13.0	13.0
	P2 (0,5;1,0)	9.4	12.1	11.5	11.5
	P3 (0,25;1,0)	8.9	11.6	11.0	11.0
	P4 (0,9;0,5)	5.6	6.8	6.5	6.5
	P5 (0,5;0,5)	4.0	5.0	4.8	4.8
	P6 (0,5;0,25)	2.9	3.6	3.4	3.4
	P7 (0,25;0,25)	2.0	2.7	2.5	2.5

Bearing type	Drive end	Non drive end	Foundation loads
	: 6309 C3	6209 C3	
Sealing	Taconite	Taconite	Max. compression : 358 kgf
	Labyrinth	Labyrinth	
Lubrication interval	: 20000 h	20000 h	
Lubricant amount	: 13 g	9 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).

These are average values based on tests with sinusoidal power supply, subject to the tolerances stipulated in NEMA MG-1.

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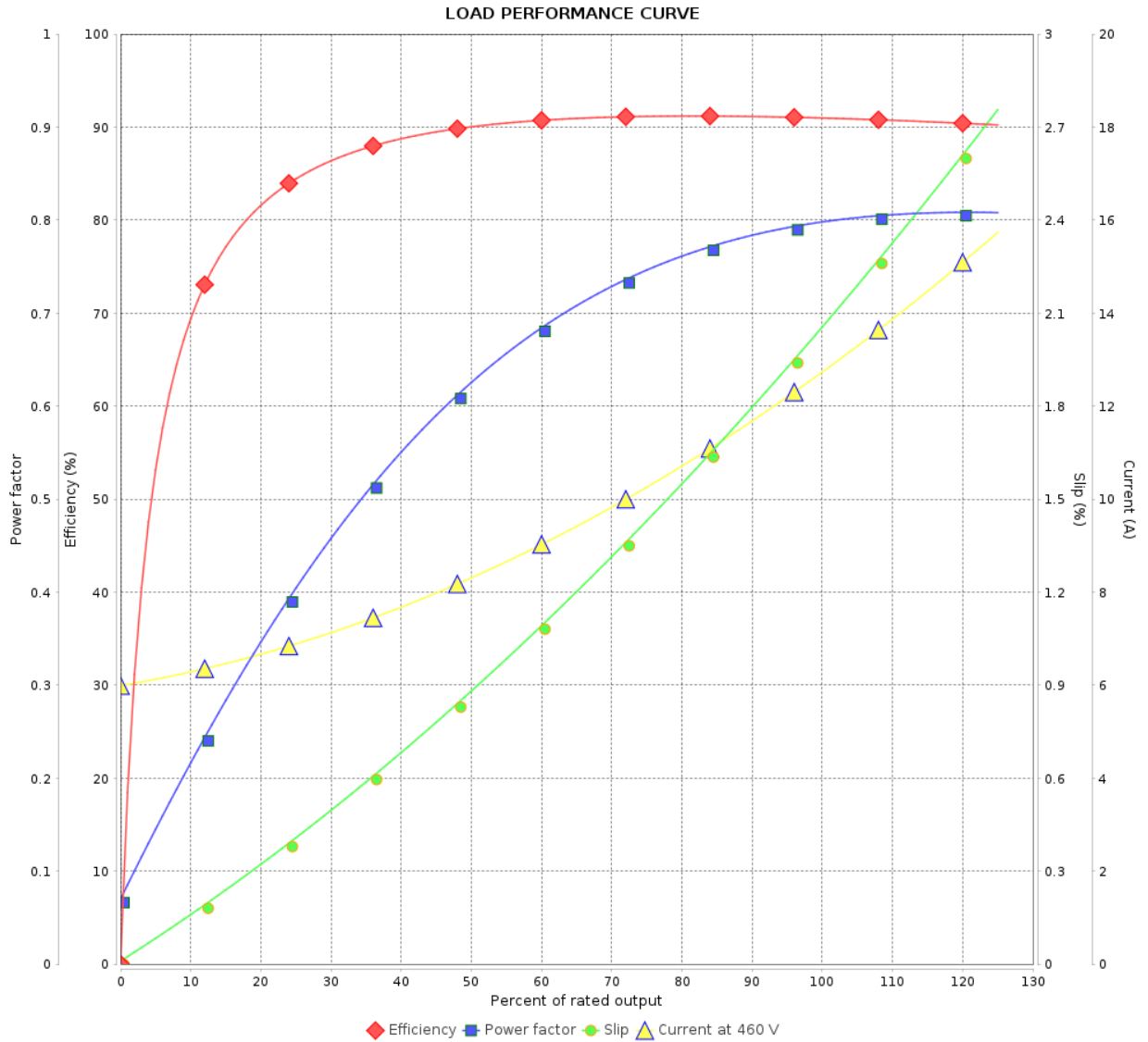
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Performance : 460 V 60 Hz 6P

Rated current	: 12.9 A	Moment of inertia (J)	: 0.1867 kgm ²
LRC	: 6.2	Duty cycle	: Cont.(S1)
Rated torque	: 6.18 kgfm	Insulation class	: F
Locked rotor torque	: 220 %	Service factor	: 1.25
Breakdown torque	: 270 %	Temperature rise	: 80 K
Rated speed	: 1175 rpm	Design	: B

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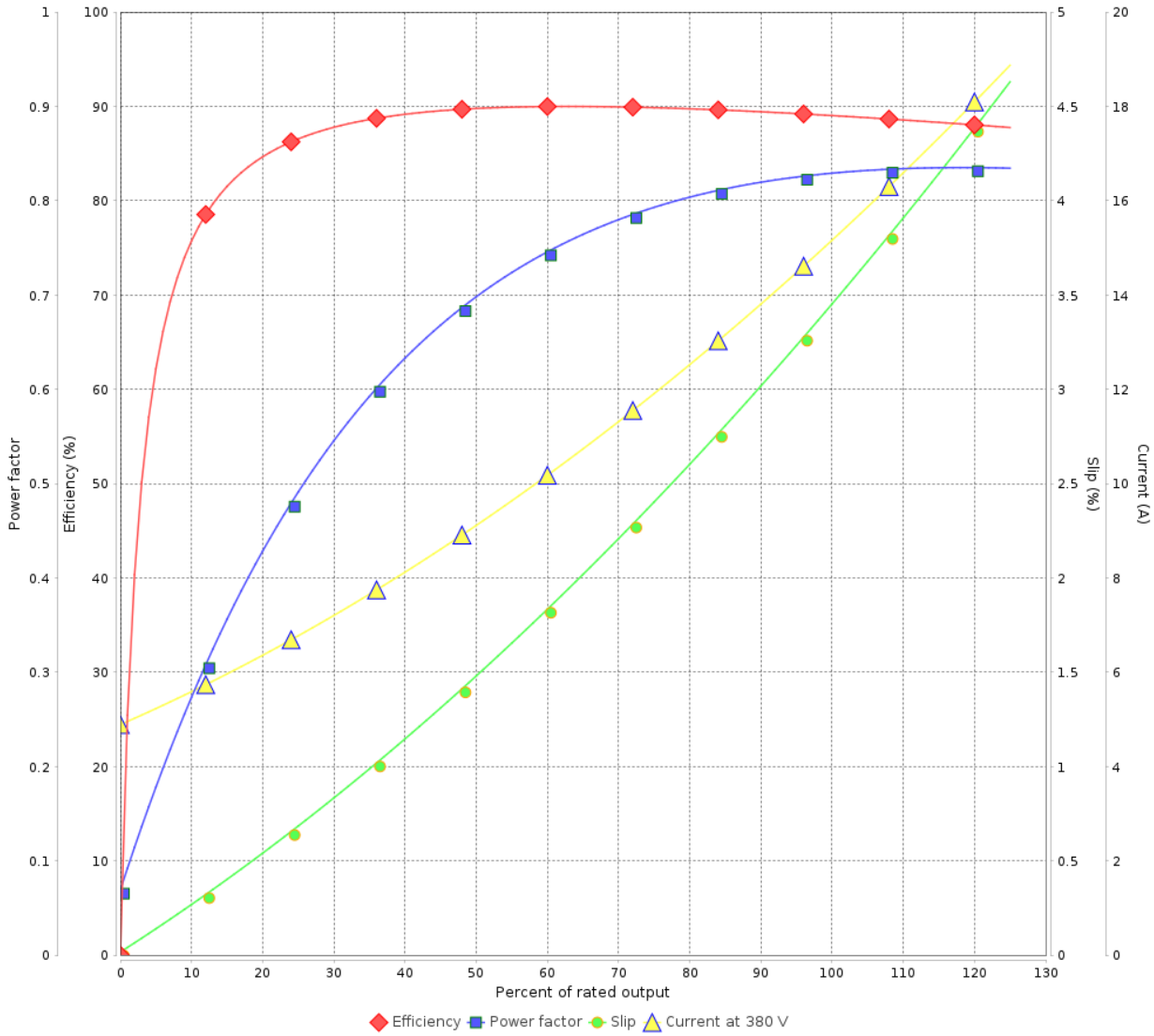
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Performance : 380 V 50 Hz 6P IE3

Rated current	: 15.4 A	Moment of inertia (J)	: 0.1867 kgm ²
LRC	: 4.8	Duty cycle	: Cont.(S1)
Rated torque	: 7.52 kgfm	Insulation class	: F
Locked rotor torque	: 160 %	Service factor	: 1.00
Breakdown torque	: 210 %	Temperature rise	: 105 K
Rated speed	: 965 rpm	Design	: B

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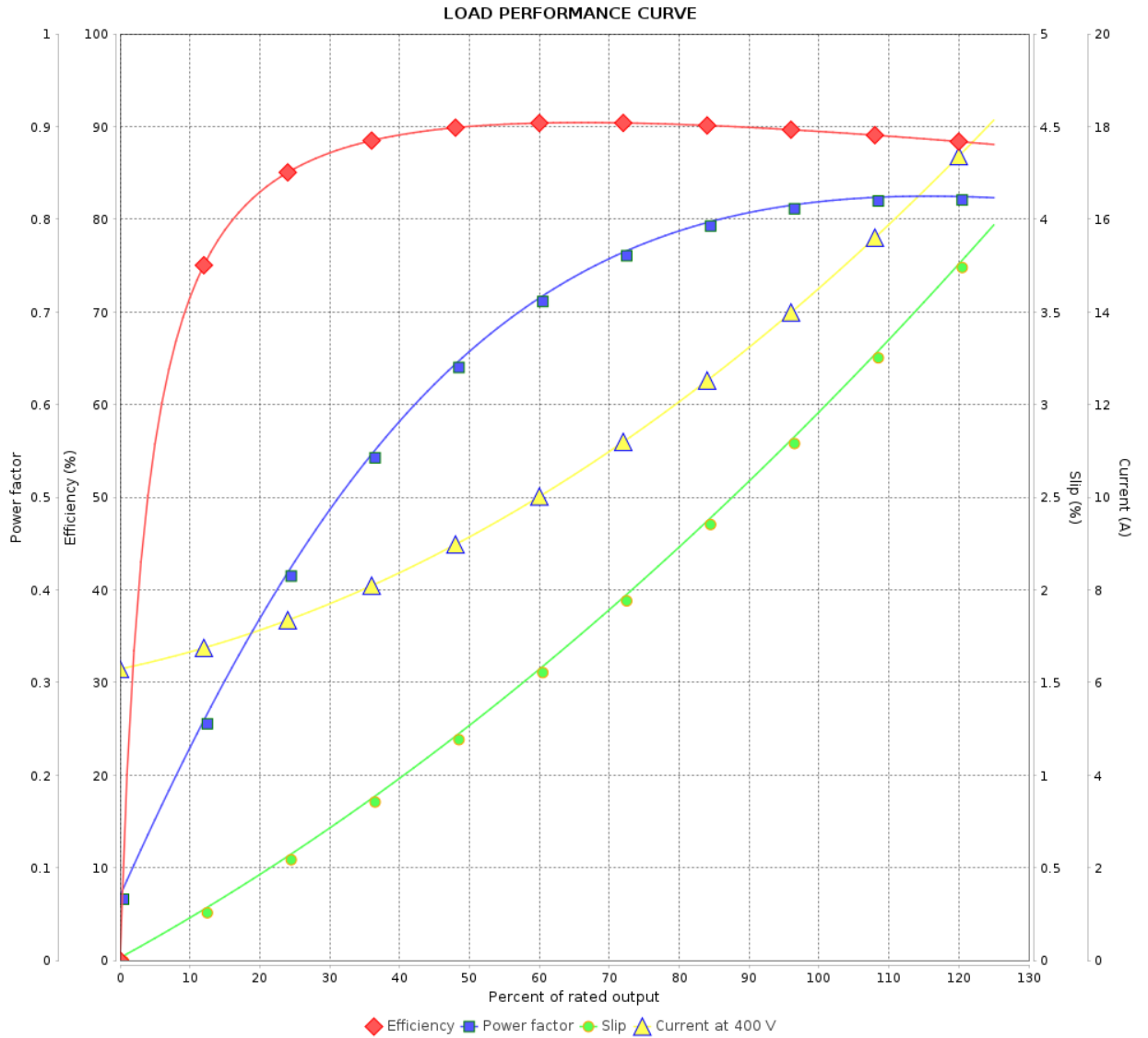
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Performance : 400 V 50 Hz 6P IE3

Rated current	: 14.8 A	Moment of inertia (J)	: 0.1867 kgm ²
LRC	: 5.4	Duty cycle	: Cont.(S1)
Rated torque	: 7.48 kgfm	Insulation class	: F
Locked rotor torque	: 190 %	Service factor	: 1.15
Breakdown torque	: 229 %	Temperature rise	: 105 K
Rated speed	: 970 rpm	Design	: B

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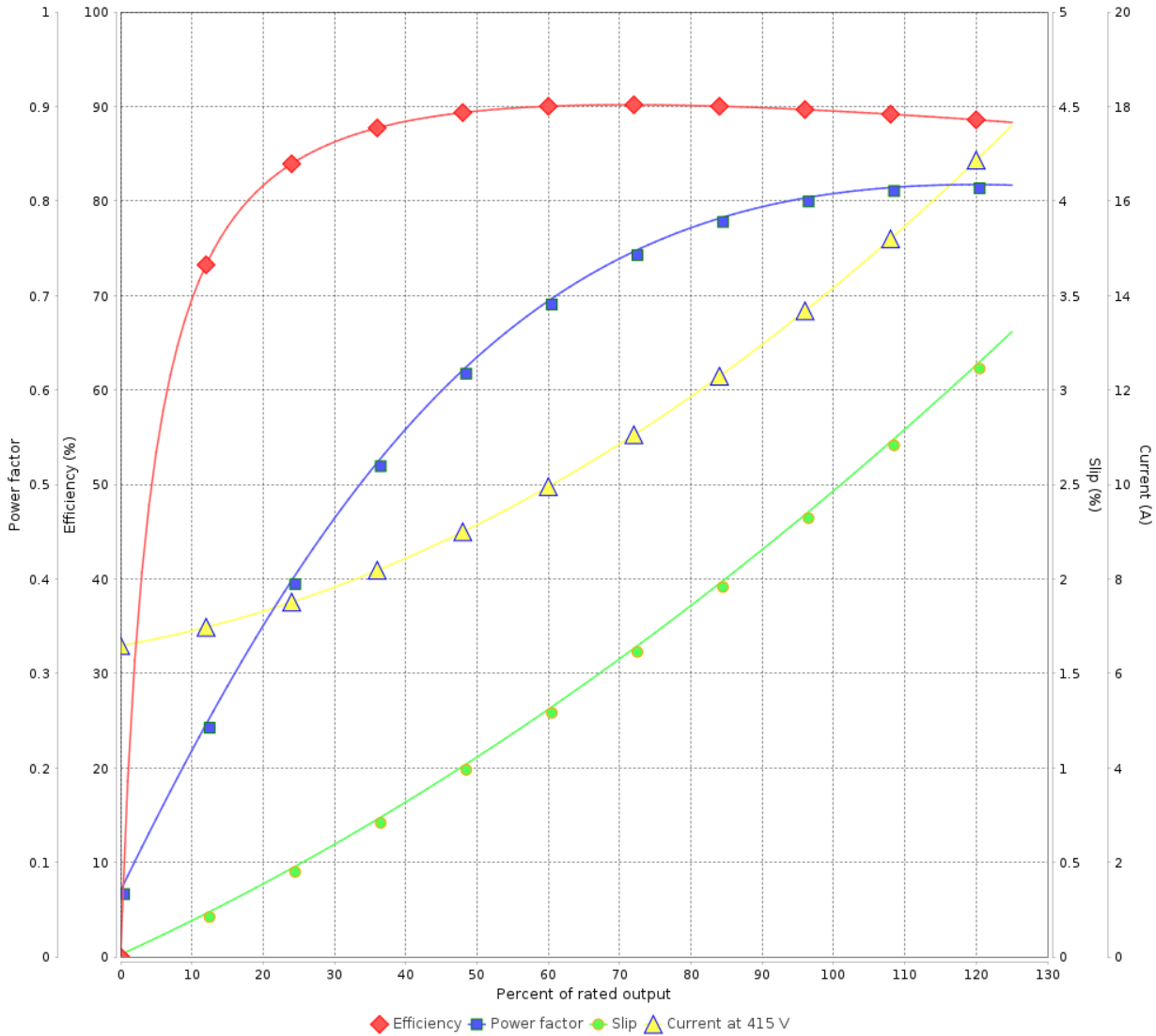
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Performance : 415 V 50 Hz 6P IE3

Rated current : 14.4 A
 LRC : 5.8
 Rated torque : 7.44 kgfm
 Locked rotor torque : 210 %
 Breakdown torque : 250 %
 Rated speed : 975 rpm

Moment of inertia (J) : 0.1867 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

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