

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 IEEE 841 NEMA Premium Efficiency Three-Phase Product code : 13060964

Frame	: 143/5T	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 ²	: 21.6 kg
Protection degree	: IP55	Moment of inertia (J)	: 0.0049 kgm ²
Design	: B		

Output [HP]	1	1	1	1
Poles	4	4	4	4
Frequency [Hz]	60	50	50	50
Rated voltage [V]	460	380	400	415
Rated current [A]	1.47	1.71	1.65	1.63
L. R. Amperes [A]	12.6	10.9	11.5	12.1
LRC [A]	8.6x(Code M)	6.4x(Code J)	7.0x(Code K)	7.4x(Code K)
No load current [A]	0.940	0.930	1.00	1.08
Rated speed [RPM]	1760	1450	1455	1455
Slip [%]	2.22	3.33	3.00	3.00
Rated torque [kgfm]	0.412	0.501	0.499	0.499
Locked rotor torque [%]	290	220	240	260
Breakdown torque [%]	350	250	290	310
Service factor	1.25	1.25	1.25	1.25
Temperature rise	80 K	80 K	80 K	80 K
Locked rotor time	32s (cold) 18s (hot)	32s (cold) 18s (hot)	32s (cold) 18s (hot)	32s (cold) 18s (hot)
Noise level ²	51.0 dB(A)	49.0 dB(A)	49.0 dB(A)	49.0 dB(A)
Efficiency (%)	25%			
	50%	80.0	80.0	80.0
	75%	84.0	82.5	82.5
	100%	85.5	82.5	84.0
Power Factor	25%			
	50%	0.55	0.62	0.58
	75%	0.68	0.74	0.71
	100%	0.75	0.81	0.78

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

Losses (%)	Drive end		Non drive end	
	P1 (0,9;1,0)	15.9	15.9	15.9
P2 (0,5;1,0)	12.8	12.8	12.8	12.8
P3 (0,25;1,0)	12.5	12.5	12.5	12.5
P4 (0,9;0,5)	10.1	10.1	10.1	10.1
P5 (0,5;0,5)	7.0	7.0	7.0	7.0
P6 (0,5;0,25)	5.8	5.8	5.8	5.8
P7 (0,25;0,25)	4.3	4.3	4.3	4.3

Bearing type	: 6205 C3	6204 C3	Foundation loads	Max. traction : 33 kgf
	Sealing	: Taconite		
	Labyrinth	Labyrinth		
Lubrication interval	: 20000 h	20000 h		
Lubricant amount	: 4 g	4 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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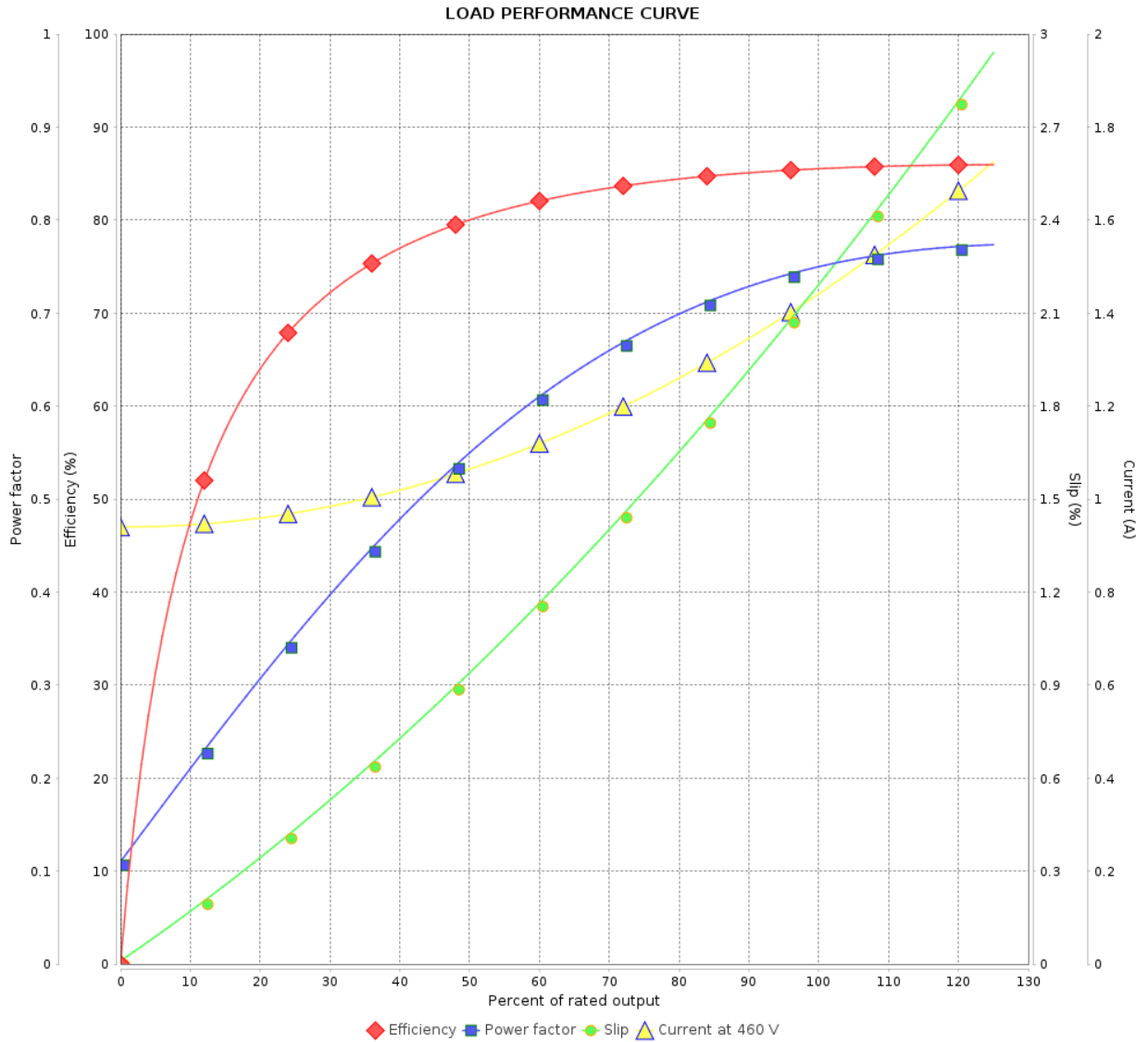
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Performance : 460 V 60 Hz 4P

Rated current : 1.47 A
 LRC : 8.6
 Rated torque : 0.412 kgfm
 Locked rotor torque : 290 %
 Breakdown torque : 350 %
 Rated speed : 1760 rpm

Moment of inertia (J) : 0.0049 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.25
 Temperature rise : 80 K
 Design : B

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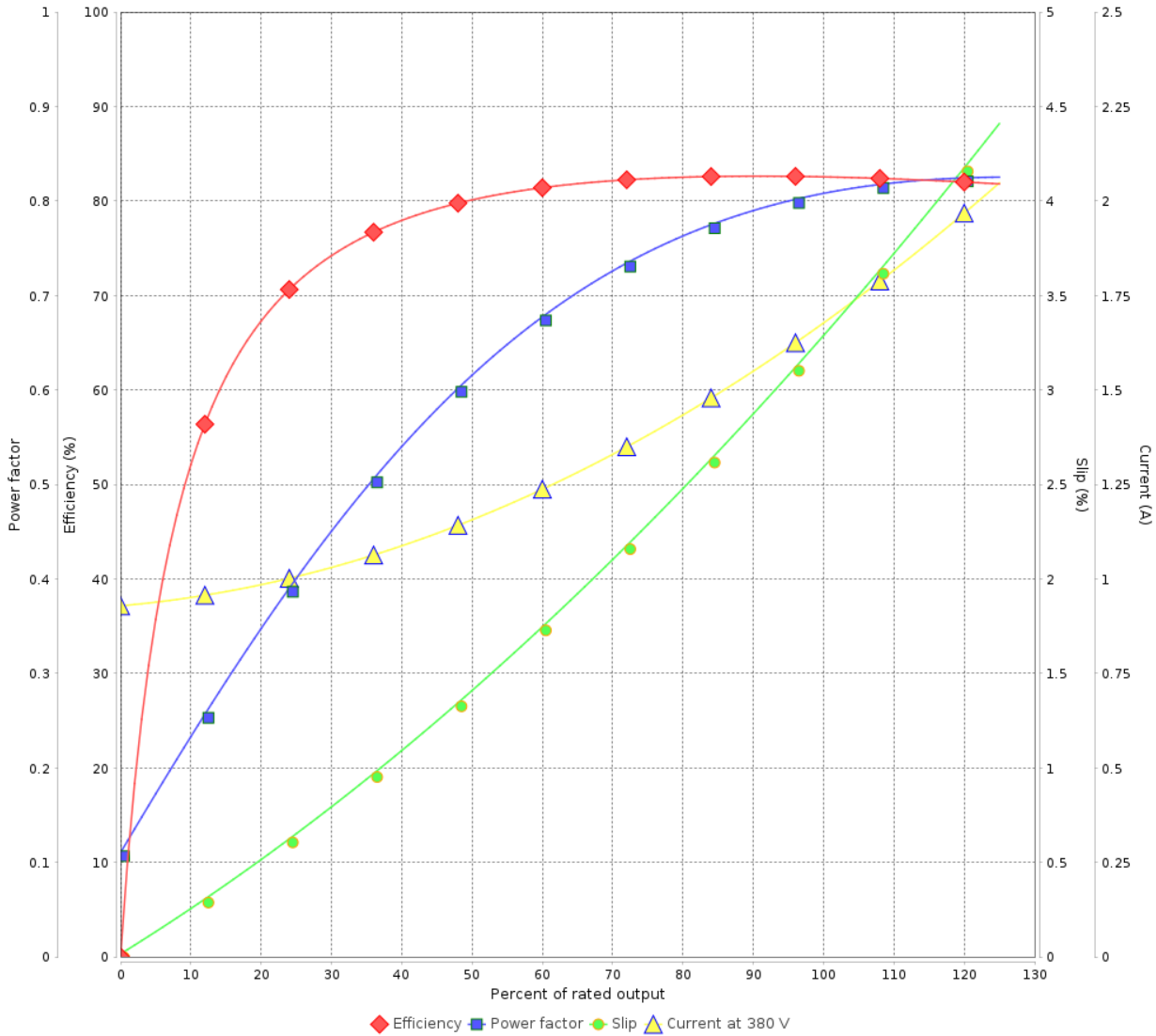
Three Phase Induction Motor - Squirrel Cage



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Product line : W22 IEEE 841 NEMA Premium Efficiency Three-Phase Product code : 13060964

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Performance : 380 V 50 Hz 4P IE3

Rated current	: 1.71 A	Moment of inertia (J)	: 0.0049 kgm ²
LRC	: 6.4	Duty cycle	: Cont.(S1)
Rated torque	: 0.501 kgfm	Insulation class	: F
Locked rotor torque	: 220 %	Service factor	: 1.25
Breakdown torque	: 250 %	Temperature rise	: 80 K
Rated speed	: 1450 rpm	Design	: B

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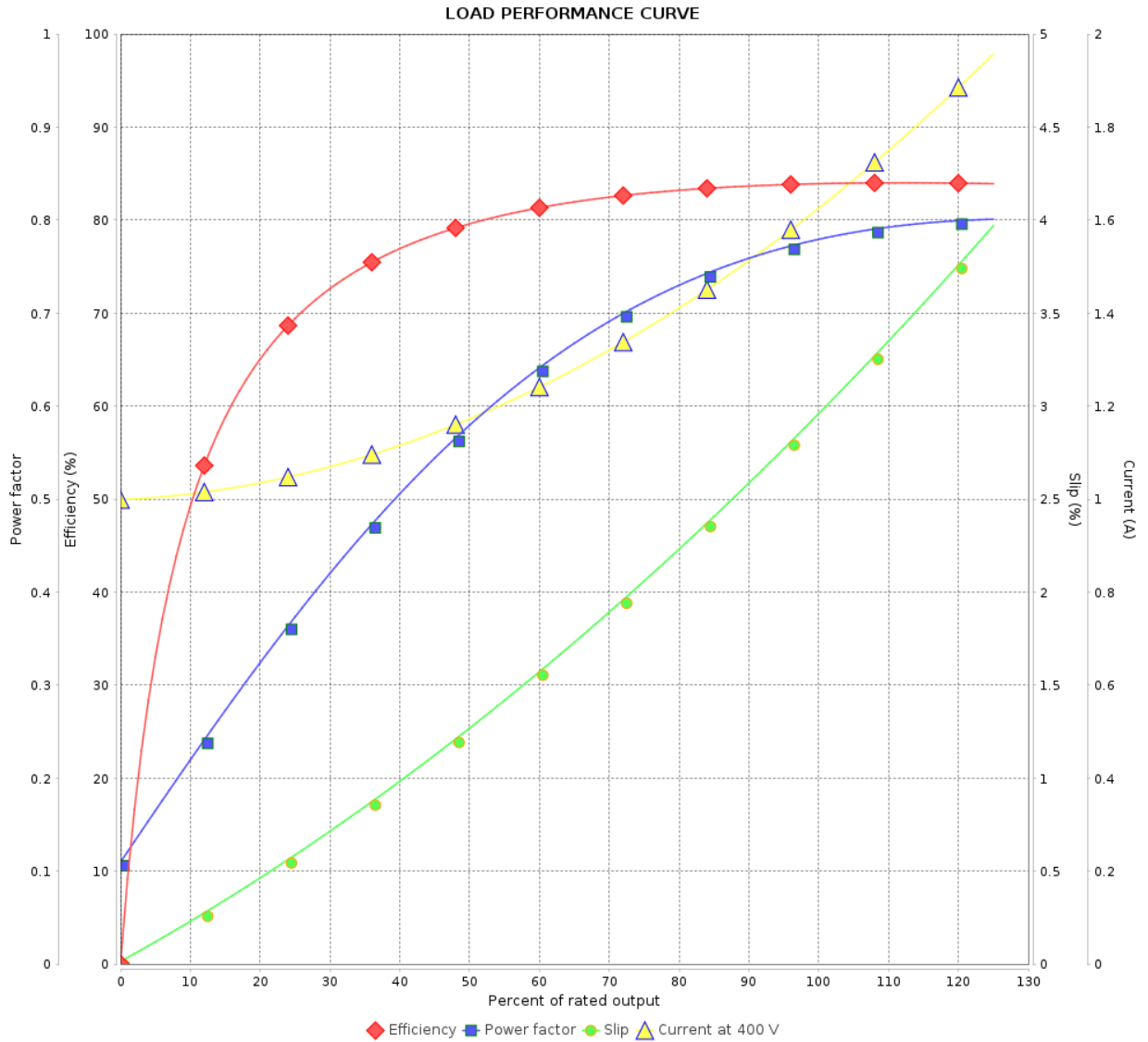
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Performance : 400 V 50 Hz 4P IE3

Rated current : 1.65 A	Moment of inertia (J) : 0.0049 kgm ²
LRC : 7.0	Duty cycle : Cont.(S1)
Rated torque : 0.499 kgfm	Insulation class : F
Locked rotor torque : 240 %	Service factor : 1.25
Breakdown torque : 290 %	Temperature rise : 80 K
Rated speed : 1455 rpm	Design : B

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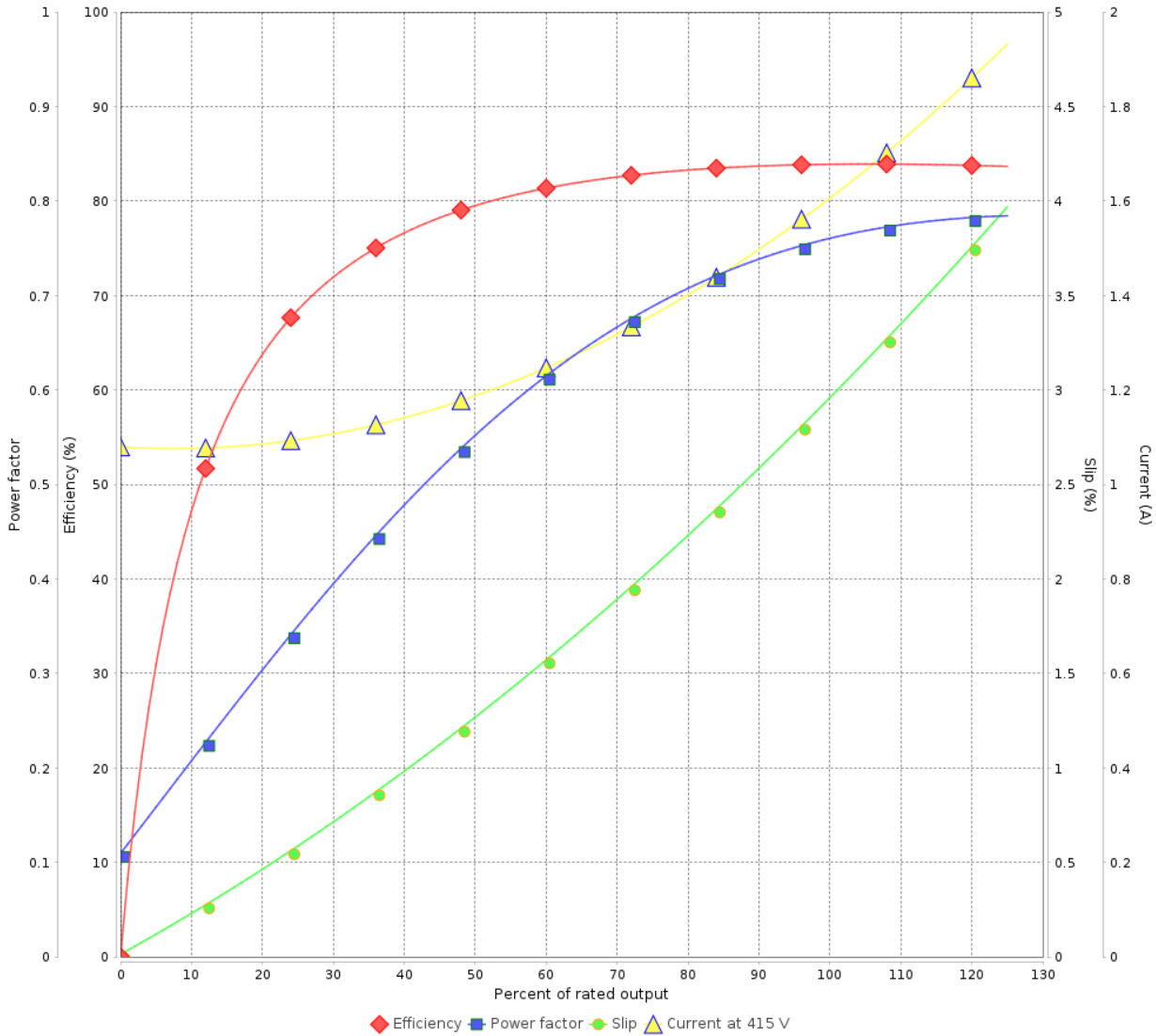
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Performance : 415 V 50 Hz 4P IE3

Rated current	: 1.63 A	Moment of inertia (J)	: 0.0049 kgm ²
LRC	: 7.4	Duty cycle	: Cont.(S1)
Rated torque	: 0.499 kgfm	Insulation class	: F
Locked rotor torque	: 260 %	Service factor	: 1.25
Breakdown torque	: 310 %	Temperature rise	: 80 K
Rated speed	: 1455 rpm	Design	: B

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