

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : W22 IEEE 841 NEMA Premium Efficiency Three-Phase Product code : 12761613

Frame	: 182/4TC	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	: 48.2 kg
Protection degree	: IP55	Moment of inertia (J)	: 0.0080 kgm ²
Design	: B		

Output [HP]	3	2	2	2	3	3	3
Poles	2	2	2	2	2	2	2
Frequency [Hz]	60	50	50	50	50	50	50
Rated voltage [V]	460	380	400	415	380	400	415
Rated current [A]	3.63	3.09	3.00	2.96	4.34	4.17	4.07
L. R. Amperes [A]	31.2	29.7	32.1	32.9	29.5	31.7	33.0
LRC [A]	8.6x(Code K)	9.6x(Code L)	10.7x(Code M)	11.1x(Code N)	6.8x(Code H)	7.6x(Code J)	8.1x(Code J)
No load current [A]	1.30	1.25	1.35	1.40	1.25	1.35	1.40
Rated speed [RPM]	3510	2930	2935	2940	2880	2890	2900
Slip [%]	2.50	2.33	2.17	2.00	4.00	3.67	3.33
Rated torque [kgfm]	0.620	0.495	0.495	0.494	0.756	0.753	0.751
Locked rotor torque [%]	250	300	340	370	210	240	260
Breakdown torque [%]	380	430	480	520	290	320	350
Service factor	1.25	1.25	1.25	1.25	1.25	1.25	1.25
Temperature rise	80 K	80 K	80 K	80 K	80 K	80 K	80 K
Locked rotor time	73s (cold) 41s (hot)	54s (cold) 30s (hot)	54s (cold) 30s (hot)	54s (cold) 30s (hot)	54s (cold) 30s (hot)	54s (cold) 30s (hot)	54s (cold) 30s (hot)
Noise level ²	66.0 dB(A)	62.0 dB(A)	62.0 dB(A)	62.0 dB(A)	62.0 dB(A)	62.0 dB(A)	62.0 dB(A)
Efficiency (%)	25%						
	50%	82.5	81.0	80.6	79.7	84.0	84.0
	75%	86.5	84.5	84.5	84.1	86.5	86.5
	100%	86.5	85.8	85.8	85.9	85.5	85.5
Power Factor	25%						
	50%	0.75	0.68	0.65	0.63	0.80	0.77
	75%	0.84	0.79	0.77	0.75	0.87	0.86
	100%	0.88	0.86	0.84	0.82	0.90	0.89

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

Losses (%)	P1 (0,9;1,0)	14.1	14.1	14.1	14.1	14.1	14.1
	P2 (0,5;1,0)	9.5	9.5	9.5	9.5	9.5	9.5
	P3 (0,25;1,0)	8.5	8.5	8.5	8.5	8.5	8.5
	P4 (0,9;0,5)	8.7	8.7	8.7	8.7	8.7	8.7
	P5 (0,5;0,5)	4.4	4.4	4.4	4.4	4.4	4.4
	P6 (0,5;0,25)	3.3	3.3	3.3	3.3	3.3	3.3
	P7 (0,25;0,25)	1.7	1.7	1.7	1.7	1.7	1.7

Bearing type	: Drive end 6207 C3 Non drive end 6206 C3	Foundation loads Max. traction : 31 kgf Max. compression : 79 kgf
Sealing	: Taconite Labyrinth Labyrinth	
Lubrication interval	: 20000 h 20000 h	
Lubricant amount	: 7 g 5 g	
Lubricant type	: Mobil Polyrex EM	

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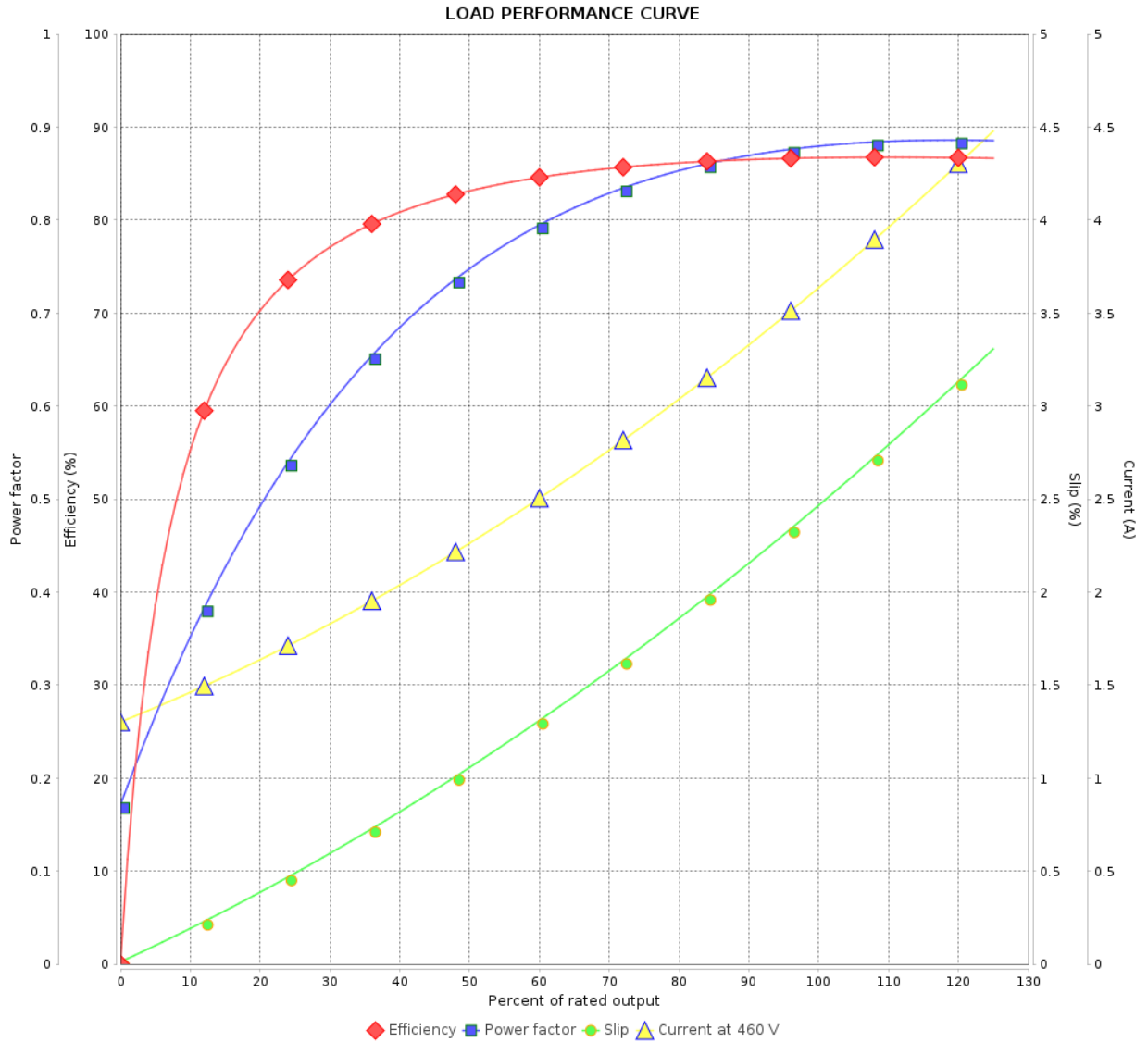
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Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 IEEE 841 NEMA Premium Efficiency Three-Phase Product code : 12761613



Performance : 460 V 60 Hz 2P

Rated current	: 3.63 A	Moment of inertia (J)	: 0.0080 kgm ²
LRC	: 8.6	Duty cycle	: Cont.(S1)
Rated torque	: 0.620 kgfm	Insulation class	: F
Locked rotor torque	: 250 %	Service factor	: 1.25
Breakdown torque	: 380 %	Temperature rise	: 80 K
Rated speed	: 3510 rpm	Design	: B

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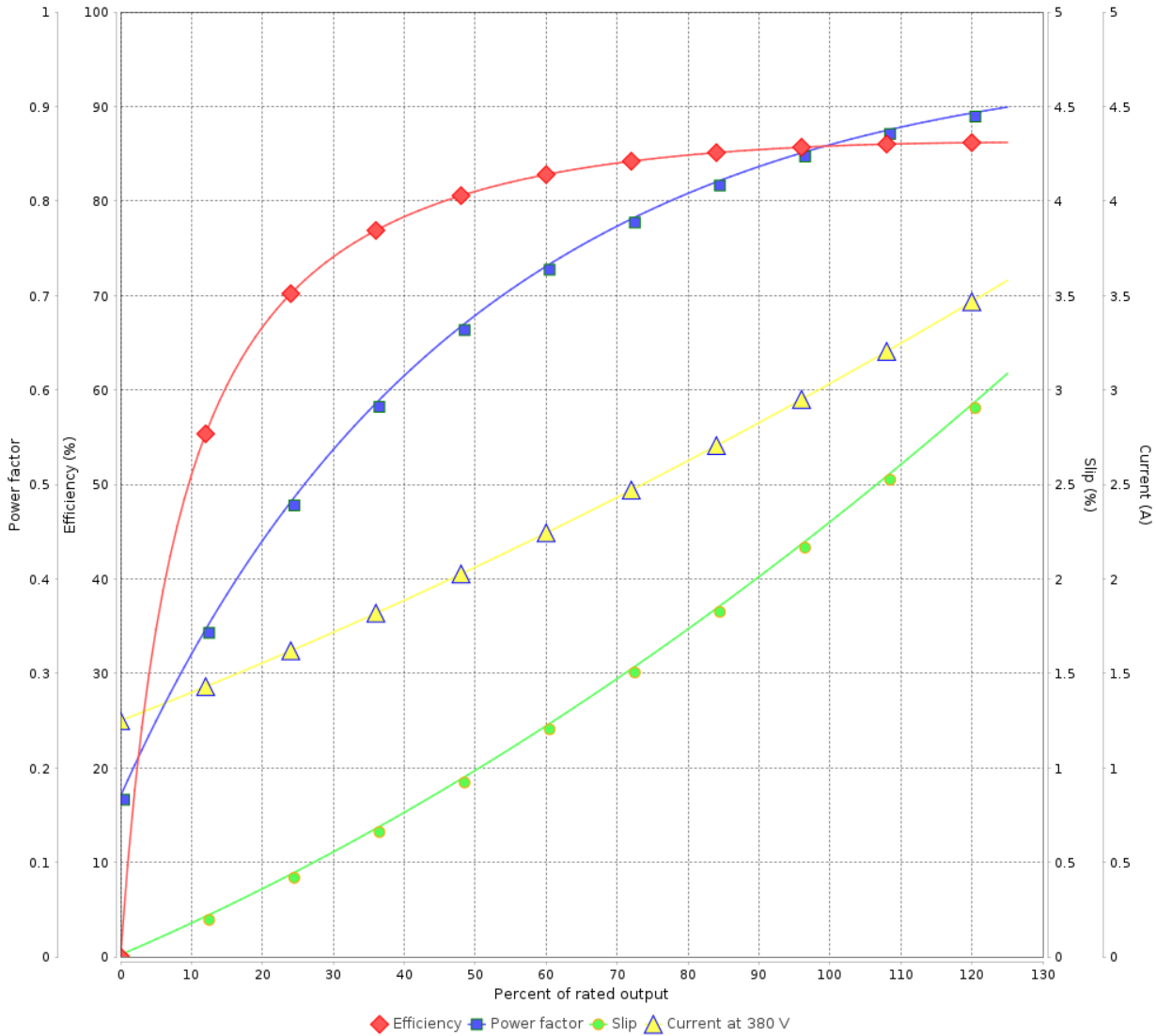
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Performance : 380 V 50 Hz 2P IE3

Rated current	: 3.09 A	Moment of inertia (J)	: 0.0080 kgm ²
LRC	: 9.6	Duty cycle	: Cont.(S1)
Rated torque	: 0.495 kgfm	Insulation class	: F
Locked rotor torque	: 300 %	Service factor	: 1.25
Breakdown torque	: 430 %	Temperature rise	: 80 K
Rated speed	: 2930 rpm	Design	: B

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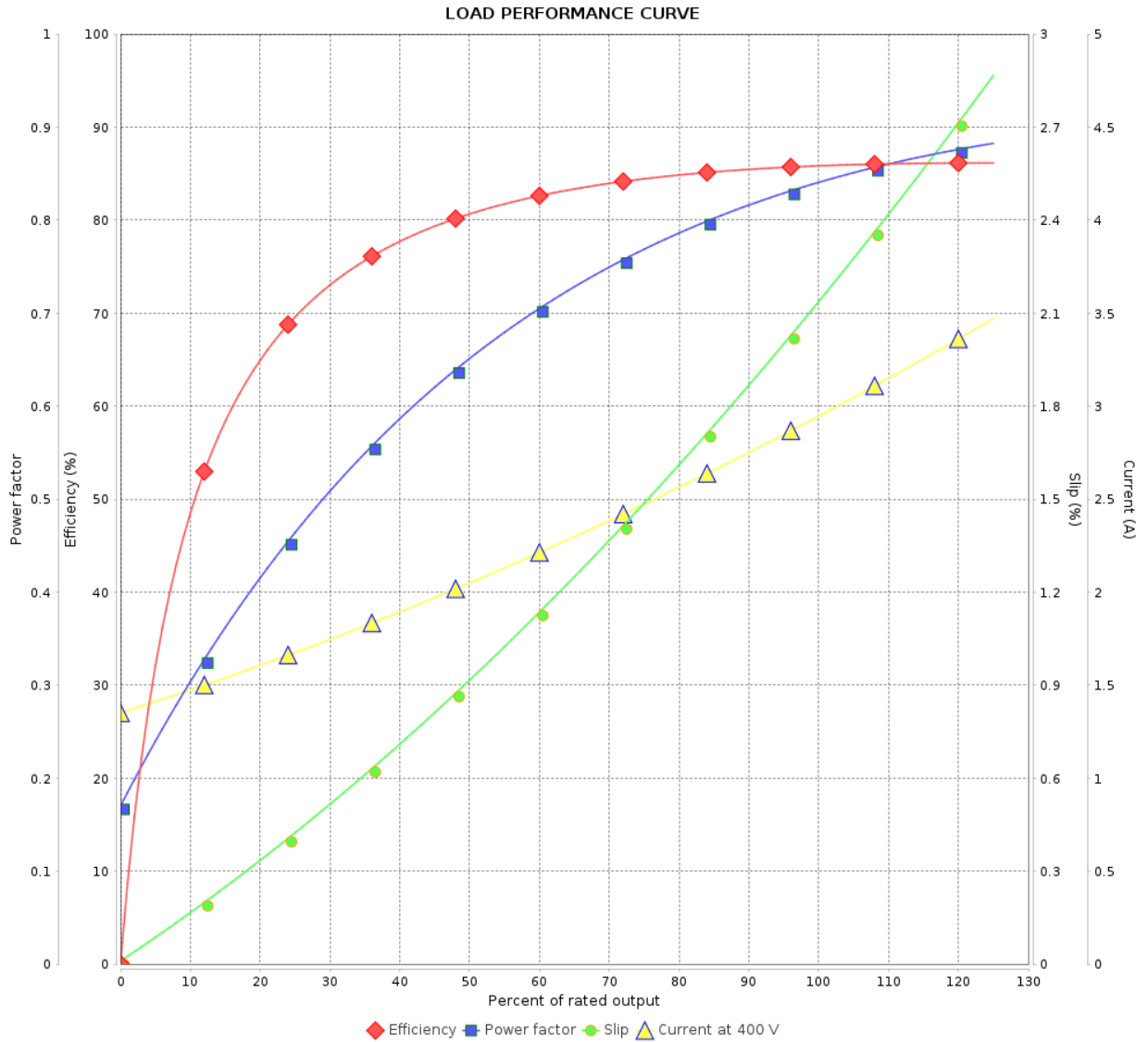
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Three-Phase

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Performance : 400 V 50 Hz 2P IE3

Rated current : 3.00 A
 LRC : 10.7
 Rated torque : 0.495 kgfm
 Locked rotor torque : 340 %
 Breakdown torque : 480 %
 Rated speed : 2935 rpm

Moment of inertia (J) : 0.0080 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.25
 Temperature rise : 80 K
 Design : B

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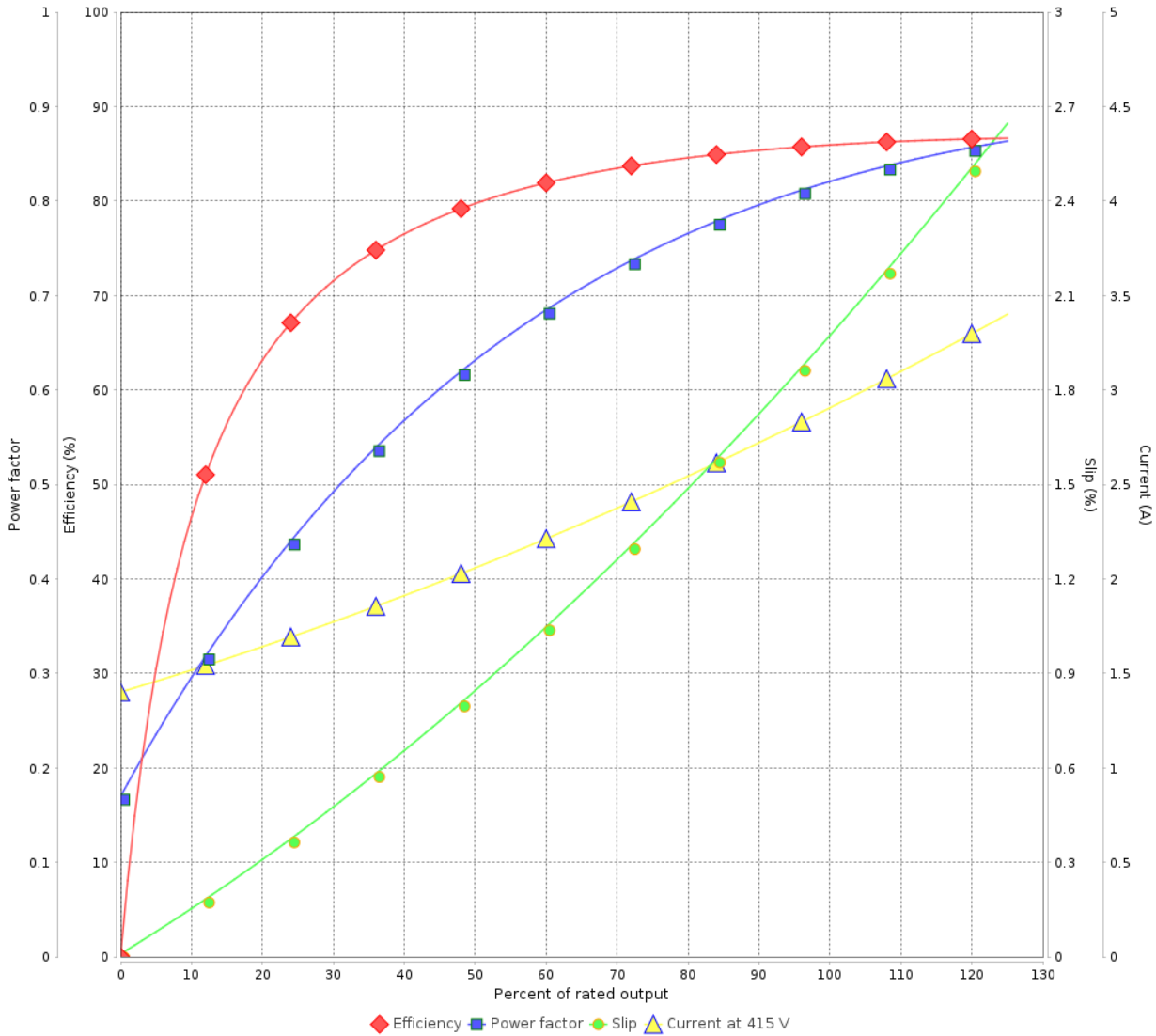
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Performance : 415 V 50 Hz 2P IE3

Rated current	: 2.96 A	Moment of inertia (J)	: 0.0080 kgm ²
LRC	: 11.1	Duty cycle	: Cont.(S1)
Rated torque	: 0.494 kgfm	Insulation class	: F
Locked rotor torque	: 370 %	Service factor	: 1.25
Breakdown torque	: 520 %	Temperature rise	: 80 K
Rated speed	: 2940 rpm	Design	: B

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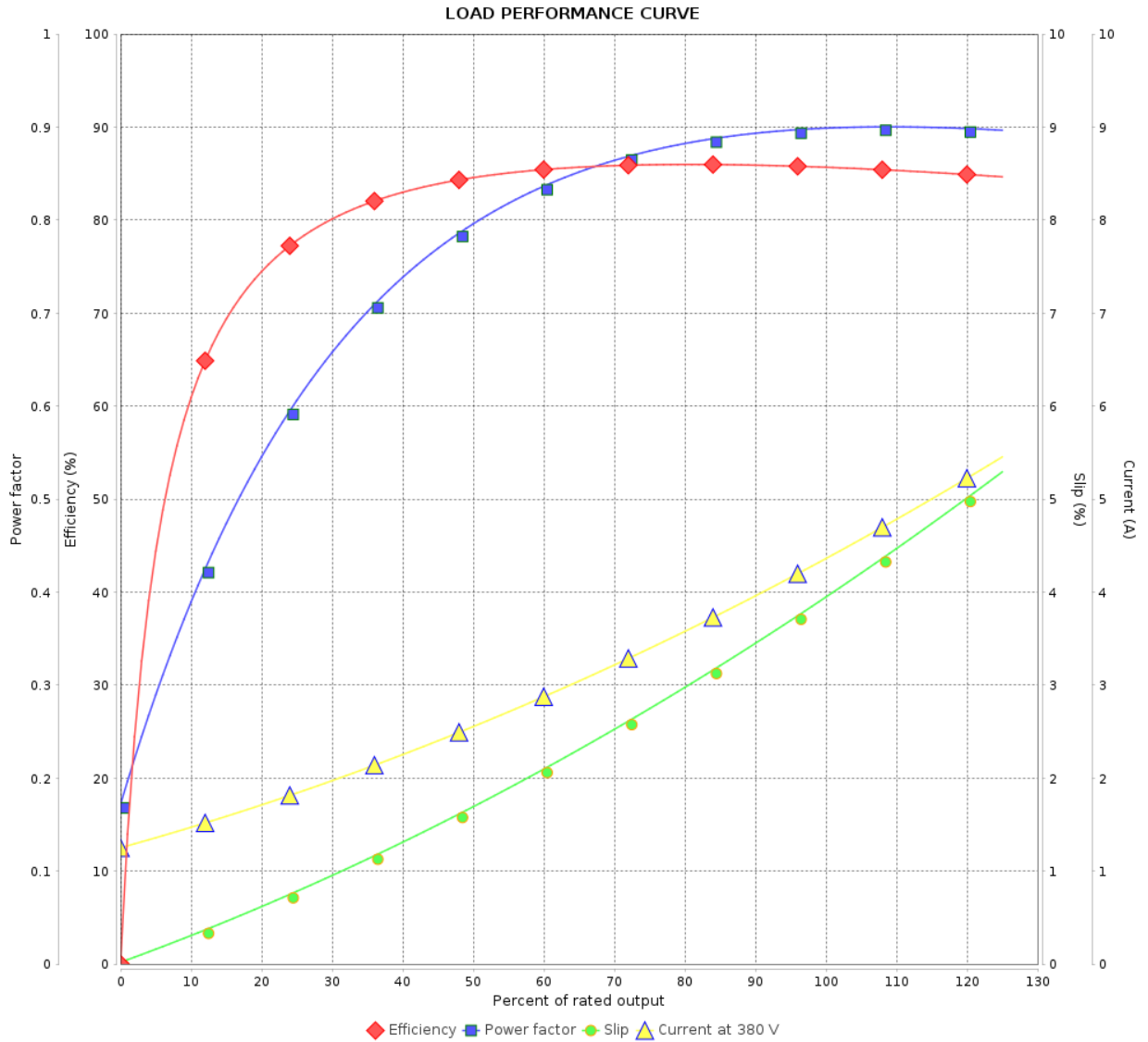
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Performance : 380 V 50 Hz 2P IE2

Rated current : 4.34 A
 LRC : 6.8
 Rated torque : 0.756 kgfm
 Locked rotor torque : 210 %
 Breakdown torque : 290 %
 Rated speed : 2880 rpm

Moment of inertia (J) : 0.0080 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.25
 Temperature rise : 80 K
 Design : B

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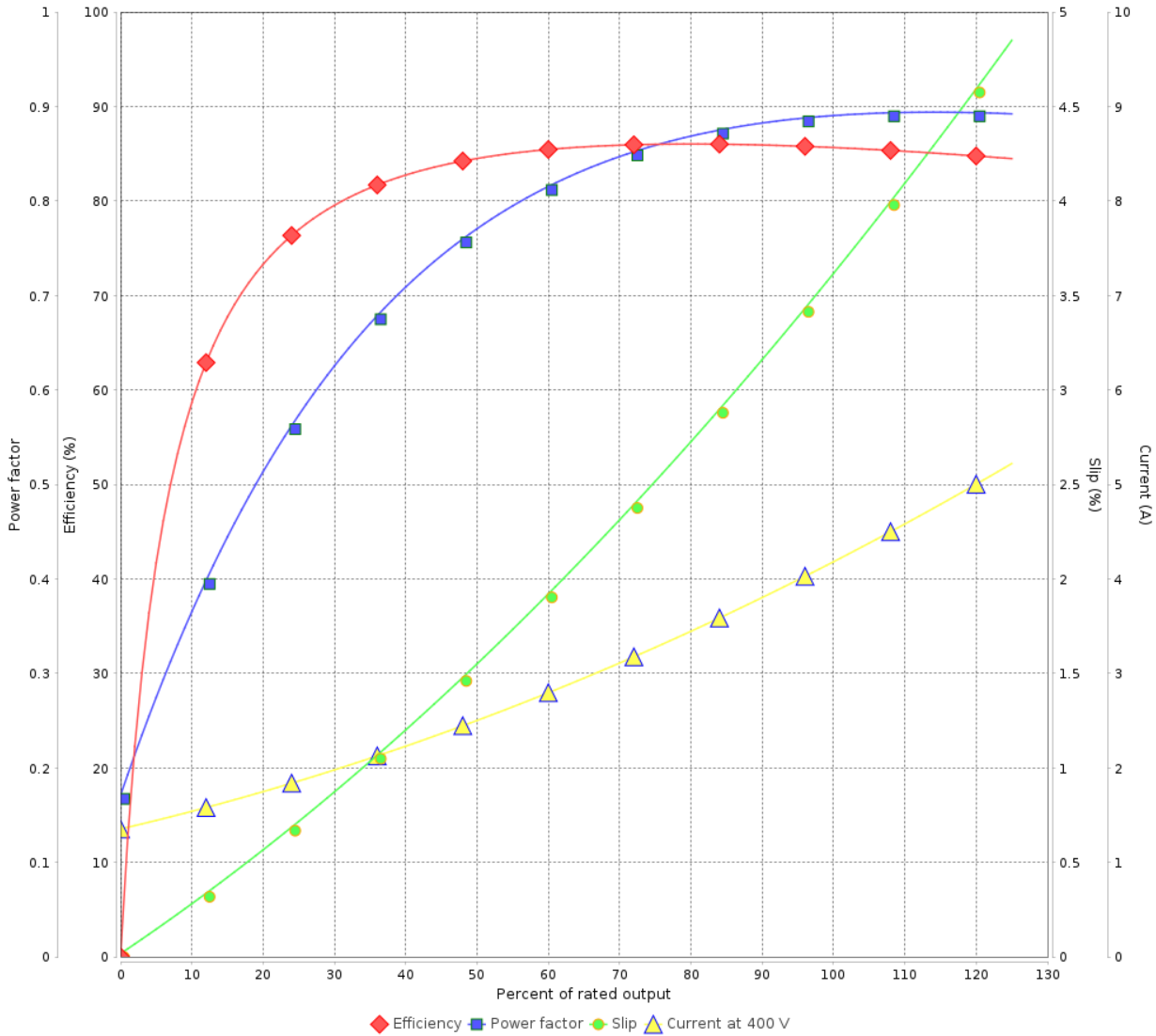
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Performance : 400 V 50 Hz 2P IE2

Rated current	: 4.17 A	Moment of inertia (J)	: 0.0080 kgm ²
LRC	: 7.6	Duty cycle	: Cont.(S1)
Rated torque	: 0.753 kgfm	Insulation class	: F
Locked rotor torque	: 240 %	Service factor	: 1.25
Breakdown torque	: 320 %	Temperature rise	: 80 K
Rated speed	: 2890 rpm	Design	: B

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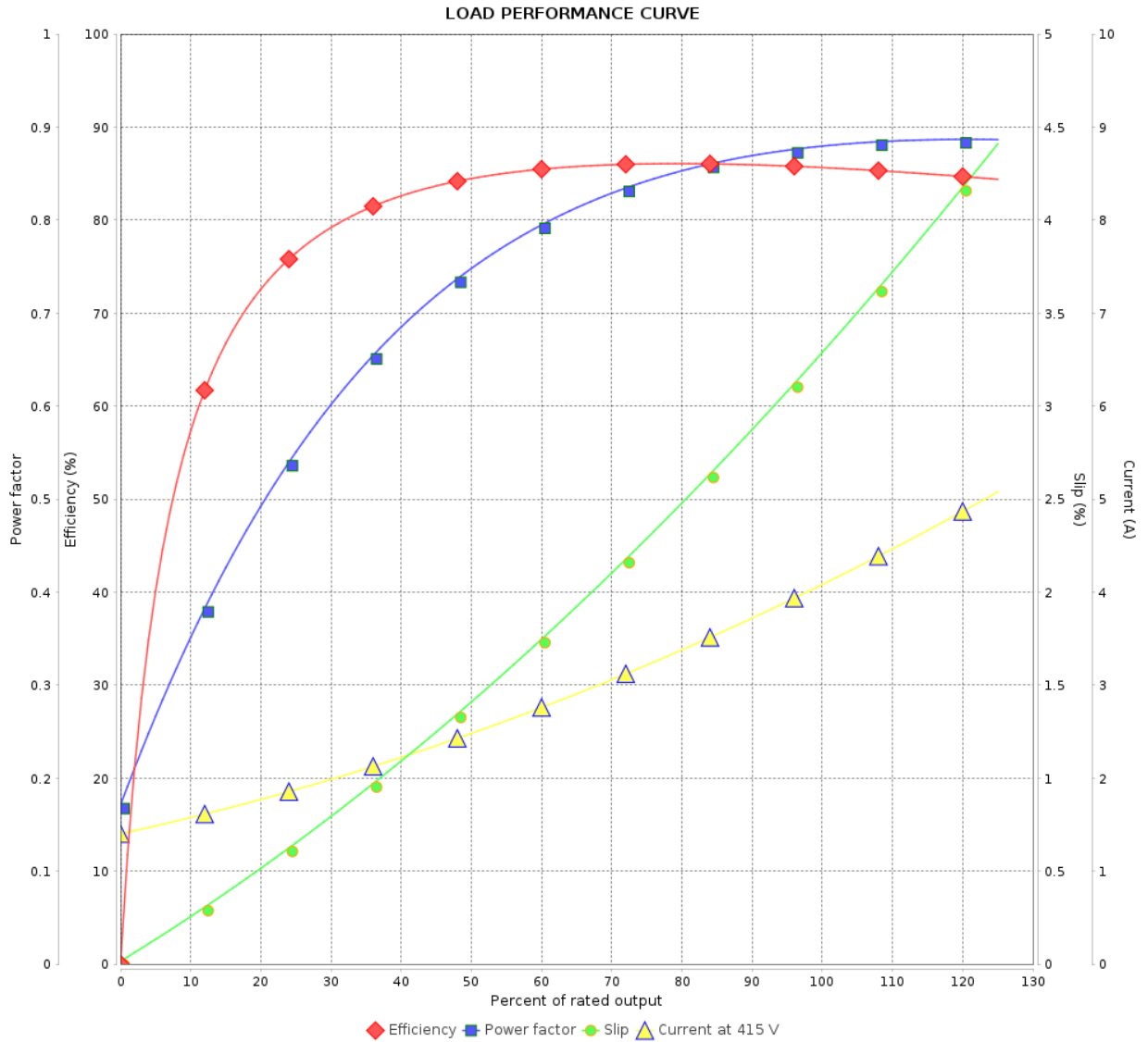
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Performance : 415 V 50 Hz 2P IE2

Rated current : 4.07 A
 LRC : 8.1
 Rated torque : 0.751 kgfm
 Locked rotor torque : 260 %
 Breakdown torque : 350 %
 Rated speed : 2900 rpm

Moment of inertia (J) : 0.0080 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.25
 Temperature rise : 80 K
 Design : B

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