

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer							
Product line	: W22 IEEE 841 NEMA Premium Efficiency Three-Phase			Product code :	11921930		
Frame	: 143/5TC			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	: 24.9 kg		
Protection degree	: IP55			Moment of inertia (J)	: 0.0067 kgm ²		
Design	: B						
Output [HP]	1	0.75	0.75	0.75	1	1	1
Poles	6	6	6	6	6	6	6
Frequency [Hz]	60	50	50	50	50	50	50
Rated voltage [V]	460	380	400	415	380	400	415
Rated current [A]	1.73	1.60	1.62	1.66	1.96	1.94	1.95
L. R. Amperes [A]	10.7	9.28	9.88	10.5	9.41	10.1	10.7
LRC [A]	6.2x(Code K)	5.8x(Code K)	6.1x(Code L)	6.3x(Code M)	4.8x(Code G)	5.2x(Code H)	5.5x(Code J)
No load current [A]	1.10	1.05	1.15	1.25	1.05	1.15	1.25
Rated speed [RPM]	1160	960	970	970	940	950	950
Slip [%]	3.33	4.00	3.00	3.00	6.00	5.00	5.00
Rated torque [kgfm]	0.626	0.567	0.561	0.561	0.772	0.764	0.764
Locked rotor torque [%]	260	280	300	320	200	229	250
Breakdown torque [%]	300	310	330	340	220	260	280
Service factor	1.25	1.00	1.00	1.00	1.00	1.00	1.00
Temperature rise	80 K	80 K	80 K	80 K	80 K	80 K	80 K
Locked rotor time	50s (cold) 28s (hot)	36s (cold) 20s (hot)	36s (cold) 20s (hot)	36s (cold) 20s (hot)	36s (cold) 20s (hot)	36s (cold) 20s (hot)	36s (cold) 20s (hot)
Noise level ²	50.0 dB(A)	45.0 dB(A)	45.0 dB(A)	45.0 dB(A)	45.0 dB(A)	45.0 dB(A)	45.0 dB(A)
Efficiency (%)	25%						
	50%	77.0	74.8	73.2	70.7	77.0	74.0
	75%	82.0	78.4	77.5	75.8	80.0	78.5
	100%	82.5	79.3	78.9	77.9	78.5	78.5
Power Factor	25%						
	50%	0.45	0.44	0.41	0.38	0.53	0.46
	75%	0.57	0.57	0.53	0.50	0.66	0.59
	100%	0.66	0.66	0.62	0.59	0.74	0.68
Losses at normative operating points (speed;torque), in percentage of rated output power							
Losses (%)	P1 (0,9;1,0)	20.0	20.0	20.0	20.0	20.0	20.0
	P2 (0,5;1,0)	16.7	16.7	16.7	16.7	16.7	16.7
	P3 (0,25;1,0)	16.9	16.9	16.9	16.9	16.9	16.9
	P4 (0,9;0,5)	12.6	12.6	12.6	12.6	12.6	12.6
	P5 (0,5;0,5)	9.2	9.2	9.2	9.2	9.2	9.2
	P6 (0,5;0,25)	7.6	7.6	7.6	7.6	7.6	7.6
	P7 (0,25;0,25)	5.8	5.8	5.8	5.8	5.8	5.8
Bearing type	: Drive end	6205 C3	Non drive end	6204 C3	Foundation loads		
Sealing	: Taconite	Labyrinth	Taconite	Labyrinth	Max. traction	: 48 kgf	
Lubrication interval	: 20000 h	20000 h	20000 h	20000 h	Max. compression	: 73 kgf	
Lubricant amount	: 4 g	4 g	4 g	4 g			
Lubricant type	: Mobil Polyrex EM						
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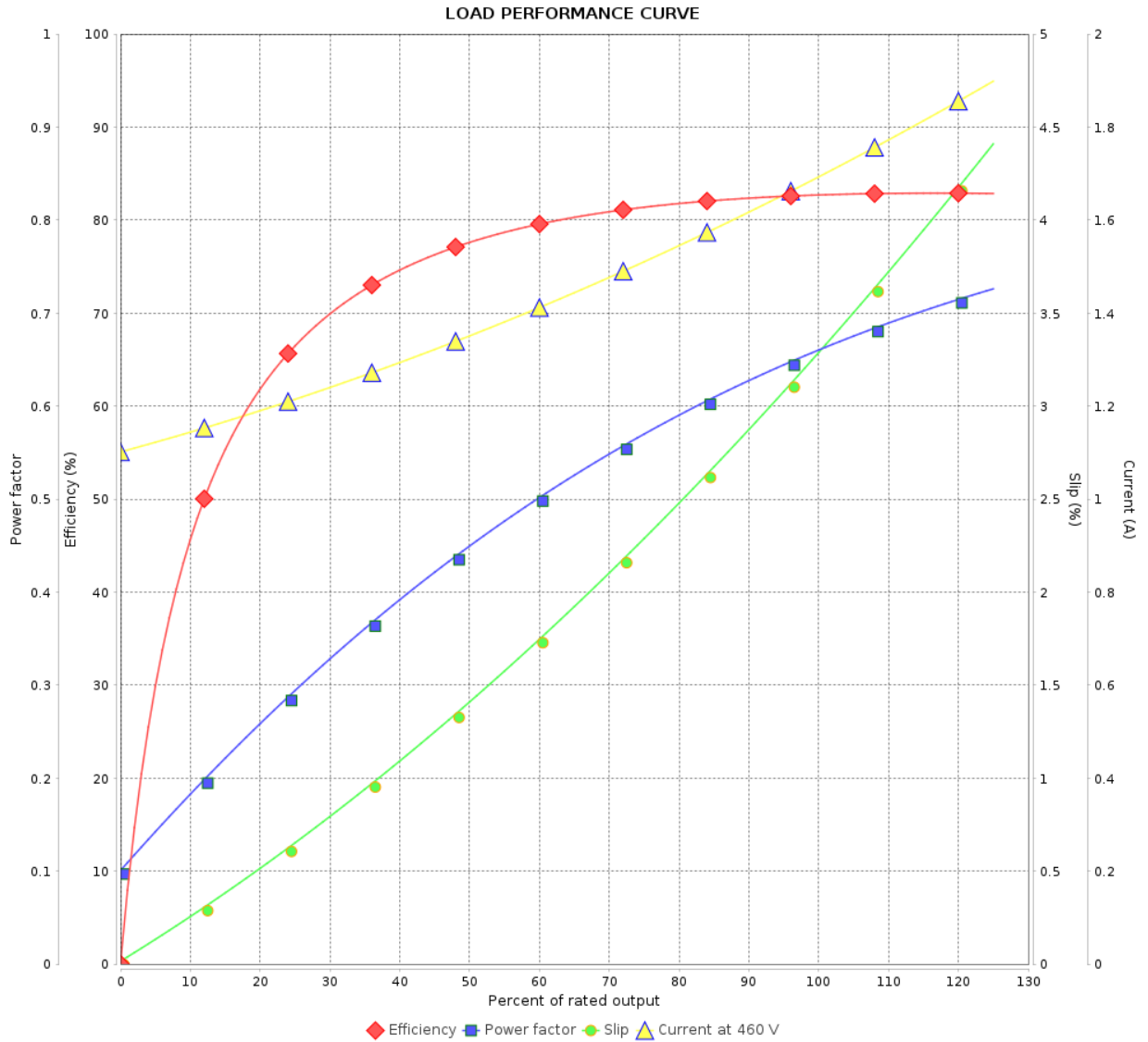
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Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W22 IEEE 841 NEMA Premium Efficiency Three-Phase Product code : 11921930



Performance : 460 V 60 Hz 6P

Rated current : 1.73 A
 LRC : 6.2
 Rated torque : 0.626 kgfm
 Locked rotor torque : 260 %
 Breakdown torque : 300 %
 Rated speed : 1160 rpm

Moment of inertia (J) : 0.0067 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.25
 Temperature rise : 80 K
 Design : B

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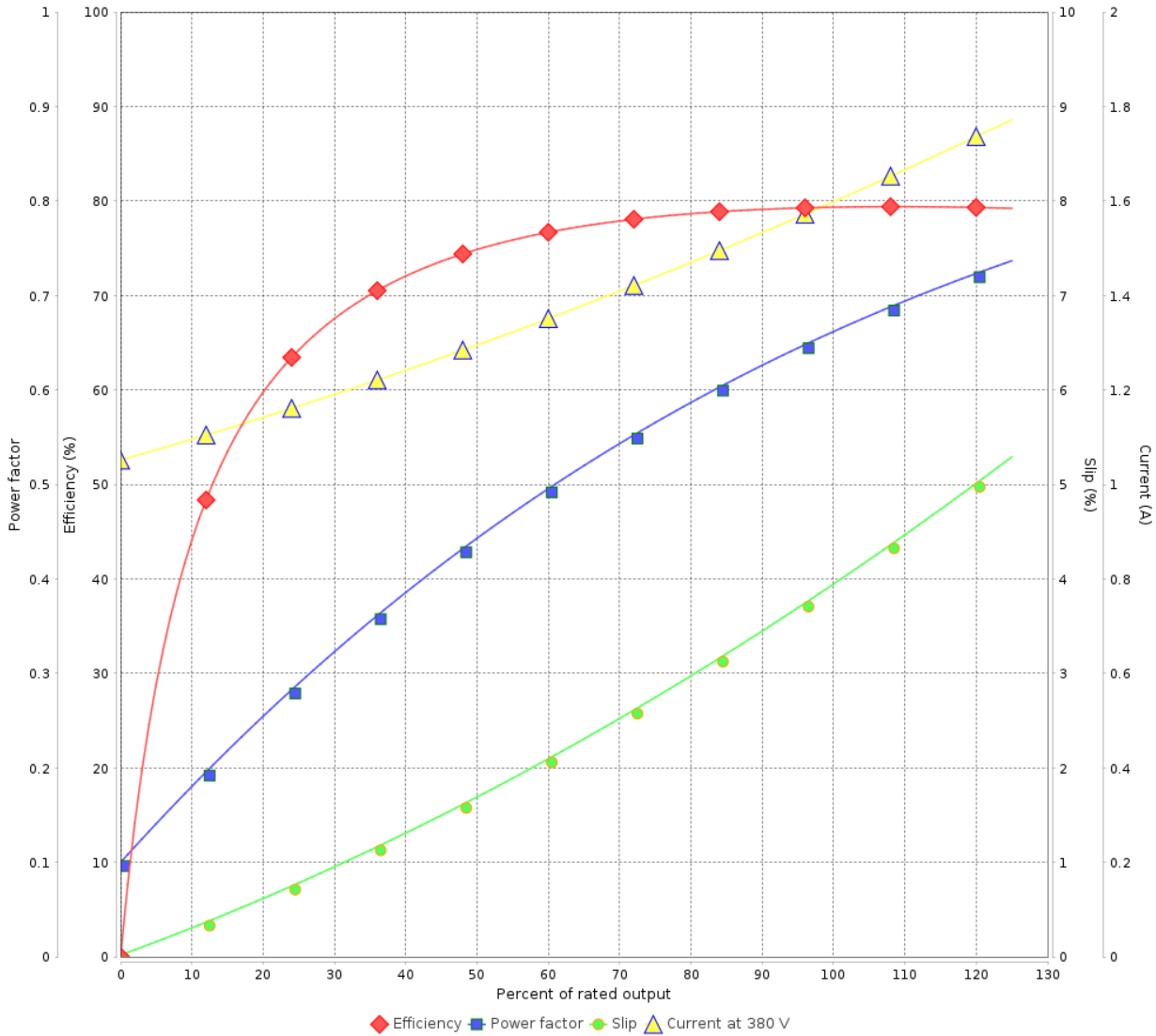
Three Phase Induction Motor - Squirrel Cage



Customer :

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Performance : 380 V 50 Hz 6P IE3

Rated current	: 1.60 A	Moment of inertia (J)	: 0.0067 kgm ²
LRC	: 5.8	Duty cycle	: Cont.(S1)
Rated torque	: 0.567 kgfm	Insulation class	: F
Locked rotor torque	: 280 %	Service factor	: 1.00
Breakdown torque	: 310 %	Temperature rise	: 80 K
Rated speed	: 960 rpm	Design	: B

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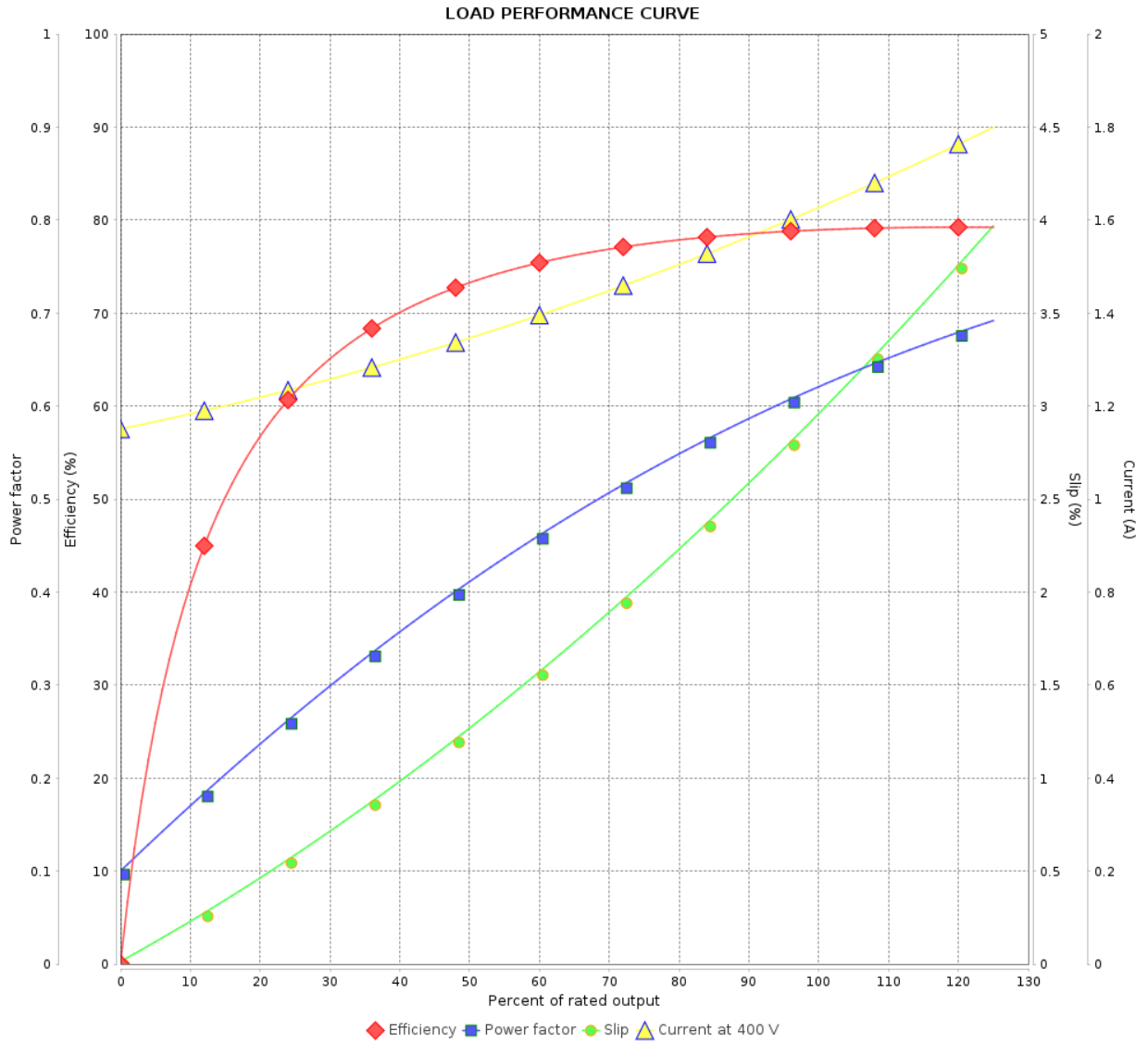
Three Phase Induction Motor - Squirrel Cage



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Performance : 400 V 50 Hz 6P IE3

Rated current : 1.62 A
 LRC : 6.1
 Rated torque : 0.561 kgfm
 Locked rotor torque : 300 %
 Breakdown torque : 330 %
 Rated speed : 970 rpm

Moment of inertia (J) : 0.0067 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : B

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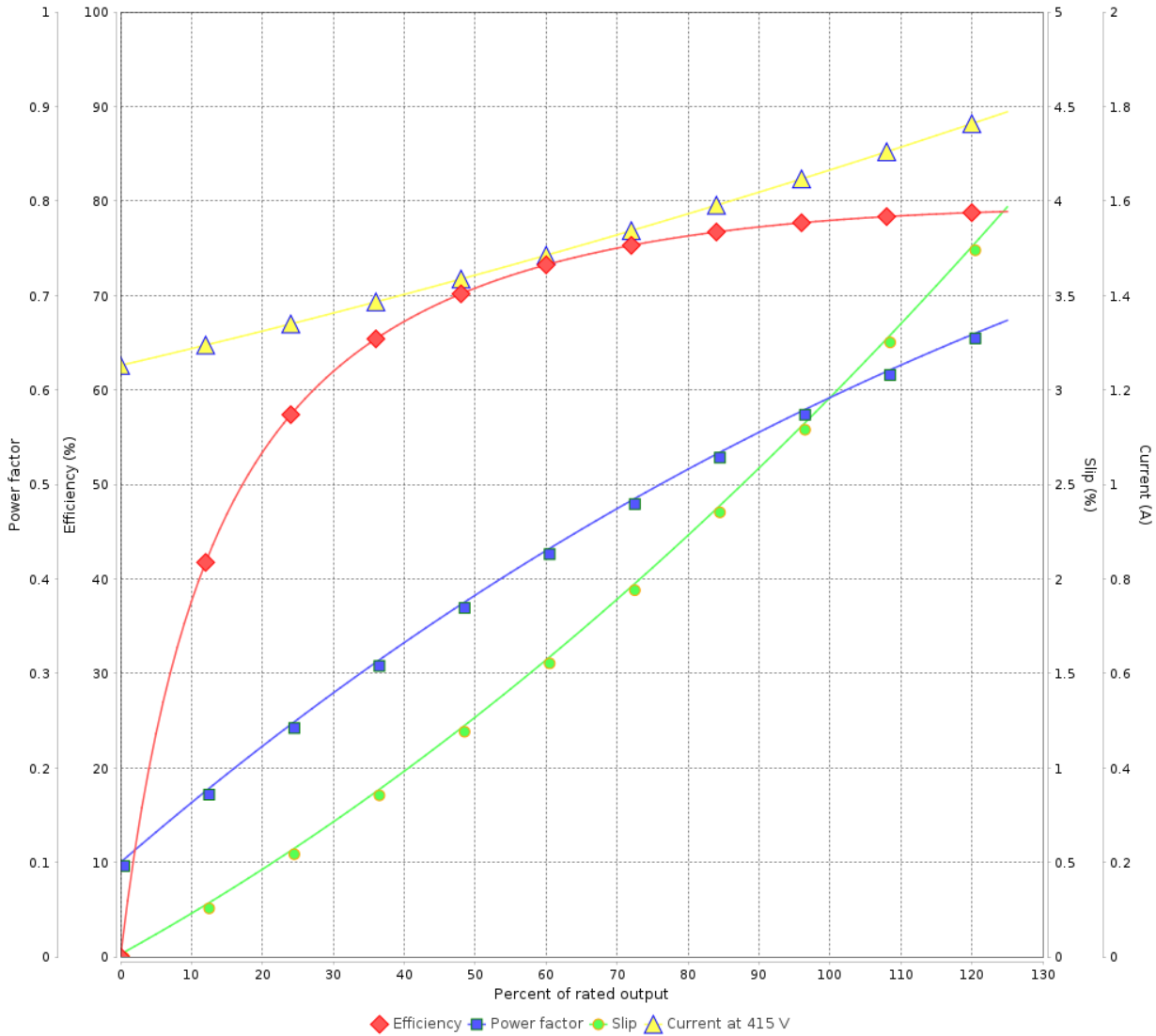
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Performance : 415 V 50 Hz 6P IE3

Rated current : 1.66 A	Moment of inertia (J) : 0.0067 kgm ²
LRC : 6.3	Duty cycle : Cont.(S1)
Rated torque : 0.561 kgfm	Insulation class : F
Locked rotor torque : 320 %	Service factor : 1.00
Breakdown torque : 340 %	Temperature rise : 80 K
Rated speed : 970 rpm	Design : B

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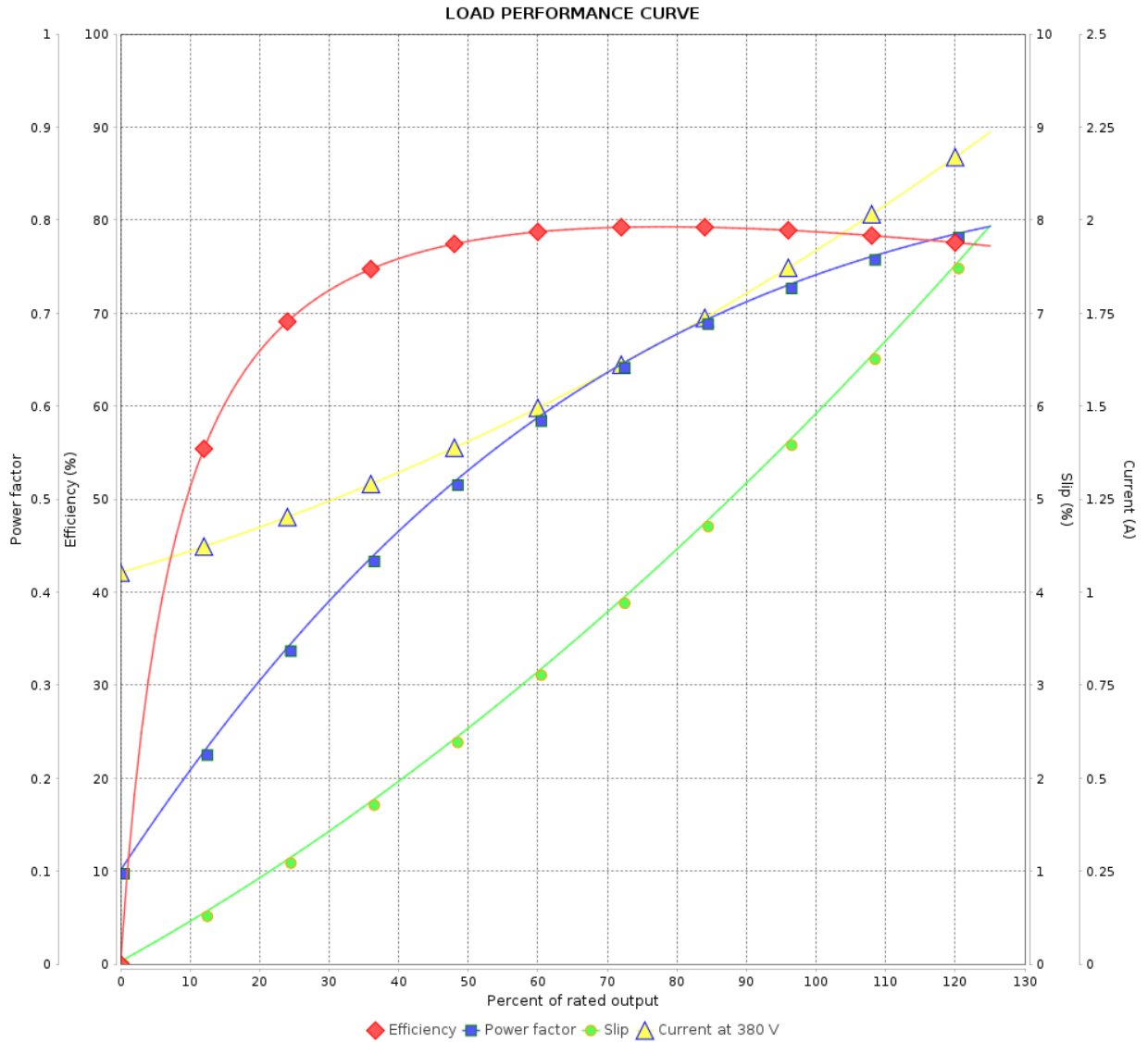
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Performance : 380 V 50 Hz 6P IE2

Rated current : 1.96 A
 LRC : 4.8
 Rated torque : 0.772 kgfm
 Locked rotor torque : 200 %
 Breakdown torque : 220 %
 Rated speed : 940 rpm

Moment of inertia (J) : 0.0067 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : B

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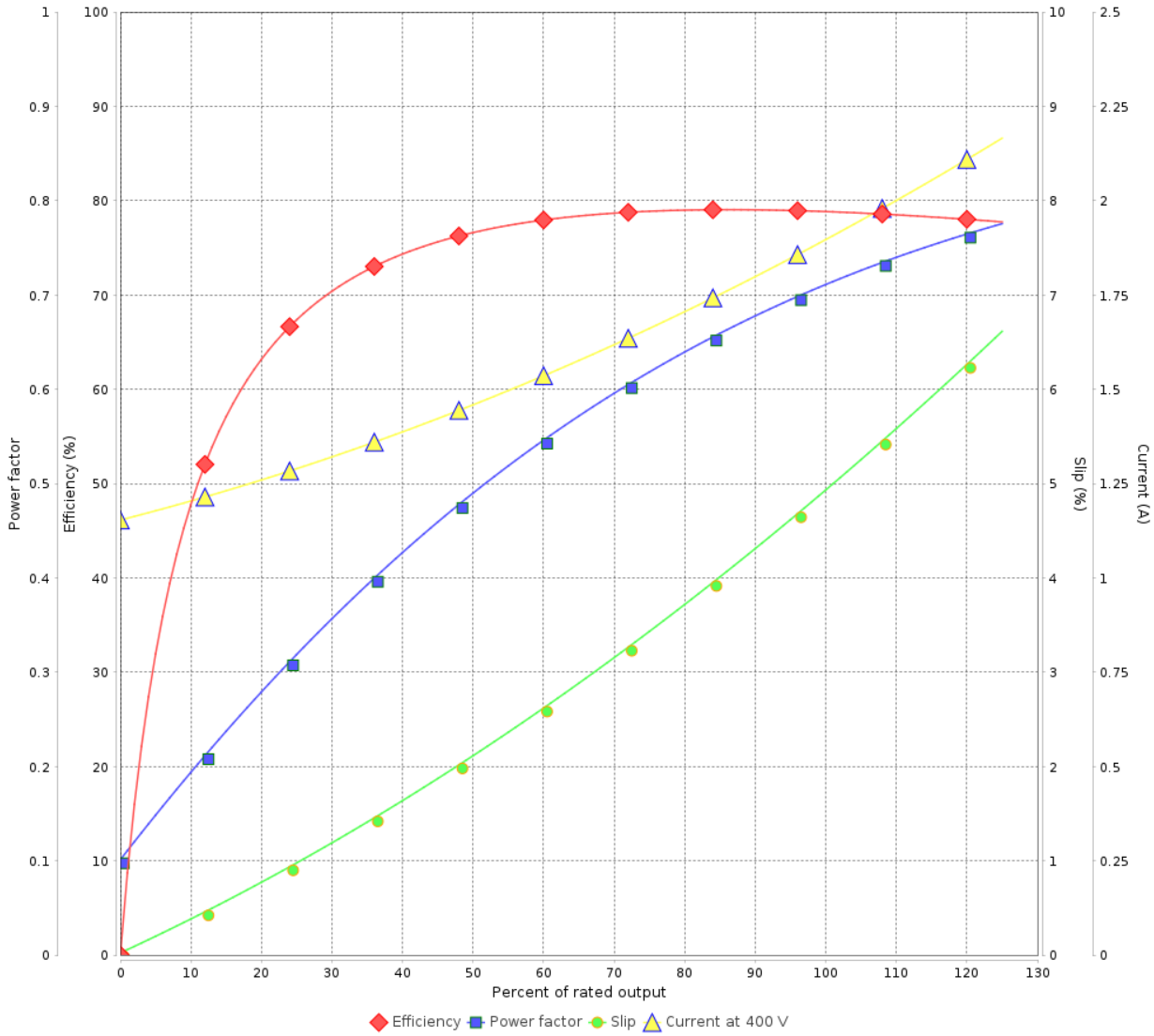
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Performance : 400 V 50 Hz 6P IE2

Rated current	: 1.94 A	Moment of inertia (J)	: 0.0067 kgm ²
LRC	: 5.2	Duty cycle	: Cont.(S1)
Rated torque	: 0.764 kgfm	Insulation class	: F
Locked rotor torque	: 229 %	Service factor	: 1.00
Breakdown torque	: 260 %	Temperature rise	: 80 K
Rated speed	: 950 rpm	Design	: B

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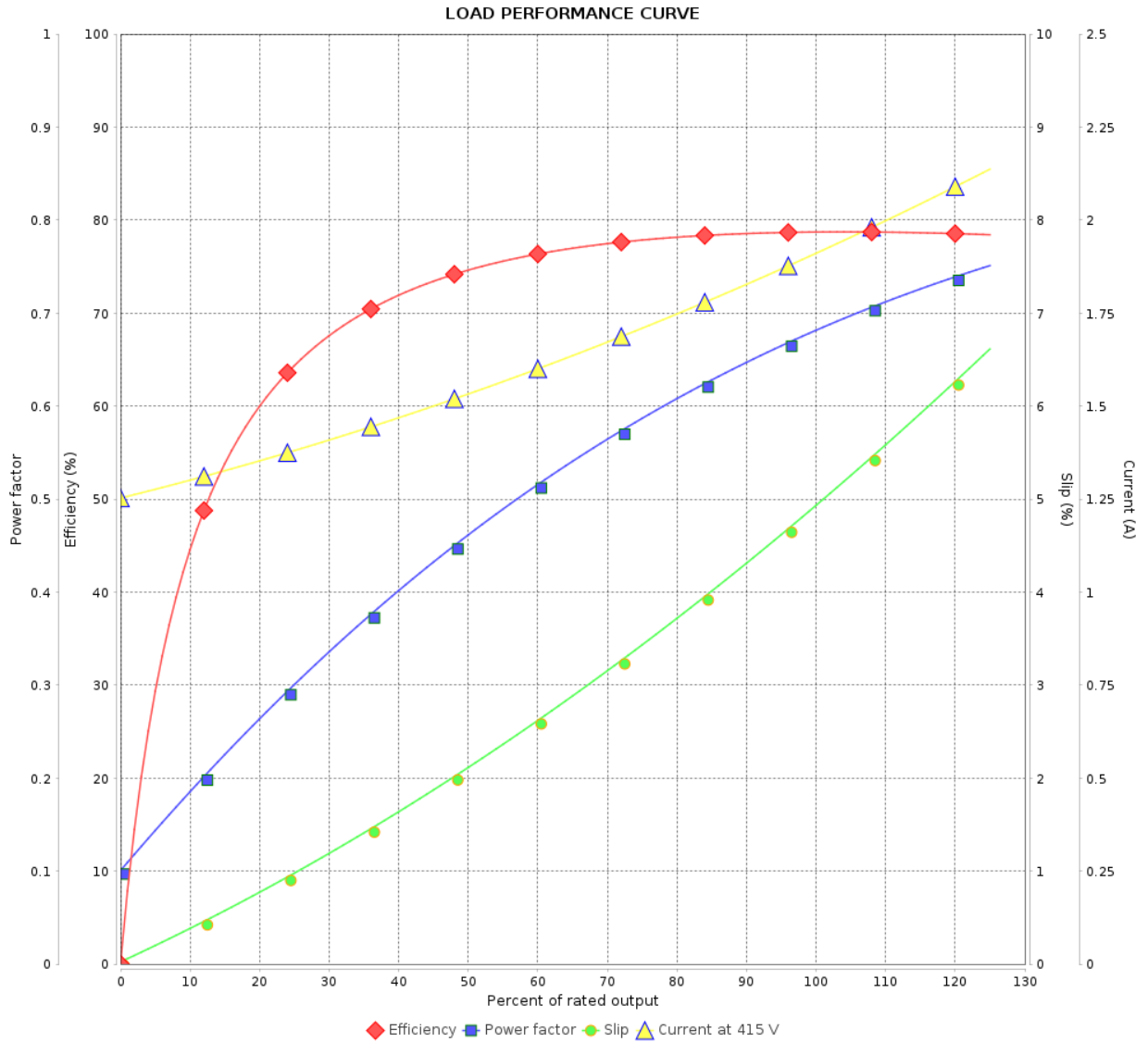
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Performance : 415 V 50 Hz 6P IE2

Rated current : 1.95 A	Moment of inertia (J) : 0.0067 kgm ²
LRC : 5.5	Duty cycle : Cont.(S1)
Rated torque : 0.764 kgfm	Insulation class : F
Locked rotor torque : 250 %	Service factor : 1.00
Breakdown torque : 280 %	Temperature rise : 80 K
Rated speed : 950 rpm	Design : B

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