

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : W22 IEEE 841 NEMA Premium Efficiency Three-Phase Product code : 12109400

Frame	: 364/5T	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 ³	: 412 kg
Protection degree	: IP56	Moment of inertia (J)	: 1.22 kgm ²
Design	: B		

Output [HP]	40	30	30	30	40	40	40
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]	46.5	43.0	41.1	40.0	57.8	55.1	53.4
L. R. Amperes [A]	298	275	296	308	283	303	320
LRC [A]	6.4x(Code G)	6.4x(Code G)	7.2x(Code H)	7.7x(Code J)	4.9x(Code E)	5.5x(Code F)	6.0x(Code G)
No load current [A]	16.5	16.0	17.0	17.8	16.0	17.0	17.8
Rated speed [RPM]	1183	985	987	988	975	980	982
Slip [%]	1.42	1.50	1.30	1.20	2.50	2.00	1.80
Rated torque [kgfm]	24.5	22.1	22.1	22.0	29.8	29.6	29.6
Locked rotor torque [%]	200	210	240	270	160	180	200
Breakdown torque [%]	240	250	280	310	190	210	229
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	37s (cold) 21s (hot)	32s (cold) 18s (hot)	32s (cold) 18s (hot)	32s (cold) 18s (hot)	32s (cold) 18s (hot)	32s (cold) 18s (hot)	32s (cold) 18s (hot)
Noise level ²	66.0 dB(A)	63.0 dB(A)	63.0 dB(A)	63.0 dB(A)	63.0 dB(A)	63.0 dB(A)	63.0 dB(A)
Efficiency (%)	25%						
	50%	93.6	92.4	92.3	91.9	93.0	93.0
	75%	93.6	92.8	93.1	93.0	92.4	93.0
	100%	94.1	92.5	93.0	93.2	91.7	92.4
Power Factor	25%						
	50%	0.73	0.68	0.66	0.63	0.78	0.76
	75%	0.82	0.80	0.79	0.76	0.84	0.83
	100%	0.86	0.84	0.83	0.82	0.86	0.85

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

Losses (%)	P1 (0,9;1,0)	6.1	6.1	6.1	6.1	6.1	6.1
	P2 (0,5;1,0)	5.0	5.0	5.0	5.0	5.0	5.0
	P3 (0,25;1,0)	4.4	4.4	4.4	4.4	4.4	4.4
	P4 (0,9;0,5)	2.8	2.8	2.8	2.8	2.8	2.8
	P5 (0,5;0,5)	1.9	1.9	1.9	1.9	1.9	1.9
	P6 (0,5;0,25)	1.1	1.1	1.1	1.1	1.1	1.1
	P7 (0,25;0,25)	0.8	0.8	0.8	0.8	0.8	0.8

Bearing type	Drive end	6314 C3	Non drive end	6314 C3	Foundation loads	
	Sealing	Inpro/Seal	Inpro/Seal	Max. traction		: 557 kgf
	Lubrication interval	17000 h	17000 h	Max. compression		: 970 kgf
	Lubricant amount	27 g	27 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.

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

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Customer : _____

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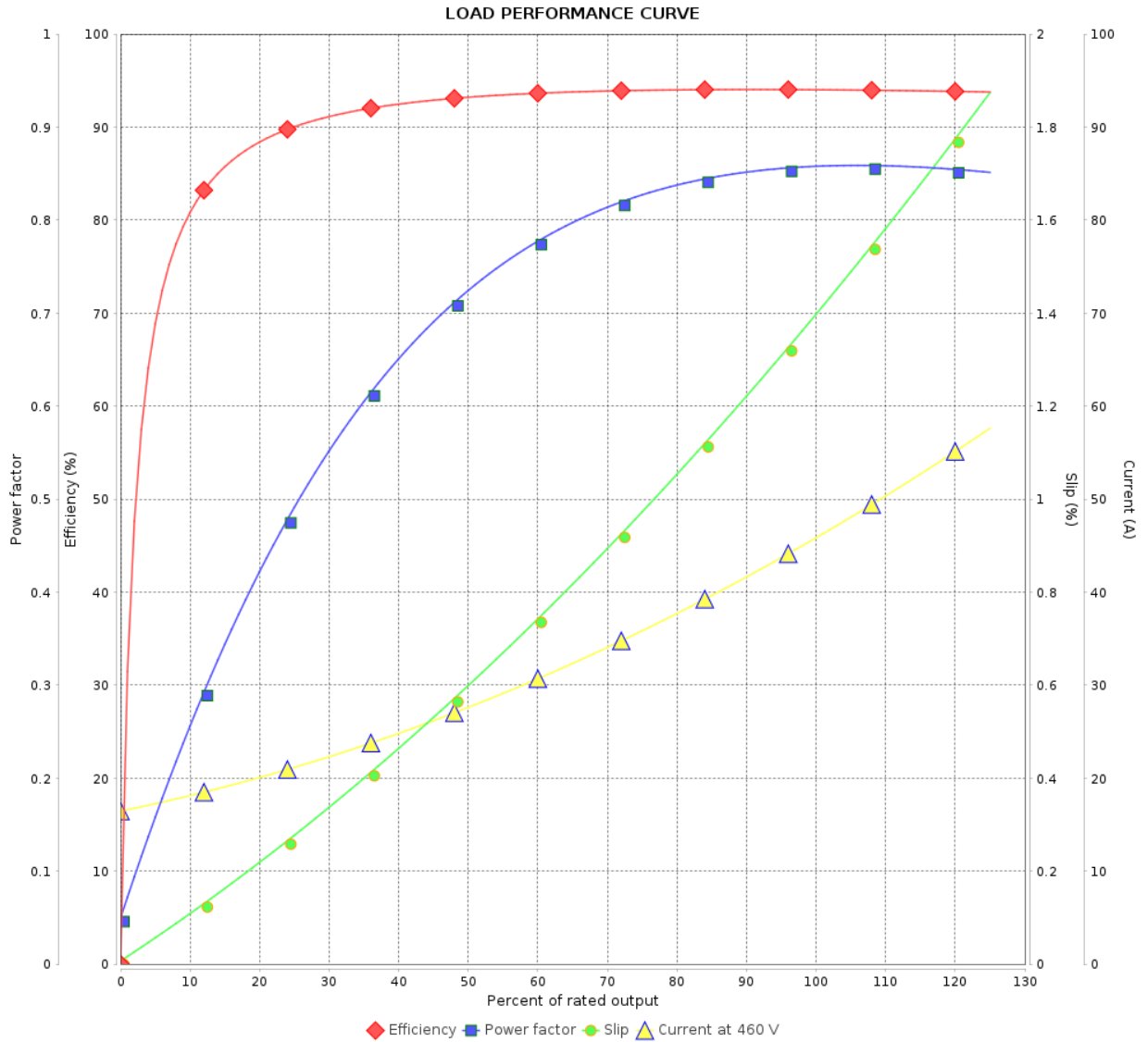
Three Phase Induction Motor - Squirrel Cage



Customer : _____

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

Product code : 12109400



Performance : 460 V 60 Hz 6P

Rated current : 46.5 A
 LRC : 6.4
 Rated torque : 24.5 kgfm
 Locked rotor torque : 200 %
 Breakdown torque : 240 %
 Rated speed : 1183 rpm

Moment of inertia (J) : 1.22 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.25
 Temperature rise : 80 K
 Design : B

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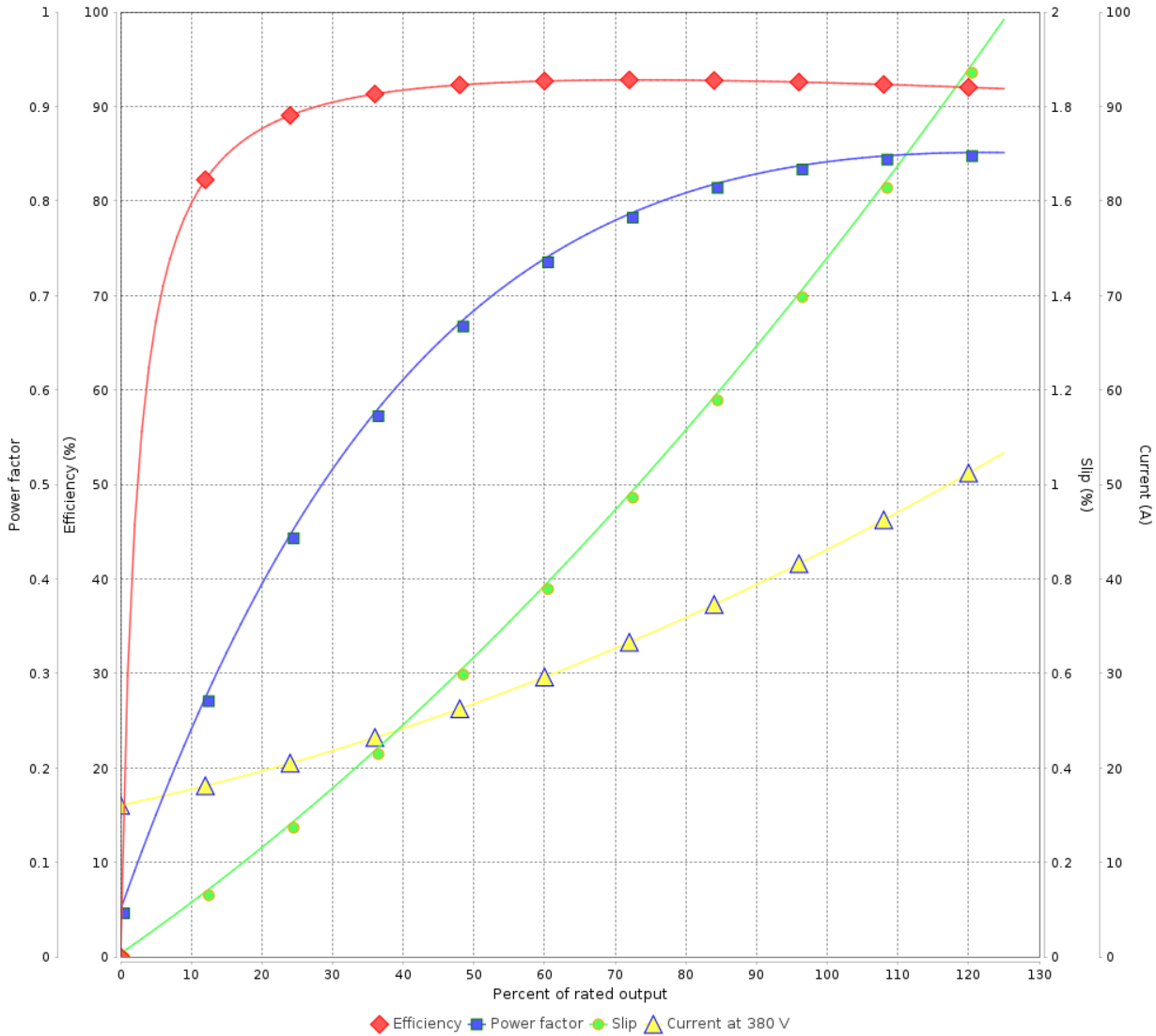
Three Phase Induction Motor - Squirrel Cage



Customer :

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Performance : 380 V 50 Hz 6P IE3

Rated current	: 43.0 A	Moment of inertia (J)	: 1.22 kgm ²
LRC	: 6.4	Duty cycle	: Cont.(S1)
Rated torque	: 22.1 kgfm	Insulation class	: F
Locked rotor torque	: 210 %	Service factor	: 1.00
Breakdown torque	: 250 %	Temperature rise	: 80 K
Rated speed	: 985 rpm	Design	: B

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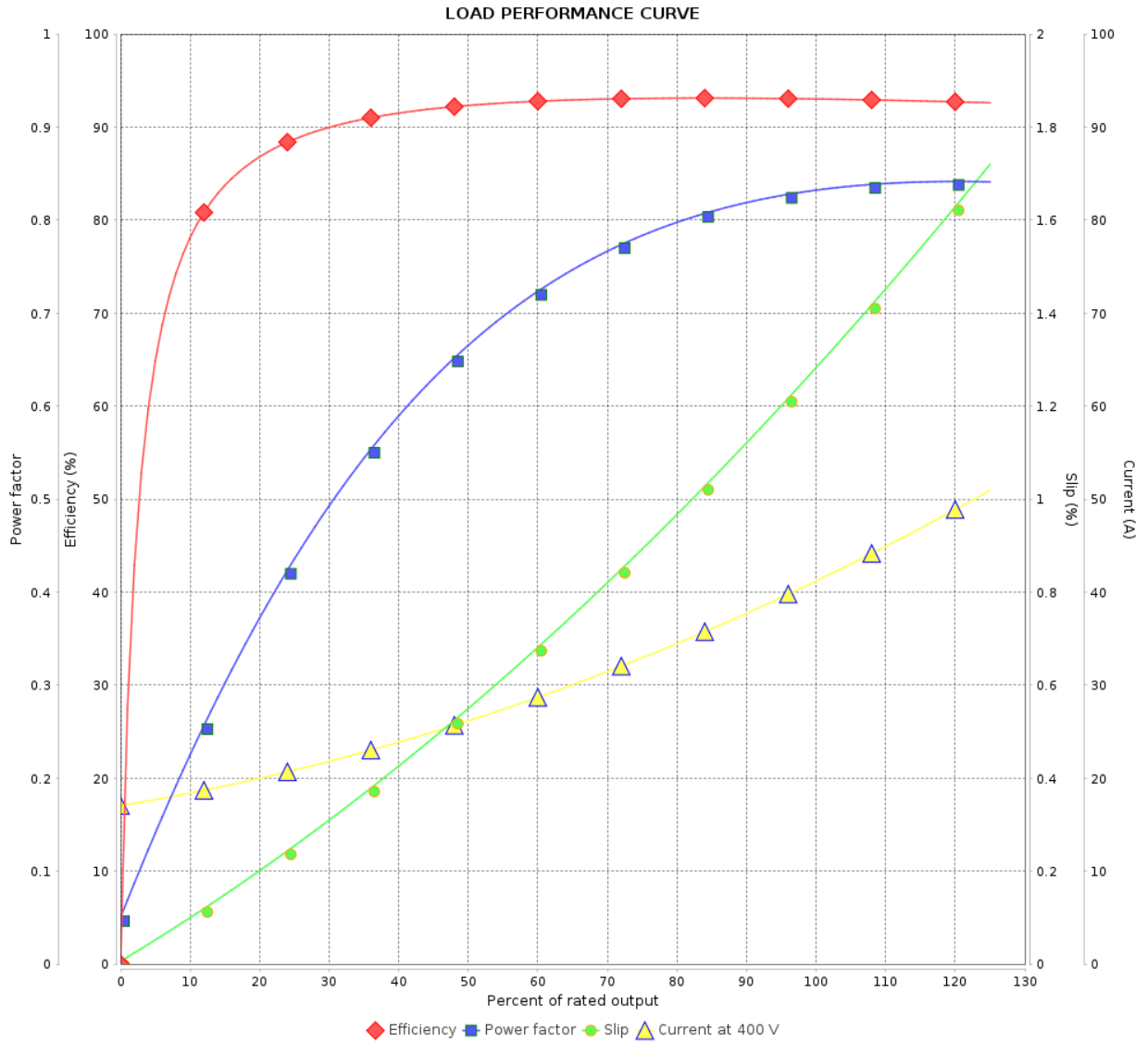
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Three Phase Induction Motor - Squirrel Cage



Customer :

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Performance : 400 V 50 Hz 6P IE3

Rated current	: 41.1 A	Moment of inertia (J)	: 1.22 kgm ²
LRC	: 7.2	Duty cycle	: Cont.(S1)
Rated torque	: 22.1 kgfm	Insulation class	: F
Locked rotor torque	: 240 %	Service factor	: 1.00
Breakdown torque	: 280 %	Temperature rise	: 80 K
Rated speed	: 987 rpm	Design	: B

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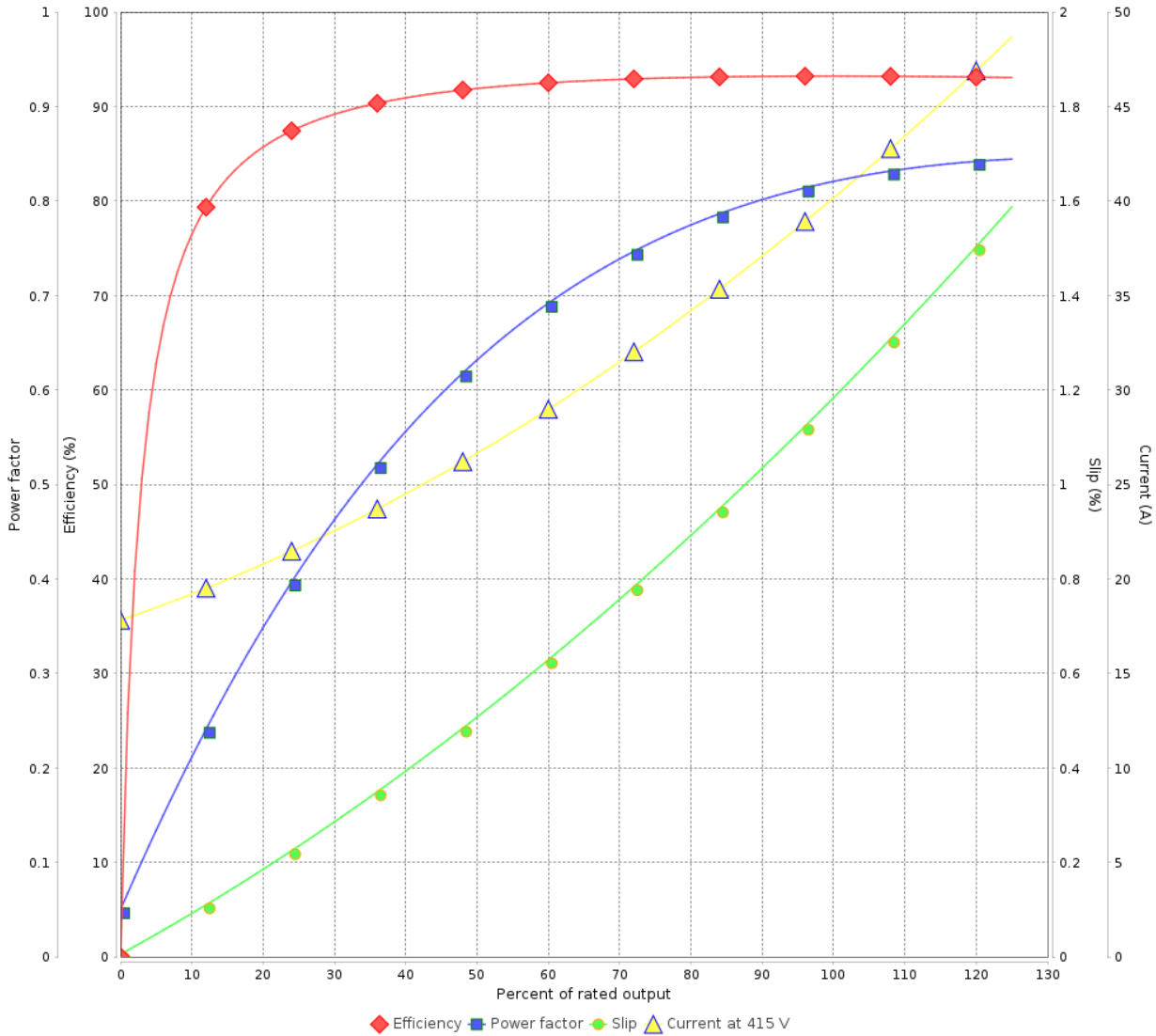
Three Phase Induction Motor - Squirrel Cage



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Performance : 415 V 50 Hz 6P IE3

Rated current : 40.0 A	Moment of inertia (J) : 1.22 kgm ²
LRC : 7.7	Duty cycle : Cont.(S1)
Rated torque : 22.0 kgfm	Insulation class : F
Locked rotor torque : 270 %	Service factor : 1.00
Breakdown torque : 310 %	Temperature rise : 80 K
Rated speed : 988 rpm	Design : B

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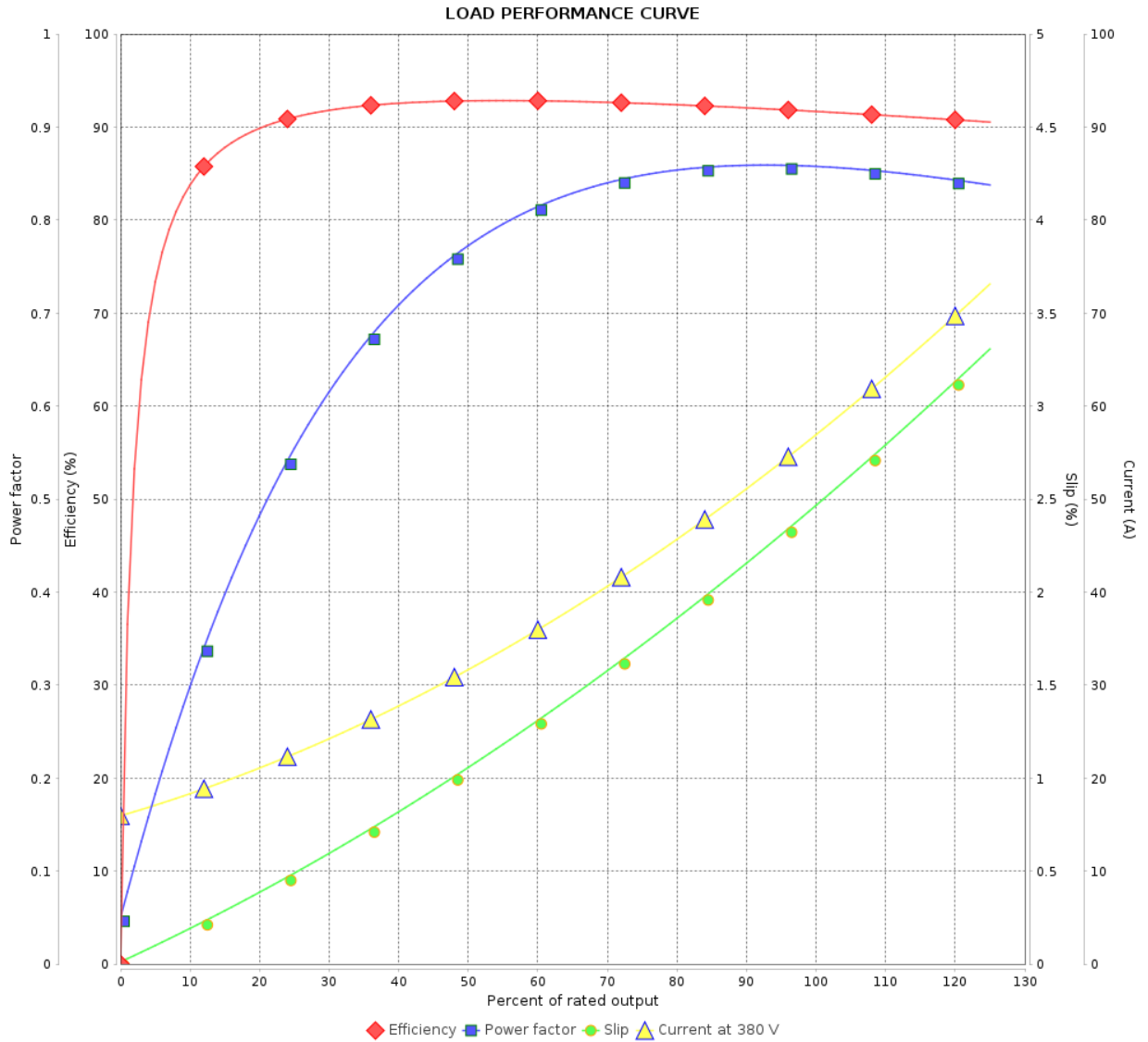
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Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W22 IEEE 841 NEMA Premium Efficiency Three-Phase Product code : 12109400



Performance : 380 V 50 Hz 6P IE2

Rated current : 57.8 A
 LRC : 4.9
 Rated torque : 29.8 kgfm
 Locked rotor torque : 160 %
 Breakdown torque : 190 %
 Rated speed : 975 rpm

Moment of inertia (J) : 1.22 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : B

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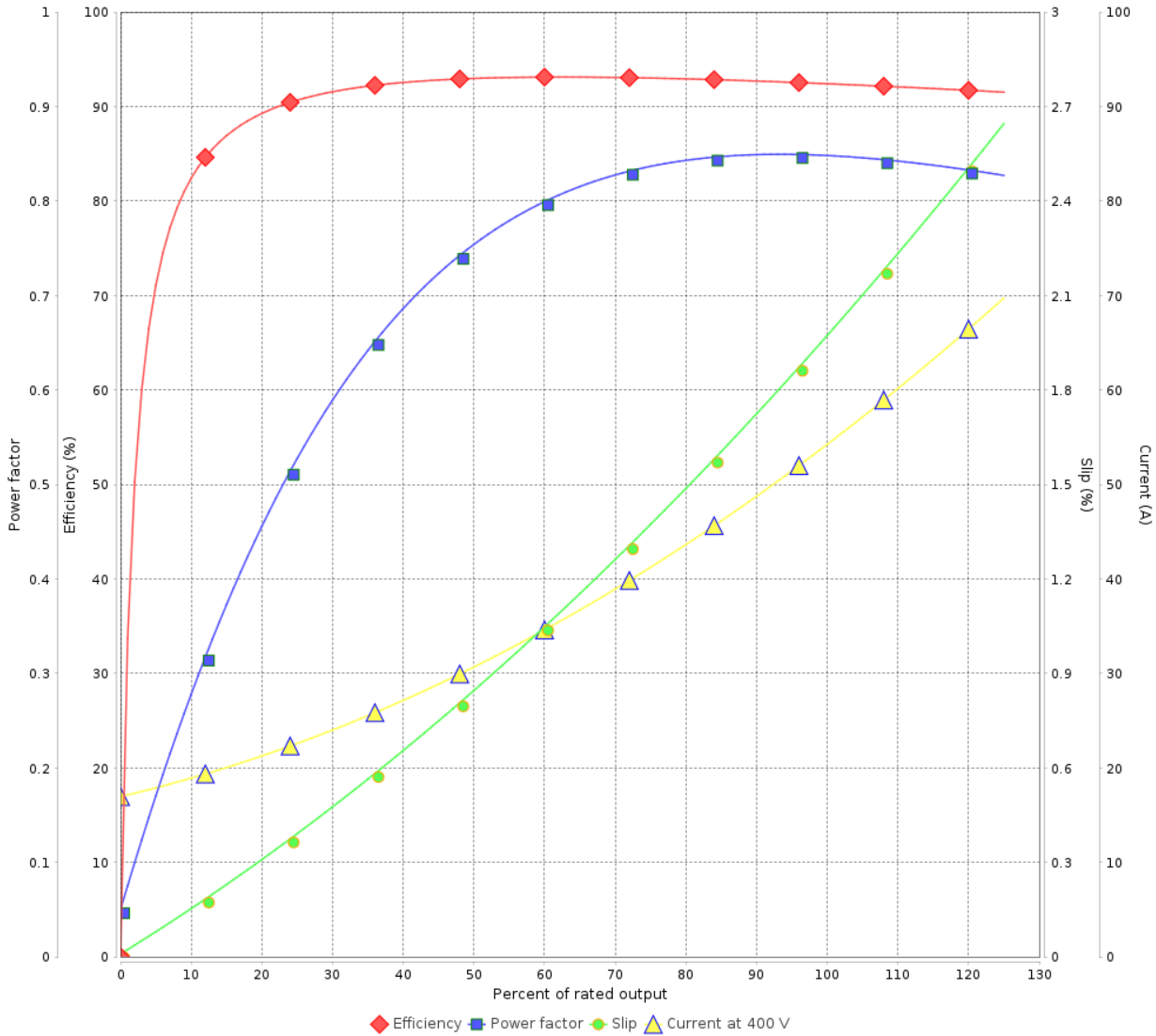
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Performance : 400 V 50 Hz 6P IE2

Rated current	: 55.1 A	Moment of inertia (J)	: 1.22 kgm ²
LRC	: 5.5	Duty cycle	: Cont.(S1)
Rated torque	: 29.6 kgfm	Insulation class	: F
Locked rotor torque	: 180 %	Service factor	: 1.00
Breakdown torque	: 210 %	Temperature rise	: 80 K
Rated speed	: 980 rpm	Design	: B

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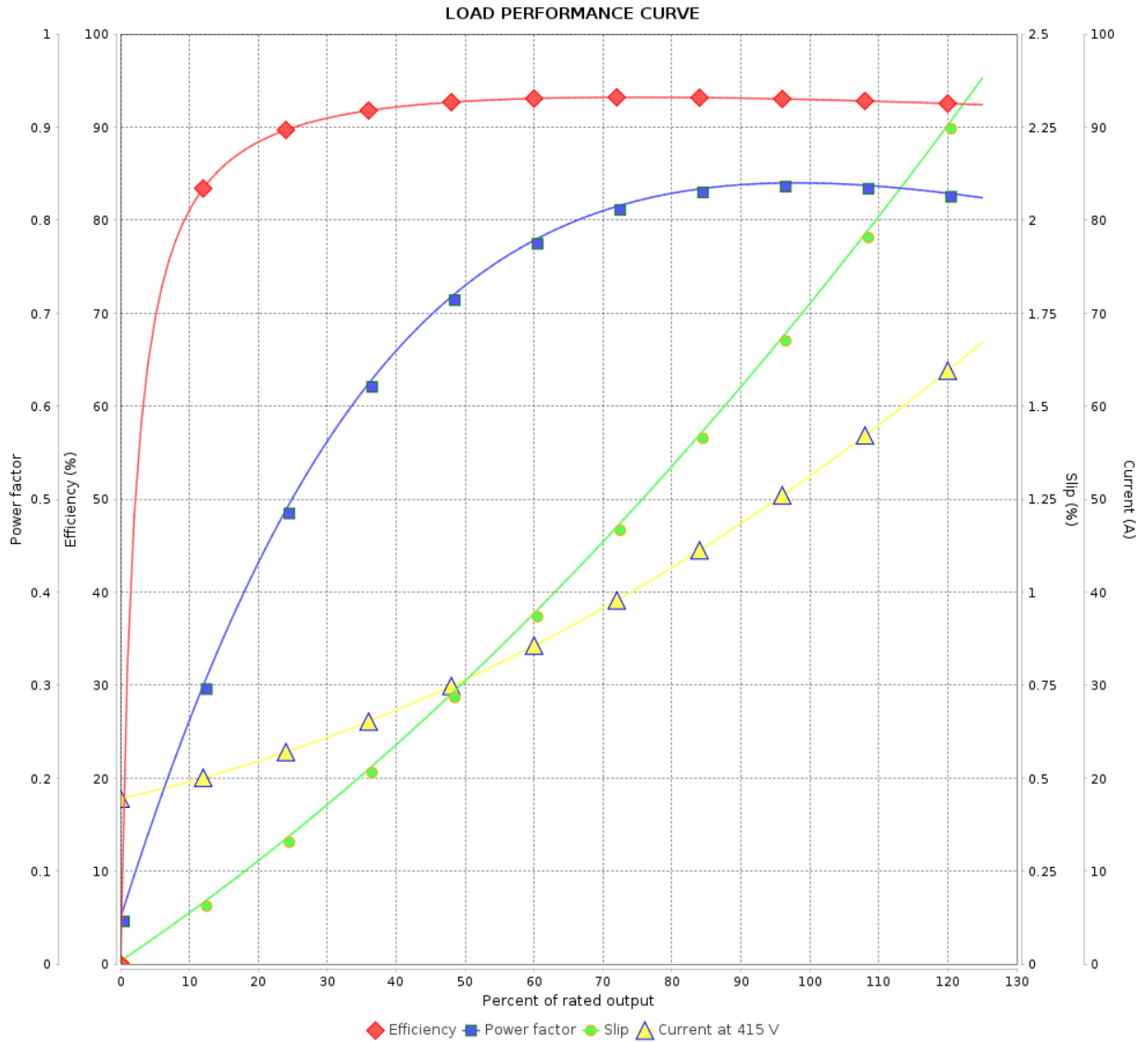
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Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W22 IEEE 841 NEMA Premium Efficiency Three-Phase Product code : 12109400



Performance : 415 V 50 Hz 6P IE3

Rated current	: 53.4 A	Moment of inertia (J)	: 1.22 kgm ²
LRC	: 6.0	Duty cycle	: Cont.(S1)
Rated torque	: 29.6 kgfm	Insulation class	: F
Locked rotor torque	: 200 %	Service factor	: 1.00
Breakdown torque	: 229 %	Temperature rise	: 80 K
Rated speed	: 982 rpm	Design	: B

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