

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : W22 IEEE 841 NEMA Premium Efficiency Three-Phase Product code : 11919904

Frame	: 213T	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	: 71.3 kg
Protection degree	: IP55	Moment of inertia (J)	: 0.0197 kgm ²
Design	: B		

Output [HP]	7.5	5	5	5	7.5	7.5	7.5
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]	8.87	7.50	7.38	7.27	10.7	10.3	9.94
L. R. Amperes [A]	63.9	61.5	67.2	70.5	61.2	66.0	68.6
LRC [A]	7.2x(Code H)	8.2x(Code K)	9.1x(Code L)	9.7x(Code M)	5.7x(Code F)	6.4x(Code G)	6.9x(Code H)
No load current [A]	3.20	3.10	3.45	3.80	3.10	3.40	3.80
Rated speed [RPM]	3525	2940	2950	2955	2895	2905	2915
Slip [%]	2.08	2.00	1.67	1.50	3.50	3.17	2.83
Rated torque [kgfm]	1.54	1.23	1.23	1.23	1.88	1.87	1.87
Locked rotor torque [%]	210	250	270	300	160	190	200
Breakdown torque [%]	300	360	400	430	229	260	280
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	105 K	105 K	80 K
Locked rotor time	39s (cold) 22s (hot)	54s (cold) 30s (hot)	52s (cold) 29s (hot)	46s (cold) 26s (hot)	36s (cold) 20s (hot)	34s (cold) 19s (hot)	34s (cold) 19s (hot)
Noise level ²	68.0 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%	87.5	86.7	86.4	86.1	88.5	87.5
	75%	89.5	88.2	88.3	88.5	88.5	88.5
	100%	89.5	88.2	88.3	88.5	87.5	88.5
Power Factor	25%						
	50%	0.75	0.71	0.66	0.62	0.80	0.77
	75%	0.83	0.80	0.77	0.73	0.87	0.85
	100%	0.87	0.85	0.82	0.80	0.89	0.88

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

Losses (%)	P1 (0,9;1,0)	10.9	12.4	12.3	12.1	13.3	13.3	12.1
	P2 (0,5;1,0)	8.3	9.4	9.3	9.2	10.1	10.1	9.2
	P3 (0,25;1,0)	7.8	8.9	8.8	8.7	9.5	9.5	8.7
	P4 (0,9;0,5)	5.9	6.8	6.7	6.6	7.2	7.2	6.6
	P5 (0,5;0,5)	3.5	3.9	3.9	3.8	4.2	4.2	3.8
	P6 (0,5;0,25)	2.4	2.7	2.7	2.6	2.9	2.9	2.6
	P7 (0,25;0,25)	1.4	1.6	1.6	1.6	1.7	1.7	1.6

Bearing type	: Drive end 6308 C3 Non drive end 6207 C3	Foundation loads Max. traction : 61 kgf Max. compression : 132 kgf
Sealing	: Taconite Labyrinth Labyrinth	
Lubrication interval	: 20000 h 20000 h	
Lubricant amount	: 11 g 7 g	
Lubricant type	: Mobil Polyrex EM	

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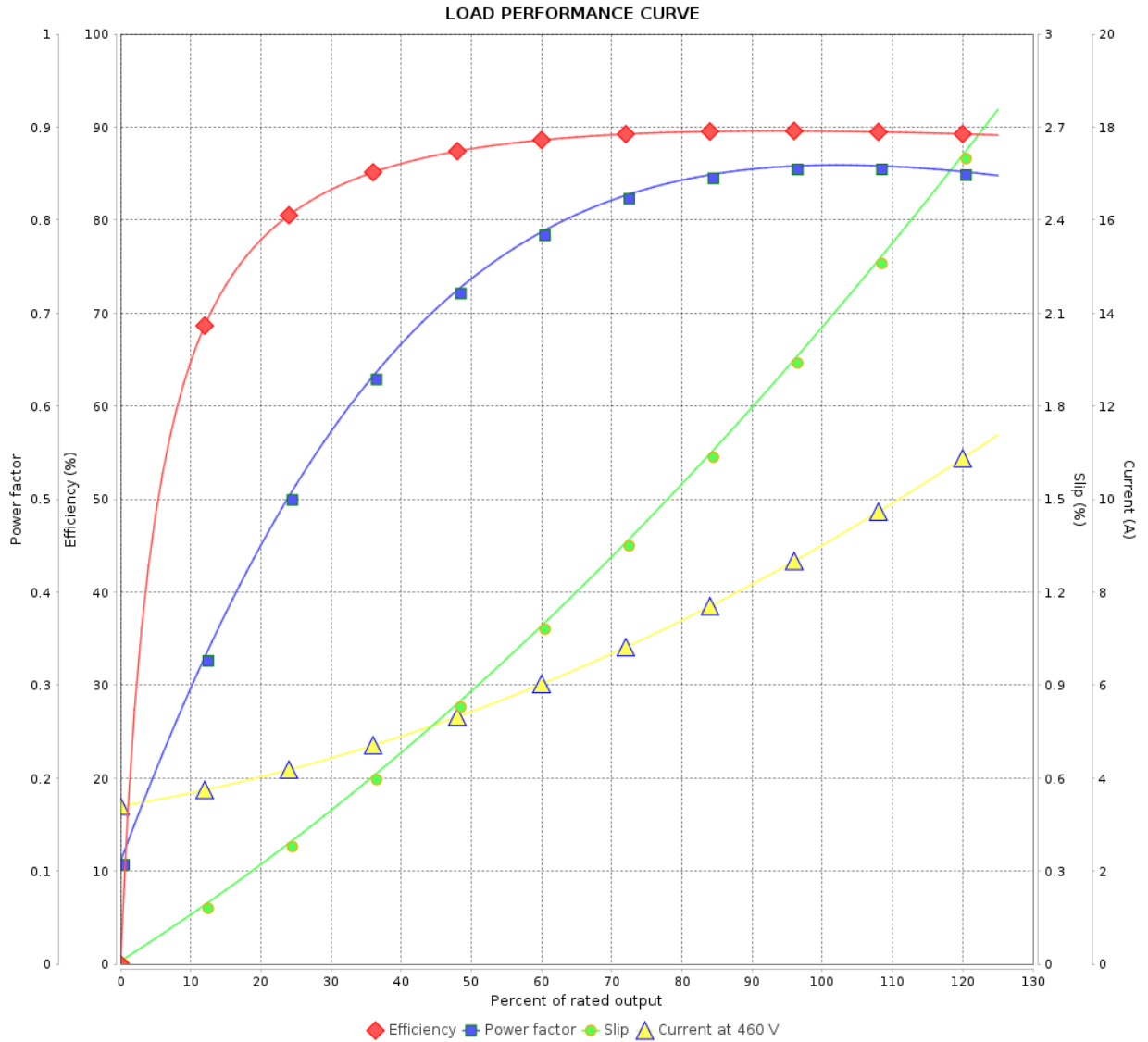
Three Phase Induction Motor - Squirrel Cage



Customer : _____

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

Product code : 11919904



Performance : 460 V 60 Hz 2P

Rated current : 8.87 A
 LRC : 7.2
 Rated torque : 1.54 kgfm
 Locked rotor torque : 210 %
 Breakdown torque : 300 %
 Rated speed : 3525 rpm

Moment of inertia (J) : 0.0197 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.25
 Temperature rise : 80 K
 Design : B

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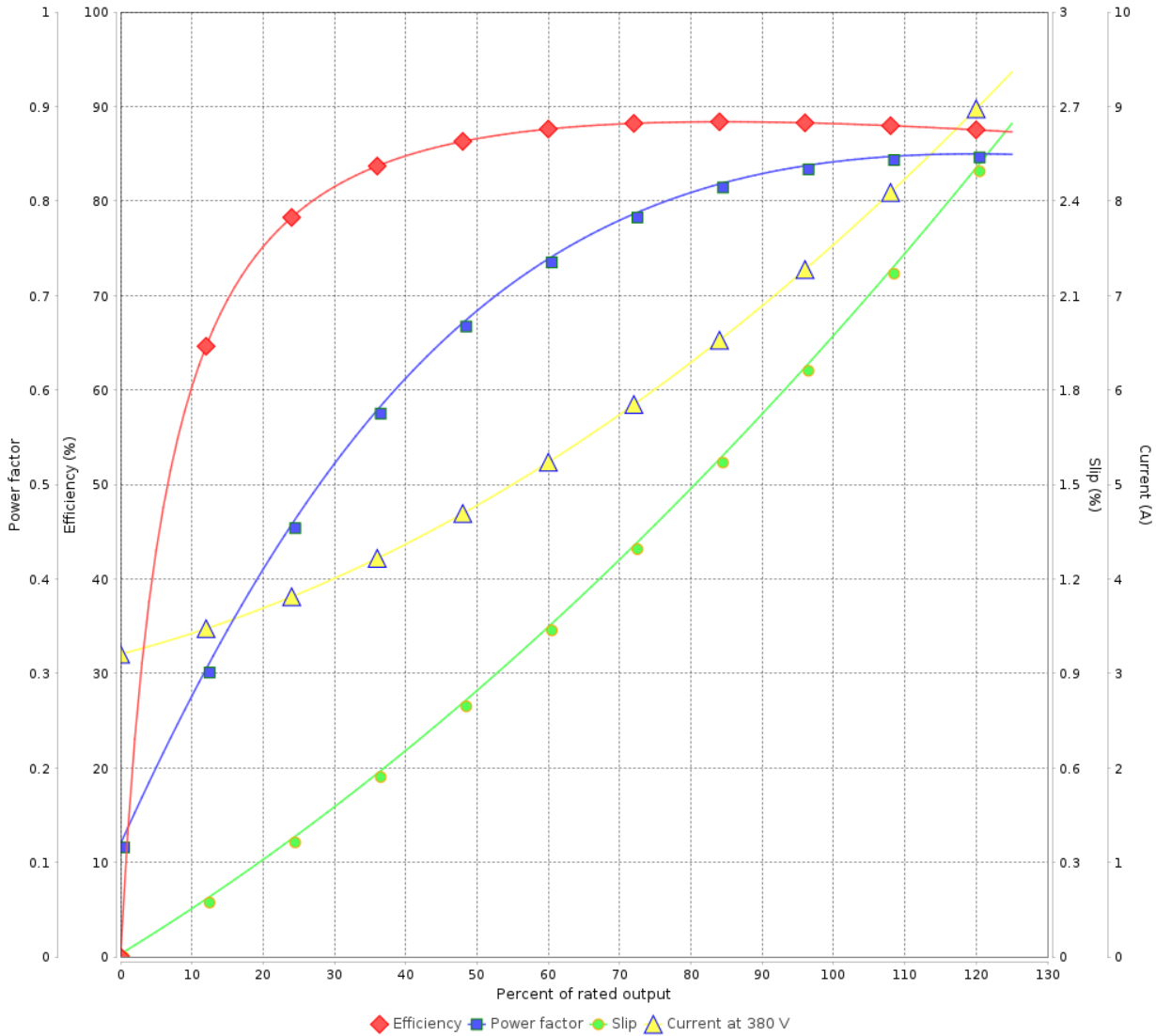
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 IEEE 841 NEMA Premium Efficiency Three-Phase Product code : 11919904

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Performance : 380 V 50 Hz 2P IE3

Rated current	: 7.50 A	Moment of inertia (J)	: 0.0197 kgm ²
LRC	: 8.2	Duty cycle	: Cont.(S1)
Rated torque	: 1.23 kgfm	Insulation class	: F
Locked rotor torque	: 250 %	Service factor	: 1.25
Breakdown torque	: 360 %	Temperature rise	: 80 K
Rated speed	: 2940 rpm	Design	: B

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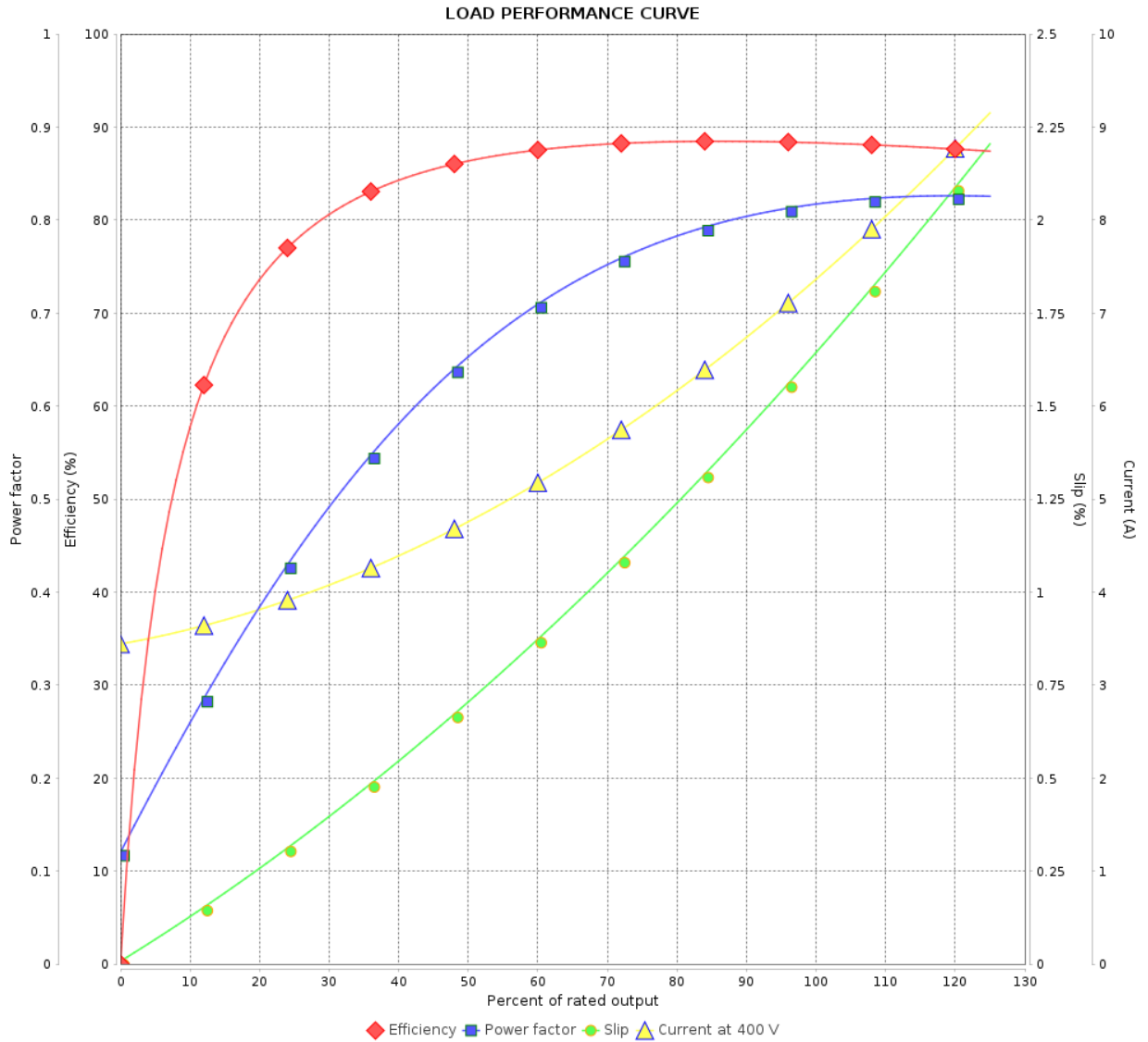
Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 11919904



Performance : 400 V 50 Hz 2P IE3

Rated current : 7.38 A
 LRC : 9.1
 Rated torque : 1.23 kgfm
 Locked rotor torque : 270 %
 Breakdown torque : 400 %
 Rated speed : 2950 rpm

Moment of inertia (J) : 0.0197 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.25
 Temperature rise : 80 K
 Design : B

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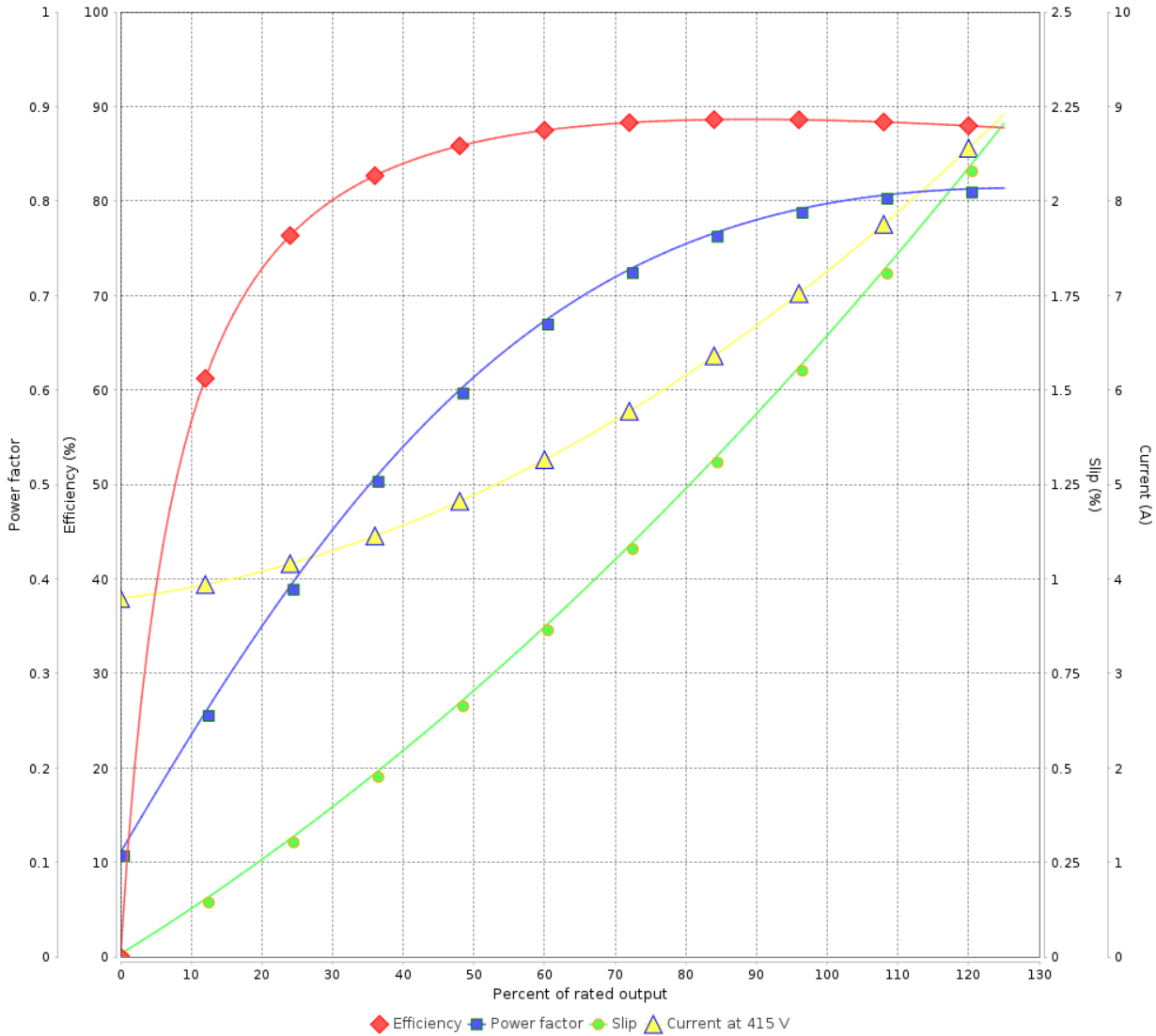
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 IEEE 841 NEMA Premium Efficiency Three-Phase Product code : 11919904

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Performance : 415 V 50 Hz 2P IE3

Rated current	: 7.27 A	Moment of inertia (J)	: 0.0197 kgm ²
LRC	: 9.7	Duty cycle	: Cont.(S1)
Rated torque	: 1.23 kgfm	Insulation class	: F
Locked rotor torque	: 300 %	Service factor	: 1.25
Breakdown torque	: 430 %	Temperature rise	: 80 K
Rated speed	: 2955 rpm	Design	: B

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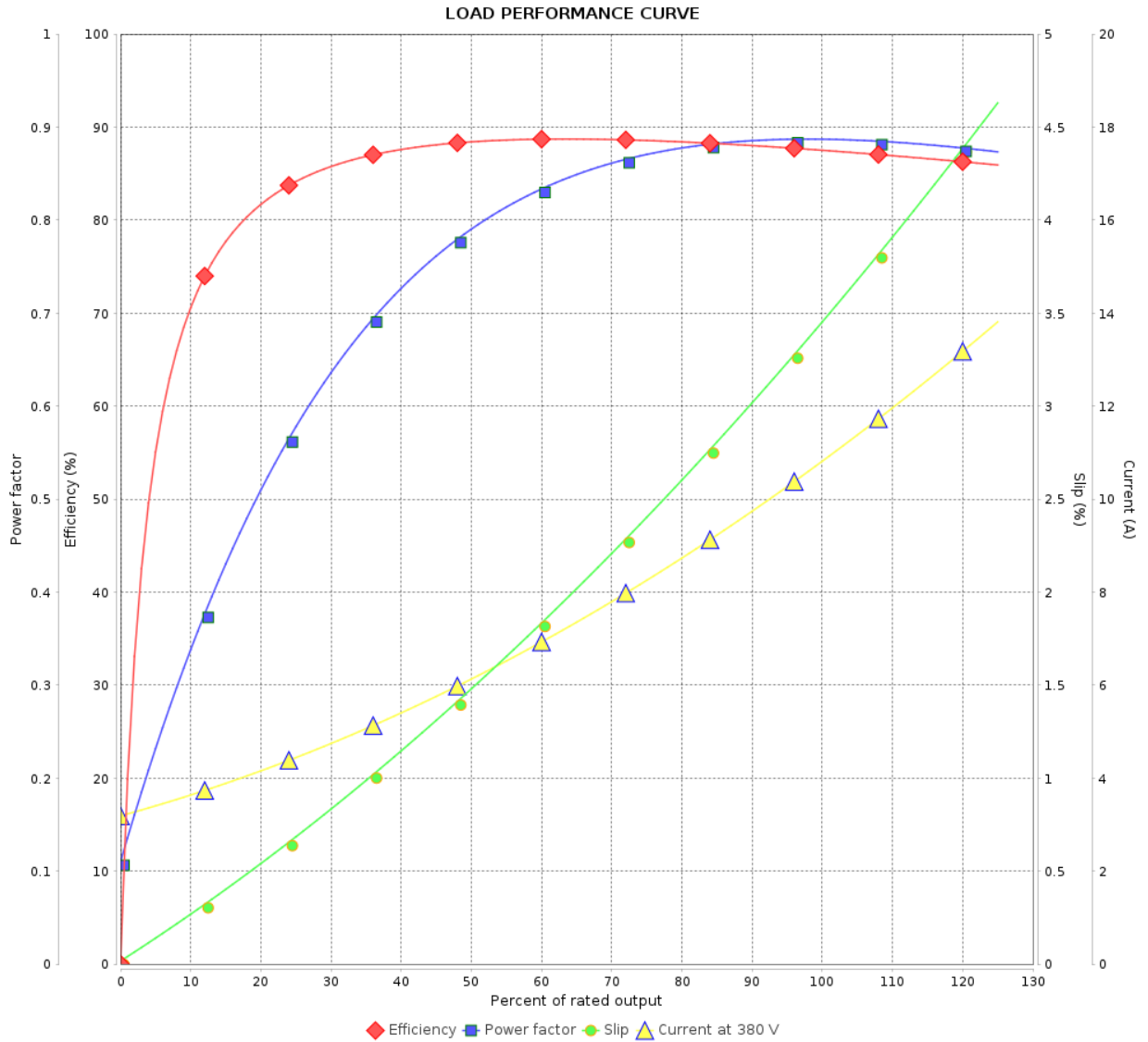
Three Phase Induction Motor - Squirrel Cage



Customer : _____

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

Product code : 11919904



Performance : 380 V 50 Hz 2P IE2

Rated current : 10.7 A
 LRC : 5.7
 Rated torque : 1.88 kgfm
 Locked rotor torque : 160 %
 Breakdown torque : 229 %
 Rated speed : 2895 rpm

Moment of inertia (J) : 0.0197 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.25
 Temperature rise : 105 K
 Design : B

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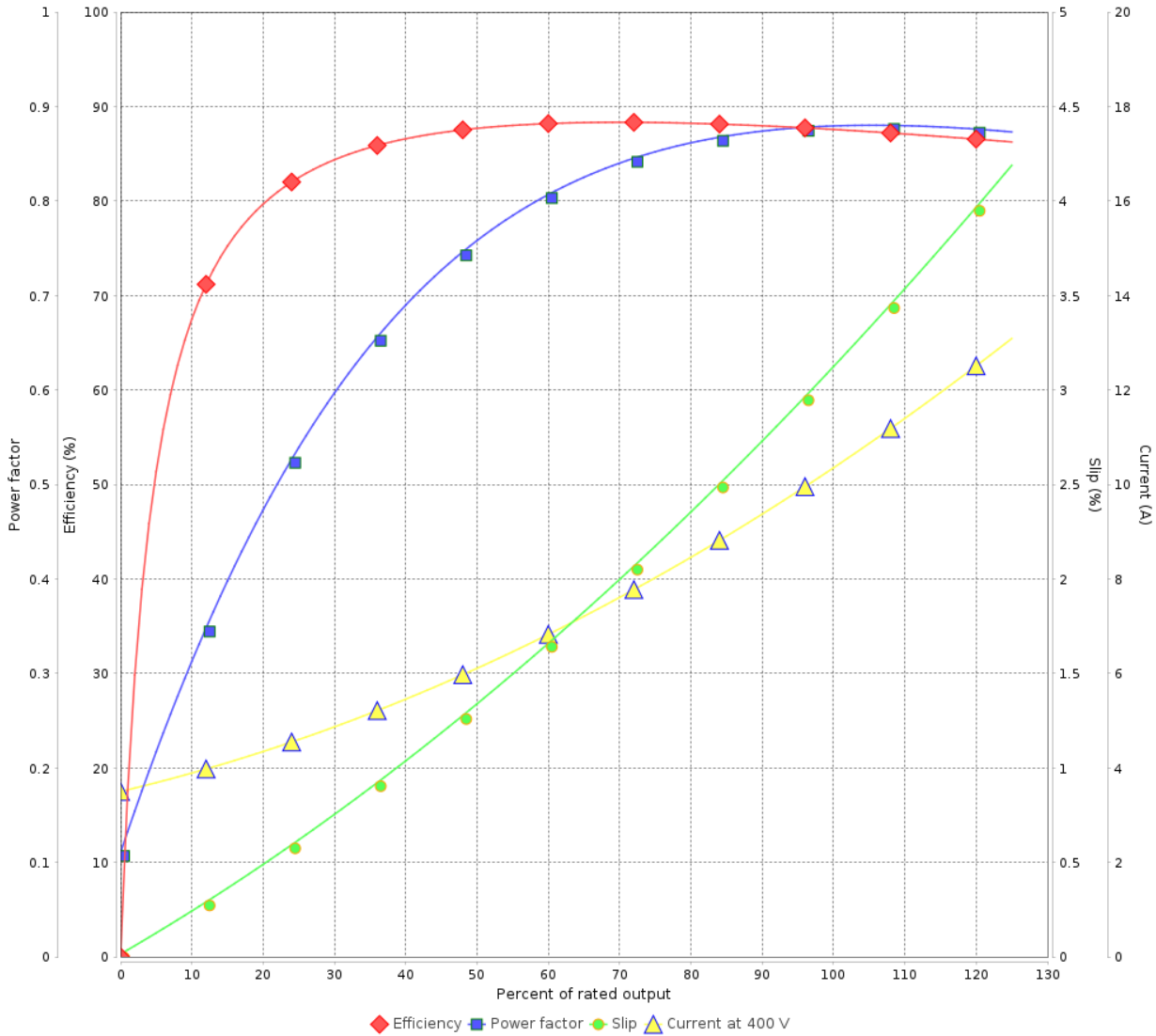
Three Phase Induction Motor - Squirrel Cage



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Performance : 400 V 50 Hz 2P IE2

Rated current	: 10.3 A	Moment of inertia (J)	: 0.0197 kgm ²
LRC	: 6.4	Duty cycle	: Cont.(S1)
Rated torque	: 1.87 kgfm	Insulation class	: F
Locked rotor torque	: 190 %	Service factor	: 1.25
Breakdown torque	: 260 %	Temperature rise	: 105 K
Rated speed	: 2905 rpm	Design	: B

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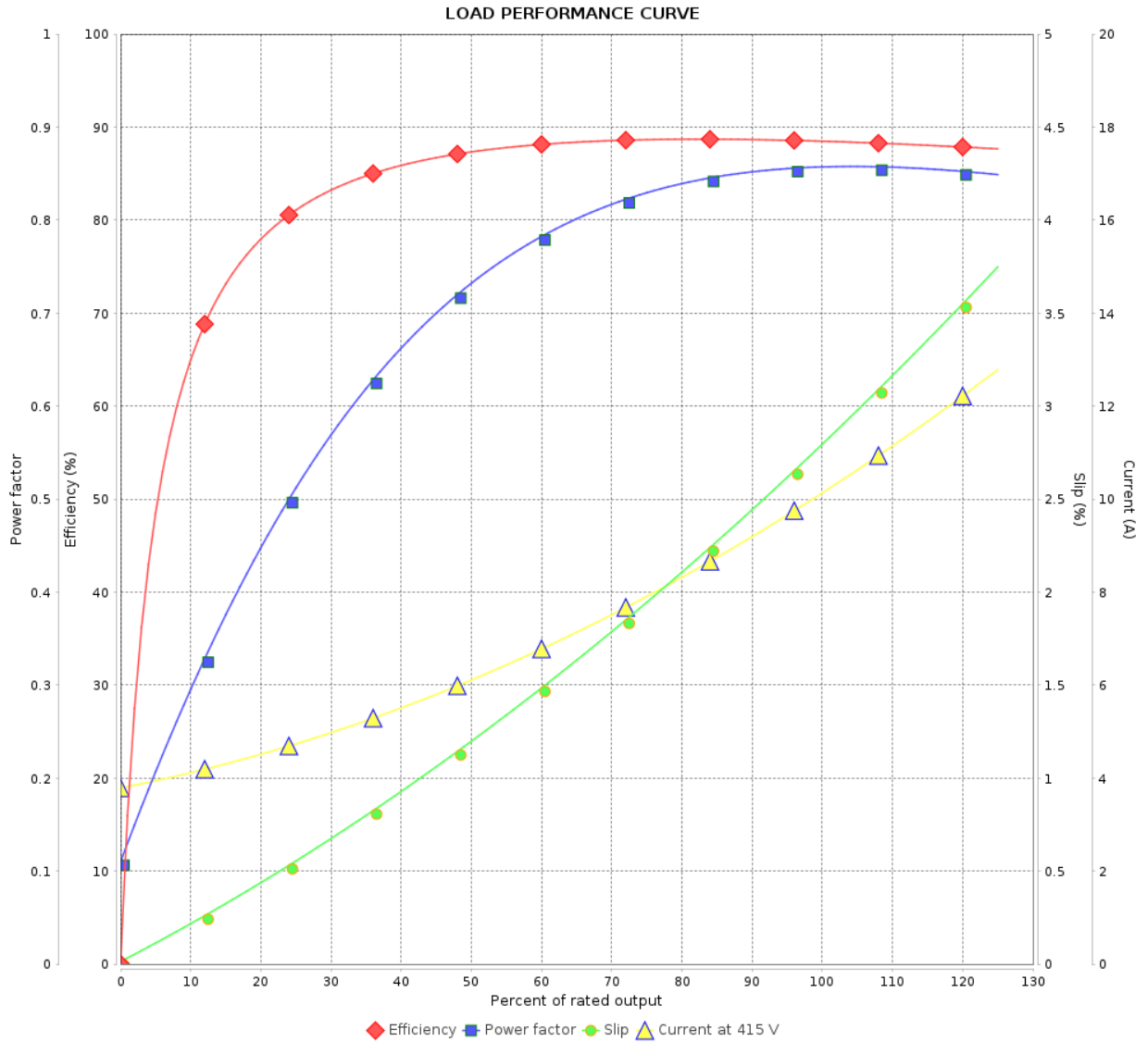
Three Phase Induction Motor - Squirrel Cage



Customer : _____

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

Product code : 11919904



Performance : 415 V 50 Hz 2P IE2

Rated current : 9.94 A
 LRC : 6.9
 Rated torque : 1.87 kgfm
 Locked rotor torque : 200 %
 Breakdown torque : 280 %
 Rated speed : 2915 rpm

Moment of inertia (J) : 0.0197 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.25
 Temperature rise : 80 K
 Design : B

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