

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :							
Product line	: W22 NEMA Premium Efficiency Three-Phase	Product code :	12516903				
Frame	: 445/7T	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	: 1114 kg				
Protection degree	: IP55	Moment of inertia (J)	: 3.77 kgm ²				
Design	: B						
Output [HP]	250	200	200	200	250	250	250
Poles	4	4	4	4	4	4	4
Frequency [Hz]	60	50	50	50	50	50	50
Rated voltage [V]	460	380	400	415	380	400	415
Rated current [A]	281	273	263	256	340	322	314
L. R. Amperes [A]	1827	1665	1788	1894	1734	1835	1915
LRC [A]	6.5x(Code G)	6.1x(Code F)	6.8x(Code G)	7.4x(Code H)	5.1x(Code E)	5.7x(Code F)	6.1x(Code F)
No load current [A]	90.0	85.0	90.0	95.0	85.0	90.0	95.0
Rated speed [RPM]	1780	1480	1485	1485	1475	1480	1480
Slip [%]	1.11	1.33	1.00	1.00	1.67	1.33	1.33
Rated torque [kgfm]	102	98.1	97.7	97.7	123	123	123
Locked rotor torque [%]	229	200	260	290	180	200	220
Breakdown torque [%]	240	240	270	300	190	210	229
Service factor	1.15	1.15	1.15	1.15	1.00	1.00	1.00
Temperature rise	80 K	80 K	80 K	80 K	105 K	105 K	105 K
Locked rotor time	27s (cold) 15s (hot)	36s (cold) 20s (hot)	32s (cold) 18s (hot)	28s (cold) 16s (hot)	18s (cold) 10s (hot)	18s (cold) 10s (hot)	18s (cold) 10s (hot)
Noise level ²	73.0 dB(A)						
Efficiency (%)	25%						
	50%	95.8	95.0	95.1	95.1	95.4	95.4
	75%	96.2	95.8	95.8	95.8	95.4	95.8
	100%	96.2	95.8	95.8	95.8	95.0	95.4
Power Factor	25%						
	50%	0.75	0.77	0.74	0.72	0.80	0.77
	75%	0.83	0.84	0.83	0.81	0.86	0.84
	100%	0.86	0.87	0.86	0.85	0.87	0.87
Losses at normative operating points (speed;torque), in percentage of rated output power							
Losses (%)	P1 (0,9;1,0)	4.2	4.2	4.2	4.2	4.2	4.2
	P2 (0,5;1,0)	3.5	3.5	3.5	3.5	3.5	3.5
	P3 (0,25;1,0)	3.1	3.1	3.1	3.1	3.1	3.1
	P4 (0,9;0,5)	2.1	2.1	2.1	2.1	2.1	2.1
	P5 (0,5;0,5)	1.5	1.5	1.5	1.5	1.5	1.5
	P6 (0,5;0,25)	1.0	1.0	1.0	1.0	1.0	1.0
	P7 (0,25;0,25)	0.6	0.6	0.6	0.6	0.6	0.6
Bearing type	: Drive end 6319 C3	Non drive end 6316 C3	Foundation loads				
Sealing	: WSeal	WSeal	Max. traction : 1909 kgf				
Lubrication interval	: 8000 h	10000 h	Max. compression : 3023 kgf				
Lubricant amount	: 45 g	34 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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Three Phase Induction Motor - Squirrel Cage



Customer : _____

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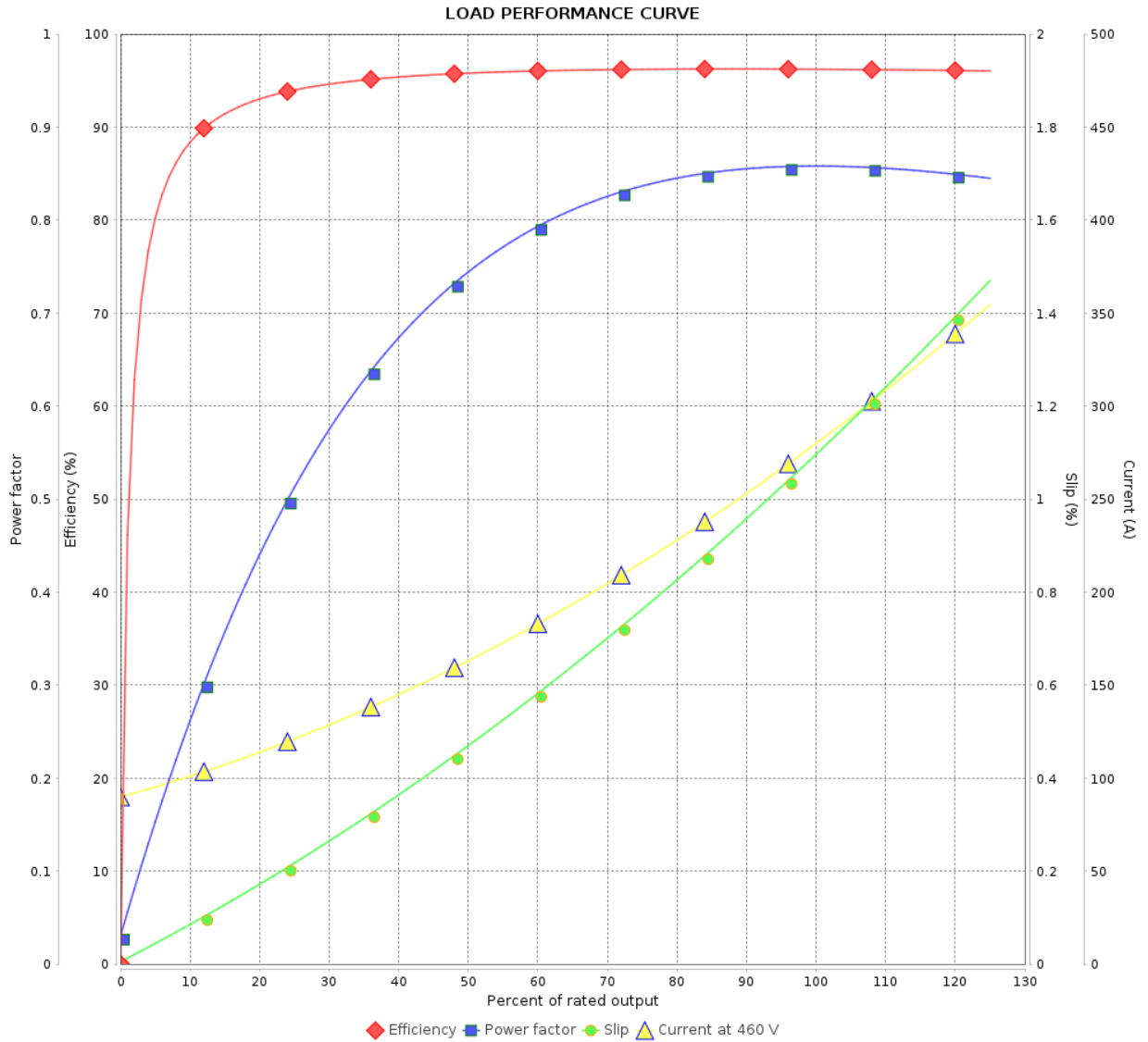
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 12516903



Performance : 460 V 60 Hz 4P

Rated current : 281 A
 LRC : 6.5
 Rated torque : 102 kgfm
 Locked rotor torque : 229 %
 Breakdown torque : 240 %
 Rated speed : 1780 rpm

Moment of inertia (J) : 3.77 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

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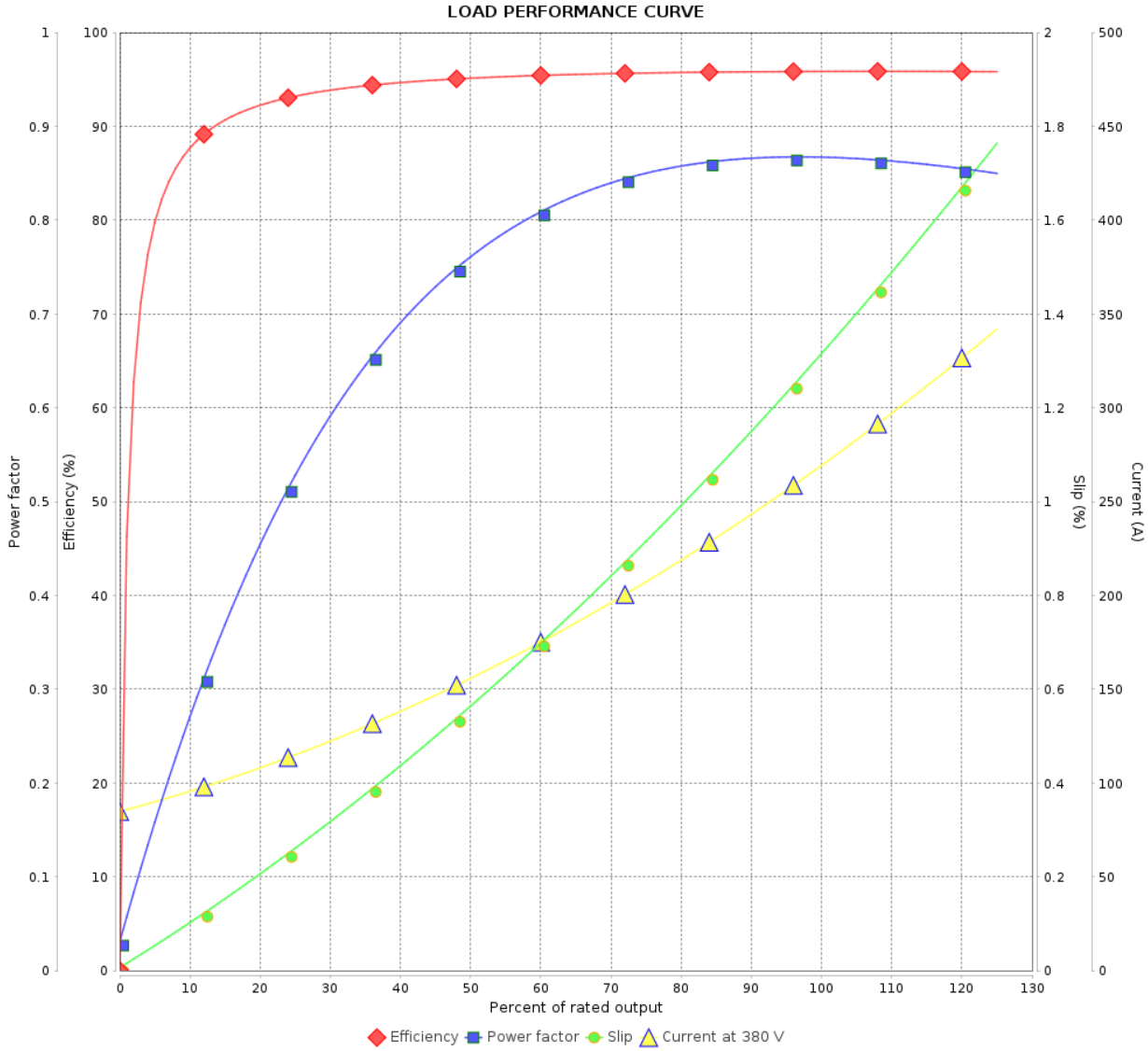
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 12516903



Performance : 380 V 50 Hz 4P IE3

Rated current	: 273 A	Moment of inertia (J)	: 3.77 kgm ²
LRC	: 6.1	Duty cycle	: Cont.(S1)
Rated torque	: 98.1 kgfm	Insulation class	: F
Locked rotor torque	: 200 %	Service factor	: 1.15
Breakdown torque	: 240 %	Temperature rise	: 80 K
Rated speed	: 1480 rpm	Design	: B

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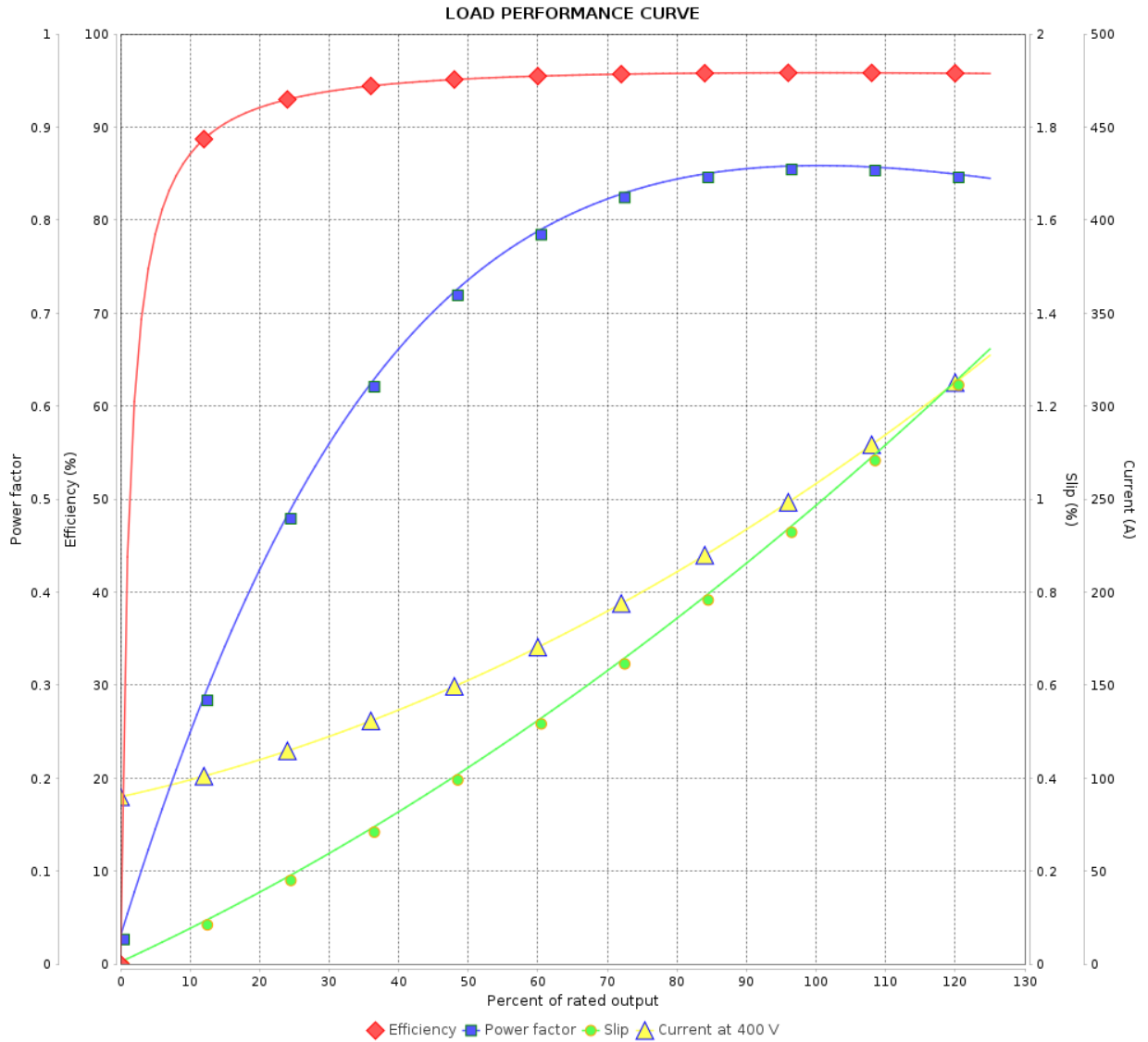
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 12516903



Performance : 400 V 50 Hz 4P IE3

Rated current : 263 A
 LRC : 6.8
 Rated torque : 97.7 kgfm
 Locked rotor torque : 260 %
 Breakdown torque : 270 %
 Rated speed : 1485 rpm

Moment of inertia (J) : 3.77 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

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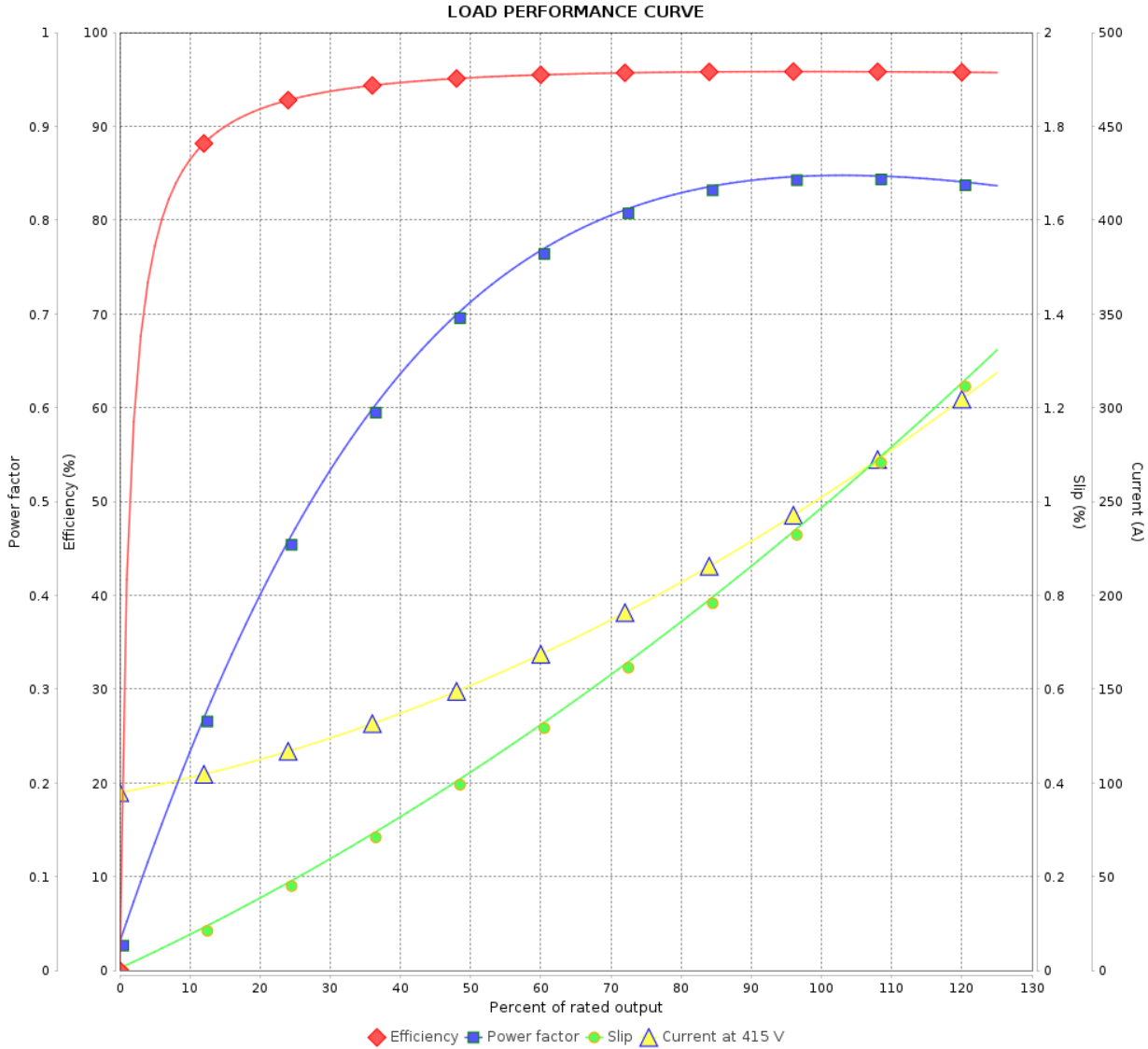
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 12516903



Performance : 415 V 50 Hz 4P IE3

Rated current	: 256 A	Moment of inertia (J)	: 3.77 kgm ²
LRC	: 7.4	Duty cycle	: Cont.(S1)
Rated torque	: 97.7 kgfm	Insulation class	: F
Locked rotor torque	: 290 %	Service factor	: 1.15
Breakdown torque	: 300 %	Temperature rise	: 80 K
Rated speed	: 1485 rpm	Design	: B

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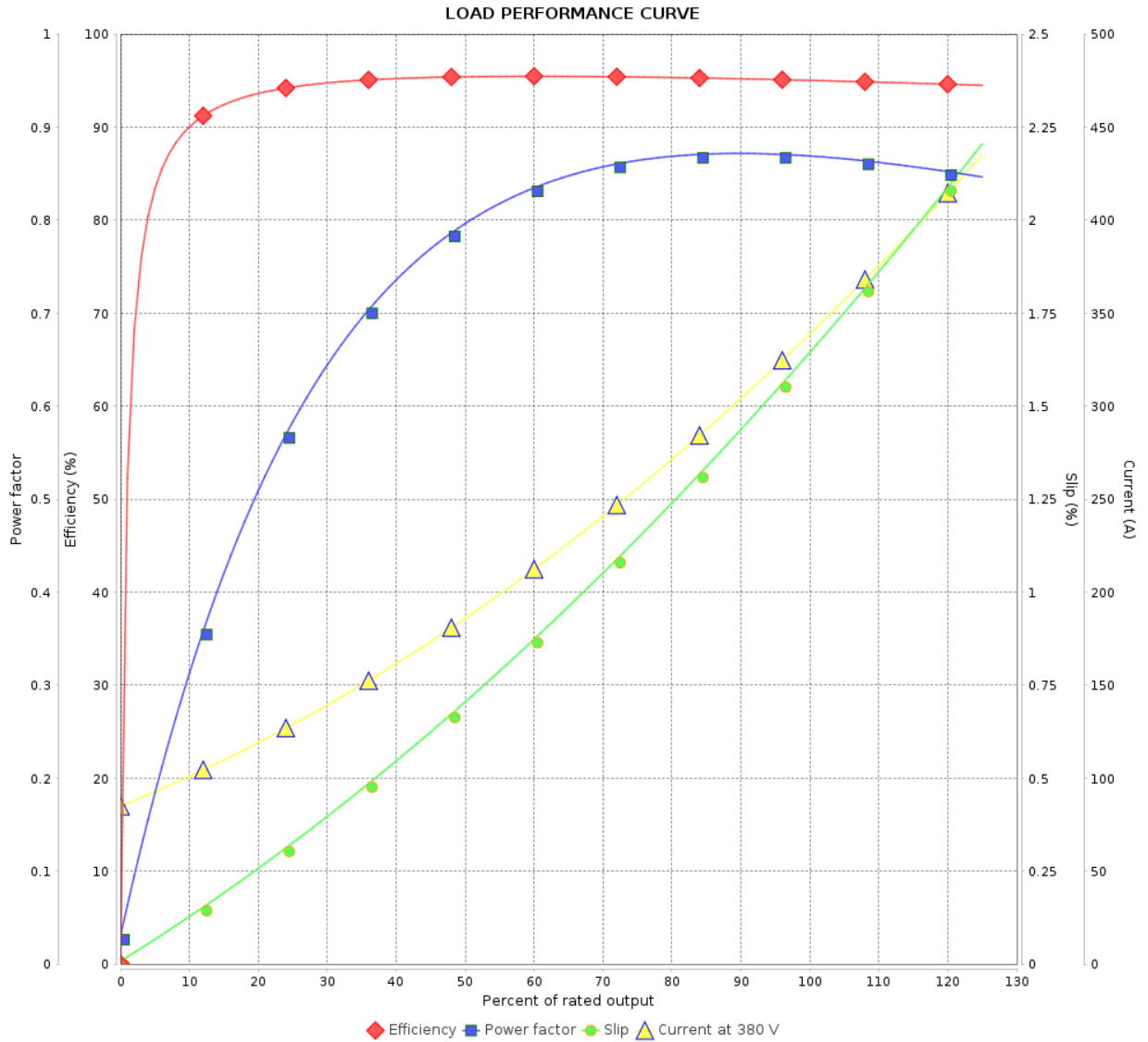
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 12516903



Performance : 380 V 50 Hz 4P IE1

Rated current : 340 A
 LRC : 5.1
 Rated torque : 123 kgfm
 Locked rotor torque : 180 %
 Breakdown torque : 190 %
 Rated speed : 1475 rpm

Moment of inertia (J) : 3.77 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 105 K
 Design : B

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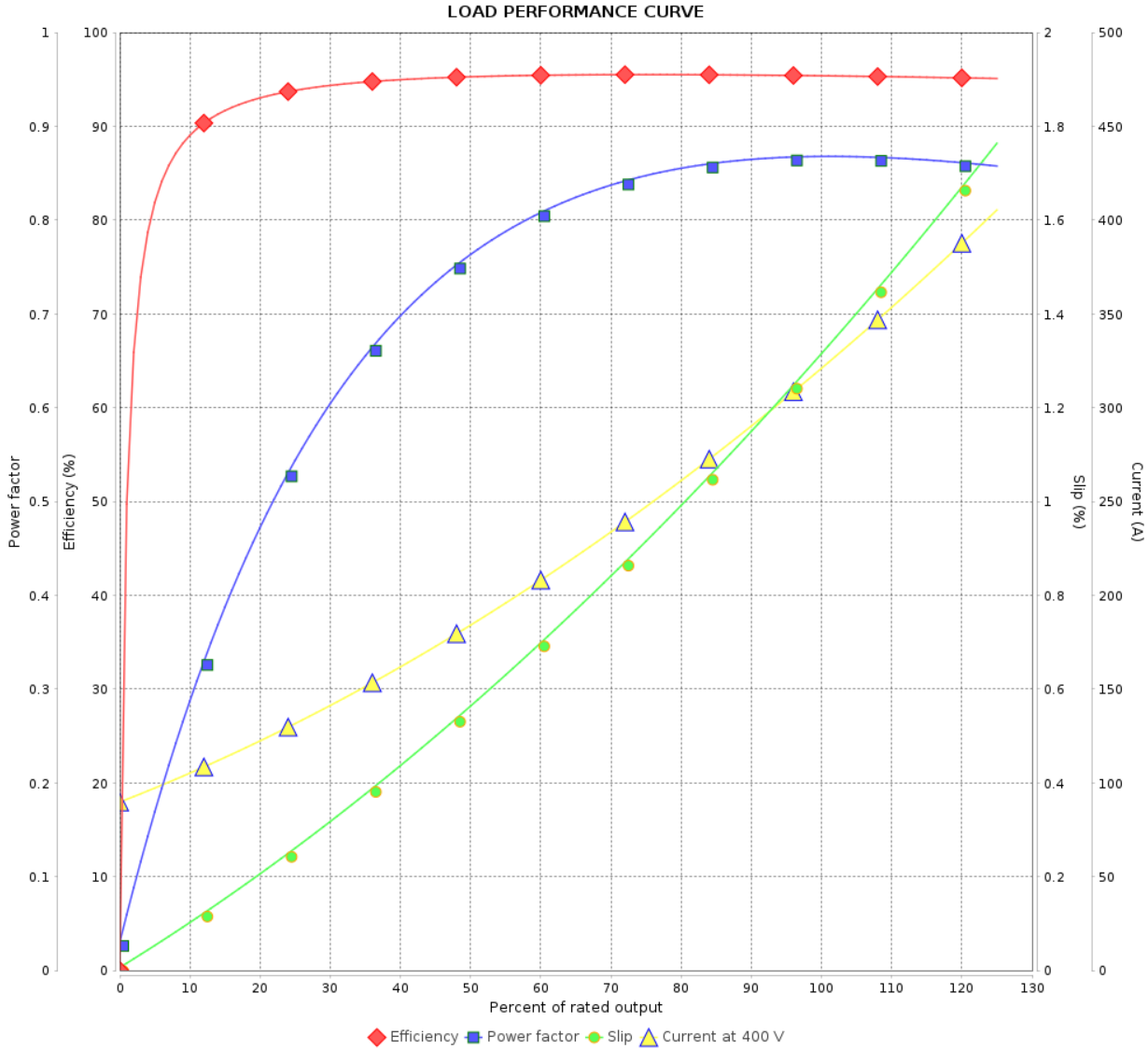
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 12516903



Performance : 400 V 50 Hz 4P IE2

Rated current : 322 A	Moment of inertia (J) : 3.77 kgm ²
LRC : 5.7	Duty cycle : Cont.(S1)
Rated torque : 123 kgfm	Insulation class : F
Locked rotor torque : 200 %	Service factor : 1.00
Breakdown torque : 210 %	Temperature rise : 105 K
Rated speed : 1480 rpm	Design : B

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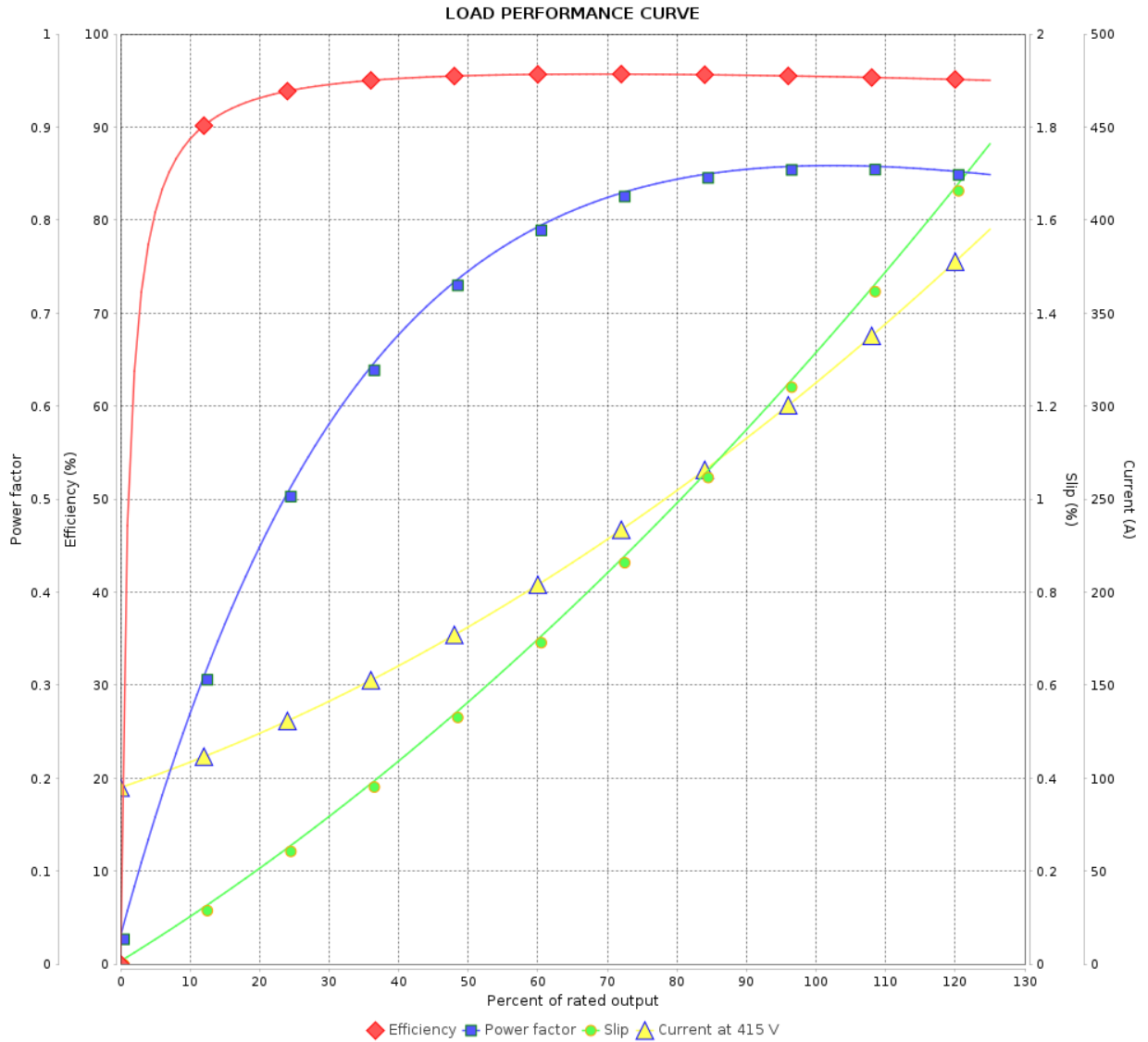
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 12516903



Performance : 415 V 50 Hz 4P IE2

Rated current : 314 A
 LRC : 6.1
 Rated torque : 123 kgfm
 Locked rotor torque : 220 %
 Breakdown torque : 229 %
 Rated speed : 1480 rpm

Moment of inertia (J) : 3.77 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 105 K
 Design : B

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