

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :							
Product line	: W22 NEMA Premium Efficiency Three-Phase	Product code :	12031971				
Frame	: 444/5TC	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	: 0.0 kg				
Protection degree	: IP55	Moment of inertia (J)	: 2.41 kgm ²				
Design	: B						
Output [HP]	125	100	100	100	125	125	125
Poles	4	4	4	4	4	4	4
Frequency [Hz]	60	50	50	50	50	50	50
Rated voltage [V]	230/460	380	400	415	380	400	415
Rated current [A]	279/139	141	136	132	168	162	155
L. R. Amperes [A]	1811/905	903	950	1004	858	922	977
LRC [A]	6.5x(Code G)	6.4x(Code G)	7.0x(Code H)	7.6x(Code J)	5.1x(Code E)	5.7x(Code F)	6.3x(Code G)
No load current [A]	92.0/46.0	46.0	49.0	52.0	44.0	49.0	52.0
Rated speed [RPM]	1785	1485	1485	1487	1480	1482	1483
Slip [%]	0.83	1.00	1.00	0.87	1.33	1.20	1.13
Rated torque [kgfm]	50.8	48.9	48.9	48.8	61.3	61.2	61.2
Locked rotor torque [%]	200	190	220	240	160	180	190
Breakdown torque [%]	229	229	260	280	200	200	220
Service factor	1.15	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	48s (cold) 27s (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	73.0 dB(A)	69.0 dB(A)	69.0 dB(A)	69.0 dB(A)	69.0 dB(A)	69.0 dB(A)	69.0 dB(A)
Efficiency (%)	25%						
	50%	95.0	94.7	94.6	94.3	95.0	95.0
	75%	95.4	95.1	95.1	95.1	95.0	95.0
	100%	95.4	95.0	95.0	95.2	94.5	94.5
Power Factor	25%						
	50%	0.74	0.73	0.69	0.67	0.79	0.76
	75%	0.82	0.82	0.80	0.78	0.84	0.83
	100%	0.85	0.85	0.84	0.83	0.86	0.85
Losses at normative operating points (speed;torque), in percentage of rated output power							
Losses (%)	P1 (0,9;1,0)	4.5	4.9	4.9	4.7	5.5	4.9
	P2 (0,5;1,0)	3.4	3.7	3.7	3.5	4.1	3.7
	P3 (0,25;1,0)	3.0	3.3	3.3	3.1	3.6	3.3
	P4 (0,9;0,5)	2.4	2.6	2.6	2.5	2.9	2.6
	P5 (0,5;0,5)	1.4	1.5	1.5	1.5	1.7	1.5
	P6 (0,5;0,25)	0.9	1.0	1.0	1.0	1.1	1.0
	P7 (0,25;0,25)	0.6	0.6	0.6	0.6	0.7	0.6
Bearing type	: Drive end : NU-319 C3	Non drive end : 6316 C3	Foundation loads				
Sealing	: Viton Lip Seal	Viton Seal	Max. traction : 1177 kgf				
Lubrication interval	: 5000 h	10000 h	Max. compression : 1177 kgf				
Lubricant amount	: 45 g	34 g					
Lubricant type	: Mobil Polyrex EM						
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Three Phase Induction Motor - Squirrel Cage



Customer : _____

Notes
USABLE @208V 307A SF 1.00 SFA 307A

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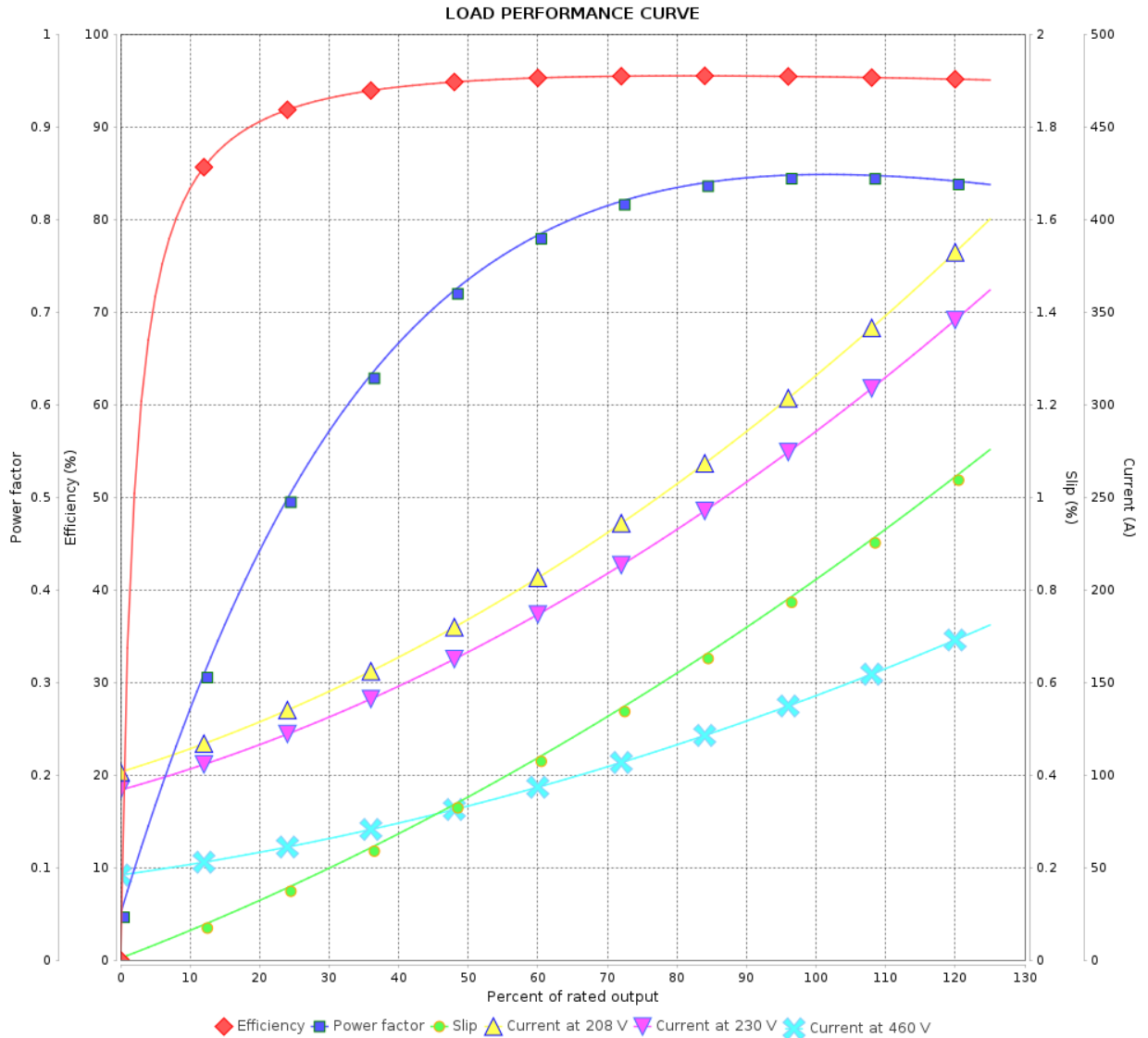
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 12031971



Performance : 230/460 V 60 Hz 4P

Rated current : 279/139 A
 LRC : 6.5
 Rated torque : 50.8 kgfm
 Locked rotor torque : 200 %
 Breakdown torque : 229 %
 Rated speed : 1785 rpm

Moment of inertia (J) : 2.41 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

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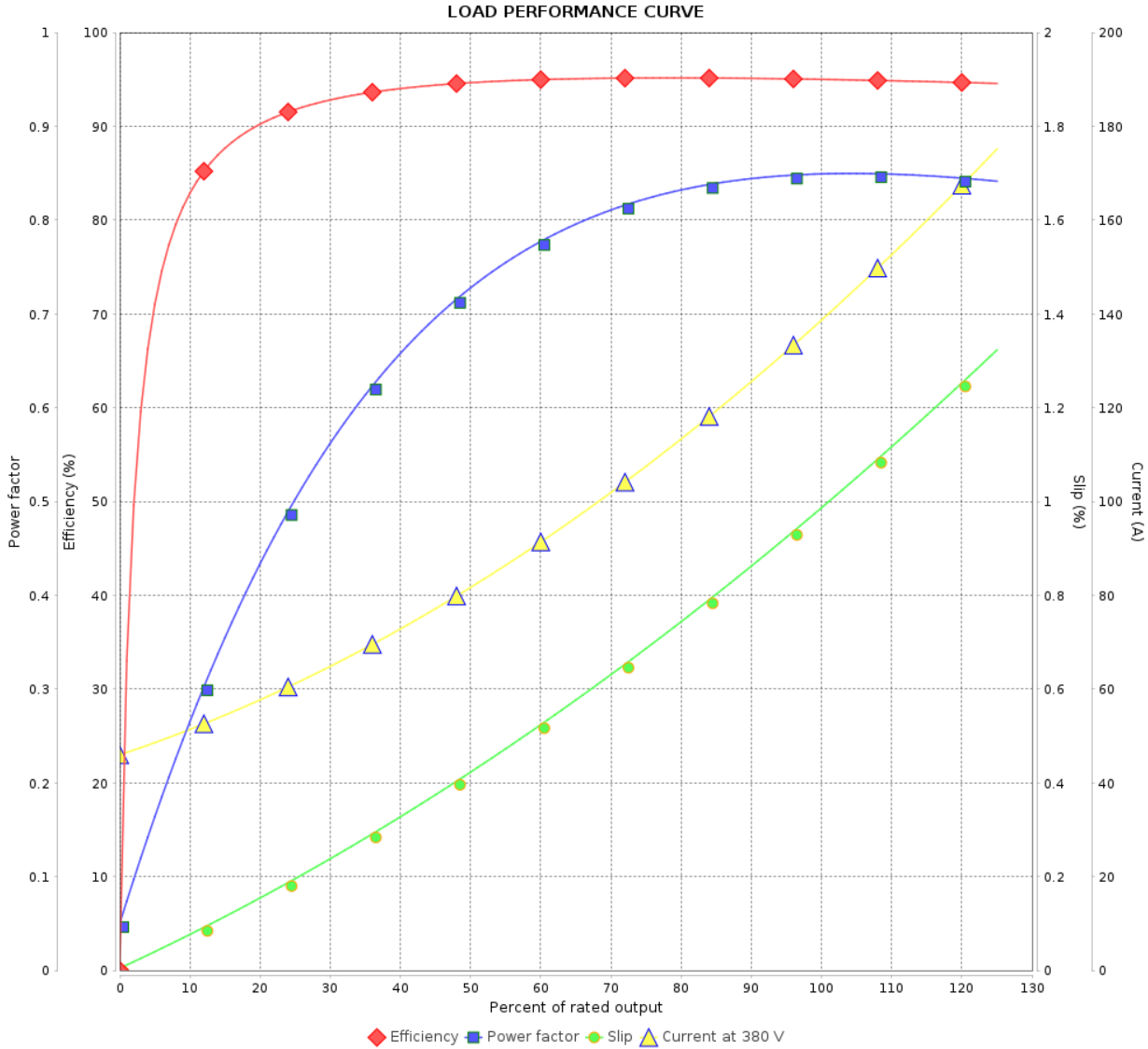
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 12031971



Performance : 380 V 50 Hz 4P IE3

Rated current : 141 A
 LRC : 6.4
 Rated torque : 48.9 kgfm
 Locked rotor torque : 190 %
 Breakdown torque : 229 %
 Rated speed : 1485 rpm

Moment of inertia (J) : 2.41 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : B

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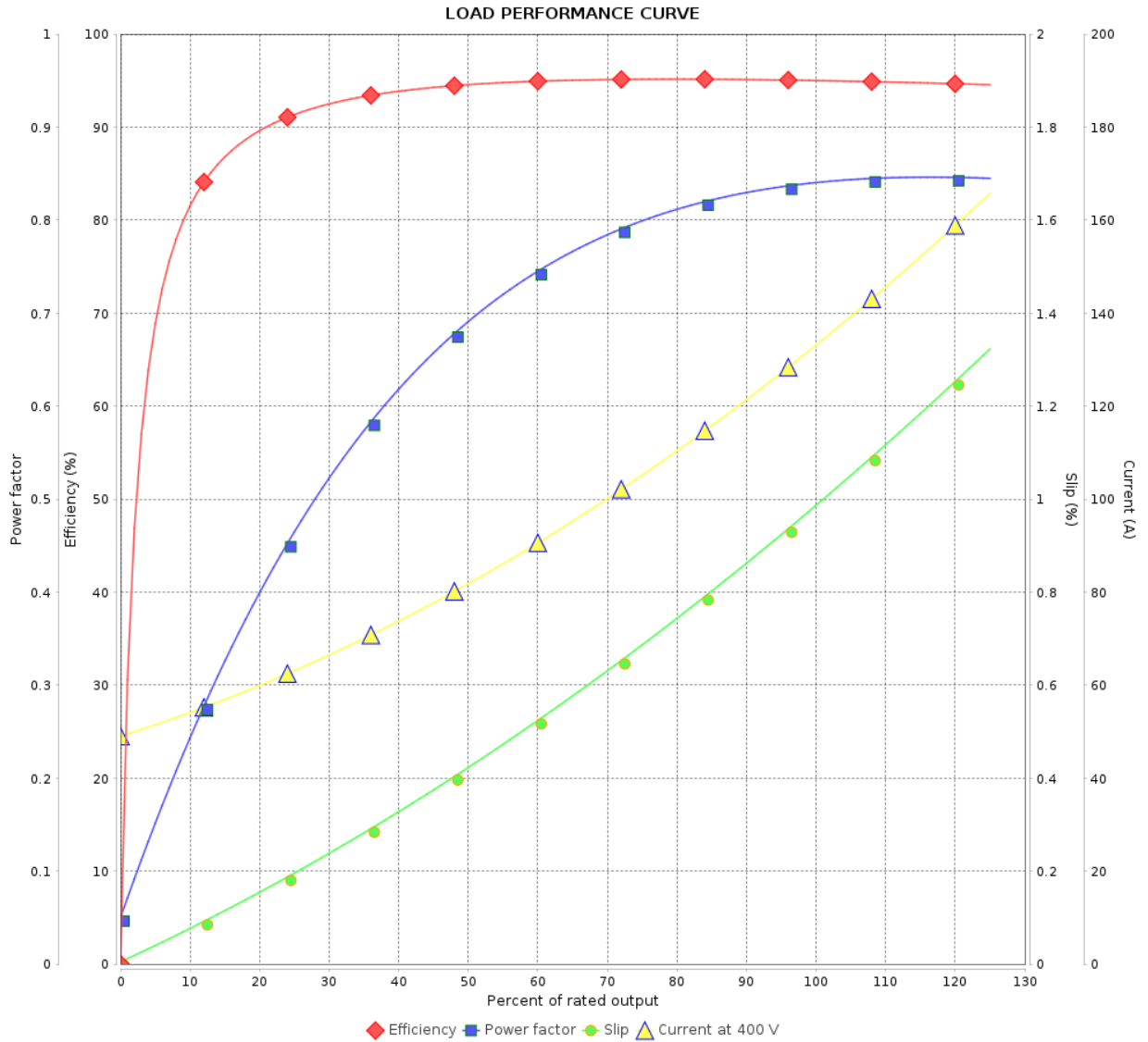
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 12031971



Performance : 400 V 50 Hz 4P IE3

Rated current : 136 A
 LRC : 7.0
 Rated torque : 48.9 kgfm
 Locked rotor torque : 220 %
 Breakdown torque : 260 %
 Rated speed : 1485 rpm

Moment of inertia (J) : 2.41 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : B

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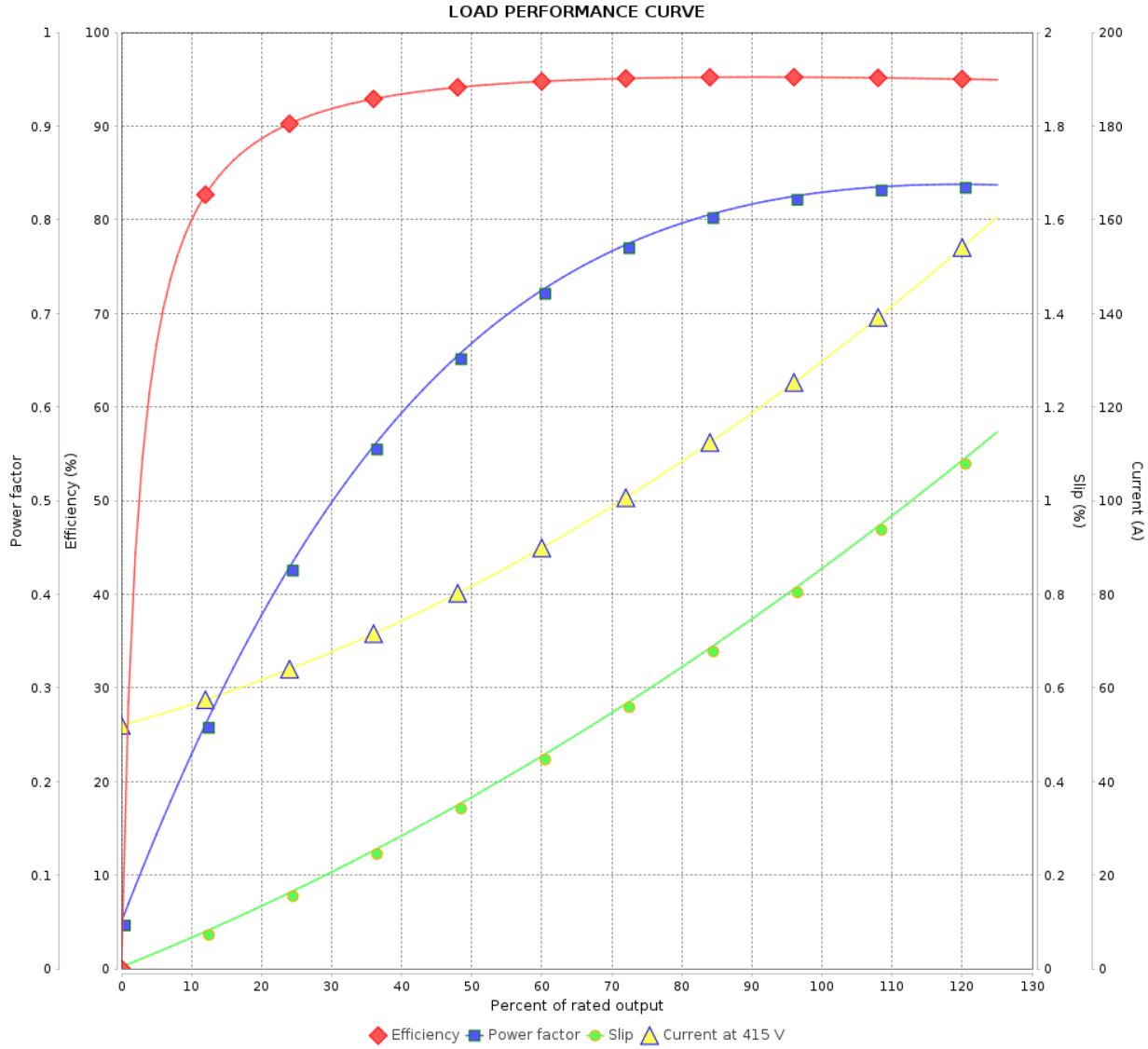
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 12031971



Performance : 415 V 50 Hz 4P IE3

Rated current	: 132 A	Moment of inertia (J)	: 2.41 kgm ²
LRC	: 7.6	Duty cycle	: Cont.(S1)
Rated torque	: 48.8 kgfm	Insulation class	: F
Locked rotor torque	: 240 %	Service factor	: 1.00
Breakdown torque	: 280 %	Temperature rise	: 80 K
Rated speed	: 1487 rpm	Design	: B

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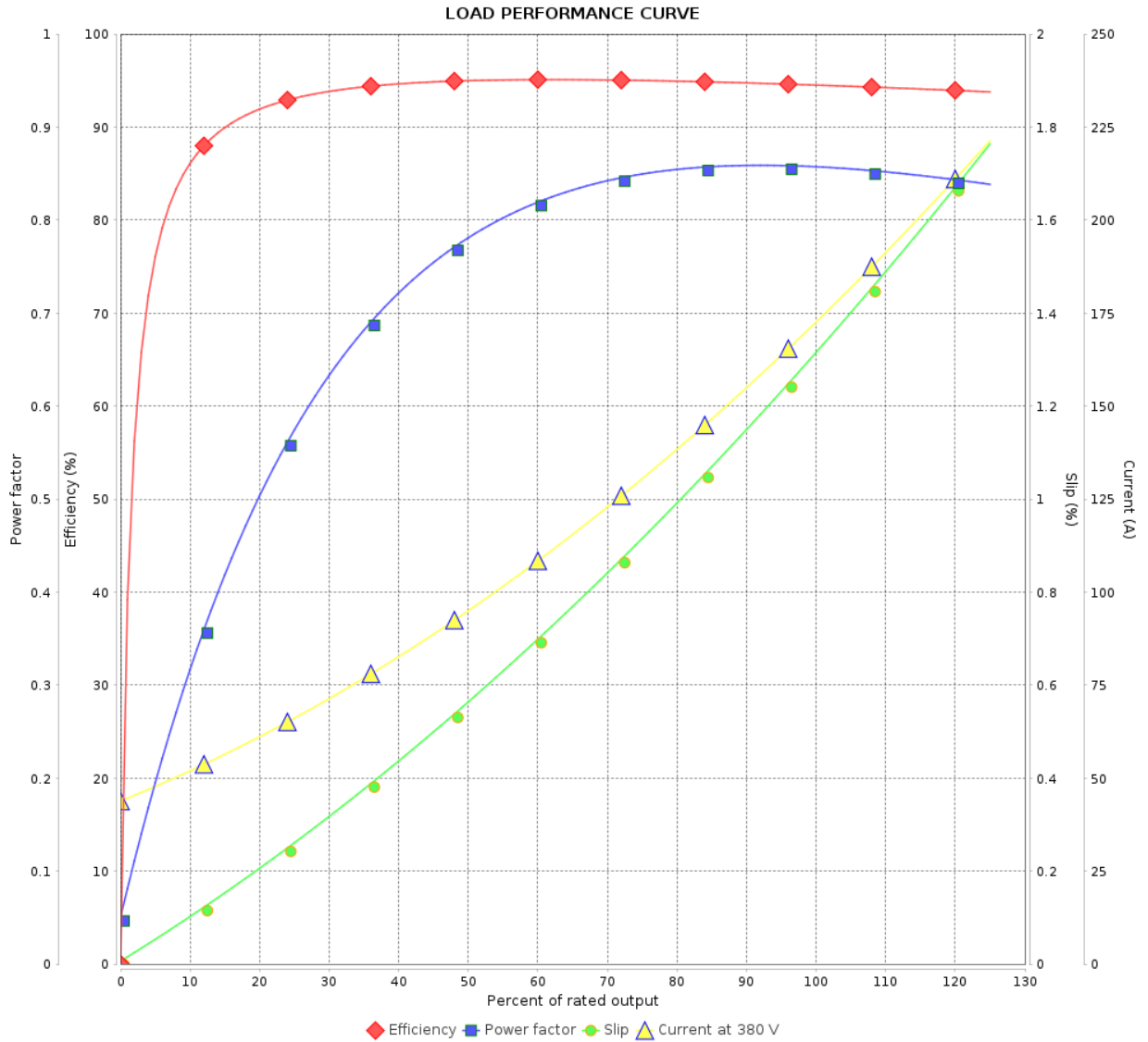
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 12031971



Performance : 380 V 50 Hz 4P IE2

Rated current : 168 A
 LRC : 5.1
 Rated torque : 61.3 kgfm
 Locked rotor torque : 160 %
 Breakdown torque : 200 %
 Rated speed : 1480 rpm

Moment of inertia (J) : 2.41 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : B

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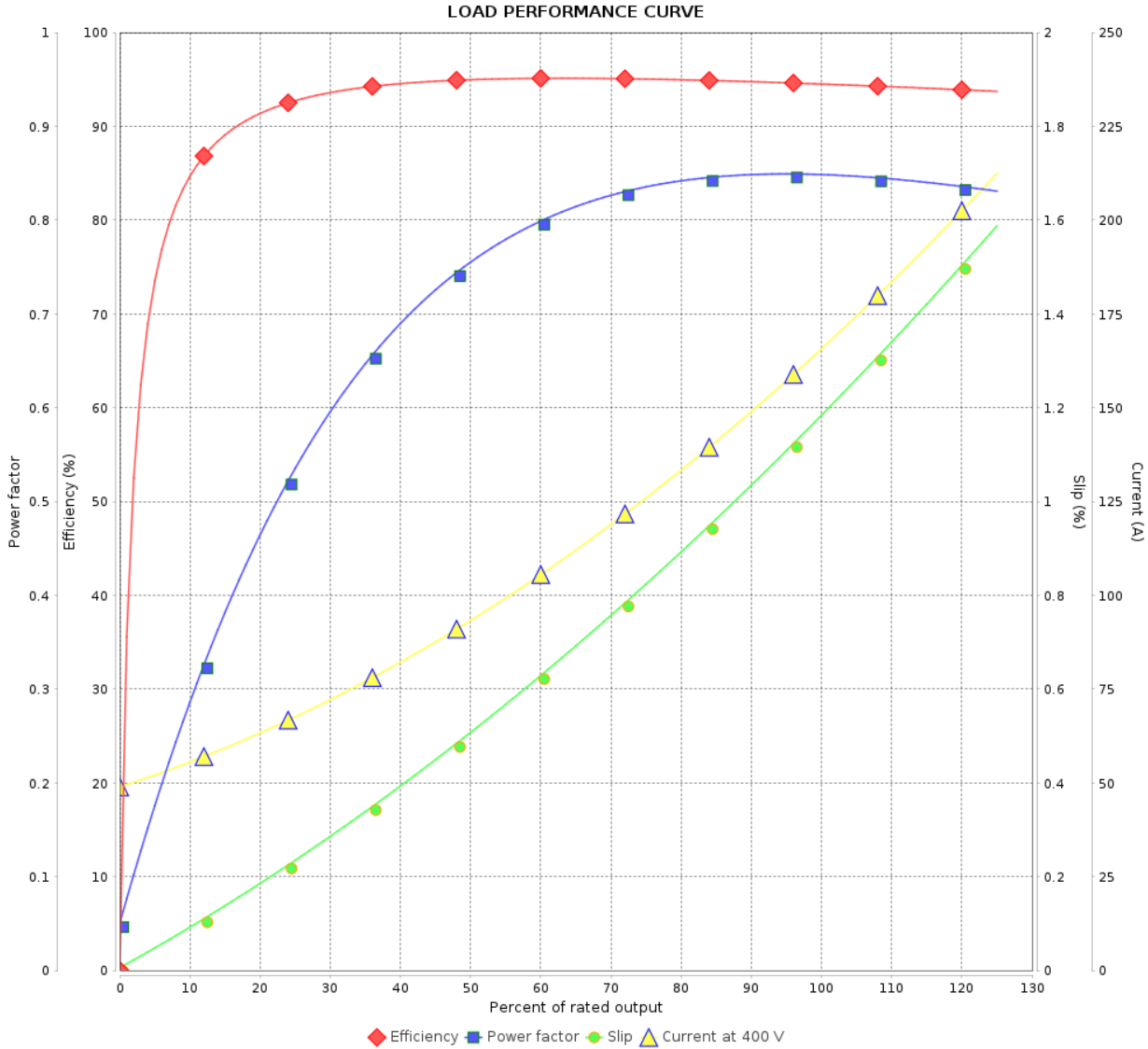
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 12031971



Performance : 400 V 50 Hz 4P IE2

Rated current	: 162 A	Moment of inertia (J)	: 2.41 kgm ²
LRC	: 5.7	Duty cycle	: Cont.(S1)
Rated torque	: 61.2 kgfm	Insulation class	: F
Locked rotor torque	: 180 %	Service factor	: 1.00
Breakdown torque	: 200 %	Temperature rise	: 80 K
Rated speed	: 1482 rpm	Design	: B

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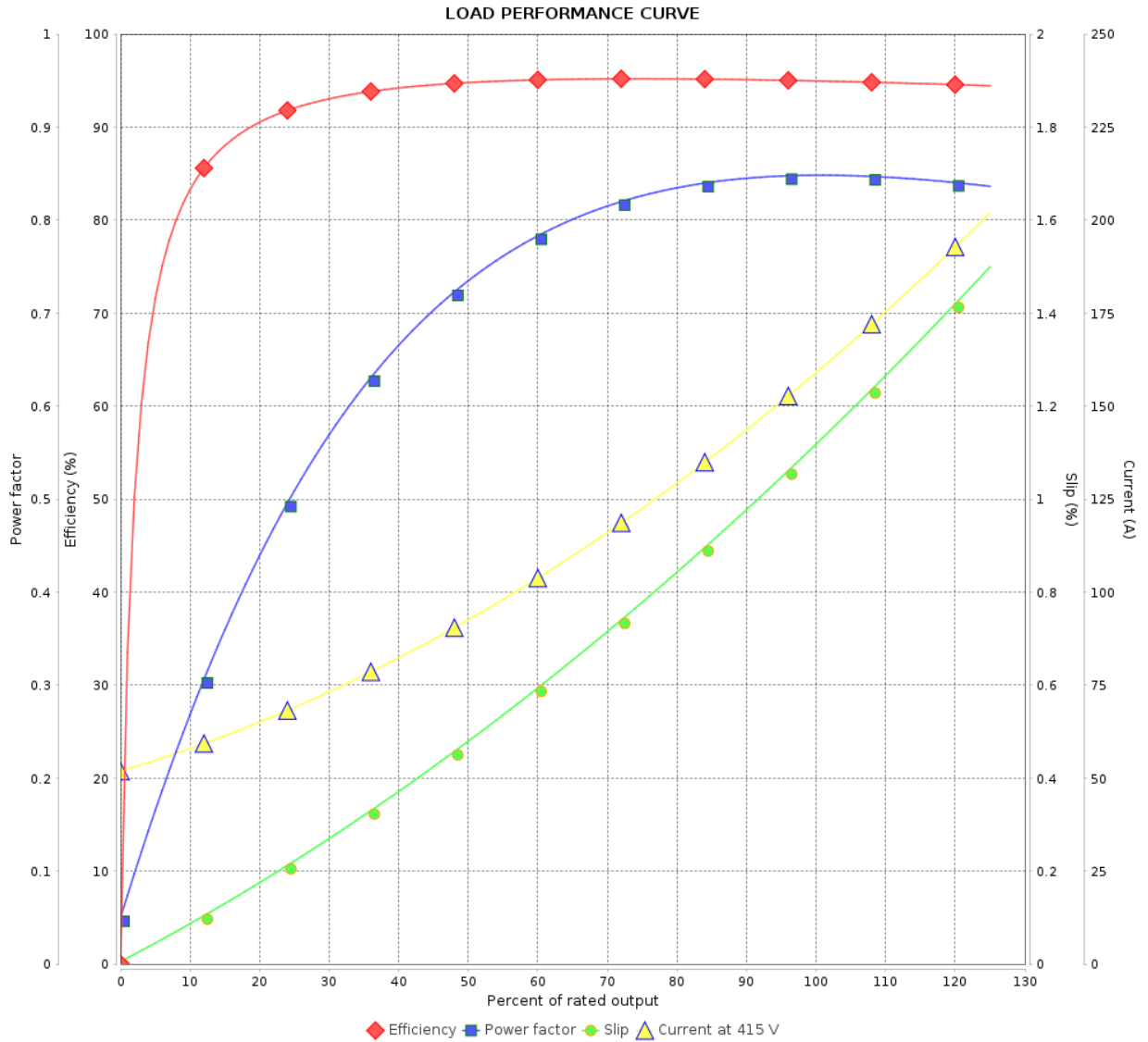
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 12031971



Performance : 415 V 50 Hz 4P IE2

Rated current : 155 A
 LRC : 6.3
 Rated torque : 61.2 kgfm
 Locked rotor torque : 190 %
 Breakdown torque : 220 %
 Rated speed : 1483 rpm

Moment of inertia (J) : 2.41 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : B

Rev.	Changes Summary	Performed	Checked	Date
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