

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase Product code : 12004235

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	: 809 kg
Protection degree	: IP55	Moment of inertia (J)	: 2.81 kgm ²
Design	: B		

Output [HP]	150	125	125	125	150	150	150
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]	340/170	169	160	156	205	194	189
L. R. Amperes [A]	2244/1122	1183	1104	1170	1189	1125	1191
LRC [A]	6.6x(Code G)	7.0x(Code G)	6.9x(Code G)	7.5x(Code H)	5.8x(Code F)	5.8x(Code F)	6.3x(Code G)
No load current [A]	116/58.0	58.0	61.2	64.0	58.0	61.2	64.0
Rated speed [RPM]	1784	1484	1486	1487	1475	1480	1482
Slip [%]	0.89	1.07	0.93	0.87	1.67	1.33	1.20
Rated torque [kgfm]	61.0	61.1	61.0	61.0	73.8	73.6	73.5
Locked rotor torque [%]	200	190	220	229	160	180	190
Breakdown torque [%]	250	240	260	290	200	220	240
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	105 K	105 K	105 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%	95.4	95.1	95.1	94.8	95.4	95.4
	75%	95.8	95.5	95.5	95.5	95.4	95.4
	100%	95.8	95.3	95.3	95.5	95.0	95.4
Power Factor	25%						
	50%	0.74	0.73	0.70	0.68	0.79	0.76
	75%	0.82	0.83	0.81	0.79	0.85	0.83
	100%	0.85	0.85	0.85	0.84	0.86	0.86

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

Losses (%)	P1 (0,9;1,0)	4.5	4.5	4.5	4.5	4.5	4.5
	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)	2.4	2.4	2.4	2.4	2.4	2.4
	P5 (0,5;0,5)	1.5	1.5	1.5	1.5	1.5	1.5
	P6 (0,5;0,25)	1.1	1.1	1.1	1.1	1.1	1.1
	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 Max. traction : 1137 kgf Max. compression : 1946 kgf
Sealing	: Viton Viton	
Lubrication interval	: Oil Seal Oil Seal	
Lubricant amount	: 8000 h 10000 h	
Lubricant type	: 45 g 34 g	
	: Mobil Polyrex EM	

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Notes
USABLE @208V 376A SF 1.00 SFA 376A

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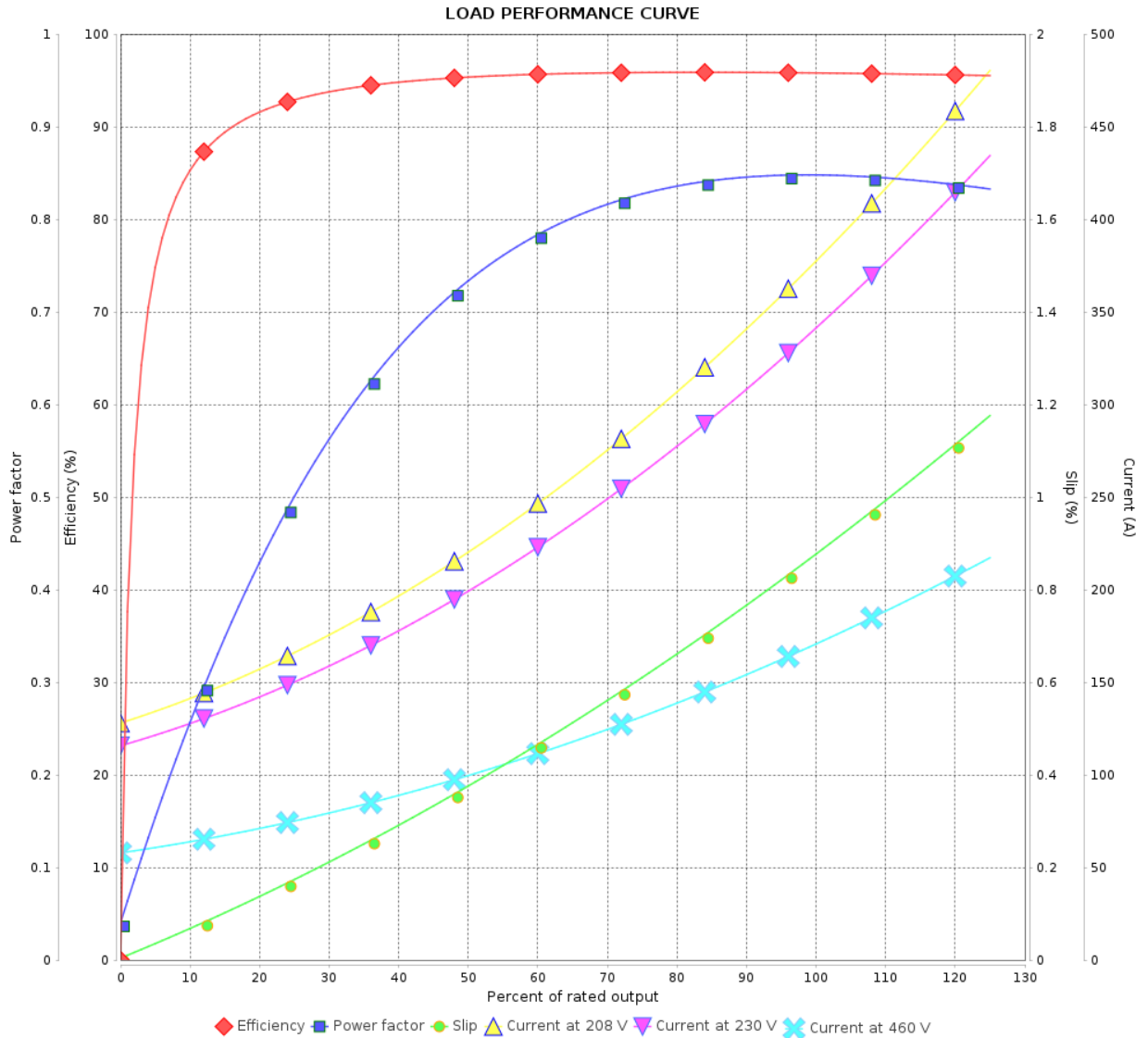
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 12004235



Performance : 230/460 V 60 Hz 4P

Rated current : 340/170 A
 LRC : 6.6
 Rated torque : 61.0 kgfm
 Locked rotor torque : 200 %
 Breakdown torque : 250 %
 Rated speed : 1784 rpm

Moment of inertia (J) : 2.81 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

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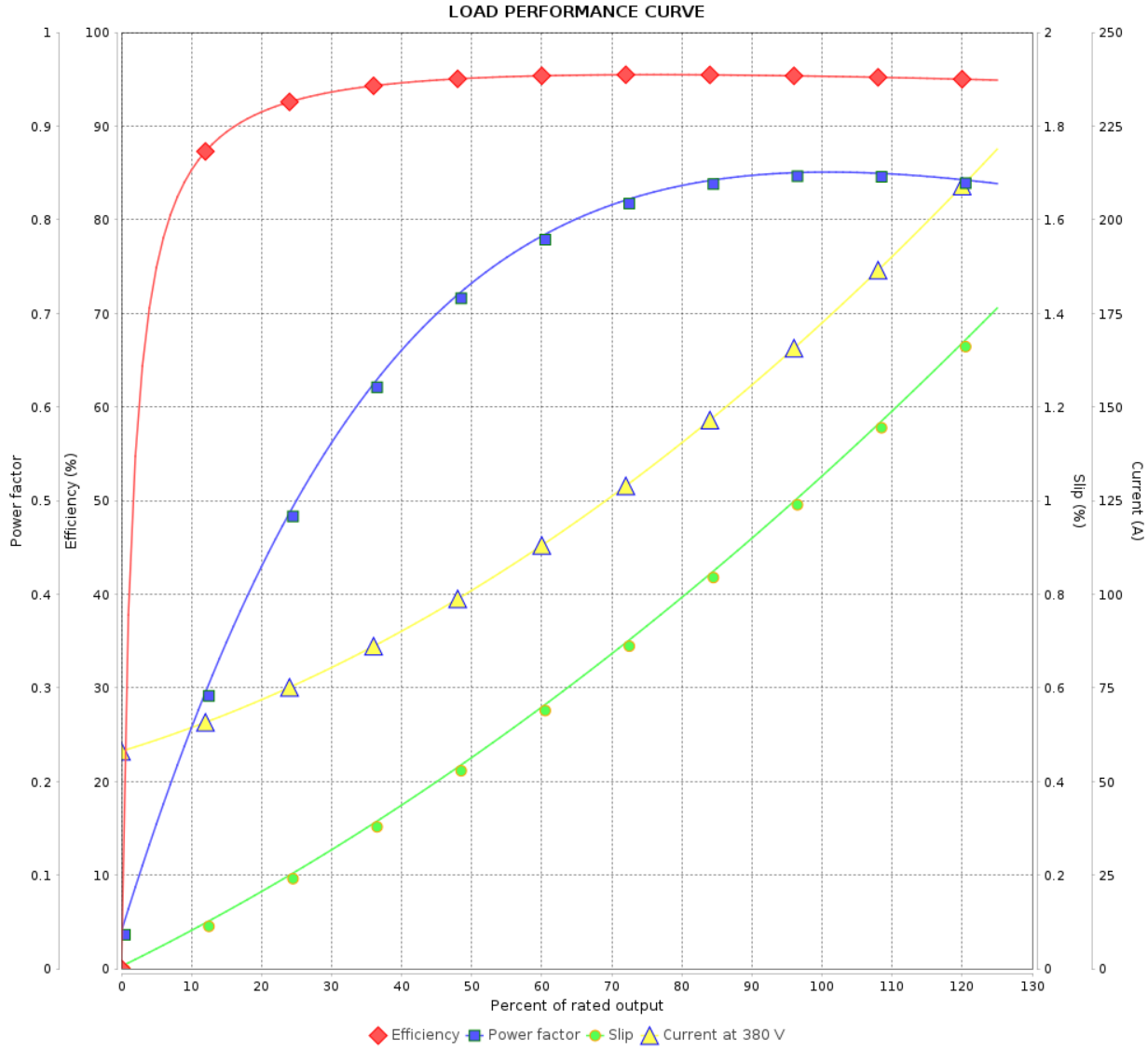
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 12004235



Performance : 380 V 50 Hz 4P IE3

Rated current : 169 A
 LRC : 7.0
 Rated torque : 61.1 kgfm
 Locked rotor torque : 190 %
 Breakdown torque : 240 %
 Rated speed : 1484 rpm

Moment of inertia (J) : 2.81 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : B

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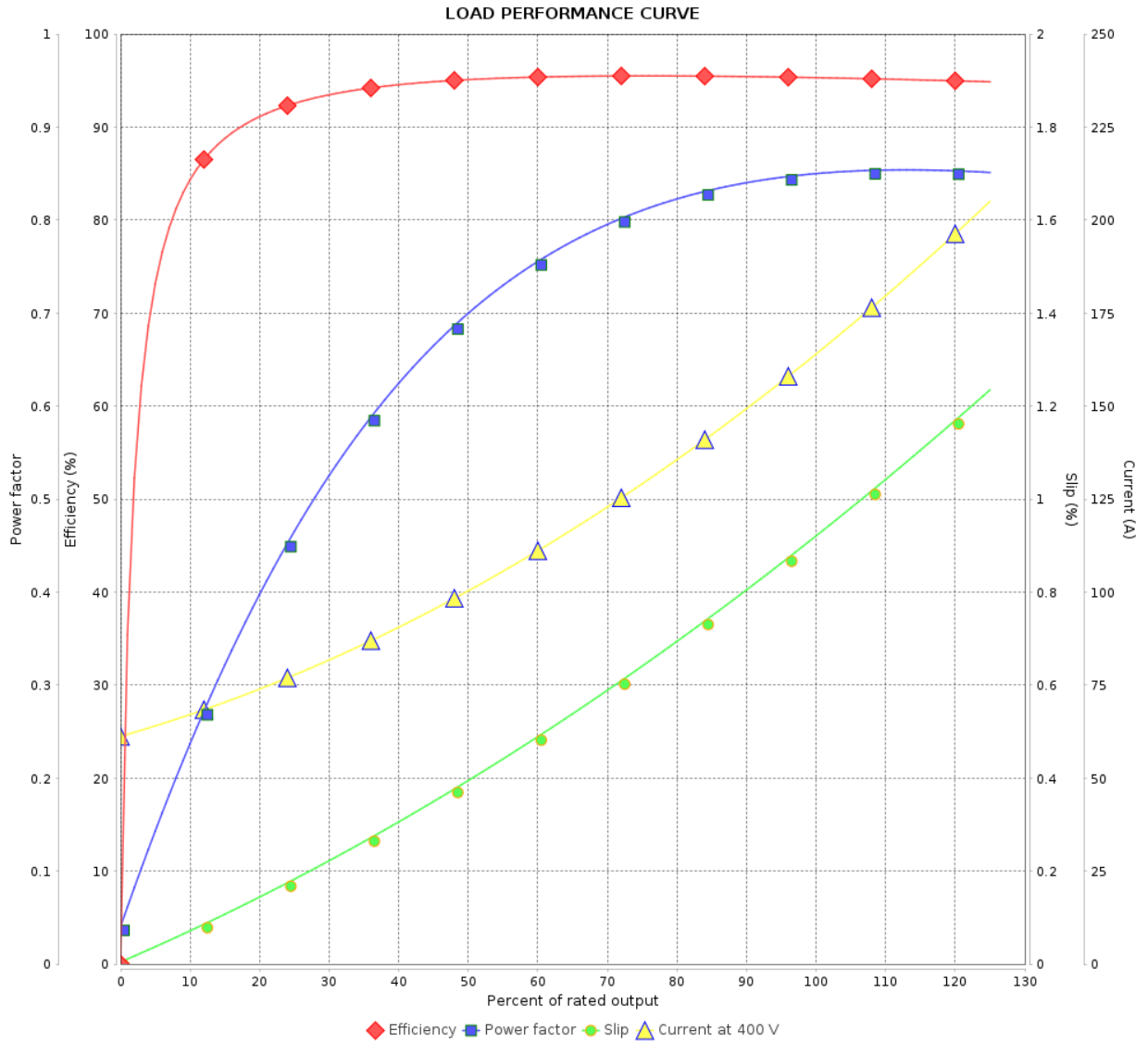
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 12004235



Performance : 400 V 50 Hz 4P IE3

Rated current : 160 A
 LRC : 6.9
 Rated torque : 61.0 kgfm
 Locked rotor torque : 220 %
 Breakdown torque : 260 %
 Rated speed : 1486 rpm

Moment of inertia (J) : 2.81 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : B

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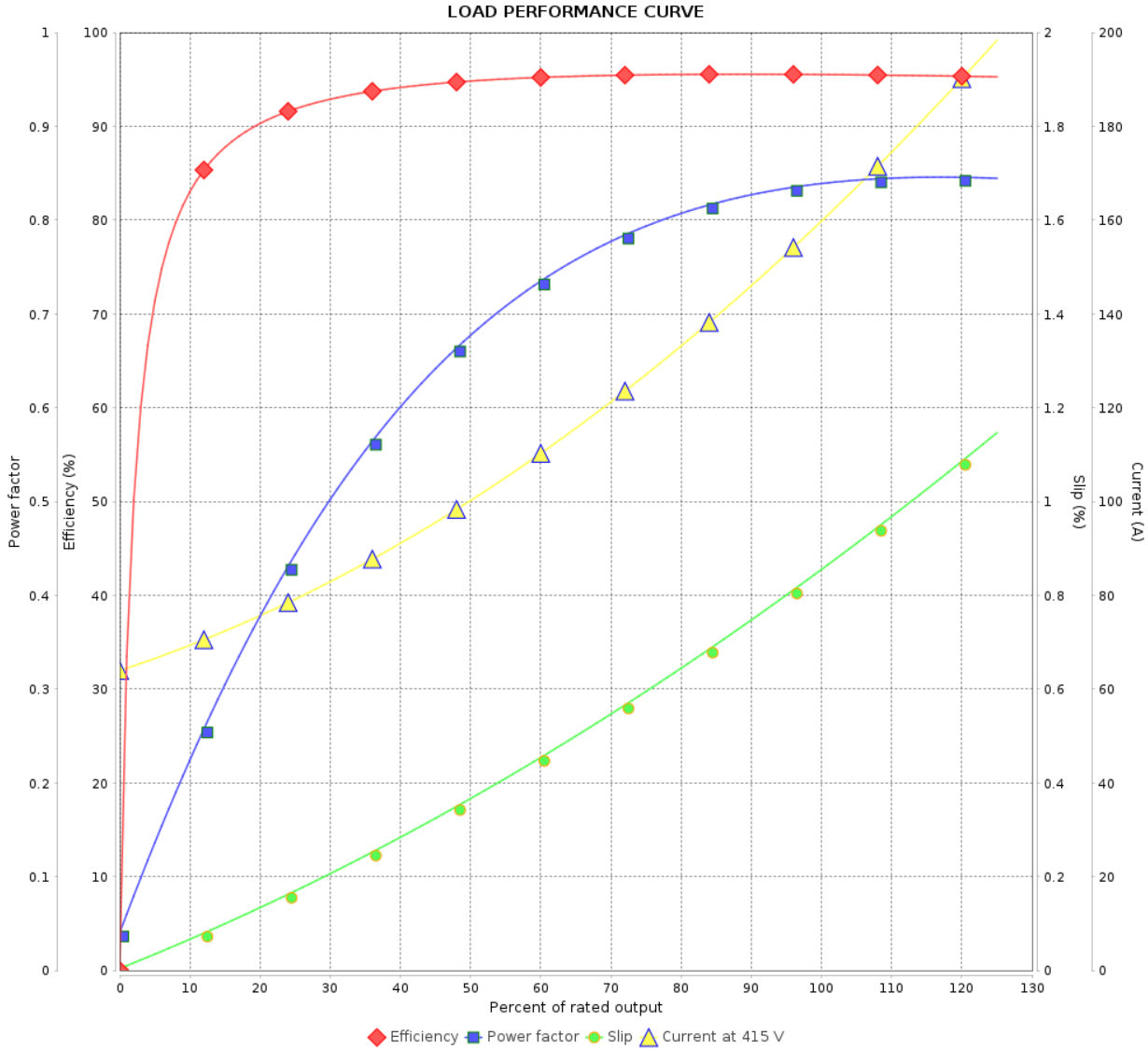
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 12004235



Performance : 415 V 50 Hz 4P IE3

Rated current	: 156 A	Moment of inertia (J)	: 2.81 kgm ²
LRC	: 7.5	Duty cycle	: Cont.(S1)
Rated torque	: 61.0 kgfm	Insulation class	: F
Locked rotor torque	: 229 %	Service factor	: 1.00
Breakdown torque	: 290 %	Temperature rise	: 80 K
Rated speed	: 1487 rpm	Design	: B

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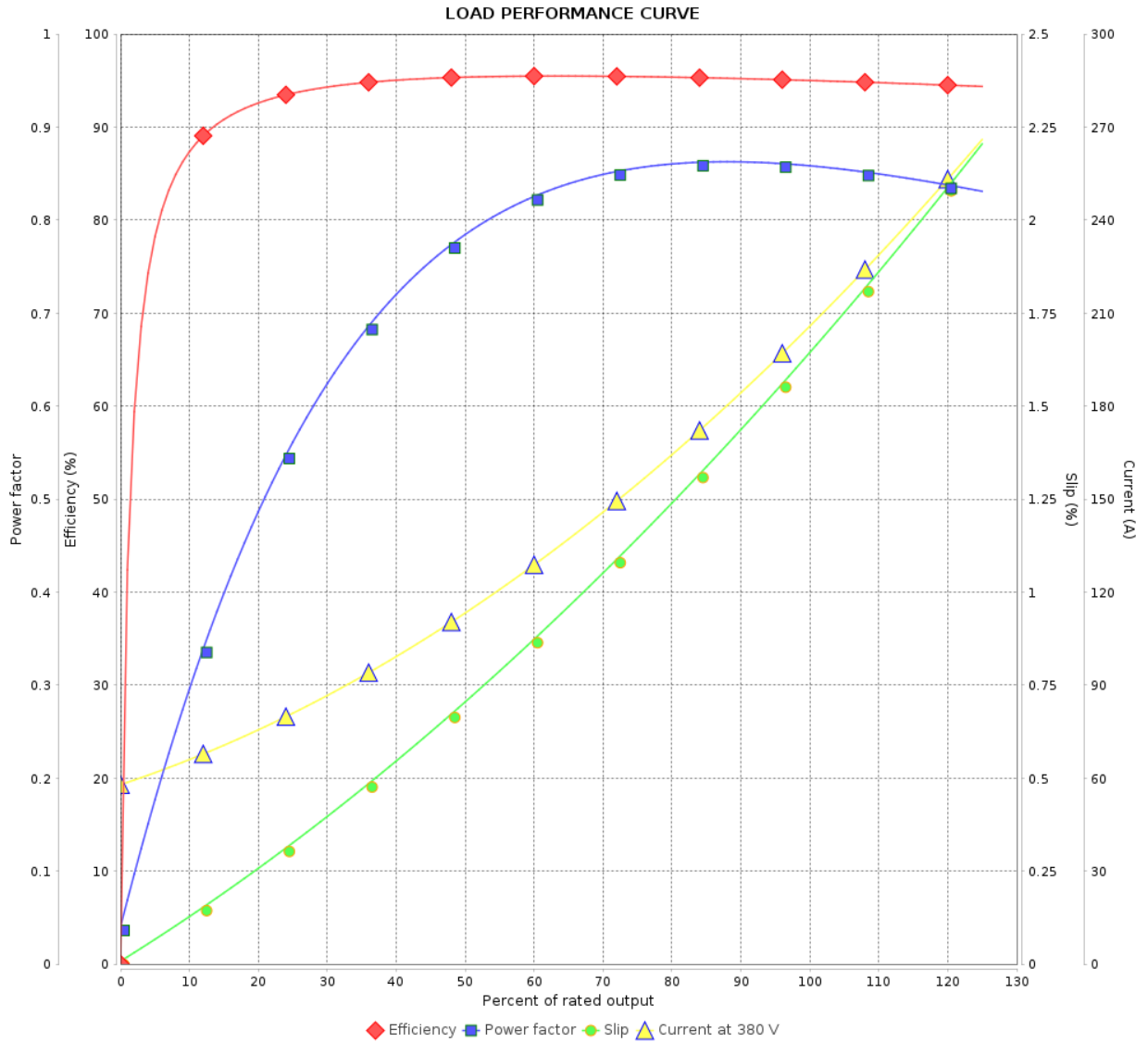
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 12004235



Performance : 380 V 50 Hz 4P IE2

Rated current : 205 A
 LRC : 5.8
 Rated torque : 73.8 kgfm
 Locked rotor torque : 160 %
 Breakdown torque : 200 %
 Rated speed : 1475 rpm

Moment of inertia (J) : 2.81 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 105 K
 Design : B

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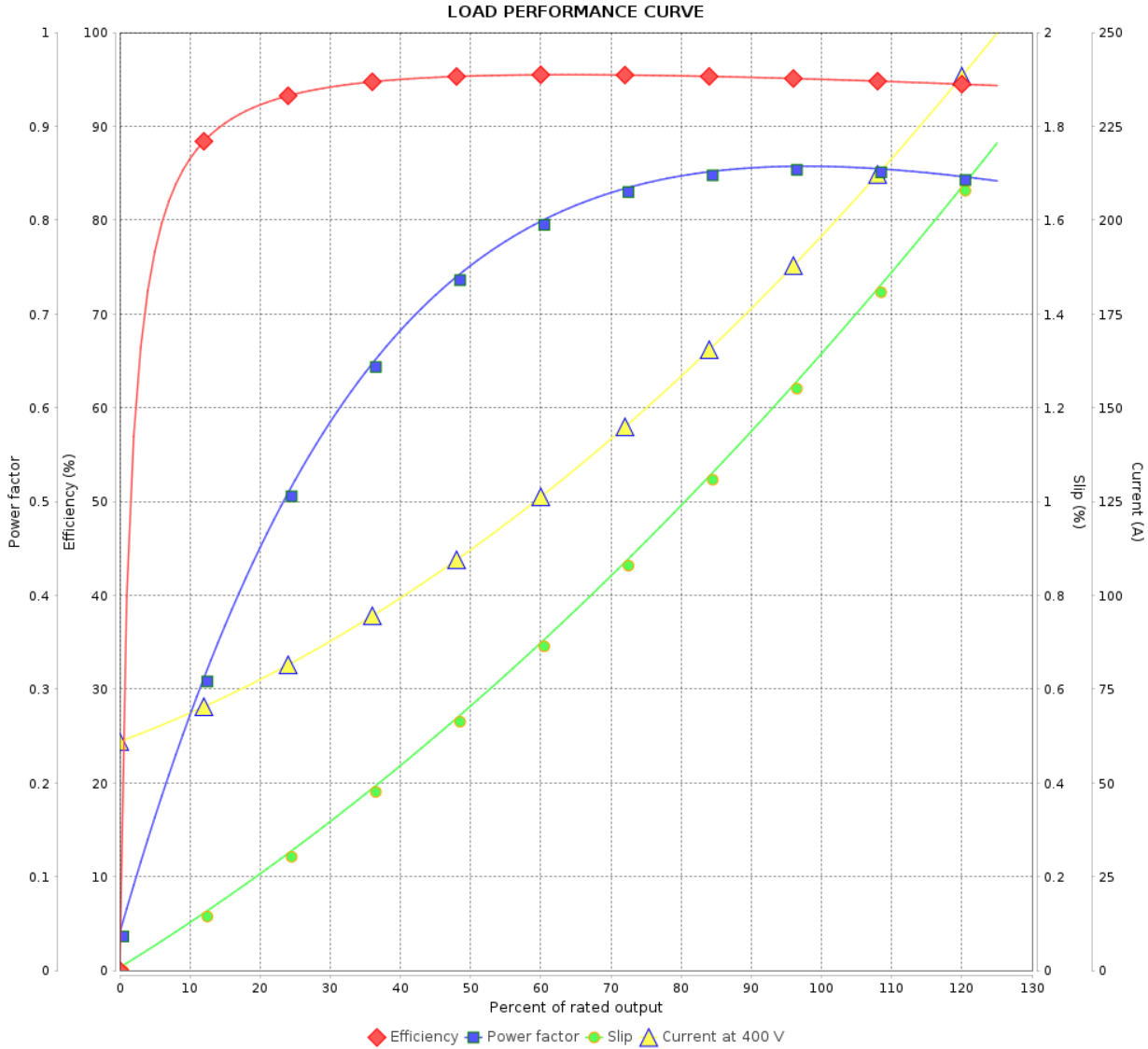
Three Phase Induction Motor - Squirrel Cage



Customer :

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Product code : 12004235



Performance : 400 V 50 Hz 4P IE2

Rated current	: 194 A	Moment of inertia (J)	: 2.81 kgm ²
LRC	: 5.8	Duty cycle	: Cont.(S1)
Rated torque	: 73.6 kgfm	Insulation class	: F
Locked rotor torque	: 180 %	Service factor	: 1.00
Breakdown torque	: 220 %	Temperature rise	: 105 K
Rated speed	: 1480 rpm	Design	: B

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