

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :								
Product line	: W22 NEMA Premium Efficiency Three-Phase	Product code :	11165649					
Frame	: 404/5T	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	: 611 kg					
Protection degree	: IP55	Moment of inertia (J)	: 1.69 kgm ²					
Design	: B							
Output [HP]	75	60	60	60	75	75	75	
Poles	6	6	6	6	6	6	6	
Frequency [Hz]	60	50	50	50	50	50	50	
Rated voltage [V]	230/460	380	400	415	380	400	415	
Rated current [A]	170/84.9	85.5	83.2	82.1	104	99.3	95.7	
L. R. Amperes [A]	1087/543	547	574	599	541	566	593	
LRC [A]	6.4x(Code G)	6.4x(Code G)	6.9x(Code H)	7.3x(Code J)	5.2x(Code E)	5.7x(Code F)	6.2x(Code G)	
No load current [A]	60.0/30.0	29.7	31.8	33.5	29.7	31.8	33.5	
Rated speed [RPM]	1184	985	985	985	978	981	983	
Slip [%]	1.33	1.50	1.50	1.50	2.20	1.90	1.70	
Rated torque [kgfm]	46.0	44.2	44.2	44.2	55.7	55.5	55.4	
Locked rotor torque [%]	229	200	240	270	170	190	210	
Breakdown torque [%]	229	240	270	290	180	200	220	
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	105 K	105 K	105 K	
Locked rotor time	30s (cold) 17s (hot)	61s (cold) 34s (hot)	57s (cold) 32s (hot)	54s (cold) 30s (hot)	25s (cold) 14s (hot)	25s (cold) 14s (hot)	25s (cold) 14s (hot)	
Noise level ²	68.0 dB(A)	64.0 dB(A)	64.0 dB(A)	64.0 dB(A)	64.0 dB(A)	64.0 dB(A)	64.0 dB(A)	
Efficiency (%)	25%	94.0	93.3	93.3	93.3	91.4	92.0	92.1
	50%	94.1	93.5	93.5	93.5	91.8	92.4	92.4
	75%	94.5	94.0	94.0	94.0	92.2	92.8	92.8
	100%	94.5	94.1	94.1	94.1	92.4	93.0	93.0
Power Factor	25%	0.49	0.44	0.40	0.38	0.55	0.51	0.49
	50%	0.74	0.66	0.62	0.60	0.79	0.76	0.74
	75%	0.83	0.79	0.75	0.74	0.85	0.84	0.83
	100%	0.86	0.85	0.83	0.81	0.87	0.86	0.86
Losses at normative operating points (speed;torque), in percentage of rated output power								
Losses (%)	P1 (0,9;1,0)	6.3	6.8	6.8	6.8	9.0	8.2	8.2
	P2 (0,5;1,0)	5.0	5.5	5.5	5.5	7.6	6.8	6.8
	P3 (0,25;1,0)	4.5	4.9	4.9	4.9	7.0	6.3	6.3
	P4 (0,9;0,5)	3.5	3.7	3.7	3.7	4.7	4.4	4.4
	P5 (0,5;0,5)	2.3	2.5	2.5	2.5	3.3	3.0	3.0
	P6 (0,5;0,25)	1.7	1.8	1.8	1.8	2.4	2.2	2.2
	P7 (0,25;0,25)	1.1	1.2	1.2	1.2	1.6	1.5	1.5
Bearing type	: Drive end : NU-316 C3	Non drive end : 6314 C3	Foundation loads					
Sealing	: WSeal	WSeal	Max. traction	: 894 kgf				
Lubrication interval	: 12000 h	17000 h	Max. compression	: 1505 kgf				
Lubricant amount	: 34 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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Three Phase Induction Motor - Squirrel Cage



Customer : _____

Notes
USABLE @208V 188A SF 1.10 SFA 207A

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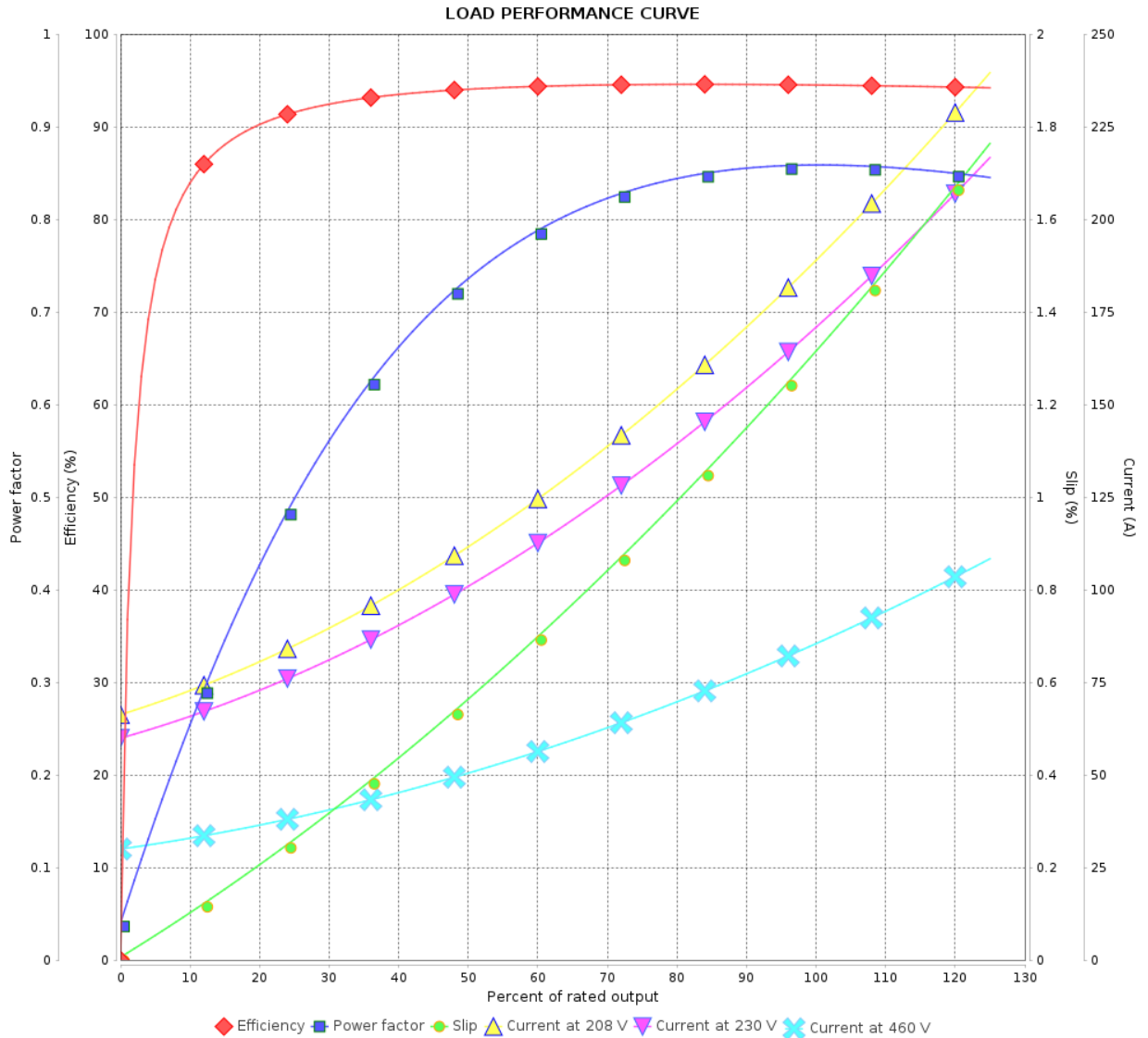
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 11165649



Performance : 230/460 V 60 Hz 6P

Rated current : 170/84.9 A
 LRC : 6.4
 Rated torque : 46.0 kgfm
 Locked rotor torque : 229 %
 Breakdown torque : 229 %
 Rated speed : 1184 rpm

Moment of inertia (J) : 1.69 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.25
 Temperature rise : 80 K
 Design : B

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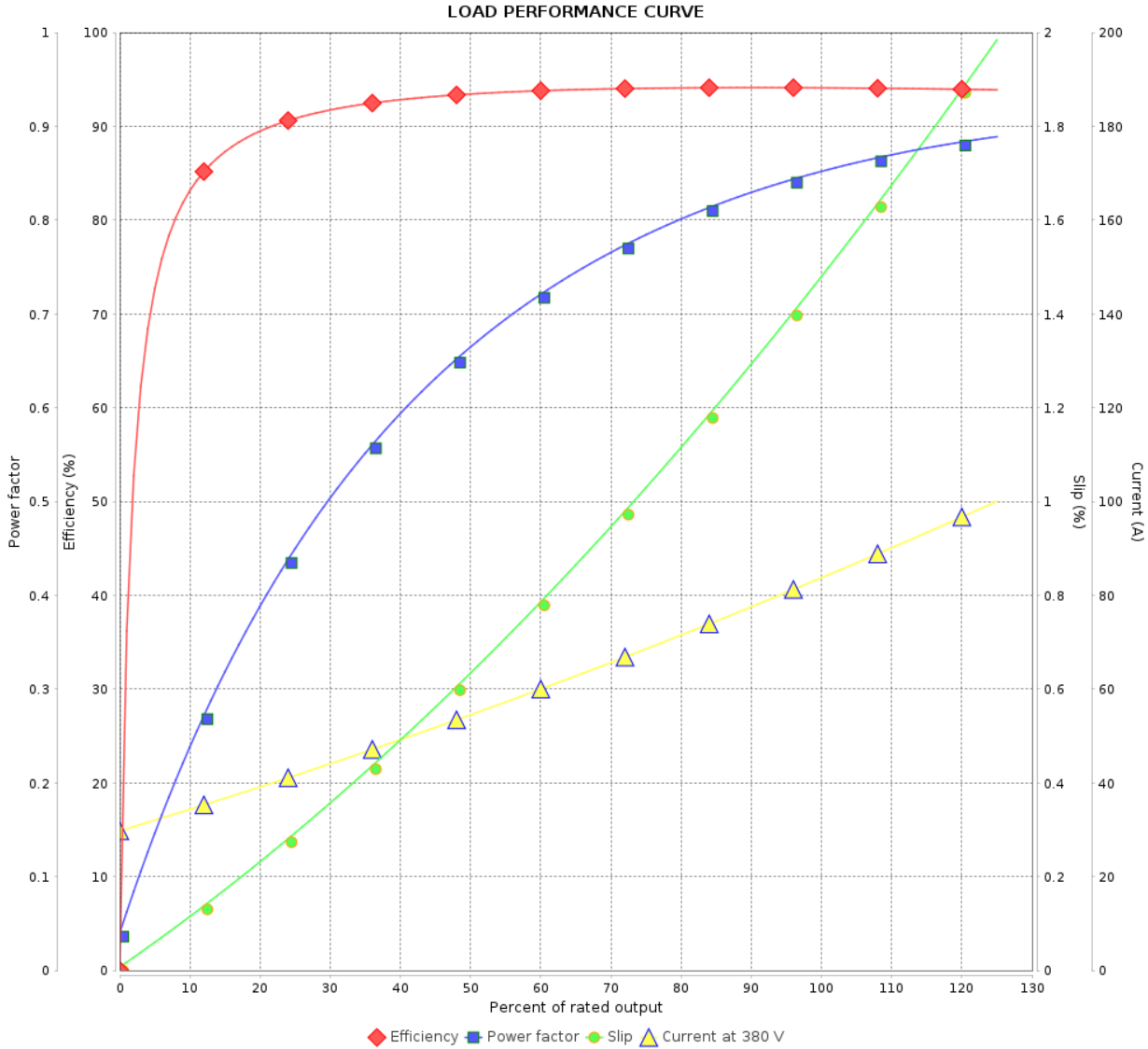
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 11165649



Performance : 380 V 50 Hz 6P IE3

Rated current : 85.5 A
 LRC : 6.4
 Rated torque : 44.2 kgfm
 Locked rotor torque : 200 %
 Breakdown torque : 240 %
 Rated speed : 985 rpm

Moment of inertia (J) : 1.69 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : B

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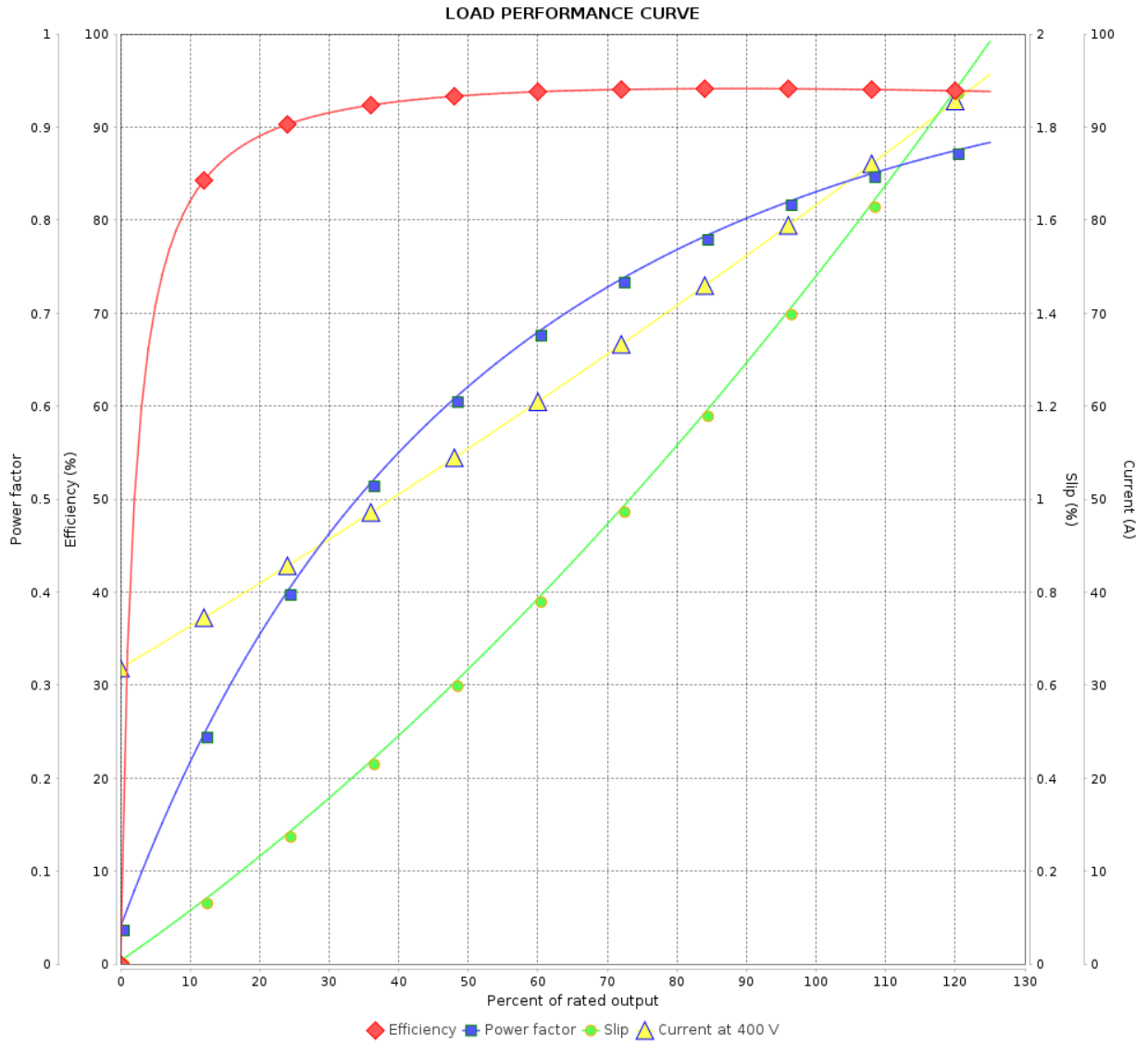
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 11165649



Performance : 400 V 50 Hz 6P IE3

Rated current : 83.2 A
 LRC : 6.9
 Rated torque : 44.2 kgfm
 Locked rotor torque : 240 %
 Breakdown torque : 270 %
 Rated speed : 985 rpm

Moment of inertia (J) : 1.69 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : B

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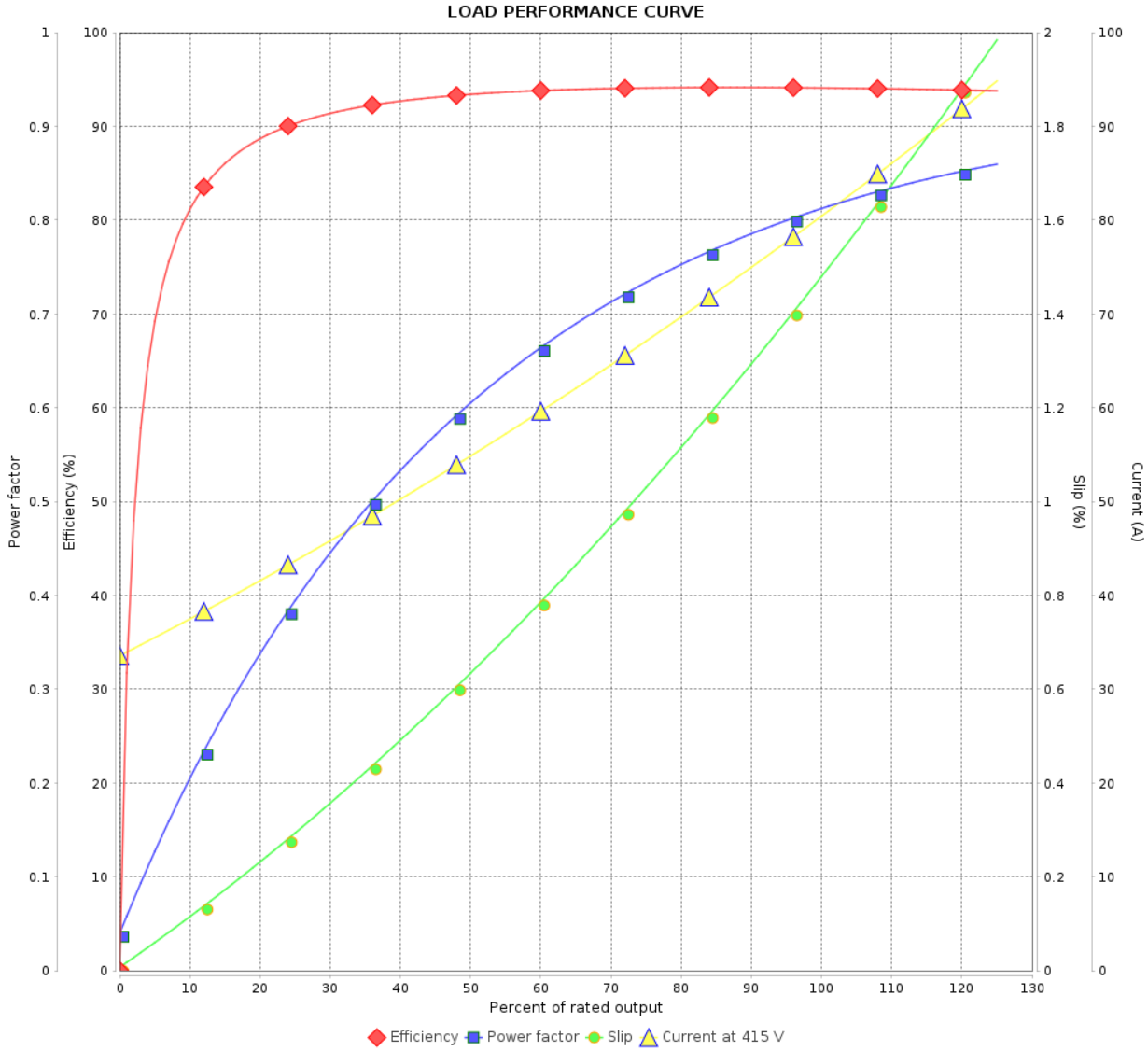
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 11165649



Performance : 415 V 50 Hz 6P IE3

Rated current : 82.1 A
 LRC : 7.3
 Rated torque : 44.2 kgfm
 Locked rotor torque : 270 %
 Breakdown torque : 290 %
 Rated speed : 985 rpm

Moment of inertia (J) : 1.69 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : B

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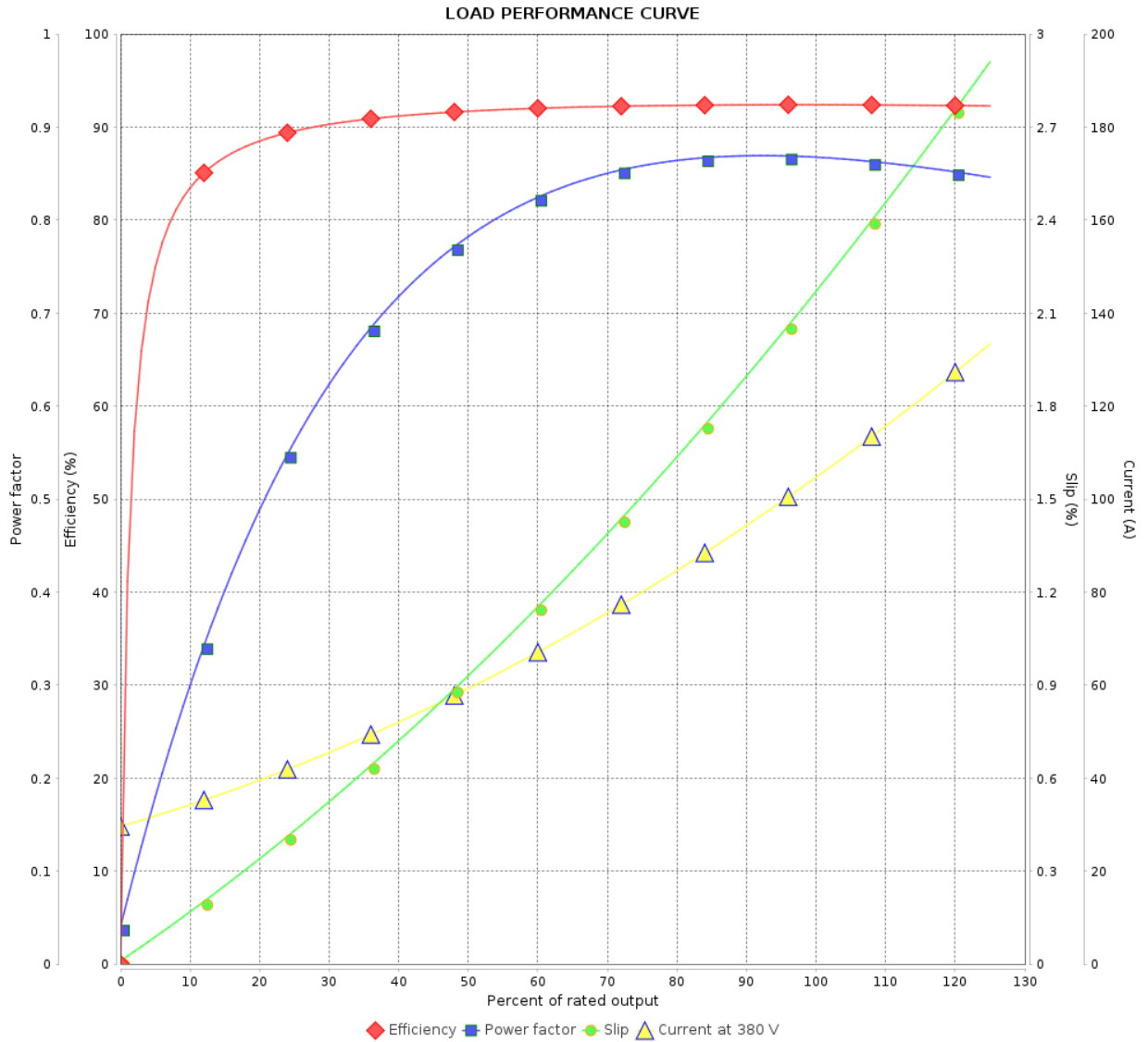
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 11165649



Performance : 380 V 50 Hz 6P IE1

Rated current : 104 A
 LRC : 5.2
 Rated torque : 55.7 kgfm
 Locked rotor torque : 170 %
 Breakdown torque : 180 %
 Rated speed : 978 rpm

Moment of inertia (J) : 1.69 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 105 K
 Design : B

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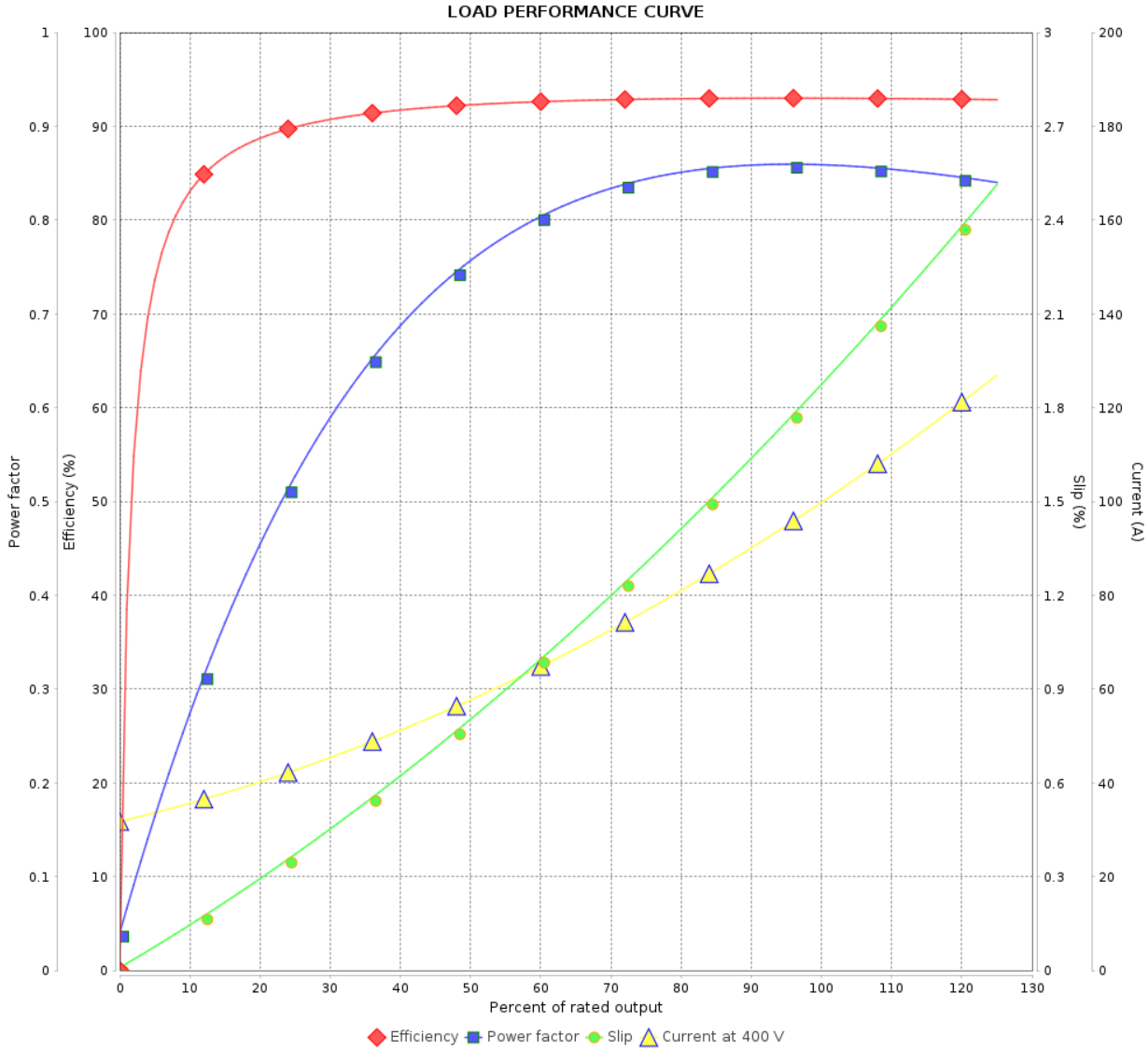
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 11165649



Performance : 400 V 50 Hz 6P IE1

Rated current : 99.3 A
 LRC : 5.7
 Rated torque : 55.5 kgfm
 Locked rotor torque : 190 %
 Breakdown torque : 200 %
 Rated speed : 981 rpm

Moment of inertia (J) : 1.69 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 105 K
 Design : B

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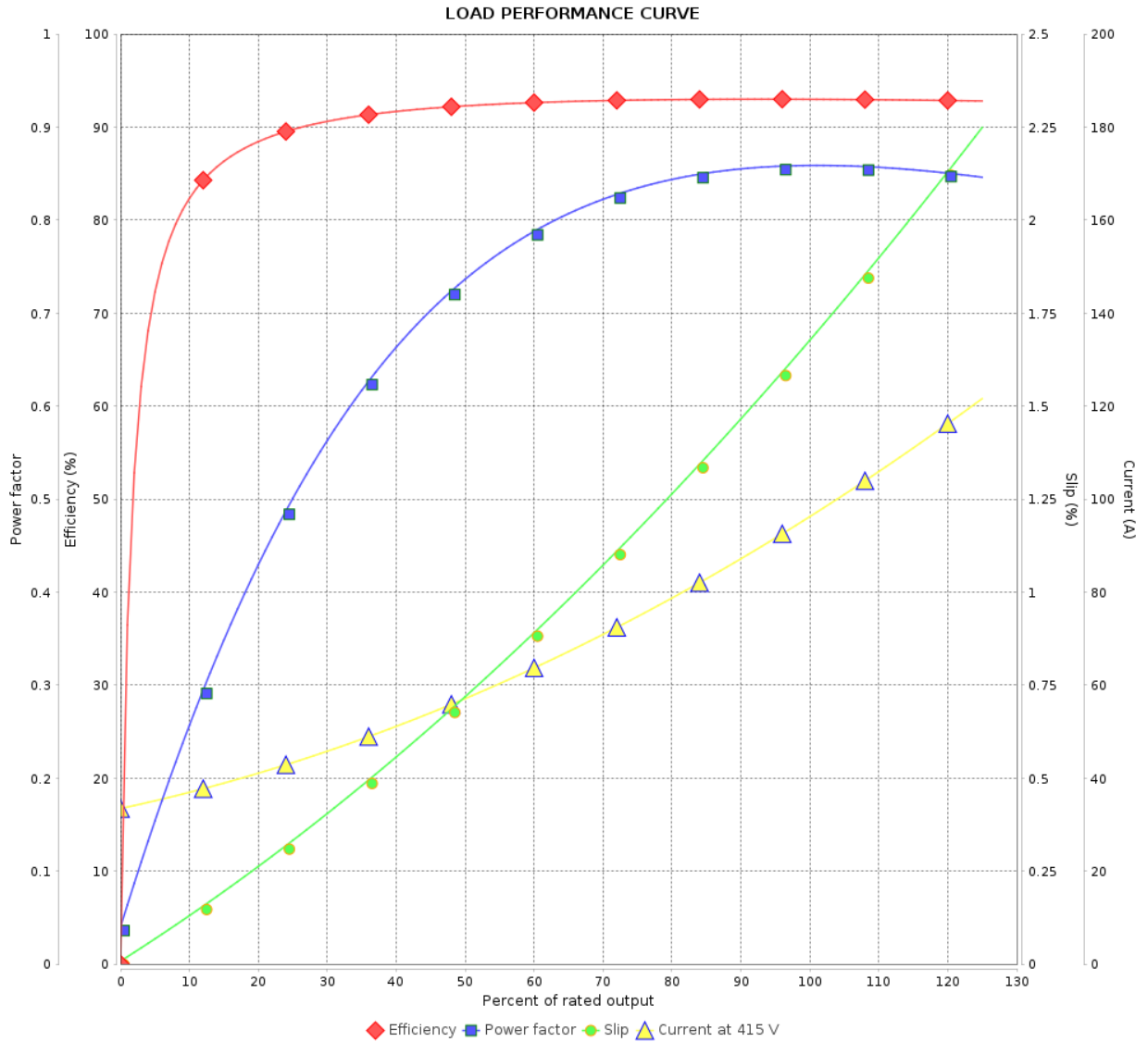
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 11165649



Performance : 415 V 50 Hz 6P IE1

Rated current : 95.7 A
 LRC : 6.2
 Rated torque : 55.4 kgfm
 Locked rotor torque : 210 %
 Breakdown torque : 220 %
 Rated speed : 983 rpm

Moment of inertia (J) : 1.69 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 105 K
 Design : B

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