

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :								
Product line	: Close Coupled Pump NEMA Premium Efficiency Three-Phase	Product code :	11185449					
Frame	: 286JM	Cooling method	: IC01 - ODP					
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	: 173 kg					
Protection degree	: IP23	Moment of inertia (J)	: 0.0993 kgm ²					
Design	: B							
Output [HP]	40	30	30	30	40	40	40	
Poles	2	2	2	2	2	2	2	
Frequency [Hz]	60	50	50	50	50	50	50	
Rated voltage [V]	230/460	380	400	415	380	400	415	
Rated current [A]	94.2/47.1	41.9	41.3	41.2	56.3	54.1	53.4	
L. R. Amperes [A]	603/301	285	314	334	293	319	342	
LRC [A]	6.4x(Code G)	6.8x(Code G)	7.6x(Code J)	8.1x(Code J)	5.2x(Code E)	5.9x(Code F)	6.4x(Code G)	
No load current [A]	32.0/16.0	15.0	18.0	20.0	15.0	17.5	20.0	
Rated speed [RPM]	3550	2955	2960	2965	2930	2935	2940	
Slip [%]	1.39	1.50	1.33	1.17	2.33	2.17	2.00	
Rated torque [kgfm]	8.18	7.37	7.36	7.34	9.91	9.89	9.87	
Locked rotor torque [%]	250	270	280	320	190	210	229	
Breakdown torque [%]	260	250	280	300	200	200	200	
Service factor	1.15	1.15	1.15	1.15	1.15	1.15	1.15	
Temperature rise	80 K	80 K	80 K	80 K	80 K	80 K	80 K	
Locked rotor time	41s (cold) 23s (hot)	46s (cold) 26s (hot)	41s (cold) 23s (hot)	36s (cold) 20s (hot)	30s (cold) 17s (hot)	28s (cold) 16s (hot)	27s (cold) 15s (hot)	
Noise level ²	73.0 dB(A)							
Efficiency (%)	25%	91.5	86.7	86.5	87.6	89.1	89.1	90.5
	50%	91.7	88.8	88.6	89.2	90.2	90.2	91.0
	75%	93.0	90.4	90.4	91.2	91.0	91.0	91.7
	100%	93.0	92.7	92.7	92.8	92.0	92.0	92.0
Power Factor	25%	0.49	0.49	0.43	0.39	0.57	0.51	0.46
	50%	0.74	0.73	0.68	0.64	0.80	0.76	0.72
	75%	0.83	0.82	0.78	0.75	0.86	0.84	0.81
	100%	0.86	0.86	0.83	0.80	0.88	0.87	0.85
Bearing type	: 6311 Z C3	6211 Z C3	Foundation loads					
Sealing	: Without	Without	Max. traction	: 196 kgf				
	Bearing Seal		Bearing Seal	Max. compression	: 369 kgf			
Lubrication interval	: 20000 h	20000 h						
Lubricant amount	: 18 g	11 g						
Lubricant type	: Mobil Polyrex EM							
Notes USABLE @208V 104A SF 1.15 SFA 120A								
This revision replaces and cancel the previous one, which must be eliminated. (1) Looking the motor from the shaft end. (2) Measured at 1m and with tolerance of +3dB(A). (3) Approximate weight subject to changes after manufacturing process. (4) At 100% of full load.				These are average values based on tests with sinusoidal power supply, subject to the tolerances stipulated in NEMA MG-1.				
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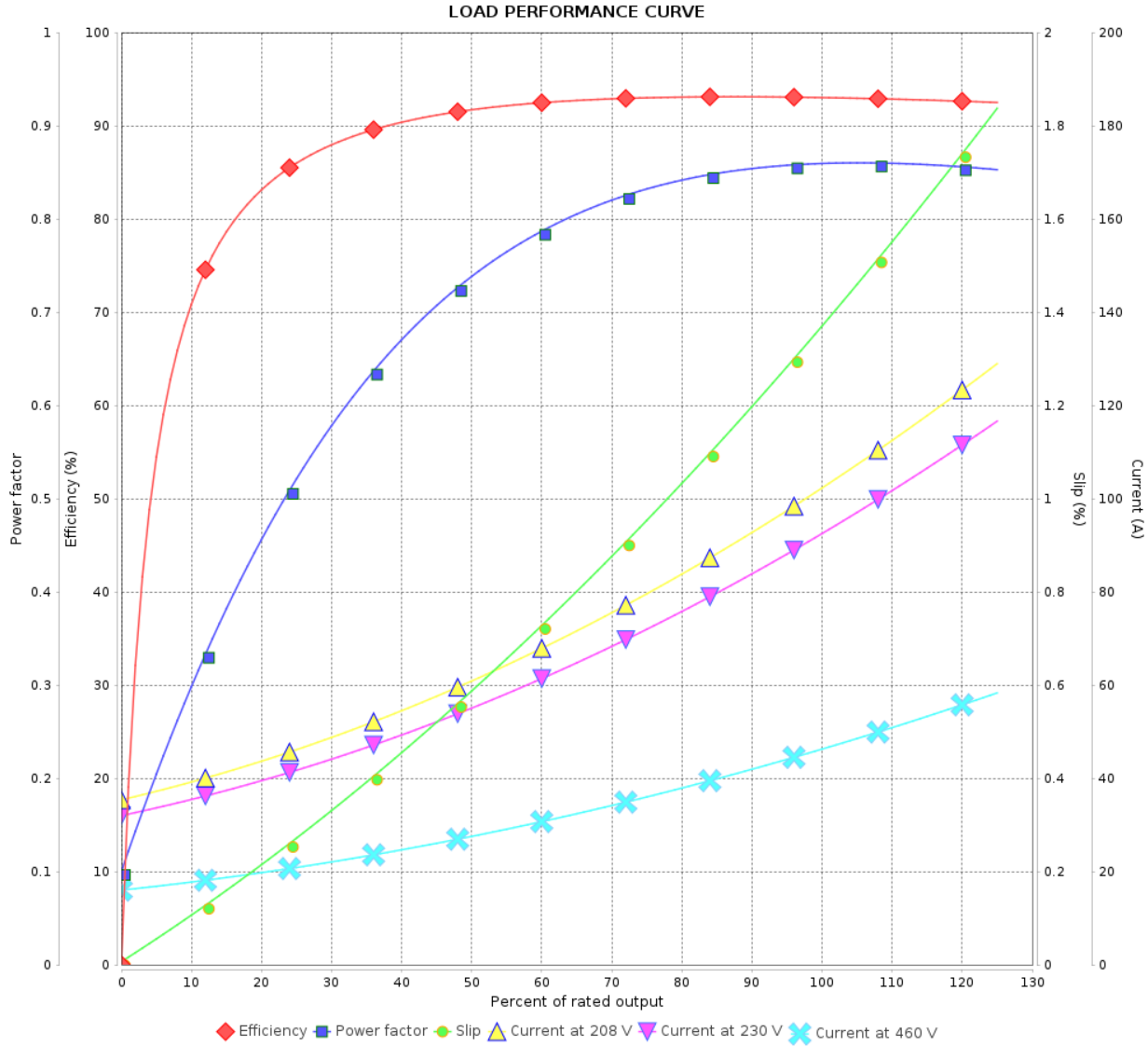
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : Close Coupled Pump NEMA Premium
Efficiency Three-Phase

Product code : 11185449



Performance : 230/460 V 60 Hz 2P

Rated current : 94.2/47.1 A
 LRC : 6.4
 Rated torque : 8.18 kgfm
 Locked rotor torque : 250 %
 Breakdown torque : 260 %
 Rated speed : 3550 rpm

Moment of inertia (J) : 0.0993 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

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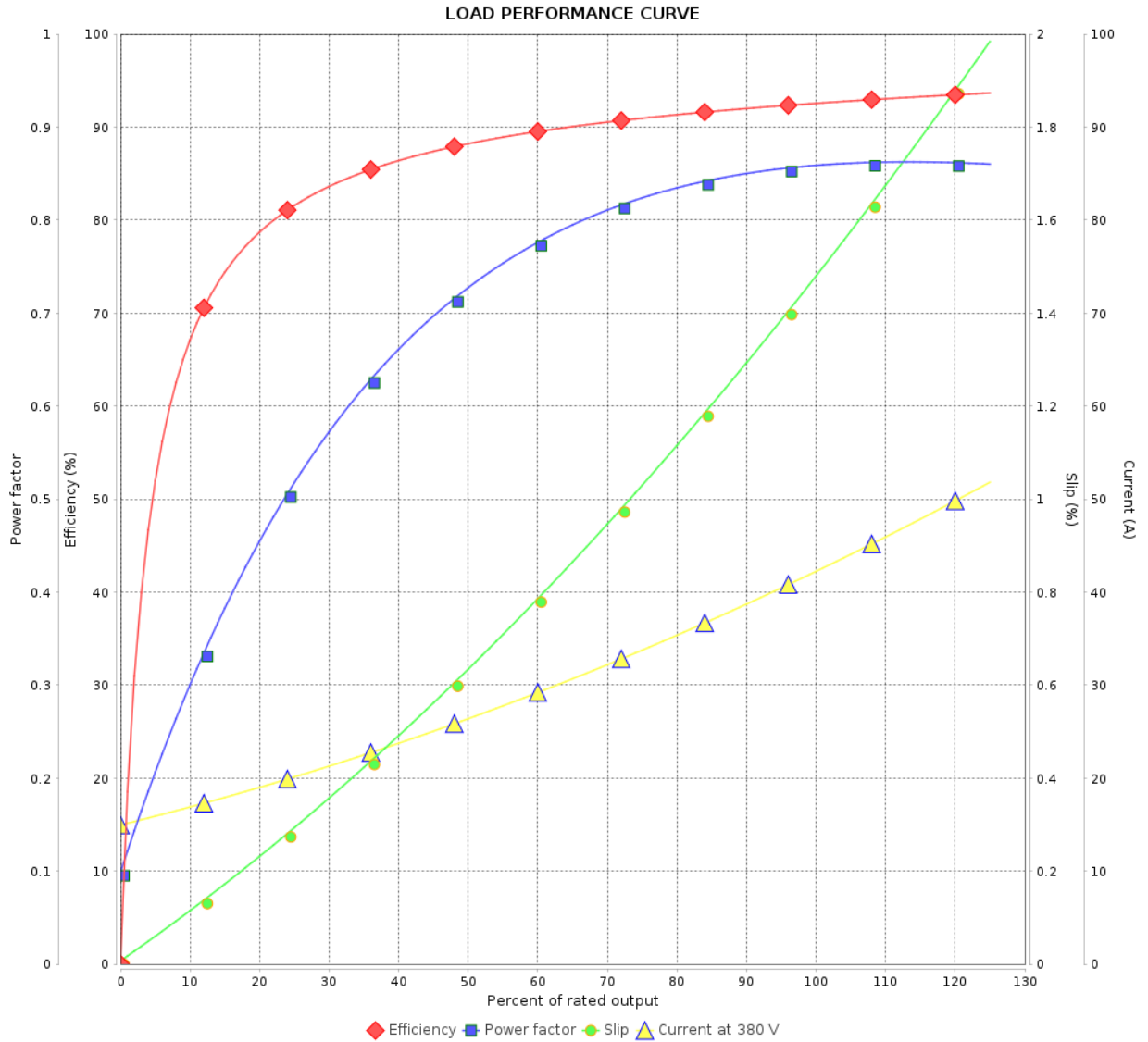
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : Close Coupled Pump NEMA Premium
Efficiency Three-Phase

Product code : 11185449



Performance : 380 V 50 Hz 2P IE3

Rated current : 41.9 A
 LRC : 6.8
 Rated torque : 7.37 kgfm
 Locked rotor torque : 270 %
 Breakdown torque : 250 %
 Rated speed : 2955 rpm

Moment of inertia (J) : 0.0993 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

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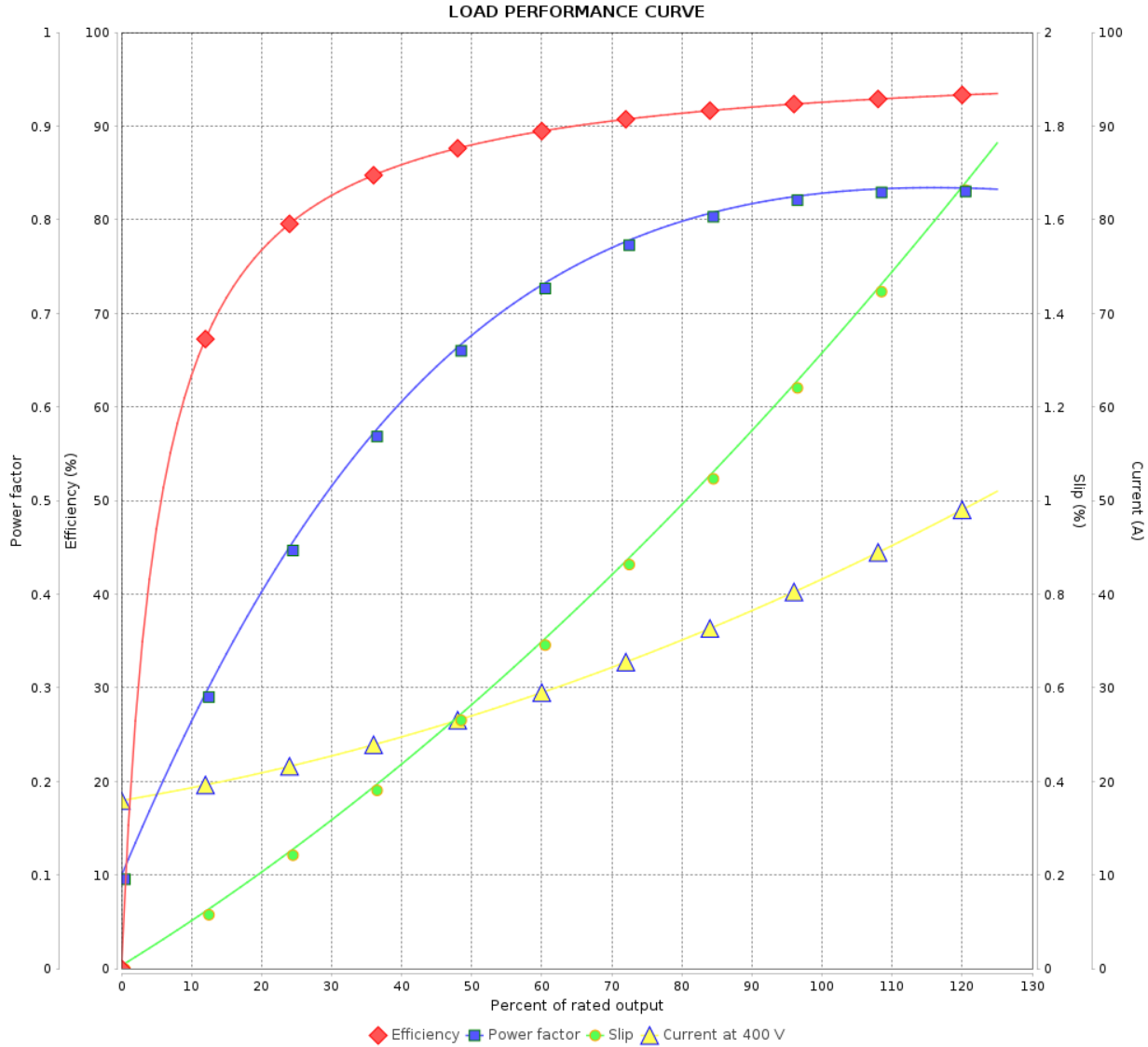
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : Close Coupled Pump NEMA Premium
Efficiency Three-Phase

Product code : 11185449



Performance : 400 V 50 Hz 2P IE3

Rated current : 41.3 A
 LRC : 7.6
 Rated torque : 7.36 kgfm
 Locked rotor torque : 280 %
 Breakdown torque : 280 %
 Rated speed : 2960 rpm

Moment of inertia (J) : 0.0993 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

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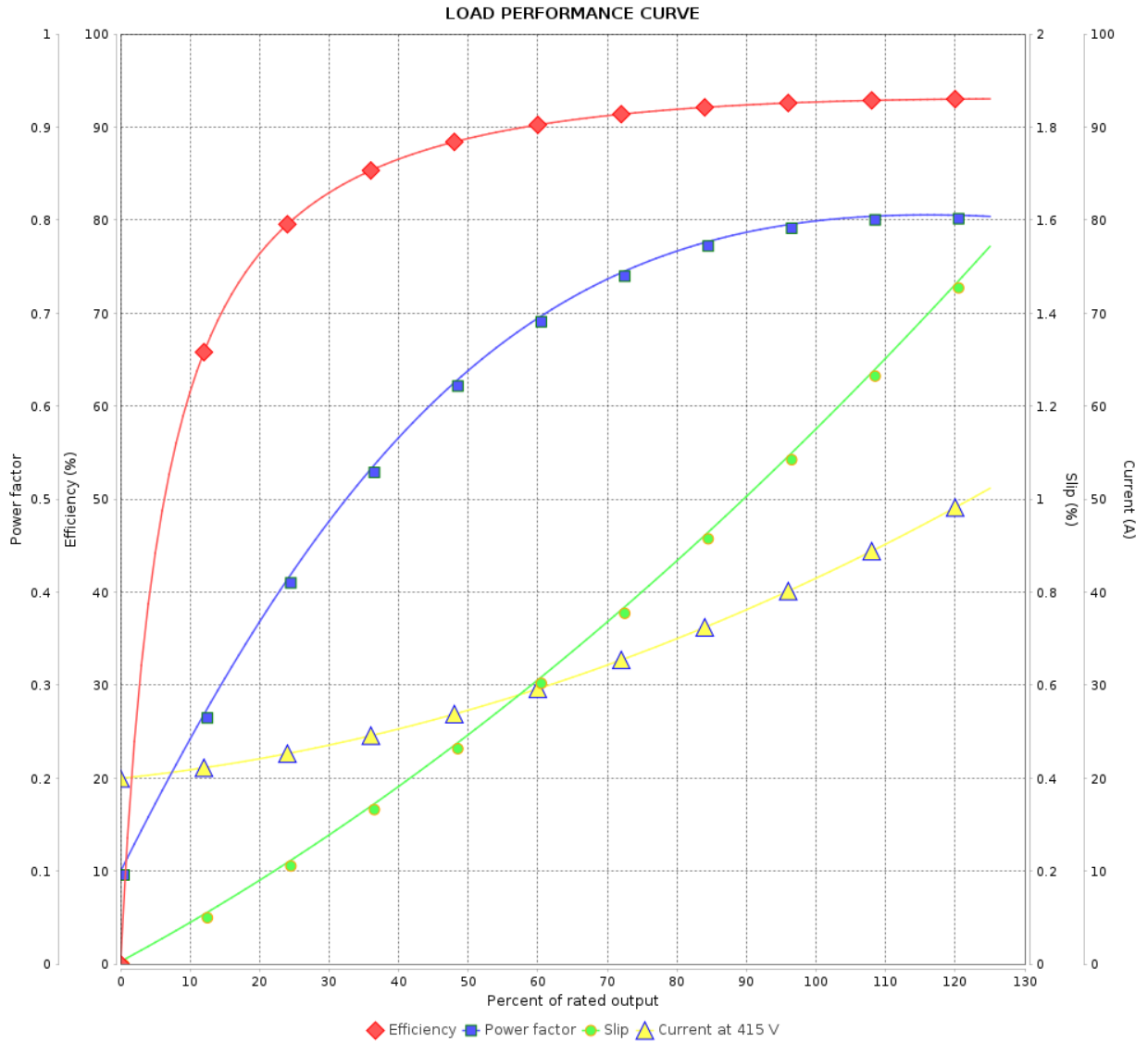
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : Close Coupled Pump NEMA Premium
Efficiency Three-Phase

Product code : 11185449



Performance : 415 V 50 Hz 2P IE3

Rated current : 41.2 A
LRC : 8.1
Rated torque : 7.34 kgfm
Locked rotor torque : 320 %
Breakdown torque : 300 %
Rated speed : 2965 rpm

Moment of inertia (J) : 0.0993 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.15
Temperature rise : 80 K
Design : B

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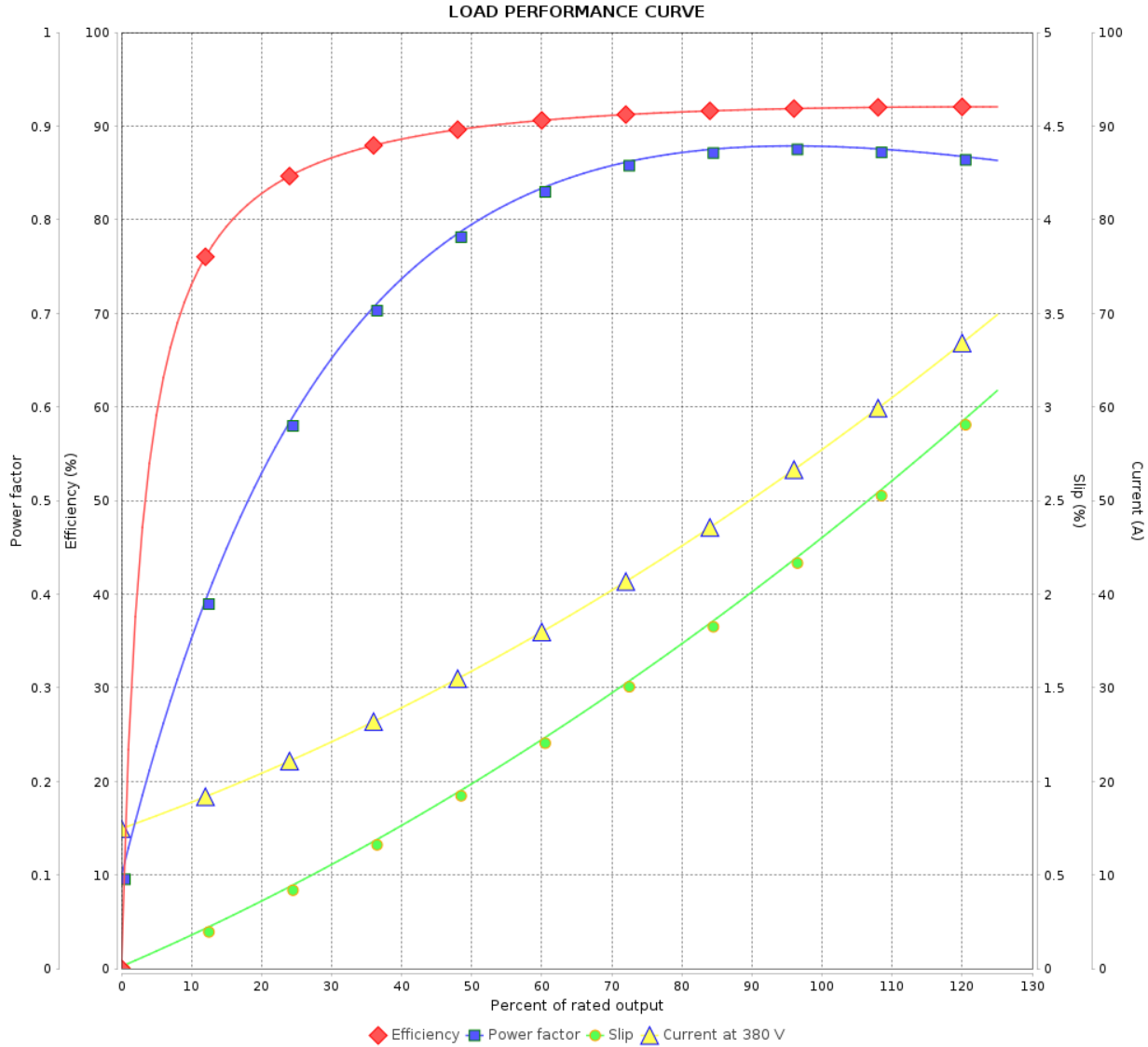
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : Close Coupled Pump NEMA Premium
Efficiency Three-Phase

Product code : 11185449



Performance : 380 V 50 Hz 2P IE2

Rated current : 56.3 A
LRC : 5.2
Rated torque : 9.91 kgfm
Locked rotor torque : 190 %
Breakdown torque : 200 %
Rated speed : 2930 rpm

Moment of inertia (J) : 0.0993 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.15
Temperature rise : 80 K
Design : B

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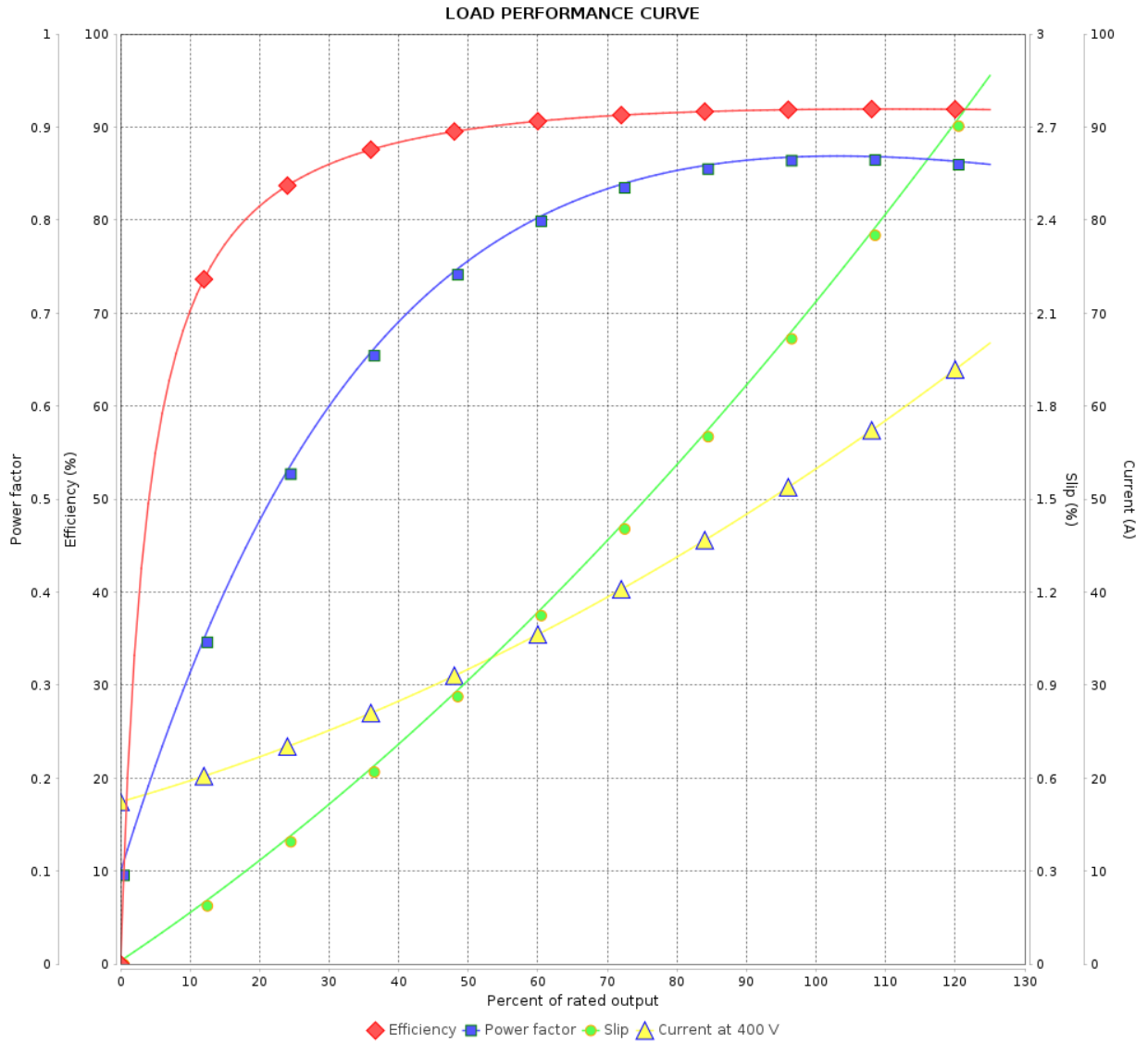
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : Close Coupled Pump NEMA Premium
Efficiency Three-Phase

Product code : 11185449



Performance : 400 V 50 Hz 2P IE2

Rated current : 54.1 A
LRC : 5.9
Rated torque : 9.89 kgfm
Locked rotor torque : 210 %
Breakdown torque : 200 %
Rated speed : 2935 rpm

Moment of inertia (J) : 0.0993 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.15
Temperature rise : 80 K
Design : B

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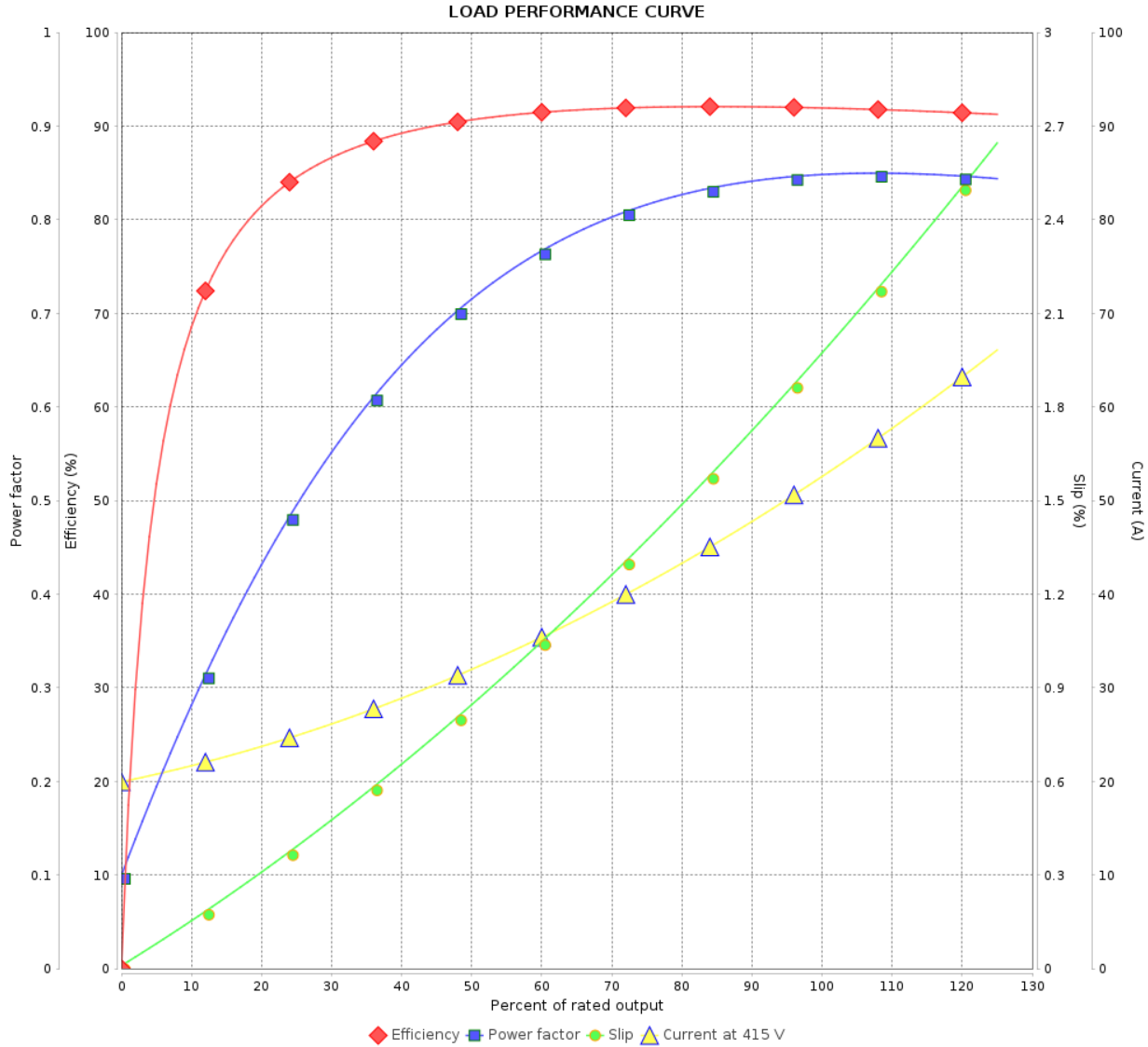
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : Close Coupled Pump NEMA Premium
Efficiency Three-Phase

Product code : 11185449



Performance : 415 V 50 Hz 2P IE2

Rated current : 53.4 A
 LRC : 6.4
 Rated torque : 9.87 kgfm
 Locked rotor torque : 229 %
 Breakdown torque : 200 %
 Rated speed : 2940 rpm

Moment of inertia (J) : 0.0993 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

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