

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : Close Coupled Pump NEMA Premium Efficiency Three-Phase Product code : 11168186

Frame	: 213/5JM	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	: 57.4 kg
Protection degree	: IP21	Moment of inertia (J)	: 0.0504 kgm ²
Design	: B		

Output [HP]	10	7.5	7.5	7.5	10	10	10
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]	24.7/12.4	11.5	11.4	11.4	15.1	14.5	14.2
L. R. Amperes [A]	161/80.4	82.9	87.5	93.2	78.7	84.3	89.6
LRC [A]	6.5x(Code H)	7.2x(Code J)	7.7x(Code K)	8.2x(Code K)	5.2x(Code F)	5.8x(Code G)	6.3x(Code H)
No load current [A]	10.9/5.45	5.50	6.00	6.50	5.50	6.00	6.50
Rated speed [RPM]	1765	1470	1475	1475	1450	1455	1460
Slip [%]	1.94	2.00	1.67	1.67	3.33	3.00	2.67
Rated torque [kgfm]	4.11	3.70	3.69	3.69	5.01	4.99	4.97
Locked rotor torque [%]	210	220	260	280	170	180	200
Breakdown torque [%]	290	290	320	360	210	229	250
Service factor	1.15	1.15	1.15	1.15	1.00	1.00	1.15
Temperature rise	105 K	105 K	105 K	105 K	105 K	105 K	105 K
Locked rotor time	10s (cold) 6s (hot)	9s (cold) 5s (hot)	9s (cold) 5s (hot)	9s (cold) 5s (hot)	9s (cold) 5s (hot)	9s (cold) 5s (hot)	9s (cold) 5s (hot)
Noise level ²	59.0 dB(A)						
Efficiency (%)	25%						
	50%	90.2	85.1	85.1	85.0	87.5	88.2
	75%	91.0	87.5	88.0	88.4	87.5	88.7
	100%	91.7	89.6	89.6	89.7	87.5	89.5
Power Factor	25%						
	50%	0.64	0.59	0.55	0.51	0.69	0.61
	75%	0.76	0.72	0.69	0.65	0.80	0.75
	100%	0.83	0.81	0.78	0.75	0.86	0.82

	<u>Drive end</u>	<u>Non drive end</u>	Foundation loads
Bearing type	: 6209 ZZ	6206 ZZ	Max. traction : 201 kgf
Sealing	: Without	Without	Max. compression : 258 kgf
	Bearing Seal	Bearing Seal	
Lubrication interval	: -	-	
Lubricant amount	: -	-	
Lubricant type	: Mobil Polyrex EM		

Notes
USABLE @208V 27.0A SF 1.15 SFA 31.0A

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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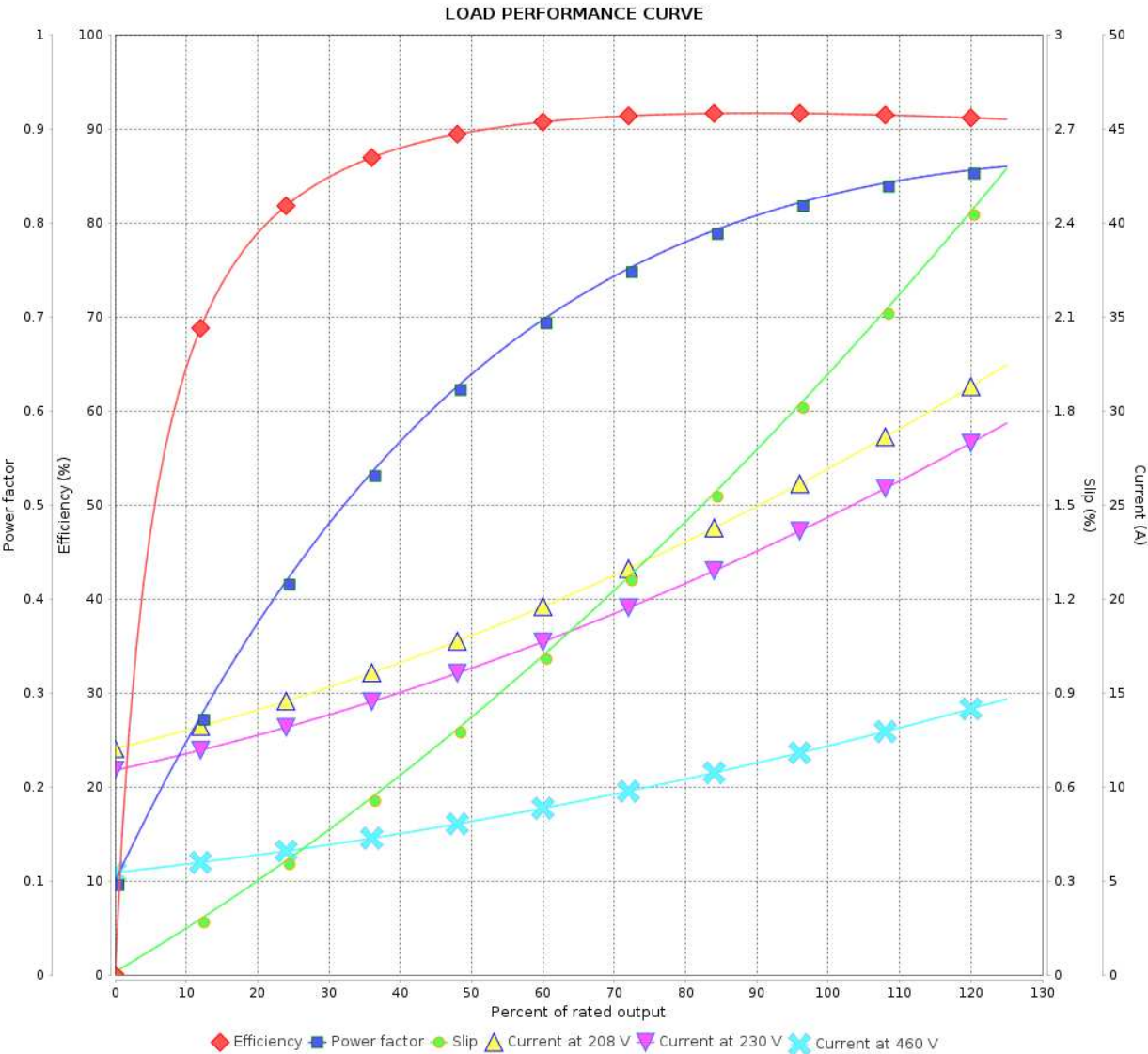
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Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : Close Coupled Pump NEMA Premium Efficiency Three-Phase Product code : 11168186



Performance : 230/460 V 60 Hz 4P

Rated current : 24.7/12.4 A
LRC : 6.5
Rated torque : 4.11 kgfm
Locked rotor torque : 210 %
Breakdown torque : 290 %
Rated speed : 1765 rpm

Moment of inertia (J) : 0.0504 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.15
Temperature rise : 105 K
Design : B

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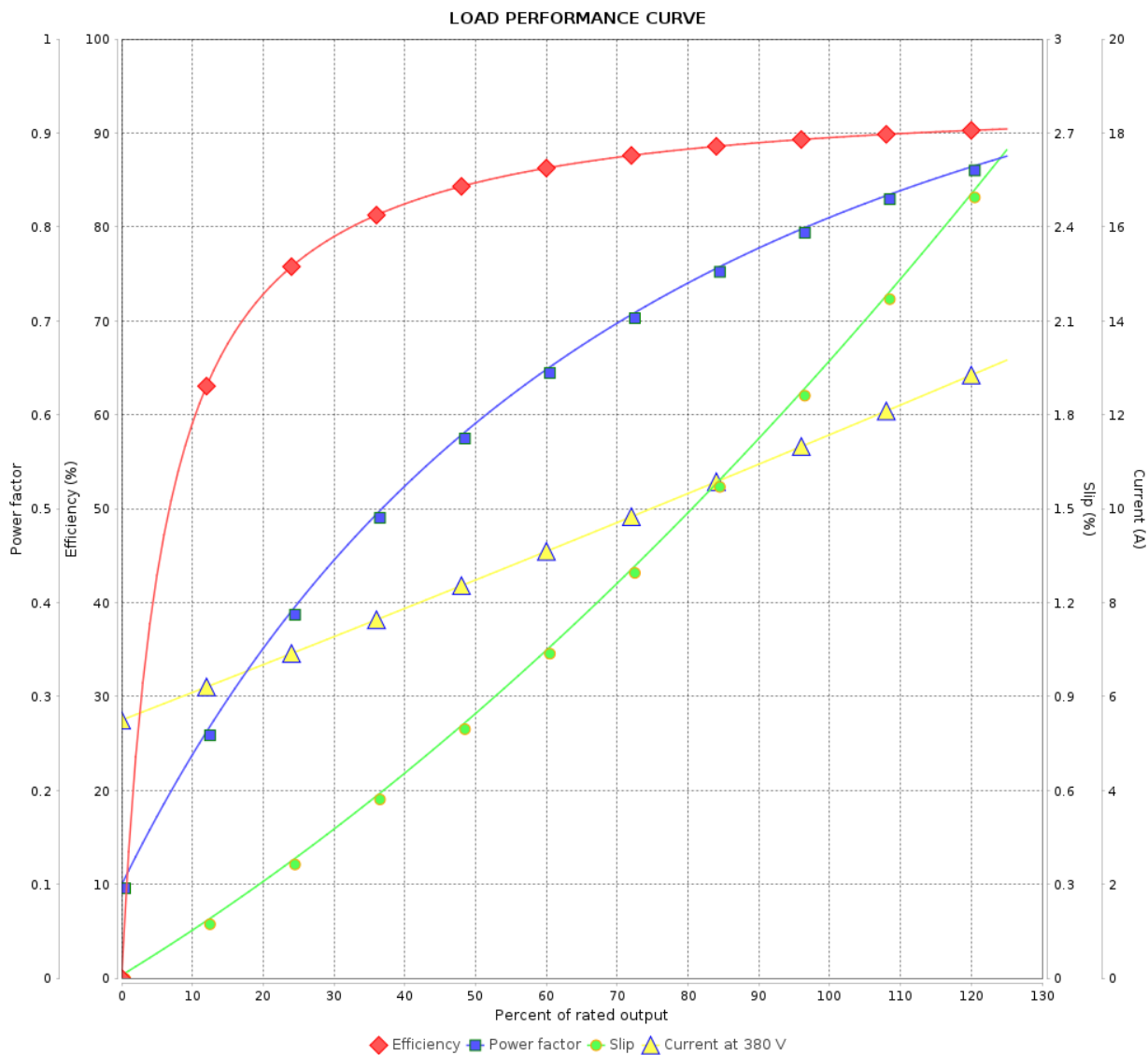
Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 11168186



Performance : 380 V 50 Hz 4P IE3

Rated current : 11.5 A
LRC : 7.2
Rated torque : 3.70 kgfm
Locked rotor torque : 220 %
Breakdown torque : 290 %
Rated speed : 1470 rpm

Moment of inertia (J) : 0.0504 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.15
Temperature rise : 105 K
Design : B

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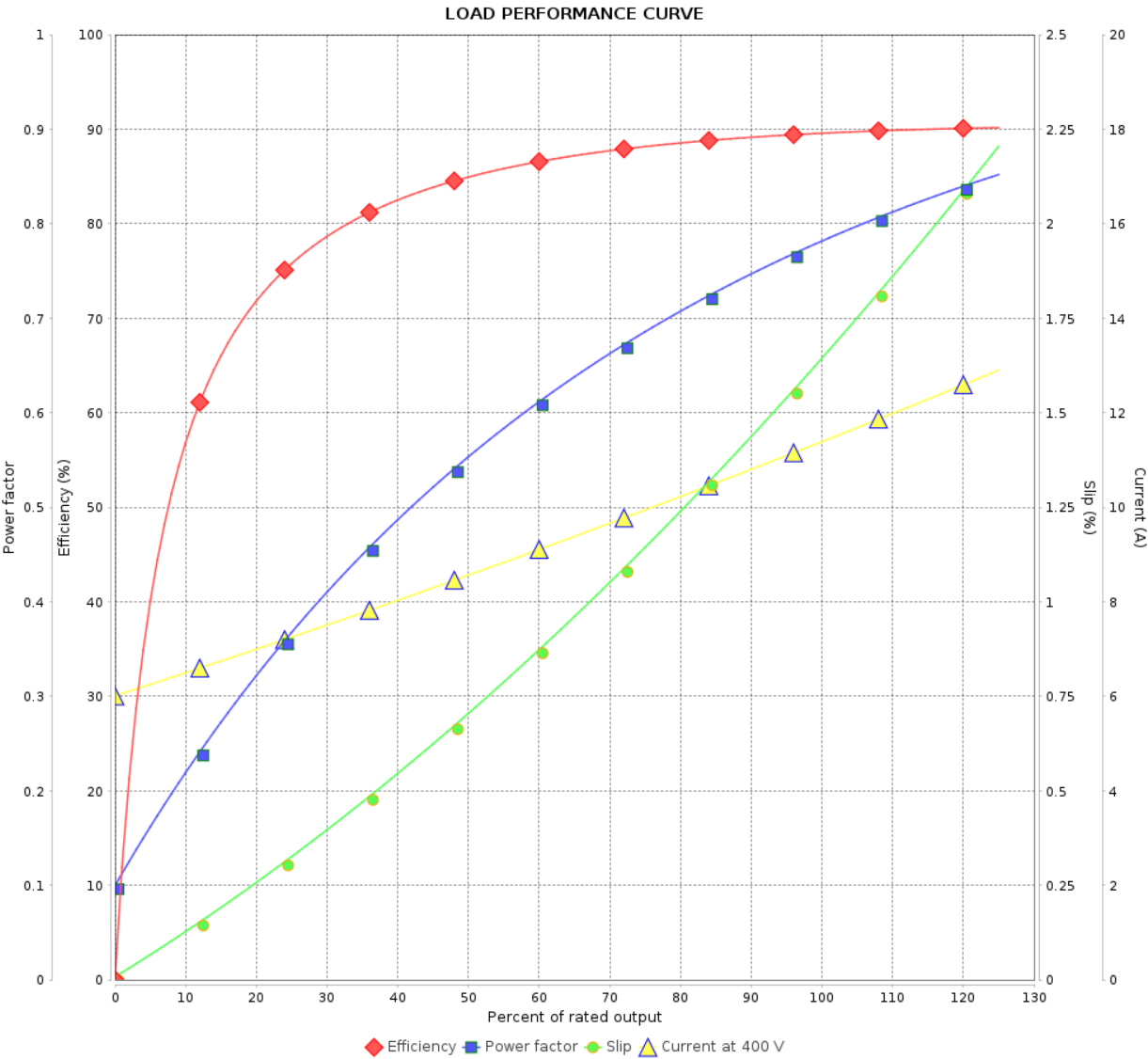
Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 11168186



Performance : 400 V 50 Hz 4P IE3

Rated current : 11.4 A
LRC : 7.7
Rated torque : 3.69 kgfm
Locked rotor torque : 260 %
Breakdown torque : 320 %
Rated speed : 1475 rpm

Moment of inertia (J) : 0.0504 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.15
Temperature rise : 105 K
Design : B

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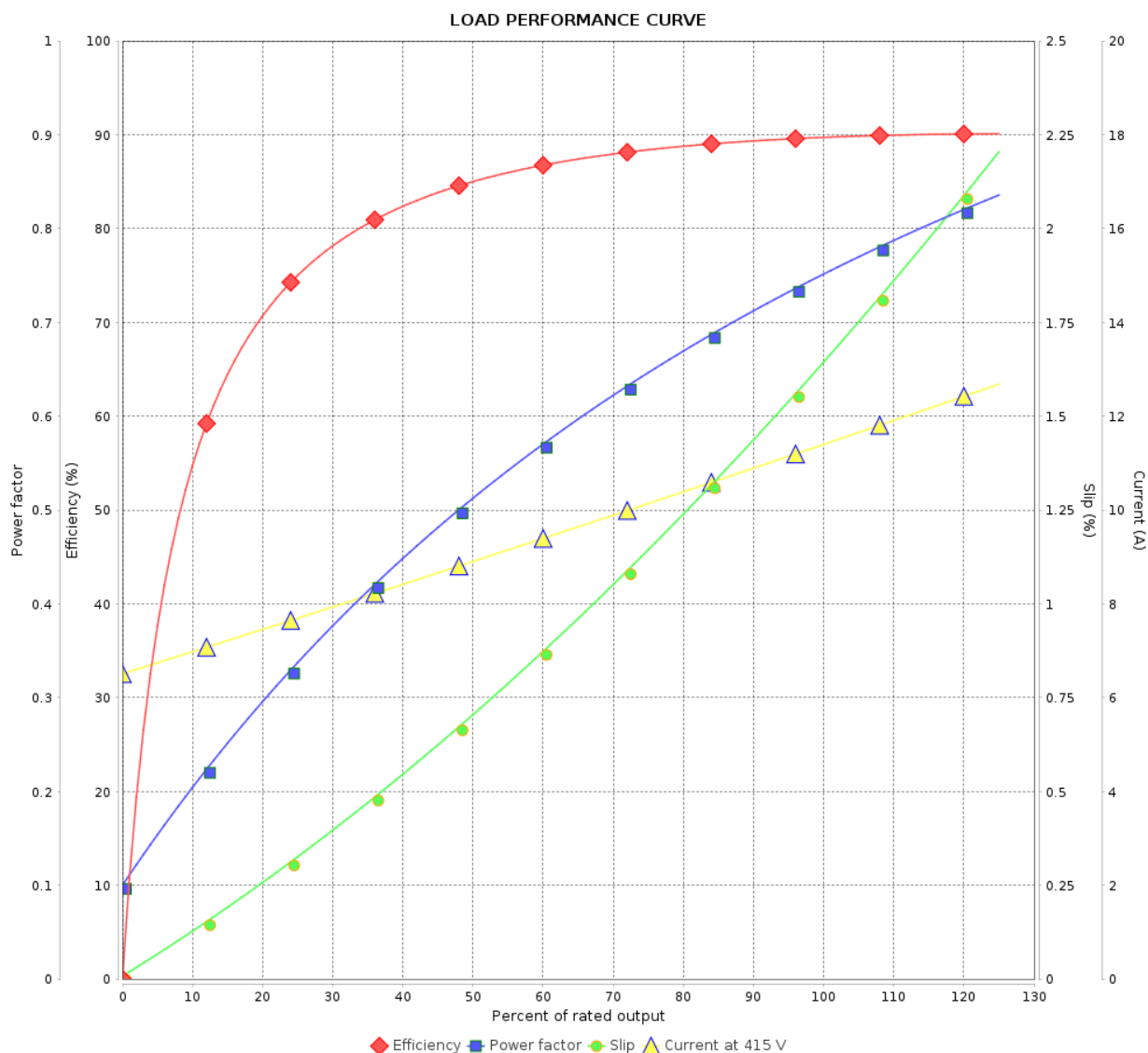
Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 11168186



Performance : 415 V 50 Hz 4P IE3

Rated current : 11.4 A
LRC : 8.2
Rated torque : 3.69 kgfm
Locked rotor torque : 280 %
Breakdown torque : 360 %
Rated speed : 1475 rpm

Moment of inertia (J) : 0.0504 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.15
Temperature rise : 105 K
Design : B

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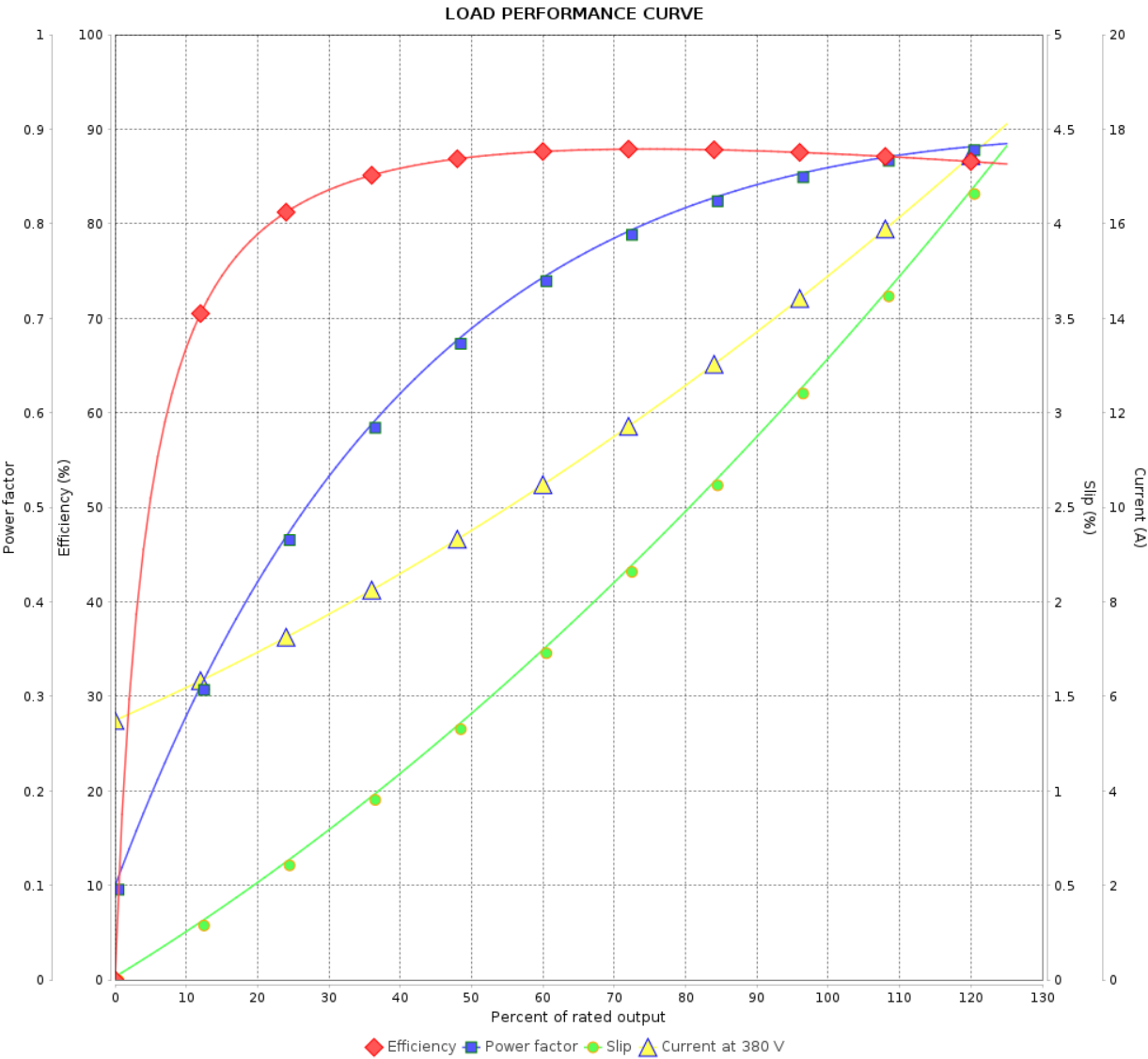
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Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : Close Coupled Pump NEMA Premium Efficiency Three-Phase Product code : 11168186



Performance : 380 V 50 Hz 4P IE1

Rated current	: 15.1 A	Moment of inertia (J)	: 0.0504 kgm ²
LRC	: 5.2	Duty cycle	: Cont.(S1)
Rated torque	: 5.01 kgfm	Insulation class	: F
Locked rotor torque	: 170 %	Service factor	: 1.00
Breakdown torque	: 210 %	Temperature rise	: 105 K
Rated speed	: 1450 rpm	Design	: B

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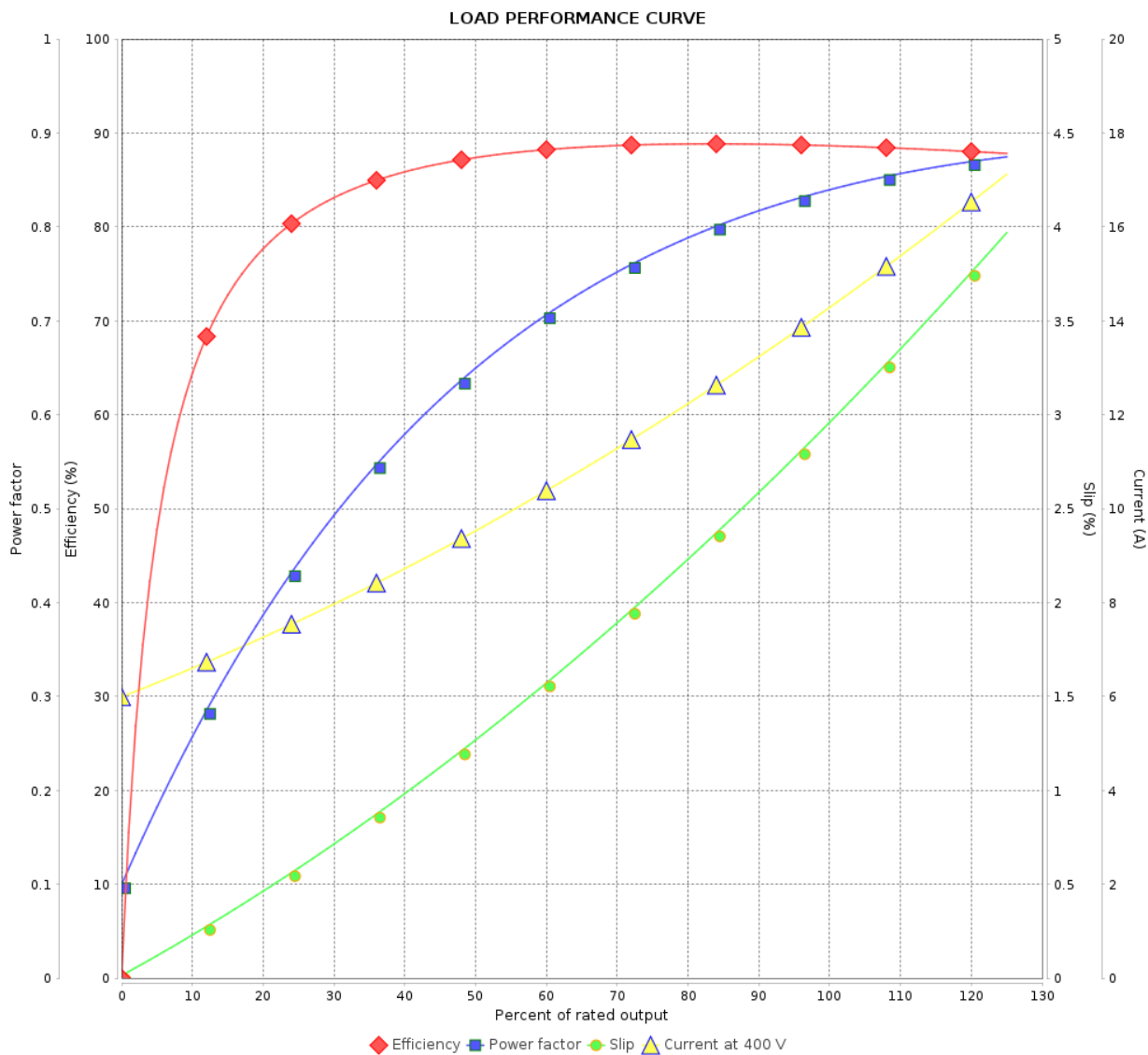
Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 11168186



Performance : 400 V 50 Hz 4P IE2

Rated current : 14.5 A
LRC : 5.8
Rated torque : 4.99 kgfm
Locked rotor torque : 180 %
Breakdown torque : 229 %
Rated speed : 1455 rpm

Moment of inertia (J) : 0.0504 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.00
Temperature rise : 105 K
Design : B

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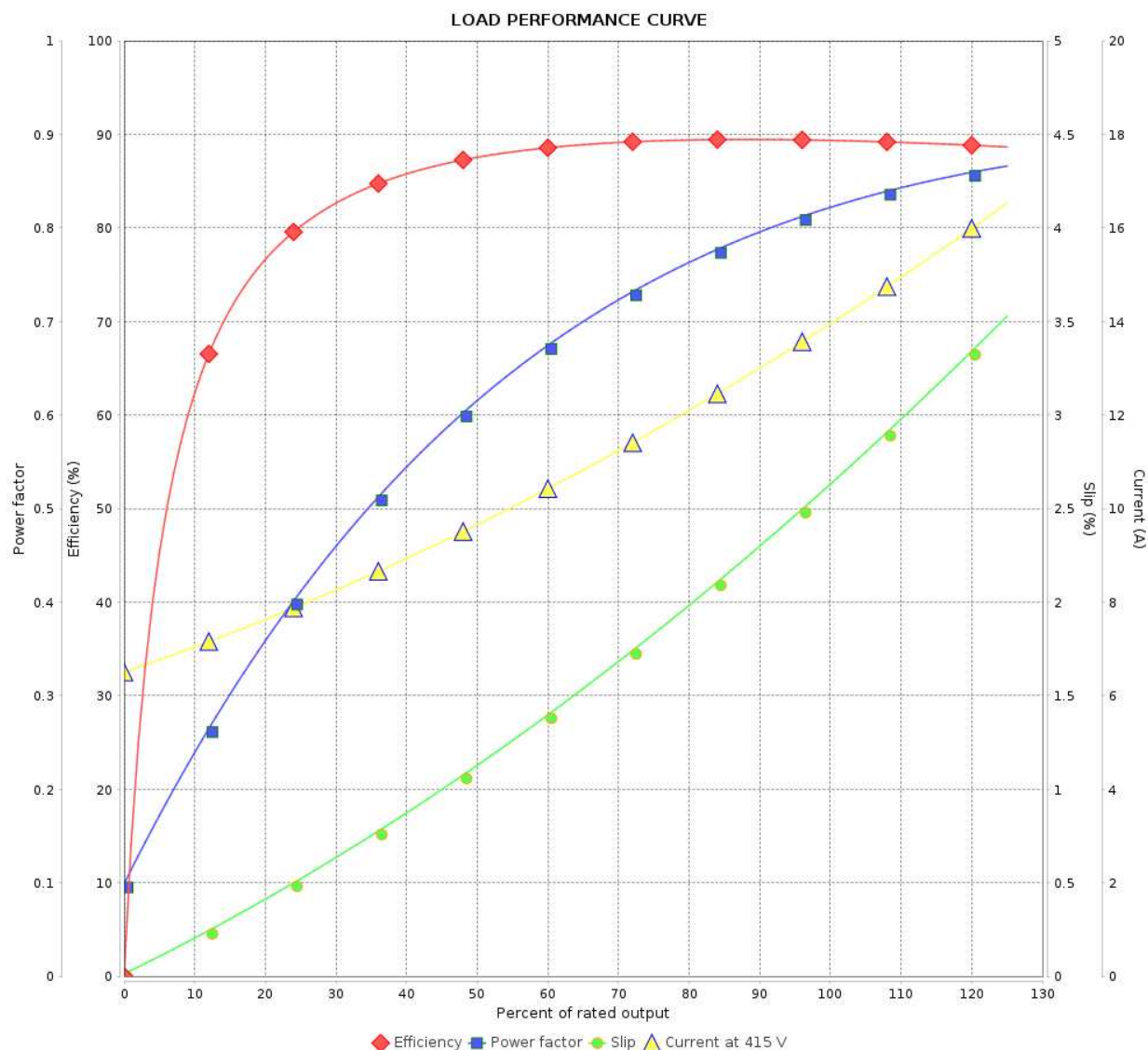
Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 11168186



Performance : 415 V 50 Hz 4P IE2

Rated current : 14.2 A
LRC : 6.3
Rated torque : 4.97 kgfm
Locked rotor torque : 200 %
Breakdown torque : 250 %
Rated speed : 1460 rpm

Moment of inertia (J) : 0.0504 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.15
Temperature rise : 105 K
Design : B

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