

# DATA SHEET



## Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : Close Coupled Pump NEMA Premium Efficiency Three-Phase      Product code : 11064401

Frame	: 256JM	Cooling method	: IC01 - ODP
Insulation class	: F	Mounting	: F-1
Duty cycle	: Cont.(S1)	Rotation <sup>1</sup>	: Both (CW and CCW)
Ambient temperature	: -20°C to +40°C	Starting method	: Direct On Line
Altitude	: 1000 m.a.s.l.	Approx. weight <sup>2</sup>	: 110 kg
Protection degree	: IP23	Moment of inertia (J)	: 0.0456 kgm <sup>2</sup>
Design	: B		

Output [HP]	25	20	20	20	25	25	25	
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]	59.6/29.8	28.5	28.0	27.7	35.7	34.2	33.3	
L. R. Amperes [A]	387/194	188	202	216	189	202	216	
LRC [A]	6.5x(Code G)	6.6x(Code G)	7.2x(Code H)	7.8x(Code J)	5.3x(Code E)	5.9x(Code F)	6.5x(Code G)	
No load current [A]	22.0/11.0	9.90	11.3	12.6	9.90	11.3	12.6	
Rated speed [RPM]	3530	2925	2935	2940	2905	2915	2925	
Slip [%]	1.94	2.50	2.17	2.00	3.17	2.83	2.50	
Rated torque [kgfm]	5.14	4.96	4.95	4.94	6.25	6.22	6.20	
Locked rotor torque [%]	200	200	229	250	160	180	200	
Breakdown torque [%]	260	300	340	380	240	270	300	
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	16s (cold) 9s (hot)	14s (cold) 8s (hot)	12s (cold) 7s (hot)	12s (cold) 7s (hot)	14s (cold) 8s (hot)	12s (cold) 7s (hot)	12s (cold) 7s (hot)	
Noise level <sup>2</sup>	67.0 dB(A)							
Efficiency (%)	25%	90.8	84.8	84.2	85.5	88.2	87.0	88.6
	50%	91.0	87.4	86.8	87.5	88.5	88.5	89.5
	75%	91.7	89.1	89.0	89.9	89.5	89.5	90.2
	100%	91.7	91.9	91.9	91.9	89.5	90.9	91.0
Power Factor	25%	0.47	0.49	0.44	0.39	0.55	0.50	0.45
	50%	0.73	0.72	0.68	0.63	0.78	0.74	0.70
	75%	0.82	0.82	0.79	0.75	0.86	0.83	0.80
	100%	0.85	0.87	0.84	0.82	0.88	0.86	0.85

	<u>Drive end</u>	<u>Non drive end</u>	Foundation loads
Bearing type	: 6309 Z C3	6209 Z C3	Max. traction : 238 kgf
Sealing	: Without	Without	Max. compression : 347 kgf
	<u>Bearing Seal</u>	<u>Bearing Seal</u>	
Lubrication interval	: 20000 h	20000 h	
Lubricant amount	: 13 g	9 g	
Lubricant type	: Mobil Polyrex EM		

Notes  
USABLE @208V 65.9A SF 1.15 SFA 75.8A

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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# LOAD PERFORMANCE CURVE

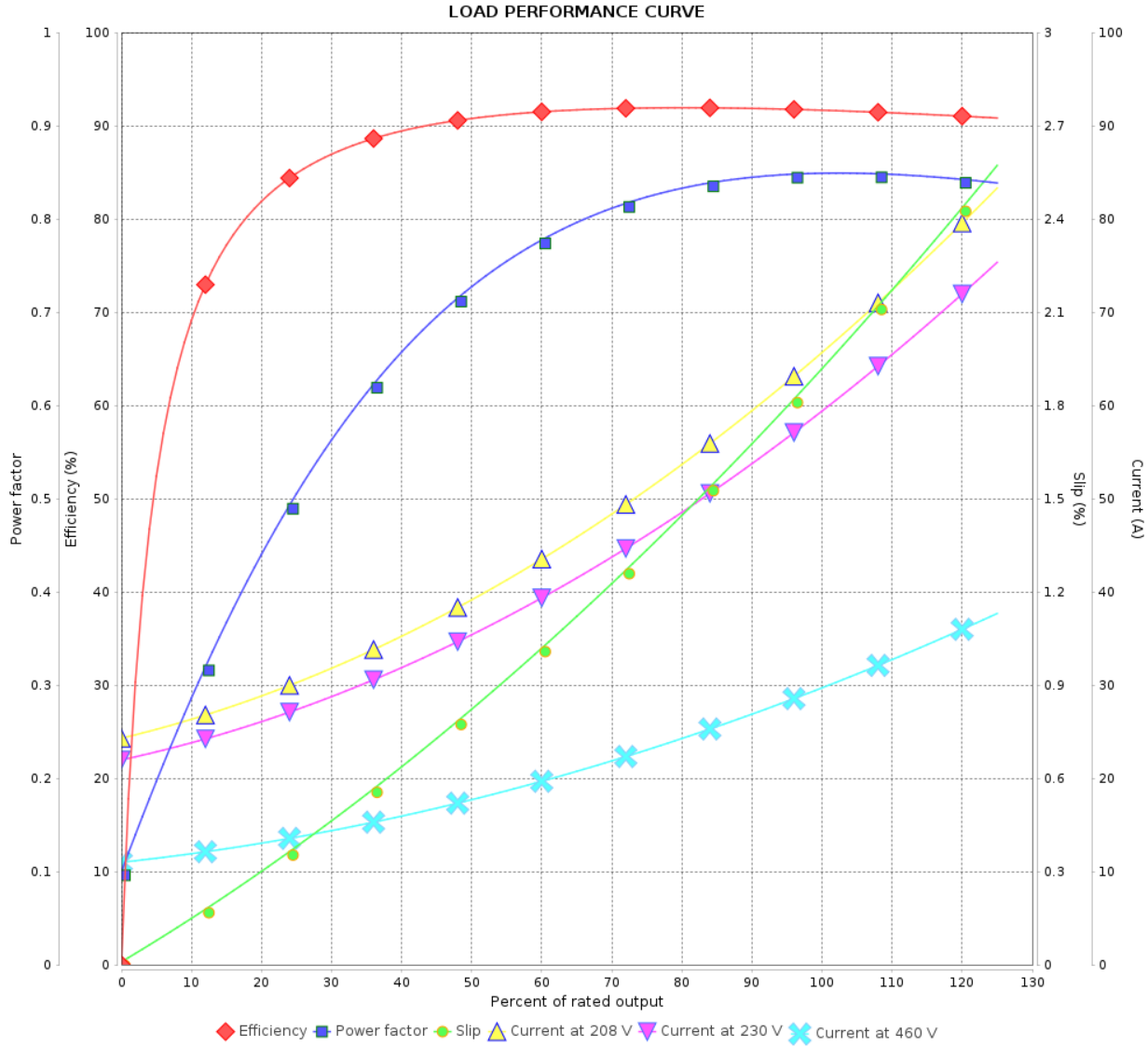
Three Phase Induction Motor - Squirrel Cage



Customer : \_\_\_\_\_

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

Product code : 11064401



Performance : 230/460 V 60 Hz 2P

Rated current : 59.6/29.8 A  
 LRC : 6.5  
 Rated torque : 5.14 kgfm  
 Locked rotor torque : 200 %  
 Breakdown torque : 260 %  
 Rated speed : 3530 rpm

Moment of inertia (J) : 0.0456 kgm<sup>2</sup>  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.15  
 Temperature rise : 80 K  
 Design : B

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# LOAD PERFORMANCE CURVE

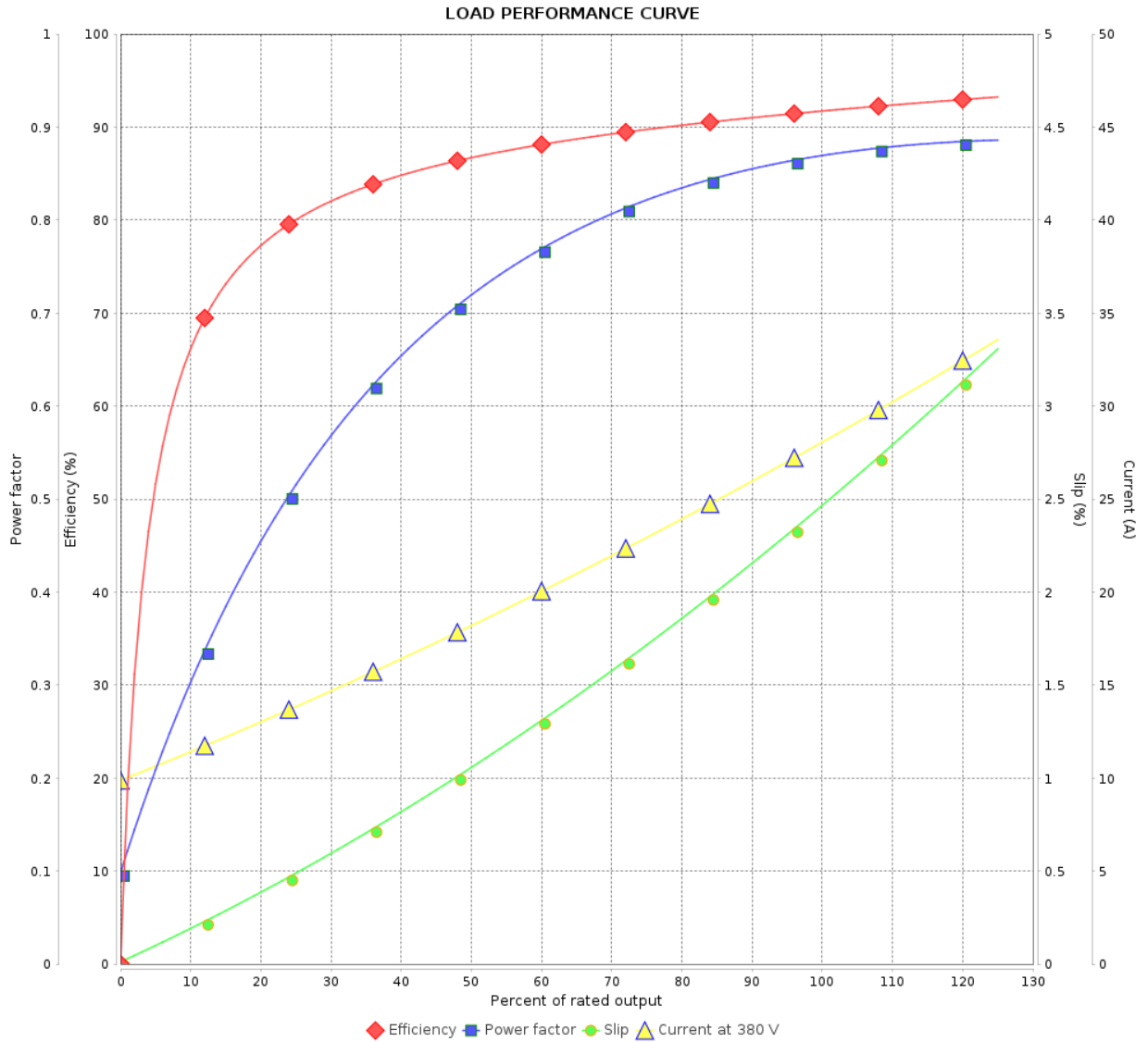
## Three Phase Induction Motor - Squirrel Cage



Customer : \_\_\_\_\_

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

Product code : 11064401



Performance : 380 V 50 Hz 2P IE3

Rated current : 28.5 A  
 LRC : 6.6  
 Rated torque : 4.96 kgfm  
 Locked rotor torque : 200 %  
 Breakdown torque : 300 %  
 Rated speed : 2925 rpm

Moment of inertia (J) : 0.0456 kgm<sup>2</sup>  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.15  
 Temperature rise : 80 K  
 Design : B

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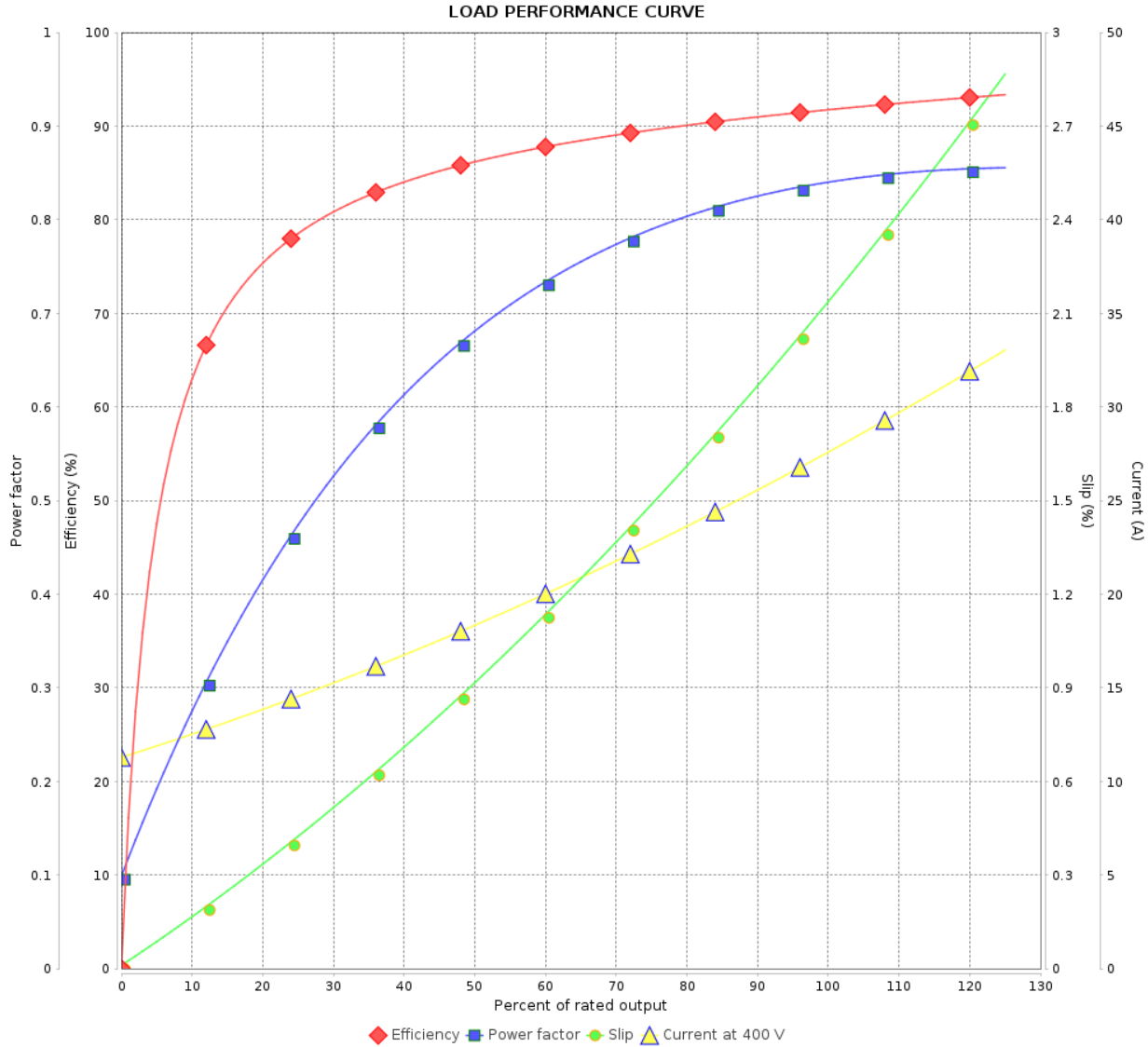
Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 11064401



Performance : 400 V 50 Hz 2P IE3

Rated current : 28.0 A  
LRC : 7.2  
Rated torque : 4.95 kgfm  
Locked rotor torque : 229 %  
Breakdown torque : 340 %  
Rated speed : 2935 rpm

Moment of inertia (J) : 0.0456 kgm<sup>2</sup>  
Duty cycle : Cont.(S1)  
Insulation class : F  
Service factor : 1.15  
Temperature rise : 80 K  
Design : B

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# LOAD PERFORMANCE CURVE

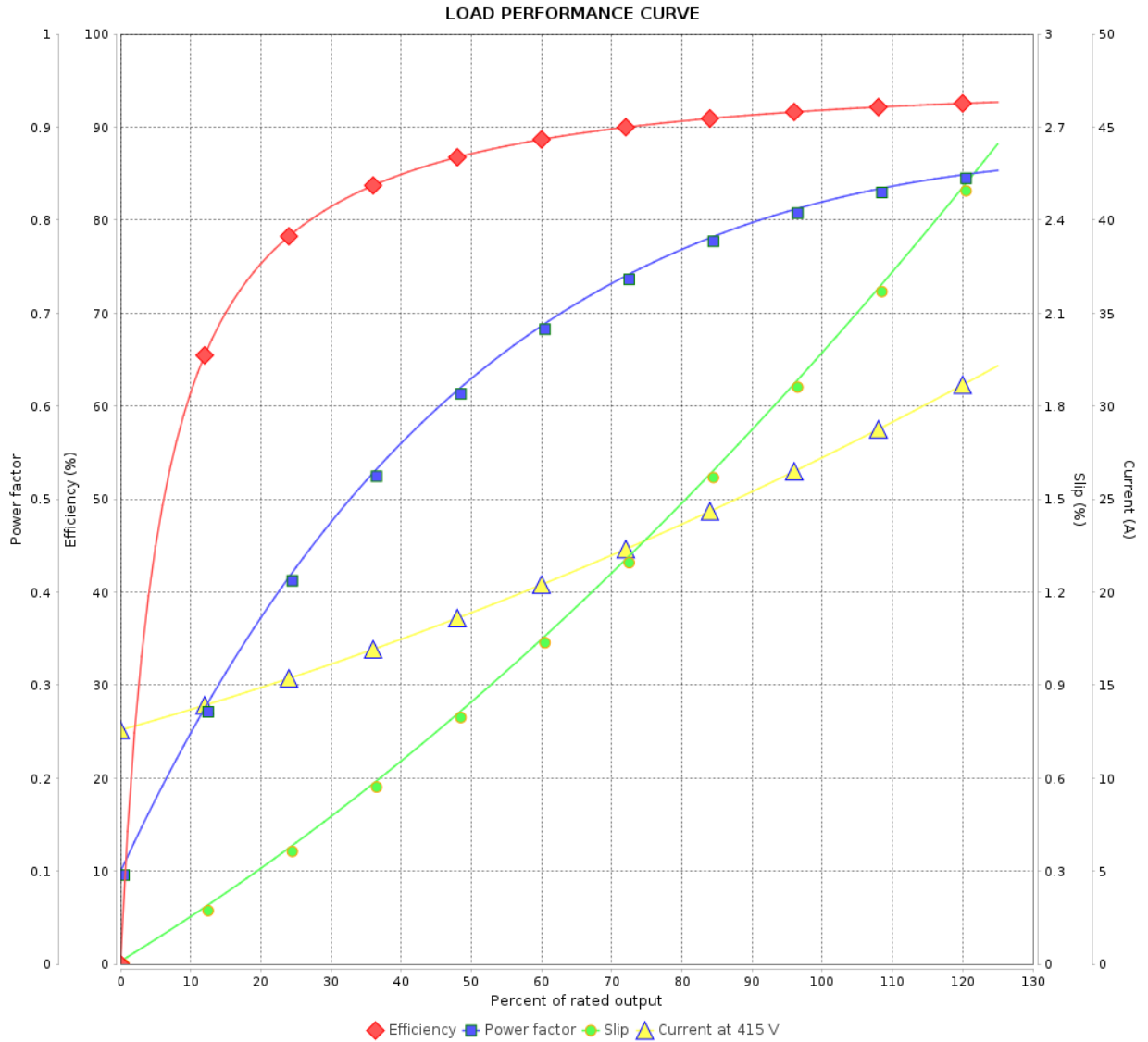
Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 11064401



Performance : 415 V 50 Hz 2P IE3

Rated current : 27.7 A  
 LRC : 7.8  
 Rated torque : 4.94 kgfm  
 Locked rotor torque : 250 %  
 Breakdown torque : 380 %  
 Rated speed : 2940 rpm

Moment of inertia (J) : 0.0456 kgm<sup>2</sup>  
 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

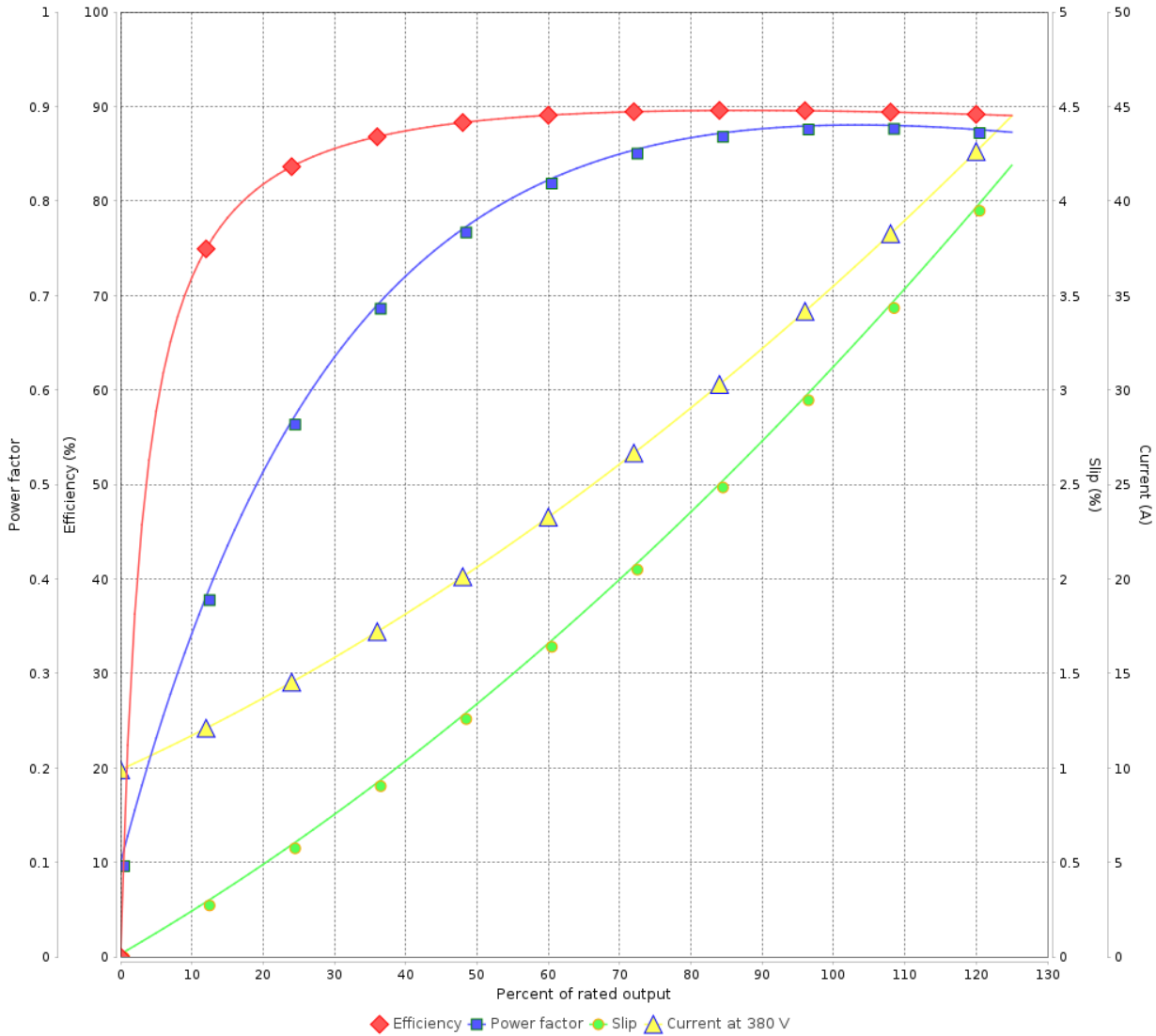


Customer :

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

Product code : 11064401

LOAD PERFORMANCE CURVE



Performance : 380 V 50 Hz 2P IE1

Rated current : 35.7 A  
LRC : 5.3  
Rated torque : 6.25 kgfm  
Locked rotor torque : 160 %  
Breakdown torque : 240 %  
Rated speed : 2905 rpm

Moment of inertia (J) : 0.0456 kgm<sup>2</sup>  
Duty cycle : Cont.(S1)  
Insulation class : F  
Service factor : 1.15  
Temperature rise : 80 K  
Design : B

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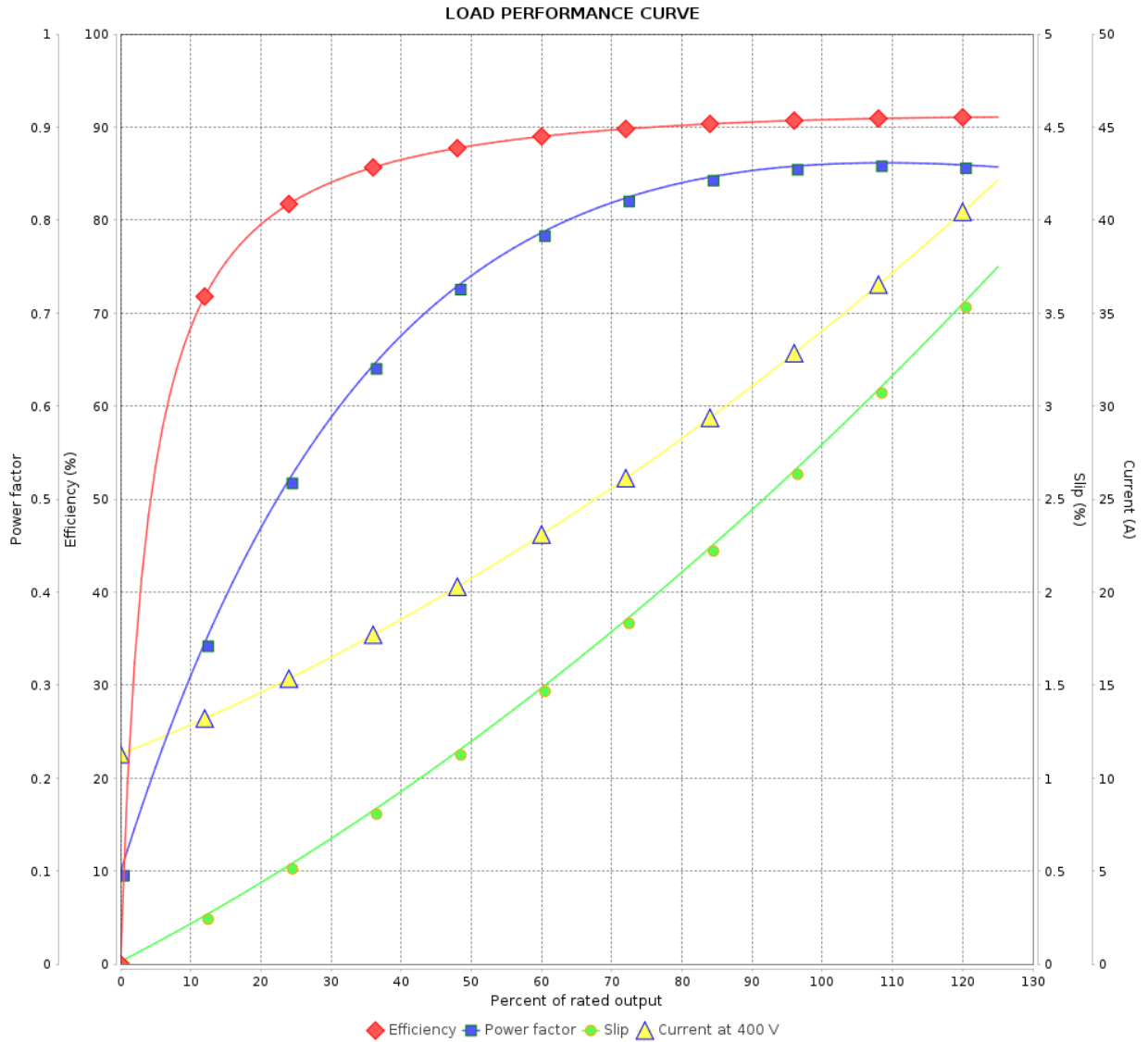
Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 11064401



Performance : 400 V 50 Hz 2P IE2

Rated current : 34.2 A  
LRC : 5.9  
Rated torque : 6.22 kgfm  
Locked rotor torque : 180 %  
Breakdown torque : 270 %  
Rated speed : 2915 rpm

Moment of inertia (J) : 0.0456 kgm<sup>2</sup>  
Duty cycle : Cont.(S1)  
Insulation class : F  
Service factor : 1.15  
Temperature rise : 80 K  
Design : B

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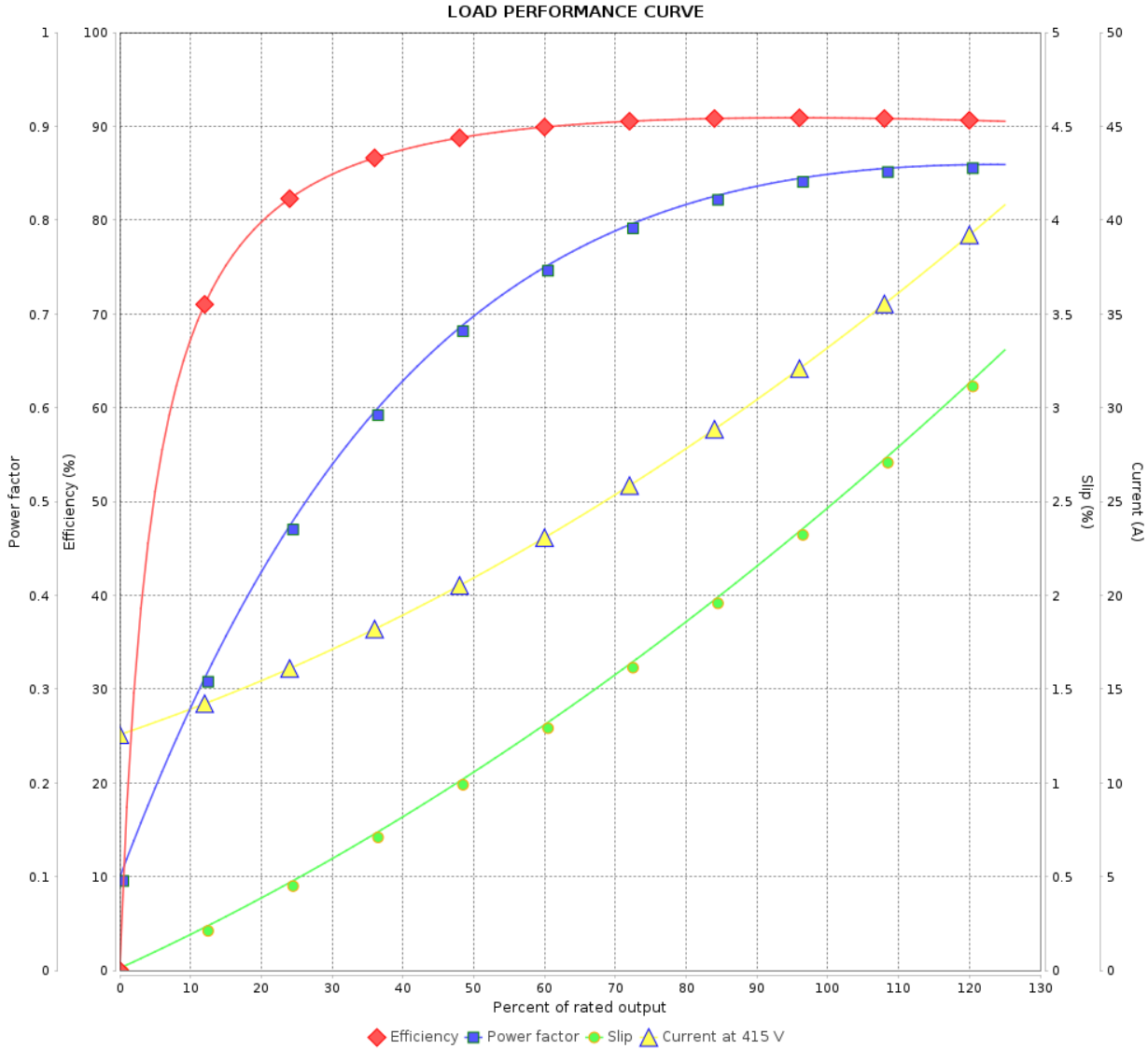
Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 11064401



Performance : 415 V 50 Hz 2P IE2

Rated current : 33.3 A  
 LRC : 6.5  
 Rated torque : 6.20 kgfm  
 Locked rotor torque : 200 %  
 Breakdown torque : 300 %  
 Rated speed : 2925 rpm

Moment of inertia (J) : 0.0456 kgm<sup>2</sup>  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.15  
 Temperature rise : 80 K  
 Design : B

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