

# DATA SHEET



## Three Phase Induction Motor - Squirrel Cage

Customer :							
Product line	: ODP NEMA Premium Efficiency Three-Phase	Product code :	12070712				
Frame	: 404/5TS	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>3</sup>	: 465 kg				
Protection degree	: IP23	Moment of inertia (J)	: 0.5023 kgm <sup>2</sup>				
Design	: B						
Output [HP]	150	125	125	125	150	150	150
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]	324/162	158	150	146	197	188	183
L. R. Amperes [A]	2138/1069	948	1035	1095	985	1072	1135
LRC [A]	6.6x(Code G)	6.0x(Code E)	6.9x(Code G)	7.5x(Code G)	5.0x(Code D)	5.7x(Code E)	6.2x(Code F)
No load current [A]	64.0/32.0	29.0	31.0	34.0	29.0	31.0	34.0
Rated speed [RPM]	3555	2950	2955	2960	2940	2945	2950
Slip [%]	1.25	1.67	1.50	1.33	2.00	1.83	1.67
Rated torque [kgfm]	30.6	30.8	30.7	30.6	37.0	37.0	36.9
Locked rotor torque [%]	190	200	220	229	170	180	190
Breakdown torque [%]	250	240	250	260	200	210	220
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	18s (cold) 10s (hot)	18s (cold) 10s (hot)	16s (cold) 9s (hot)	14s (cold) 8s (hot)	18s (cold) 10s (hot)	16s (cold) 9s (hot)	14s (cold) 8s (hot)
Noise level <sup>2</sup>	84.0 dB(A)						
Efficiency (%)	25%						
	50%	94.5	92.4	92.8	93.2	93.0	93.6
	75%	94.5	93.1	93.4	93.7	93.0	93.6
	100%	94.5	95.0	95.0	95.2	93.3	93.0
Power Factor	25%						
	50%	0.86	0.85	0.83	0.82	0.89	0.87
	75%	0.89	0.90	0.89	0.88	0.90	0.89
	100%	0.90	0.91	0.91	0.90	0.91	0.90
Bearing type	: Drive end : 6314 C3	Non drive end : 6314 C3	Foundation loads				
Sealing	: Without	Without	Max. traction : 566 kgf				
	Bearing Seal Bearing Seal		Max. compression : 1031 kgf				
Lubrication interval	: 14418 h	14418 h					
Lubricant amount	: 27 g	27 g					
Lubricant type	: Mobil Polyrex EM						
Notes USABLE @208V 356A SF 1.15 SFA 409A							
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

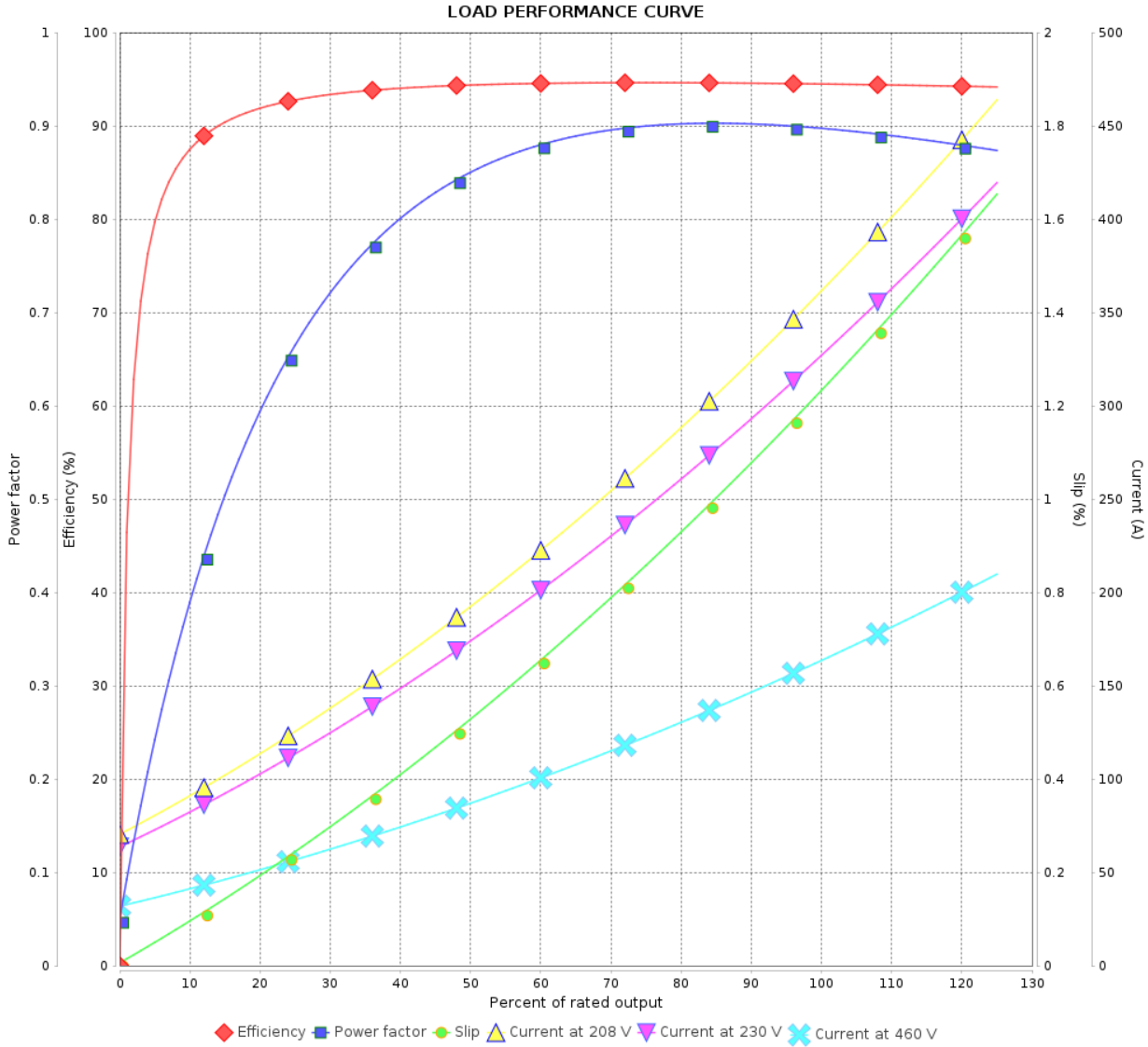
Three Phase Induction Motor - Squirrel Cage



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

Product line : ODP NEMA Premium Efficiency Three-Phase

Product code : 12070712



Performance : 230/460 V 60 Hz 2P

Rated current : 324/162 A  
 LRC : 6.6  
 Rated torque : 30.6 kgfm  
 Locked rotor torque : 190 %  
 Breakdown torque : 250 %  
 Rated speed : 3555 rpm

Moment of inertia (J) : 0.5023 kgm<sup>2</sup>  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.15  
 Temperature rise : 105 K  
 Design : B

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# LOAD PERFORMANCE CURVE

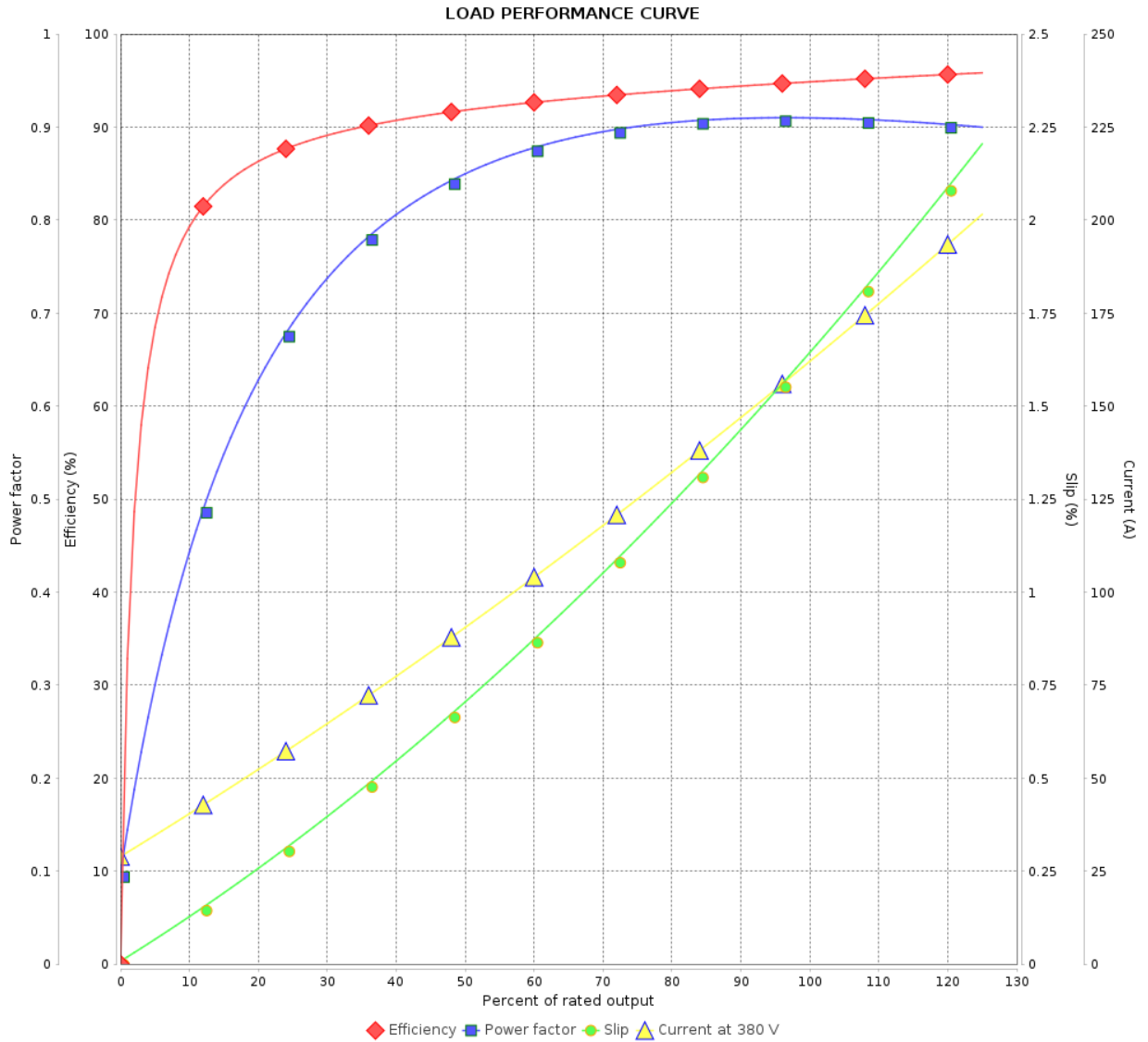
## Three Phase Induction Motor - Squirrel Cage



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

Product line : ODP NEMA Premium Efficiency Three-Phase

Product code : 12070712



Performance : 380 V 50 Hz 2P IE3

Rated current : 158 A  
 LRC : 6.0  
 Rated torque : 30.8 kgfm  
 Locked rotor torque : 200 %  
 Breakdown torque : 240 %  
 Rated speed : 2950 rpm

Moment of inertia (J) : 0.5023 kgm<sup>2</sup>  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.15  
 Temperature rise : 105 K  
 Design : B

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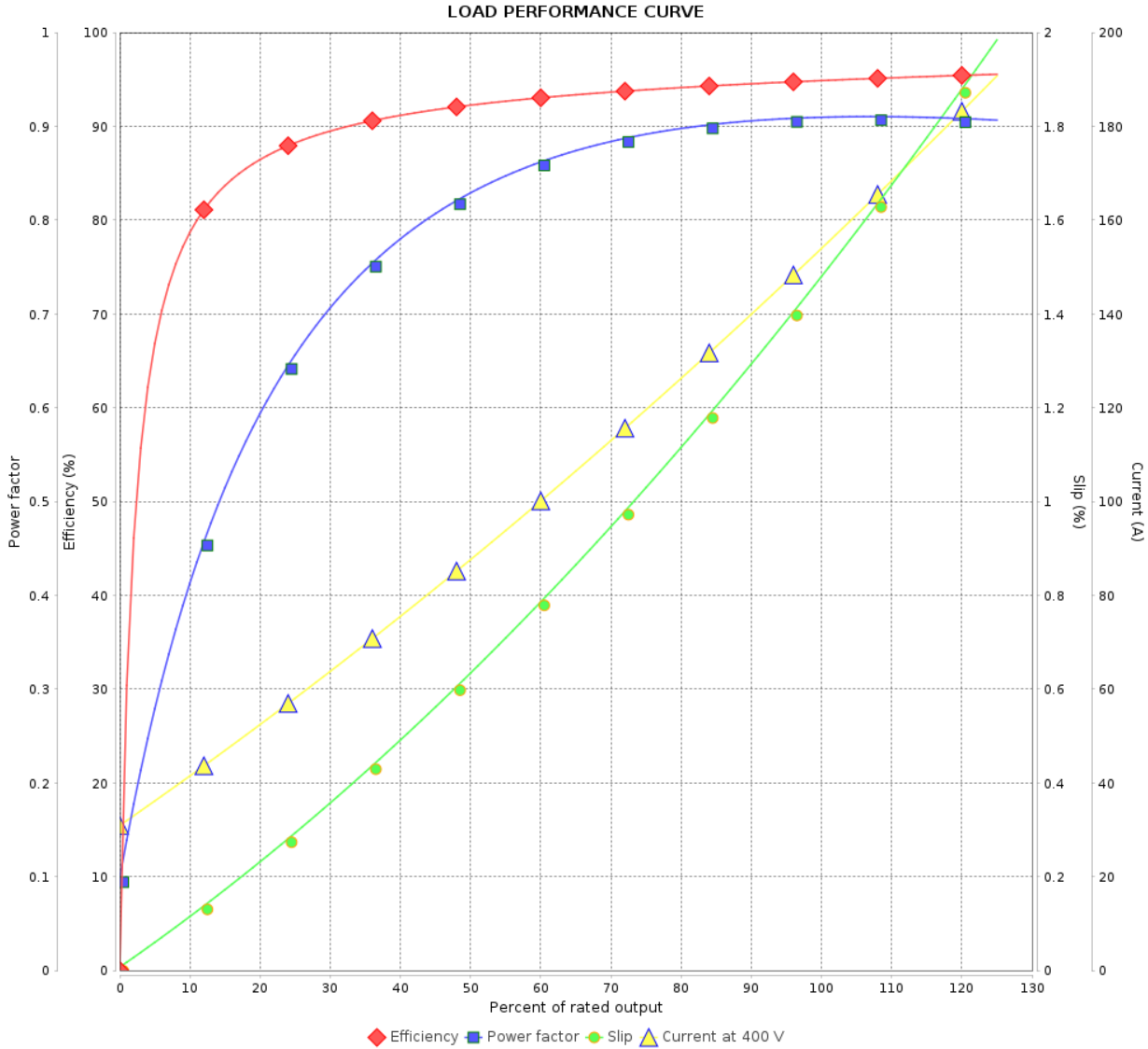
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : ODP NEMA Premium Efficiency Three-Phase

Product code : 12070712



Performance : 400 V 50 Hz 2P IE3

Rated current : 150 A  
 LRC : 6.9  
 Rated torque : 30.7 kgfm  
 Locked rotor torque : 220 %  
 Breakdown torque : 250 %  
 Rated speed : 2955 rpm

Moment of inertia (J) : 0.5023 kgm<sup>2</sup>  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.15  
 Temperature rise : 105 K  
 Design : B

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# LOAD PERFORMANCE CURVE

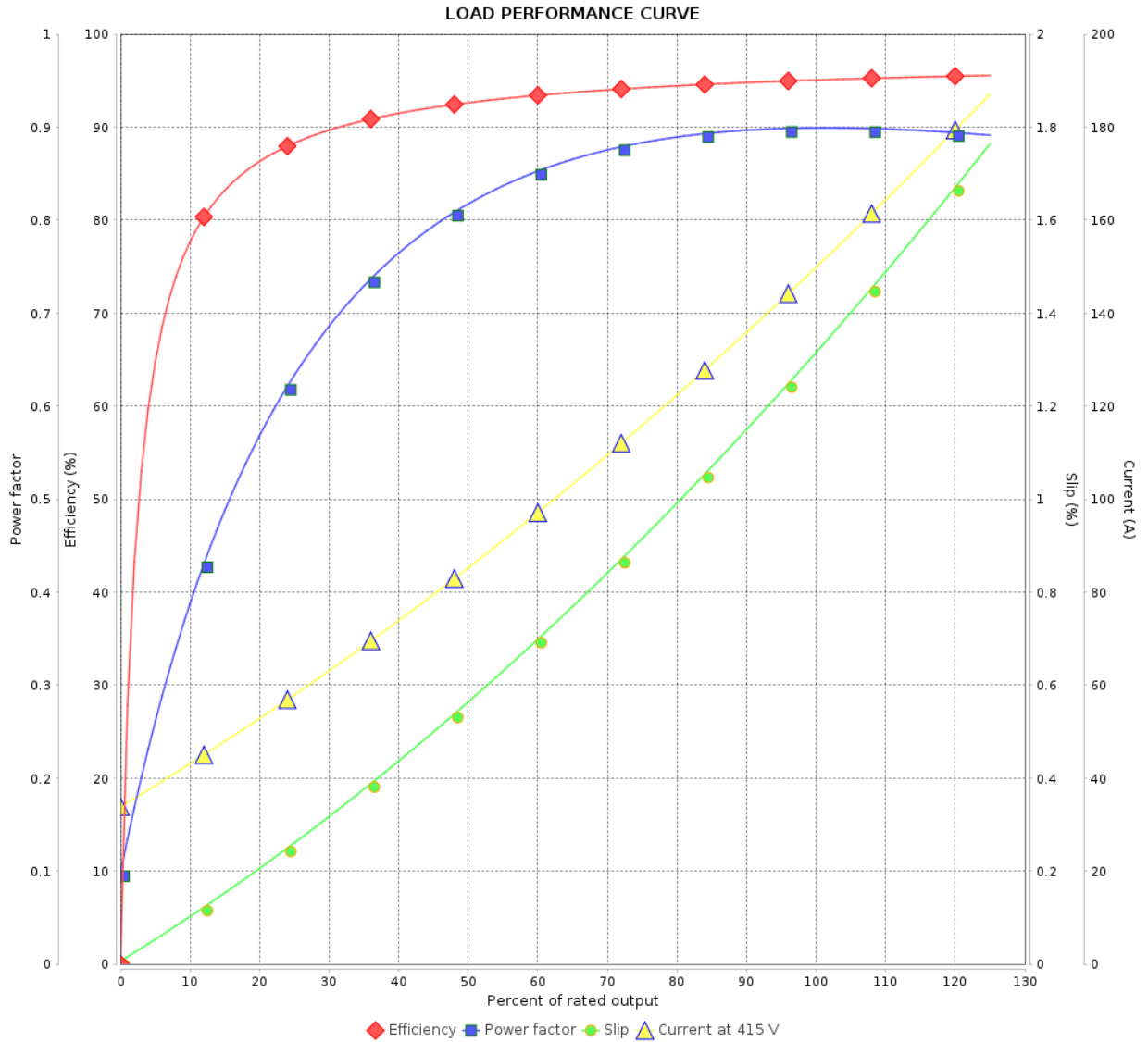
## Three Phase Induction Motor - Squirrel Cage



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

Product line : ODP NEMA Premium Efficiency Three-Phase

Product code : 12070712



Performance : 415 V 50 Hz 2P IE3

Rated current : 146 A  
 LRC : 7.5  
 Rated torque : 30.6 kgfm  
 Locked rotor torque : 229 %  
 Breakdown torque : 260 %  
 Rated speed : 2960 rpm

Moment of inertia (J) : 0.5023 kgm<sup>2</sup>  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.15  
 Temperature rise : 105 K  
 Design : B

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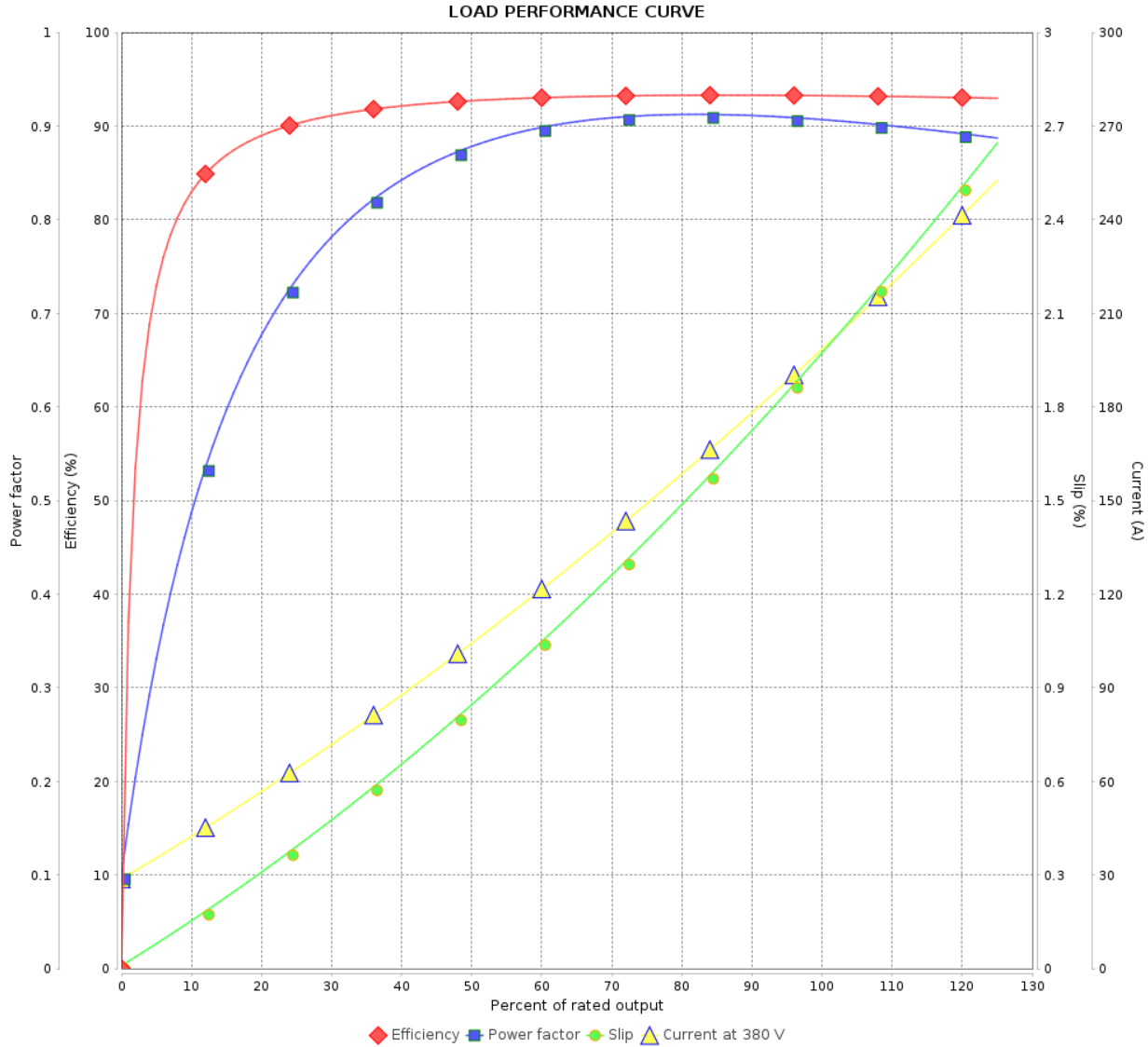
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : ODP NEMA Premium Efficiency Three-Phase

Product code : 12070712



Performance : 380 V 50 Hz 2P IE1

Rated current : 197 A  
 LRC : 5.0  
 Rated torque : 37.0 kgfm  
 Locked rotor torque : 170 %  
 Breakdown torque : 200 %  
 Rated speed : 2940 rpm

Moment of inertia (J) : 0.5023 kgm<sup>2</sup>  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.00  
 Temperature rise : 105 K  
 Design : B

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# LOAD PERFORMANCE CURVE

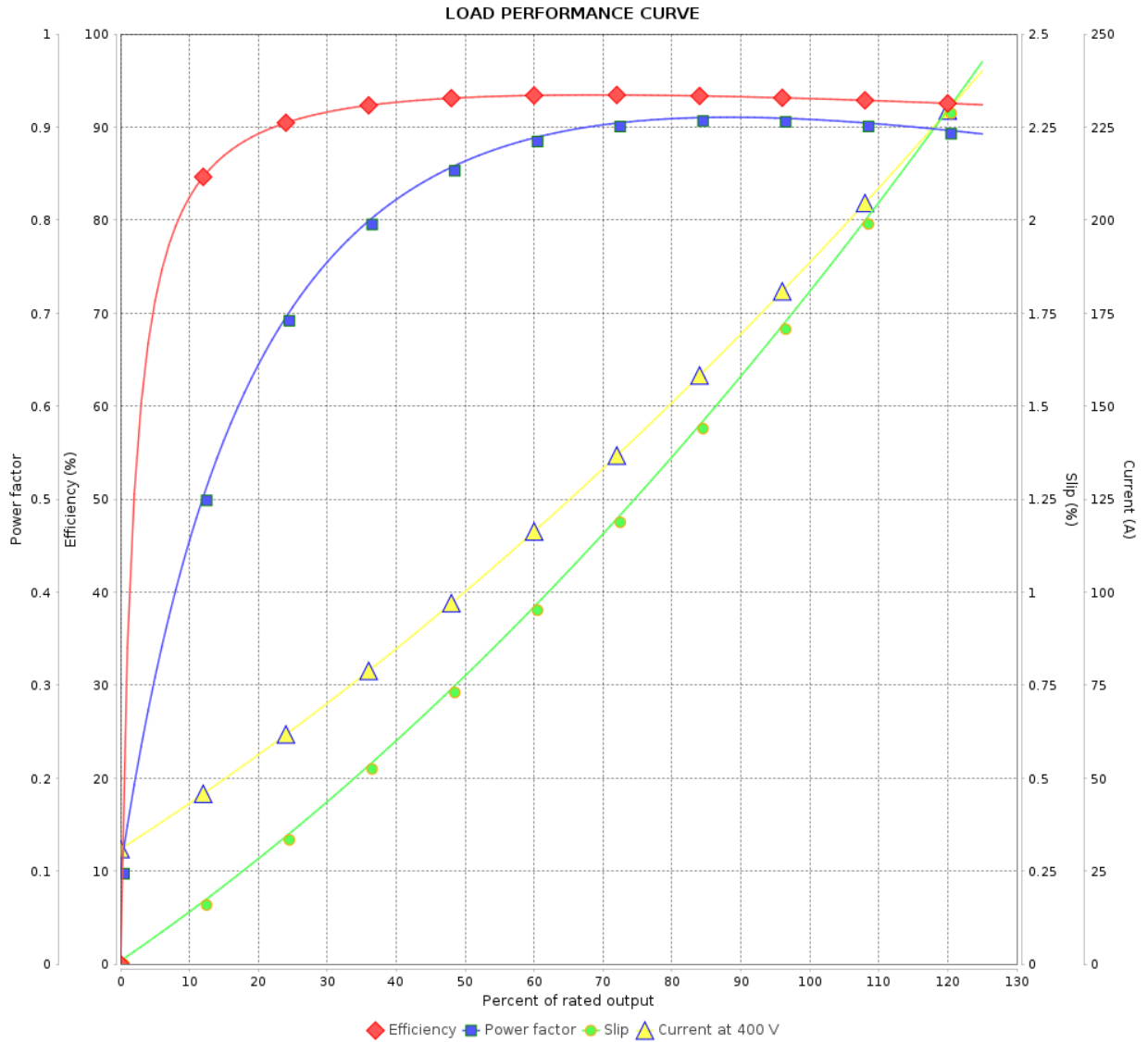
## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : ODP NEMA Premium Efficiency Three-Phase

Product code : 12070712



Performance : 400 V 50 Hz 2P

Rated current : 188 A  
 LRC : 5.7  
 Rated torque : 37.0 kgfm  
 Locked rotor torque : 180 %  
 Breakdown torque : 210 %  
 Rated speed : 2945 rpm

Moment of inertia (J) : 0.5023 kgm<sup>2</sup>  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.00  
 Temperature rise : 105 K  
 Design : B

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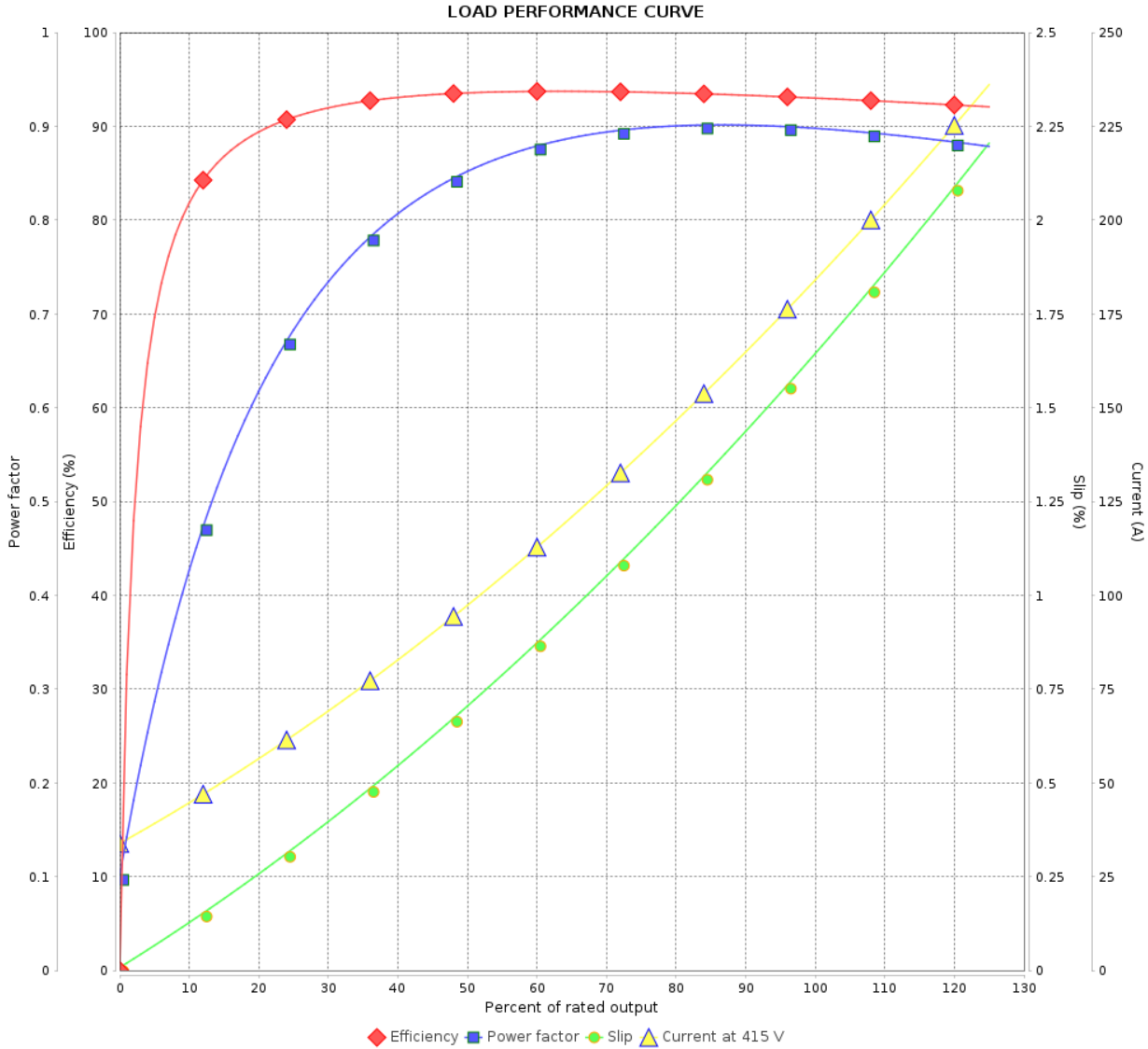
Three Phase Induction Motor - Squirrel Cage



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

Product line : ODP NEMA Premium Efficiency Three-Phase

Product code : 12070712



Performance : 415 V 50 Hz 2P

Rated current : 183 A  
 LRC : 6.2  
 Rated torque : 36.9 kgfm  
 Locked rotor torque : 190 %  
 Breakdown torque : 220 %  
 Rated speed : 2950 rpm

Moment of inertia (J) : 0.5023 kgm<sup>2</sup>  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.15  
 Temperature rise : 105 K  
 Design : B

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