

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :								
Product line	: ODP NEMA Premium Efficiency Three-Phase	Product code :	10015868					
Frame	: 326TS	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>	: 225 kg					
Protection degree	: IP23	Moment of inertia (J)	: 0.1839 kgm <sup>2</sup>					
Design	: B							
Output [HP]	60	50	50	50	60	60	60	
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]	142/71.0	69.8	67.9	66.1	86.7	82.3	80.1	
L. R. Amperes [A]	852/426	384	421	463	416	436	481	
LRC [A]	6.0x(Code G)	5.5x(Code F)	6.2x(Code G)	7.0x(Code H)	4.8x(Code E)	5.3x(Code F)	6.0x(Code G)	
No load current [A]	43.0/21.5	20.0	23.0	23.5	20.0	23.0	25.5	
Rated speed [RPM]	3560	2960	2965	2965	2940	2950	2955	
Slip [%]	1.11	1.33	1.17	1.17	2.00	1.67	1.50	
Rated torque [kgfm]	12.2	12.3	12.2	12.2	14.8	14.8	14.7	
Locked rotor torque [%]	220	210	229	240	170	180	200	
Breakdown torque [%]	229	210	240	260	180	200	210	
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	43s (cold) 24s (hot)	39s (cold) 22s (hot)	36s (cold) 20s (hot)	34s (cold) 19s (hot)	39s (cold) 22s (hot)	36s (cold) 20s (hot)	34s (cold) 19s (hot)	
Noise level <sup>2</sup>	75.0 dB(A)							
Efficiency (%)	25%	92.9	86.6	87.9	90.1	89.4	89.8	91.0
	50%	93.0	89.3	89.9	91.0	90.2	91.0	91.7
	75%	93.6	90.7	91.5	93.0	91.0	91.7	92.4
	100%	93.6	93.7	93.7	93.8	91.7	92.9	93.0
Power Factor	25%	0.53	0.54	0.49	0.46	0.59	0.54	0.50
	50%	0.77	0.77	0.73	0.70	0.80	0.77	0.74
	75%	0.84	0.83	0.81	0.79	0.85	0.83	0.81
	100%	0.85	0.86	0.84	0.83	0.86	0.85	0.84
Bearing type	: 6312 Z C3	Drive end	Non drive end	6212 Z C3	Foundation loads			
Sealing	: Without	Without	Without	Bearing Seal	Max. traction	: 277 kgf		
Lubrication interval	: 19658 h	20000 h	20000 h	Bearing Seal	Max. compression	: 502 kgf		
Lubricant amount	: 21 g	13 g	13 g					
Lubricant type	: Mobil Polyrex EM							
Notes								
USABLE @208V 157A SF 1.15 SFA 181A								
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

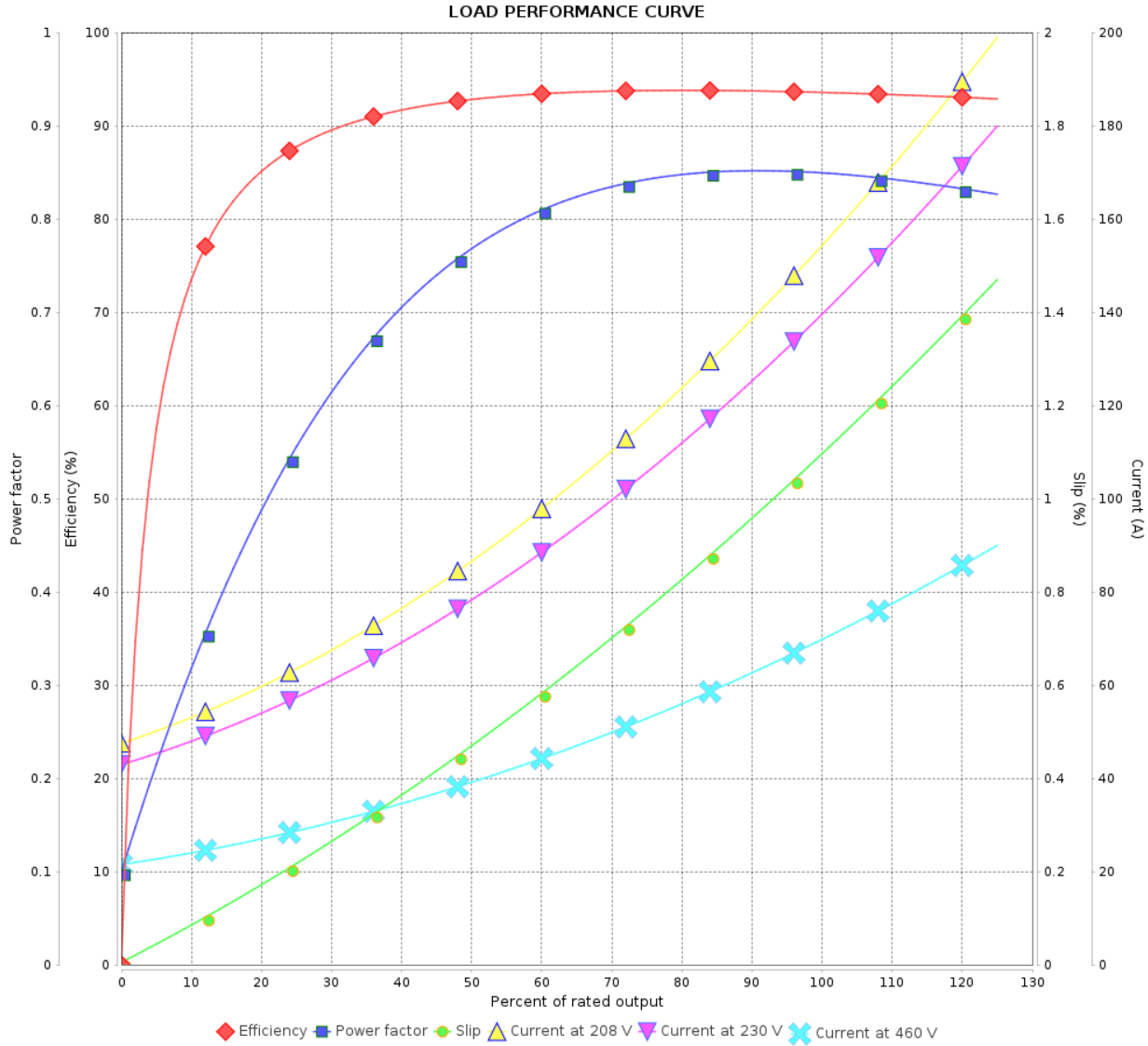
Three Phase Induction Motor - Squirrel Cage



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

Product line : ODP NEMA Premium Efficiency Three-Phase

Product code : 10015868



Performance : 230/460 V 60 Hz 2P

Rated current : 142/71.0 A  
 LRC : 6.0  
 Rated torque : 12.2 kgfm  
 Locked rotor torque : 220 %  
 Breakdown torque : 229 %  
 Rated speed : 3560 rpm

Moment of inertia (J) : 0.1839 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

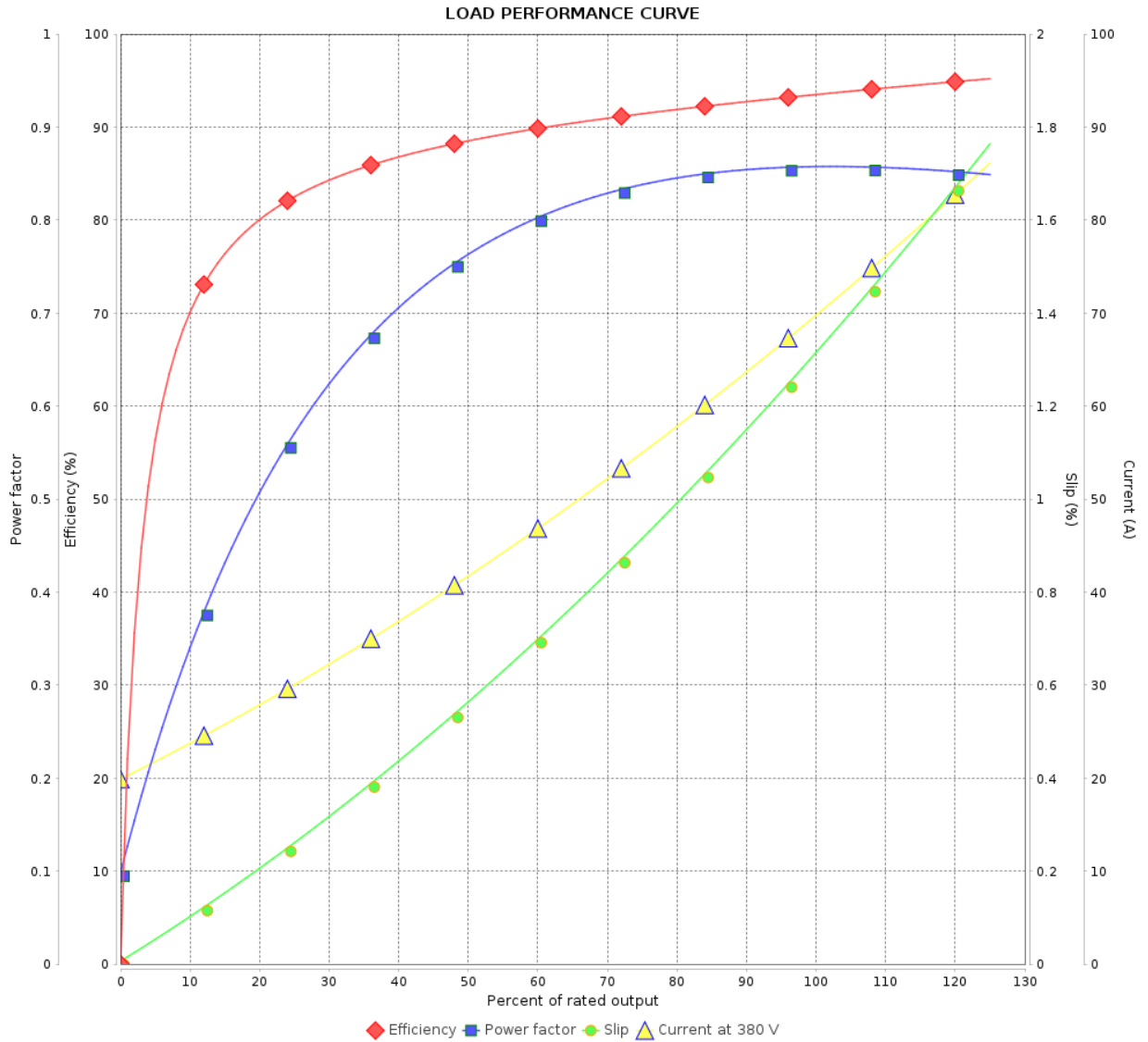
## Three Phase Induction Motor - Squirrel Cage



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

Product line : ODP NEMA Premium Efficiency Three-Phase

Product code : 10015868



Performance : 380 V 50 Hz 2P IE3

Rated current : 69.8 A  
 LRC : 5.5  
 Rated torque : 12.3 kgfm  
 Locked rotor torque : 210 %  
 Breakdown torque : 210 %  
 Rated speed : 2960 rpm

Moment of inertia (J) : 0.1839 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

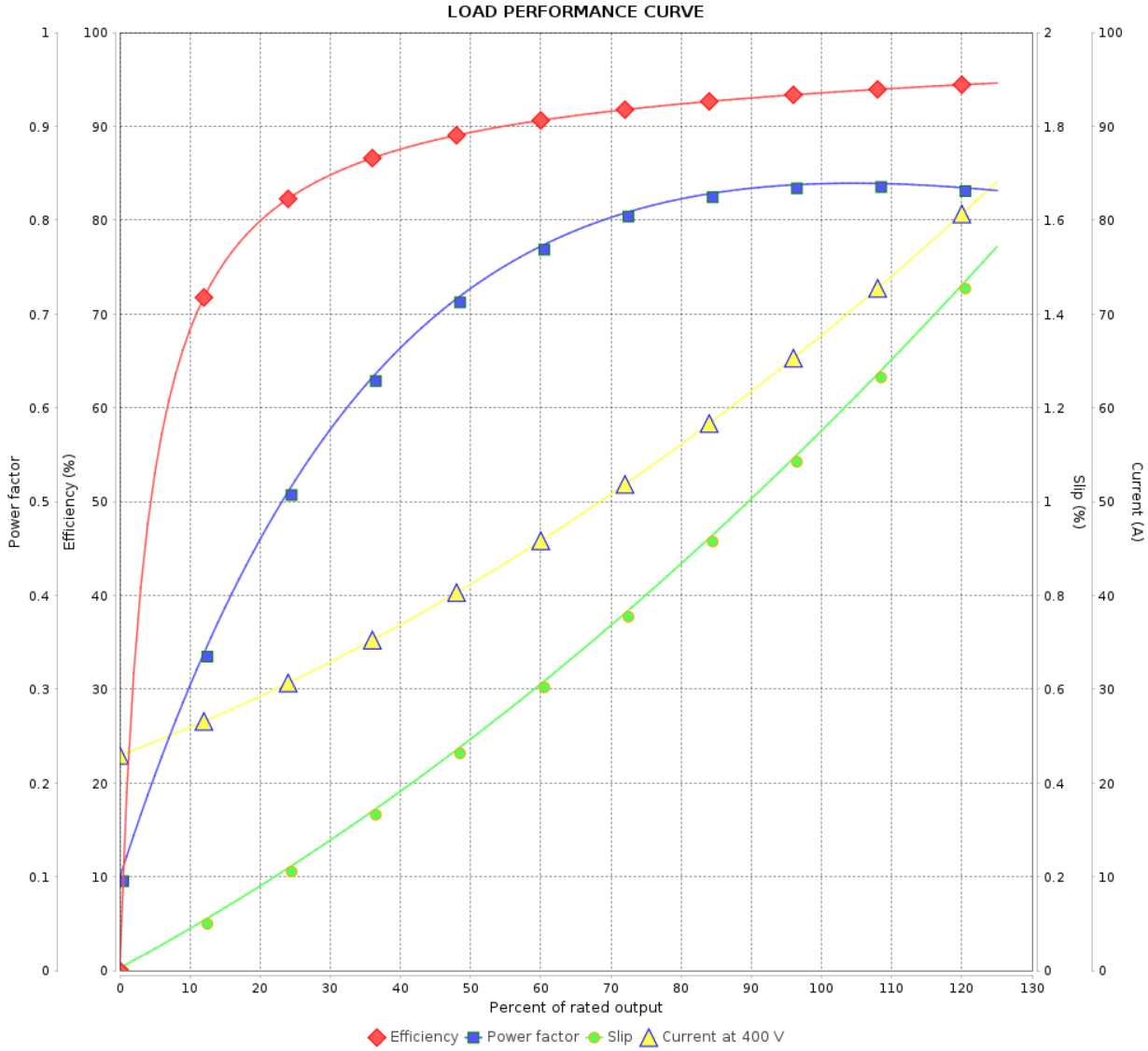
Three Phase Induction Motor - Squirrel Cage



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

Product line : ODP NEMA Premium Efficiency Three-Phase

Product code : 10015868



Performance : 400 V 50 Hz 2P IE3

Rated current : 67.9 A  
 LRC : 6.2  
 Rated torque : 12.2 kgfm  
 Locked rotor torque : 229 %  
 Breakdown torque : 240 %  
 Rated speed : 2965 rpm

Moment of inertia (J) : 0.1839 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

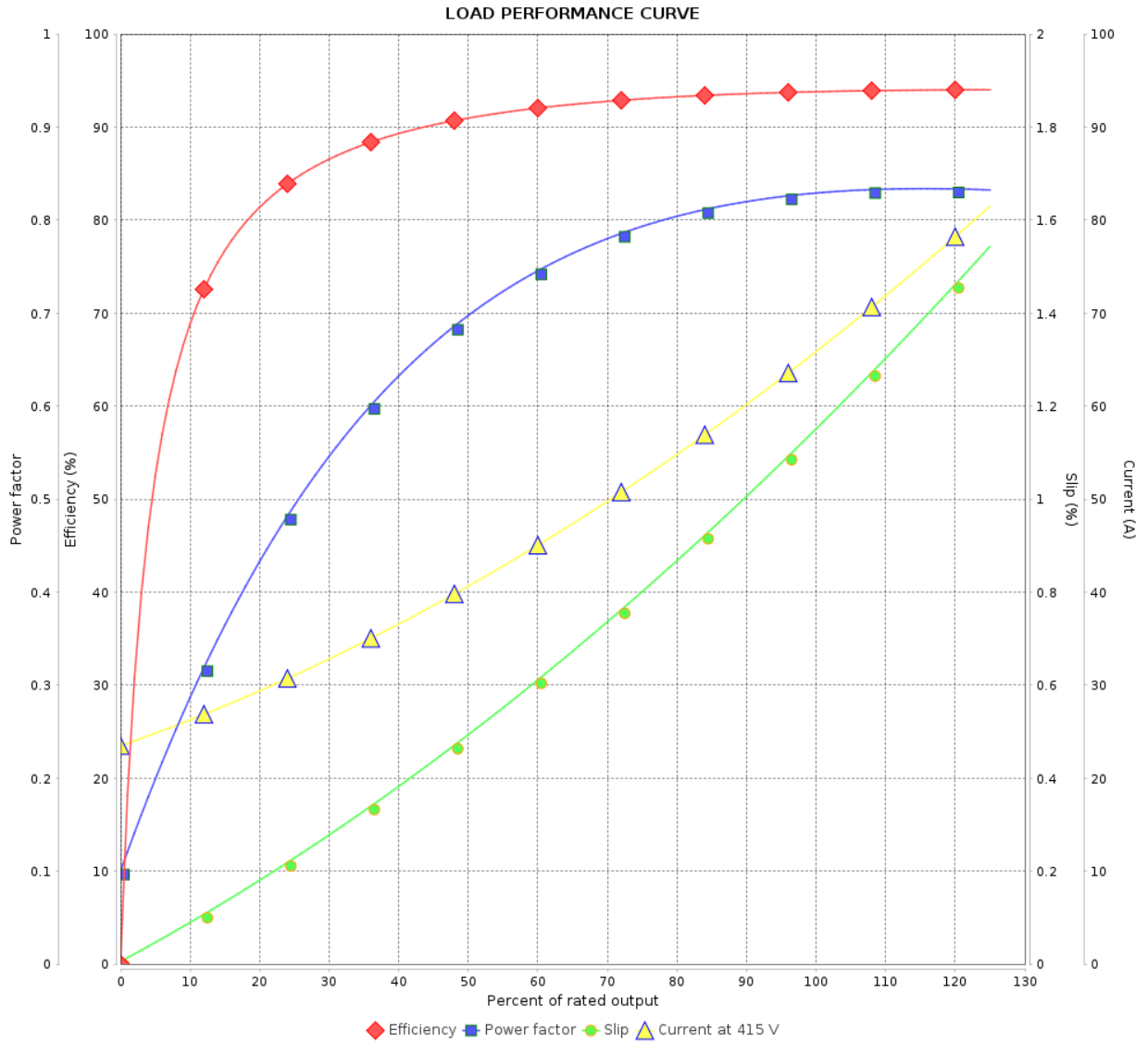
Three Phase Induction Motor - Squirrel Cage



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

Product line : ODP NEMA Premium Efficiency Three-Phase

Product code : 10015868



Performance : 415 V 50 Hz 2P IE3

Rated current : 66.1 A  
 LRC : 7.0  
 Rated torque : 12.2 kgfm  
 Locked rotor torque : 240 %  
 Breakdown torque : 260 %  
 Rated speed : 2965 rpm

Moment of inertia (J) : 0.1839 kgm<sup>2</sup>  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.15  
 Temperature rise : 80 K  
 Design : B

Rev.	Changes Summary	Performed	Checked	Date
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# LOAD PERFORMANCE CURVE

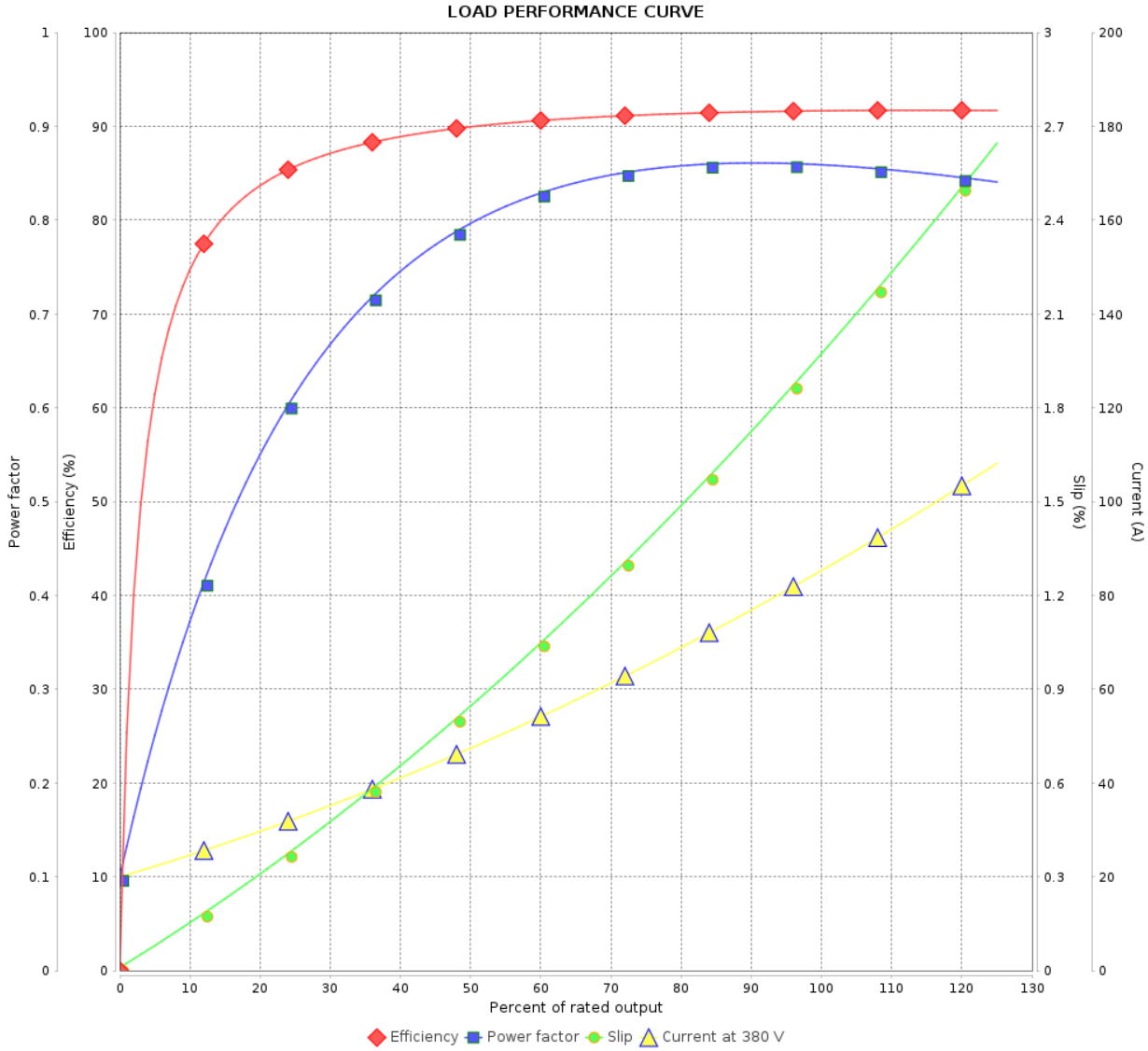
Three Phase Induction Motor - Squirrel Cage



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

Product line : ODP NEMA Premium Efficiency Three-Phase

Product code : 10015868



Performance : 380 V 50 Hz 2P IE1

Rated current : 86.7 A  
 LRC : 4.8  
 Rated torque : 14.8 kgfm  
 Locked rotor torque : 170 %  
 Breakdown torque : 180 %  
 Rated speed : 2940 rpm

Moment of inertia (J) : 0.1839 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

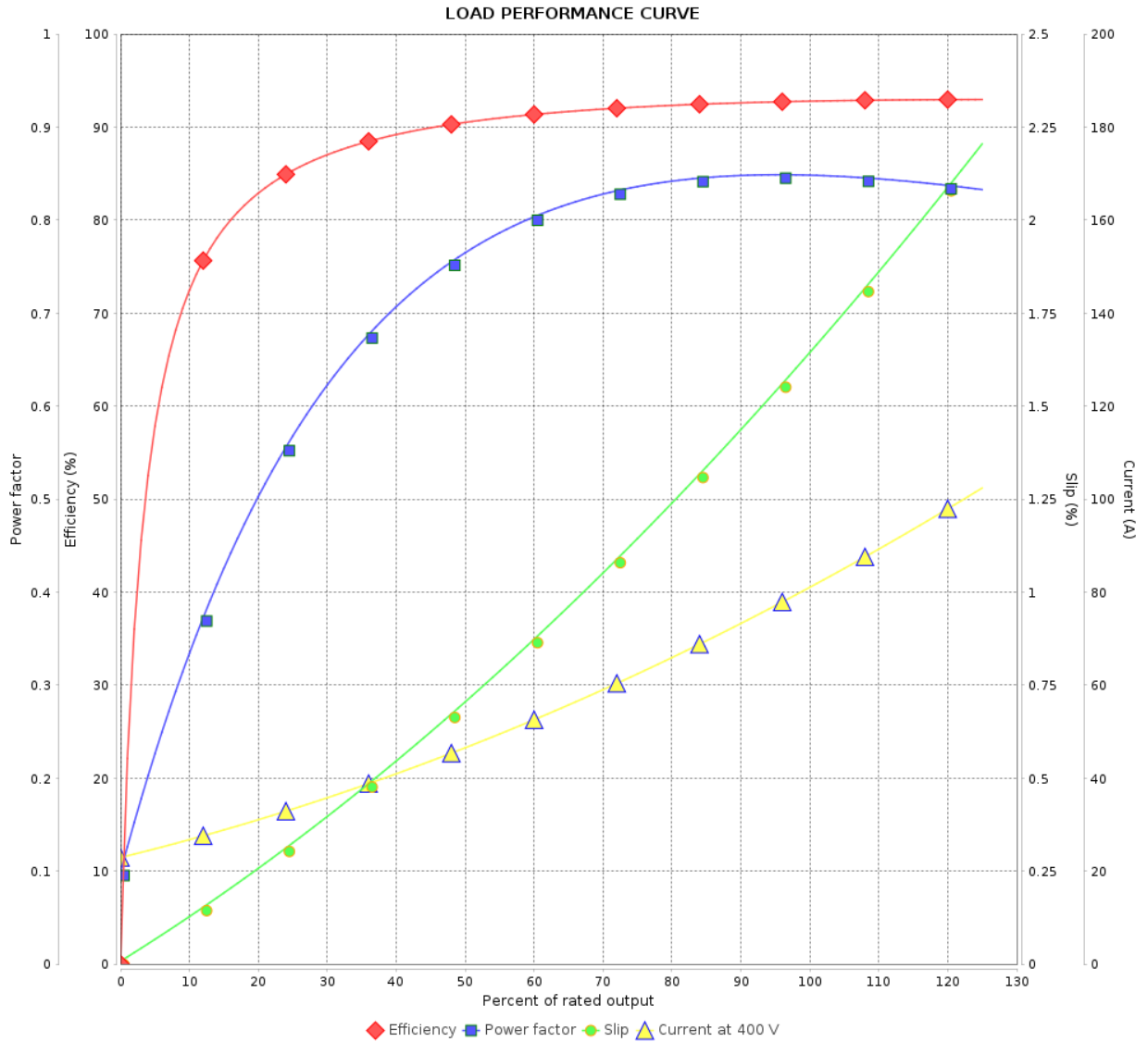
## Three Phase Induction Motor - Squirrel Cage



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

Product line : ODP NEMA Premium Efficiency Three-Phase

Product code : 10015868



Performance : 400 V 50 Hz 2P IE2

Rated current : 82.3 A  
 LRC : 5.3  
 Rated torque : 14.8 kgfm  
 Locked rotor torque : 180 %  
 Breakdown torque : 200 %  
 Rated speed : 2950 rpm

Moment of inertia (J) : 0.1839 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

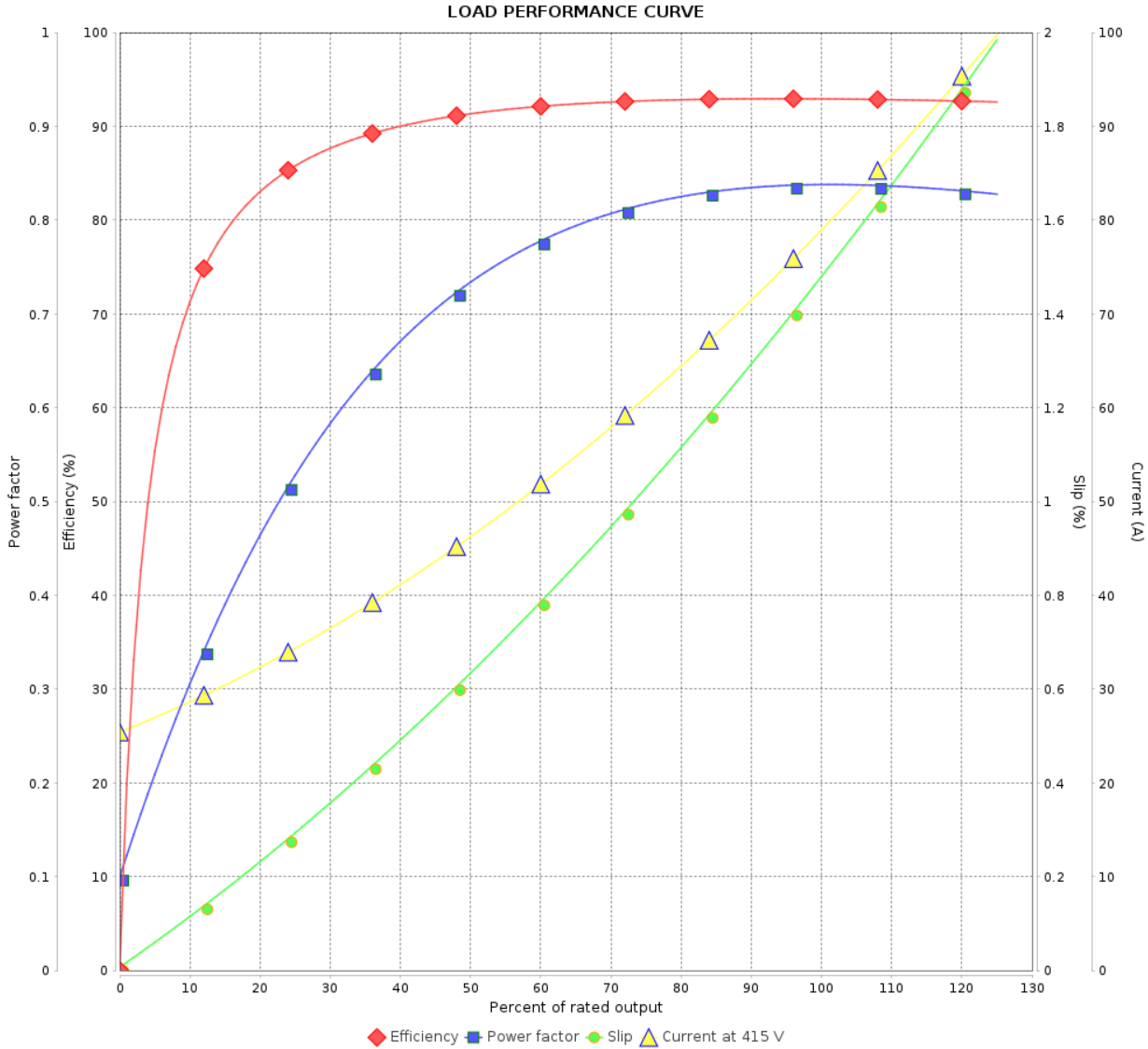
Three Phase Induction Motor - Squirrel Cage



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

Product line : ODP NEMA Premium Efficiency Three-Phase

Product code : 10015868



Performance : 415 V 50 Hz 2P IE2

Rated current : 80.1 A  
 LRC : 6.0  
 Rated torque : 14.7 kgfm  
 Locked rotor torque : 200 %  
 Breakdown torque : 210 %  
 Rated speed : 2955 rpm

Moment of inertia (J) : 0.1839 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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