

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :							
Product line	: ODP NEMA Premium Efficiency Three-Phase	Product code :	14226462				
Frame	: 404/5TC	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>	: 461 kg				
Protection degree	: IP23	Moment of inertia (J)	: 0.9623 kgm <sup>2</sup>				
Design	: B						
Output [HP]	100	75	75	75	100	100	100
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]	226/113	99.3	96.5	95.2	136	131	127
L. R. Amperes [A]	1514/757	804	859	904	830	878	927
LRC [A]	6.7x(Code G)	8.1x(Code H)	8.9x(Code J)	9.5x(Code K)	6.1x(Code F)	6.7x(Code G)	7.3x(Code H)
No load current [A]	84.0/42.0	38.6	42.2	45.8	38.6	42.2	45.8
Rated speed [RPM]	1780	1480	1480	1485	1475	1475	1480
Slip [%]	1.11	1.33	1.33	1.00	1.67	1.67	1.33
Rated torque [kgfm]	40.8	36.8	36.8	36.7	49.2	49.2	49.0
Locked rotor torque [%]	229	270	280	290	200	210	220
Breakdown torque [%]	270	320	360	400	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	18s (cold) 10s (hot)	19s (cold) 11s (hot)	18s (cold) 10s (hot)	16s (cold) 9s (hot)	19s (cold) 11s (hot)	18s (cold) 10s (hot)	16s (cold) 9s (hot)
Noise level <sup>2</sup>	69.0 dB(A)						
Efficiency (%)	25%						
	50%	95.0	92.2	91.9	91.7	93.9	93.9
	75%	95.4	93.9	93.9	93.9	94.0	94.0
	100%	95.4	94.6	94.6	94.6	94.1	94.1
Power Factor	25%						
	50%	0.77	0.75	0.71	0.66	0.84	0.80
	75%	0.84	0.85	0.83	0.79	0.88	0.87
	100%	0.87	0.89	0.87	0.85	0.89	0.88
Bearing type	: 6316 C3	Drive end	Non drive end	6314 C3	Foundation loads		
Sealing	: Without	Without	Without	Bearing Seal	Max. traction	: 1217 kgf	
Lubrication interval	: 20000 h	20000 h	20000 h	Bearing Seal	Max. compression	: 1678 kgf	
Lubricant amount	: 34 g	27 g	27 g				
Lubricant type	: Mobil Polyrex EM						
Notes USABLE @208V 254A SF 1.15 SFA 292A							
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

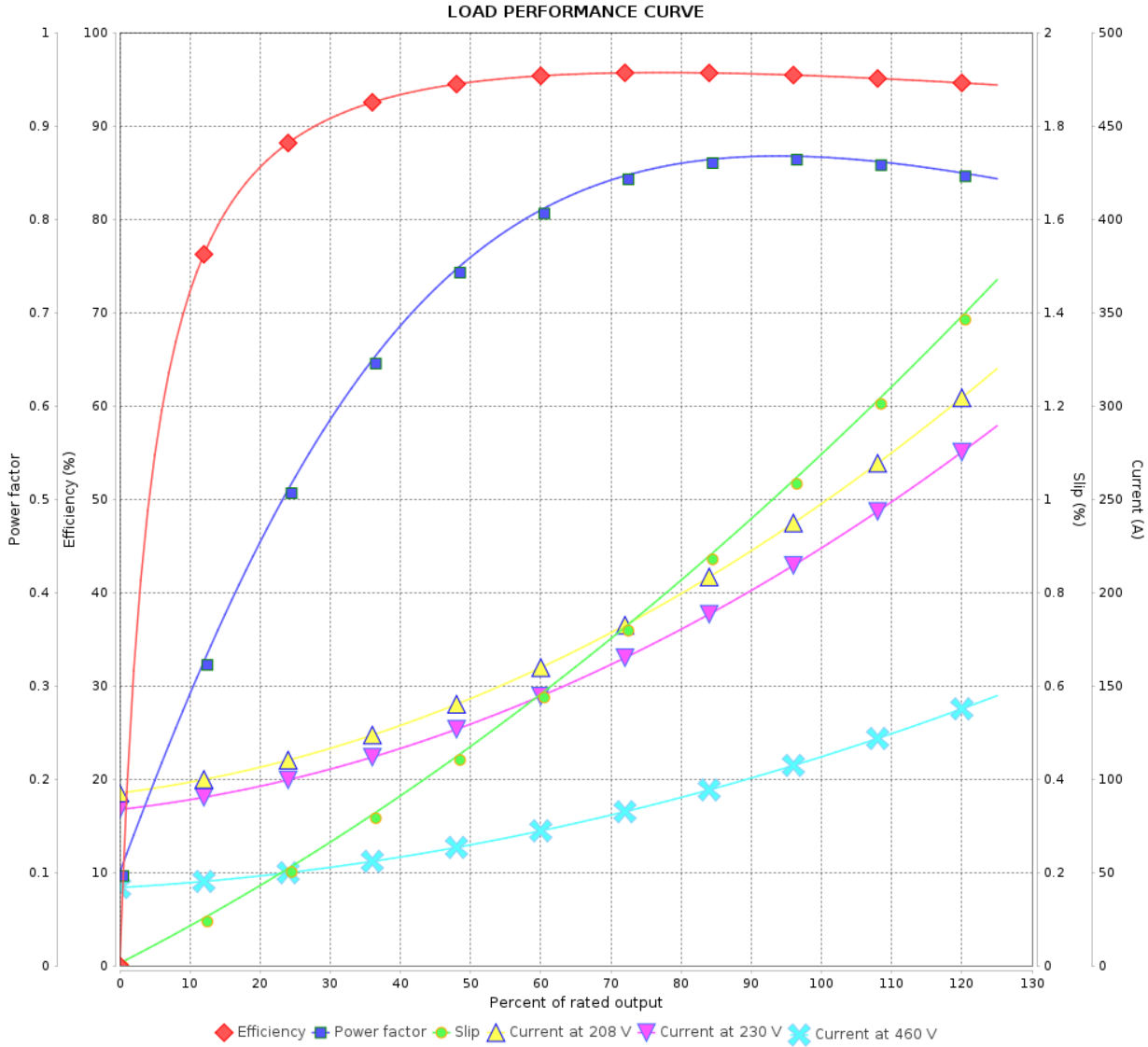
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : ODP NEMA Premium Efficiency Three-Phase

Product code : 14226462



Performance : 230/460 V 60 Hz 4P

Rated current : 226/113 A  
 LRC : 6.7  
 Rated torque : 40.8 kgfm  
 Locked rotor torque : 229 %  
 Breakdown torque : 270 %  
 Rated speed : 1780 rpm

Moment of inertia (J) : 0.9623 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

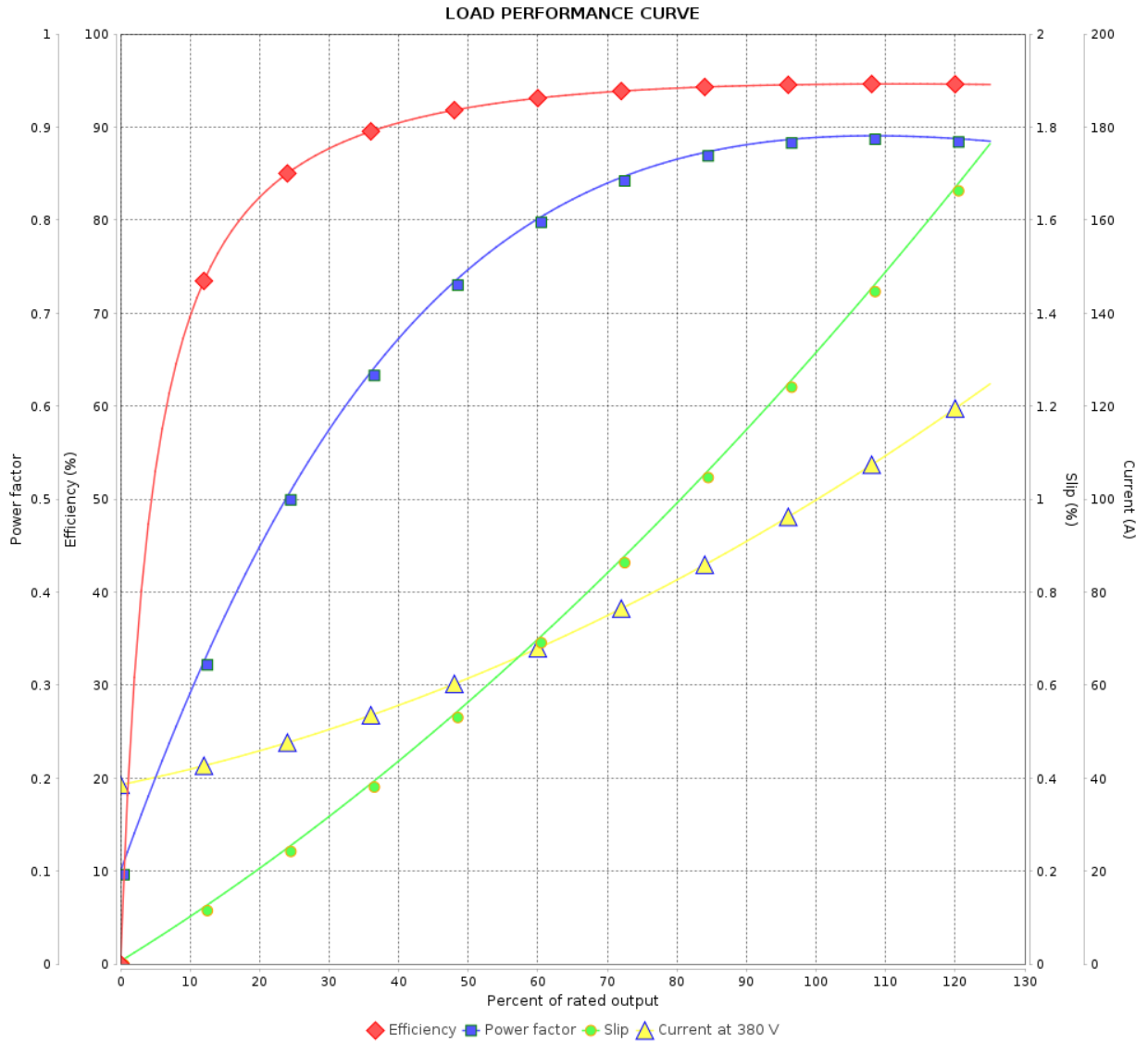
## Three Phase Induction Motor - Squirrel Cage



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

Product line : ODP NEMA Premium Efficiency Three-Phase

Product code : 14226462



Performance : 380 V 50 Hz 4P IE3

Rated current : 99.3 A  
 LRC : 8.1  
 Rated torque : 36.8 kgfm  
 Locked rotor torque : 270 %  
 Breakdown torque : 320 %  
 Rated speed : 1480 rpm

Moment of inertia (J) : 0.9623 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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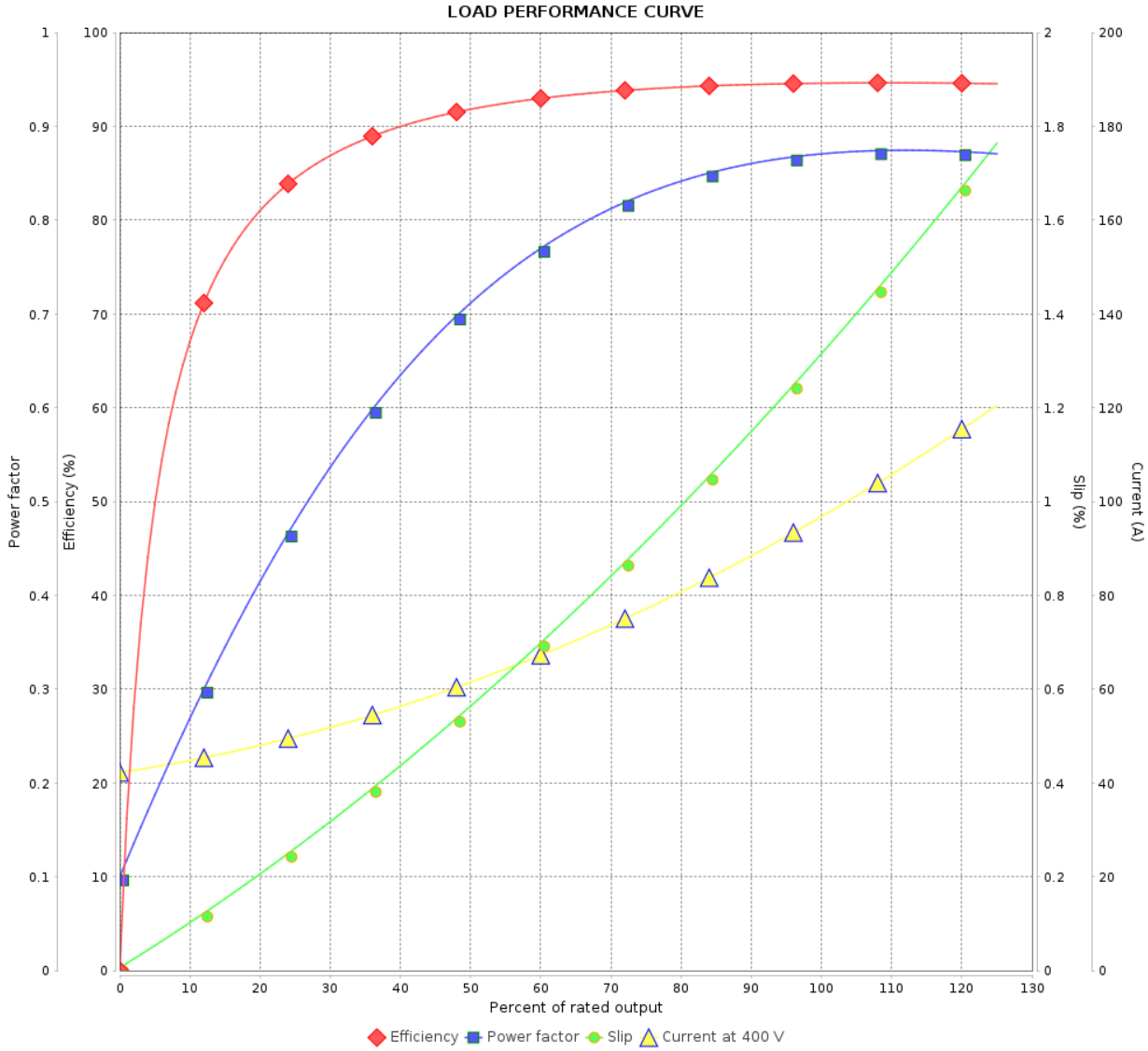
Three Phase Induction Motor - Squirrel Cage



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

Product line : ODP NEMA Premium Efficiency Three-Phase

Product code : 14226462



Performance : 400 V 50 Hz 4P IE3

Rated current : 96.5 A  
 LRC : 8.9  
 Rated torque : 36.8 kgfm  
 Locked rotor torque : 280 %  
 Breakdown torque : 360 %  
 Rated speed : 1480 rpm

Moment of inertia (J) : 0.9623 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

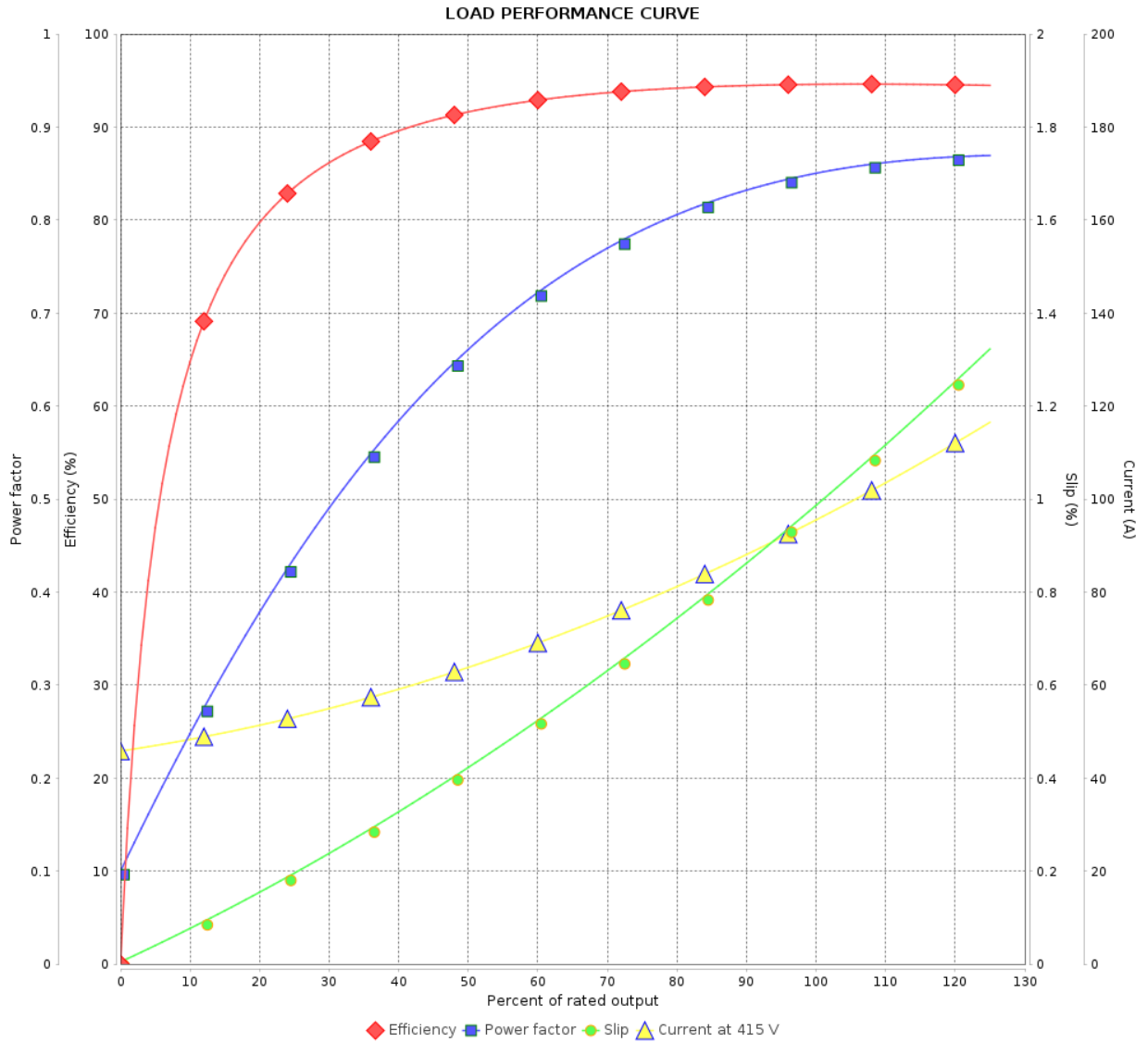
## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : ODP NEMA Premium Efficiency Three-Phase

Product code : 14226462



Performance : 415 V 50 Hz 4P IE3

Rated current : 95.2 A  
 LRC : 9.5  
 Rated torque : 36.7 kgfm  
 Locked rotor torque : 290 %  
 Breakdown torque : 400 %  
 Rated speed : 1485 rpm

Moment of inertia (J) : 0.9623 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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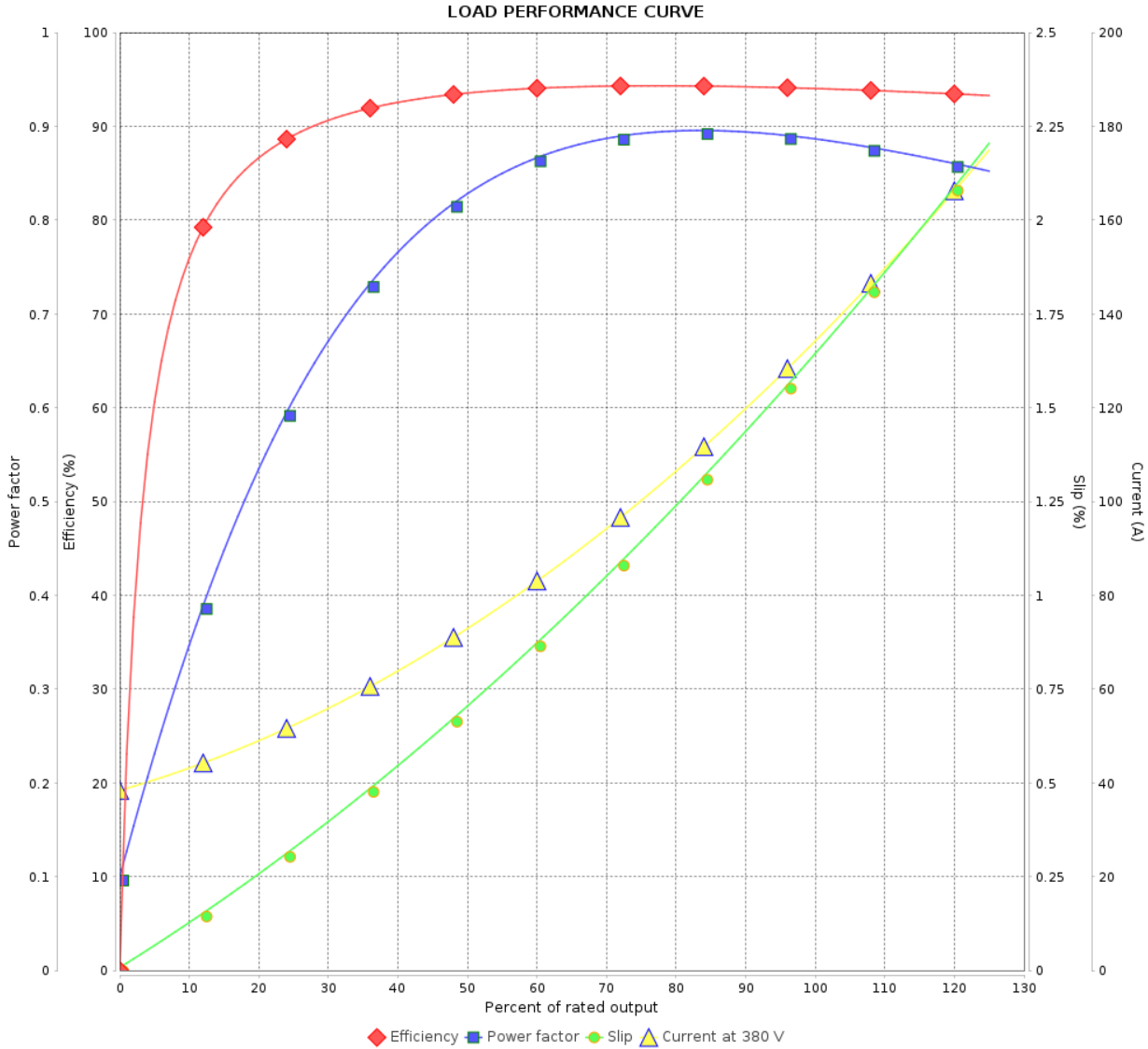
Three Phase Induction Motor - Squirrel Cage



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

Product line : ODP NEMA Premium Efficiency Three-Phase

Product code : 14226462



Performance : 380 V 50 Hz 4P IE2

Rated current : 136 A  
 LRC : 6.1  
 Rated torque : 49.2 kgfm  
 Locked rotor torque : 200 %  
 Breakdown torque : 240 %  
 Rated speed : 1475 rpm

Moment of inertia (J) : 0.9623 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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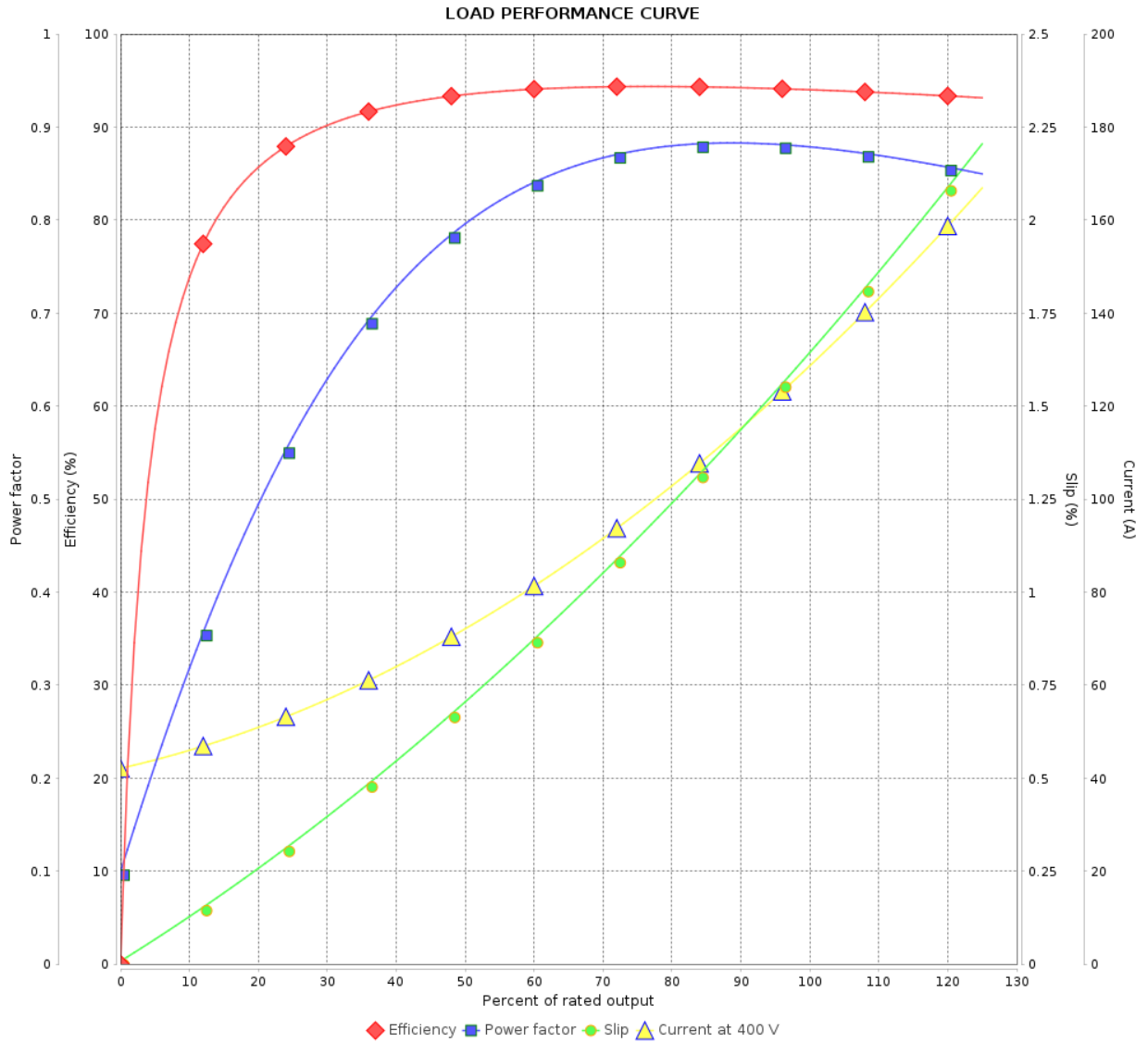
## Three Phase Induction Motor - Squirrel Cage



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

Product line : ODP NEMA Premium Efficiency Three-Phase

Product code : 14226462



Performance : 400 V 50 Hz 4P IE2

Rated current : 131 A  
 LRC : 6.7  
 Rated torque : 49.2 kgfm  
 Locked rotor torque : 210 %  
 Breakdown torque : 270 %  
 Rated speed : 1475 rpm

Moment of inertia (J) : 0.9623 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

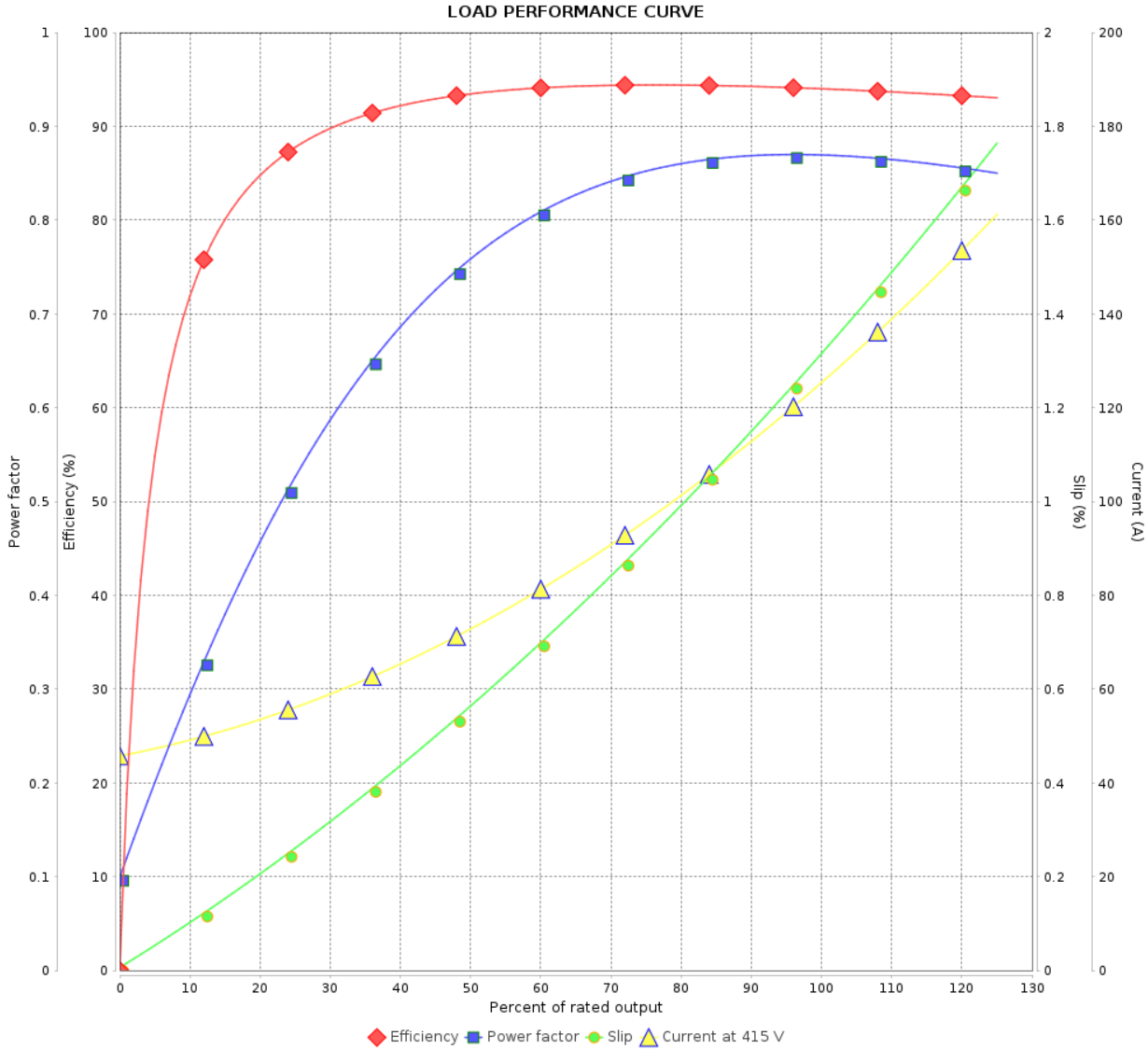
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : ODP NEMA Premium Efficiency Three-Phase

Product code : 14226462



Performance : 415 V 50 Hz 4P IE2

Rated current : 127 A  
 LRC : 7.3  
 Rated torque : 49.0 kgfm  
 Locked rotor torque : 220 %  
 Breakdown torque : 300 %  
 Rated speed : 1480 rpm

Moment of inertia (J) : 0.9623 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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