

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :								
Product line	: ODP NEMA Premium Efficiency Three-Phase	Product code :	10475591					
Frame	: 324TS	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	: 209 kg					
Protection degree	: IP23	Moment of inertia (J)	: 0.1615 kgm ²					
Design	: B							
Output [HP]	50	40	40	40	50	50	50	
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]	118/59.1	58.2	57.3	56.6	71.5	69.6	67.9	
L. R. Amperes [A]	756/378	361	384	402	358	383	401	
LRC [A]	6.4x(Code G)	6.2x(Code G)	6.7x(Code H)	7.1x(Code J)	5.0x(Code E)	5.5x(Code F)	5.9x(Code G)	
No load current [A]	41.0/20.5	19.0	22.0	24.5	19.0	22.0	24.5	
Rated speed [RPM]	3565	2965	2965	2970	2950	2955	2960	
Slip [%]	0.97	1.17	1.17	1.00	1.67	1.50	1.33	
Rated torque [kgfm]	10.2	9.79	9.79	9.77	12.3	12.3	12.3	
Locked rotor torque [%]	229	229	240	270	200	200	210	
Breakdown torque [%]	240	240	270	290	200	210	229	
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	50s (cold) 28s (hot)	54s (cold) 30s (hot)	48s (cold) 27s (hot)	45s (cold) 25s (hot)	54s (cold) 30s (hot)	48s (cold) 27s (hot)	45s (cold) 25s (hot)	
Noise level ²	74.0 dB(A)							
Efficiency (%)	25%	92.2	88.0	87.9	88.6	90.1	90.1	90.1
	50%	92.4	89.8	89.6	90.0	91.0	91.0	91.0
	75%	93.6	91.4	91.6	92.0	91.7	91.7	91.7
	100%	93.6	93.3	93.3	93.4	92.5	92.5	92.5
Power Factor	25%	0.49	0.50	0.44	0.40	0.56	0.50	0.45
	50%	0.74	0.74	0.68	0.64	0.78	0.73	0.69
	75%	0.82	0.81	0.77	0.73	0.84	0.81	0.78
	100%	0.84	0.84	0.81	0.79	0.85	0.83	0.82
Bearing type	: 6312 Z C3	Drive end	Non drive end	6212 Z C3	Foundation loads			
Sealing	: Without	Without	Without	Bearing Seal	Max. traction	: 250 kgf		
Lubrication interval	: 19658 h	20000 h	20000 h	Bearing Seal	Max. compression	: 459 kgf		
Lubricant amount	: 21 g	13 g	13 g					
Lubricant type	: Mobil Polyrex EM							
Notes								
USABLE @208V 131A SF 1.15 SFA 150A								
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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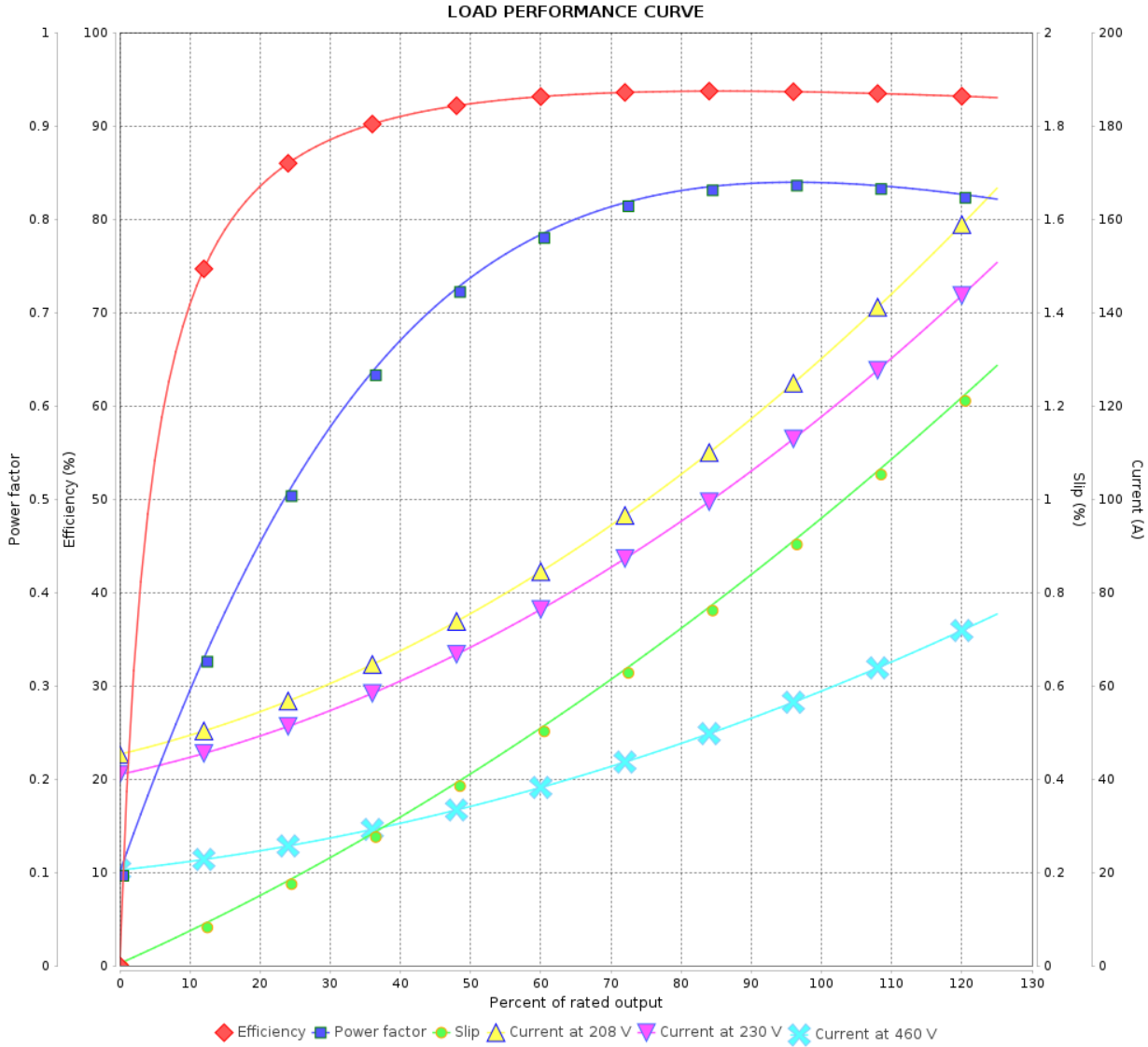
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : ODP NEMA Premium Efficiency Three-Phase

Product code : 10475591



Performance : 230/460 V 60 Hz 2P

Rated current : 118/59.1 A
 LRC : 6.4
 Rated torque : 10.2 kgfm
 Locked rotor torque : 229 %
 Breakdown torque : 240 %
 Rated speed : 3565 rpm

Moment of inertia (J) : 0.1615 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

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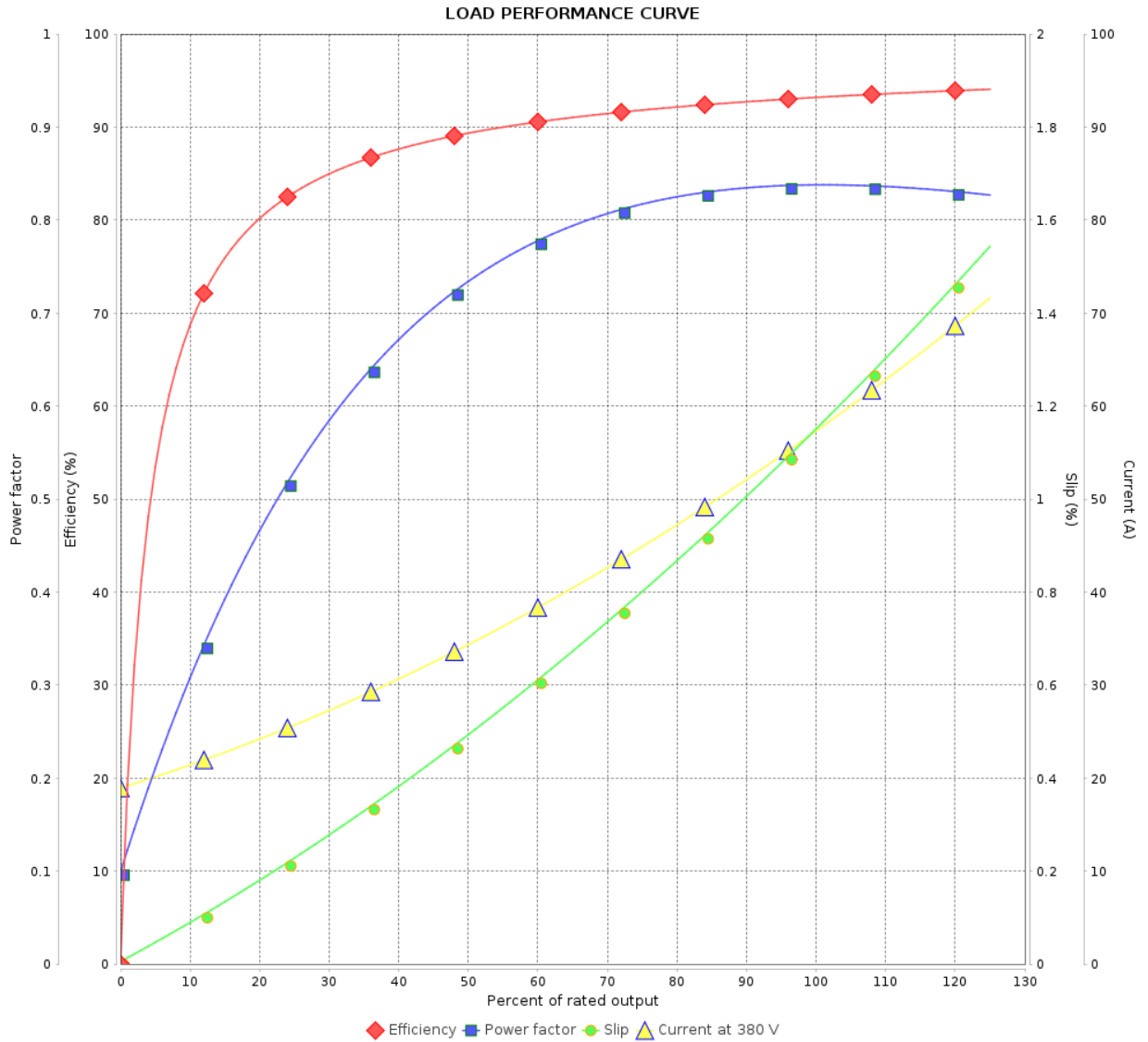
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : ODP NEMA Premium Efficiency Three-Phase

Product code : 10475591



Performance : 380 V 50 Hz 2P IE3

Rated current : 58.2 A
 LRC : 6.2
 Rated torque : 9.79 kgfm
 Locked rotor torque : 229 %
 Breakdown torque : 240 %
 Rated speed : 2965 rpm

Moment of inertia (J) : 0.1615 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

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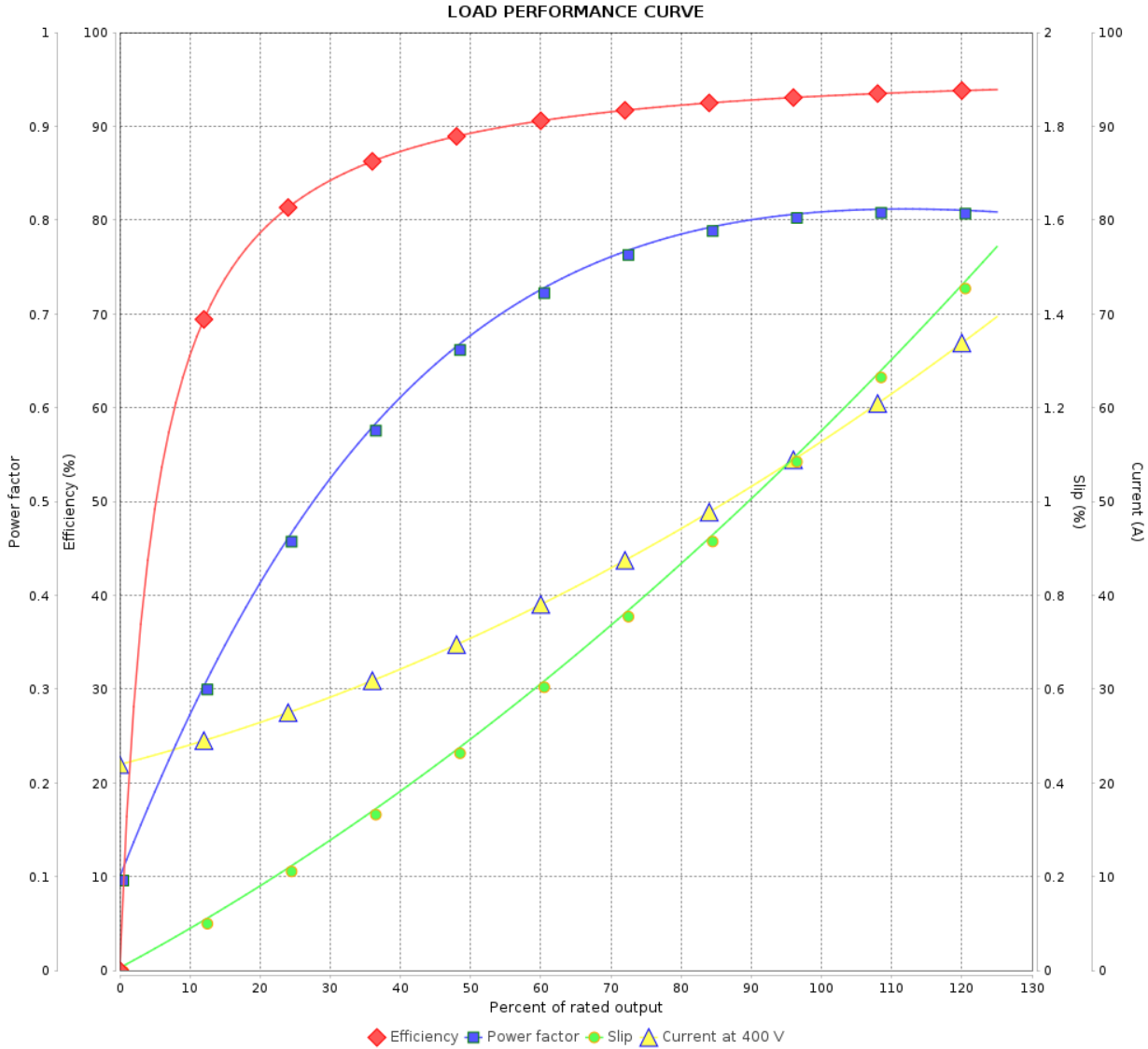
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : ODP NEMA Premium Efficiency Three-Phase

Product code : 10475591



Performance : 400 V 50 Hz 2P IE3

Rated current : 57.3 A
 LRC : 6.7
 Rated torque : 9.79 kgfm
 Locked rotor torque : 240 %
 Breakdown torque : 270 %
 Rated speed : 2965 rpm

Moment of inertia (J) : 0.1615 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

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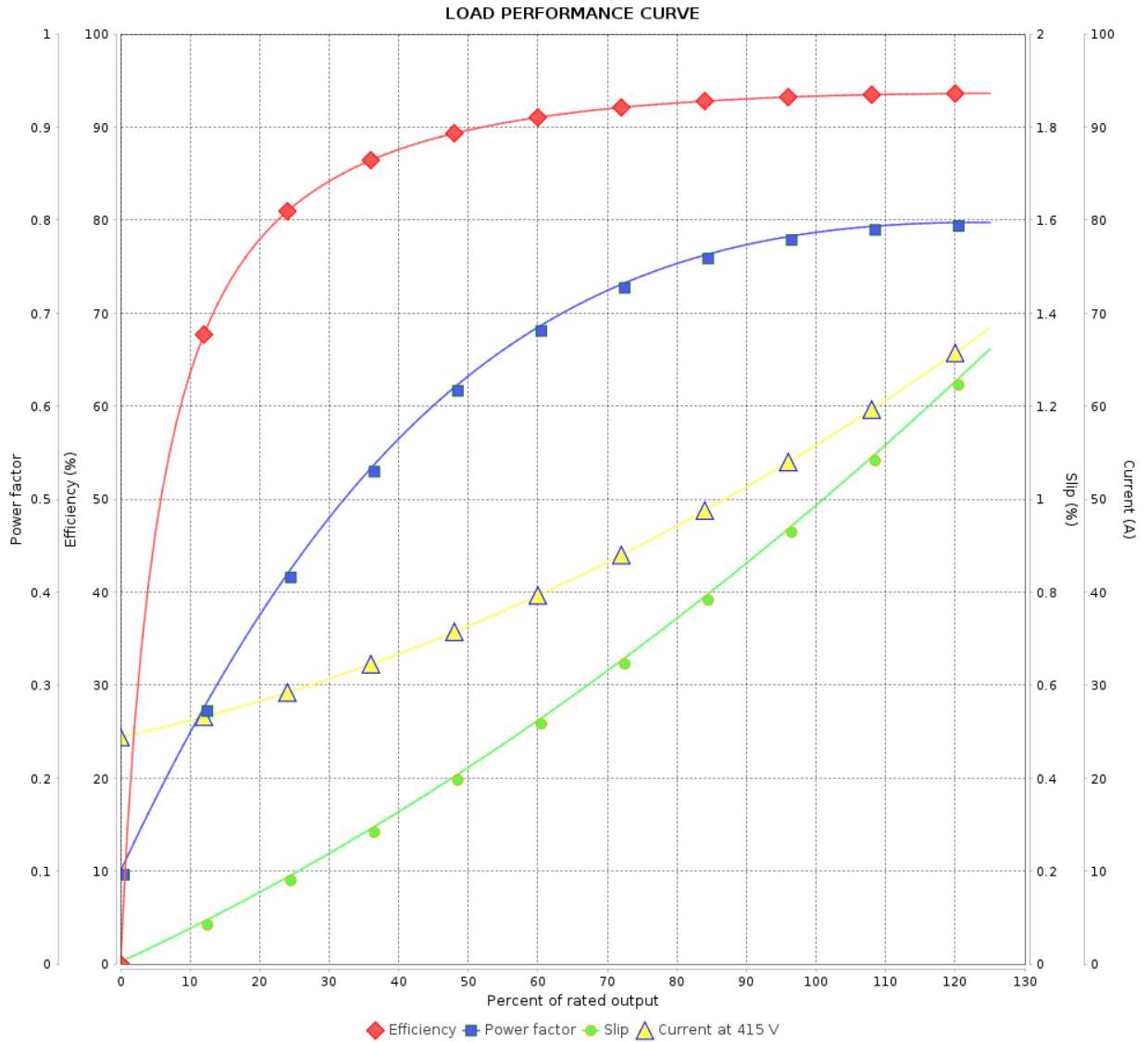
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : ODP NEMA Premium Efficiency Three-Phase

Product code : 10475591



Performance : 415 V 50 Hz 2P IE3

Rated current : 56.6 A
 LRC : 7.1
 Rated torque : 9.77 kgfm
 Locked rotor torque : 270 %
 Breakdown torque : 290 %
 Rated speed : 2970 rpm

Moment of inertia (J) : 0.1615 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

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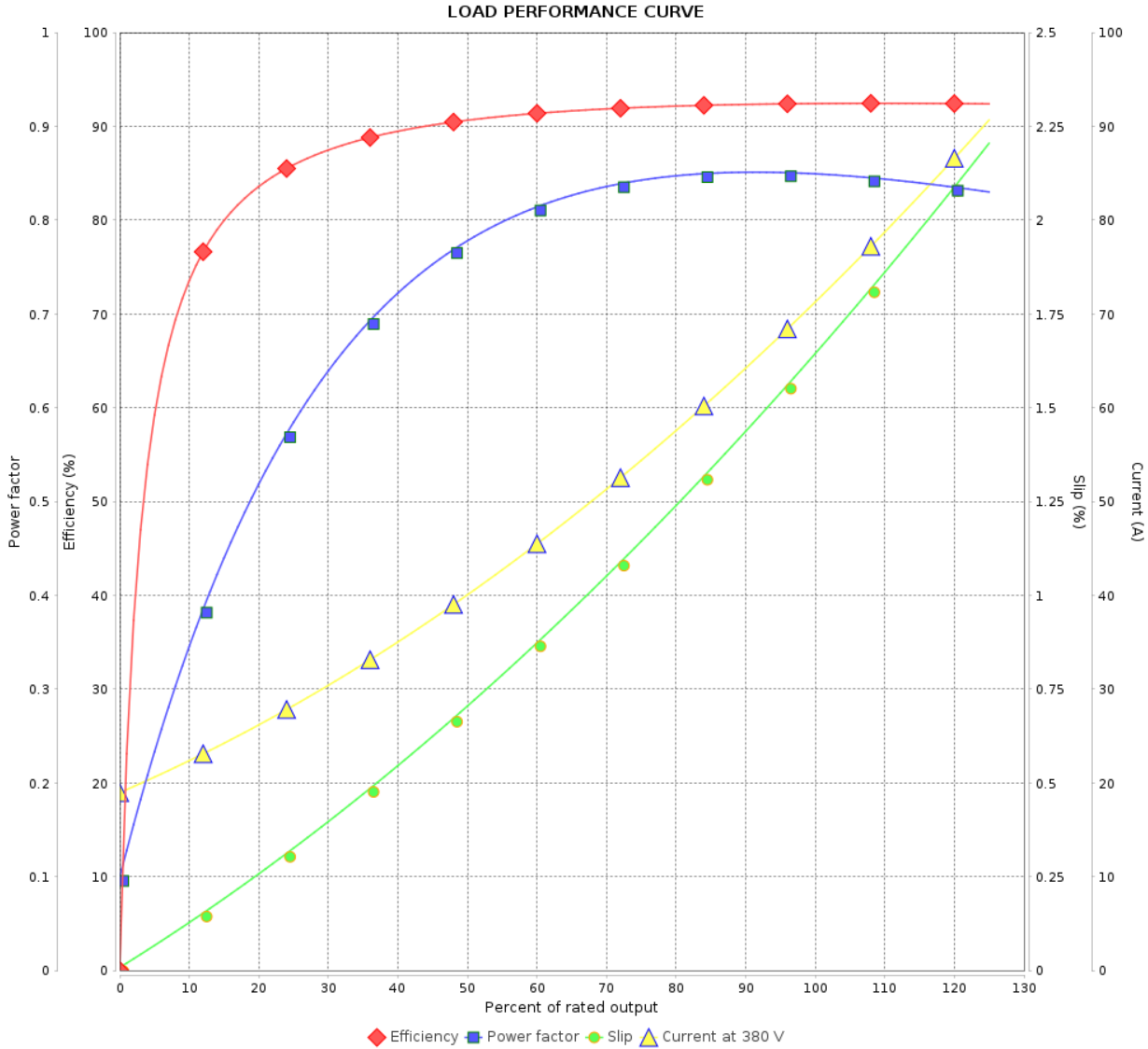
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : ODP NEMA Premium Efficiency Three-Phase

Product code : 10475591



Performance : 380 V 50 Hz 2P IE2

Rated current : 71.5 A
 LRC : 5.0
 Rated torque : 12.3 kgfm
 Locked rotor torque : 200 %
 Breakdown torque : 200 %
 Rated speed : 2950 rpm

Moment of inertia (J) : 0.1615 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

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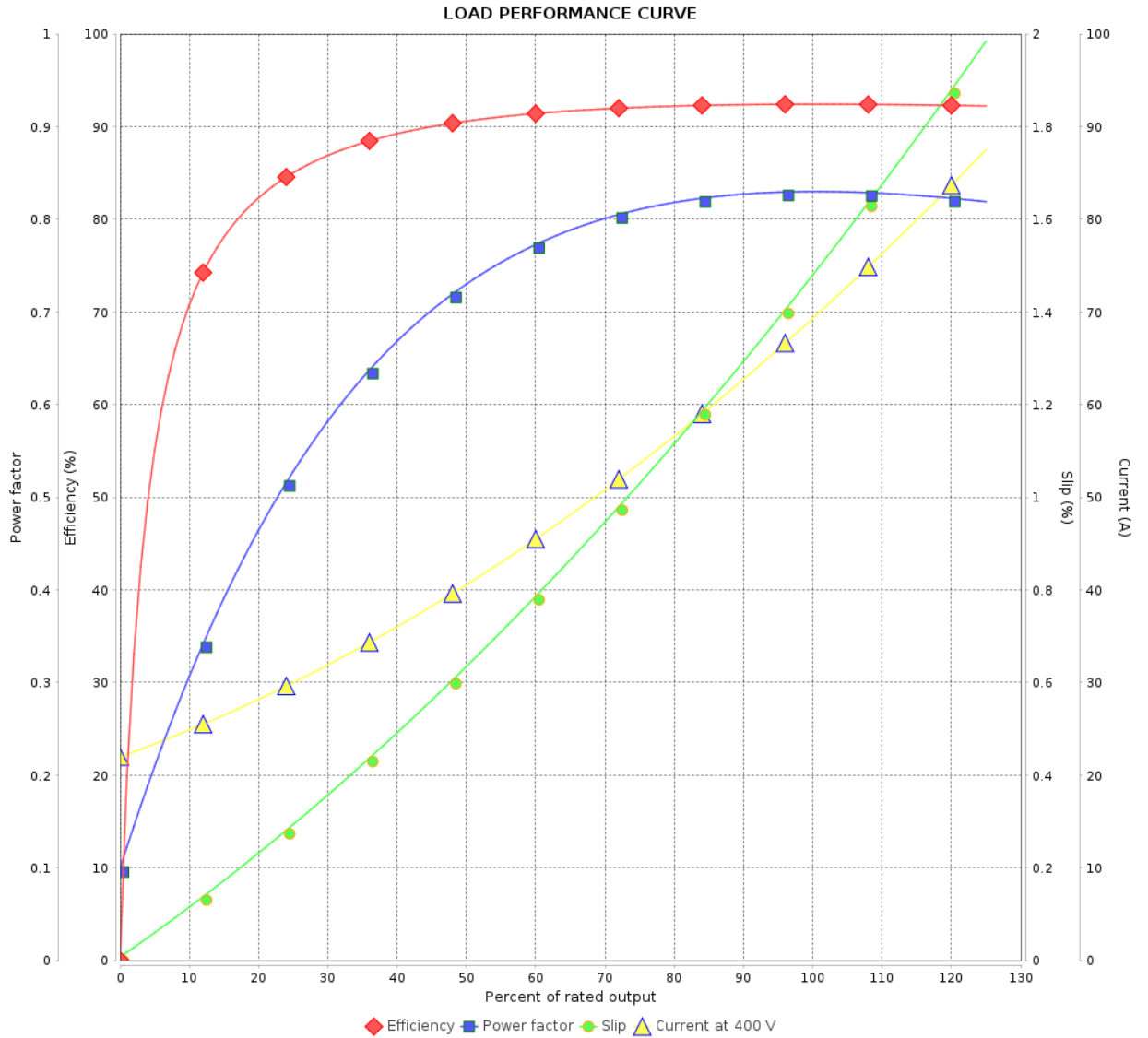
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : ODP NEMA Premium Efficiency Three-Phase

Product code : 10475591



Performance : 400 V 50 Hz 2P IE2

Rated current : 69.6 A
 LRC : 5.5
 Rated torque : 12.3 kgfm
 Locked rotor torque : 200 %
 Breakdown torque : 210 %
 Rated speed : 2955 rpm

Moment of inertia (J) : 0.1615 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

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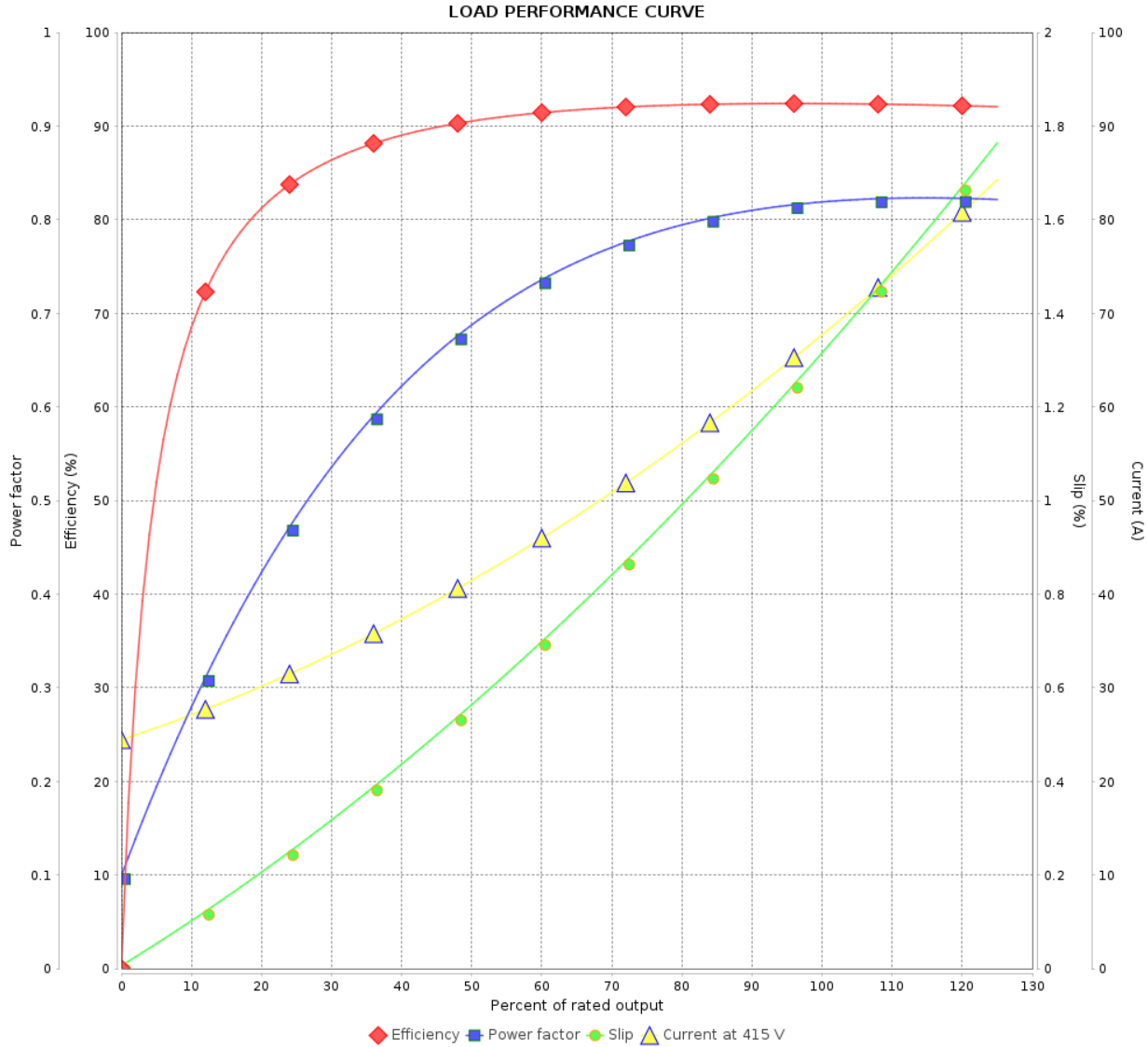
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : ODP NEMA Premium Efficiency Three-Phase

Product code : 10475591



Performance : 415 V 50 Hz 2P IE2

Rated current : 67.9 A
 LRC : 5.9
 Rated torque : 12.3 kgfm
 Locked rotor torque : 210 %
 Breakdown torque : 229 %
 Rated speed : 2960 rpm

Moment of inertia (J) : 0.1615 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

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