

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :							
Product line	: W22 NEMA Premium Efficiency Three-Phase	Product code :	12447129				
Frame	: 324/6TC	Cooling method	: IC411 - TEFC				
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	: 263 kg				
Protection degree	: IP55	Moment of inertia (J)	: 0.3861 kgm ²				
Design	: B						
Output [HP]	40	30	30	30	40	40	40
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]	94.2/47.1	42.8	41.6	41.1	57.4	54.1	52.8
L. R. Amperes [A]	575/287	291	308	316	287	303	317
LRC [A]	6.1x(Code G)	6.8x(Code H)	7.4x(Code J)	7.7x(Code J)	5.0x(Code E)	5.6x(Code F)	6.0x(Code G)
No load current [A]	34.0/17.0	16.8	17.3	18.6	16.8	17.3	18.6
Rated speed [RPM]	1775	1477	1480	1481	1460	1465	1470
Slip [%]	1.39	1.53	1.33	1.27	2.67	2.33	2.00
Rated torque [kgfm]	16.4	14.7	14.7	14.7	19.9	19.8	19.7
Locked rotor torque [%]	229	240	270	280	170	190	210
Breakdown torque [%]	240	260	290	310	180	210	229
Service factor	1.25	1.00	1.00	1.00	1.00	1.00	1.00
Temperature rise	80 K	80 K	80 K	80 K	105 K	105 K	105 K
Locked rotor time	36s (cold) 20s (hot)	25s (cold) 14s (hot)	27s (cold) 15s (hot)	27s (cold) 15s (hot)	25s (cold) 14s (hot)	27s (cold) 15s (hot)	27s (cold) 15s (hot)
Noise level ²	66.0 dB(A)	63.0 dB(A)	63.0 dB(A)	63.0 dB(A)	63.0 dB(A)	63.0 dB(A)	63.0 dB(A)
Efficiency (%)	25%	0.000			0.000		
	50%	93.6	92.9	92.4	91.7	93.6	93.0
	75%	94.1	93.1	93.0	92.6	93.0	93.0
	100%	94.1	93.0	93.2	93.1	92.4	93.0
Power Factor	25%	0.00			0.00		
	50%	0.72	0.68	0.64	0.62	0.78	0.74
	75%	0.80	0.78	0.75	0.73	0.84	0.82
	100%	0.85	0.84	0.82	0.80	0.86	0.85
Losses at normative operating points (speed;torque), in percentage of rated output power							
Losses (%)	P1 (0,9;1,0)	6.1	6.1	6.1	6.1	6.1	6.1
	P2 (0,5;1,0)	5.1	5.1	5.1	5.1	5.1	5.1
	P3 (0,25;1,0)	5.0	5.0	5.0	5.0	5.0	5.0
	P4 (0,9;0,5)	2.8	2.8	2.8	2.8	2.8	2.8
	P5 (0,5;0,5)	1.9	1.9	1.9	1.9	1.9	1.9
	P6 (0,5;0,25)	1.2	1.2	1.2	1.2	1.2	1.2
	P7 (0,25;0,25)	0.8	0.8	0.8	0.8	0.8	0.8
Bearing type	: Drive end 6312 C3	Non drive end 6212 C3	Foundation loads				
Sealing	: V'Ring	V'Ring	Max. traction	: 440 kgf			
Lubrication interval	: 20000 h	20000 h	Max. compression	: 703 kgf			
Lubricant amount	: 21 g	13 g					
Lubricant type	: Mobil Polyrex EM						
This revision replaces and cancel the previous one, which must be eliminated. (1) Looking the motor from the shaft end.				These are average values based on tests with sinusoidal power supply, subject to the tolerances stipulated in NEMA MG-1.			
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Notes
USABLE @208V 104A SF 1.15 SFA 120A

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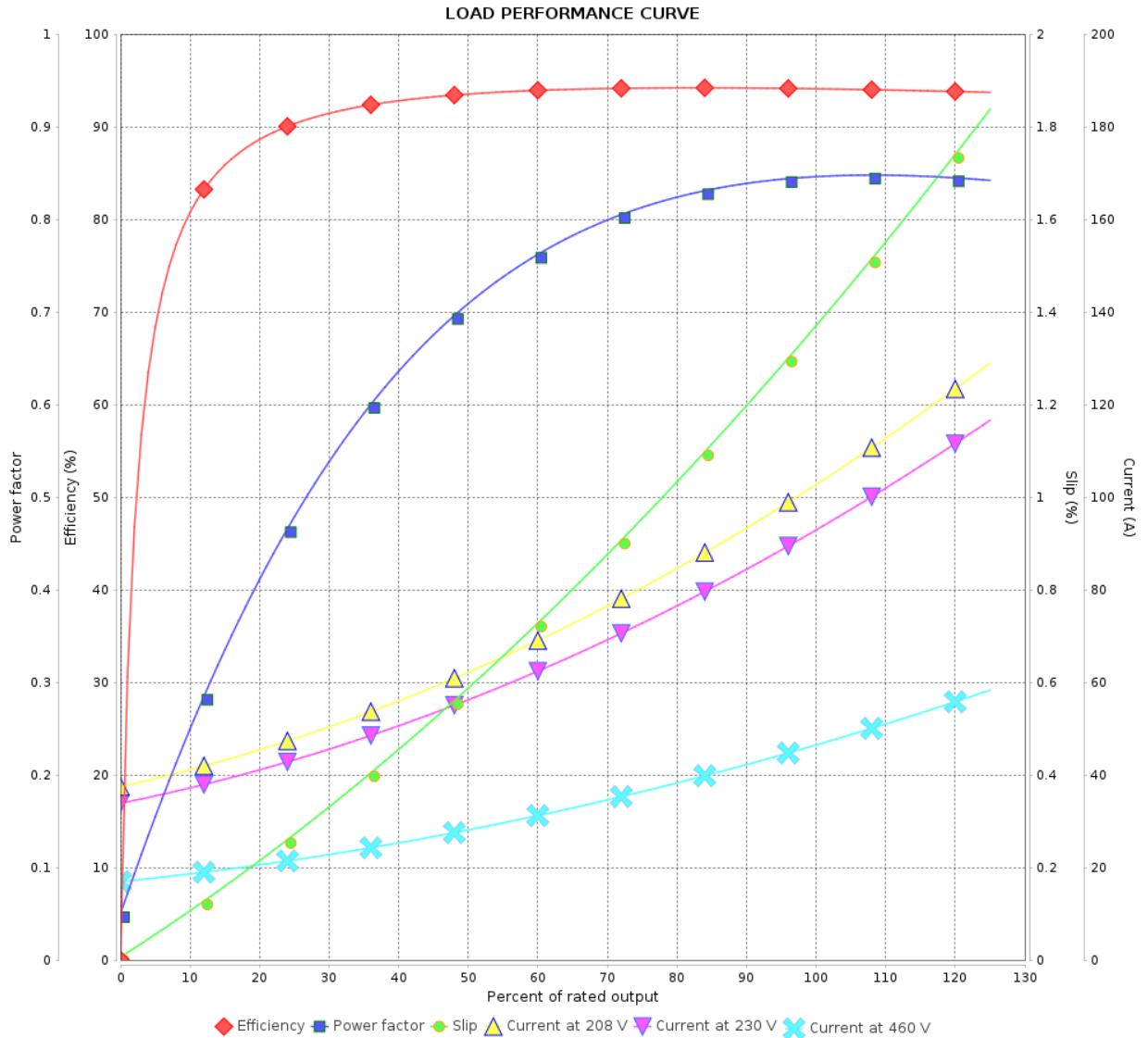
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 12447129



Performance : 230/460 V 60 Hz 4P

Rated current : 94.2/47.1 A
 LRC : 6.1
 Rated torque : 16.4 kgfm
 Locked rotor torque : 229 %
 Breakdown torque : 240 %
 Rated speed : 1775 rpm

Moment of inertia (J) : 0.3861 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.25
 Temperature rise : 80 K
 Design : B

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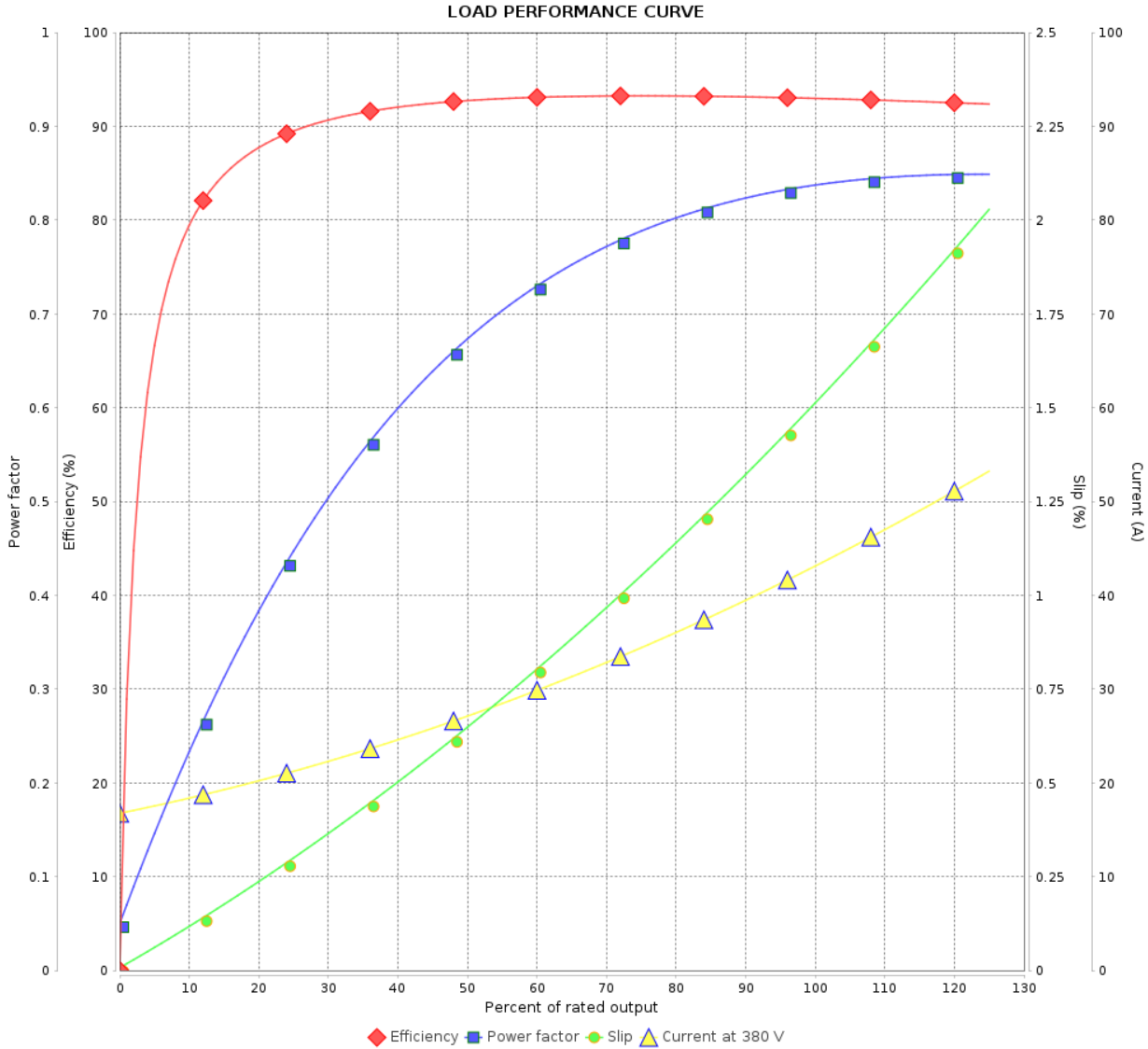
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 12447129



Performance : 380 V 50 Hz 4P IE3

Rated current : 42.8 A
 LRC : 6.8
 Rated torque : 14.7 kgfm
 Locked rotor torque : 240 %
 Breakdown torque : 260 %
 Rated speed : 1477 rpm

Moment of inertia (J) : 0.3861 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : B

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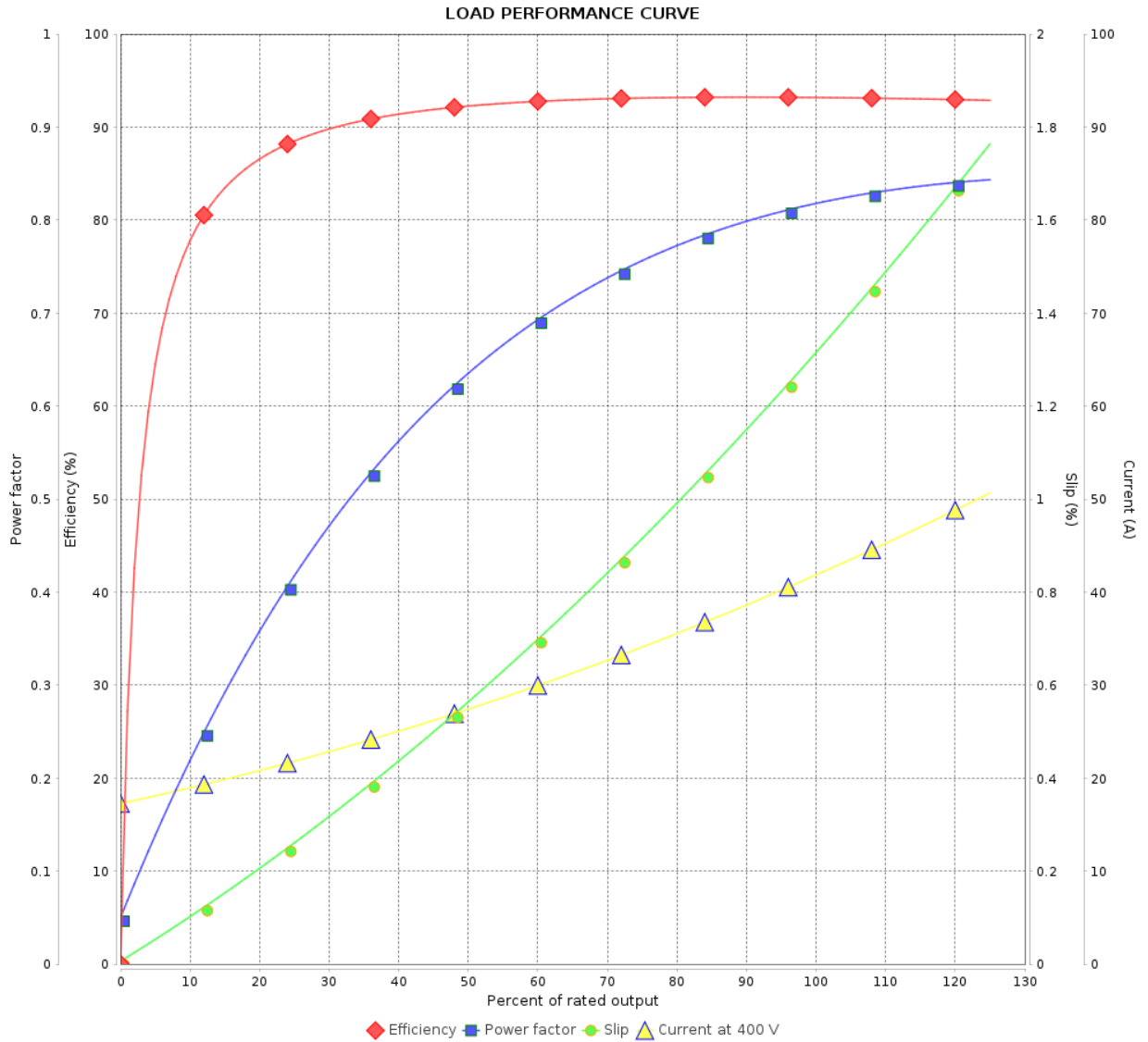
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 12447129



Performance : 400 V 50 Hz 4P IE3

Rated current : 41.6 A
 LRC : 7.4
 Rated torque : 14.7 kgfm
 Locked rotor torque : 270 %
 Breakdown torque : 290 %
 Rated speed : 1480 rpm

Moment of inertia (J) : 0.3861 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : B

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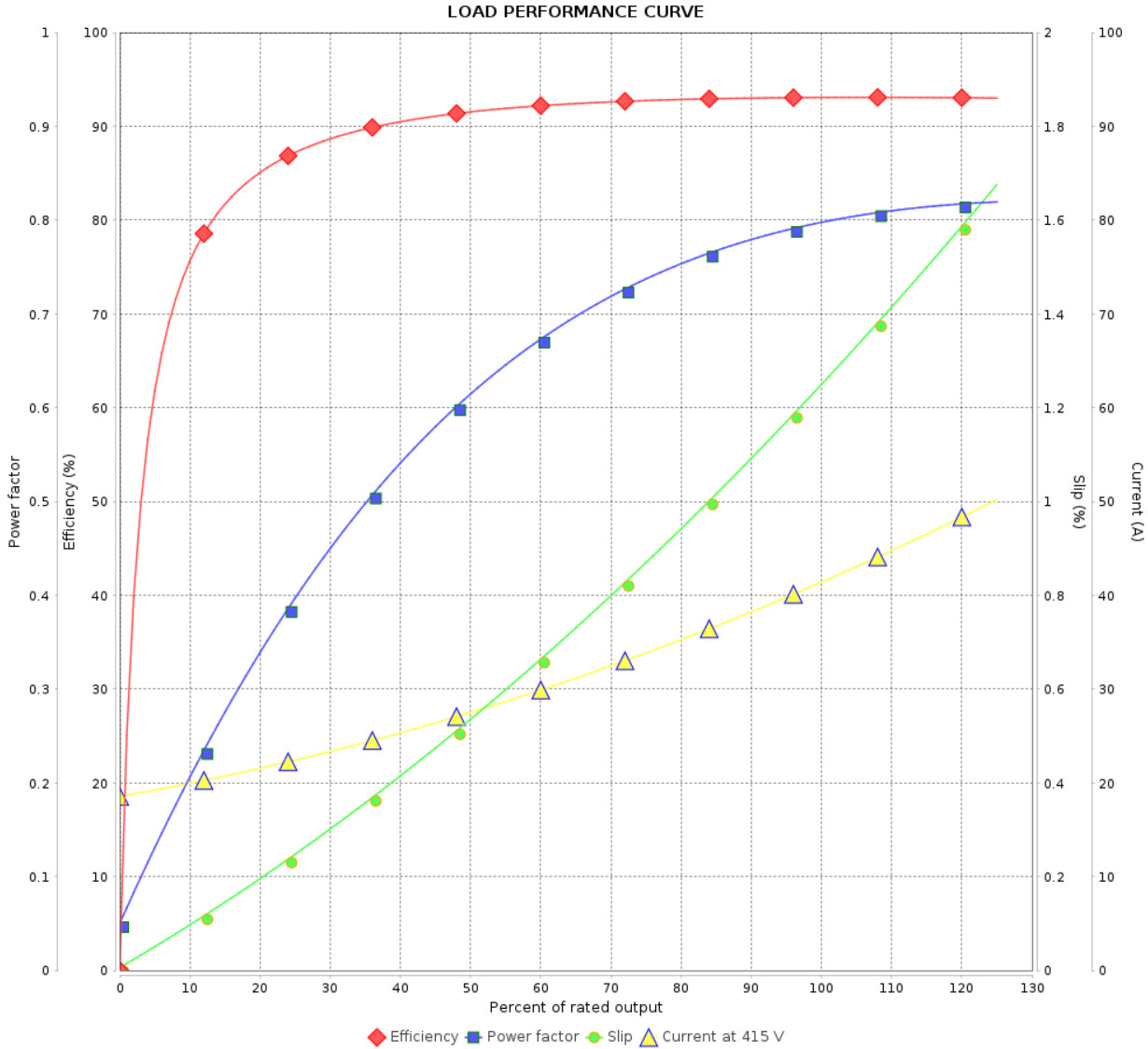
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 12447129



Performance : 415 V 50 Hz 4P IE3

Rated current : 41.1 A
 LRC : 7.7
 Rated torque : 14.7 kgfm
 Locked rotor torque : 280 %
 Breakdown torque : 310 %
 Rated speed : 1481 rpm

Moment of inertia (J) : 0.3861 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : B

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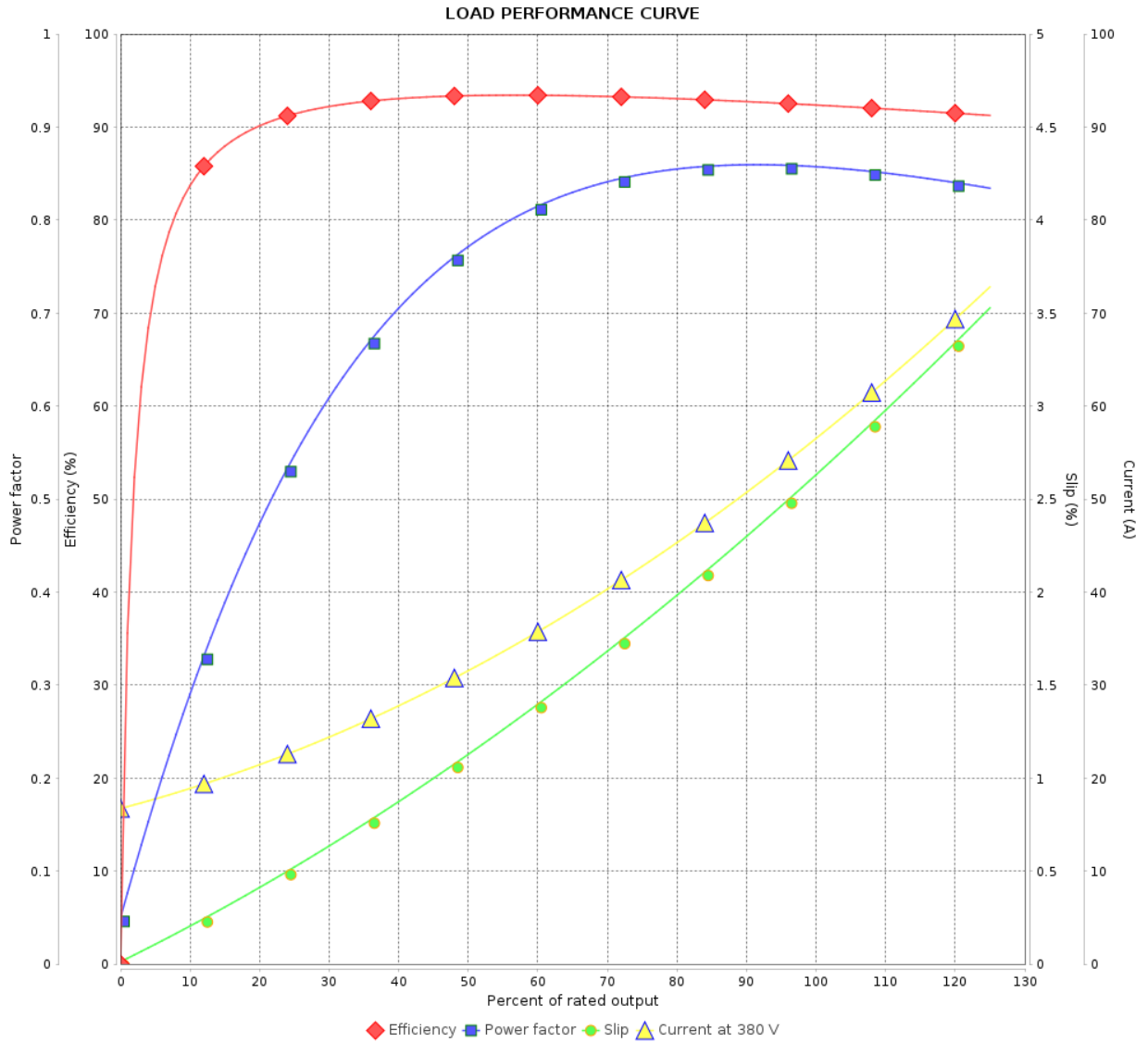
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 12447129



Performance : 380 V 50 Hz 4P IE2

Rated current : 57.4 A
 LRC : 5.0
 Rated torque : 19.9 kgfm
 Locked rotor torque : 170 %
 Breakdown torque : 180 %
 Rated speed : 1460 rpm

Moment of inertia (J) : 0.3861 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 105 K
 Design : B

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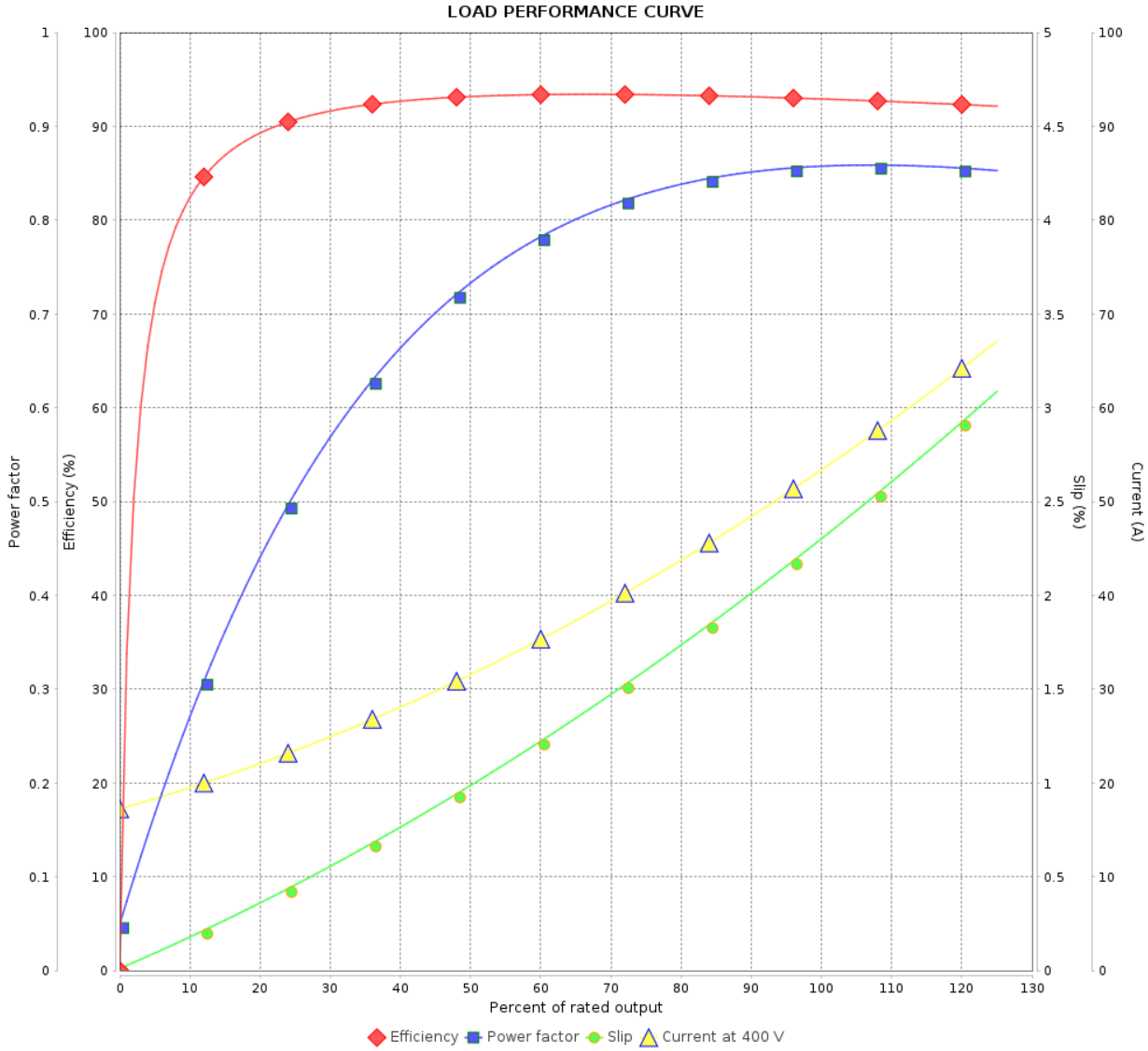
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 12447129



Performance : 400 V 50 Hz 4P IE2

Rated current : 54.1 A
 LRC : 5.6
 Rated torque : 19.8 kgfm
 Locked rotor torque : 190 %
 Breakdown torque : 210 %
 Rated speed : 1465 rpm

Moment of inertia (J) : 0.3861 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 105 K
 Design : B

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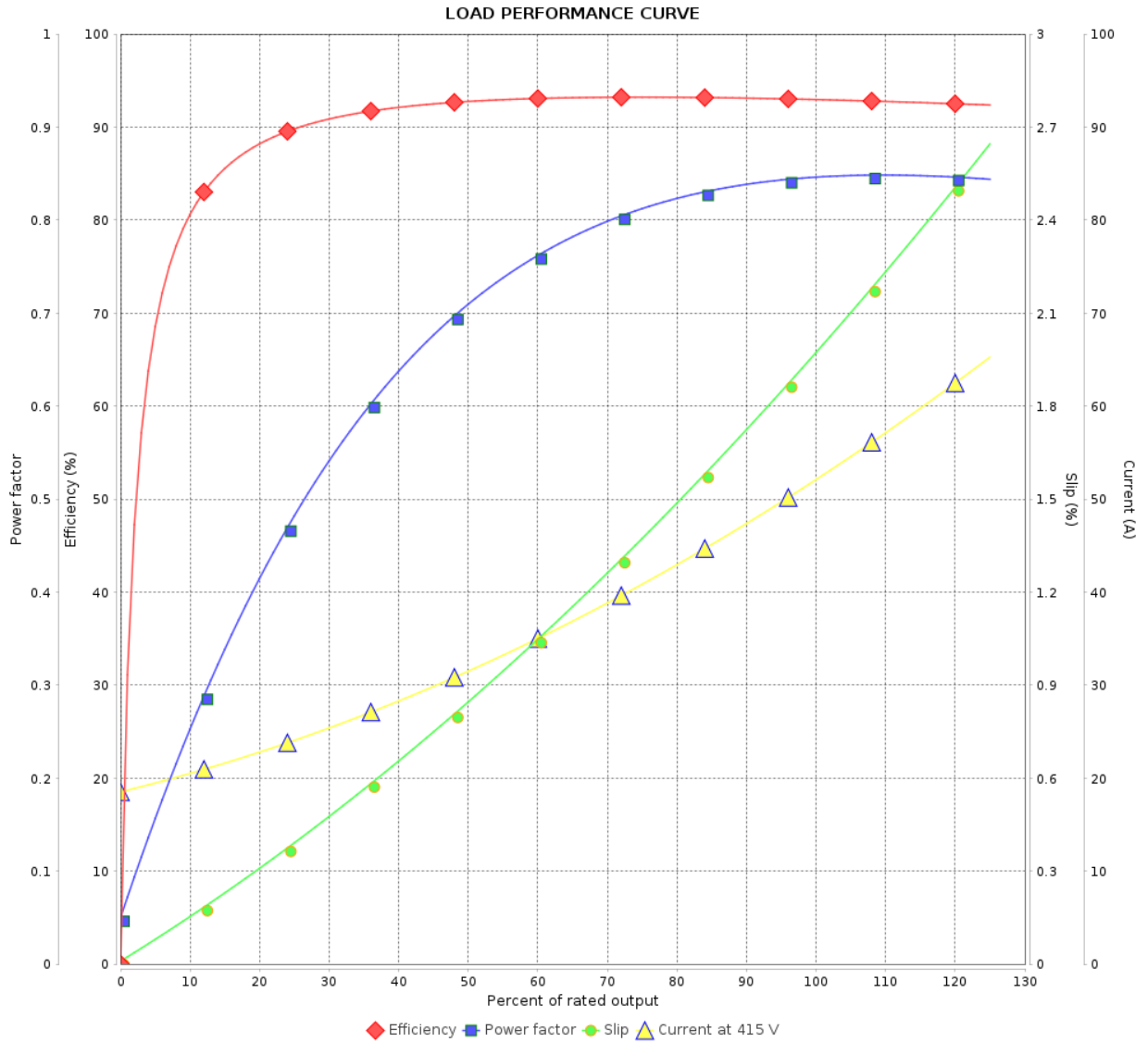
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 12447129



Performance : 415 V 50 Hz 4P IE2

Rated current : 52.8 A
 LRC : 6.0
 Rated torque : 19.7 kgfm
 Locked rotor torque : 210 %
 Breakdown torque : 229 %
 Rated speed : 1470 rpm

Moment of inertia (J) : 0.3861 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 105 K
 Design : B

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