

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : W22 IEEE 841 NEMA Premium Efficiency Three-Phase Product code : 11943172

Frame	: 324/6T	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 ²	: 275 kg
Protection degree	: IP55	Moment of inertia (J)	: 0.3861 kgm ²
Design	: B		

Output [HP]	50	40	40	40	50	50	50
Poles	4	4	4	4	4	4	4
Frequency [Hz]	60	50	50	50	50	50	50
Rated voltage [V]	460	380	400	415	380	400	415
Rated current [A]	59.2	58.7	57.1	56.4	71.6	68.4	66.3
L. R. Amperes [A]	367	376	400	417	372	397	411
LRC [A]	6.2x(Code G)	6.4x(Code G)	7.0x(Code H)	7.4x(Code J)	5.2x(Code E)	5.8x(Code F)	6.2x(Code G)
No load current [A]	23.5	23.0	24.0	25.0	23.0	24.0	25.0
Rated speed [RPM]	1775	1475	1477	1478	1460	1465	1470
Slip [%]	1.39	1.67	1.53	1.47	2.67	2.33	2.00
Rated torque [kgfm]	20.4	19.7	19.7	19.6	24.9	24.8	24.7
Locked rotor torque [%]	229	229	250	260	180	200	210
Breakdown torque [%]	270	260	300	330	200	240	260
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	27s (cold) 15s (hot)	19s (cold) 11s (hot)	19s (cold) 11s (hot)	19s (cold) 11s (hot)	19s (cold) 11s (hot)	19s (cold) 11s (hot)	19s (cold) 11s (hot)
Noise level ²	70.0 dB(A)	67.0 dB(A)	67.0 dB(A)	67.0 dB(A)	67.0 dB(A)	67.0 dB(A)	67.0 dB(A)
Efficiency (%)	25%						
	50%	93.0	92.5	91.5	91.1	93.0	92.4
	75%	94.1	93.1	92.8	93.0	93.0	93.0
	100%	94.5	93.6	93.6	93.6	92.4	93.0
Power Factor	25%						
	50%	0.66	0.64	0.60	0.57	0.72	0.68
	75%	0.77	0.77	0.73	0.70	0.81	0.79
	100%	0.83	0.83	0.81	0.79	0.85	0.84

Losses at normative operating points (speed;torque), in percentage of rated output power

Losses (%)	P1 (0,9;1,0)	5.7	5.7	5.7	5.7	5.7	5.7
	P2 (0,5;1,0)	4.9	4.9	4.9	4.9	4.9	4.9
	P3 (0,25;1,0)	4.7	4.7	4.7	4.7	4.7	4.7
	P4 (0,9;0,5)	2.7	2.7	2.7	2.7	2.7	2.7
	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)	0.9	0.9	0.9	0.9	0.9	0.9

Bearing type	: Drive end 6312 C3 Non drive end 6212 C3	Foundation loads Max. traction : 671 kgf Max. compression : 946 kgf
Sealing	: Taconite Labyrinth Taconite Labyrinth	
Lubrication interval	: 20000 h 20000 h	
Lubricant amount	: 21 g 13 g	
Lubricant type	: Mobil Polyrex EM	

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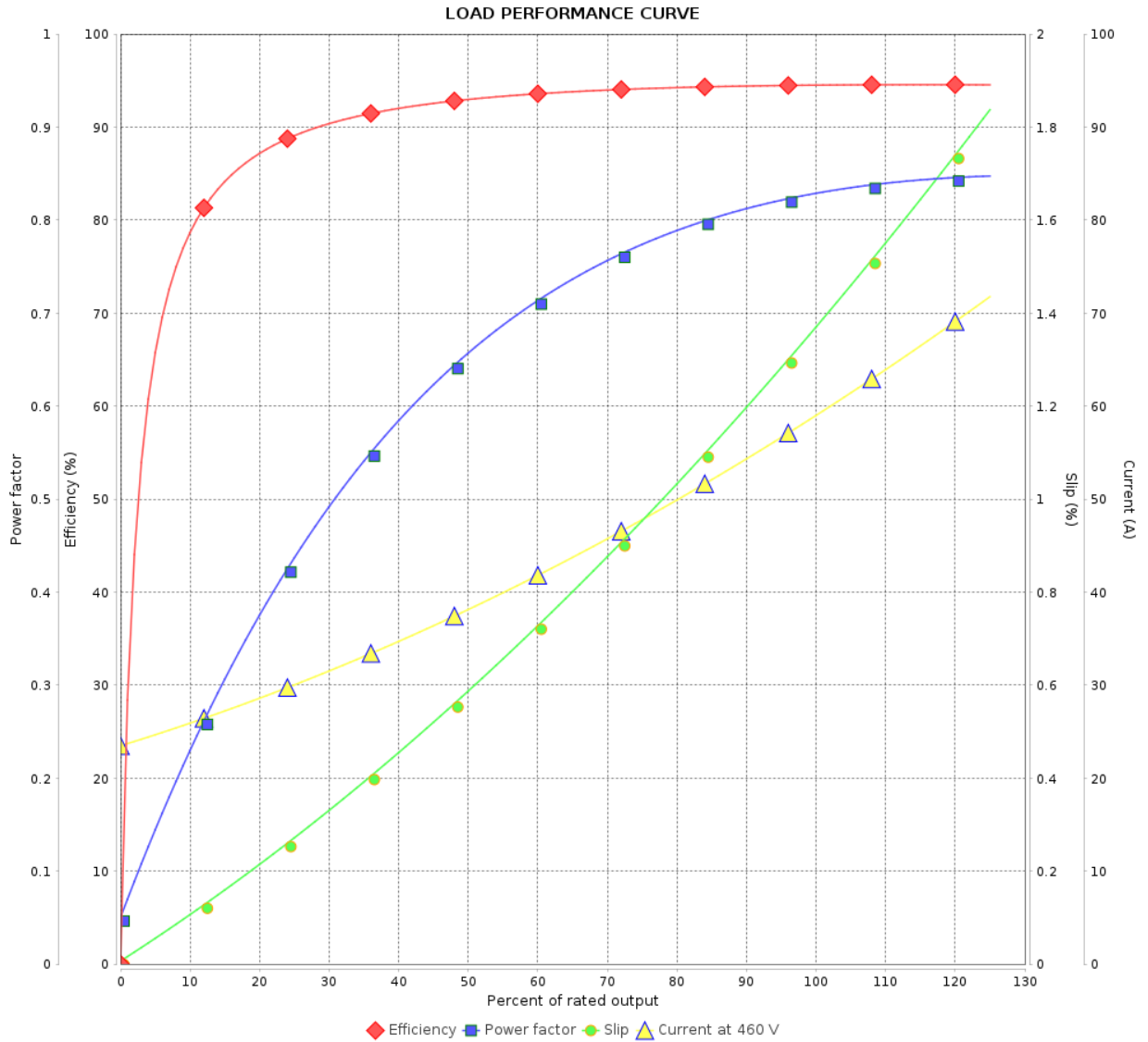
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 IEEE 841 NEMA Premium Efficiency Three-Phase

Product code : 11943172



Performance : 460 V 60 Hz 4P

Rated current : 59.2 A
 LRC : 6.2
 Rated torque : 20.4 kgfm
 Locked rotor torque : 229 %
 Breakdown torque : 270 %
 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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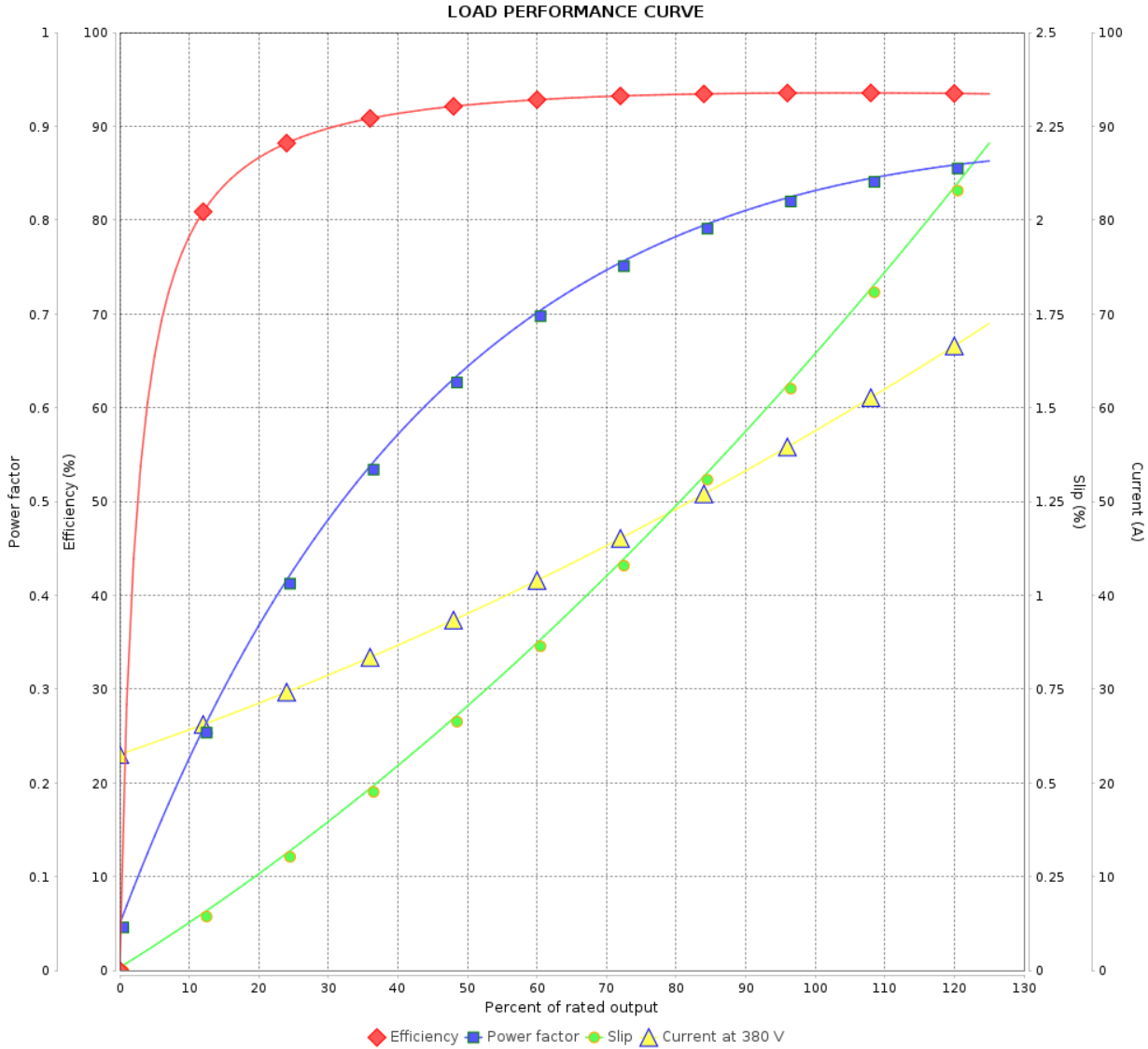
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Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 IEEE 841 NEMA Premium Efficiency Three-Phase Product code : 11943172



Performance : 380 V 50 Hz 4P IE3

Rated current	: 58.7 A	Moment of inertia (J)	: 0.3861 kgm ²
LRC	: 6.4	Duty cycle	: Cont.(S1)
Rated torque	: 19.7 kgfm	Insulation class	: F
Locked rotor torque	: 229 %	Service factor	: 1.00
Breakdown torque	: 260 %	Temperature rise	: 80 K
Rated speed	: 1475 rpm	Design	: B

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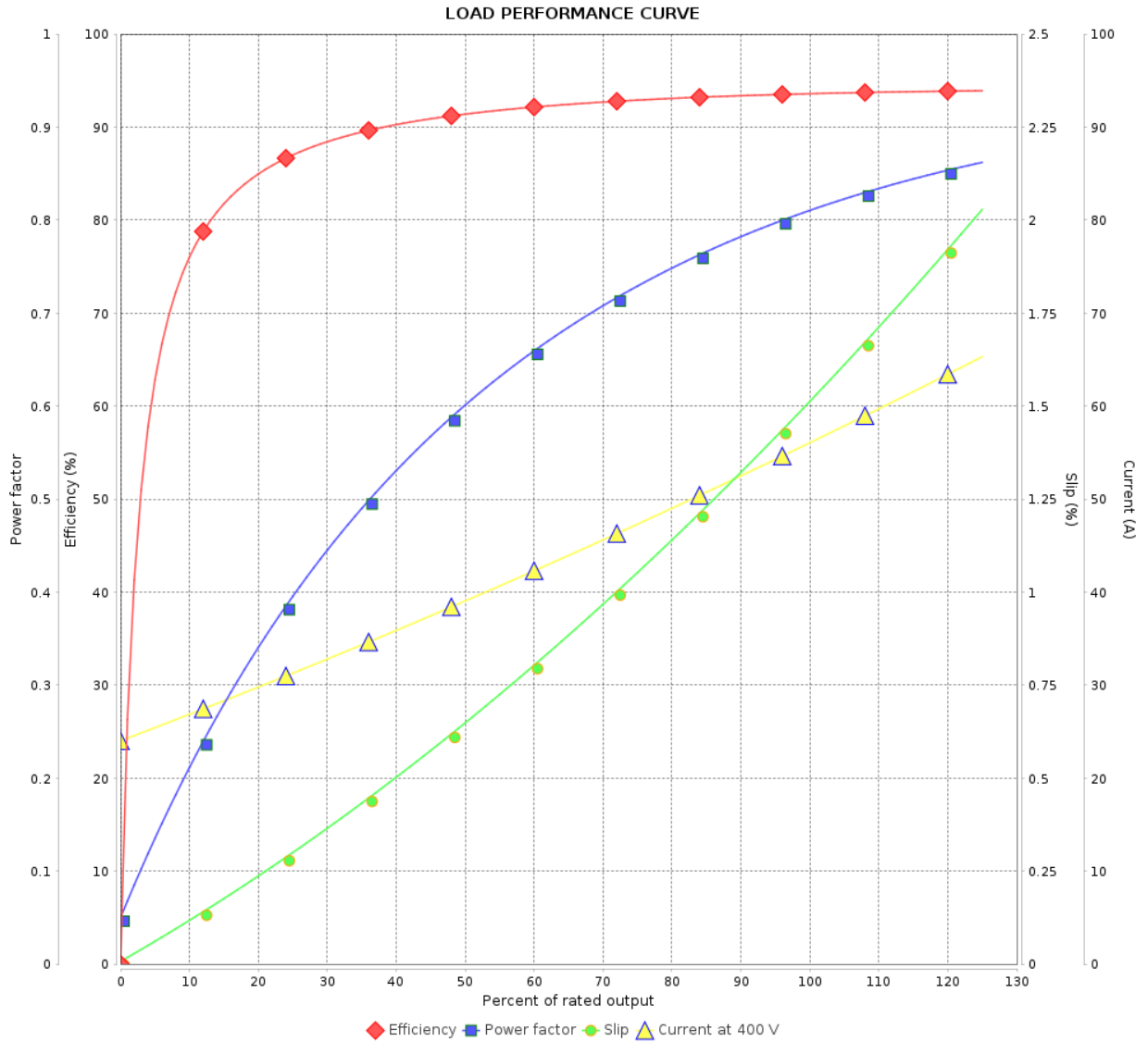
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 IEEE 841 NEMA Premium Efficiency Three-Phase

Product code : 11943172



Performance : 400 V 50 Hz 4P IE3

Rated current : 57.1 A
 LRC : 7.0
 Rated torque : 19.7 kgfm
 Locked rotor torque : 250 %
 Breakdown torque : 300 %
 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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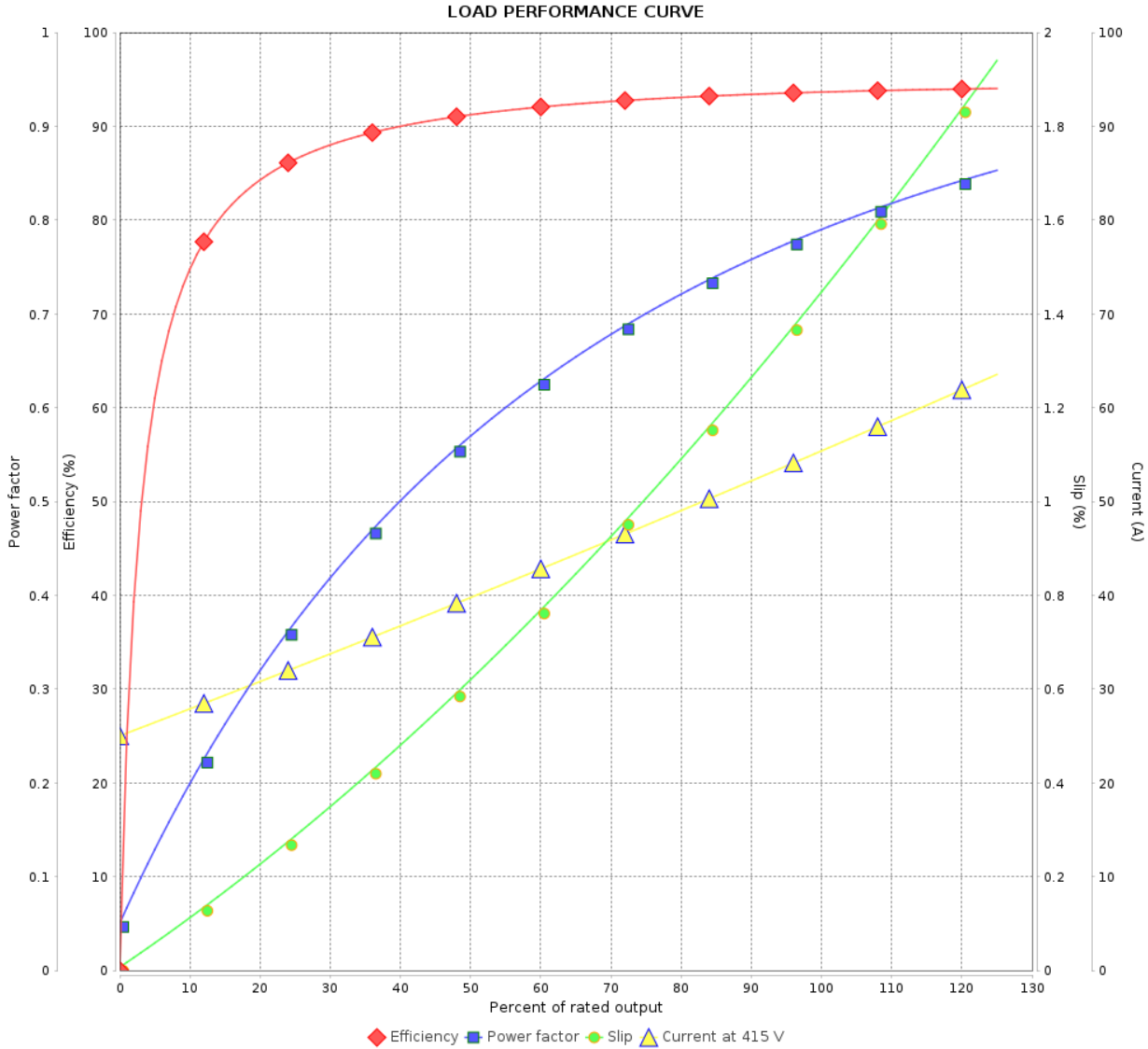
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Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 IEEE 841 NEMA Premium Efficiency Three-Phase Product code : 11943172



Performance : 415 V 50 Hz 4P IE3

Rated current	: 56.4 A	Moment of inertia (J)	: 0.3861 kgm ²
LRC	: 7.4	Duty cycle	: Cont.(S1)
Rated torque	: 19.6 kgfm	Insulation class	: F
Locked rotor torque	: 260 %	Service factor	: 1.00
Breakdown torque	: 330 %	Temperature rise	: 80 K
Rated speed	: 1478 rpm	Design	: B

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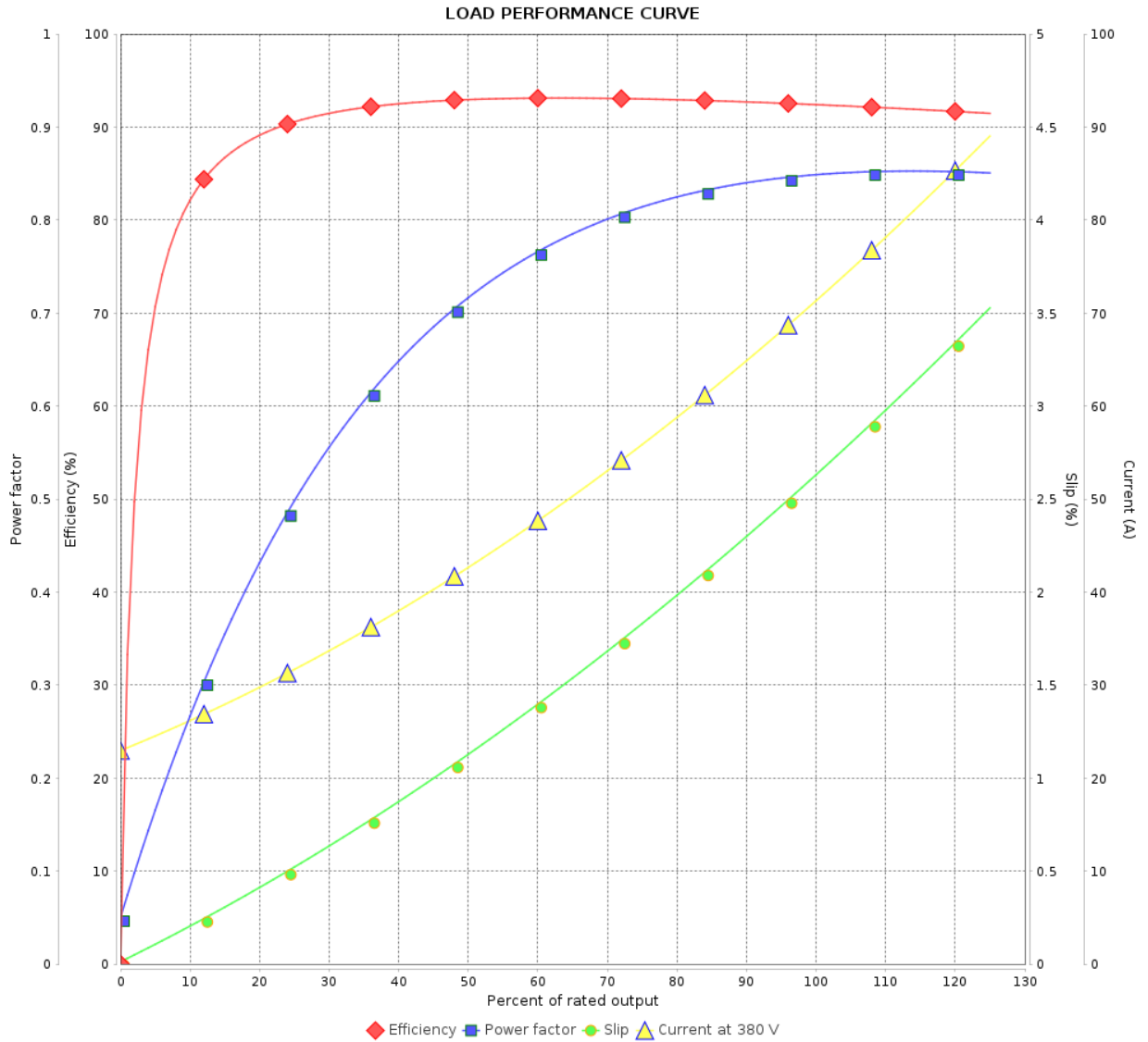
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Three Phase Induction Motor - Squirrel Cage



Customer : _____

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Performance : 380 V 50 Hz 4P IE1

Rated current	: 71.6 A	Moment of inertia (J)	: 0.3861 kgm ²
LRC	: 5.2	Duty cycle	: Cont.(S1)
Rated torque	: 24.9 kgfm	Insulation class	: F
Locked rotor torque	: 180 %	Service factor	: 1.00
Breakdown torque	: 200 %	Temperature rise	: 105 K
Rated speed	: 1460 rpm	Design	: B

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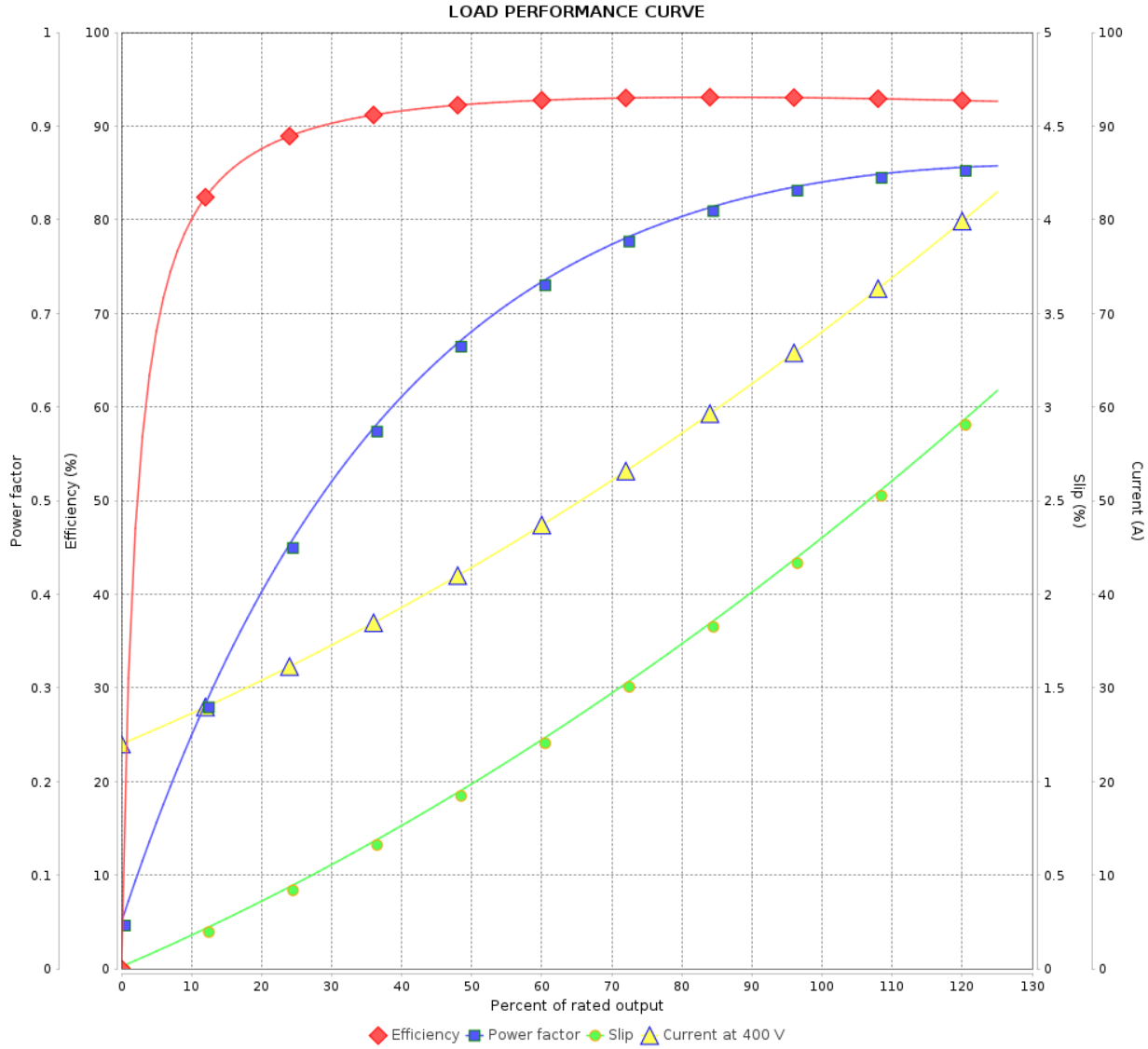
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Performance : 400 V 50 Hz 4P IE2

Rated current	: 68.4 A	Moment of inertia (J)	: 0.3861 kgm ²
LRC	: 5.8	Duty cycle	: Cont.(S1)
Rated torque	: 24.8 kgfm	Insulation class	: F
Locked rotor torque	: 200 %	Service factor	: 1.00
Breakdown torque	: 240 %	Temperature rise	: 105 K
Rated speed	: 1465 rpm	Design	: B

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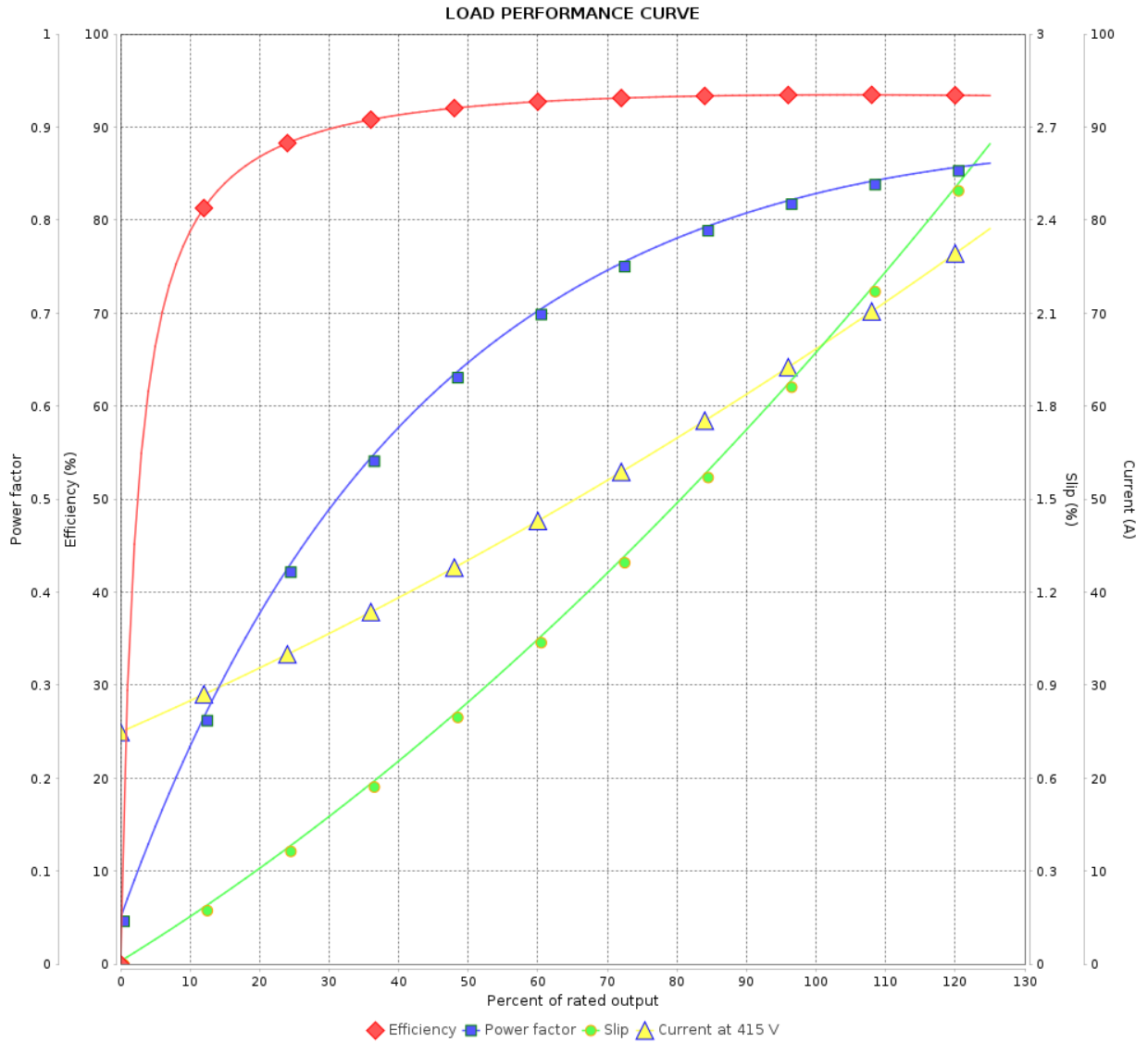
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 IEEE 841 NEMA Premium Efficiency Three-Phase

Product code : 11943172



Performance : 415 V 50 Hz 4P IE2

Rated current : 66.3 A
 LRC : 6.2
 Rated torque : 24.7 kgfm
 Locked rotor torque : 210 %
 Breakdown torque : 260 %
 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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