

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : W22 IEEE 841 NEMA Premium Efficiency Three-Phase Product code : 11943606

Frame	: 444/5TC	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	: 0.0 kg
Protection degree	: IP55	Moment of inertia (J)	: 3.68 kgm ²
Design	: B		

Output [HP]	100	75	75	75	100	100	100
Poles	8	8	8	8	8	8	8
Frequency [Hz]	60	50	50	50	50	50	50
Rated voltage [V]	460	380	400	415	380	400	415
Rated current [A]	127	118	116	115	152	147	144
L. R. Amperes [A]	762	717	778	806	714	779	806
LRC [A]	6.0x(Code G)	6.1x(Code G)	6.7x(Code J)	7.0x(Code J)	4.7x(Code E)	5.3x(Code F)	5.6x(Code G)
No load current [A]	56.0	55.0	61.0	67.0	55.0	61.0	67.0
Rated speed [RPM]	890	740	740	740	735	740	740
Slip [%]	1.11	1.33	1.33	1.33	2.00	1.33	1.33
Rated torque [kgfm]	81.5	73.6	73.6	73.6	98.7	98.1	98.1
Locked rotor torque [%]	190	200	229	250	150	170	190
Breakdown torque [%]	220	229	270	290	170	200	220
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)	21s (cold) 12s (hot)	21s (cold) 12s (hot)	21s (cold) 12s (hot)	21s (cold) 12s (hot)	21s (cold) 12s (hot)	21s (cold) 12s (hot)
Noise level ²	63.0 dB(A)	59.0 dB(A)	59.0 dB(A)	59.0 dB(A)	59.0 dB(A)	59.0 dB(A)	59.0 dB(A)
Efficiency (%)	25%						
	50%	93.6	92.9	91.9	91.2	93.6	92.4
	75%	94.1	93.4	93.0	92.6	93.0	93.0
	100%	94.1	93.2	93.2	93.1	92.4	93.0
Power Factor	25%						
	50%	0.63	0.59	0.55	0.51	0.69	0.61
	75%	0.74	0.72	0.68	0.65	0.78	0.73
	100%	0.79	0.78	0.75	0.73	0.81	0.78

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)	4.9	4.9	4.9	4.9	4.9	4.9
	P3 (0,25;1,0)	4.4	4.4	4.4	4.4	4.4	4.4
	P4 (0,9;0,5)	3.0	3.0	3.0	3.0	3.0	3.0
	P5 (0,5;0,5)	2.0	2.0	2.0	2.0	2.0	2.0
	P6 (0,5;0,25)	1.4	1.4	1.4	1.4	1.4	1.4
	P7 (0,25;0,25)	0.9	0.9	0.9	0.9	0.9	0.9

Bearing type	: Drive end 6319 C3 Non drive end 6316 C3	Foundation loads Max. traction : 1887 kgf Max. compression : 1887 kgf
Sealing	: Taconite Labyrinth Taconite Labyrinth	
Lubrication interval	: 17000 h 20000 h	
Lubricant amount	: 45 g 34 g	
Lubricant type	: Mobil Polyrex EM	

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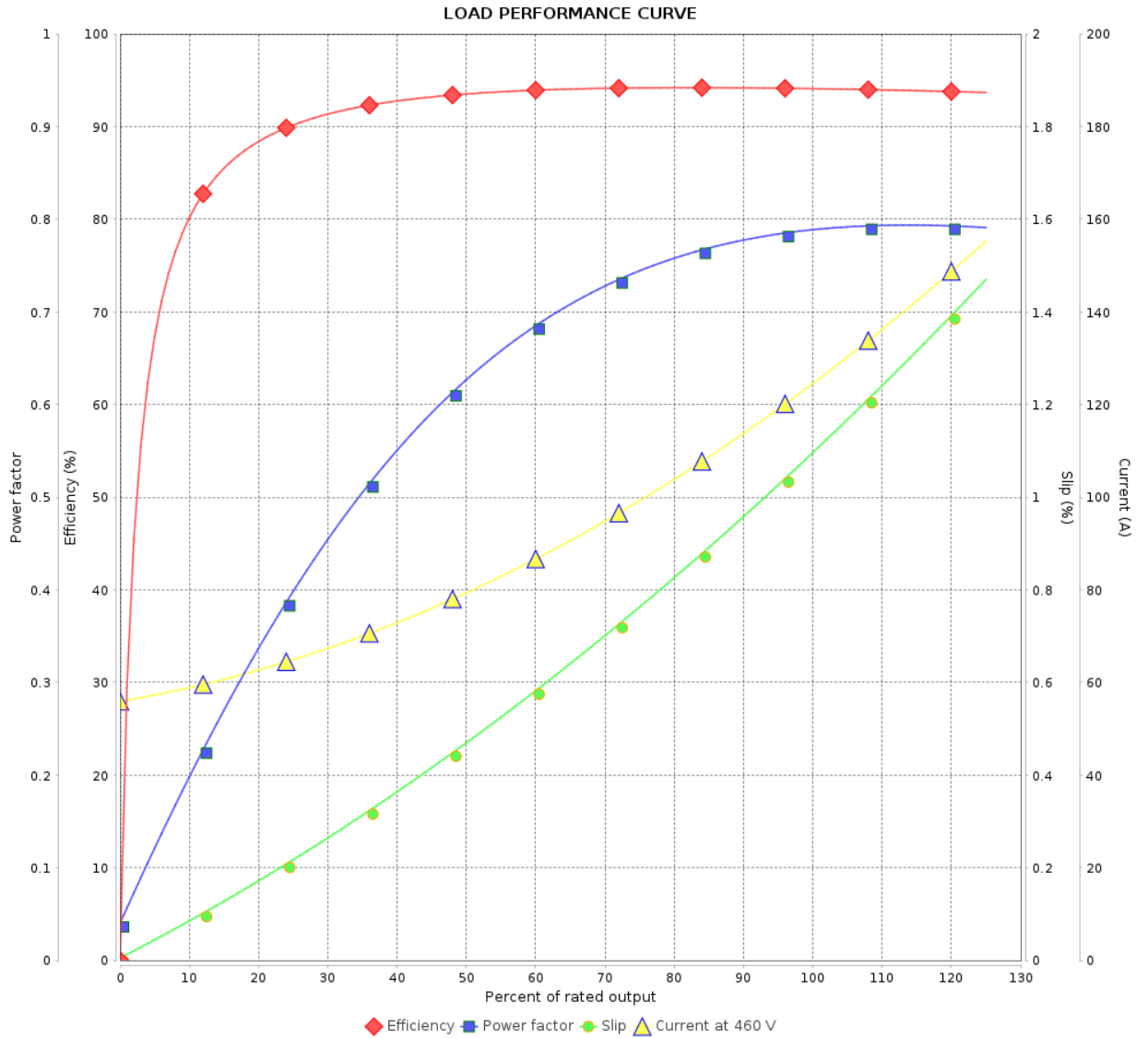
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Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 IEEE 841 NEMA Premium Efficiency Three-Phase Product code : 11943606



Performance : 460 V 60 Hz 8P

Rated current	: 127 A	Moment of inertia (J)	: 3.68 kgm ²
LRC	: 6.0	Duty cycle	: Cont.(S1)
Rated torque	: 81.5 kgfm	Insulation class	: F
Locked rotor torque	: 190 %	Service factor	: 1.25
Breakdown torque	: 220 %	Temperature rise	: 80 K
Rated speed	: 890 rpm	Design	: B

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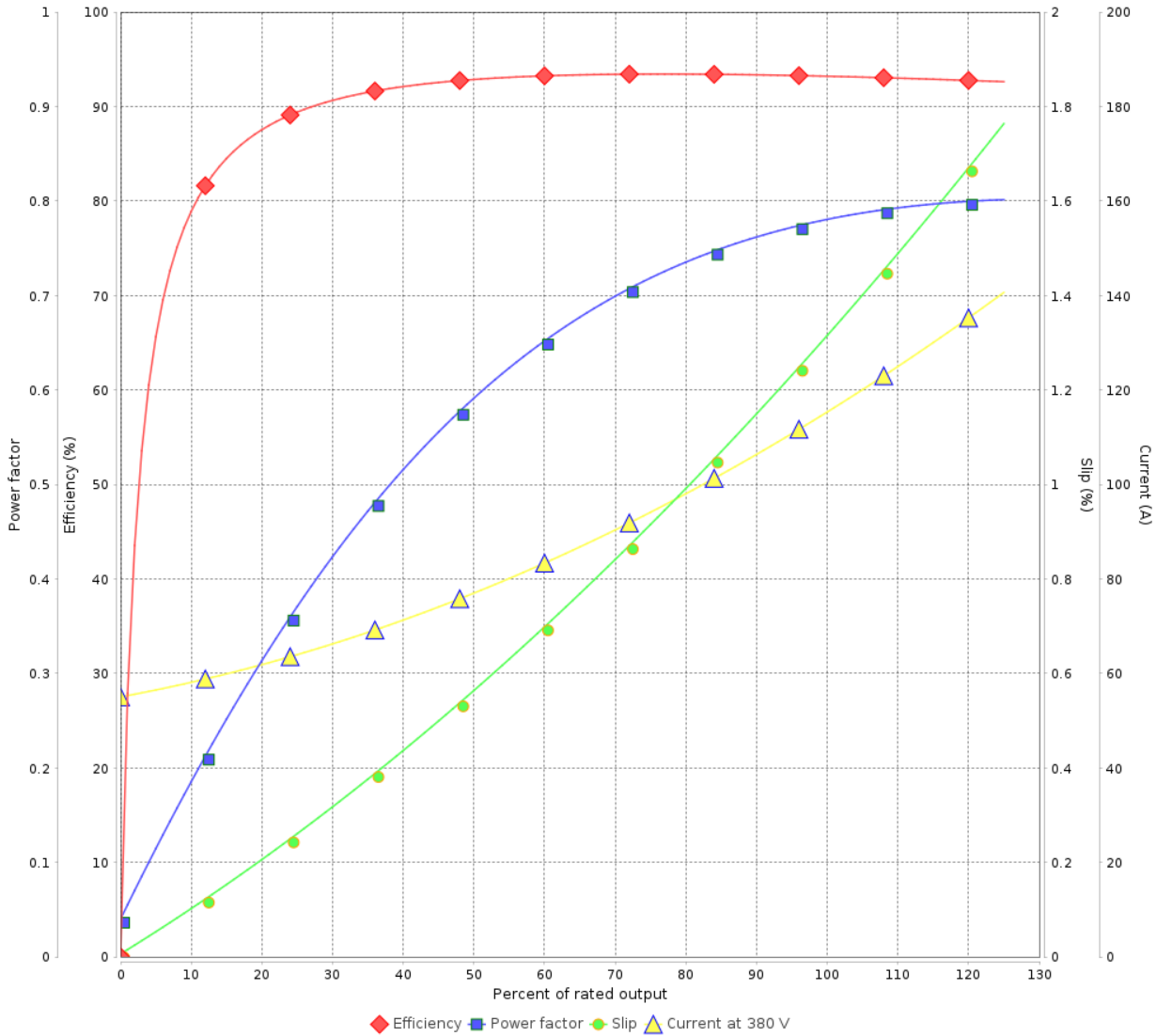
Three Phase Induction Motor - Squirrel Cage



Customer : _____

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Performance : 380 V 50 Hz 8P IE3

Rated current	: 118 A	Moment of inertia (J)	: 3.68 kgm ²
LRC	: 6.1	Duty cycle	: Cont.(S1)
Rated torque	: 73.6 kgfm	Insulation class	: F
Locked rotor torque	: 200 %	Service factor	: 1.00
Breakdown torque	: 229 %	Temperature rise	: 80 K
Rated speed	: 740 rpm	Design	: B

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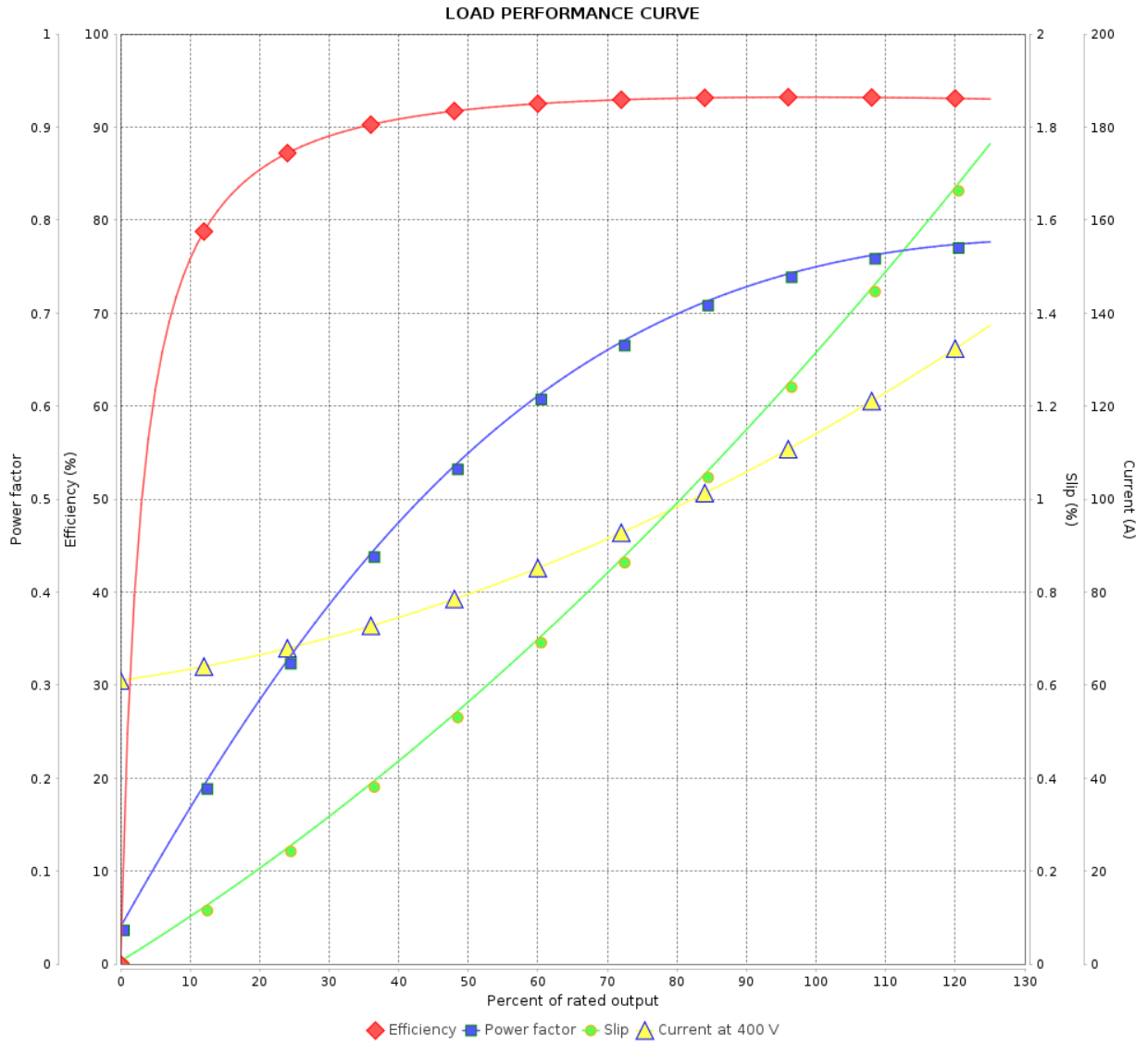
Three Phase Induction Motor - Squirrel Cage



Customer : _____

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

Product code : 11943606



Performance : 400 V 50 Hz 8P IE3

Rated current : 116 A
 LRC : 6.7
 Rated torque : 73.6 kgfm
 Locked rotor torque : 229 %
 Breakdown torque : 270 %
 Rated speed : 740 rpm

Moment of inertia (J) : 3.68 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : B

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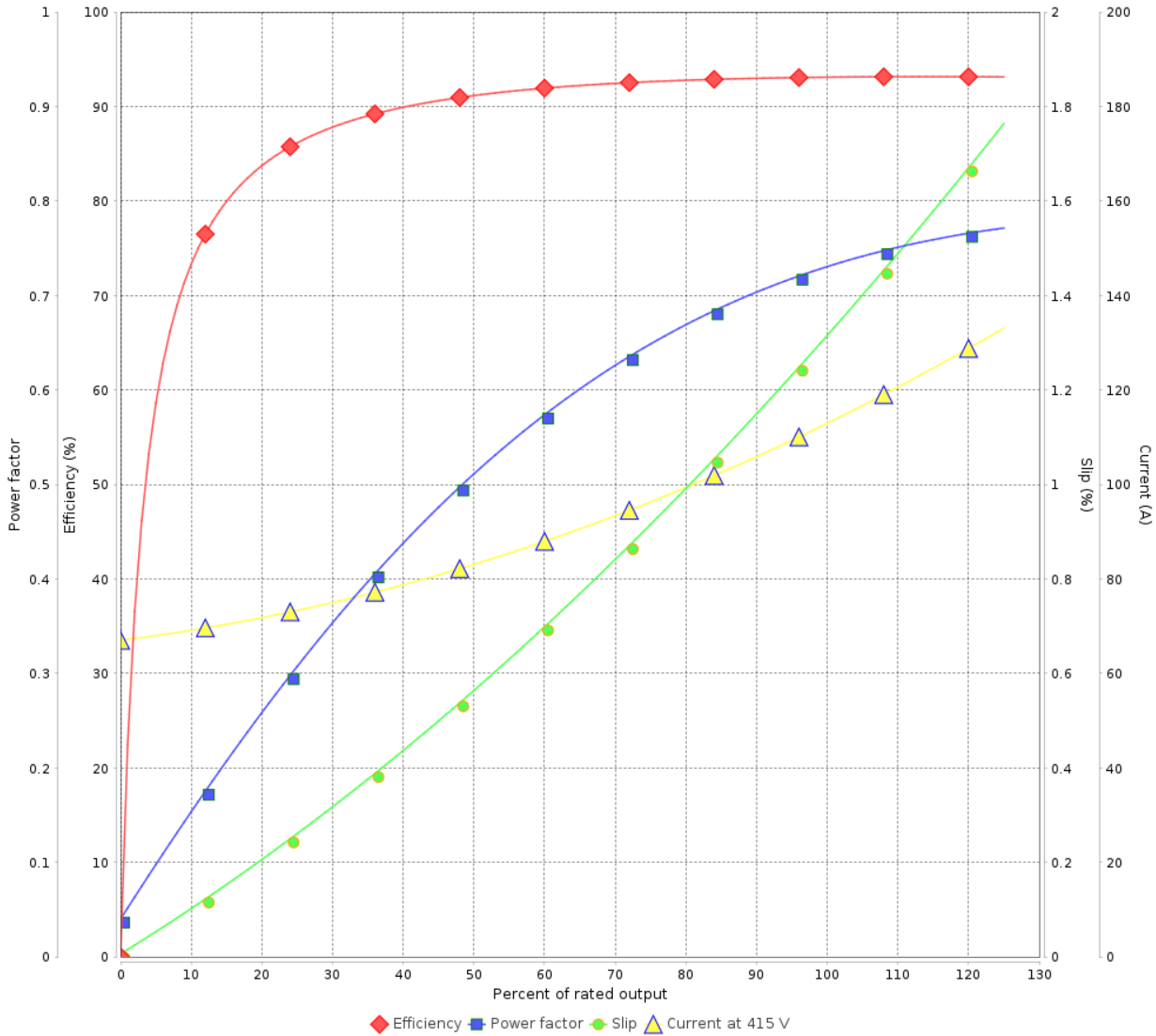
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 IEEE 841 NEMA Premium Efficiency Three-Phase Product code : 11943606

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Performance : 415 V 50 Hz 8P IE3

Rated current	: 115 A	Moment of inertia (J)	: 3.68 kgm ²
LRC	: 7.0	Duty cycle	: Cont.(S1)
Rated torque	: 73.6 kgfm	Insulation class	: F
Locked rotor torque	: 250 %	Service factor	: 1.00
Breakdown torque	: 290 %	Temperature rise	: 80 K
Rated speed	: 740 rpm	Design	: B

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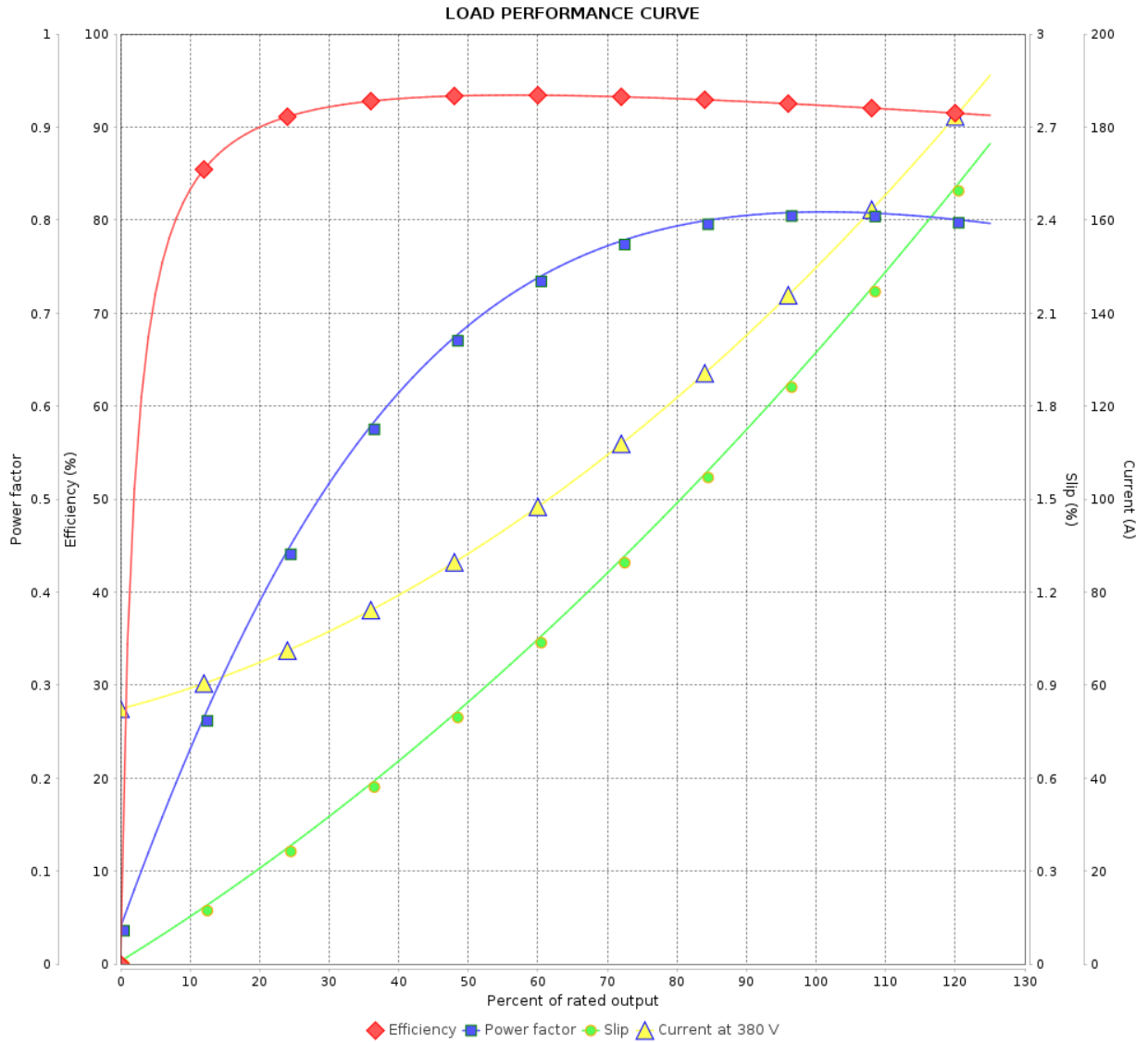
Three Phase Induction Motor - Squirrel Cage



Customer :

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Product code : 11943606



Performance : 380 V 50 Hz 8P IE2

Rated current : 152 A
 LRC : 4.7
 Rated torque : 98.7 kgfm
 Locked rotor torque : 150 %
 Breakdown torque : 170 %
 Rated speed : 735 rpm

Moment of inertia (J) : 3.68 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 105 K
 Design : B

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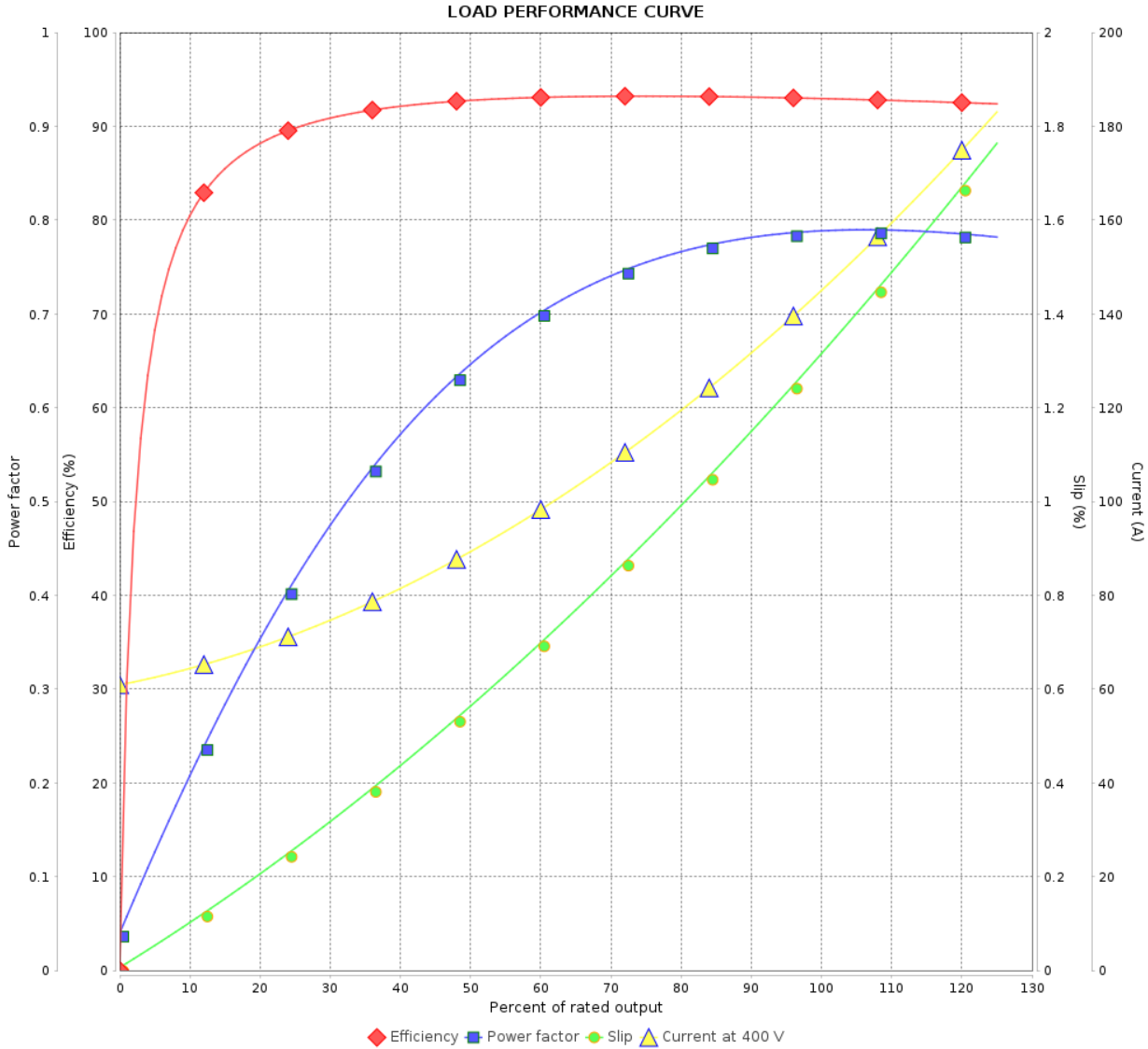
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Performance : 400 V 50 Hz 8P IE2

Rated current	: 147 A	Moment of inertia (J)	: 3.68 kgm ²
LRC	: 5.3	Duty cycle	: Cont.(S1)
Rated torque	: 98.1 kgfm	Insulation class	: F
Locked rotor torque	: 170 %	Service factor	: 1.00
Breakdown torque	: 200 %	Temperature rise	: 105 K
Rated speed	: 740 rpm	Design	: B

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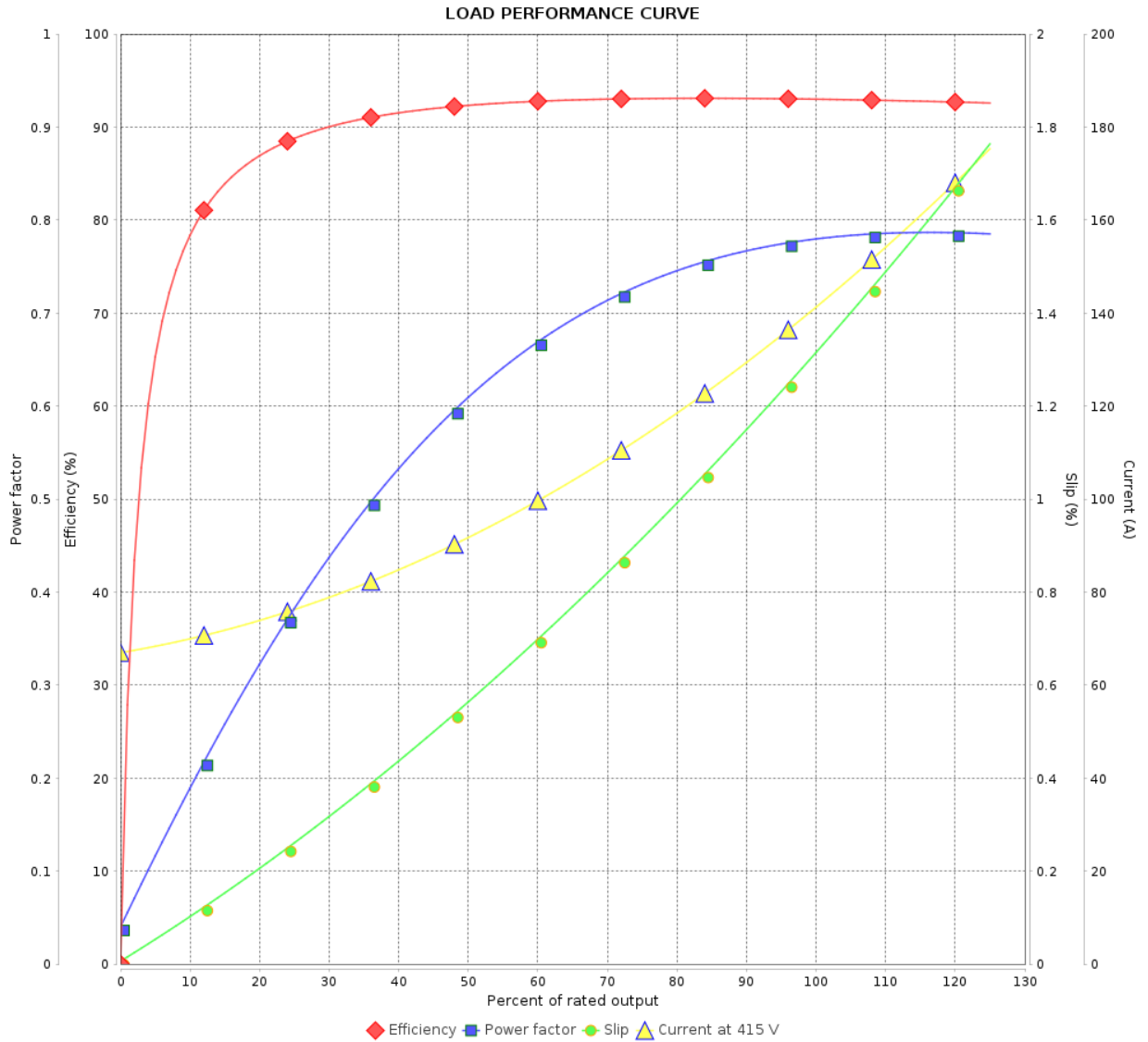
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Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W22 IEEE 841 NEMA Premium Efficiency Three-Phase Product code : 11943606



Performance : 415 V 50 Hz 8P IE2

Rated current : 144 A
 LRC : 5.6
 Rated torque : 98.1 kgfm
 Locked rotor torque : 190 %
 Breakdown torque : 220 %
 Rated speed : 740 rpm

Moment of inertia (J) : 3.68 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 105 K
 Design : B

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