

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer : _____

Product line : W22 IEEE 841 NEMA Premium Efficiency Three-Phase Product code : 11938794

Frame : 143/5TC	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 : 26.0 kg
Protection degree : IP55	Moment of inertia (J) : 0.0066 kgm ²
Design : B	

Output [HP]	2	1.5	1.5	1.5	2	2	2
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]	2.79	2.57	2.57	2.56	3.33	3.22	3.14
L. R. Amperes [A]	23.2	21.1	22.4	21.5	20.0	21.3	22.9
LRC [A]	8.3x(Code L)	8.2x(Code L)	8.7x(Code M)	8.4x(Code M)	6.0x(Code H)	6.6x(Code J)	7.3x(Code K)
No load current [A]	1.63	1.61	1.80	1.97	1.61	1.80	1.97
Rated speed [RPM]	1750	1460	1465	1465	1435	1440	1450
Slip [%]	2.78	2.67	2.33	2.33	4.33	4.00	3.33
Rated torque [kgfm]	0.829	0.746	0.743	0.743	1.01	1.01	1.00
Locked rotor torque [%]	270	290	320	350	220	229	250
Breakdown torque [%]	320	330	380	409	240	260	290
Service factor	1.25	1.25	1.25	1.25	1.25	1.25	1.25
Temperature rise	80 K	80 K	80 K	80 K	80 K	80 K	80 K
Locked rotor time	18s (cold) 10s (hot)	32s (cold) 18s (hot)	28s (cold) 16s (hot)	27s (cold) 15s (hot)	23s (cold) 13s (hot)	21s (cold) 12s (hot)	21s (cold) 12s (hot)
Noise level ²	51.0 dB(A)	49.0 dB(A)	49.0 dB(A)	49.0 dB(A)	49.0 dB(A)	49.0 dB(A)	49.0 dB(A)
Efficiency (%)	25%						
	50%	85.5	84.0	82.0	81.4	85.5	84.0
	75%	86.5	84.2	83.5	83.1	84.0	84.0
	100%	86.5	84.5	84.5	84.1	82.5	84.0
Power Factor	25%						
	50%	0.57	0.55	0.50	0.47	0.66	0.62
	75%	0.70	0.69	0.64	0.61	0.78	0.74
	100%	0.78	0.77	0.73	0.71	0.83	0.80

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

Losses (%)	P1 (0,9;1,0)	15.0	15.0	15.0	15.0	15.0	15.0
	P2 (0,5;1,0)	12.8	12.8	12.8	12.8	12.8	12.8
	P3 (0,25;1,0)	12.1	12.1	12.1	12.1	12.1	12.1
	P4 (0,9;0,5)	8.4	8.4	8.4	8.4	8.4	8.4
	P5 (0,5;0,5)	6.0	6.0	6.0	6.0	6.0	6.0
	P6 (0,5;0,25)	4.7	4.7	4.7	4.7	4.7	4.7
	P7 (0,25;0,25)	3.5	3.5	3.5	3.5	3.5	3.5

Bearing type	: Drive end : 6205 C3 Non drive end : 6204 C3	Foundation loads Max. traction : 70 kgf Max. compression : 96 kgf
Sealing	: Taconite Labyrinth Taconite Labyrinth	
Lubrication interval	: 20000 h 20000 h	
Lubricant amount	: 4 g 4 g	
Lubricant type	: Mobil Polyrex EM	

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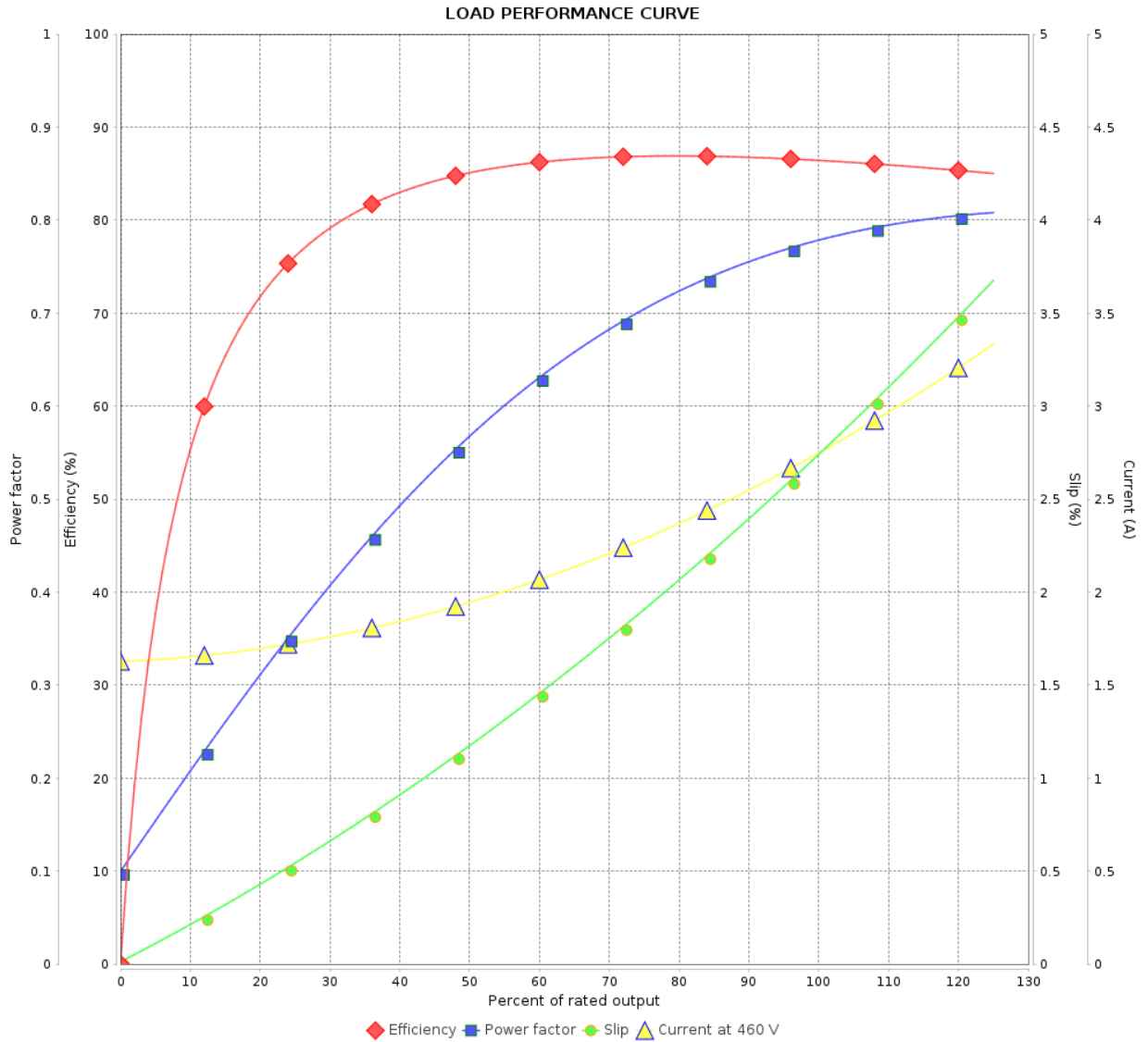
Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 11938794



Performance : 460 V 60 Hz 4P

Rated current : 2.79 A
 LRC : 8.3
 Rated torque : 0.829 kgfm
 Locked rotor torque : 270 %
 Breakdown torque : 320 %
 Rated speed : 1750 rpm

Moment of inertia (J) : 0.0066 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.25
 Temperature rise : 80 K
 Design : B

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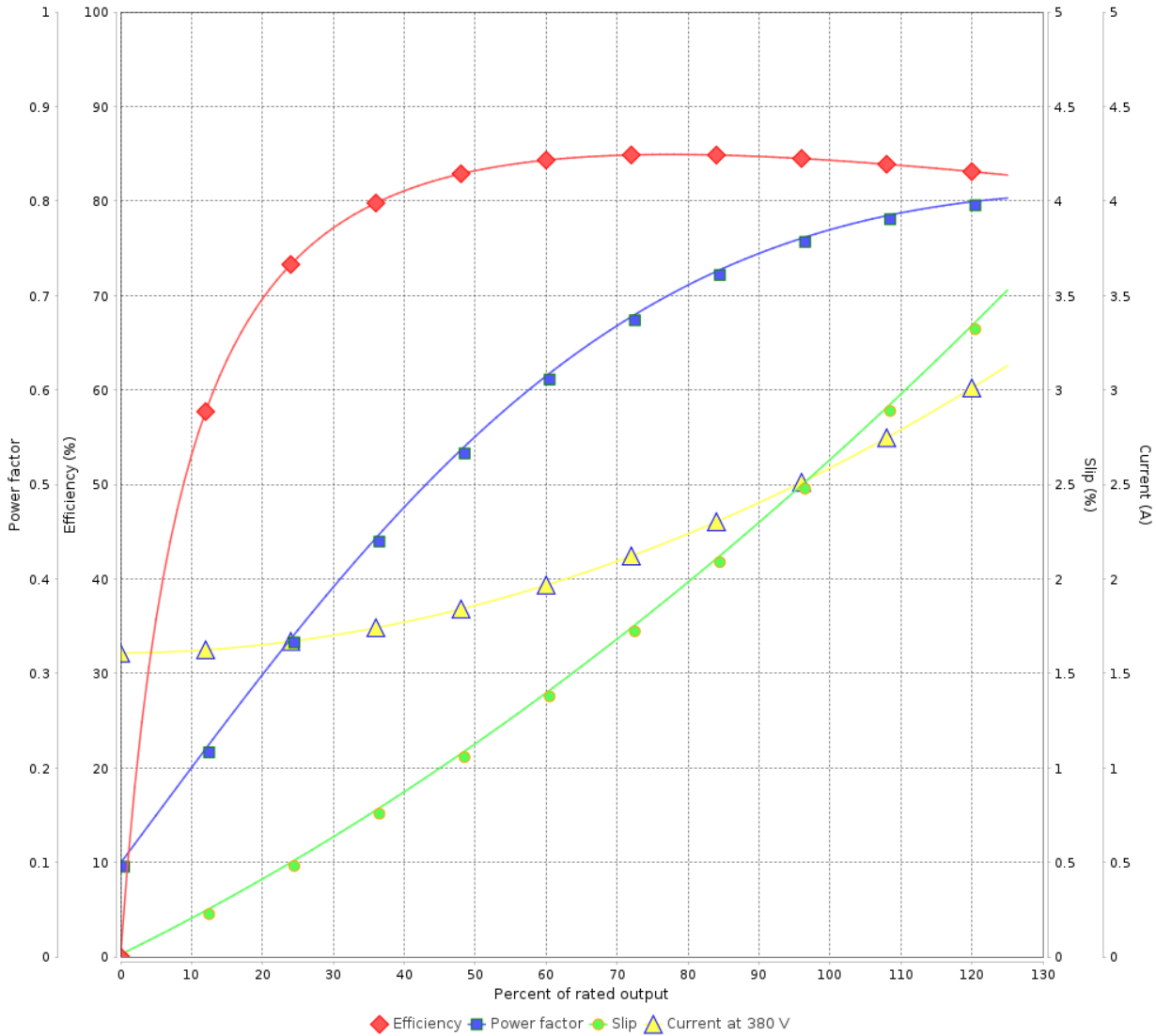
Three Phase Induction Motor - Squirrel Cage



Customer :

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Performance : 380 V 50 Hz 4P IE3

Rated current	: 2.57 A	Moment of inertia (J)	: 0.0066 kgm ²
LRC	: 8.2	Duty cycle	: Cont.(S1)
Rated torque	: 0.746 kgfm	Insulation class	: F
Locked rotor torque	: 290 %	Service factor	: 1.25
Breakdown torque	: 330 %	Temperature rise	: 80 K
Rated speed	: 1460 rpm	Design	: B

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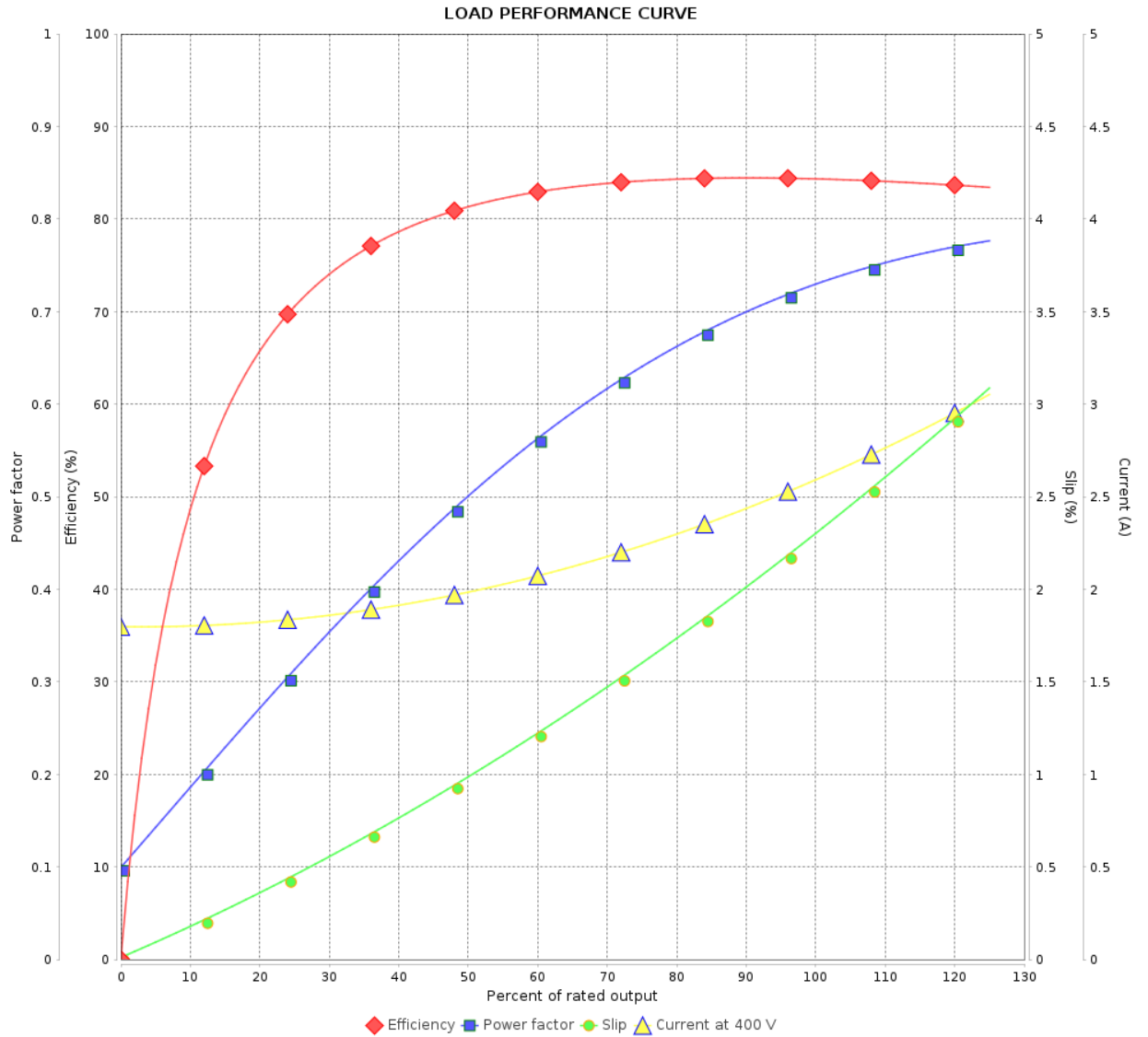
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Three Phase Induction Motor - Squirrel Cage



Customer : _____

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Performance : 400 V 50 Hz 4P IE3

Rated current : 2.57 A
 LRC : 8.7
 Rated torque : 0.743 kgfm
 Locked rotor torque : 320 %
 Breakdown torque : 380 %
 Rated speed : 1465 rpm

Moment of inertia (J) : 0.0066 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.25
 Temperature rise : 80 K
 Design : B

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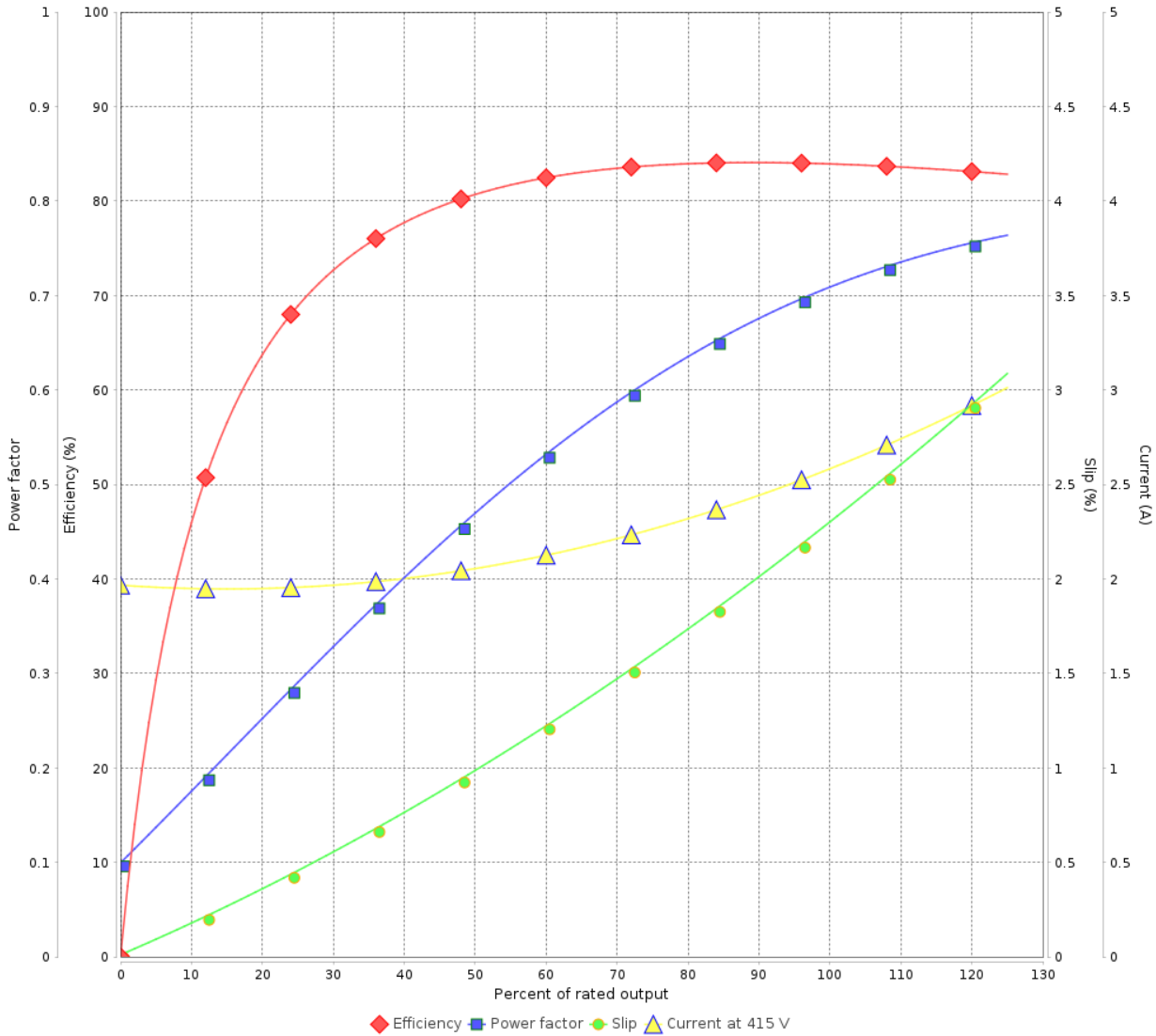
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 IEEE 841 NEMA Premium Efficiency Three-Phase Product code : 11938794

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Performance : 415 V 50 Hz 4P IE3

Rated current	: 2.56 A	Moment of inertia (J)	: 0.0066 kgm ²
LRC	: 8.4	Duty cycle	: Cont.(S1)
Rated torque	: 0.743 kgfm	Insulation class	: F
Locked rotor torque	: 350 %	Service factor	: 1.25
Breakdown torque	: 409 %	Temperature rise	: 80 K
Rated speed	: 1465 rpm	Design	: B

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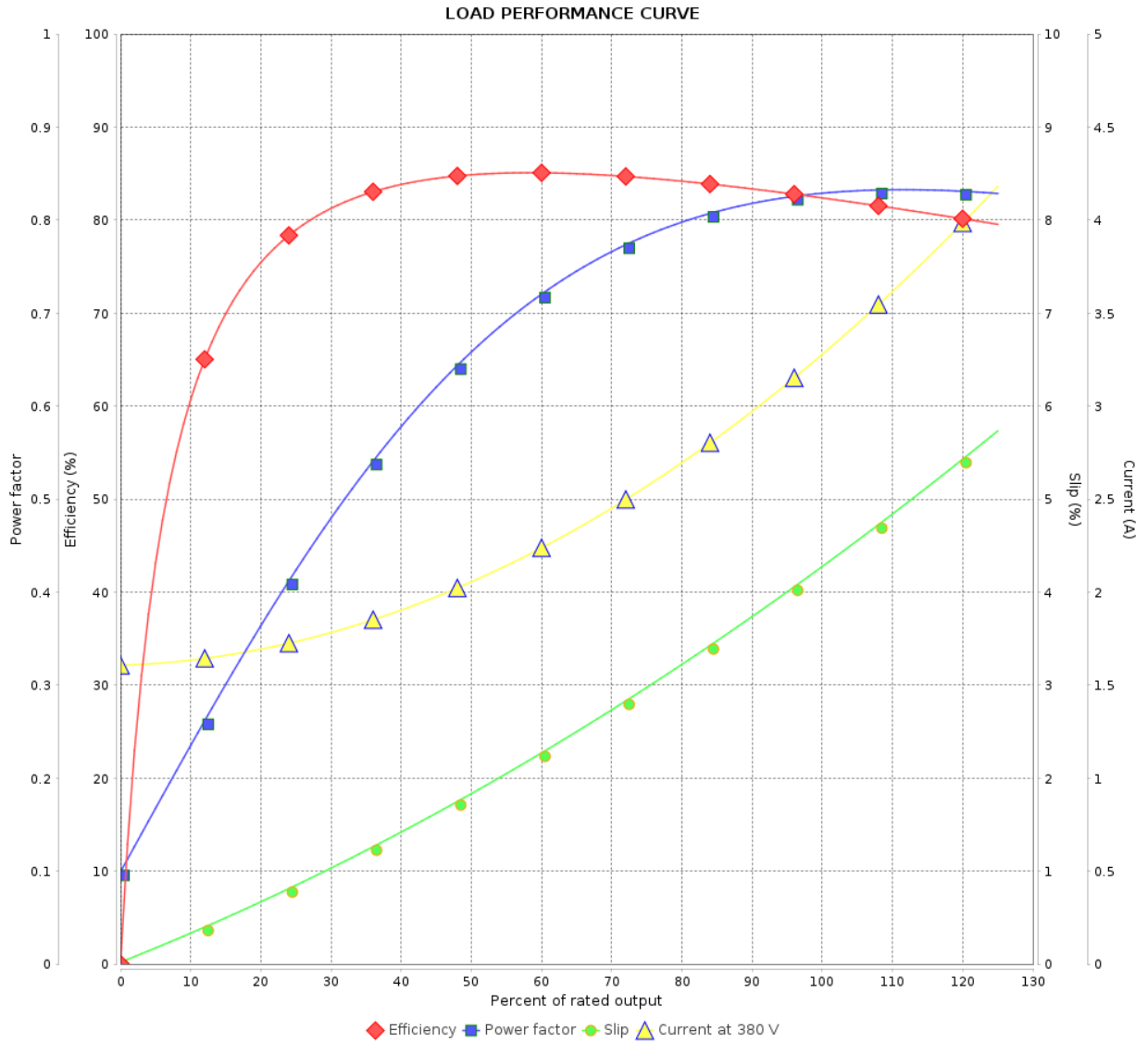
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Customer :

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Product code : 11938794



Performance : 380 V 50 Hz 4P IE1

Rated current : 3.33 A
 LRC : 6.0
 Rated torque : 1.01 kgfm
 Locked rotor torque : 220 %
 Breakdown torque : 240 %
 Rated speed : 1435 rpm

Moment of inertia (J) : 0.0066 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.25
 Temperature rise : 80 K
 Design : B

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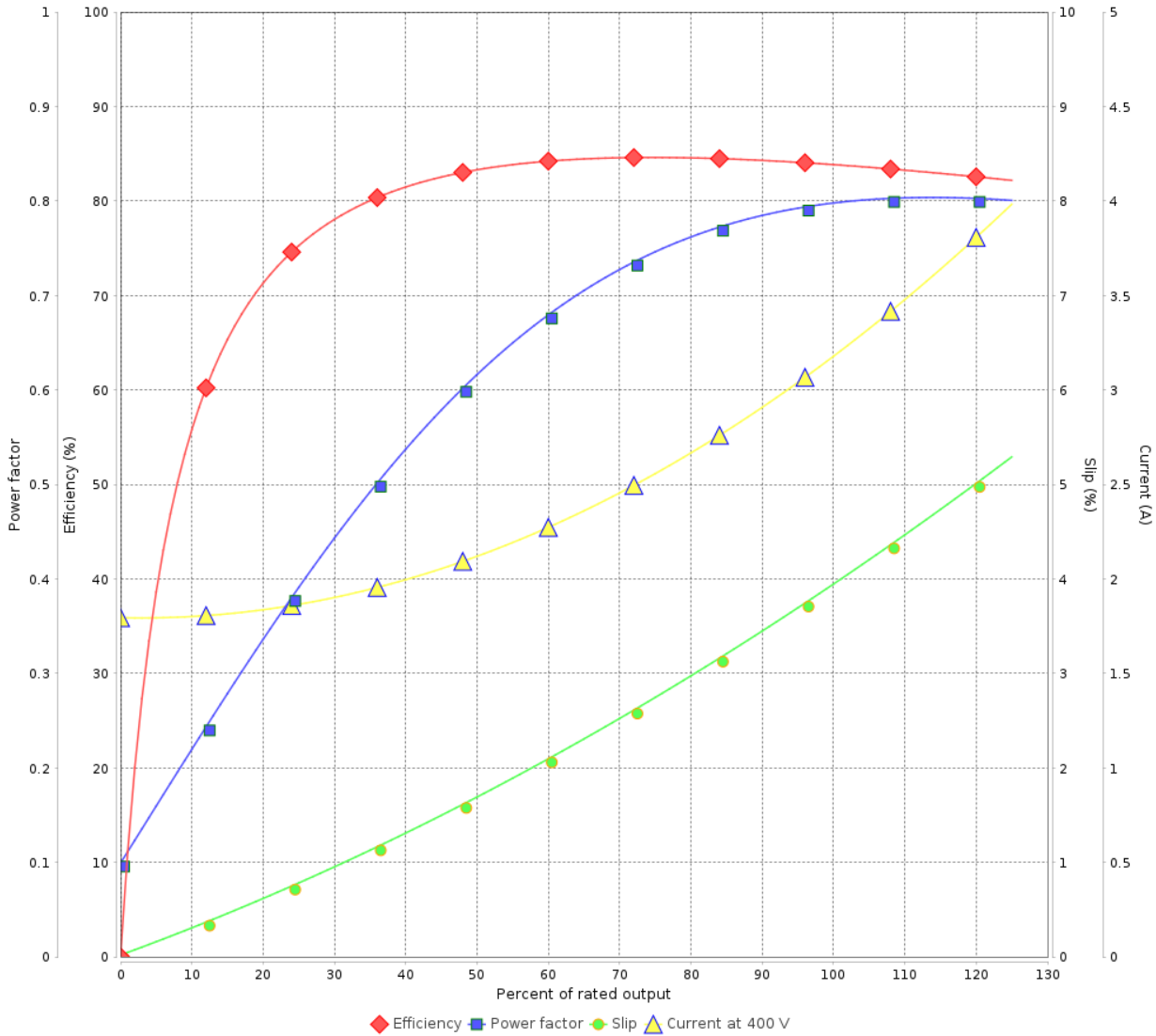
Three Phase Induction Motor - Squirrel Cage



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Performance : 400 V 50 Hz 4P IE2

Rated current	: 3.22 A	Moment of inertia (J)	: 0.0066 kgm ²
LRC	: 6.6	Duty cycle	: Cont.(S1)
Rated torque	: 1.01 kgfm	Insulation class	: F
Locked rotor torque	: 229 %	Service factor	: 1.25
Breakdown torque	: 260 %	Temperature rise	: 80 K
Rated speed	: 1440 rpm	Design	: B

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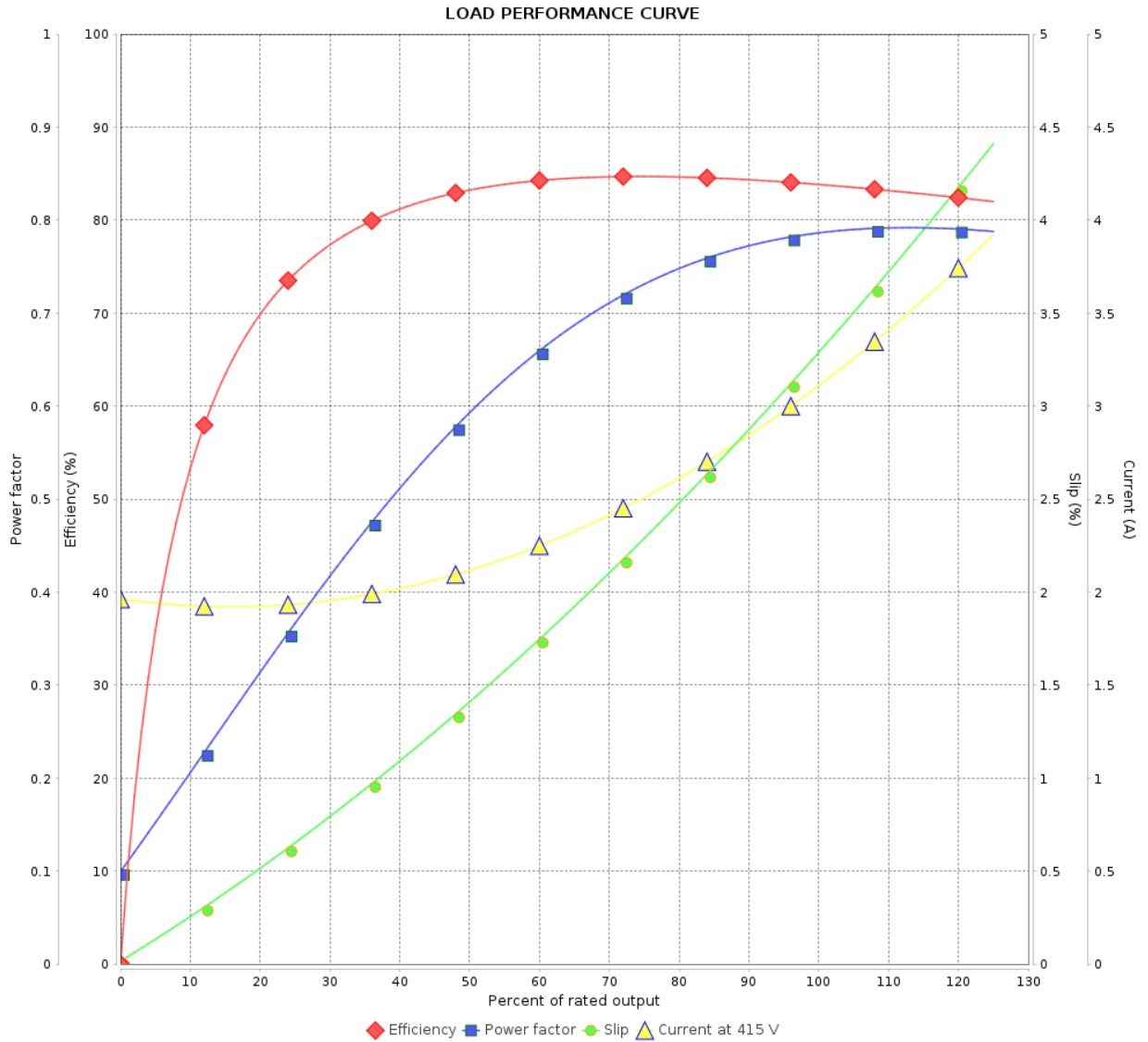
Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 11938794



Performance : 415 V 50 Hz 4P IE2

Rated current : 3.14 A
 LRC : 7.3
 Rated torque : 1.00 kgfm
 Locked rotor torque : 250 %
 Breakdown torque : 290 %
 Rated speed : 1450 rpm

Moment of inertia (J) : 0.0066 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.25
 Temperature rise : 80 K
 Design : B

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