

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :							
Product line	: W22 Close Coupled Pump JM NEMA Premium Efficiency Three-Phase						
Product code :	13469729						
Frame	: 143/5JM						
Insulation class	: F						
Duty cycle	: Cont.(S1)						
Ambient temperature	: -20°C to +40°C						
Altitude	: 1000 m.a.s.l.						
Protection degree	: IP55						
Design	: B						
Cooling method	: IC411 - TEFC						
Mounting	: F-1						
Rotation ¹	: Both (CW and CCW)						
Starting method	: Direct On Line						
Approx. weight ³	: 25.7 kg						
Moment of inertia (J)	: 0.0026 kgm ²						
Output [HP]	3	2	2	2	3	3	3
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]	7.42/3.71	3.24	3.17	3.15	4.44	4.26	4.13
L. R. Amperes [A]	60.1/30.1	27.9	29.2	29.9	27.1	28.5	29.3
LRC [A]	8.1x(Code J)	8.6x(Code L)	9.2x(Code M)	9.5x(Code M)	6.1x(Code G)	6.7x(Code H)	7.1x(Code H)
No load current [A]	2.60/1.30	1.28	1.43	1.55	1.28	1.43	1.55
Rated speed [RPM]	3460	2890	2905	2910	2820	2840	2850
Slip [%]	3.89	3.67	3.17	3.00	6.00	5.33	5.00
Rated torque [kgfm]	0.629	0.502	0.500	0.499	0.772	0.767	0.764
Locked rotor torque [%]	330	400	459	490	260	300	320
Breakdown torque [%]	360	400	459	509	260	300	330
Service factor	1.25	1.25	1.00	1.00	1.25	1.00	1.00
Temperature rise	80 K	80 K	80 K	80 K	80 K	80 K	80 K
Locked rotor time	25s (cold) 14s (hot)	25s (cold) 14s (hot)	23s (cold) 13s (hot)	23s (cold) 13s (hot)	25s (cold) 14s (hot)	23s (cold) 13s (hot)	23s (cold) 13s (hot)
Noise level ²	68.0 dB(A)	62.0 dB(A)	62.0 dB(A)	62.0 dB(A)	62.0 dB(A)	62.0 dB(A)	62.0 dB(A)
Efficiency (%)	25%						
	50%	85.5	81.9	82.0	82.2	84.0	84.5
	75%	86.5	84.0	84.4	84.8	85.0	85.5
	100%	86.5	84.8	85.3	85.9	84.6	85.6
Power Factor	25%						
	50%	0.70	0.63	0.58	0.55	0.76	0.72
	75%	0.81	0.76	0.72	0.69	0.85	0.82
	100%	0.86	0.83	0.80	0.77	0.89	0.87
Losses at normative operating points (speed;torque), in percentage of rated output power							
Losses (%)	P1 (0,9;1,0)	14.8	14.8	14.8	14.8	14.8	14.8
	P2 (0,5;1,0)	12.3	12.3	12.3	12.3	12.3	12.3
	P3 (0,25;1,0)	11.7	11.7	11.7	11.7	11.7	11.7
	P4 (0,9;0,5)	6.8	6.8	6.8	6.8	6.8	6.8
	P5 (0,5;0,5)	4.3	4.3	4.3	4.3	4.3	4.3
	P6 (0,5;0,25)	2.6	2.6	2.6	2.6	2.6	2.6
	P7 (0,25;0,25)	1.7	1.7	1.7	1.7	1.7	1.7
Bearing type	: Drive end 6206 ZZ	Non drive end 6204 ZZ	Foundation loads				
Sealing	: V'Ring	V'Ring	Max. traction : 59 kgf				
Lubrication interval	: -	-	Max. compression : 85 kgf				
Lubricant amount	: -	-					
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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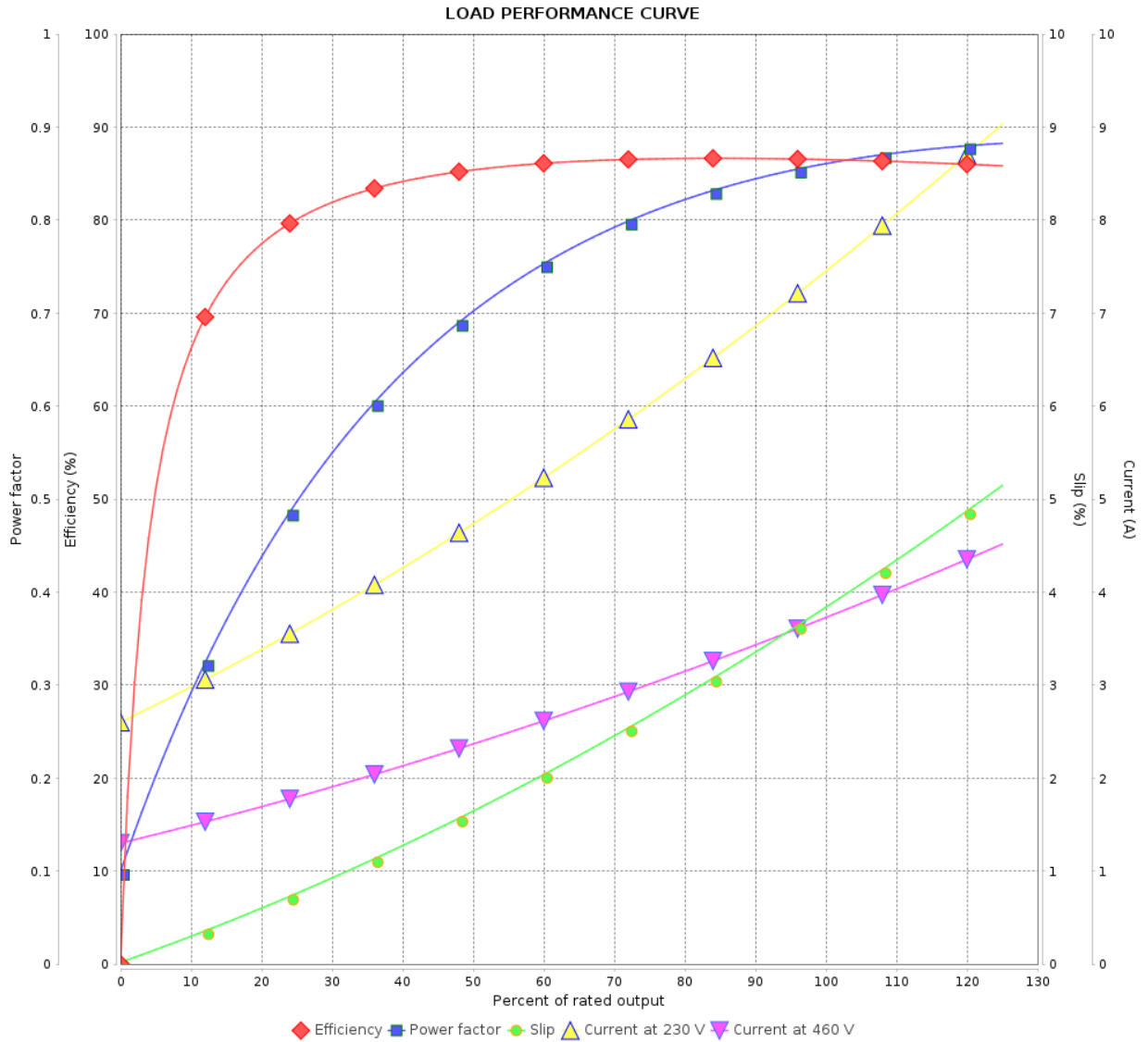
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 Close Coupled Pump JM NEMA
Premium Efficiency Three-Phase

Product code : 13469729



Performance : 230/460 V 60 Hz 2P

Rated current : 7.42/3.71 A
 LRC : 8.1
 Rated torque : 0.629 kgfm
 Locked rotor torque : 330 %
 Breakdown torque : 360 %
 Rated speed : 3460 rpm

Moment of inertia (J) : 0.0026 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.25
 Temperature rise : 80 K
 Design : B

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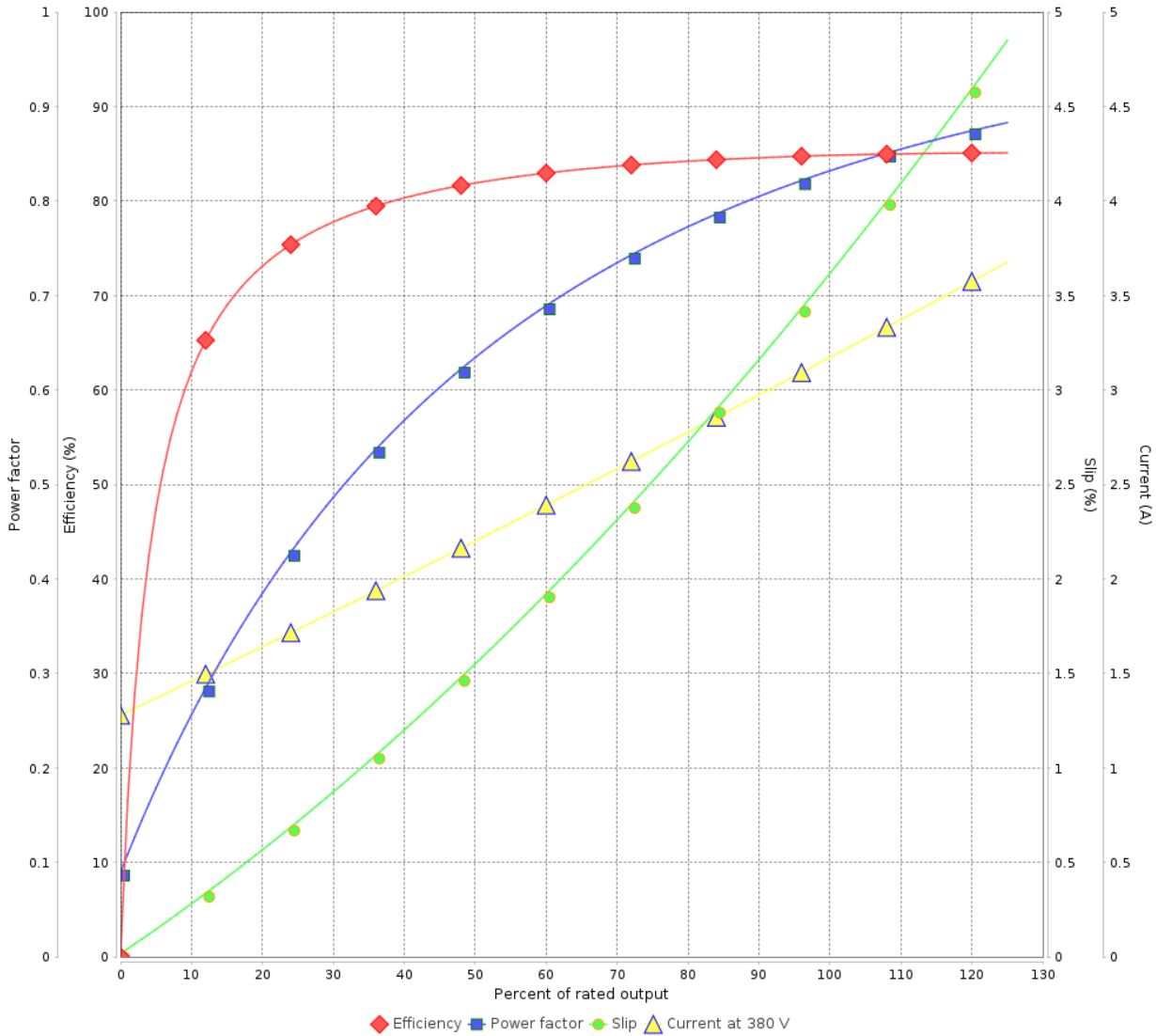


Customer : _____

Product line : W22 Close Coupled Pump JM NEMA
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Performance : 380 V 50 Hz 2P IE3

Rated current : 3.24 A
LRC : 8.6
Rated torque : 0.502 kgfm
Locked rotor torque : 400 %
Breakdown torque : 400 %
Rated speed : 2890 rpm

Moment of inertia (J) : 0.0026 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.25
Temperature rise : 80 K
Design : B

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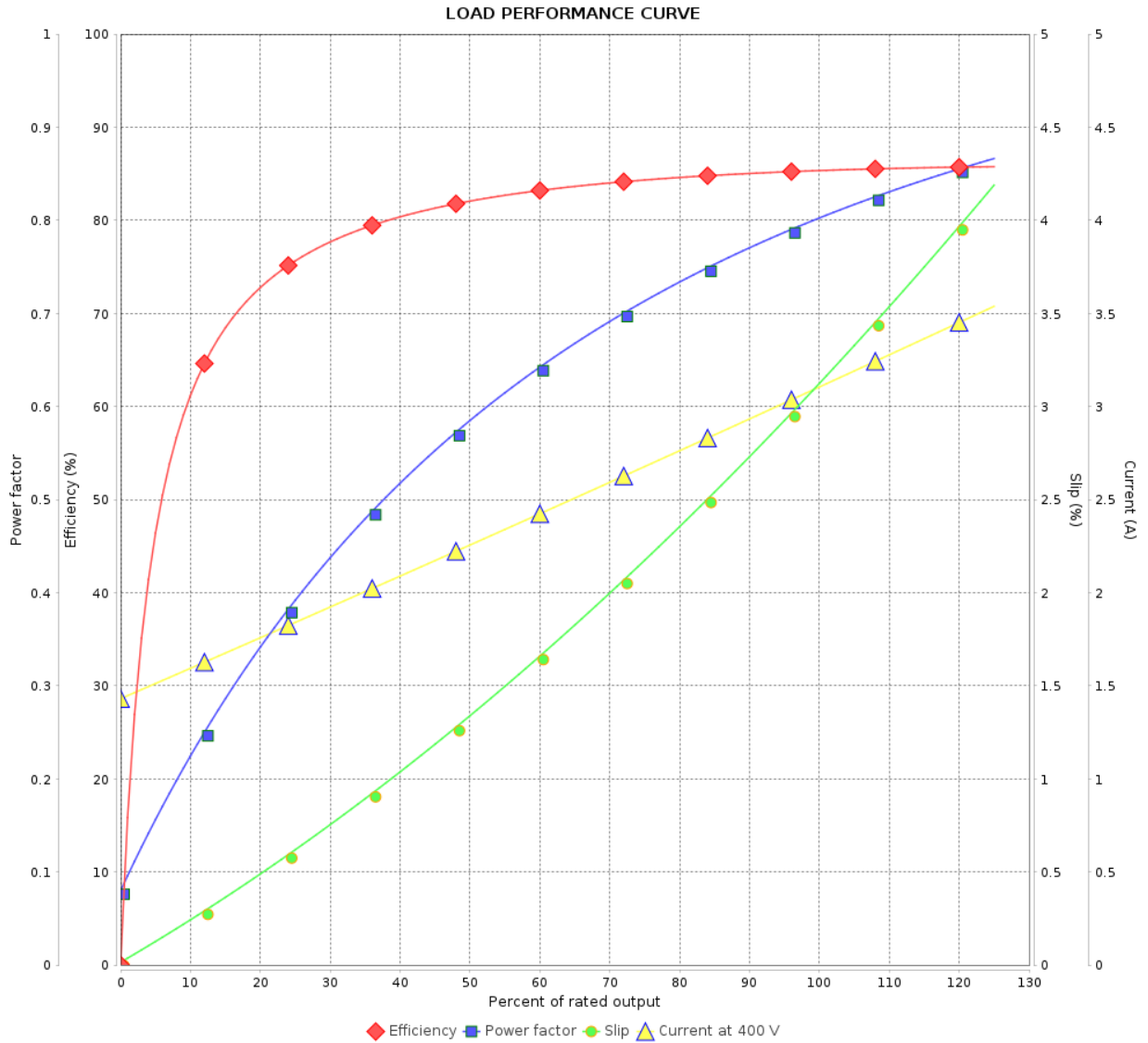
Three Phase Induction Motor - Squirrel Cage



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Premium Efficiency Three-Phase

Product code : 13469729



Performance : 400 V 50 Hz 2P IE3

Rated current : 3.17 A
 LRC : 9.2
 Rated torque : 0.500 kgfm
 Locked rotor torque : 459 %
 Breakdown torque : 459 %
 Rated speed : 2905 rpm

Moment of inertia (J) : 0.0026 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : B

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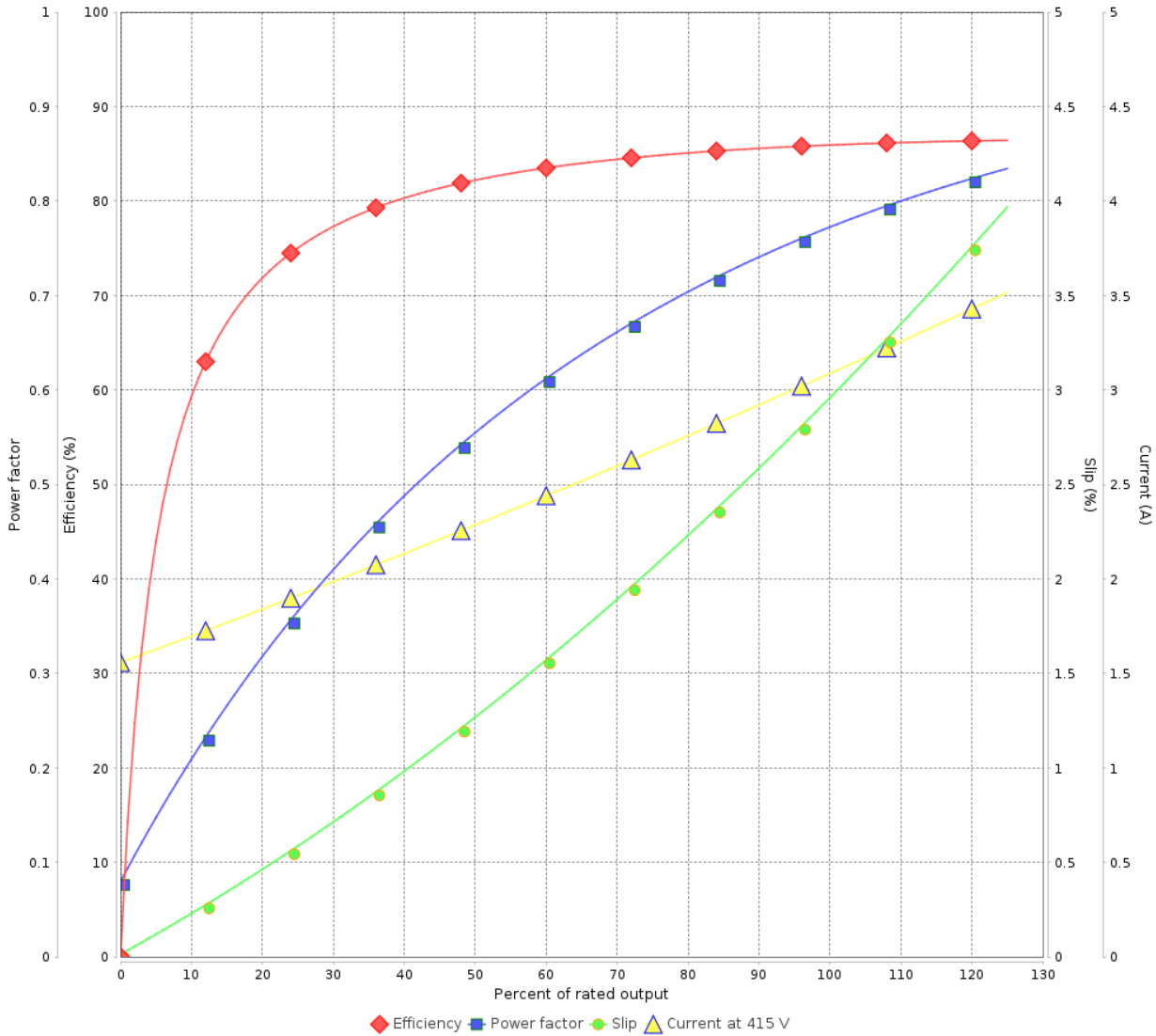


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Performance : 415 V 50 Hz 2P IE3

Rated current : 3.15 A
LRC : 9.5
Rated torque : 0.499 kgfm
Locked rotor torque : 490 %
Breakdown torque : 509 %
Rated speed : 2910 rpm

Moment of inertia (J) : 0.0026 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.00
Temperature rise : 80 K
Design : B

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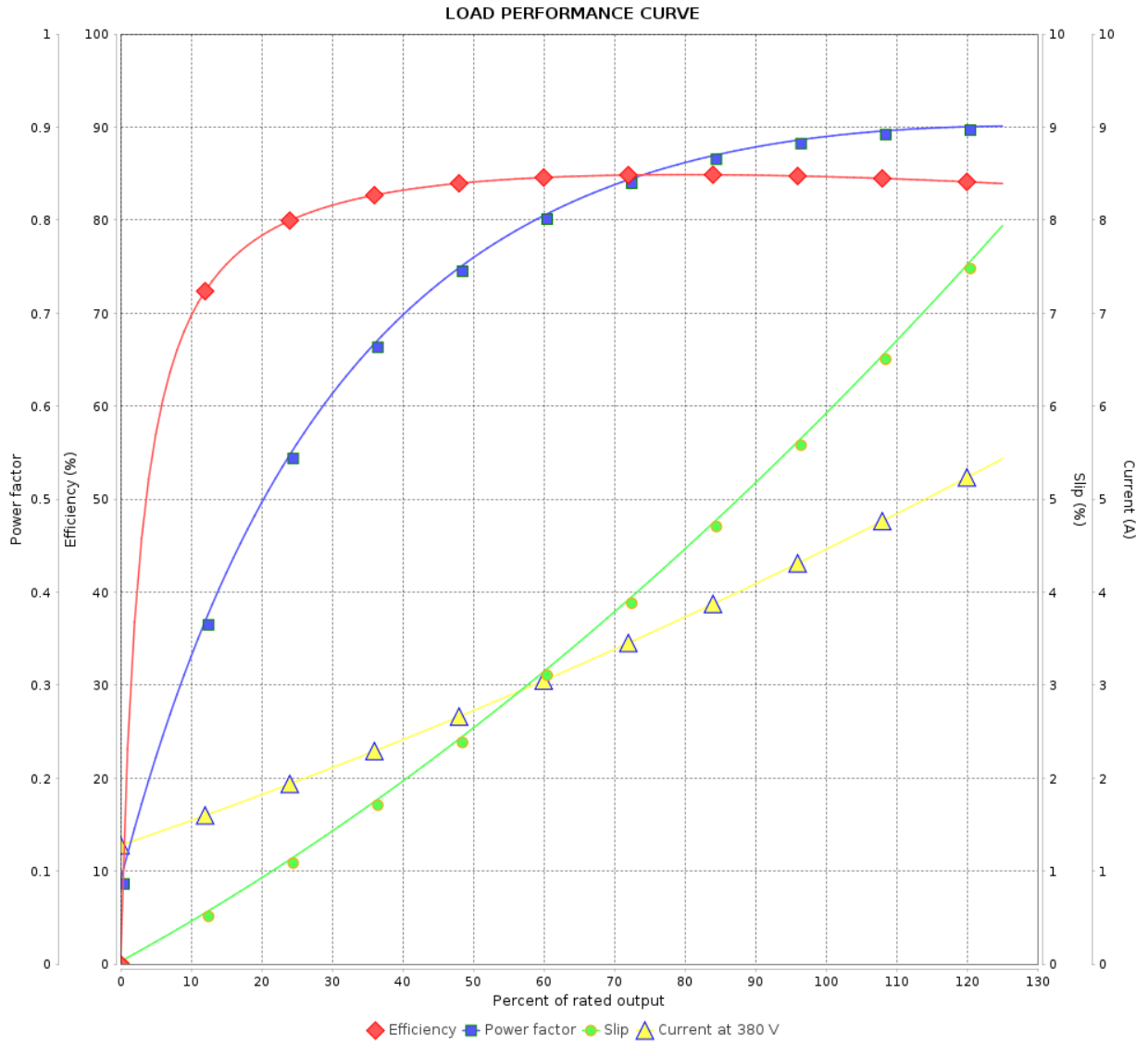
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Performance : 380 V 50 Hz 2P IE2

Rated current : 4.44 A
 LRC : 6.1
 Rated torque : 0.772 kgfm
 Locked rotor torque : 260 %
 Breakdown torque : 260 %
 Rated speed : 2820 rpm

Moment of inertia (J) : 0.0026 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.25
 Temperature rise : 80 K
 Design : B

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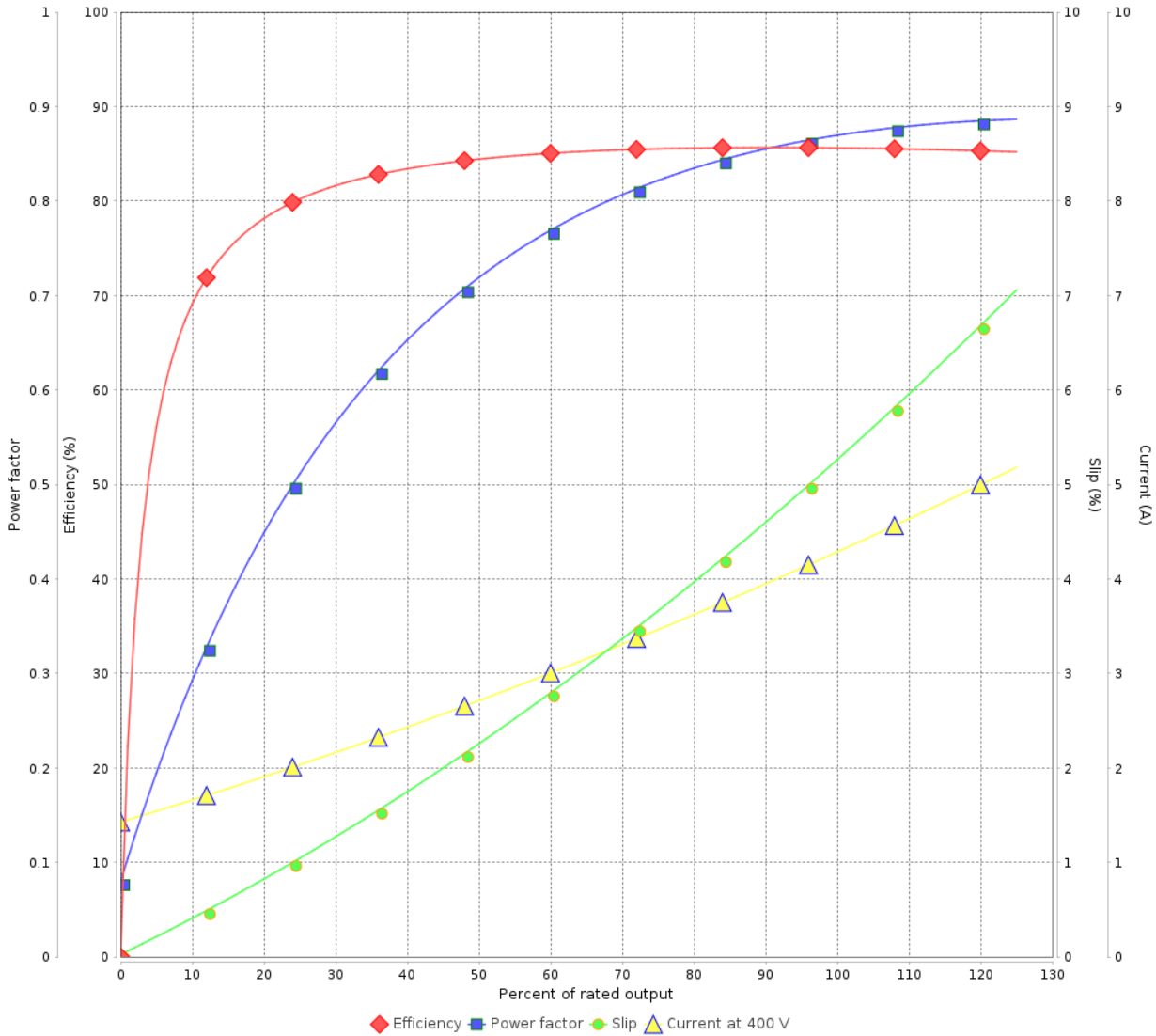


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Performance : 400 V 50 Hz 2P IE2

Rated current : 4.26 A
LRC : 6.7
Rated torque : 0.767 kgfm
Locked rotor torque : 300 %
Breakdown torque : 300 %
Rated speed : 2840 rpm

Moment of inertia (J) : 0.0026 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.00
Temperature rise : 80 K
Design : B

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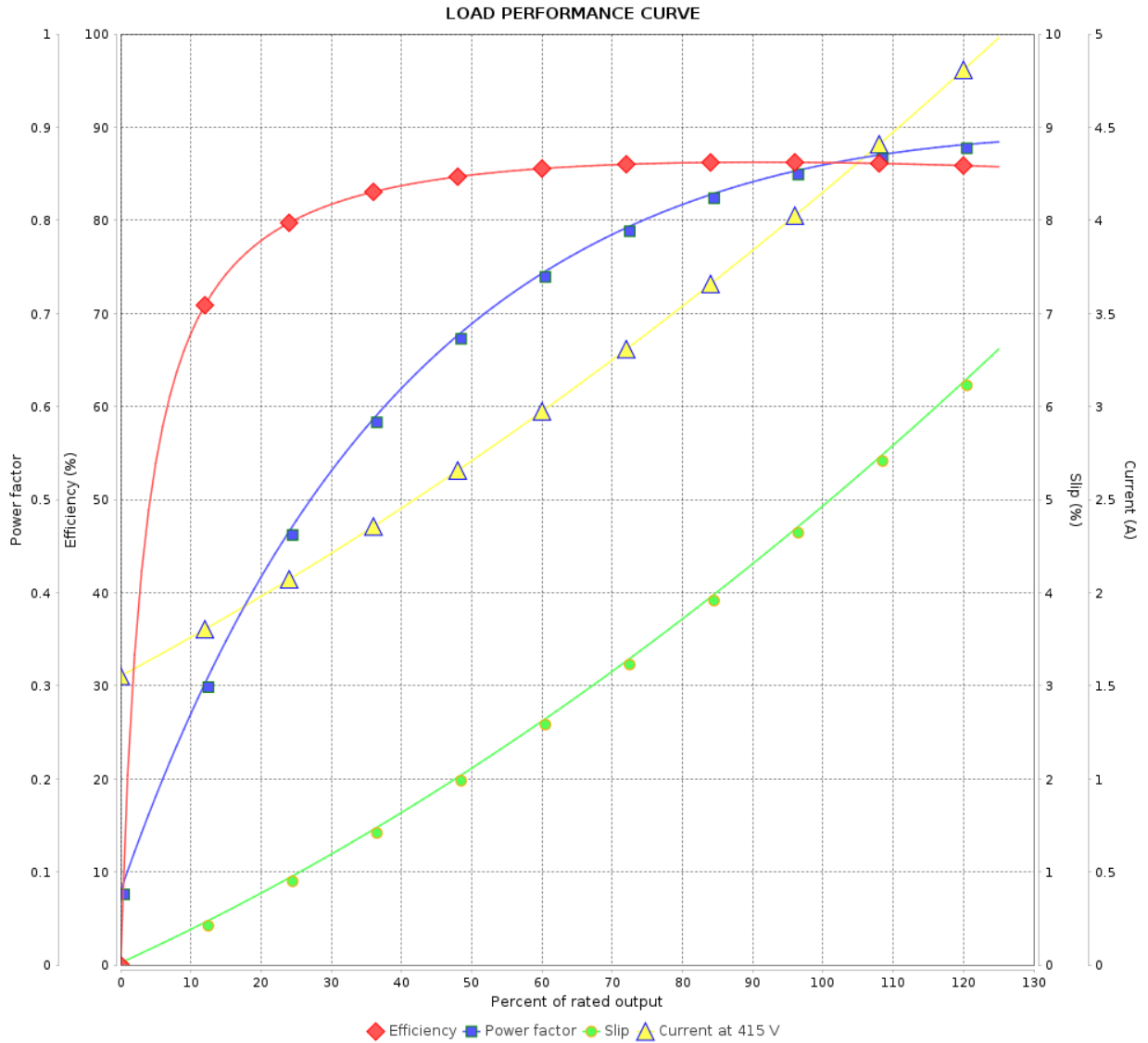
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Customer :

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Performance : 415 V 50 Hz 2P IE3

Rated current : 4.13 A
 LRC : 7.1
 Rated torque : 0.764 kgfm
 Locked rotor torque : 320 %
 Breakdown torque : 330 %
 Rated speed : 2850 rpm

Moment of inertia (J) : 0.0026 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : B

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