

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase
Product code : 11440288

Frame : 284/6TSC	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 : 177 kg
Protection degree : IP55	Moment of inertia (J) : 0.1419 kgm ²
Design : B	

Output [HP]	30	25	25	25	30	30	30
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]	68.4/34.2	34.2	32.8	32.0	42.0	39.6	38.2
L. R. Amperes [A]	431/216	202	220	231	206	218	229
LRC [A]	6.3x(Code G)	5.9x(Code F)	6.7x(Code G)	7.2x(Code H)	4.9x(Code E)	5.5x(Code F)	6.0x(Code F)
No load current [A]	18.2/9.10	9.00	10.0	10.5	9.00	10.0	10.5
Rated speed [RPM]	3545	2940	2950	2955	2910	2930	2935
Slip [%]	1.53	2.00	1.67	1.50	3.00	2.33	2.17
Rated torque [kgfm]	6.14	6.17	6.15	6.14	7.48	7.43	7.42
Locked rotor torque [%]	200	190	220	229	160	180	190
Breakdown torque [%]	250	229	270	290	200	220	240
Service factor	1.25	1.00	1.00	1.00	1.00	1.00	1.00
Temperature rise	80 K	105 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	72.0 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%	0.000			0.000		
	50%	91.7	91.0	91.1	91.2	91.7	91.7
	75%	91.7	91.5	91.5	91.8	90.2	91.0
	100%	91.7	92.4	92.4	92.4	89.5	90.2
Power Factor	25%	0.00			0.00		
	50%	0.80	0.80	0.78	0.76	0.84	0.82
	75%	0.86	0.87	0.85	0.84	0.88	0.87
	100%	0.88	0.89	0.88	0.87	0.89	0.89

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

Losses (%)	P1 (0,9;1,0)	8.6	7.8	7.8	7.8	11.2	10.3	9.4
	P2 (0,5;1,0)	6.7	6.1	6.1	6.1	8.7	8.1	7.4
	P3 (0,25;1,0)	5.9	5.3	5.3	5.3	7.6	7.0	6.4
	P4 (0,9;0,5)	4.2	3.8	3.8	3.8	5.4	5.0	4.6
	P5 (0,5;0,5)	2.5	2.3	2.3	2.3	3.2	3.0	2.7
	P6 (0,5;0,25)	1.5	1.4	1.4	1.4	2.0	1.8	1.7
	P7 (0,25;0,25)	0.9	0.8	0.8	0.8	1.2	1.1	1.0

Bearing type : Sealing : Lubrication interval : Lubricant amount : Lubricant type :	Drive end	6311 C3	Non drive end	6211 C3	Foundation loads Max. traction : 166 kgf Max. compression : 343 kgf
		V'Ring		V'Ring	
		14000 h		17000 h	
		18 g		11 g	
		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 76.7A SF 1.10 SFA 84.4A

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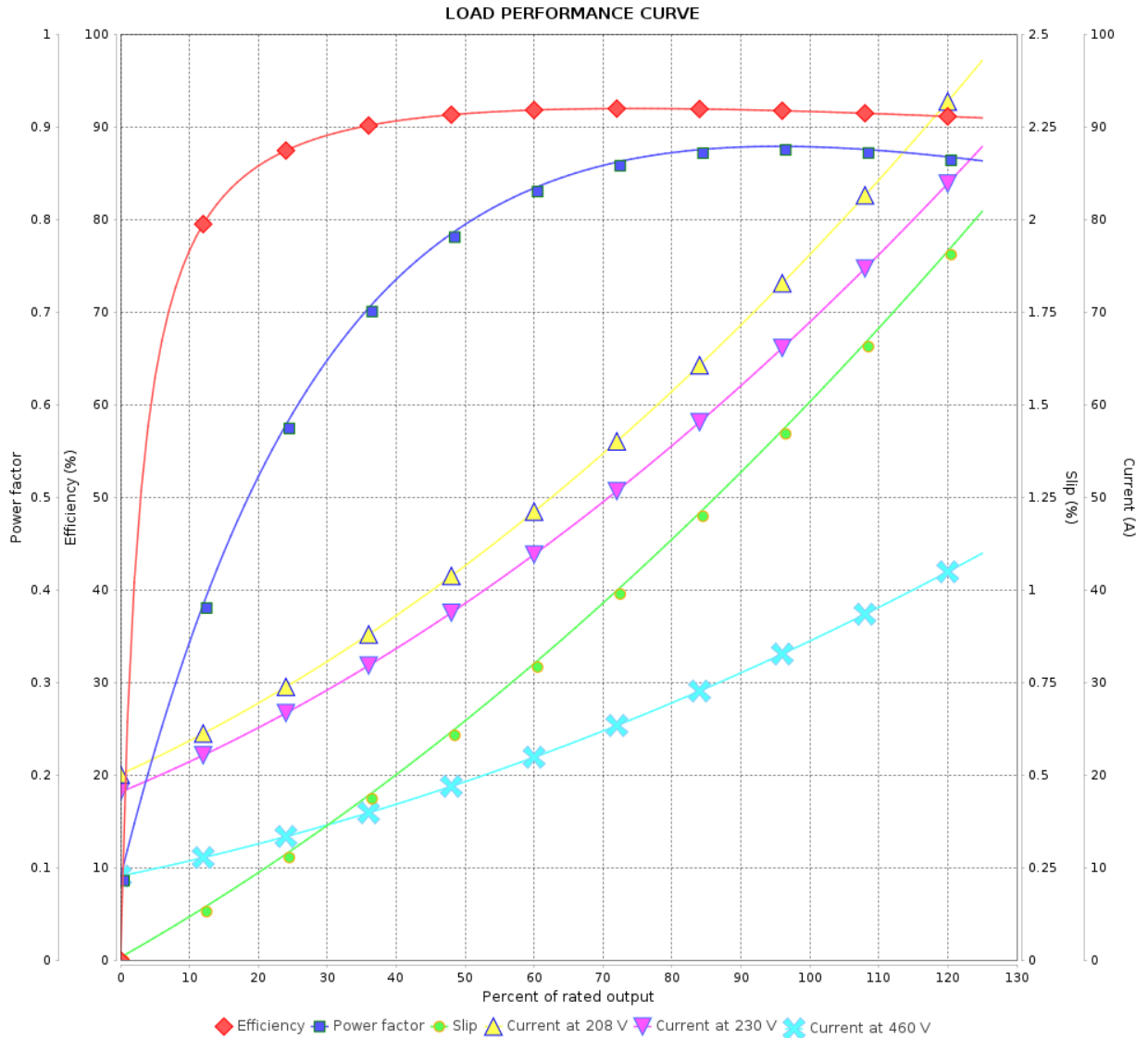
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 11440288



Performance : 230/460 V 60 Hz 2P

Rated current : 68.4/34.2 A
 LRC : 6.3
 Rated torque : 6.14 kgfm
 Locked rotor torque : 200 %
 Breakdown torque : 250 %
 Rated speed : 3545 rpm

Moment of inertia (J) : 0.1419 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.25
 Temperature rise : 80 K
 Design : B

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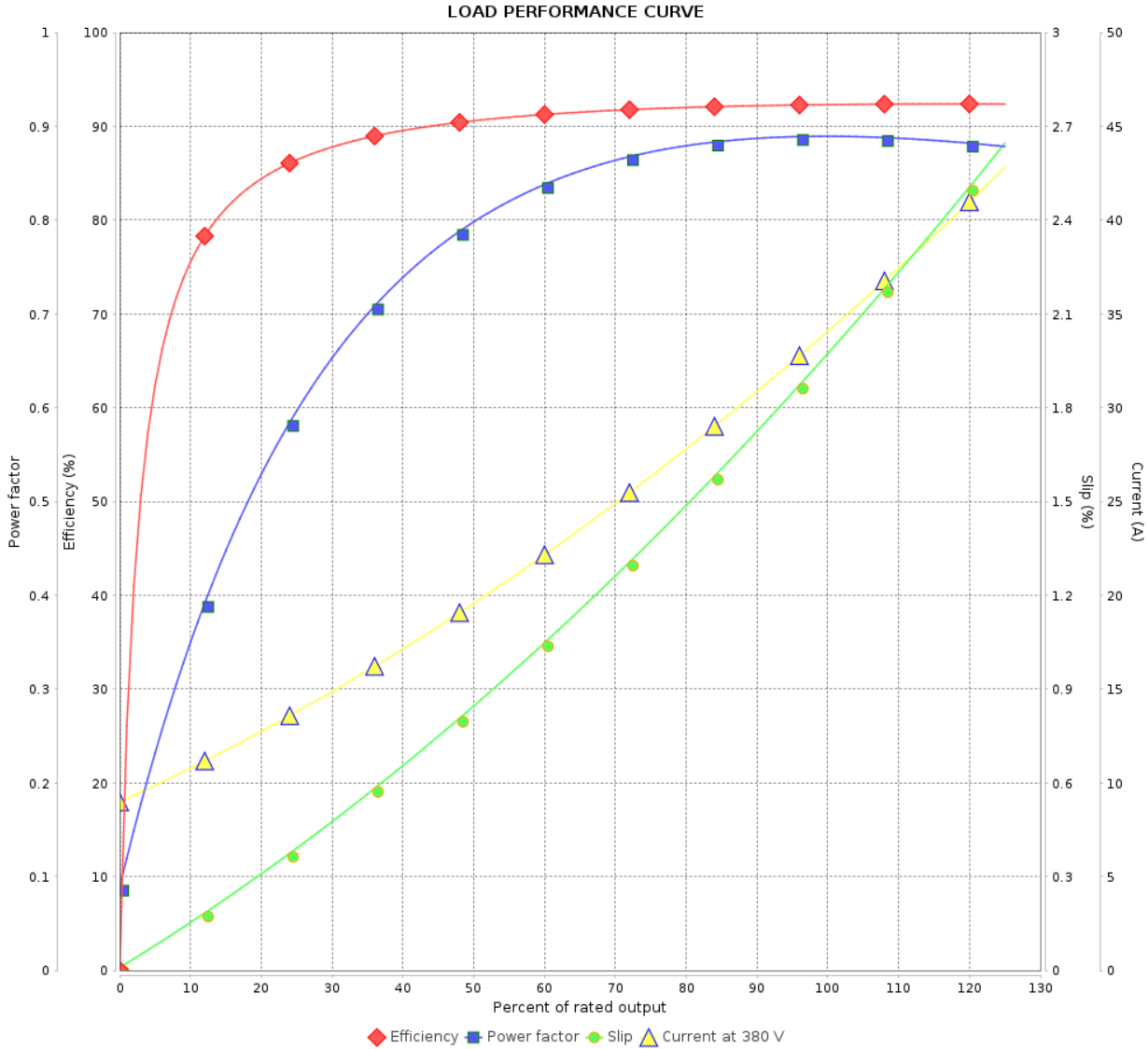
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 11440288



Performance : 380 V 50 Hz 2P IE3

Rated current : 34.2 A
 LRC : 5.9
 Rated torque : 6.17 kgfm
 Locked rotor torque : 190 %
 Breakdown torque : 229 %
 Rated speed : 2940 rpm

Moment of inertia (J) : 0.1419 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 105 K
 Design : B

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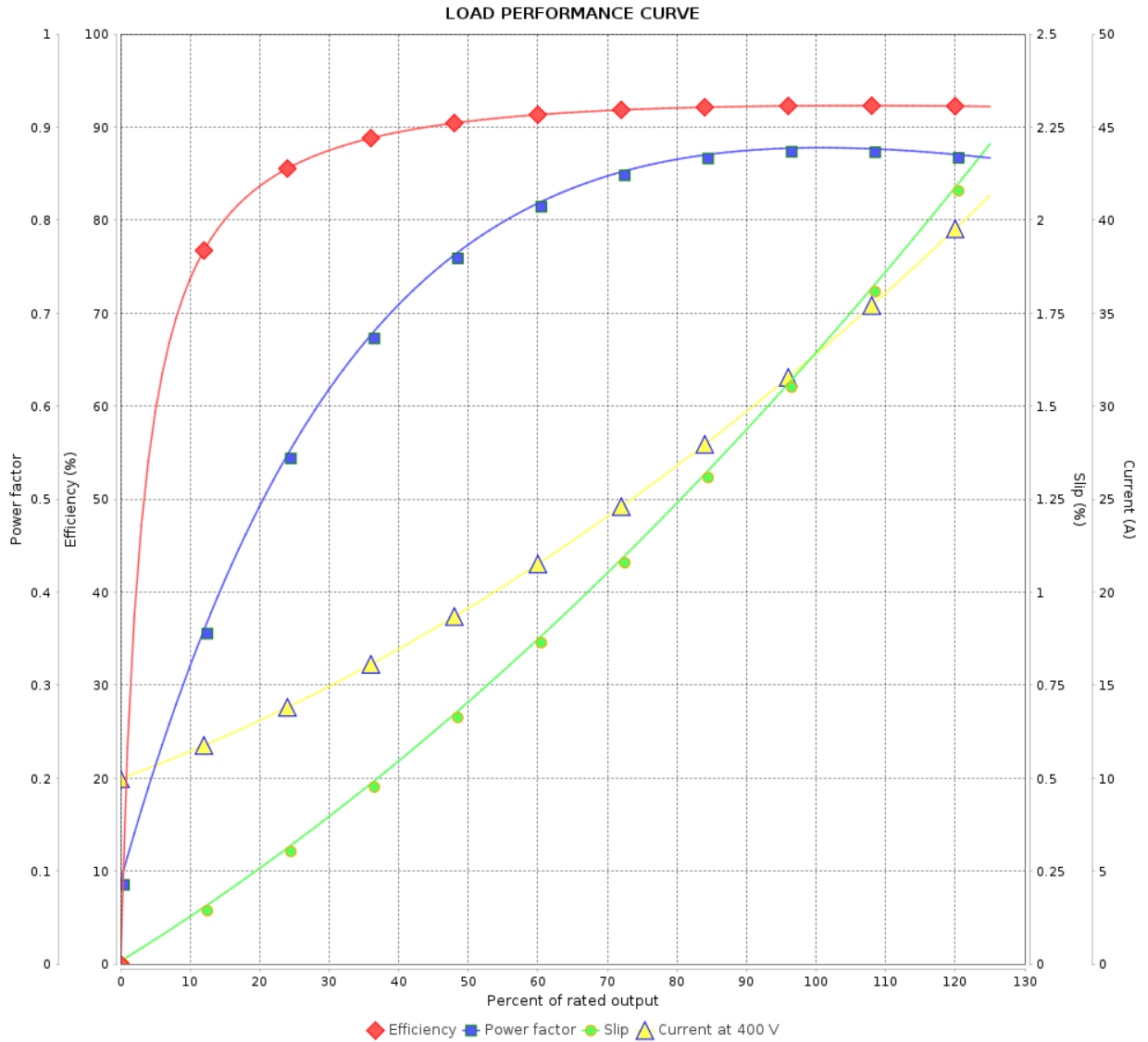
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 11440288



Performance : 400 V 50 Hz 2P IE3

Rated current : 32.8 A
 LRC : 6.7
 Rated torque : 6.15 kgfm
 Locked rotor torque : 220 %
 Breakdown torque : 270 %
 Rated speed : 2950 rpm

Moment of inertia (J) : 0.1419 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : B

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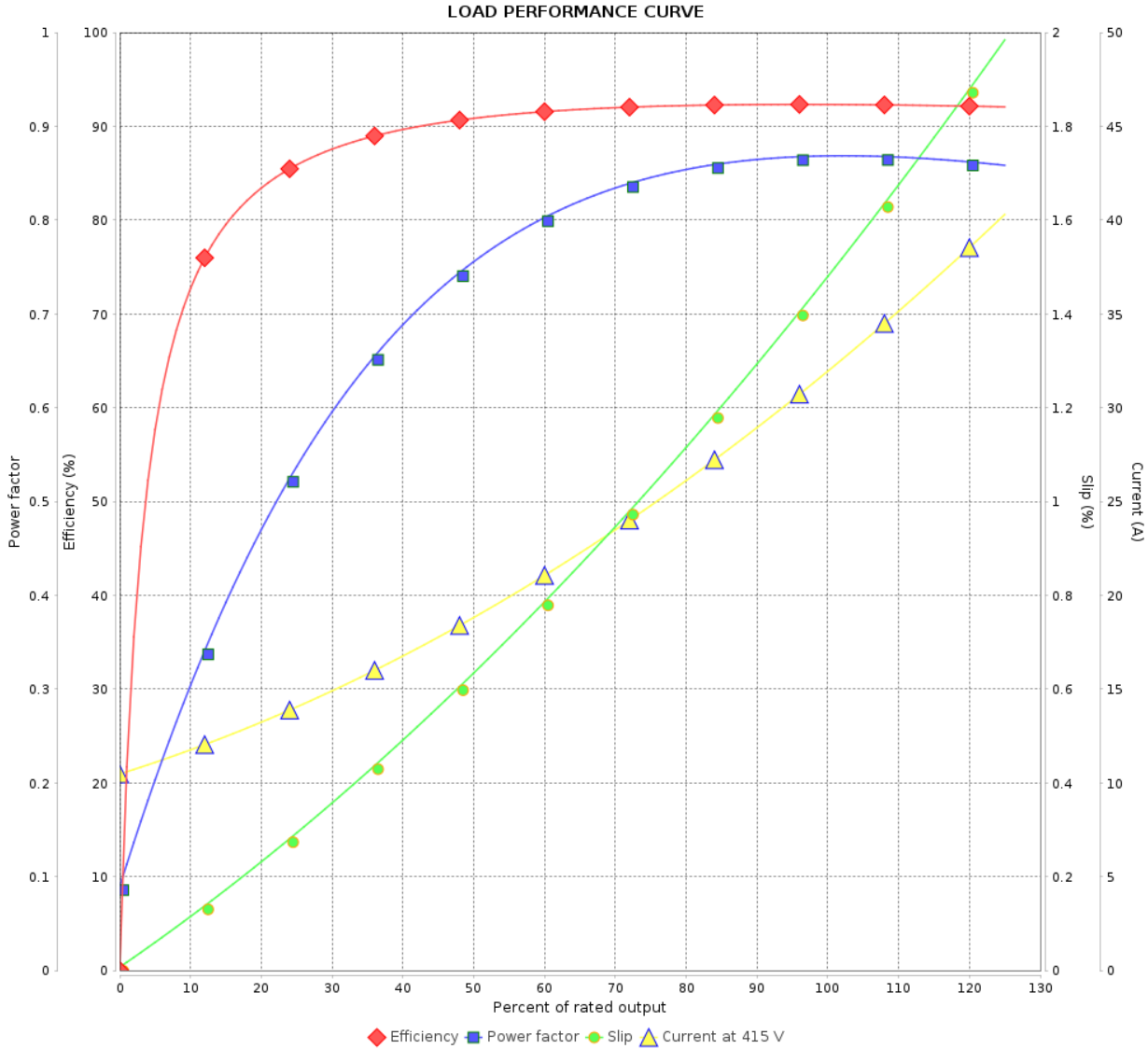
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 11440288



Performance : 415 V 50 Hz 2P IE3

Rated current : 32.0 A
 LRC : 7.2
 Rated torque : 6.14 kgfm
 Locked rotor torque : 229 %
 Breakdown torque : 290 %
 Rated speed : 2955 rpm

Moment of inertia (J) : 0.1419 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : B

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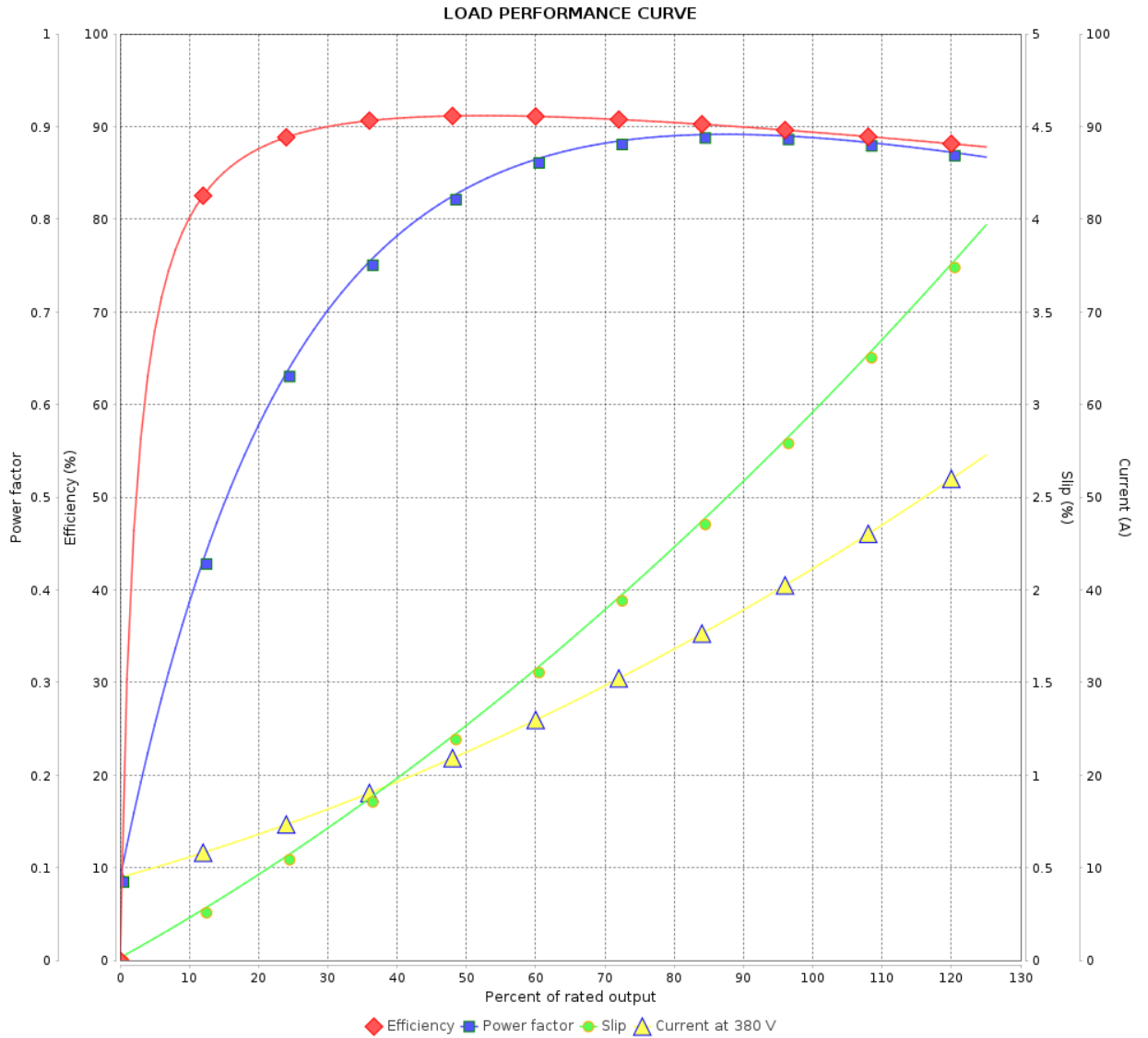
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 11440288



Performance : 380 V 50 Hz 2P

Rated current : 42.0 A
 LRC : 4.9
 Rated torque : 7.48 kgfm
 Locked rotor torque : 160 %
 Breakdown torque : 200 %
 Rated speed : 2910 rpm

Moment of inertia (J) : 0.1419 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 105 K
 Design : B

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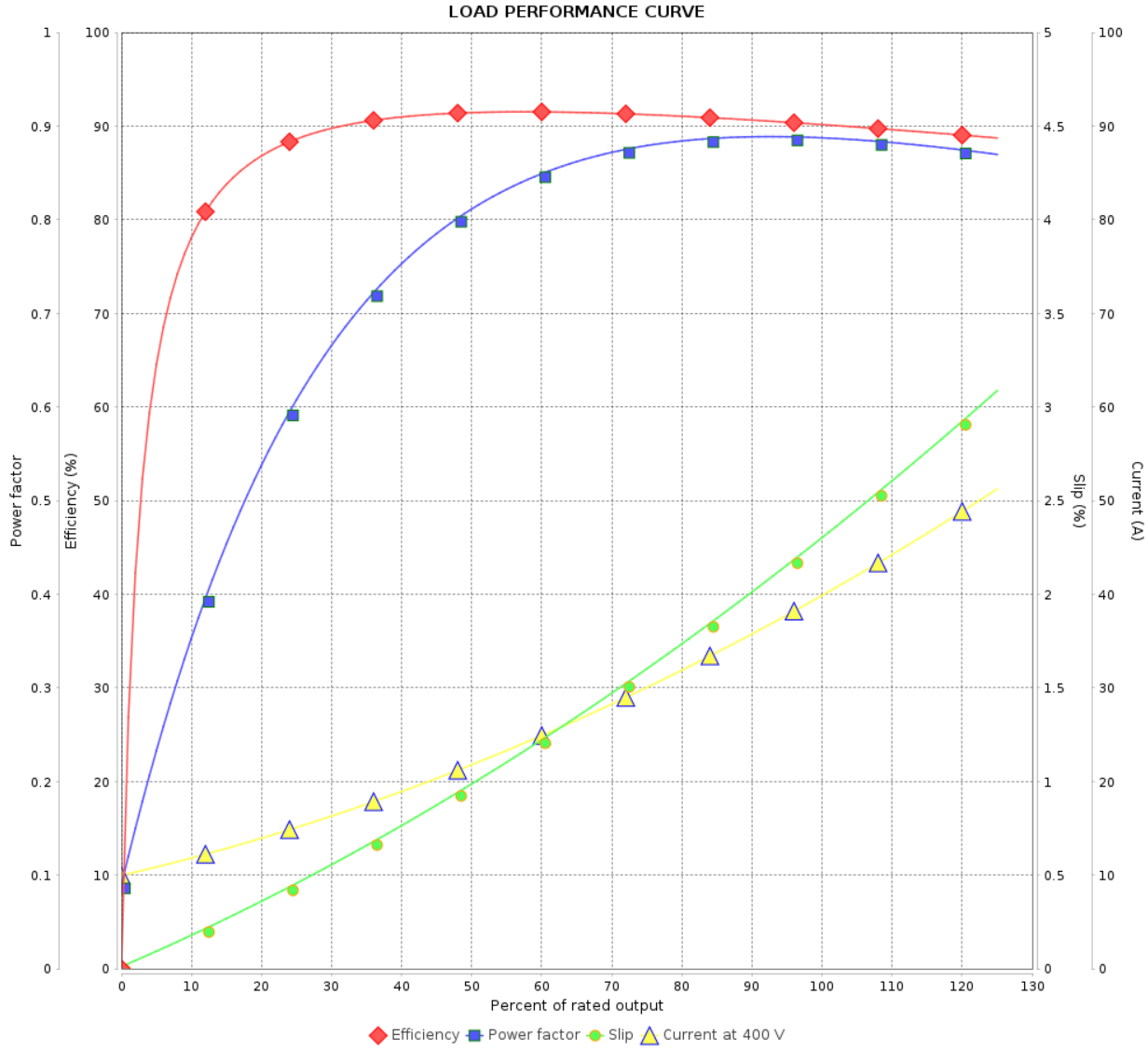
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 11440288



Performance : 400 V 50 Hz 2P IE1

Rated current : 39.6 A
 LRC : 5.5
 Rated torque : 7.43 kgfm
 Locked rotor torque : 180 %
 Breakdown torque : 220 %
 Rated speed : 2930 rpm

Moment of inertia (J) : 0.1419 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 105 K
 Design : B

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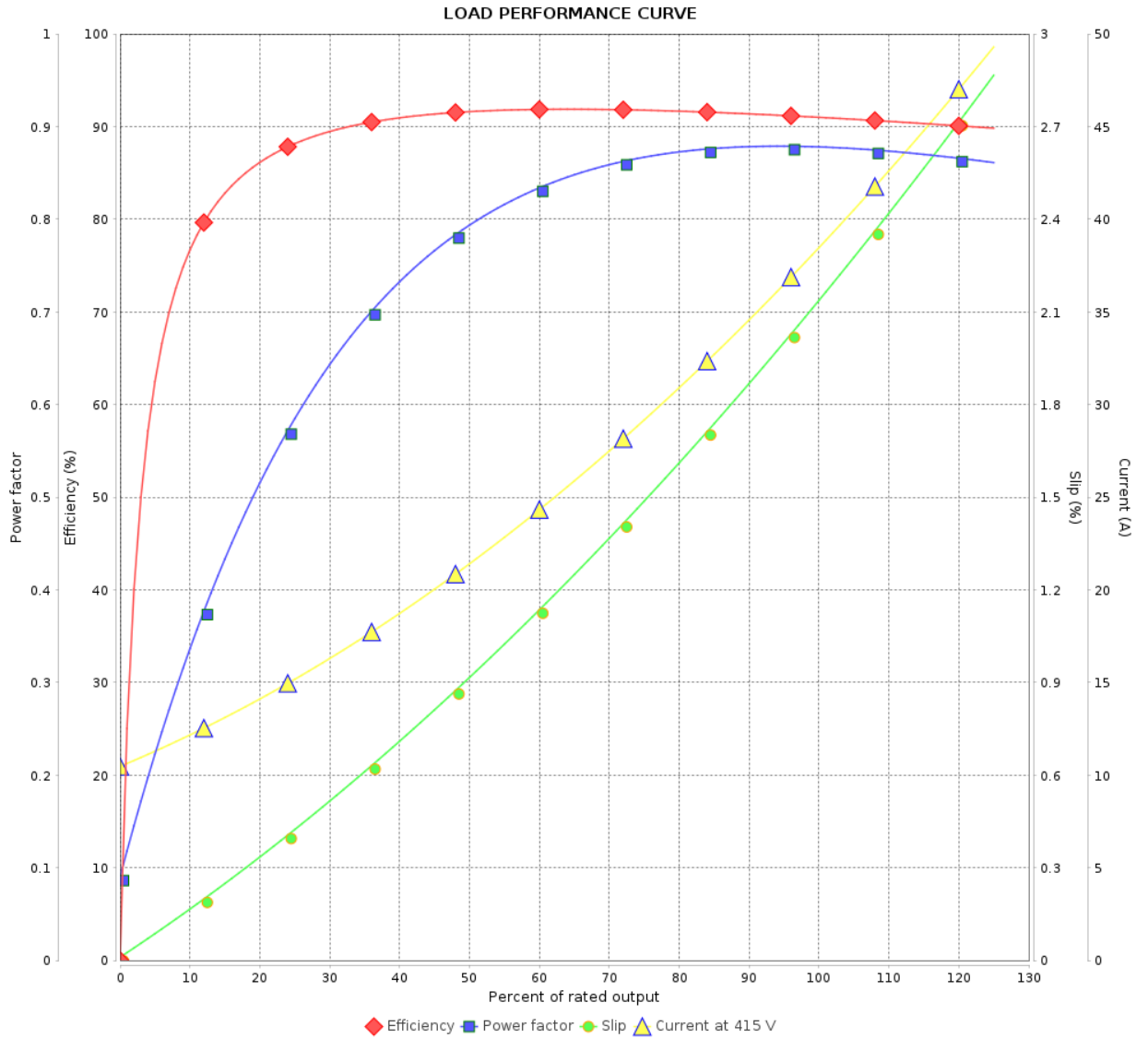
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 11440288



Performance : 415 V 50 Hz 2P IE1

Rated current : 38.2 A
 LRC : 6.0
 Rated torque : 7.42 kgfm
 Locked rotor torque : 190 %
 Breakdown torque : 240 %
 Rated speed : 2935 rpm

Moment of inertia (J) : 0.1419 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 105 K
 Design : B

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