

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :								
Product line	: W22 NEMA Premium Efficiency Three-Phase	Product code :	12447101					
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	: 174 kg					
Protection degree	: IP55	Moment of inertia (J)	: 0.1135 kgm ²					
Design	: B							
Output [HP]	25	20	20	20	25	25	25	
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]	57.5/28.8	28.2	27.1	26.4	35.3	33.6	32.1	
L. R. Amperes [A]	363/181	175	187	198	173	185	199	
LRC [A]	6.3x(Code G)	6.2x(Code G)	6.9x(Code H)	7.5x(Code J)	4.9x(Code E)	5.5x(Code F)	6.2x(Code G)	
No load current [A]	16.3/8.15	7.70	8.40	9.00	7.70	8.40	9.00	
Rated speed [RPM]	3545	2945	2951	2956	2915	2930	2940	
Slip [%]	1.53	1.83	1.63	1.47	2.83	2.33	2.00	
Rated torque [kgfm]	5.12	4.93	4.92	4.91	6.22	6.19	6.17	
Locked rotor torque [%]	200	200	229	240	160	180	190	
Breakdown torque [%]	250	240	280	300	190	210	240	
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	30s (cold) 17s (hot)	25s (cold) 14s (hot)	25s (cold) 14s (hot)	25s (cold) 14s (hot)	25s (cold) 14s (hot)	25s (cold) 14s (hot)	25s (cold) 14s (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						
	50%	91.0	90.2	90.3	89.8	91.0	91.0	
	75%	91.7	90.7	91.1	91.1	90.2	91.0	
	100%	91.7	91.9	91.9	91.9	89.5	90.2	
Power Factor	25%	0.00						
	50%	0.78	0.79	0.76	0.73	0.83	0.81	
	75%	0.85	0.86	0.84	0.82	0.88	0.87	
	100%	0.88	0.88	0.87	0.86	0.89	0.88	
Losses at normative operating points (speed;torque), in percentage of rated output power								
Losses (%)	P1 (0,9;1,0)	8.1	7.9	7.9	7.9	10.6	9.8	8.9
	P2 (0,5;1,0)	5.6	5.5	5.5	5.5	7.3	6.7	6.1
	P3 (0,25;1,0)	4.9	4.8	4.8	4.8	6.3	5.9	5.3
	P4 (0,9;0,5)	4.8	4.6	4.6	4.6	6.2	5.7	5.2
	P5 (0,5;0,5)	2.5	2.4	2.4	2.4	3.2	2.9	2.7
	P6 (0,5;0,25)	1.7	1.7	1.7	1.7	2.2	2.1	1.9
	P7 (0,25;0,25)	0.9	0.9	0.9	0.9	1.2	1.1	1.0
Bearing type	: Drive end 6311 C3	Non drive end 6211 C3	Foundation loads					
Sealing	: V'Ring	V'Ring	Max. traction : 125 kgf					
Lubrication interval	: 14000 h	17000 h	Max. compression : 298 kgf					
Lubricant amount	: 18 g	11 g						
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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Customer : _____

Notes
USABLE @208V 63.0A SF 1.10 SFA 69.3A

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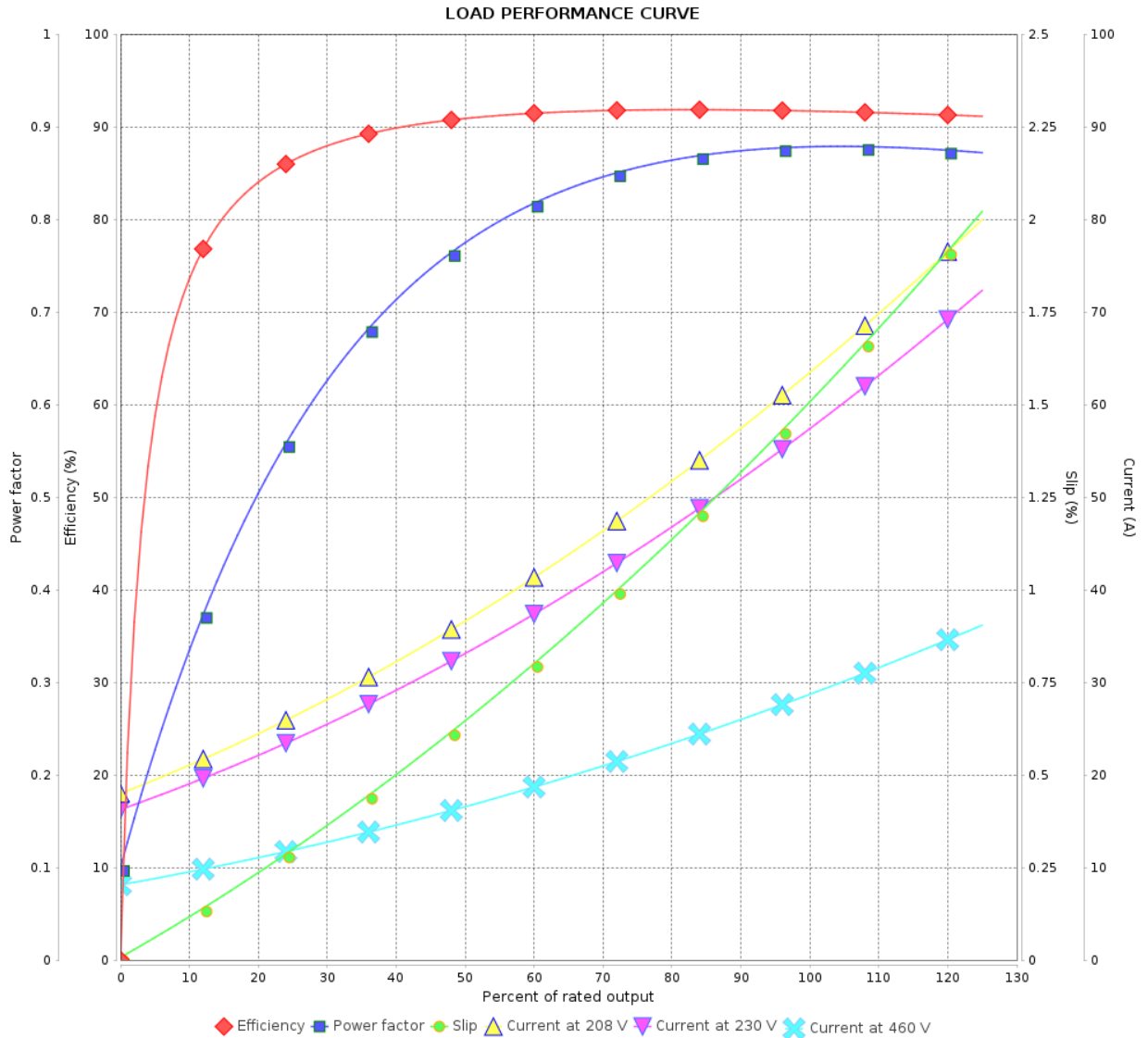
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 12447101



Performance : 230/460 V 60 Hz 2P

Rated current : 57.5/28.8 A
 LRC : 6.3
 Rated torque : 5.12 kgfm
 Locked rotor torque : 200 %
 Breakdown torque : 250 %
 Rated speed : 3545 rpm

Moment of inertia (J) : 0.1135 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.25
 Temperature rise : 80 K
 Design : B

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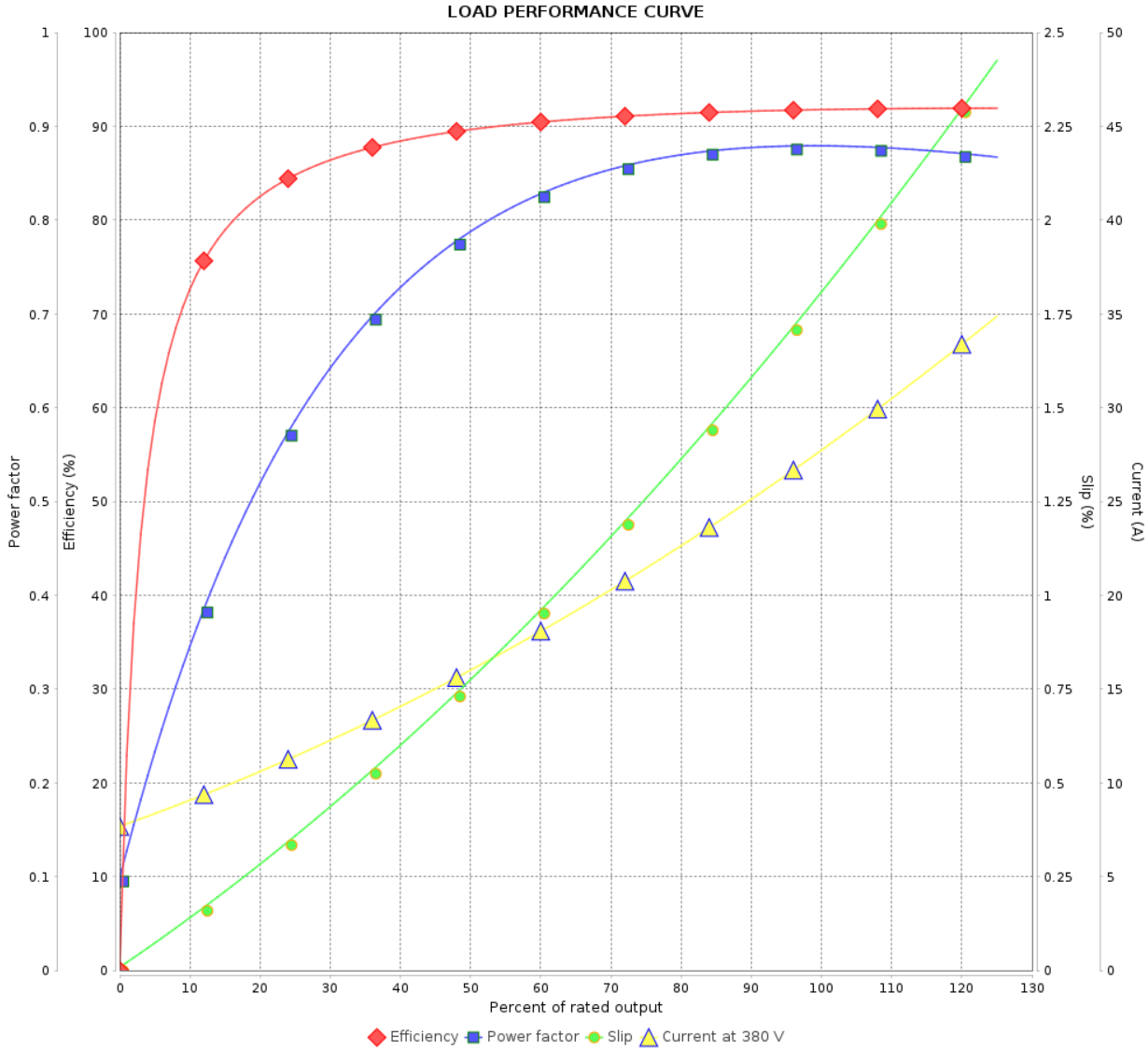
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 12447101



Performance : 380 V 50 Hz 2P IE3

Rated current : 28.2 A
 LRC : 6.2
 Rated torque : 4.93 kgfm
 Locked rotor torque : 200 %
 Breakdown torque : 240 %
 Rated speed : 2945 rpm

Moment of inertia (J) : 0.1135 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : B

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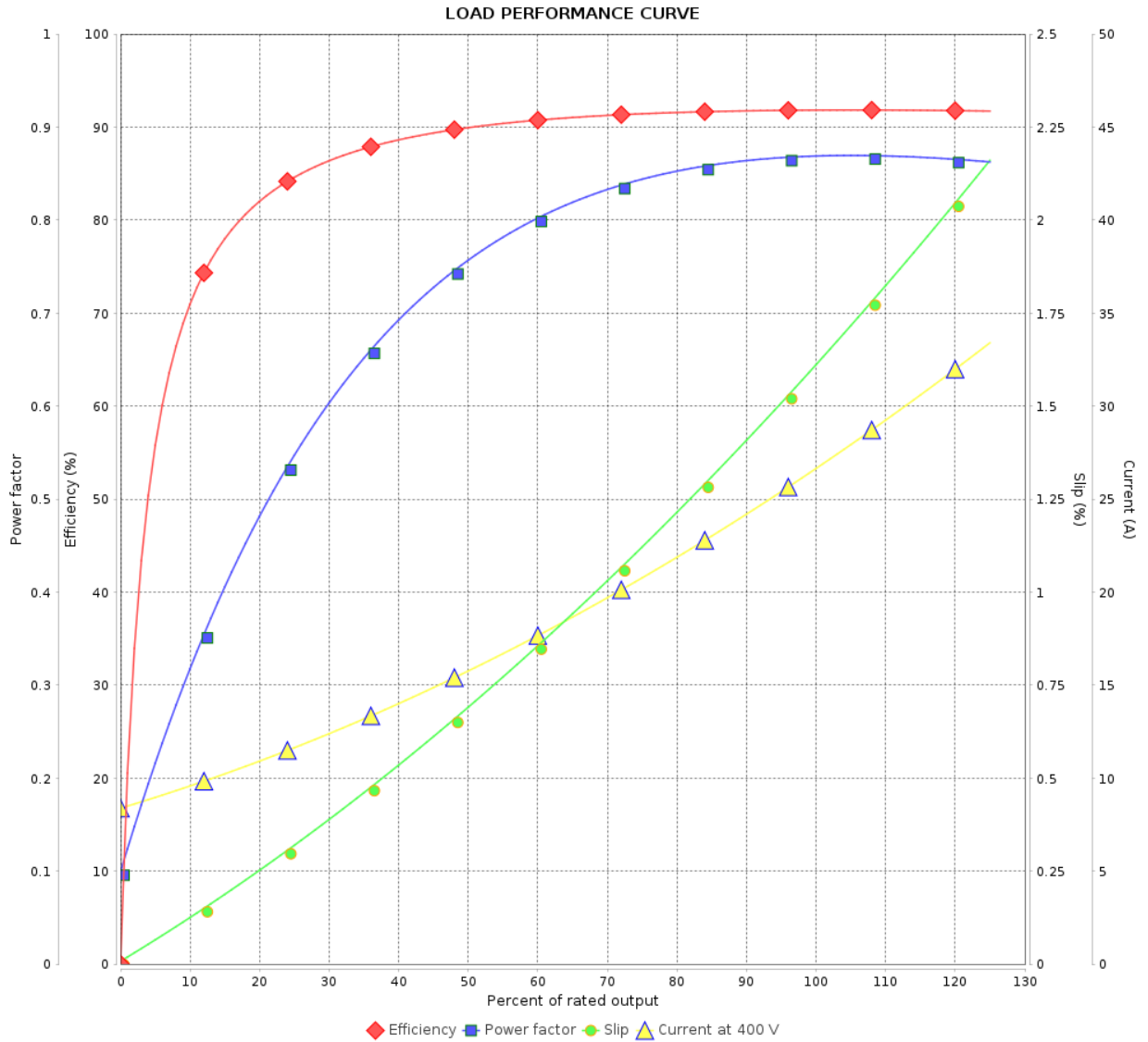
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 12447101



Performance : 400 V 50 Hz 2P IE3

Rated current : 27.1 A
 LRC : 6.9
 Rated torque : 4.92 kgfm
 Locked rotor torque : 229 %
 Breakdown torque : 280 %
 Rated speed : 2951 rpm

Moment of inertia (J) : 0.1135 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : B

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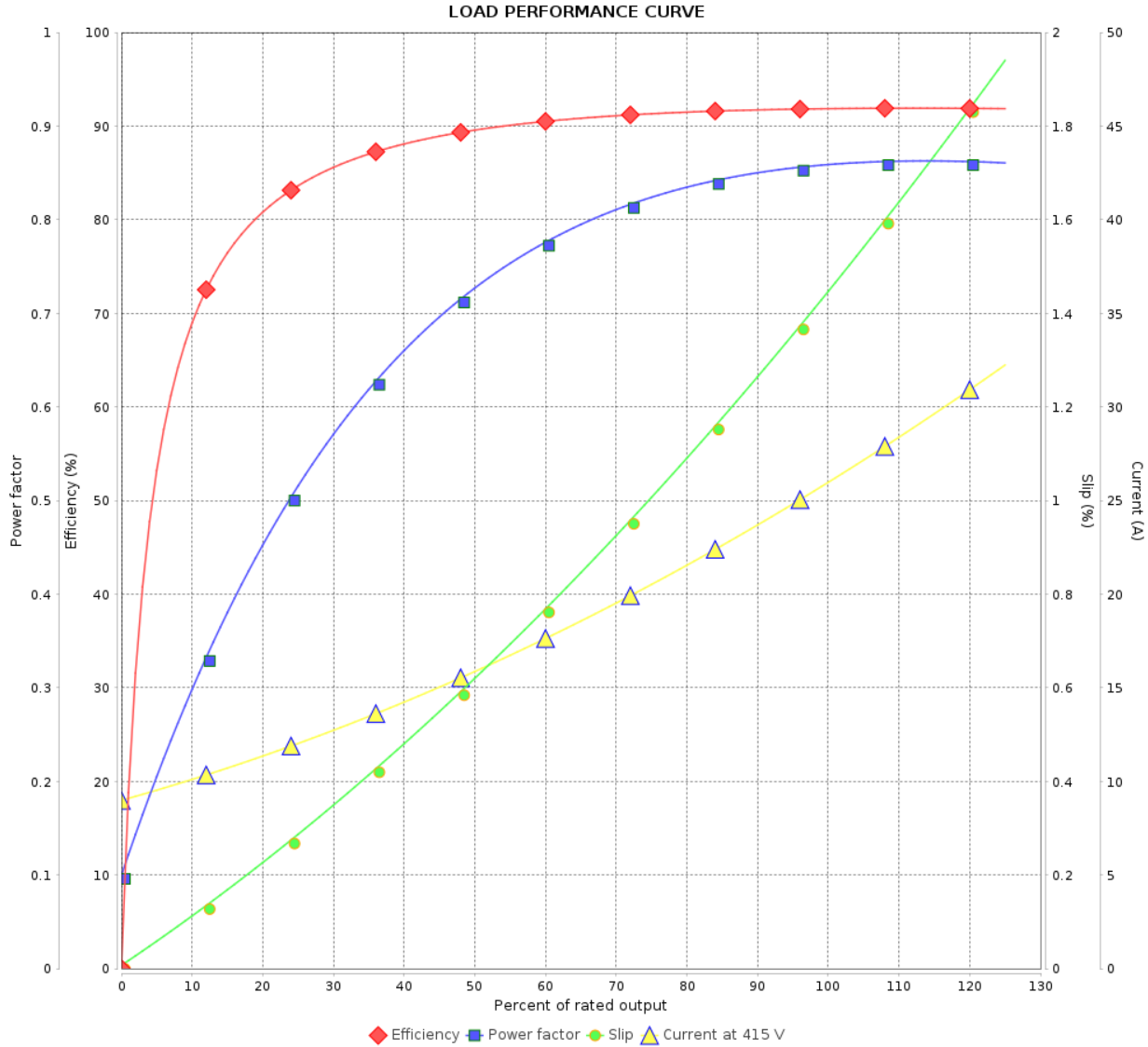
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 12447101



Performance : 415 V 50 Hz 2P IE3

Rated current : 26.4 A
 LRC : 7.5
 Rated torque : 4.91 kgfm
 Locked rotor torque : 240 %
 Breakdown torque : 300 %
 Rated speed : 2956 rpm

Moment of inertia (J) : 0.1135 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : B

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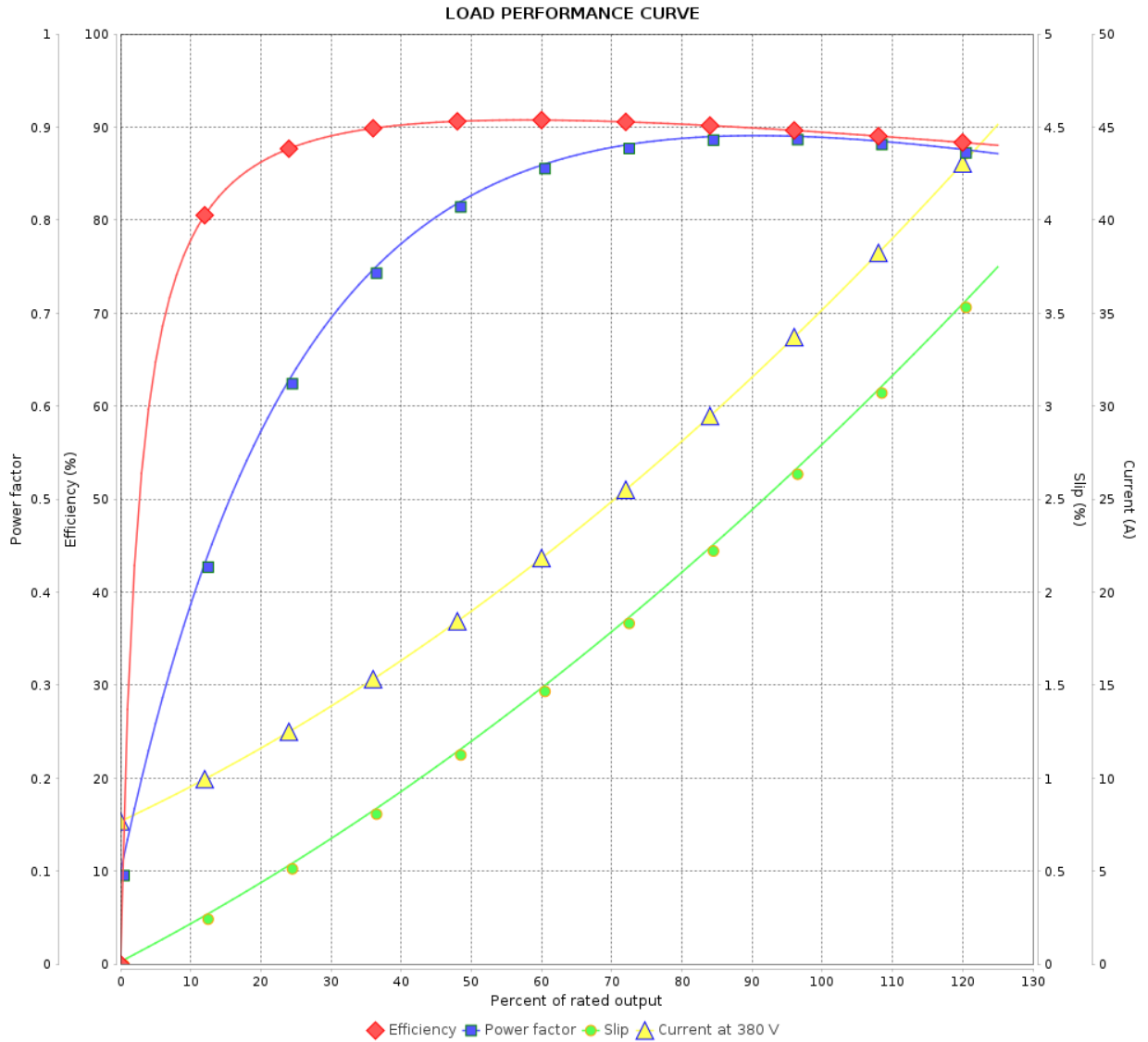
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 12447101



Performance : 380 V 50 Hz 2P IE1

Rated current : 35.3 A
 LRC : 4.9
 Rated torque : 6.22 kgfm
 Locked rotor torque : 160 %
 Breakdown torque : 190 %
 Rated speed : 2915 rpm

Moment of inertia (J) : 0.1135 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 105 K
 Design : B

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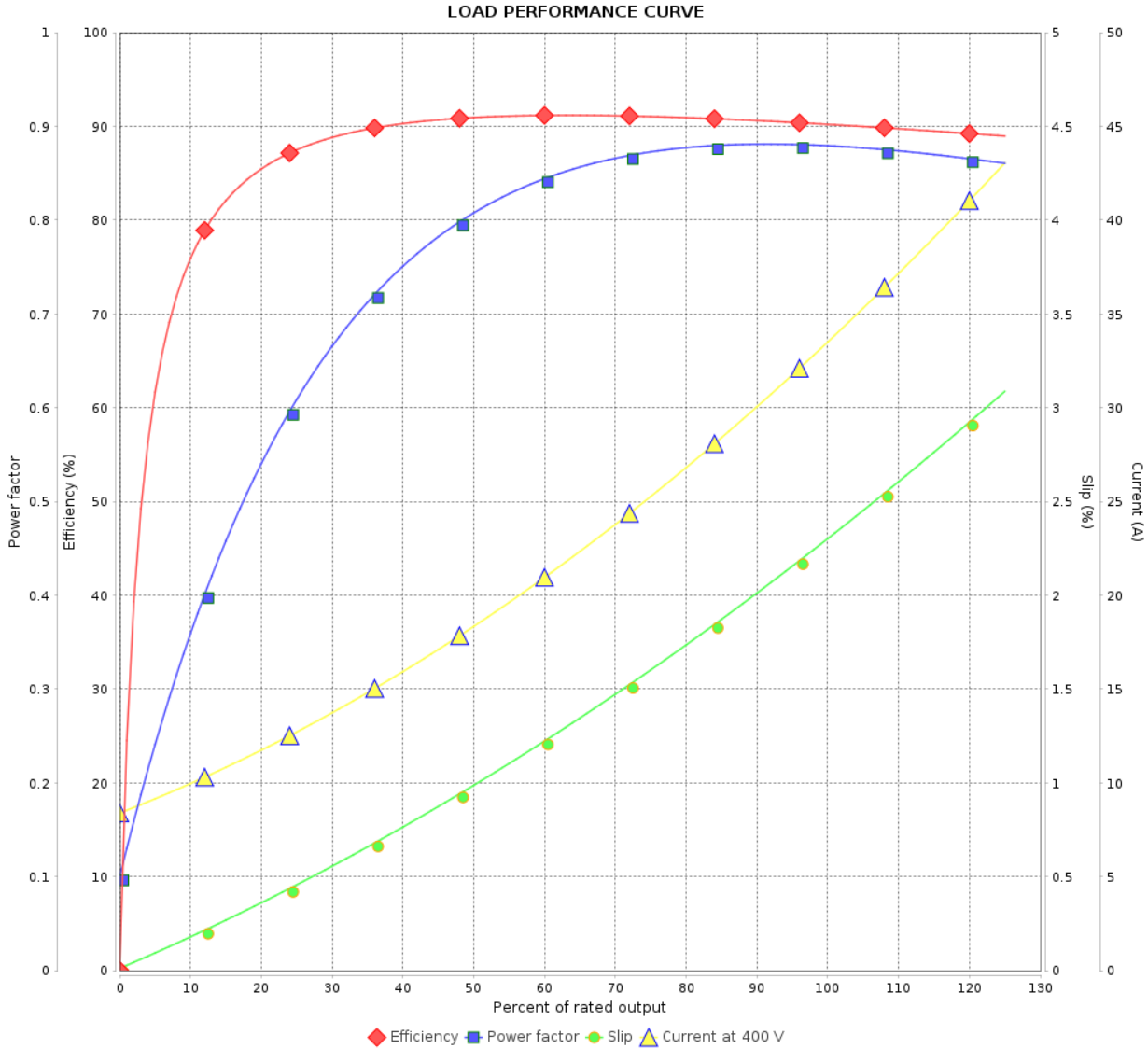
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 12447101



Performance : 400 V 50 Hz 2P IE1

Rated current : 33.6 A
 LRC : 5.5
 Rated torque : 6.19 kgfm
 Locked rotor torque : 180 %
 Breakdown torque : 210 %
 Rated speed : 2930 rpm

Moment of inertia (J) : 0.1135 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 105 K
 Design : B

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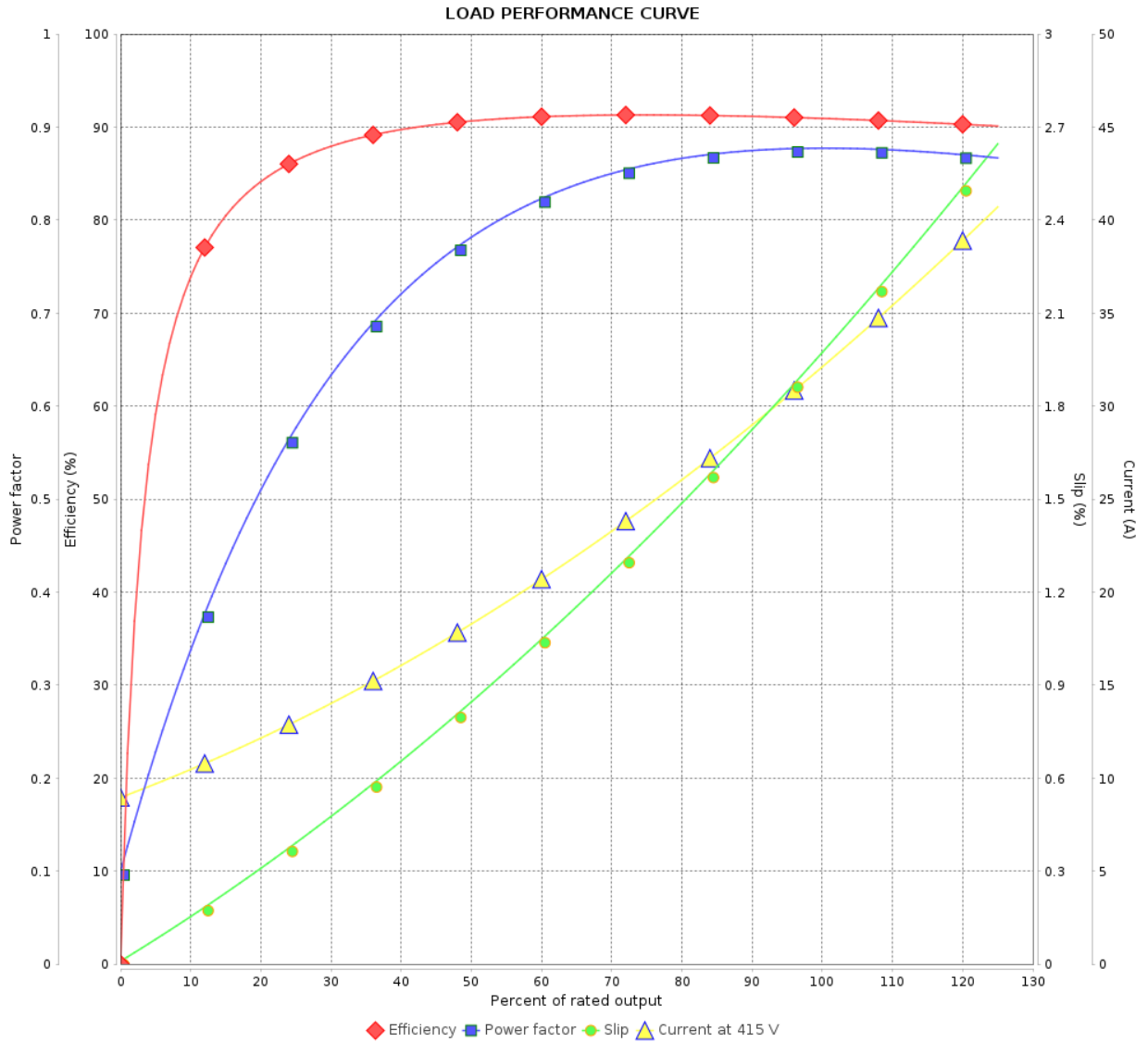
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 12447101



Performance : 415 V 50 Hz 2P IE2

Rated current : 32.1 A
 LRC : 6.2
 Rated torque : 6.17 kgfm
 Locked rotor torque : 190 %
 Breakdown torque : 240 %
 Rated speed : 2940 rpm

Moment of inertia (J) : 0.1135 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 105 K
 Design : B

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