

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :								
Product line	: W22 NEMA Premium Efficiency Three-Phase	Product code :	12264596					
Frame	: 213/5TD	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	: 83.8 kg					
Protection degree	: IP55	Moment of inertia (J)	: 0.0636 kgm ²					
Design	: B							
Output [HP]	10	7.5	7.5	7.5	10	10	10	
Poles	4	4	4	4	4	4	4	
Frequency [Hz]	60	50	50	50	50	50	50	
Rated voltage [V]	230/460	380	400	415	380	400	415	
Rated current [A]	25.3/12.7	11.5	11.4	11.3	15.2	14.4	14.1	
L. R. Amperes [A]	162/81.1	86.2	91.5	96.1	90.9	93.6	98.8	
LRC [A]	6.4x(Code H)	7.5x(Code J)	8.0x(Code K)	8.5x(Code L)	6.0x(Code G)	6.5x(Code H)	7.0x(Code H)	
No load current [A]	11.3/5.65	5.60	6.00	6.35	5.60	6.00	6.35	
Rated speed [RPM]	1765	1465	1470	1470	1450	1455	1460	
Slip [%]	1.94	2.33	2.00	2.00	3.33	3.00	2.67	
Rated torque [kgfm]	4.11	3.72	3.70	3.70	5.01	4.99	4.97	
Locked rotor torque [%]	200	200	240	260	150	180	190	
Breakdown torque [%]	295	300	340	360	220	250	270	
Service factor	1.25	1.15	1.15	1.15	1.15	1.15	1.15	
Temperature rise	80 K	80 K	80 K	80 K	80 K	80 K	80 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	58.0 dB(A)	56.0 dB(A)	56.0 dB(A)	56.0 dB(A)	56.0 dB(A)	56.0 dB(A)	56.0 dB(A)	
Efficiency (%)	25%							
	50%	91.0	90.0	89.2	88.7	90.3	90.3	
	75%	91.7	90.0	89.9	89.8	90.2	90.2	
	100%	91.7	89.8	90.1	90.3	88.5	89.5	
Power Factor	25%							
	50%	0.65	0.61	0.57	0.53	0.72	0.68	
	75%	0.76	0.74	0.70	0.67	0.81	0.79	
	100%	0.81	0.81	0.77	0.75	0.85	0.84	
Losses at normative operating points (speed;torque), in percentage of rated output power								
Losses (%)	P1 (0,9;1,0)	8.8	11.0	10.7	10.4	12.6	11.4	10.6
	P2 (0,5;1,0)	7.3	9.2	8.9	8.7	10.5	9.5	8.8
	P3 (0,25;1,0)	7.0	8.8	8.5	8.3	10.1	9.1	8.4
	P4 (0,9;0,5)	4.6	5.8	5.6	5.5	6.6	6.0	5.6
	P5 (0,5;0,5)	3.2	4.0	3.9	3.8	4.6	4.1	3.8
	P6 (0,5;0,25)	2.3	2.8	2.7	2.7	3.2	2.9	2.7
	P7 (0,25;0,25)	1.6	2.0	1.9	1.9	2.2	2.0	1.9
Bearing type	: Drive end 6308 ZZ	Non drive end 6207 ZZ	Foundation loads					
Sealing	: V'Ring	V'Ring	Max. traction	: 206 kgf				
Lubrication interval	: -	-	Max. compression	: 290 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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Customer : _____

Notes
USABLE @208V 27.4A SF 1.15 SFA 31.5A

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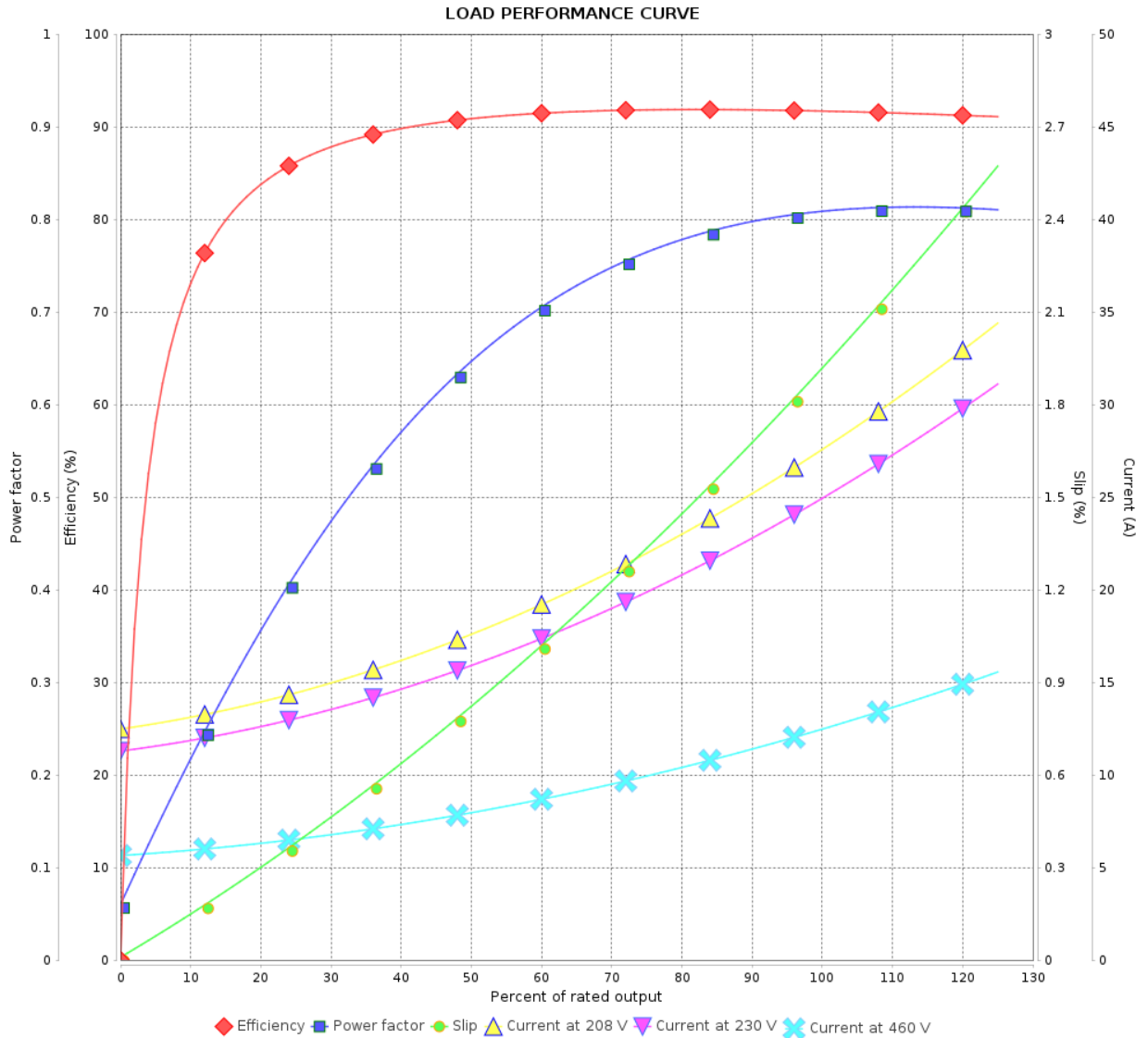
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 12264596



Performance : 230/460 V 60 Hz 4P

Rated current : 25.3/12.7 A
 LRC : 6.4
 Rated torque : 4.11 kgfm
 Locked rotor torque : 200 %
 Breakdown torque : 295 %
 Rated speed : 1765 rpm

Moment of inertia (J) : 0.0636 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.25
 Temperature rise : 80 K
 Design : B

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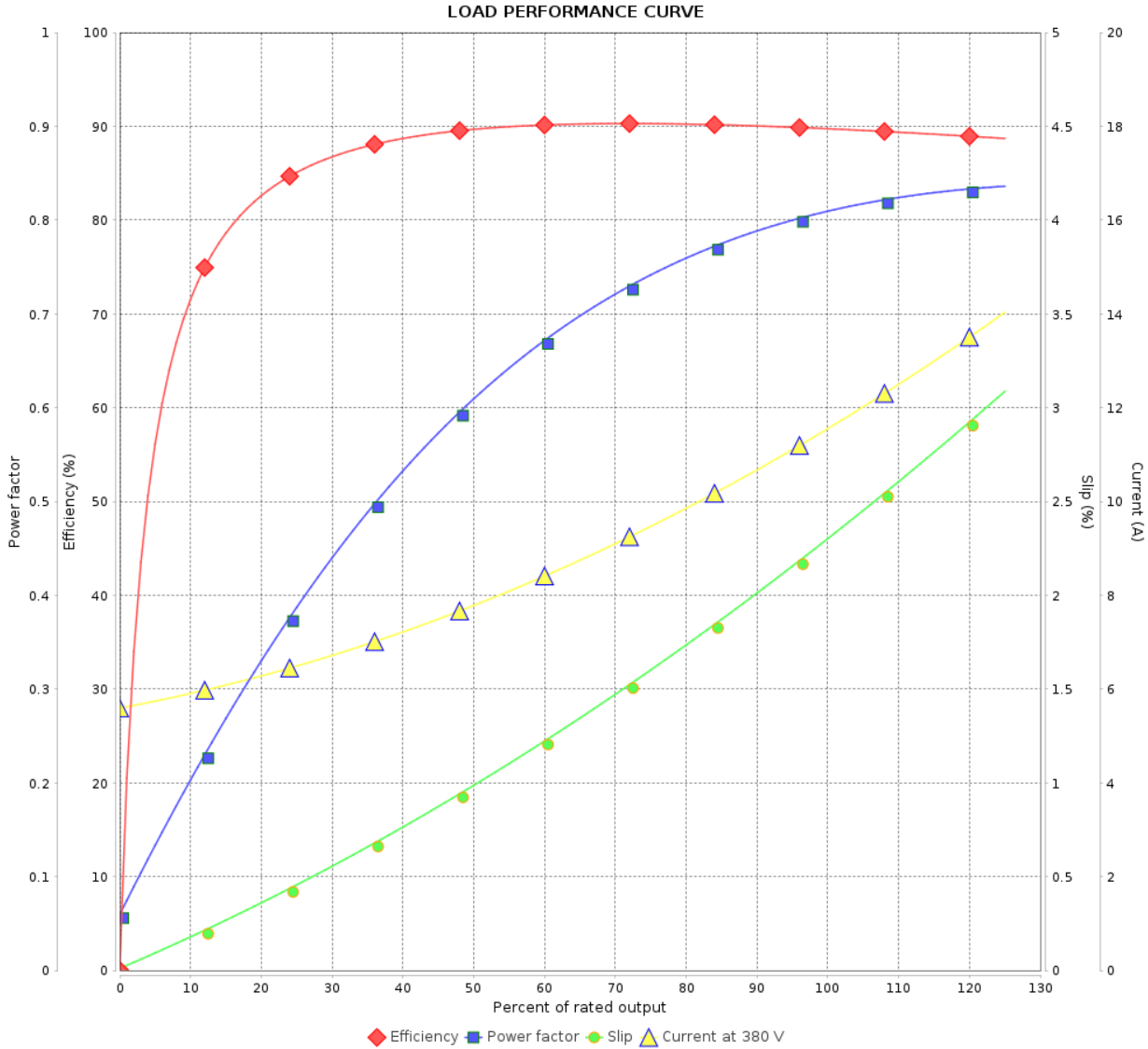
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 12264596



Performance : 380 V 50 Hz 4P IE3

Rated current : 11.5 A
 LRC : 7.5
 Rated torque : 3.72 kgfm
 Locked rotor torque : 200 %
 Breakdown torque : 300 %
 Rated speed : 1465 rpm

Moment of inertia (J) : 0.0636 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

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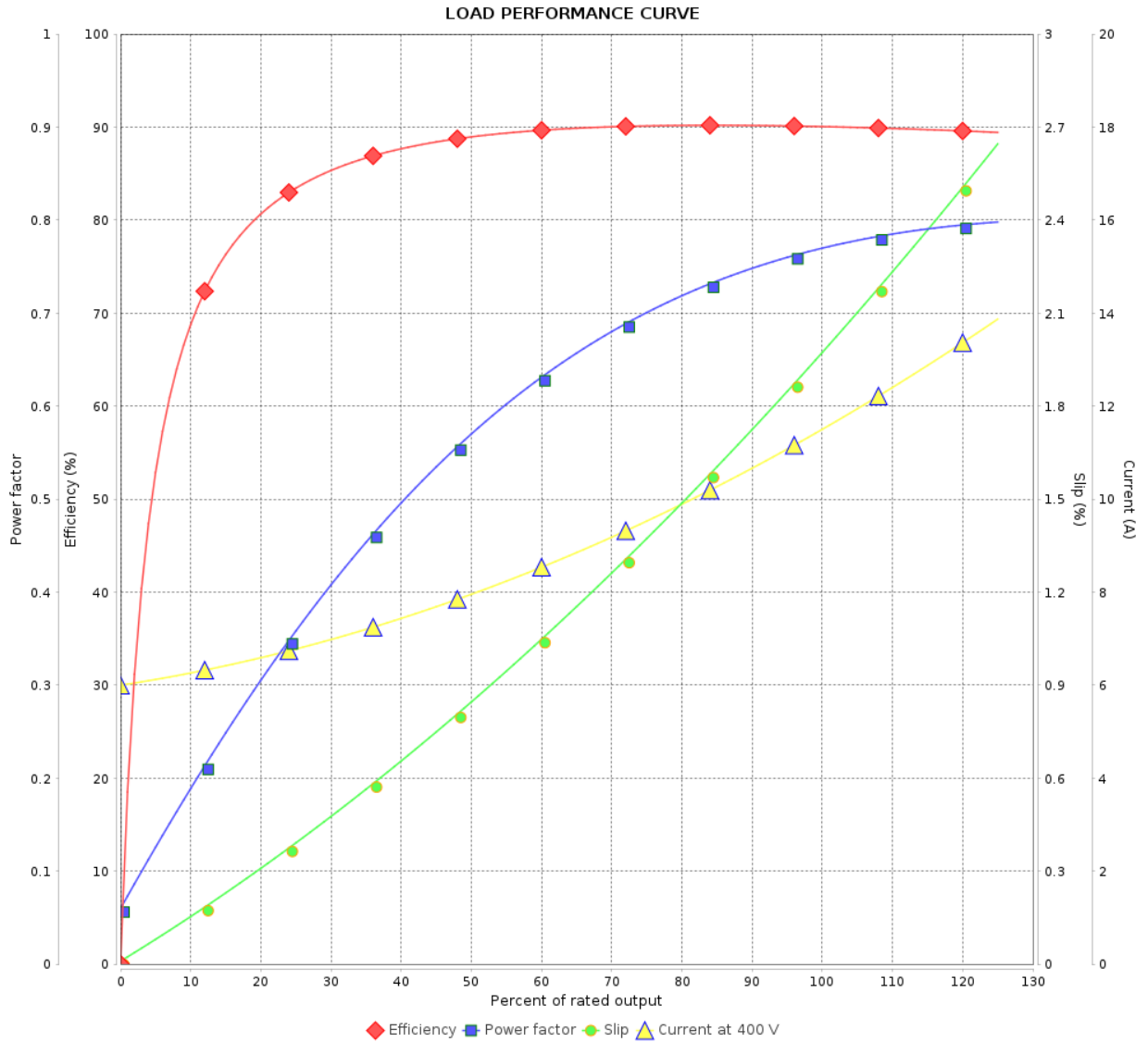
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 12264596



Performance : 400 V 50 Hz 4P IE3

Rated current : 11.4 A
 LRC : 8.0
 Rated torque : 3.70 kgfm
 Locked rotor torque : 240 %
 Breakdown torque : 340 %
 Rated speed : 1470 rpm

Moment of inertia (J) : 0.0636 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

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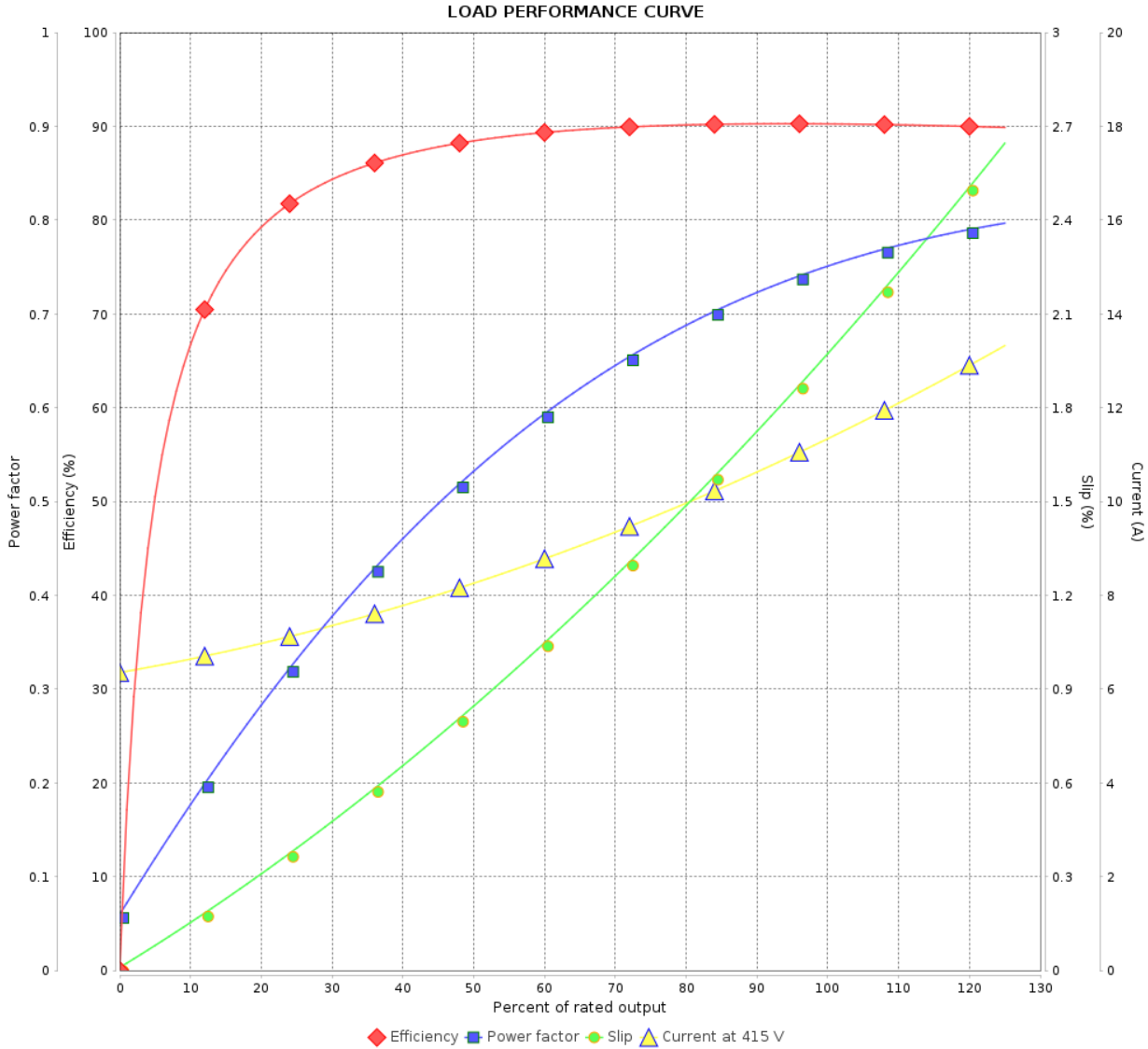
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 12264596



Performance : 415 V 50 Hz 4P IE3

Rated current : 11.3 A
 LRC : 8.5
 Rated torque : 3.70 kgfm
 Locked rotor torque : 260 %
 Breakdown torque : 360 %
 Rated speed : 1470 rpm

Moment of inertia (J) : 0.0636 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

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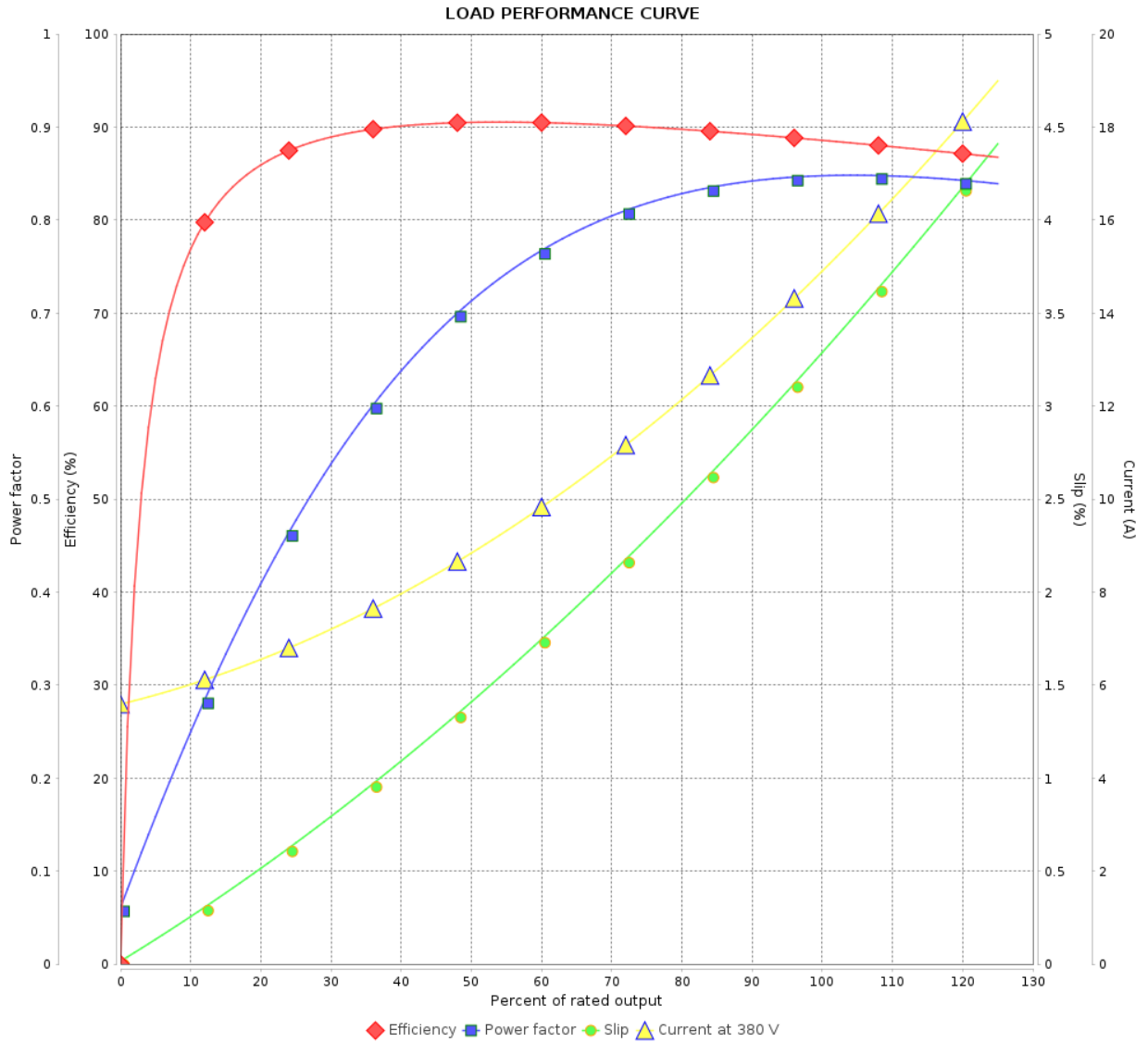
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 12264596



Performance : 380 V 50 Hz 4P IE1

Rated current : 15.2 A
 LRC : 6.0
 Rated torque : 5.01 kgfm
 Locked rotor torque : 150 %
 Breakdown torque : 220 %
 Rated speed : 1450 rpm

Moment of inertia (J) : 0.0636 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

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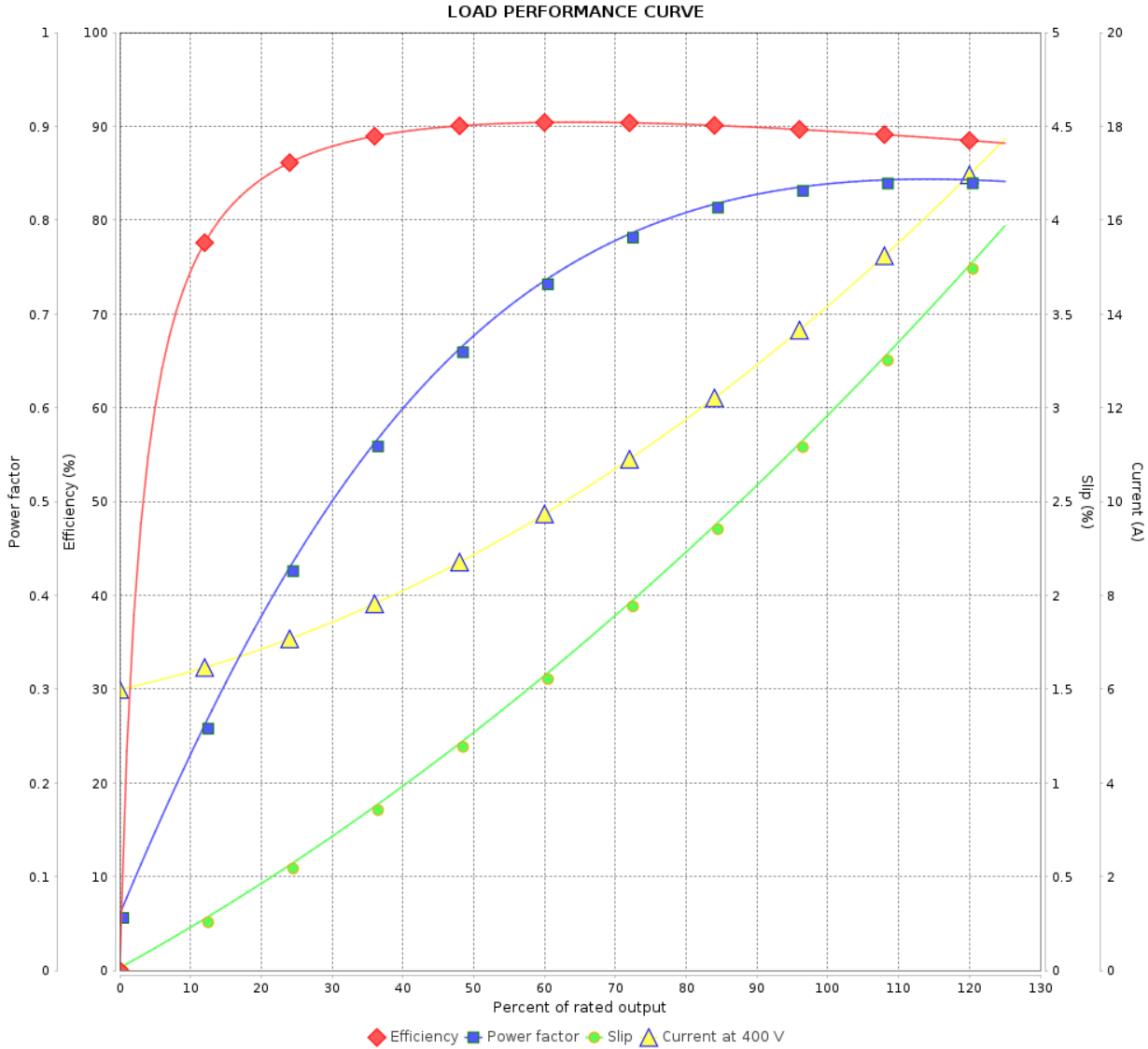
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 12264596



Performance : 400 V 50 Hz 4P IE2

Rated current : 14.4 A
 LRC : 6.5
 Rated torque : 4.99 kgfm
 Locked rotor torque : 180 %
 Breakdown torque : 250 %
 Rated speed : 1455 rpm

Moment of inertia (J) : 0.0636 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

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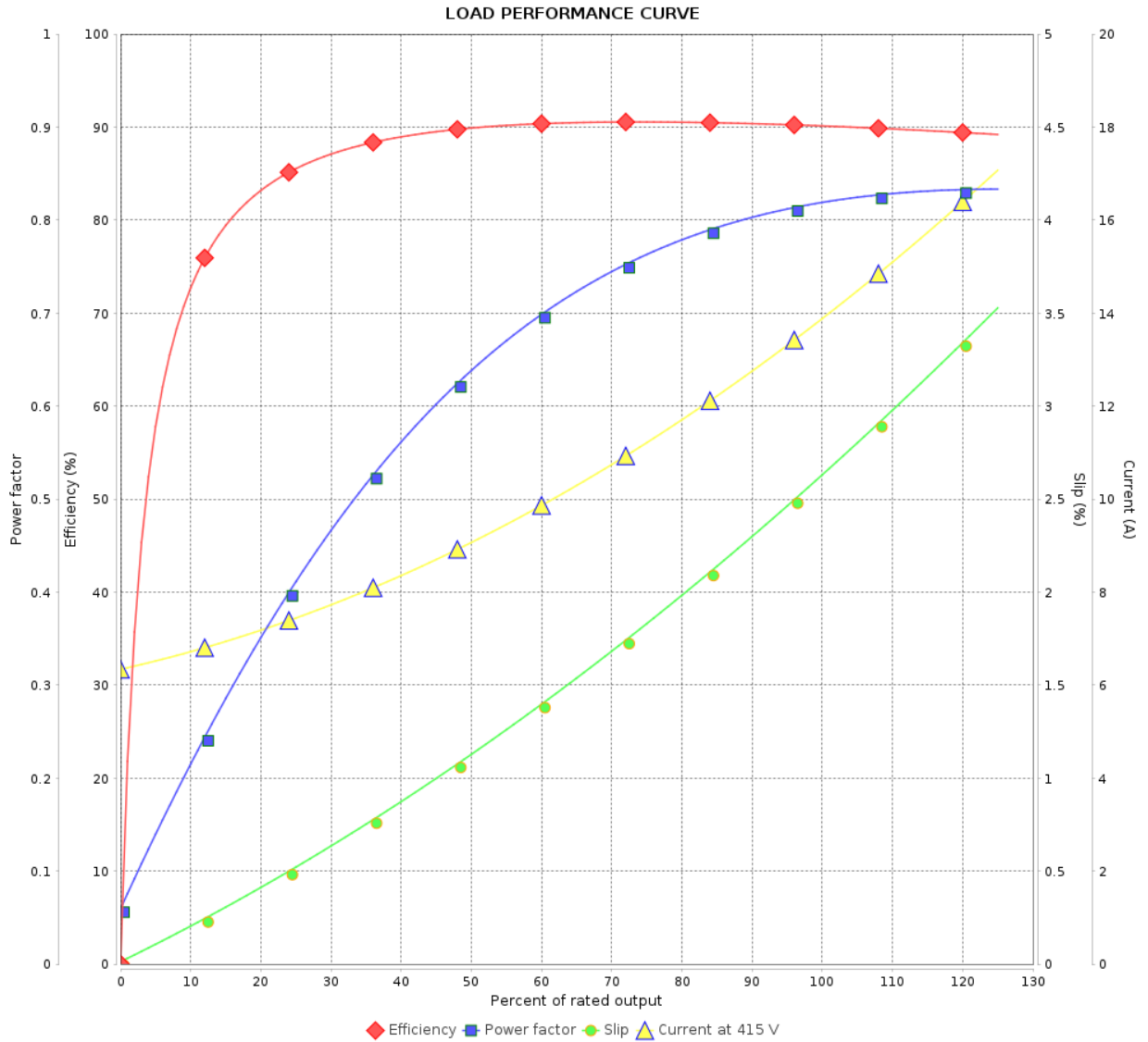
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 12264596



Performance : 415 V 50 Hz 4P IE2

Rated current : 14.1 A
 LRC : 7.0
 Rated torque : 4.97 kgfm
 Locked rotor torque : 190 %
 Breakdown torque : 270 %
 Rated speed : 1460 rpm

Moment of inertia (J) : 0.0636 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

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