

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :							
Product line	: W22 NEMA Premium Efficiency Three-Phase	Product code :	11647930				
Frame	: 182/4T	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	: 44.4 kg				
Protection degree	: IP55	Moment of inertia (J)	: 0.0095 kgm ²				
Design	: A						
Output [HP]	7.5	5.5	5.5	5.5	7.5	7.5	7.5
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]	17.5/8.76	7.84	7.62	7.47	10.9	10.3	10.0
L. R. Amperes [A]	144/71.8	65.1	69.3	71.7	68.7	72.1	74.0
LRC [A]	8.2x(Code J)	8.3x(Code J)	9.1x(Code K)	9.6x(Code L)	6.3x(Code G)	7.0x(Code H)	7.4x(Code H)
No load current [A]	5.80/2.90	2.70	3.00	3.20	2.70	3.00	3.20
Rated speed [RPM]	3485	2900	2910	2915	2810	2840	2860
Slip [%]	3.19	3.33	3.00	2.83	6.33	5.33	4.67
Rated torque [kgfm]	1.56	1.38	1.37	1.37	1.94	1.92	1.90
Locked rotor torque [%]	270	310	350	370	220	250	270
Breakdown torque [%]	330	360	390	430	260	280	310
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	80 K	80 K	80 K
Locked rotor time	30s (cold) 17s (hot)	28s (cold) 16s (hot)	27s (cold) 15s (hot)	27s (cold) 15s (hot)	28s (cold) 16s (hot)	27s (cold) 15s (hot)	27s (cold) 15s (hot)
Noise level ²	66.0 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%	88.5	85.5	85.9	86.2	87.0	87.5
	75%	89.5	87.0	87.6	88.1	87.0	88.0
	100%	89.5	88.1	88.1	88.7	84.5	86.0
Power Factor	25%						
	50%	0.75	0.70	0.66	0.63	0.80	0.77
	75%	0.84	0.82	0.79	0.77	0.88	0.86
	100%	0.88	0.88	0.86	0.84	0.91	0.90
Losses at normative operating points (speed;torque), in percentage of rated output power							
Losses (%)	P1 (0,9;1,0)	11.4	11.4	11.4	11.4	11.4	11.4
	P2 (0,5;1,0)	9.4	9.4	9.4	9.4	9.4	9.4
	P3 (0,25;1,0)	8.7	8.7	8.7	8.7	8.7	8.7
	P4 (0,9;0,5)	5.3	5.3	5.3	5.3	5.3	5.3
	P5 (0,5;0,5)	3.4	3.4	3.4	3.4	3.4	3.4
	P6 (0,5;0,25)	2.1	2.1	2.1	2.1	2.1	2.1
	P7 (0,25;0,25)	1.3	1.3	1.3	1.3	1.3	1.3
Bearing type	: Drive end 6207 ZZ	Non drive end 6206 ZZ	Foundation loads				
Sealing	: V'Ring	V'Ring	Max. traction	: 101 kgf			
Lubrication interval	: -	-	Max. compression	: 146 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 : _____

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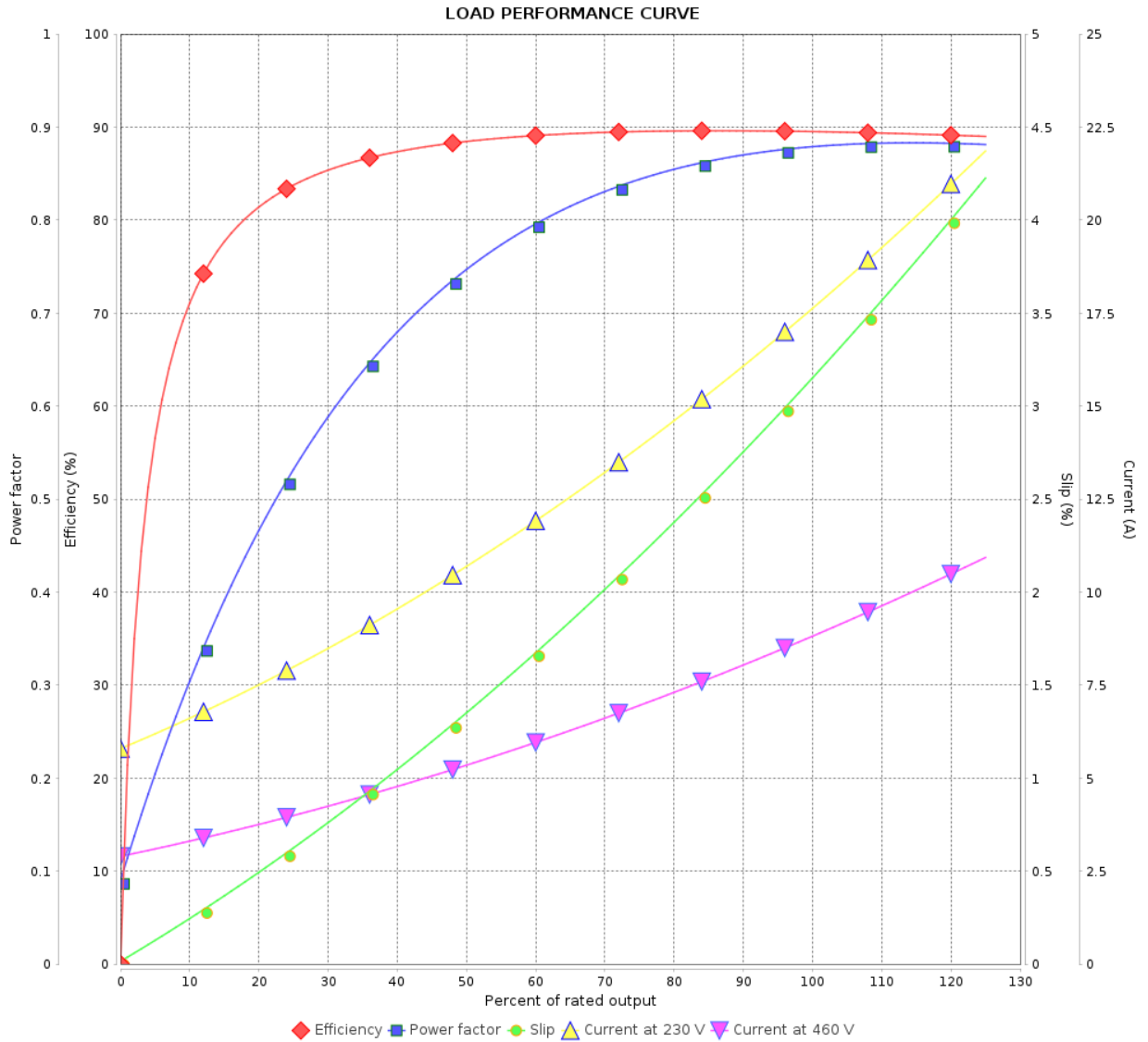
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 11647930



Performance : 230/460 V 60 Hz 2P

Rated current : 17.5/8.76 A
 LRC : 8.2
 Rated torque : 1.56 kgfm
 Locked rotor torque : 270 %
 Breakdown torque : 330 %
 Rated speed : 3485 rpm

Moment of inertia (J) : 0.0095 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.25
 Temperature rise : 80 K
 Design : A

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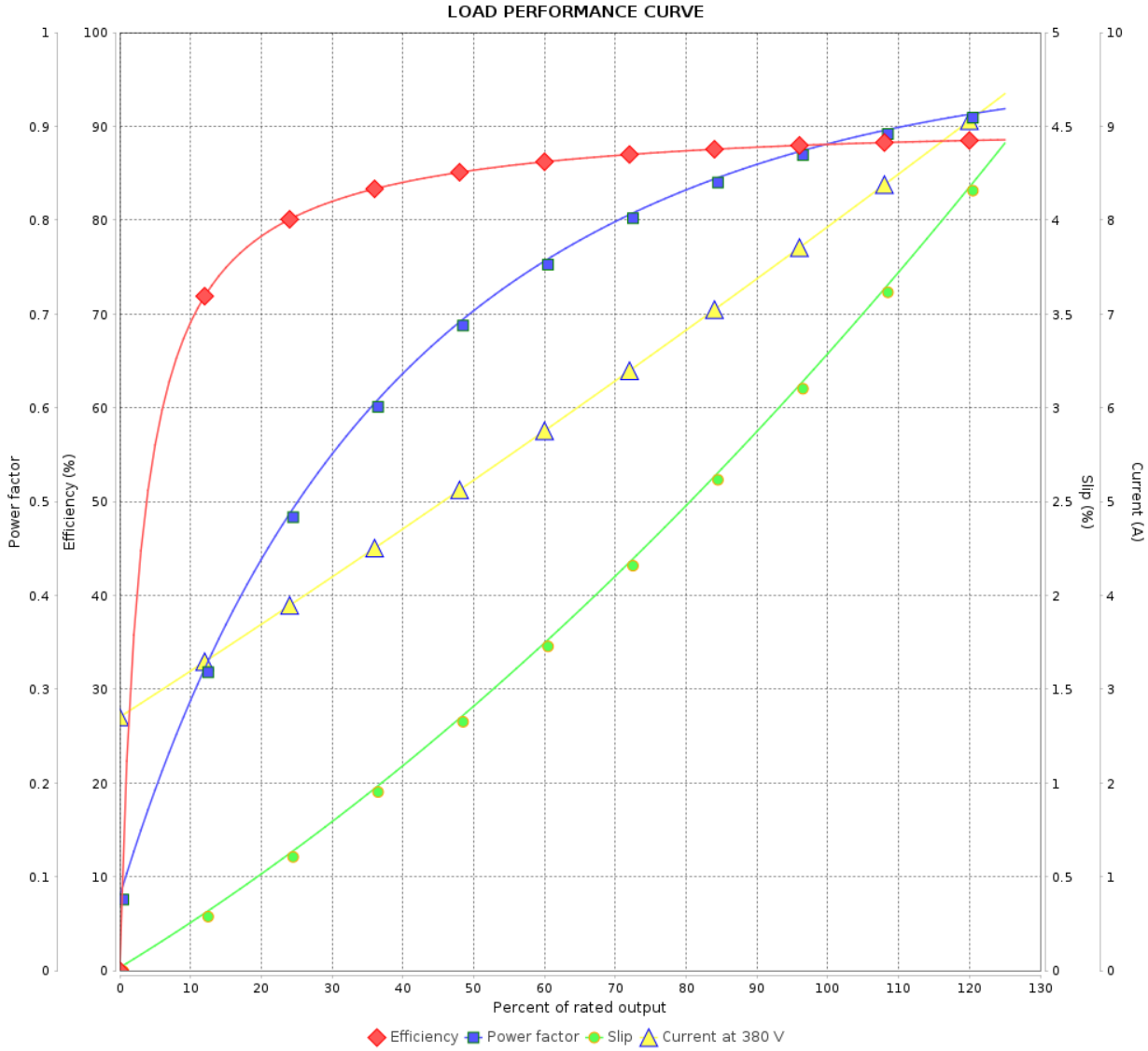
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 11647930



Performance : 380 V 50 Hz 2P IE3

Rated current : 7.84 A
 LRC : 8.3
 Rated torque : 1.38 kgfm
 Locked rotor torque : 310 %
 Breakdown torque : 360 %
 Rated speed : 2900 rpm

Moment of inertia (J) : 0.0095 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : A

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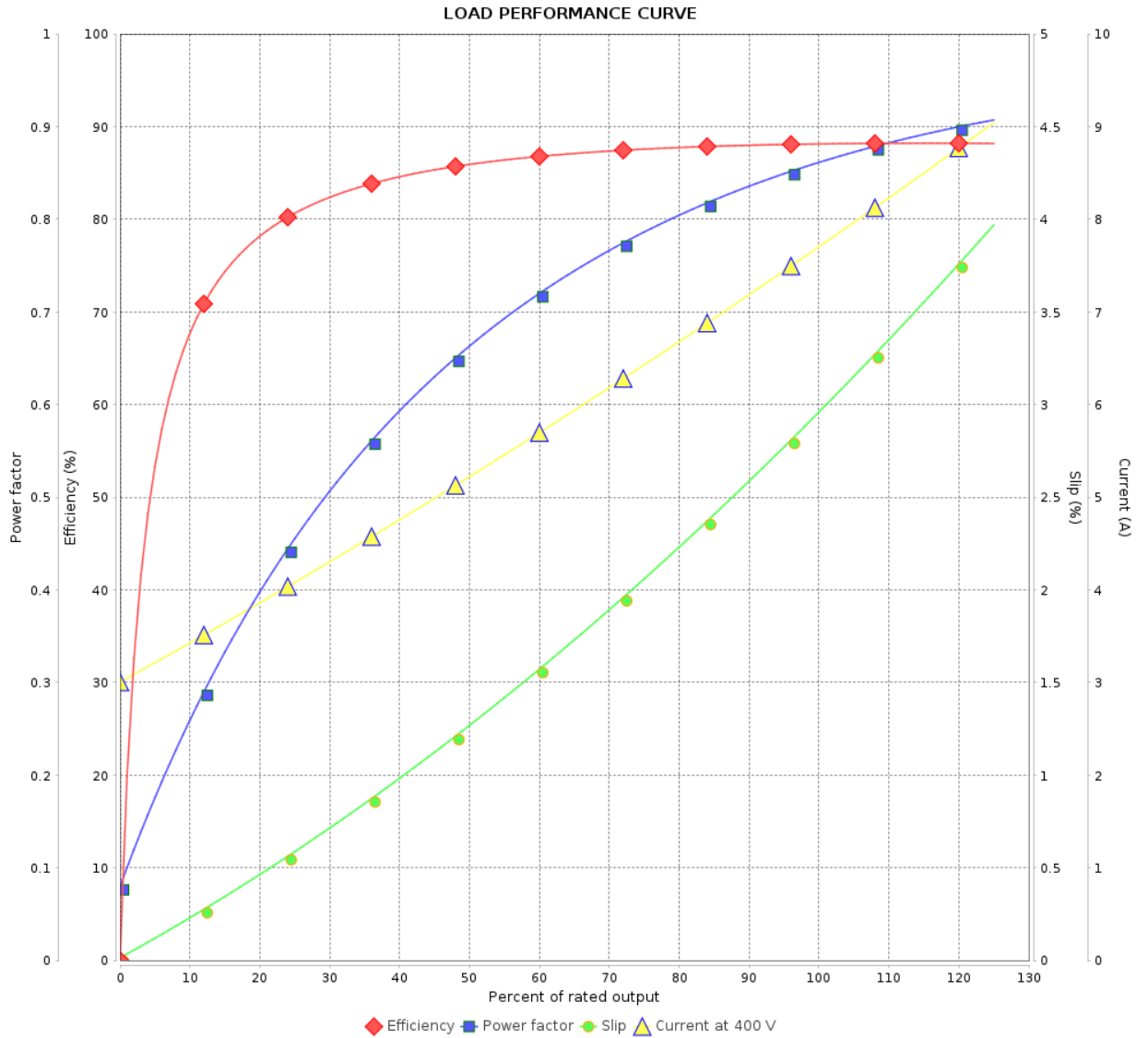
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 11647930



Performance : 400 V 50 Hz 2P IE3

Rated current : 7.62 A
 LRC : 9.1
 Rated torque : 1.37 kgfm
 Locked rotor torque : 350 %
 Breakdown torque : 390 %
 Rated speed : 2910 rpm

Moment of inertia (J) : 0.0095 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : A

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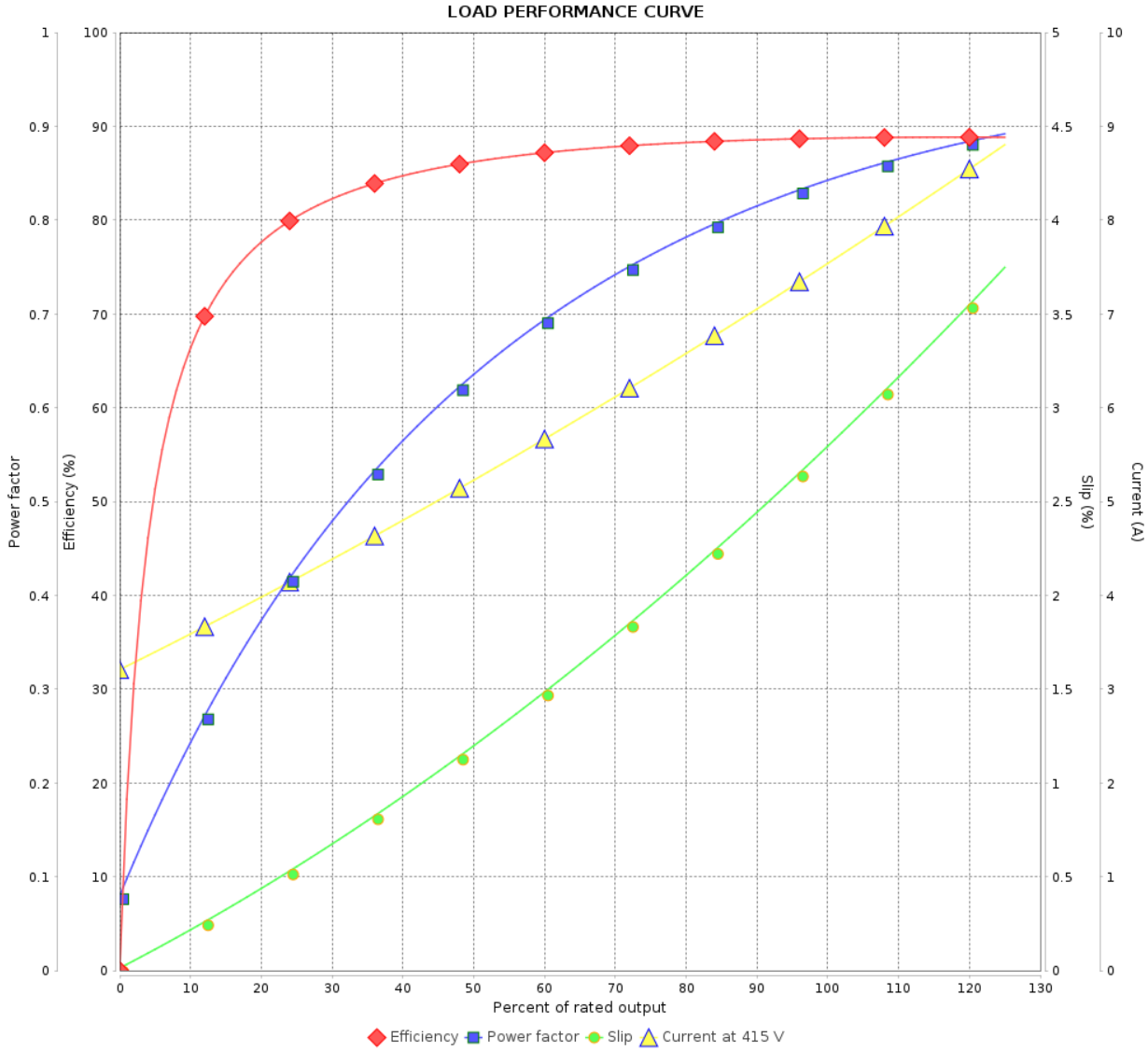
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 11647930



Performance : 415 V 50 Hz 2P IE3

Rated current : 7.47 A
 LRC : 9.6
 Rated torque : 1.37 kgfm
 Locked rotor torque : 370 %
 Breakdown torque : 430 %
 Rated speed : 2915 rpm

Moment of inertia (J) : 0.0095 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : A

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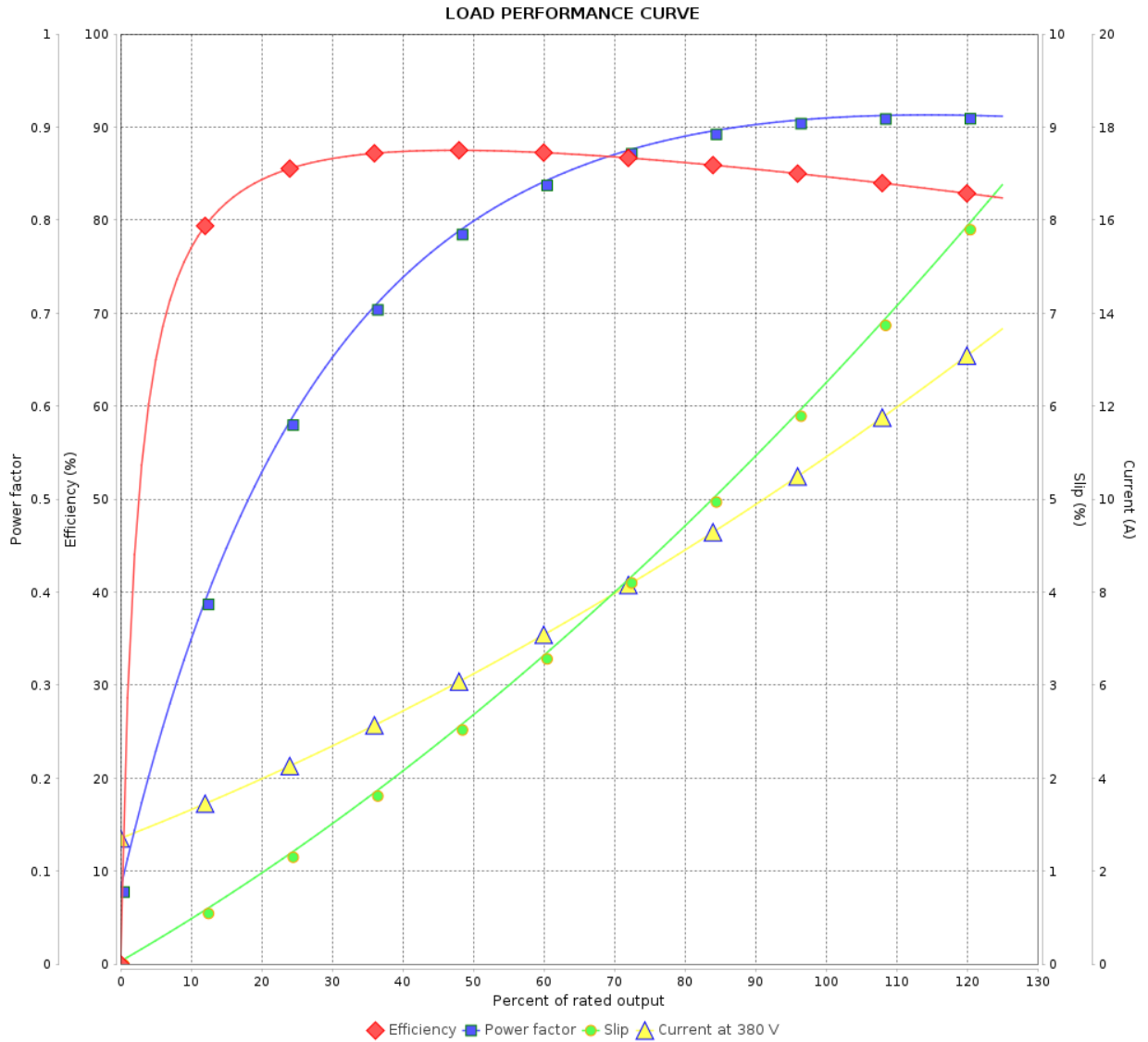
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 11647930



Performance : 380 V 50 Hz 2P

Rated current : 10.9 A
 LRC : 6.3
 Rated torque : 1.94 kgfm
 Locked rotor torque : 220 %
 Breakdown torque : 260 %
 Rated speed : 2810 rpm

Moment of inertia (J) : 0.0095 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : A

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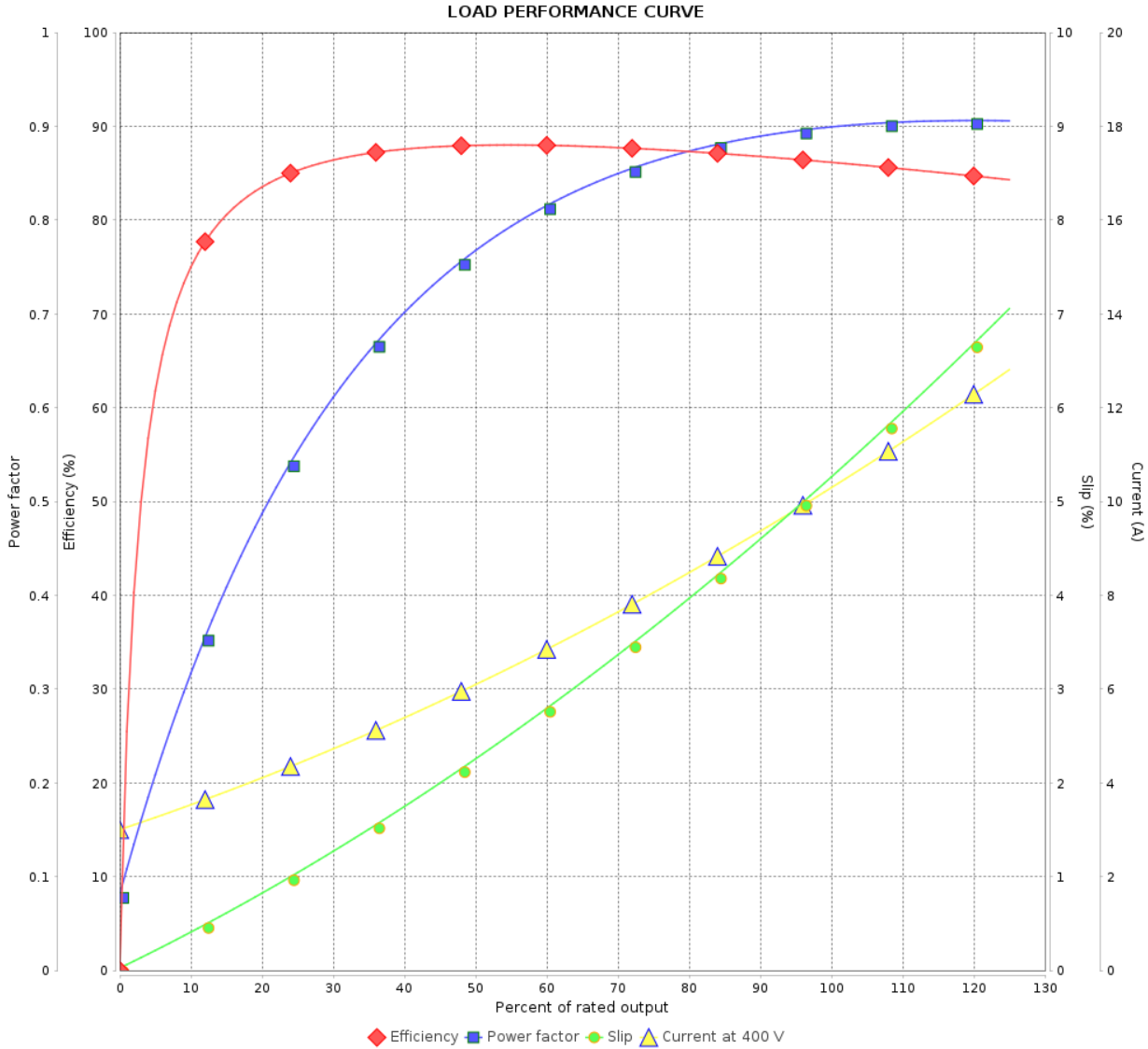
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 11647930



Performance : 400 V 50 Hz 2P IE1

Rated current : 10.3 A
 LRC : 7.0
 Rated torque : 1.92 kgfm
 Locked rotor torque : 250 %
 Breakdown torque : 280 %
 Rated speed : 2840 rpm

Moment of inertia (J) : 0.0095 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : A

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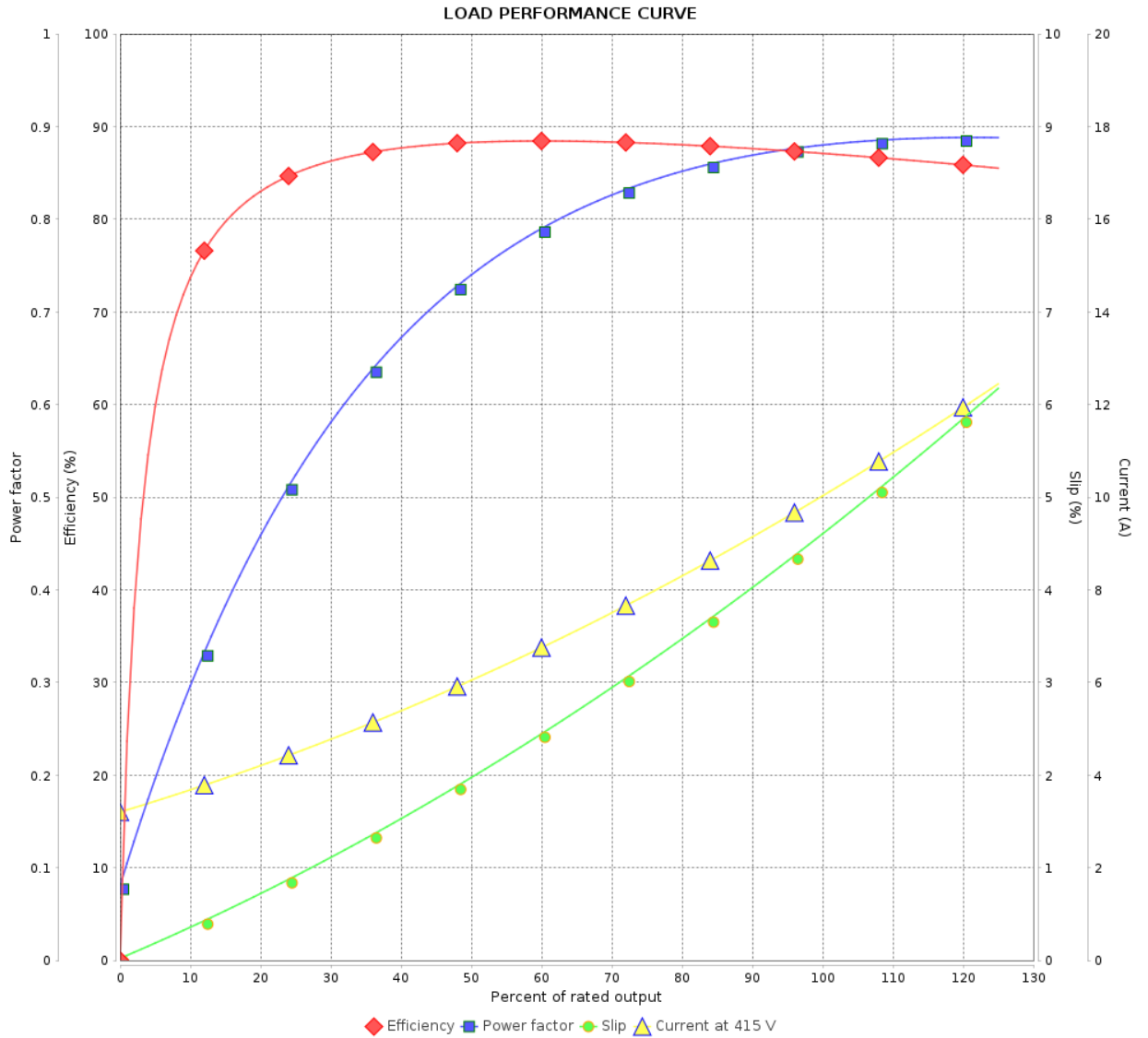
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 11647930



Performance : 415 V 50 Hz 2P IE2

Rated current : 10.0 A
 LRC : 7.4
 Rated torque : 1.90 kgfm
 Locked rotor torque : 270 %
 Breakdown torque : 310 %
 Rated speed : 2860 rpm

Moment of inertia (J) : 0.0095 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : A

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