

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase Product code : 11166657

Frame : 364/5T	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 : 418 kg
Protection degree : IP55	Moment of inertia (J) : 0.9798 kgm ²
Design : B	

Output [HP]	75	60	60	60	75	75	75
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]	174/87.2	88.5	84.9	82.7	106	102	98.7
L. R. Amperes [A]	1116/558	620	637	662	541	571	602
LRC [A]	6.4x(Code G)	7.0x(Code H)	7.5x(Code J)	8.0x(Code J)	5.1x(Code E)	5.6x(Code F)	6.1x(Code G)
No load current [A]	66.0/33.0	33.0	35.0	38.0	33.0	35.0	38.0
Rated speed [RPM]	1780	1480	1480	1485	1470	1475	1480
Slip [%]	1.11	1.33	1.33	1.00	2.00	1.67	1.33
Rated torque [kgfm]	30.6	29.4	29.4	29.3	37.0	36.9	36.8
Locked rotor torque [%]	240	210	240	260	170	200	210
Breakdown torque [%]	260	250	280	310	200	220	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	25s (cold) 14s (hot)	18s (cold) 10s (hot)	18s (cold) 10s (hot)	18s (cold) 10s (hot)	18s (cold) 10s (hot)	18s (cold) 10s (hot)	18s (cold) 10s (hot)
Noise level ²	67.0 dB(A)	63.0 dB(A)	63.0 dB(A)	63.0 dB(A)	63.0 dB(A)	63.0 dB(A)	63.0 dB(A)
Efficiency (%)	25%	0.000				0.000	
	50%	94.5	93.7	93.6	93.5	94.5	94.1
	75%	95.0	94.2	94.2	94.2	94.1	94.5
	100%	95.4	94.2	94.4	94.6	93.6	94.5
Power Factor	25%	0.00				0.00	
	50%	0.68	0.68	0.64	0.61	0.75	0.67
	75%	0.78	0.78	0.75	0.73	0.82	0.78
	100%	0.83	0.82	0.81	0.80	0.84	0.82

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

Losses (%)	P1 (0,9;1,0)	4.7	4.7	4.7	4.7	4.7	4.7
	P2 (0,5;1,0)	3.8	3.8	3.8	3.8	3.8	3.8
	P3 (0,25;1,0)	3.5	3.5	3.5	3.5	3.5	3.5
	P4 (0,9;0,5)	2.4	2.4	2.4	2.4	2.4	2.4
	P5 (0,5;0,5)	1.6	1.6	1.6	1.6	1.6	1.6
	P6 (0,5;0,25)	1.1	1.1	1.1	1.1	1.1	1.1
	P7 (0,25;0,25)	0.7	0.7	0.7	0.7	0.7	0.7

Bearing type : Sealing : Lubrication interval : Lubricant amount : Lubricant type :	Drive end	Non drive end	Foundation loads Max. traction : 782 kgf Max. compression : 1200 kgf
	6314 C3	6314 C3	
	WSeal	WSeal	
	12000 h	12000 h	
	27 g	27 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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Three Phase Induction Motor - Squirrel Cage



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Notes
USABLE @208V 186A SF 1.10 SFA 205A

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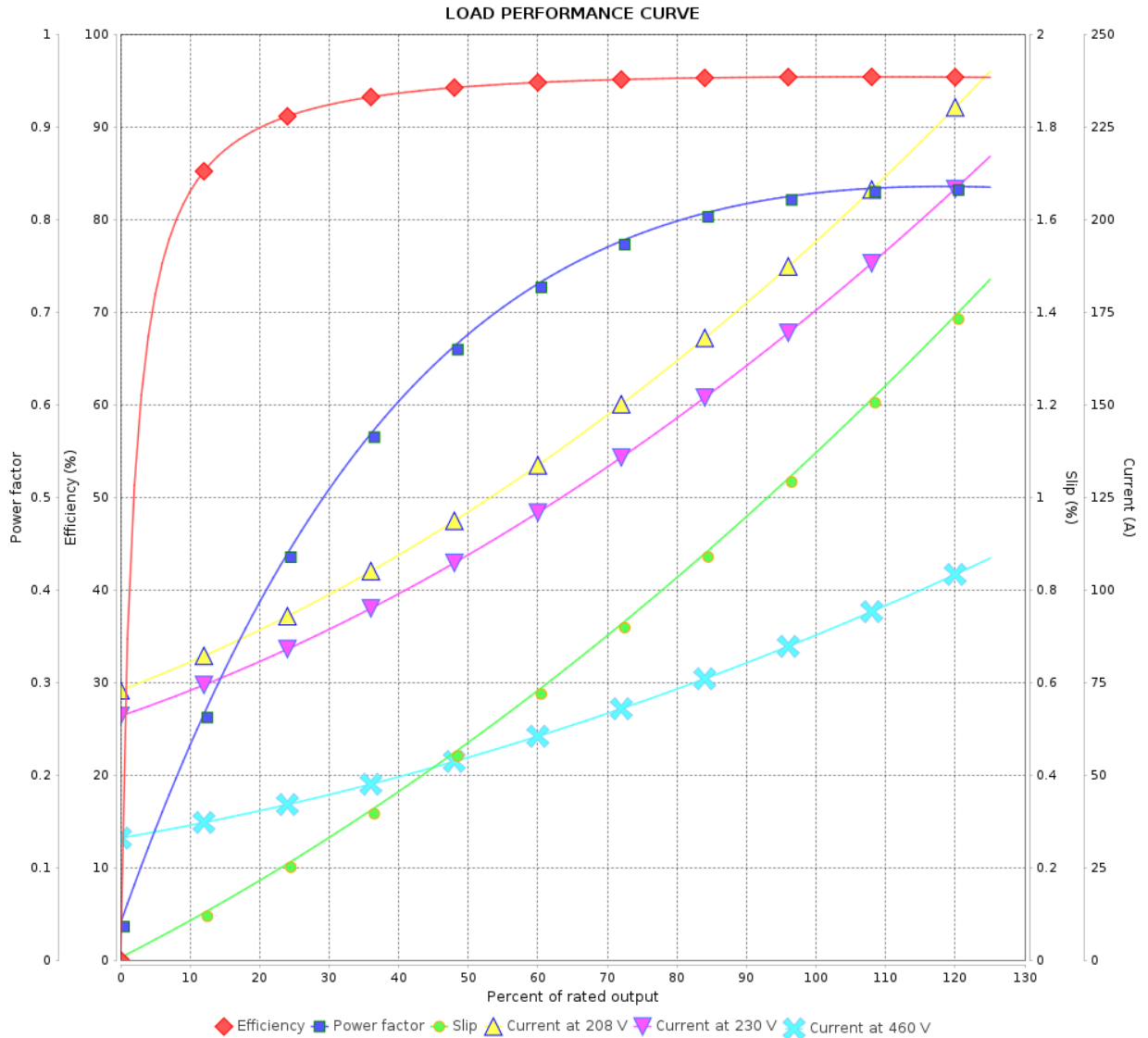
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 11166657



Performance : 230/460 V 60 Hz 4P

Rated current : 174/87.2 A
 LRC : 6.4
 Rated torque : 30.6 kgfm
 Locked rotor torque : 240 %
 Breakdown torque : 260 %
 Rated speed : 1780 rpm

Moment of inertia (J) : 0.9798 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.25
 Temperature rise : 80 K
 Design : B

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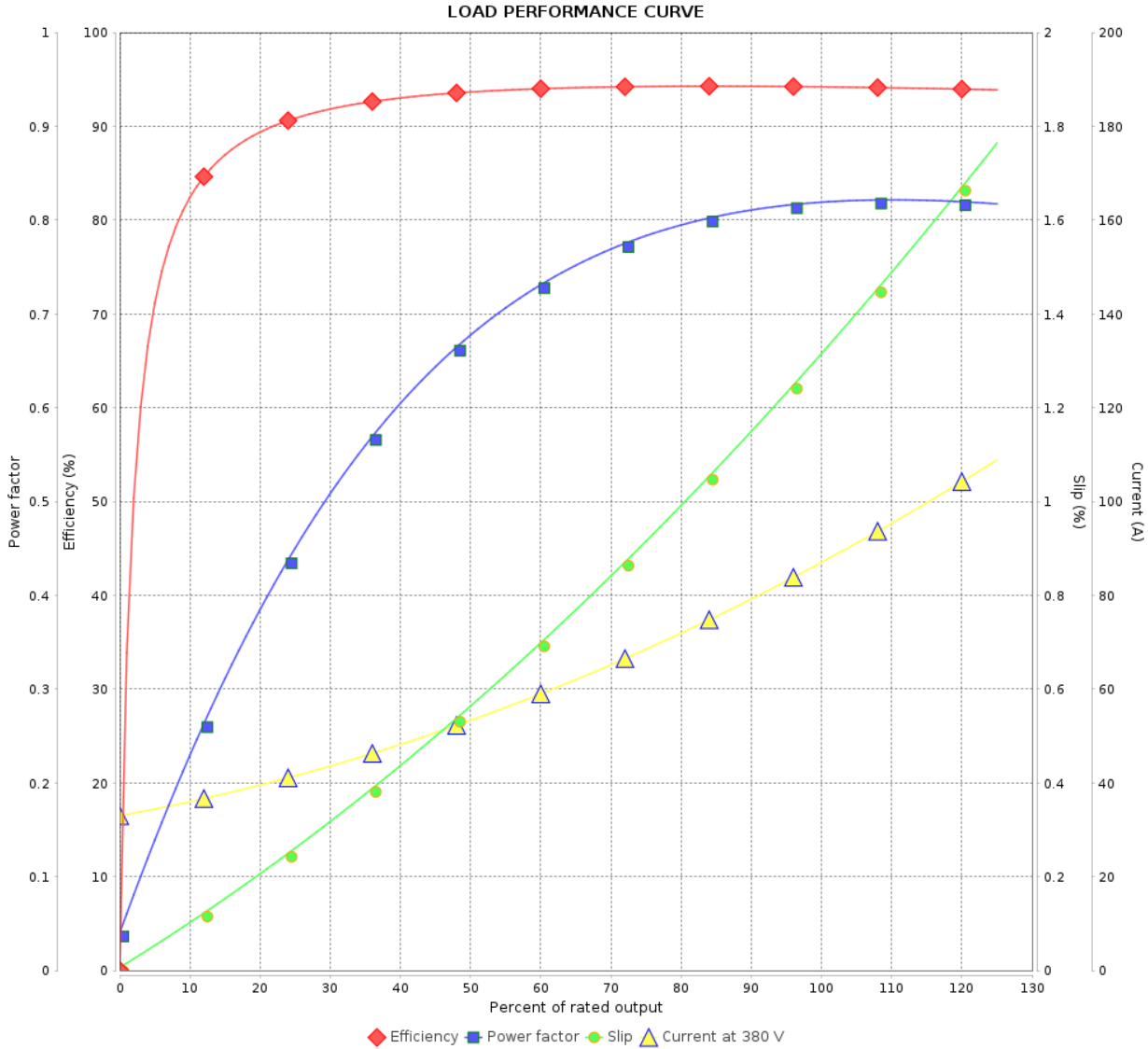
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 11166657



Performance : 380 V 50 Hz 4P IE3

Rated current : 88.5 A
 LRC : 7.0
 Rated torque : 29.4 kgfm
 Locked rotor torque : 210 %
 Breakdown torque : 250 %
 Rated speed : 1480 rpm

Moment of inertia (J) : 0.9798 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : B

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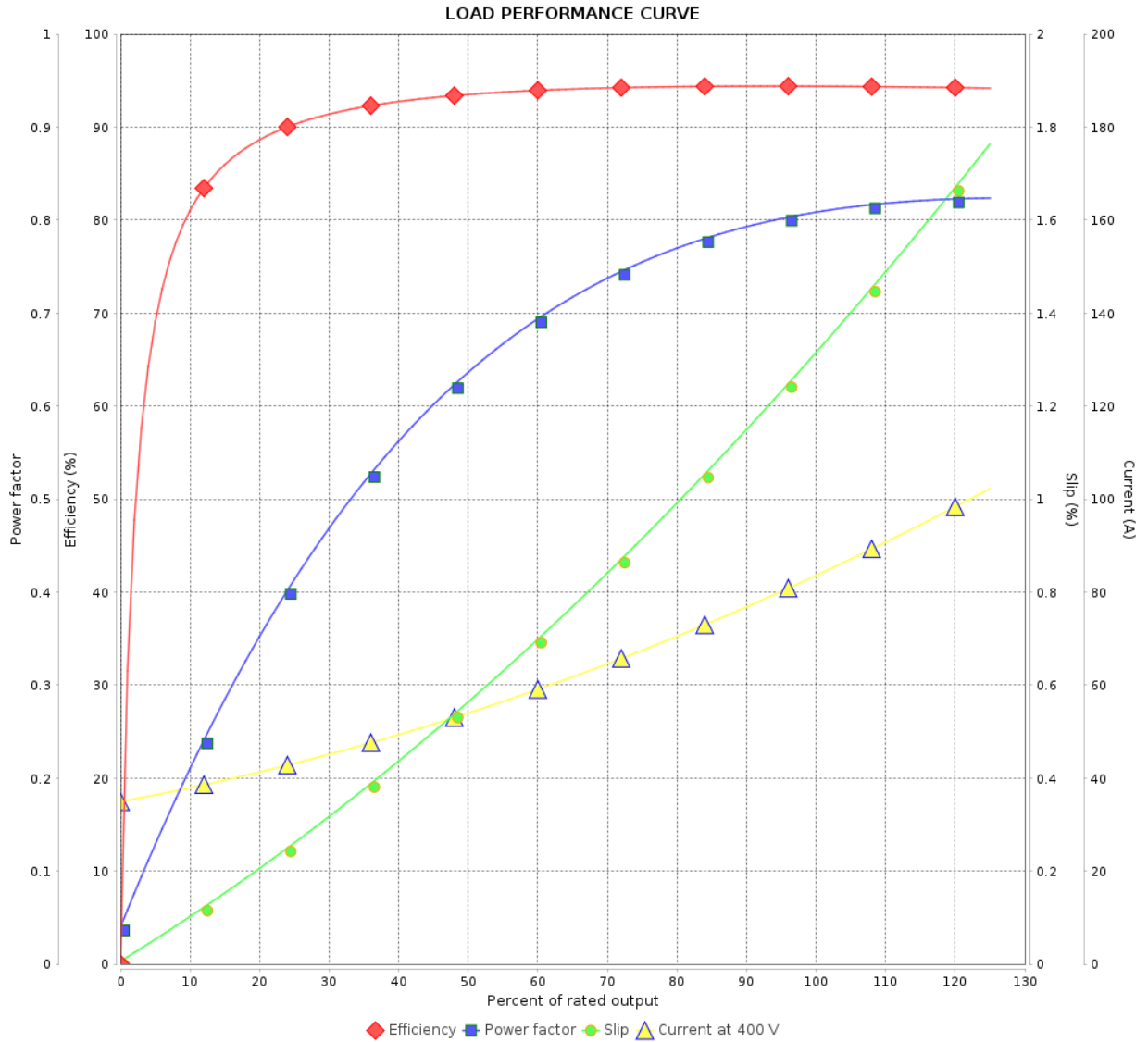
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 11166657



Performance : 400 V 50 Hz 4P IE3

Rated current : 84.9 A
 LRC : 7.5
 Rated torque : 29.4 kgfm
 Locked rotor torque : 240 %
 Breakdown torque : 280 %
 Rated speed : 1480 rpm

Moment of inertia (J) : 0.9798 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : B

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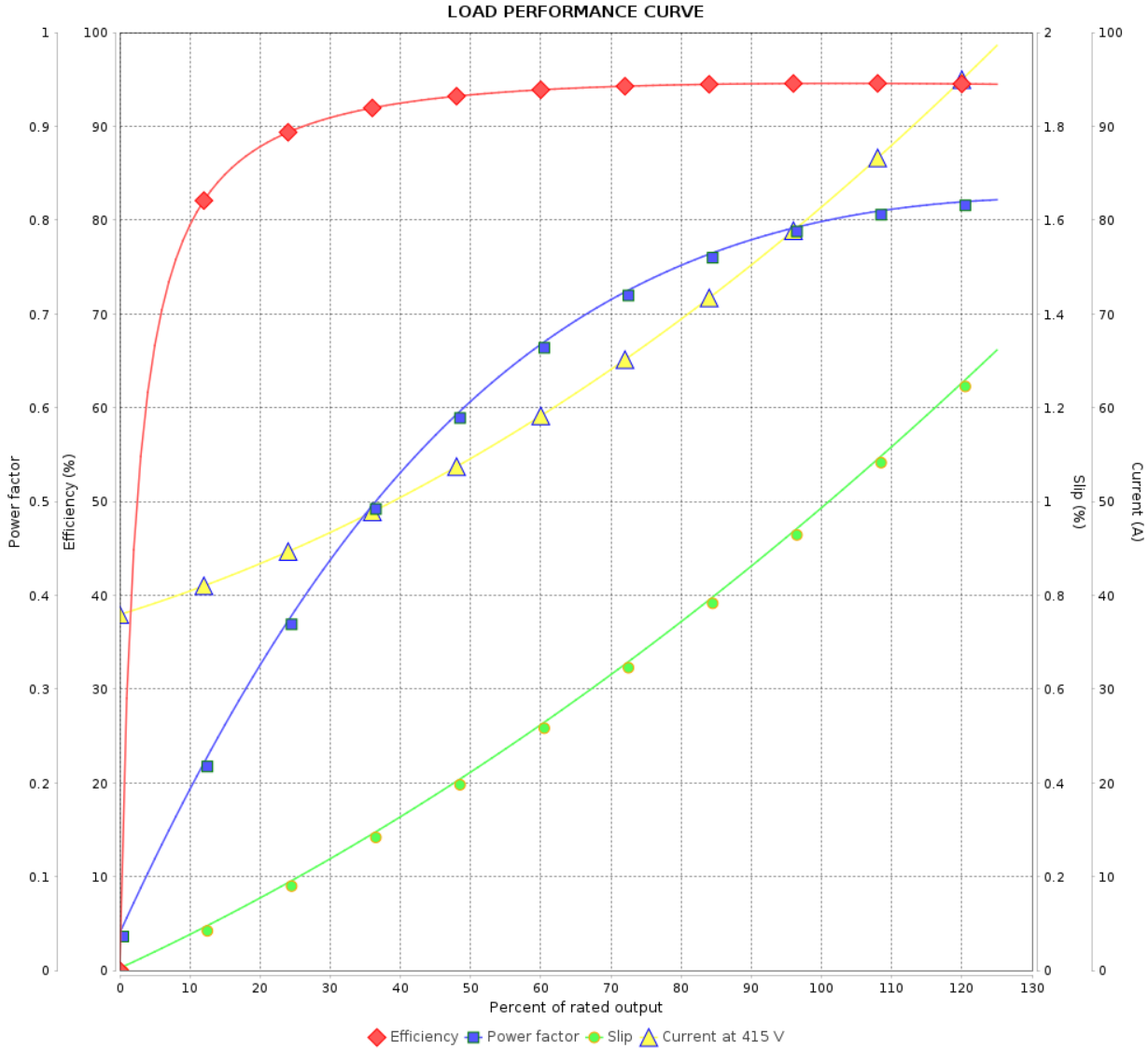
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 11166657



Performance : 415 V 50 Hz 4P IE3

Rated current : 82.7 A
 LRC : 8.0
 Rated torque : 29.3 kgfm
 Locked rotor torque : 260 %
 Breakdown torque : 310 %
 Rated speed : 1485 rpm

Moment of inertia (J) : 0.9798 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : B

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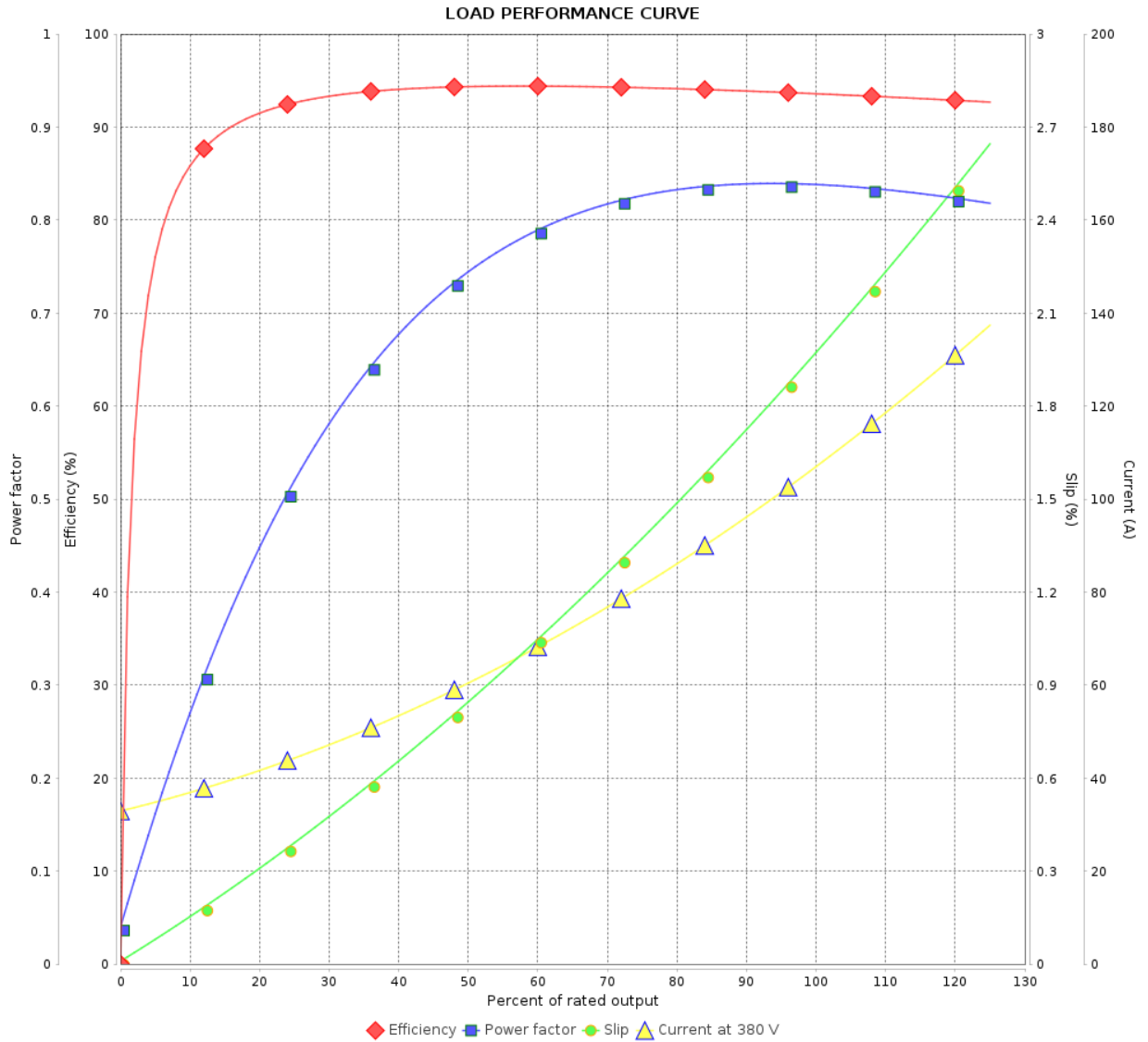
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 11166657



Performance : 380 V 50 Hz 4P IE2

Rated current : 106 A
 LRC : 5.1
 Rated torque : 37.0 kgfm
 Locked rotor torque : 170 %
 Breakdown torque : 200 %
 Rated speed : 1470 rpm

Moment of inertia (J) : 0.9798 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 105 K
 Design : B

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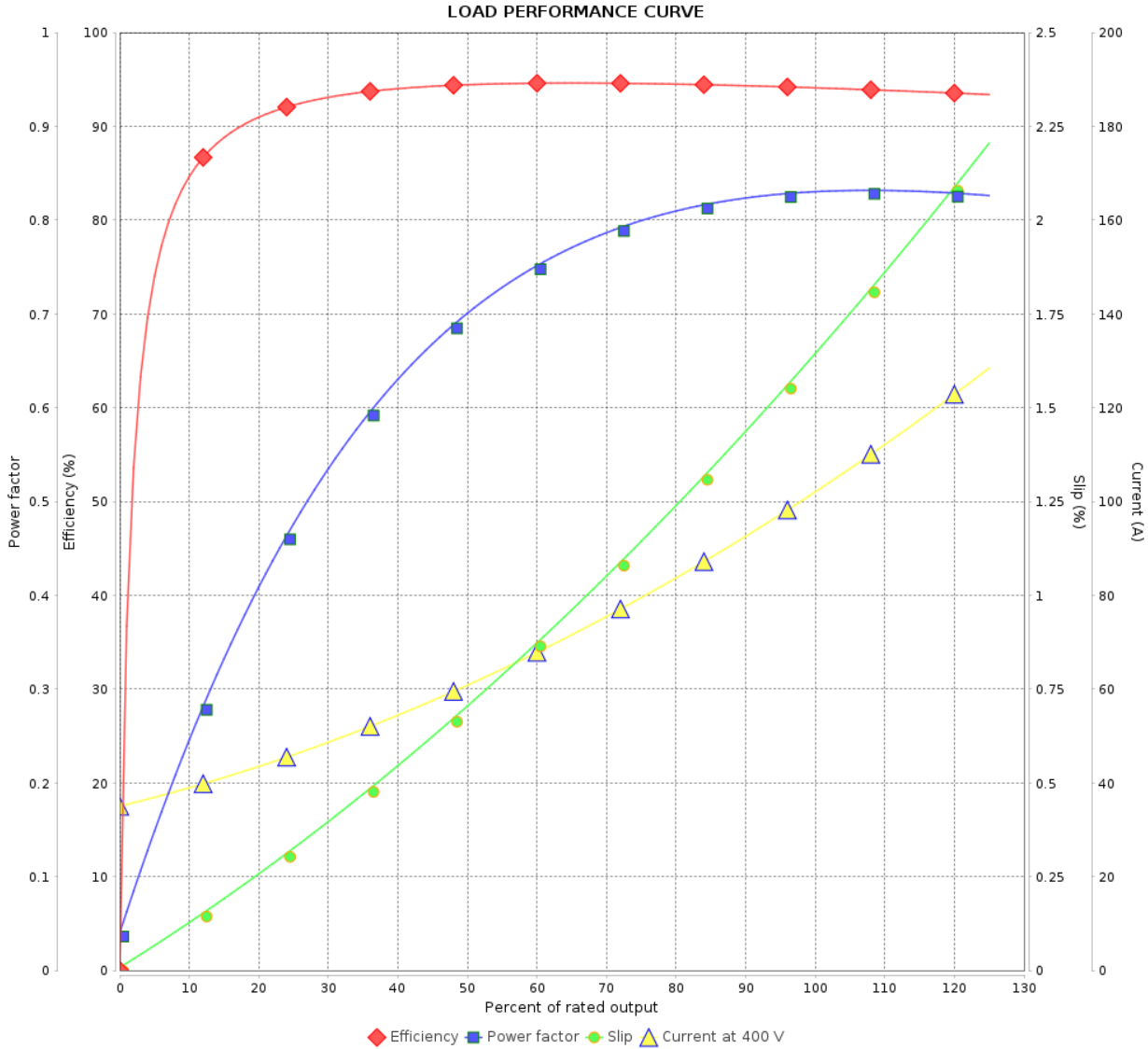
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 11166657



Performance : 400 V 50 Hz 4P IE2

Rated current : 102 A
 LRC : 5.6
 Rated torque : 36.9 kgfm
 Locked rotor torque : 200 %
 Breakdown torque : 220 %
 Rated speed : 1475 rpm

Moment of inertia (J) : 0.9798 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 105 K
 Design : B

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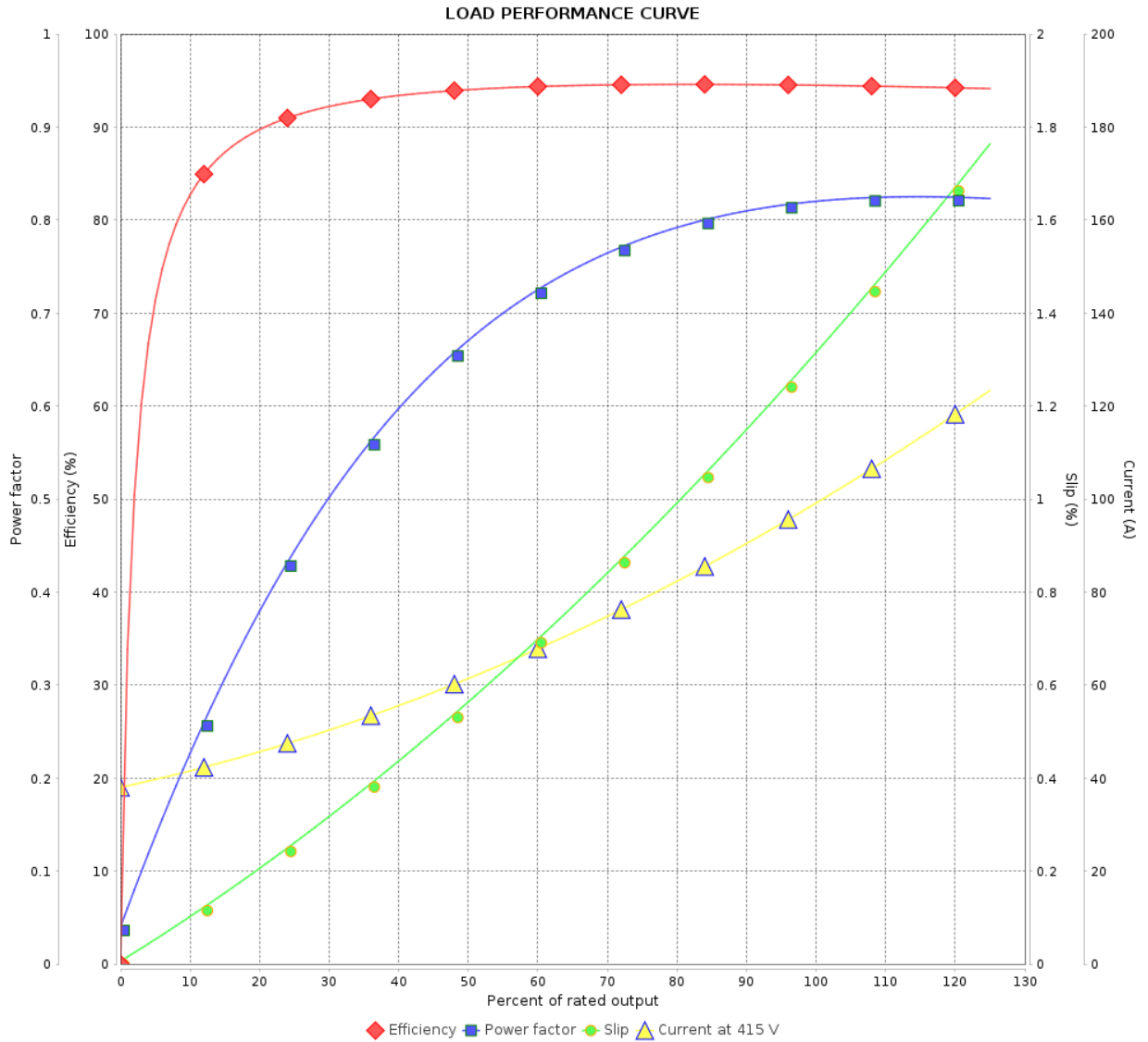
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 11166657



Performance : 415 V 50 Hz 4P IE2

Rated current : 98.7 A
 LRC : 6.1
 Rated torque : 36.8 kgfm
 Locked rotor torque : 210 %
 Breakdown torque : 240 %
 Rated speed : 1480 rpm

Moment of inertia (J) : 0.9798 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 105 K
 Design : B

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