

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase Product code : 11355769

Frame	: 444/5T	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	: 704 kg
Protection degree	: IP55	Moment of inertia (J)	: 2.41 kgm ²
Design	: B		

Output [HP]	125	100	100	100	125	125	125
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]	278/139	139	136	132	168	160	155
L. R. Amperes [A]	1807/904	890	952	1003	857	912	961
LRC [A]	6.5x(Code G)	6.4x(Code G)	7.0x(Code H)	7.6x(Code J)	5.1x(Code E)	5.7x(Code F)	6.2x(Code G)
No load current [A]	80.0/40.0	40.0	43.0	45.0	40.0	43.0	45.0
Rated speed [RPM]	1785	1485	1485	1487	1475	1480	1483
Slip [%]	0.83	1.00	1.00	0.87	1.67	1.33	1.13
Rated torque [kgfm]	50.8	48.9	48.9	48.8	61.3	61.2	61.2
Locked rotor torque [%]	200	200	229	240	160	180	190
Breakdown torque [%]	229	229	260	280	180	200	220
Service factor	1.15	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	48s (cold) 27s (hot)	32s (cold) 18s (hot)	32s (cold) 18s (hot)	32s (cold) 18s (hot)	32s (cold) 18s (hot)	32s (cold) 18s (hot)	32s (cold) 18s (hot)
Noise level ²	73.0 dB(A)	69.0 dB(A)	69.0 dB(A)	69.0 dB(A)	69.0 dB(A)	69.0 dB(A)	69.0 dB(A)
Efficiency (%)	25%						
	50%	95.0	94.7	94.6	94.3	95.0	95.0
	75%	95.4	95.1	95.1	95.1	95.0	95.0
	100%	95.4	95.0	95.0	95.2	94.5	94.5
Power Factor	25%						
	50%	0.74	0.73	0.69	0.67	0.79	0.76
	75%	0.82	0.82	0.80	0.78	0.85	0.83
	100%	0.85	0.86	0.84	0.83	0.86	0.86

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

Losses (%)	P1 (0,9;1,0)	4.5	4.5	4.5	4.5	4.5	4.5
	P2 (0,5;1,0)	3.4	3.4	3.4	3.4	3.4	3.4
	P3 (0,25;1,0)	3.1	3.1	3.1	3.1	3.1	3.1
	P4 (0,9;0,5)	2.4	2.4	2.4	2.4	2.4	2.4
	P5 (0,5;0,5)	1.4	1.4	1.4	1.4	1.4	1.4
	P6 (0,5;0,25)	0.9	0.9	0.9	0.9	0.9	0.9
	P7 (0,25;0,25)	0.5	0.5	0.5	0.5	0.5	0.5

Bearing type	: 6319 C3	6316 C3	Foundation loads	
	: WSeal	WSeal		Max. traction : 825 kgf
	: 8000 h	10000 h		Max. compression : 1529 kgf
	: 45 g	34 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 307A SF 1.00 SFA 307A

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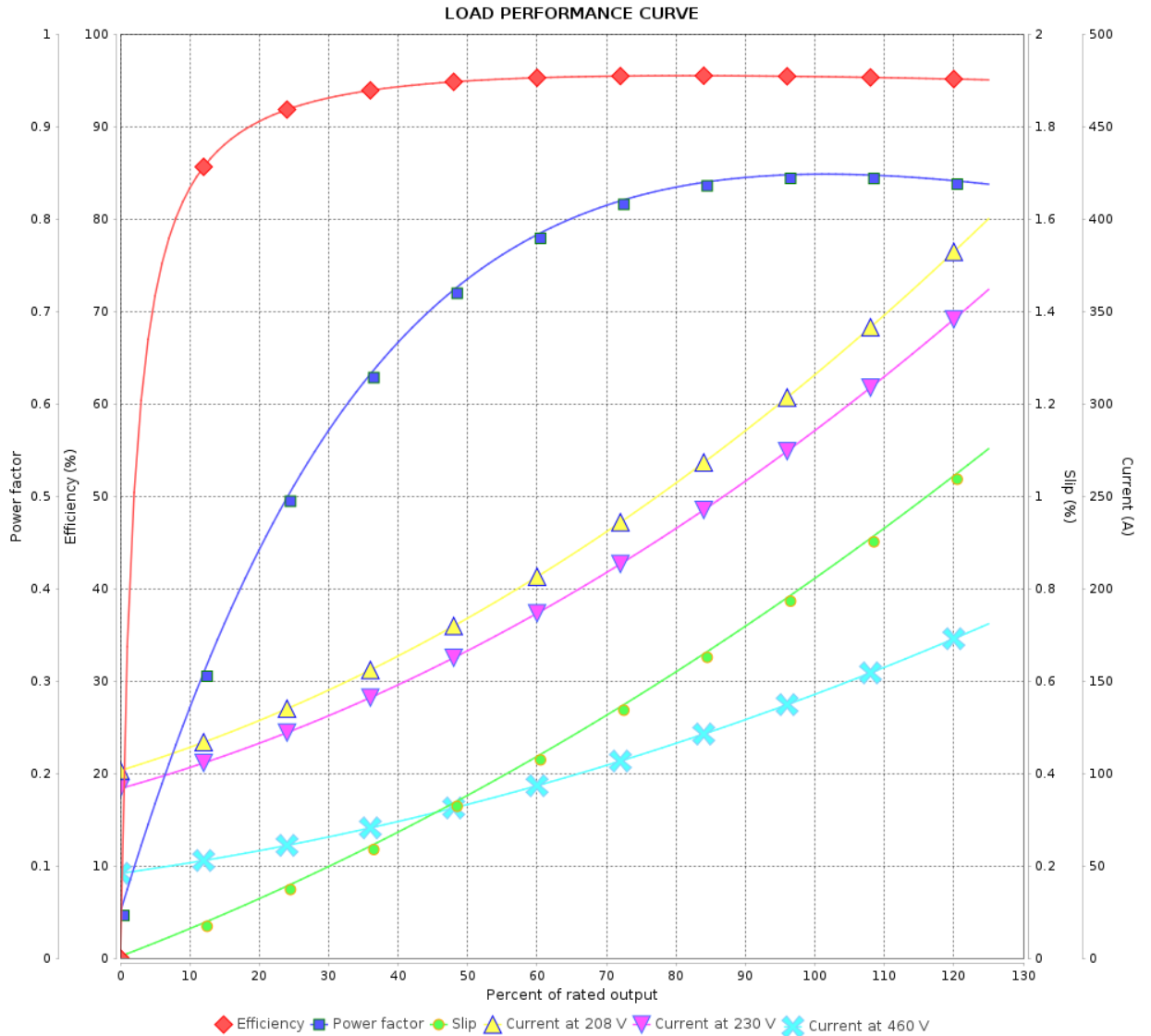
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 11355769



Performance : 230/460 V 60 Hz 4P

Rated current : 278/139 A
 LRC : 6.5
 Rated torque : 50.8 kgfm
 Locked rotor torque : 200 %
 Breakdown torque : 229 %
 Rated speed : 1785 rpm

Moment of inertia (J) : 2.41 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

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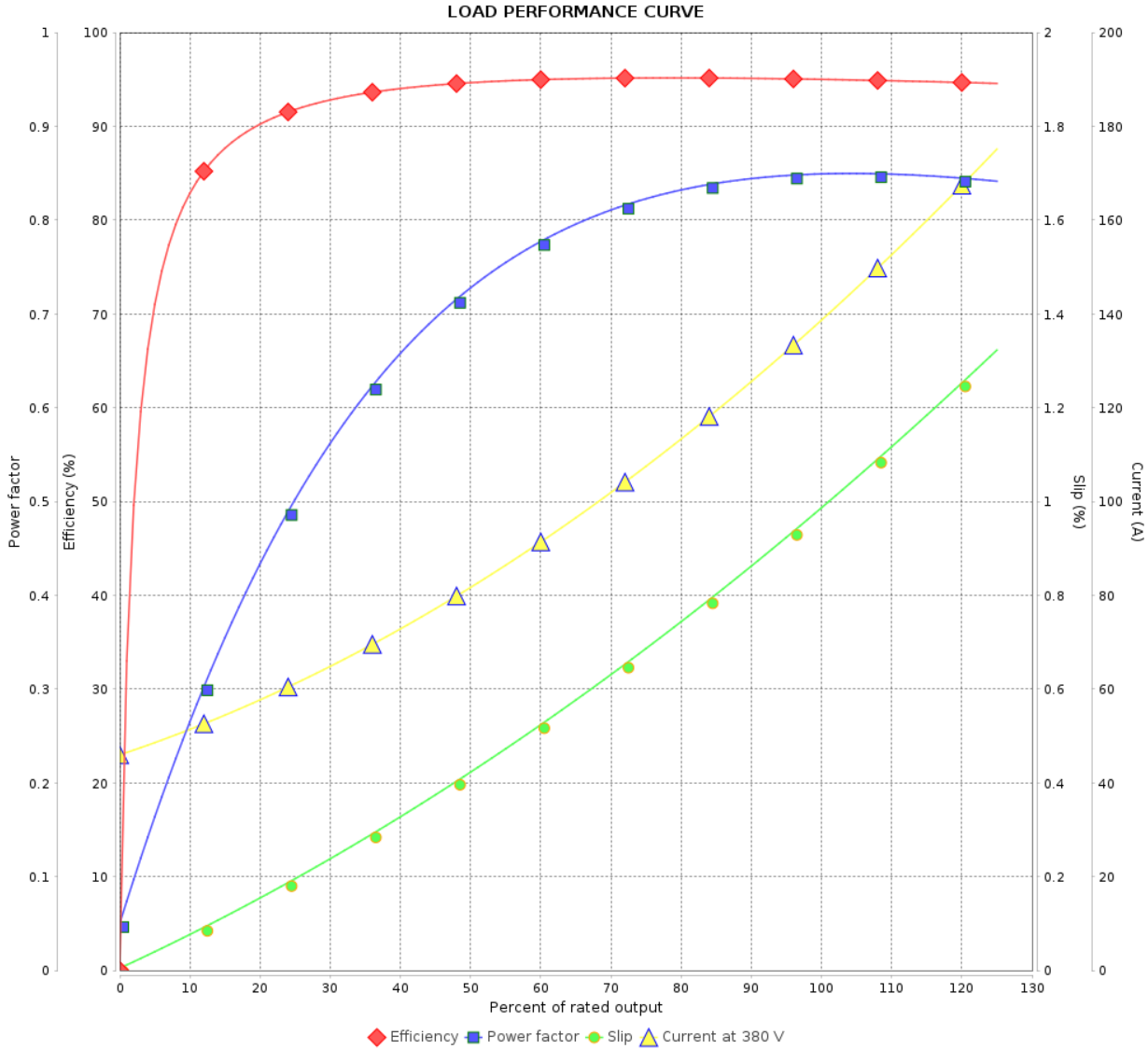
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 11355769



Performance : 380 V 50 Hz 4P IE3

Rated current	: 139 A	Moment of inertia (J)	: 2.41 kgm ²
LRC	: 6.4	Duty cycle	: Cont.(S1)
Rated torque	: 48.9 kgfm	Insulation class	: F
Locked rotor torque	: 200 %	Service factor	: 1.00
Breakdown torque	: 229 %	Temperature rise	: 80 K
Rated speed	: 1485 rpm	Design	: B

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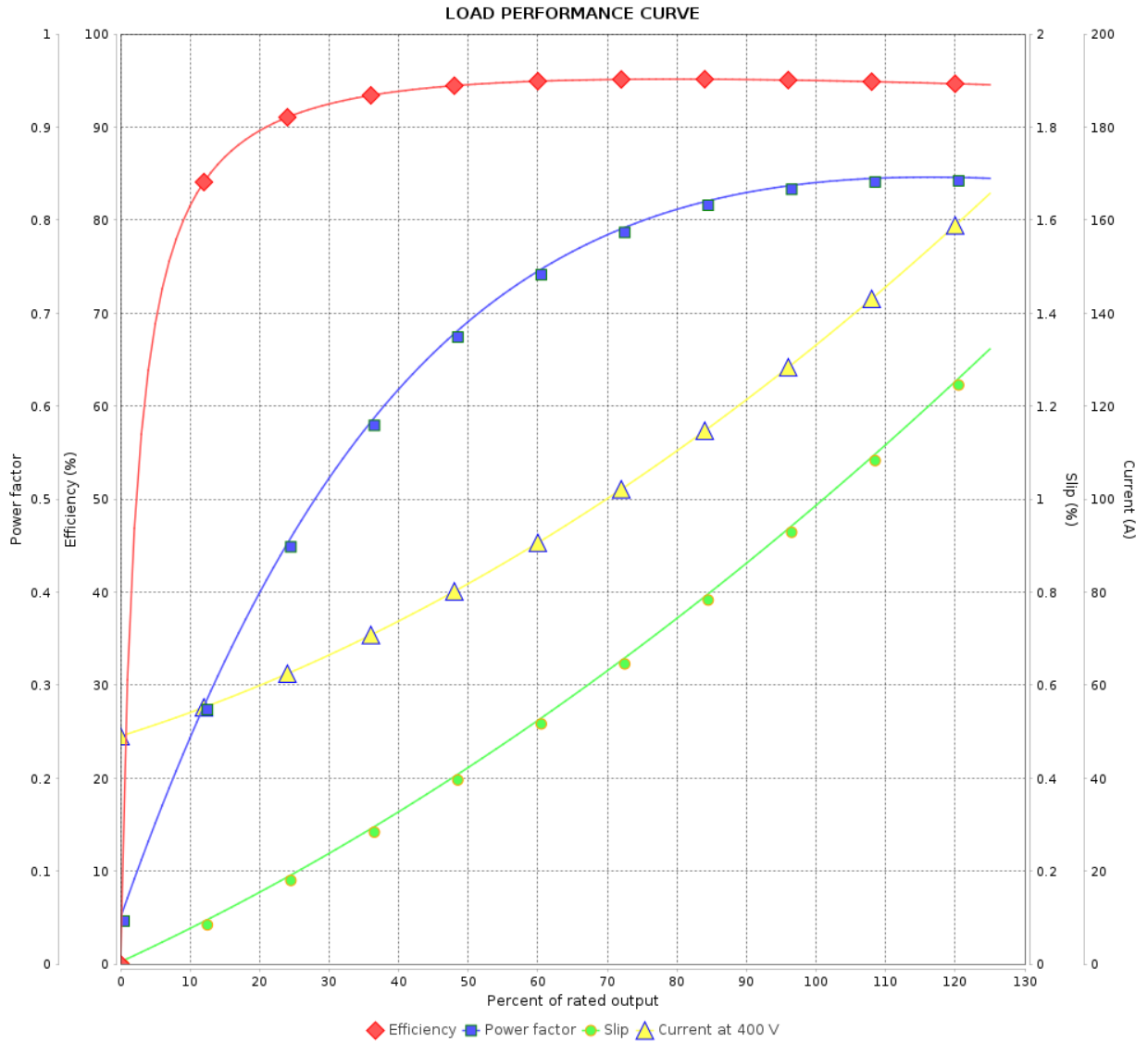
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 11355769



Performance : 400 V 50 Hz 4P IE3

Rated current : 136 A
 LRC : 7.0
 Rated torque : 48.9 kgfm
 Locked rotor torque : 229 %
 Breakdown torque : 260 %
 Rated speed : 1485 rpm

Moment of inertia (J) : 2.41 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : B

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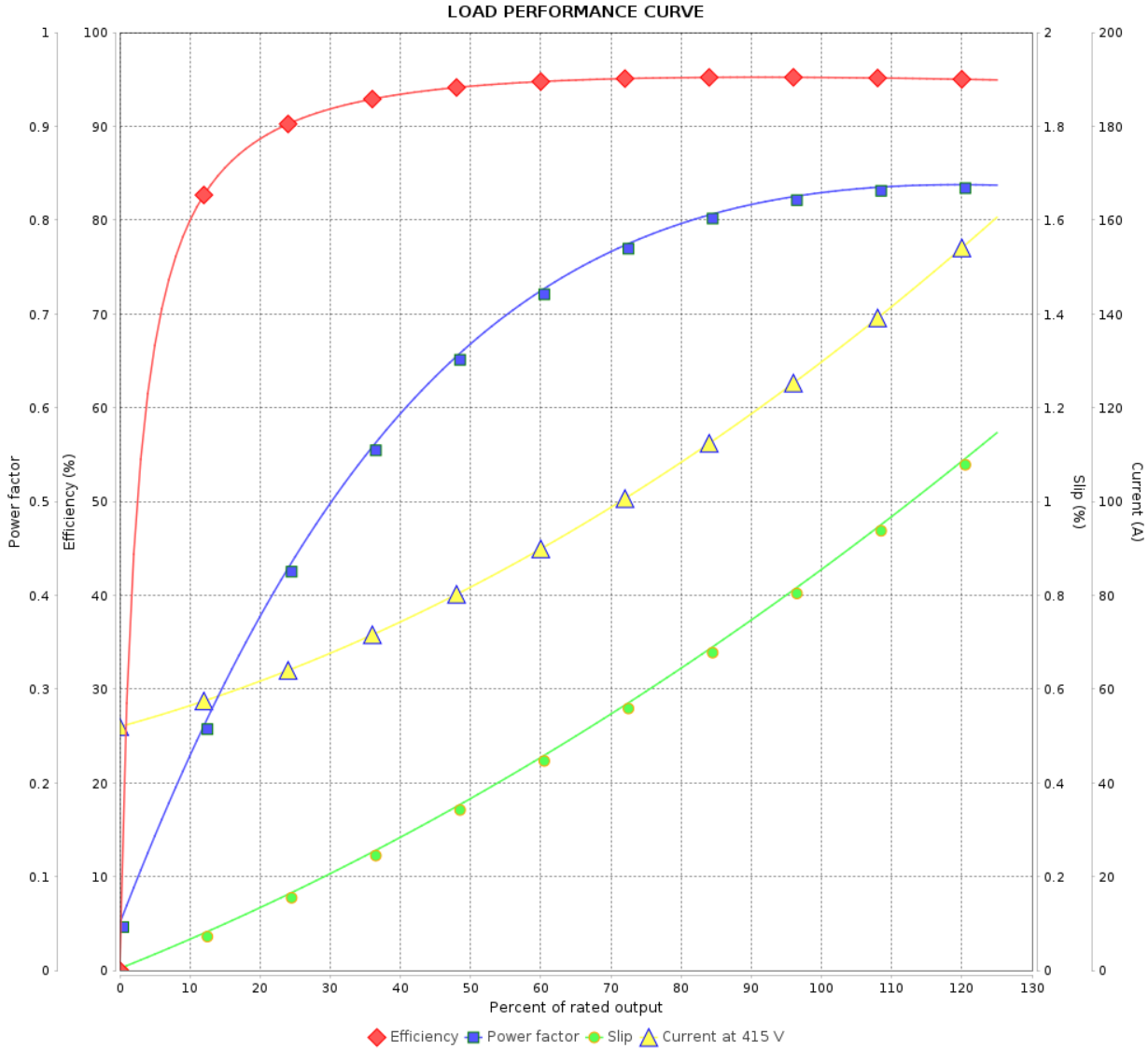
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 11355769



Performance : 415 V 50 Hz 4P IE3

Rated current	: 132 A	Moment of inertia (J)	: 2.41 kgm ²
LRC	: 7.6	Duty cycle	: Cont.(S1)
Rated torque	: 48.8 kgfm	Insulation class	: F
Locked rotor torque	: 240 %	Service factor	: 1.00
Breakdown torque	: 280 %	Temperature rise	: 80 K
Rated speed	: 1487 rpm	Design	: B

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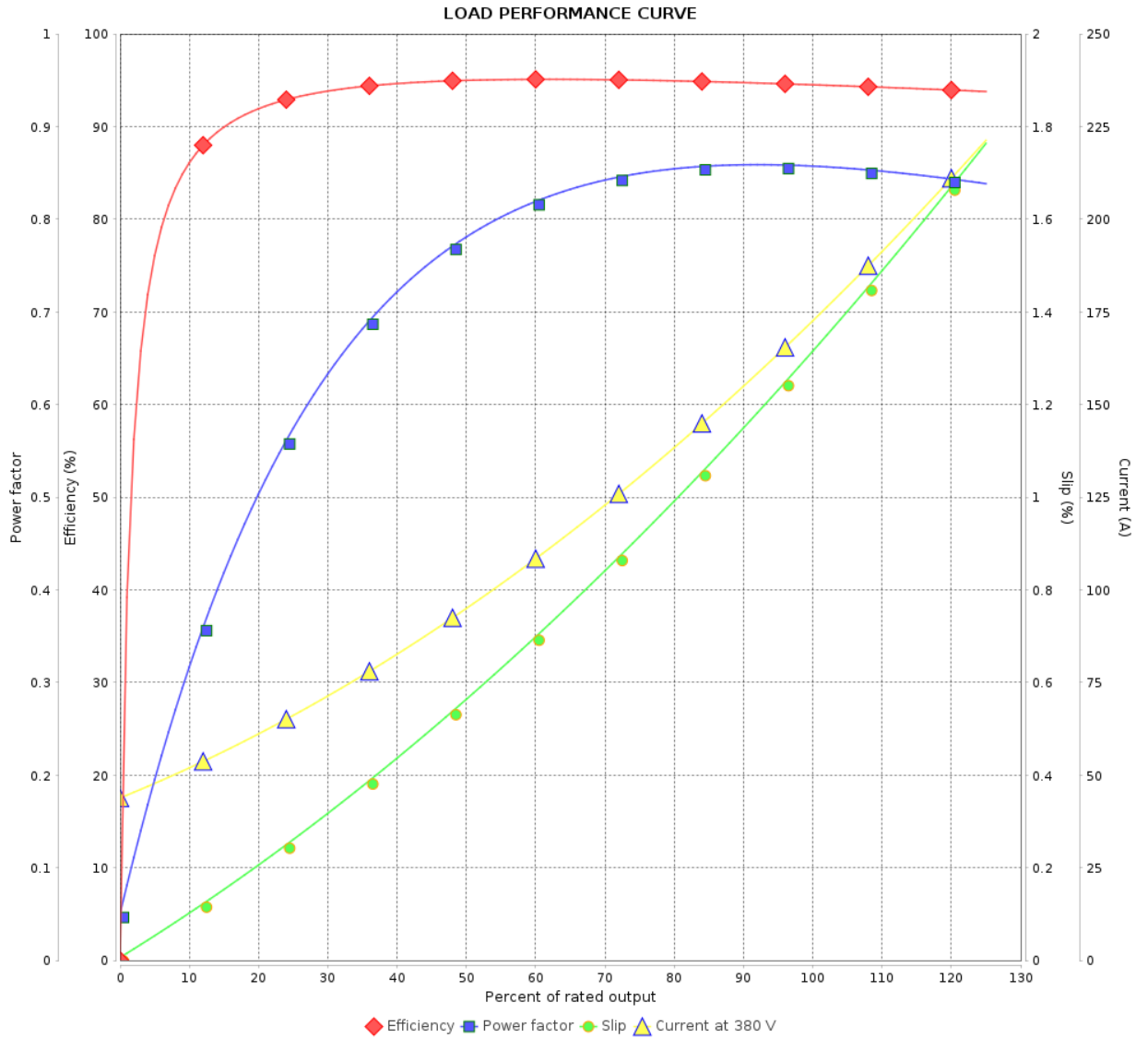
Three Phase Induction Motor - Squirrel Cage



Customer : _____

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Product code : 11355769



Performance : 380 V 50 Hz 4P IE2

Rated current : 168 A
 LRC : 5.1
 Rated torque : 61.3 kgfm
 Locked rotor torque : 160 %
 Breakdown torque : 180 %
 Rated speed : 1475 rpm

Moment of inertia (J) : 2.41 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : B

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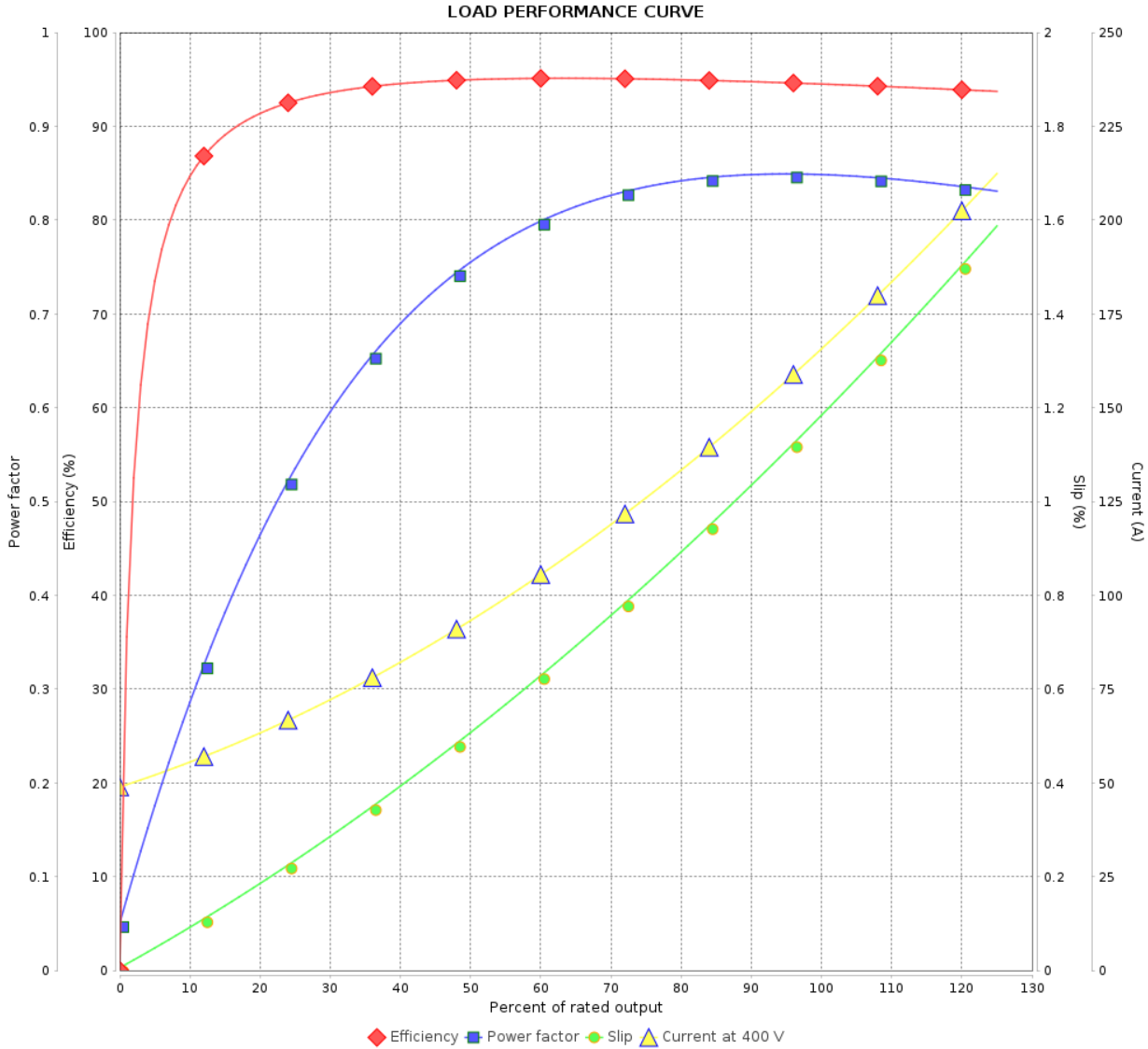
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Product code : 11355769



Performance : 400 V 50 Hz 4P IE2

Rated current : 160 A
 LRC : 5.7
 Rated torque : 61.2 kgfm
 Locked rotor torque : 180 %
 Breakdown torque : 200 %
 Rated speed : 1480 rpm

Moment of inertia (J) : 2.41 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : B

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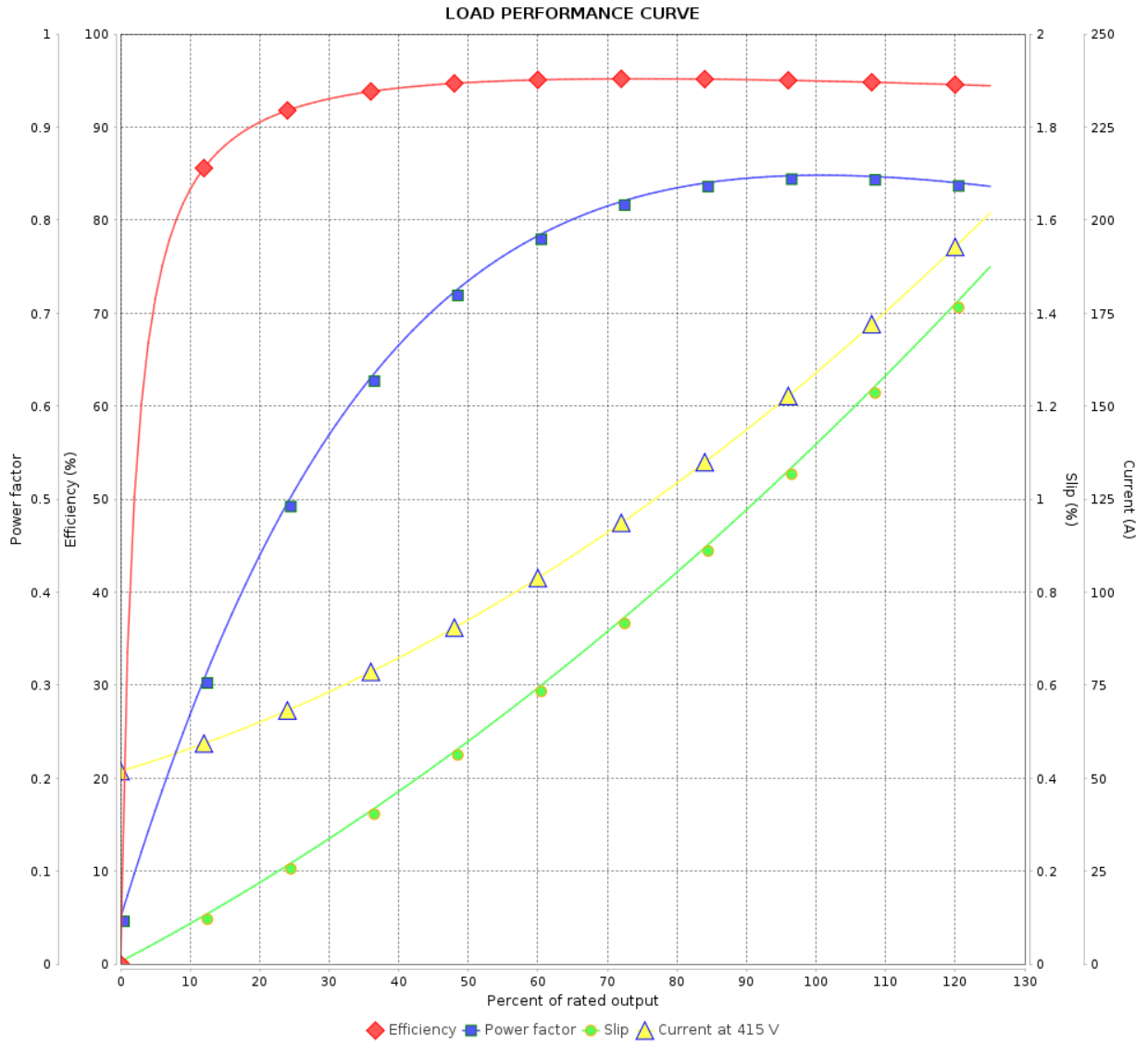
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 11355769



Performance : 415 V 50 Hz 4P IE2

Rated current : 155 A
 LRC : 6.2
 Rated torque : 61.2 kgfm
 Locked rotor torque : 190 %
 Breakdown torque : 220 %
 Rated speed : 1483 rpm

Moment of inertia (J) : 2.41 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : B

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