

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : ODP NEMA Premium Efficiency Three-Phase Product code : 12794538

Frame	: 404/5T	Cooling method	: IC01 - ODP
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 ²	: 491 kg
Protection degree	: IP23	Moment of inertia (J)	: 1.12 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]	272/136	138	136	134	165	159	154	
L. R. Amperes [A]	1904/952	925	1006	1059	891	970	1016	
LRC [A]	7.0x(Code G)	6.7x(Code G)	7.4x(Code H)	7.9x(Code J)	5.4x(Code E)	6.1x(Code F)	6.6x(Code G)	
No load current [A]	82.0/41.0	42.7	47.1	51.6	42.7	47.1	51.6	
Rated speed [RPM]	1780	1475	1480	1485	1470	1475	1480	
Slip [%]	1.11	1.67	1.33	1.00	2.00	1.67	1.33	
Rated torque [kgfm]	51.0	49.2	49.0	48.9	61.7	61.5	61.3	
Locked rotor torque [%]	240	300	330	350	240	260	280	
Breakdown torque [%]	250	260	290	310	210	229	250	
Service factor	1.15	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	18s (cold) 10s (hot)	16s (cold) 9s (hot)	14s (cold) 8s (hot)	14s (cold) 8s (hot)	16s (cold) 9s (hot)	14s (cold) 8s (hot)	14s (cold) 8s (hot)	
Noise level ²	69.0 dB(A)							
Efficiency (%)	25%	94.9	92.3	92.2	91.5	93.9	93.9	93.6
	50%	95.0	93.2	93.0	92.4	94.1	94.1	94.1
	75%	95.4	94.2	94.3	94.2	94.1	94.1	94.1
	100%	95.4	95.0	95.0	95.0	94.2	94.2	94.5
Power Factor	25%	0.53	0.49	0.45	0.41	0.56	0.51	0.47
	50%	0.76	0.72	0.68	0.63	0.78	0.74	0.70
	75%	0.85	0.82	0.78	0.75	0.86	0.83	0.80
	100%	0.87	0.87	0.84	0.82	0.88	0.87	0.86

	<u>Drive end</u>	<u>Non drive end</u>	Foundation loads
Bearing type	: NU-316 C3	6314 C3	Max. traction : 1262 kgf
Sealing	: Without	Without	Max. compression : 1753 kgf
	<u>Bearing Seal</u>	<u>Bearing Seal</u>	
Lubrication interval	: 20000 h	20000 h	
Lubricant amount	: 34 g	27 g	
Lubricant type	: Mobil Polyrex EM		

Notes
USABLE @208V 301A SF 1.15 SFA 346A

This revision replaces and cancel the previous one, which must be eliminated.
 (1) Looking the motor from the shaft end.
 (2) Measured at 1m and with tolerance of +3dB(A).
 (3) Approximate weight subject to changes after manufacturing process.
 (4) At 100% of full load.

These are average values based on tests with sinusoidal power supply, subject to the tolerances stipulated in NEMA MG-1.

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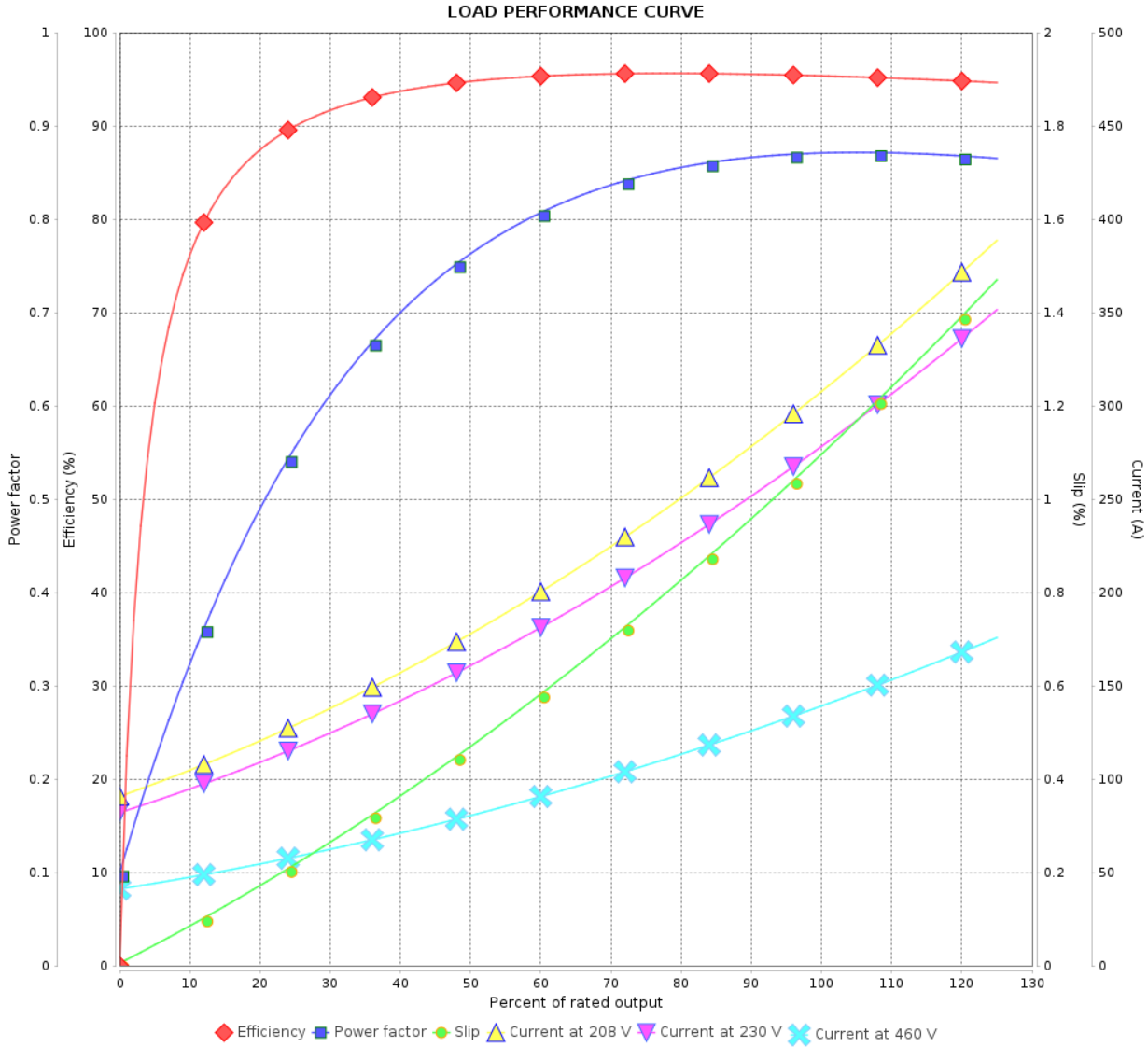
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : ODP NEMA Premium Efficiency Three-Phase

Product code : 12794538



Performance : 230/460 V 60 Hz 4P

Rated current : 272/136 A
 LRC : 7.0
 Rated torque : 51.0 kgfm
 Locked rotor torque : 240 %
 Breakdown torque : 250 %
 Rated speed : 1780 rpm

Moment of inertia (J) : 1.12 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

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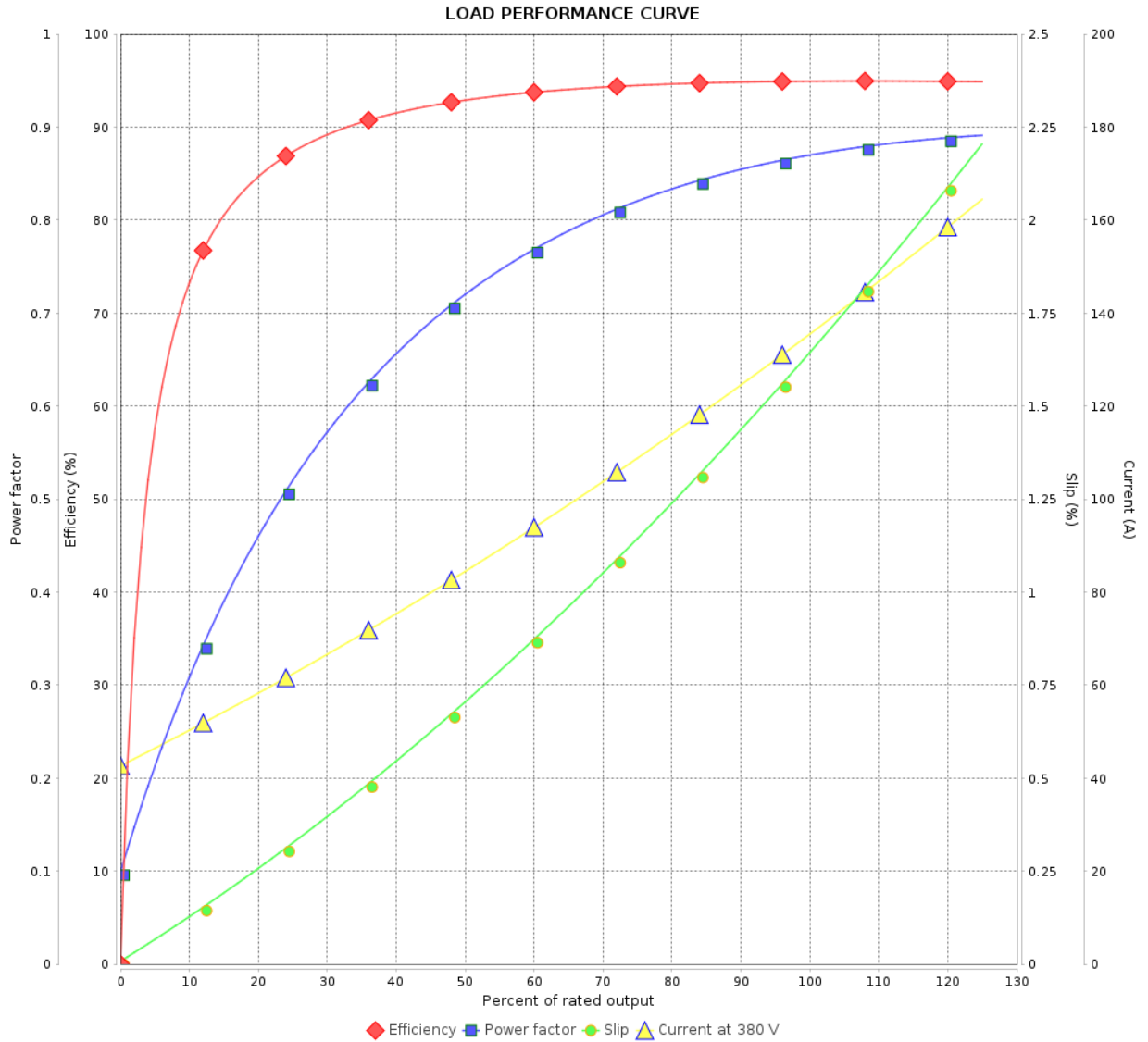
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : ODP NEMA Premium Efficiency Three-Phase

Product code : 12794538



Performance : 380 V 50 Hz 4P IE3

Rated current : 138 A
 LRC : 6.7
 Rated torque : 49.2 kgfm
 Locked rotor torque : 300 %
 Breakdown torque : 260 %
 Rated speed : 1475 rpm

Moment of inertia (J) : 1.12 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

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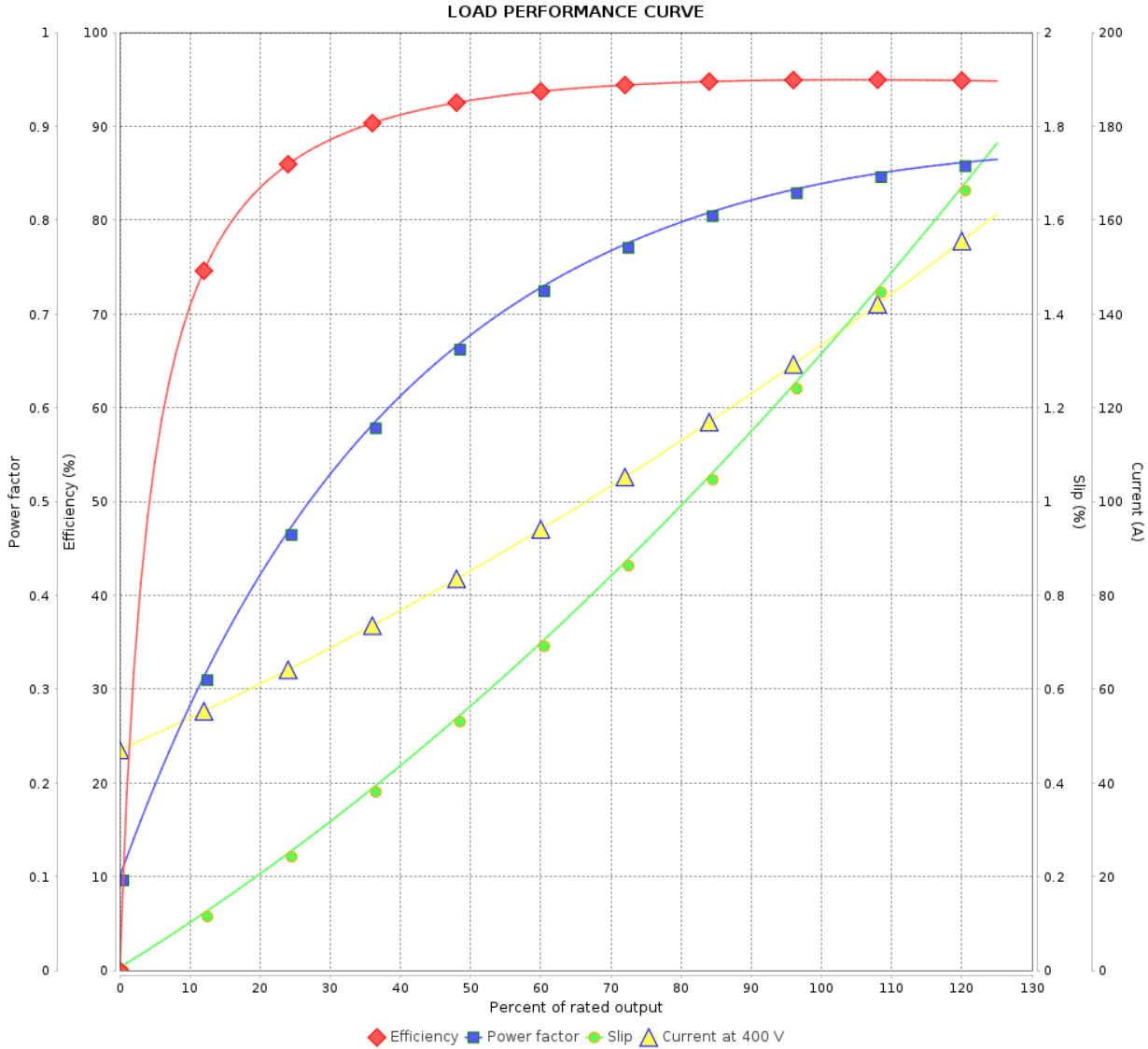
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : ODP NEMA Premium Efficiency Three-Phase

Product code : 12794538



Performance : 400 V 50 Hz 4P IE3

Rated current : 136 A
 LRC : 7.4
 Rated torque : 49.0 kgfm
 Locked rotor torque : 330 %
 Breakdown torque : 290 %
 Rated speed : 1480 rpm

Moment of inertia (J) : 1.12 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

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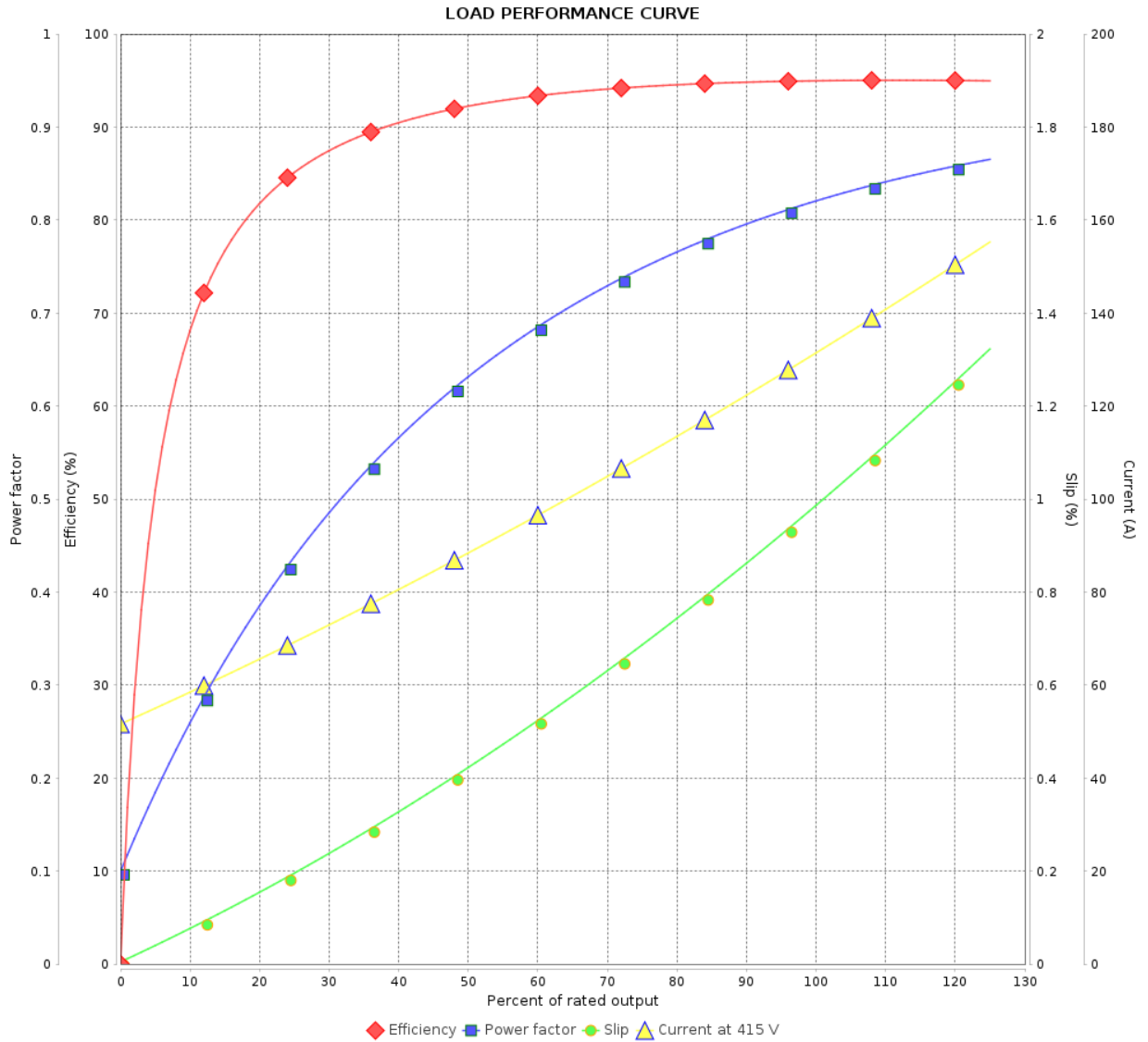
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : ODP NEMA Premium Efficiency Three-Phase

Product code : 12794538



Performance : 415 V 50 Hz 4P IE3

Rated current : 134 A
 LRC : 7.9
 Rated torque : 48.9 kgfm
 Locked rotor torque : 350 %
 Breakdown torque : 310 %
 Rated speed : 1485 rpm

Moment of inertia (J) : 1.12 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

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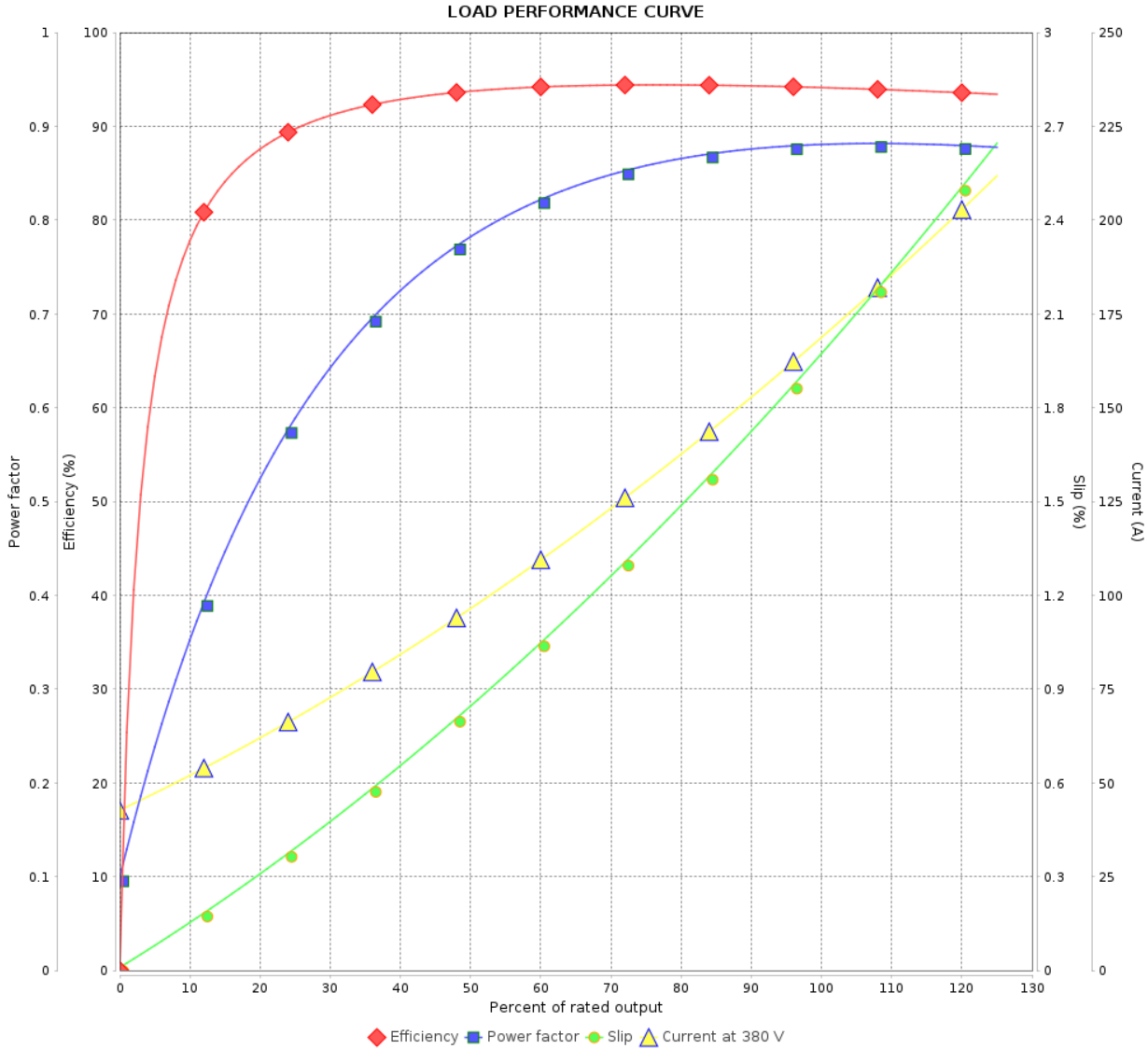
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : ODP NEMA Premium Efficiency Three-Phase

Product code : 12794538



Performance : 380 V 50 Hz 4P IE2

Rated current	: 165 A	Moment of inertia (J)	: 1.12 kgm ²
LRC	: 5.4	Duty cycle	: Cont.(S1)
Rated torque	: 61.7 kgfm	Insulation class	: F
Locked rotor torque	: 240 %	Service factor	: 1.15
Breakdown torque	: 210 %	Temperature rise	: 80 K
Rated speed	: 1470 rpm	Design	: B

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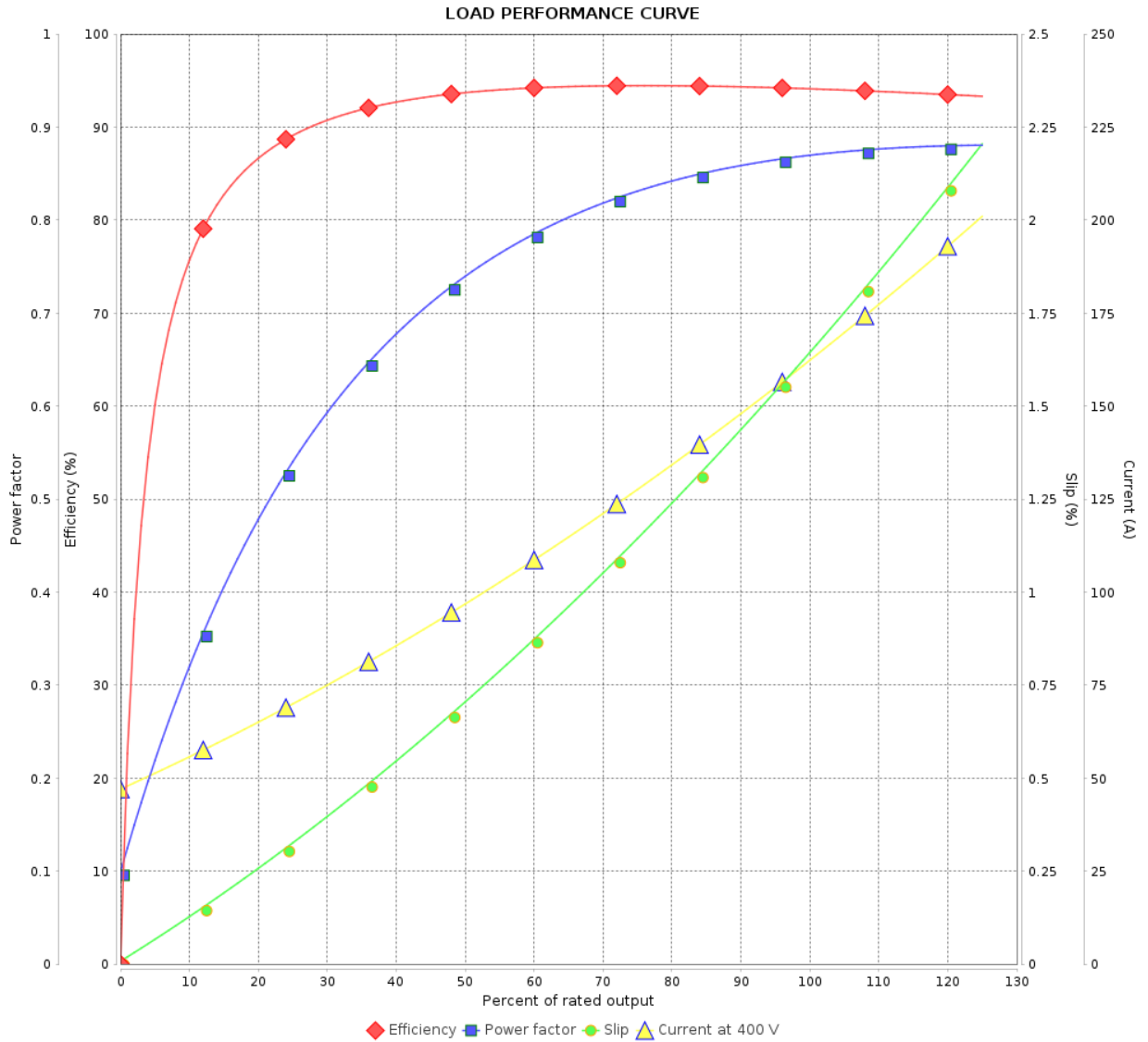
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : ODP NEMA Premium Efficiency Three-Phase

Product code : 12794538



Performance : 400 V 50 Hz 4P IE2

Rated current : 159 A
 LRC : 6.1
 Rated torque : 61.5 kgfm
 Locked rotor torque : 260 %
 Breakdown torque : 229 %
 Rated speed : 1475 rpm

Moment of inertia (J) : 1.12 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

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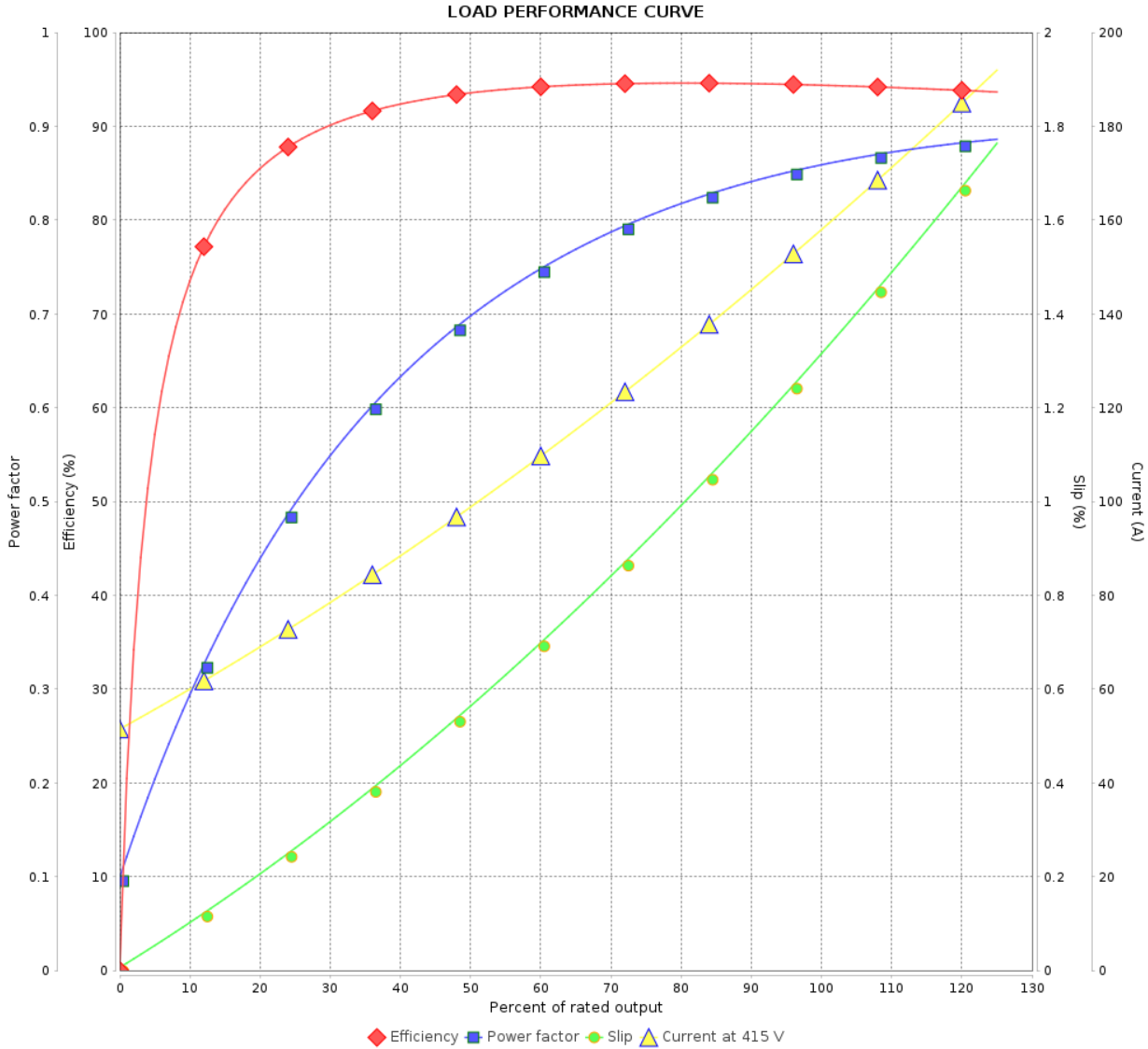
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : ODP NEMA Premium Efficiency Three-Phase

Product code : 12794538



Performance : 415 V 50 Hz 4P IE2

Rated current : 154 A
 LRC : 6.6
 Rated torque : 61.3 kgfm
 Locked rotor torque : 280 %
 Breakdown torque : 250 %
 Rated speed : 1480 rpm

Moment of inertia (J) : 1.12 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

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