

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 IEEE 841 NEMA Premium Efficiency Three-Phase Product code : 11941736

Frame	: 324TC	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	: 0.0 kg
Protection degree	: IP55	Moment of inertia (J)	: 0.4843 kgm ²
Design	: B		

Output [HP]	25	20	20	20	25	25	25
Poles	6	6	6	6	6	6	6
Frequency [Hz]	60	50	50	50	50	50	50
Rated voltage [V]	460	380	400	415	380	400	415
Rated current [A]	30.5	30.0	29.4	28.7	36.8	35.5	34.6
L. R. Amperes [A]	183	174	185	195	184	192	201
LRC [A]	6.0x(Code G)	5.8x(Code G)	6.3x(Code H)	6.8x(Code H)	5.0x(Code E)	5.4x(Code F)	5.8x(Code G)
No load current [A]	12.5	12.3	13.3	14.2	12.3	13.3	14.2
Rated speed [RPM]	1180	980	983	985	970	976	975
Slip [%]	1.67	2.00	1.70	1.50	3.00	2.40	2.50
Rated torque [kgfm]	15.4	14.8	14.8	14.7	18.7	18.6	18.6
Locked rotor torque [%]	210	200	229	250	160	180	190
Breakdown torque [%]	250	240	280	300	200	220	240
Service factor	1.25	1.00	1.15	1.15	1.00	1.15	1.15
Temperature rise	80 K	80 K	80 K	80 K	80 K	80 K	80 K
Locked rotor time	46s (cold) 26s (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	62.0 dB(A)	60.0 dB(A)	60.0 dB(A)	60.0 dB(A)	60.0 dB(A)	60.0 dB(A)	60.0 dB(A)
Efficiency (%)	25%						
	50%	91.7	91.1	91.1	91.1	91.7	91.7
	75%	93.0	91.8	92.2	92.2	91.7	92.4
	100%	93.0	91.6	92.2	92.2	91.0	91.7
Power Factor	25%						
	50%	0.65	0.63	0.60	0.57	0.71	0.68
	75%	0.77	0.76	0.74	0.71	0.81	0.79
	100%	0.82	0.83	0.80	0.79	0.84	0.82

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

Losses (%)	P1 (0,9;1,0)	7.3	8.9	8.2	8.2	9.6	8.8	8.8
	P2 (0,5;1,0)	6.1	7.5	6.9	6.9	8.1	7.4	7.4
	P3 (0,25;1,0)	6.0	7.3	6.7	6.7	7.9	7.2	7.2
	P4 (0,9;0,5)	3.6	4.3	4.0	4.0	4.7	4.3	4.3
	P5 (0,5;0,5)	2.5	3.0	2.8	2.8	3.2	3.0	3.0
	P6 (0,5;0,25)	1.6	2.0	1.8	1.8	2.1	2.0	2.0
	P7 (0,25;0,25)	1.1	1.4	1.3	1.3	1.5	1.4	1.4

Bearing type	: 6312 C3	Non drive end	6212 C3	Foundation loads	
Sealing	: Taconite		Taconite	Max. traction	: 562 kgf
	: Labyrinth		Labyrinth	Max. compression	: 562 kgf
Lubrication interval	: 20000 h		20000 h		
Lubricant amount	: 21 g		13 g		
Lubricant type	: Mobil Polyrex EM				

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Customer :

Notes

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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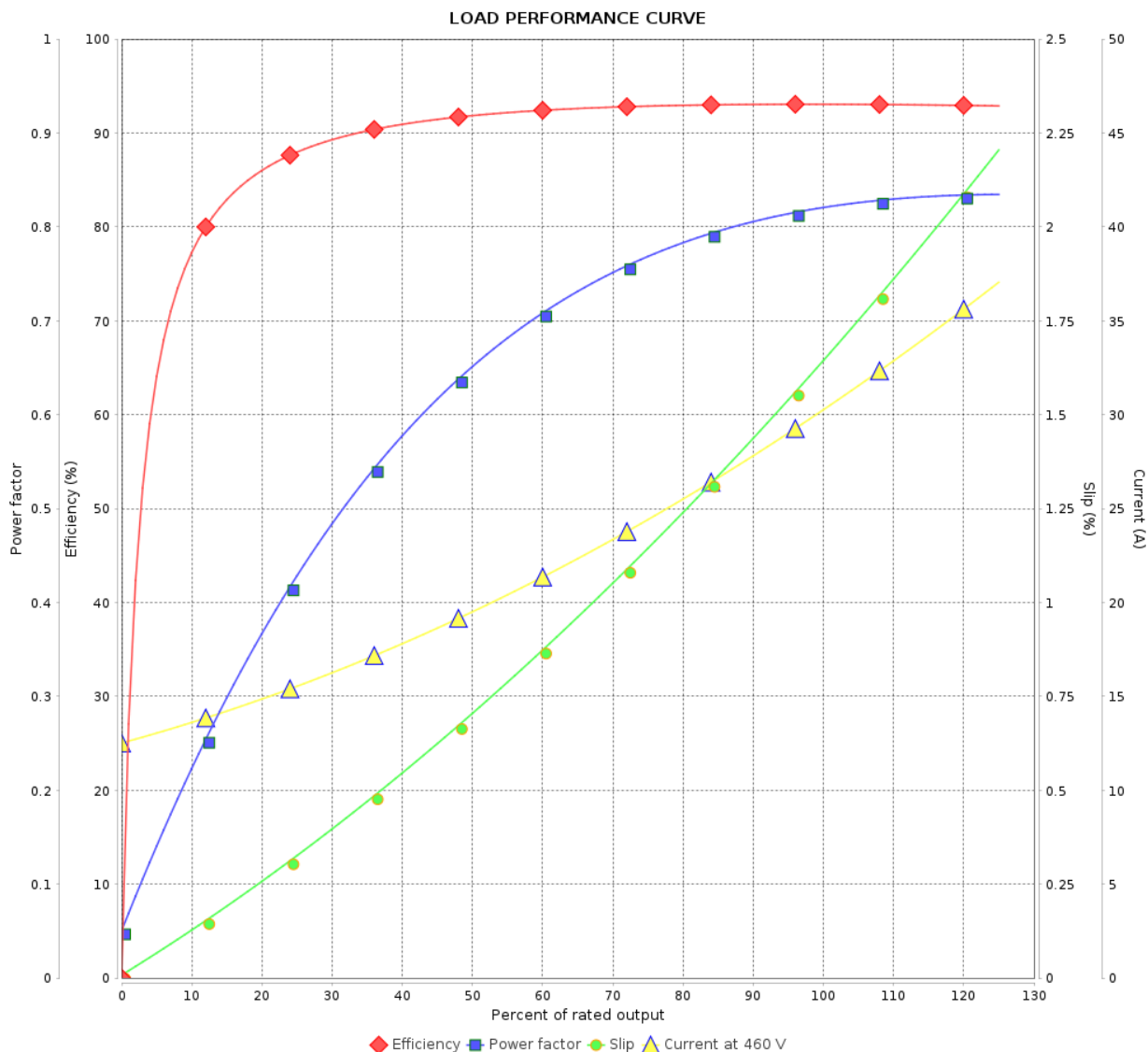
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 IEEE 841 NEMA Premium
Efficiency Three-Phase

Product code : 11941736



Performance : 460 V 60 Hz 6P

Rated current : 30.5 A
LRC : 6.0
Rated torque : 15.4 kgfm
Locked rotor torque : 210 %
Breakdown torque : 250 %
Rated speed : 1180 rpm

Moment of inertia (J) : 0.4843 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.25
Temperature rise : 80 K
Design : B

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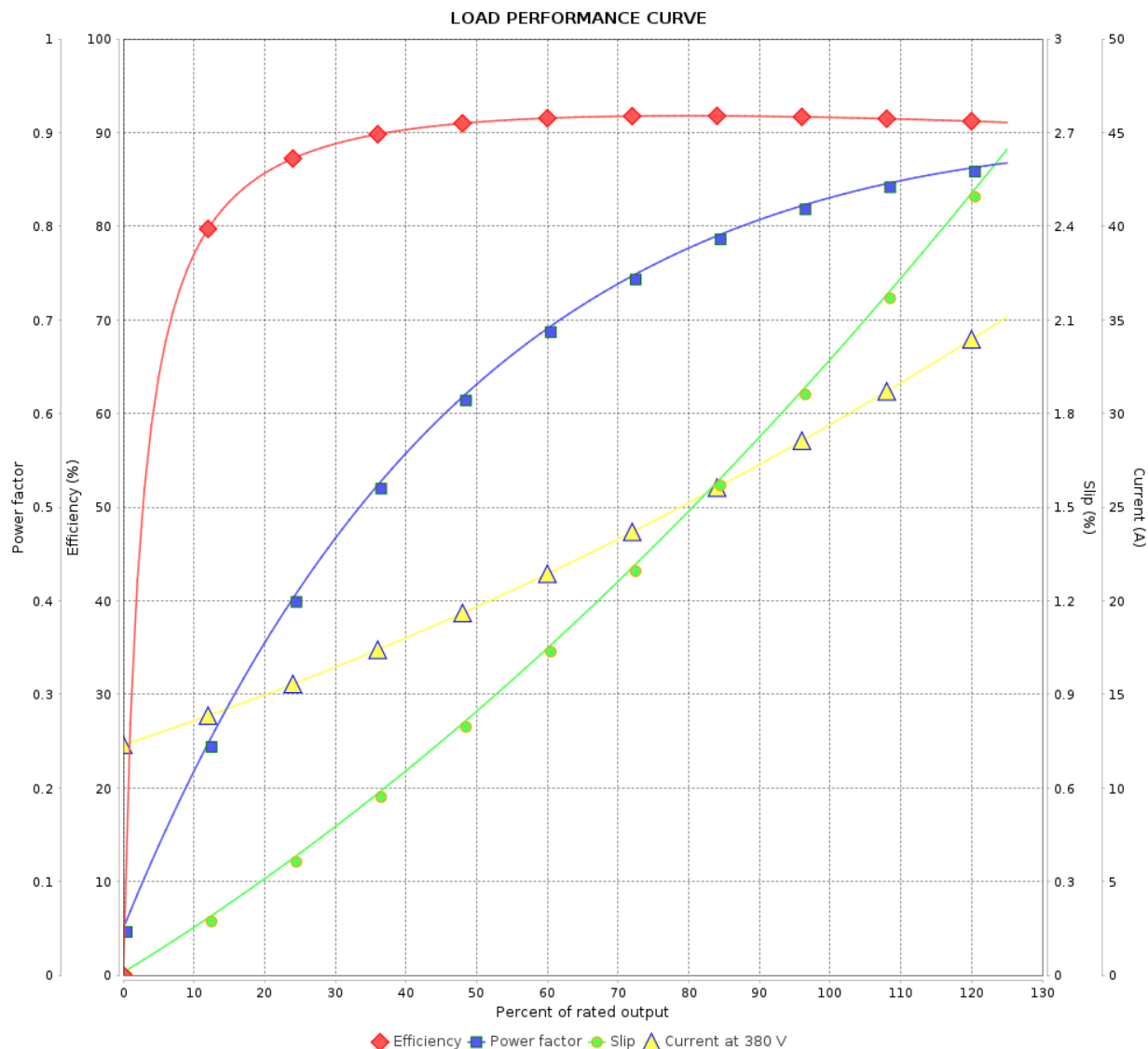
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 IEEE 841 NEMA Premium
Efficiency Three-Phase

Product code : 11941736



Performance : 380 V 50 Hz 6P IE3

Rated current : 30.0 A
LRC : 5.8
Rated torque : 14.8 kgfm
Locked rotor torque : 200 %
Breakdown torque : 240 %
Rated speed : 980 rpm

Moment of inertia (J) : 0.4843 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.00
Temperature rise : 80 K
Design : B

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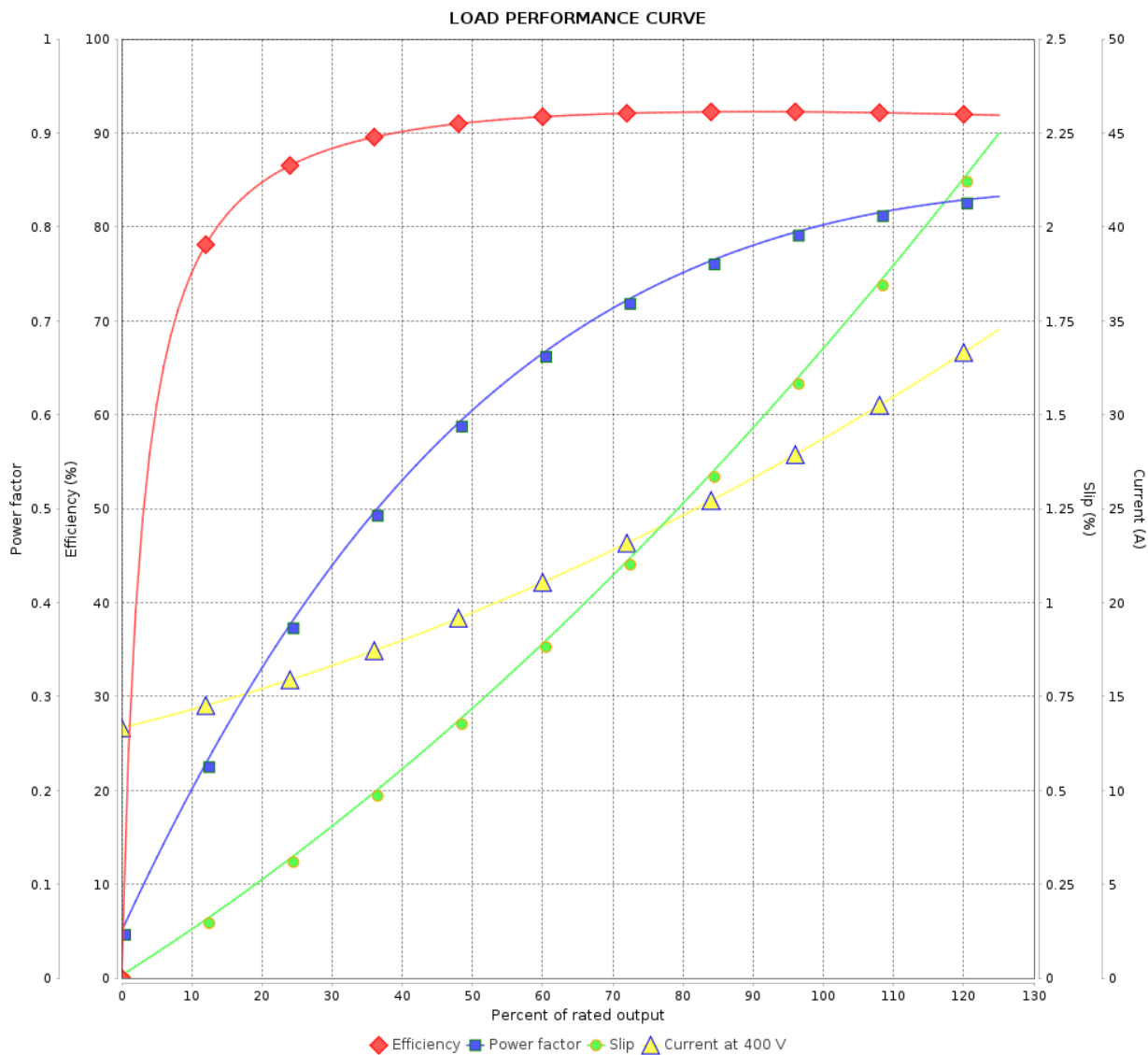
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 IEEE 841 NEMA Premium
Efficiency Three-Phase

Product code : 11941736



Performance : 400 V 50 Hz 6P IE3

Rated current : 29.4 A
LRC : 6.3
Rated torque : 14.8 kgfm
Locked rotor torque : 229 %
Breakdown torque : 280 %
Rated speed : 983 rpm

Moment of inertia (J) : 0.4843 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.15
Temperature rise : 80 K
Design : B

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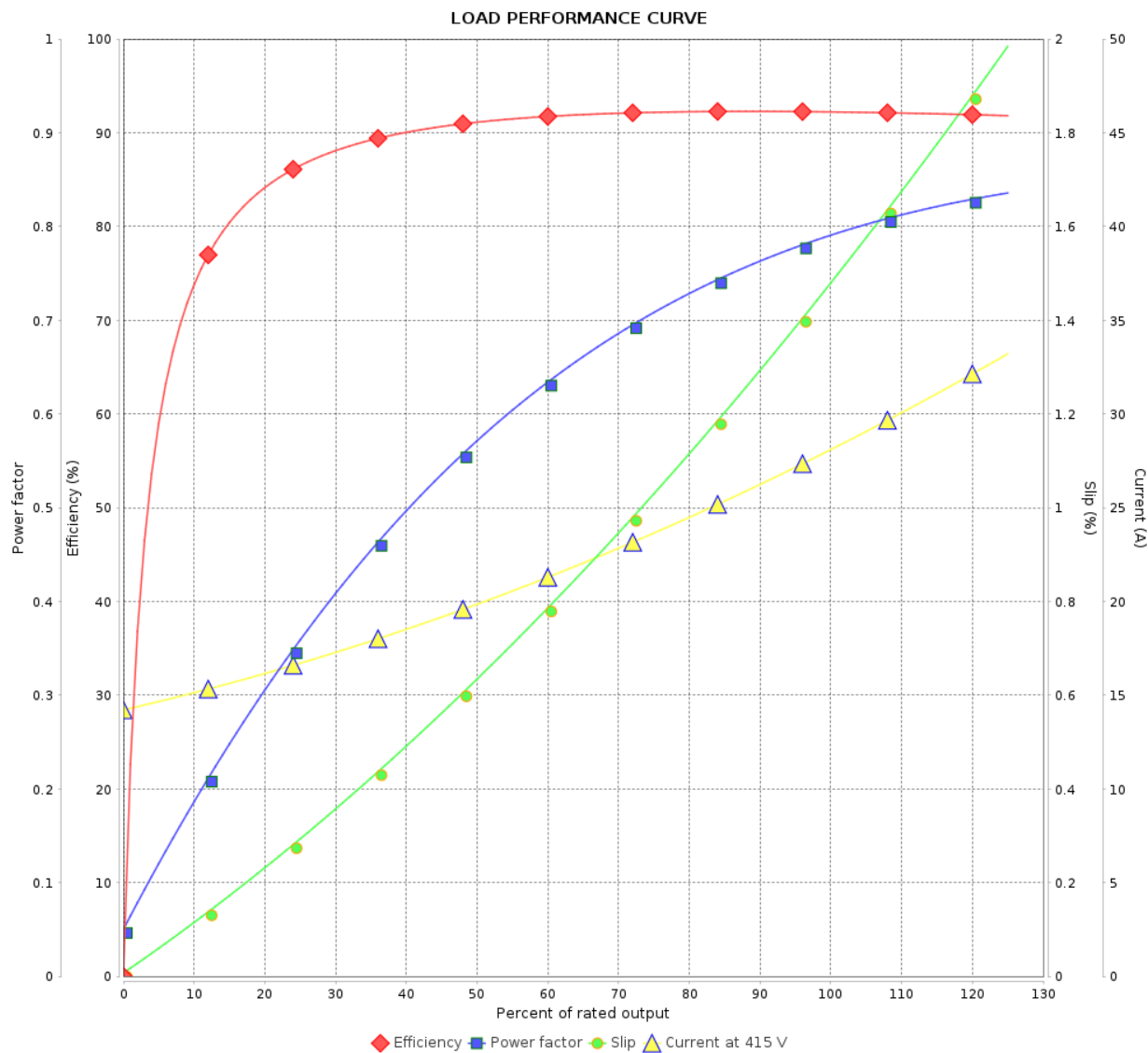
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 IEEE 841 NEMA Premium
Efficiency Three-Phase

Product code : 11941736



Performance : 415 V 50 Hz 6P IE3

Rated current : 28.7 A
LRC : 6.8
Rated torque : 14.7 kgfm
Locked rotor torque : 250 %
Breakdown torque : 300 %
Rated speed : 985 rpm

Moment of inertia (J) : 0.4843 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.15
Temperature rise : 80 K
Design : B

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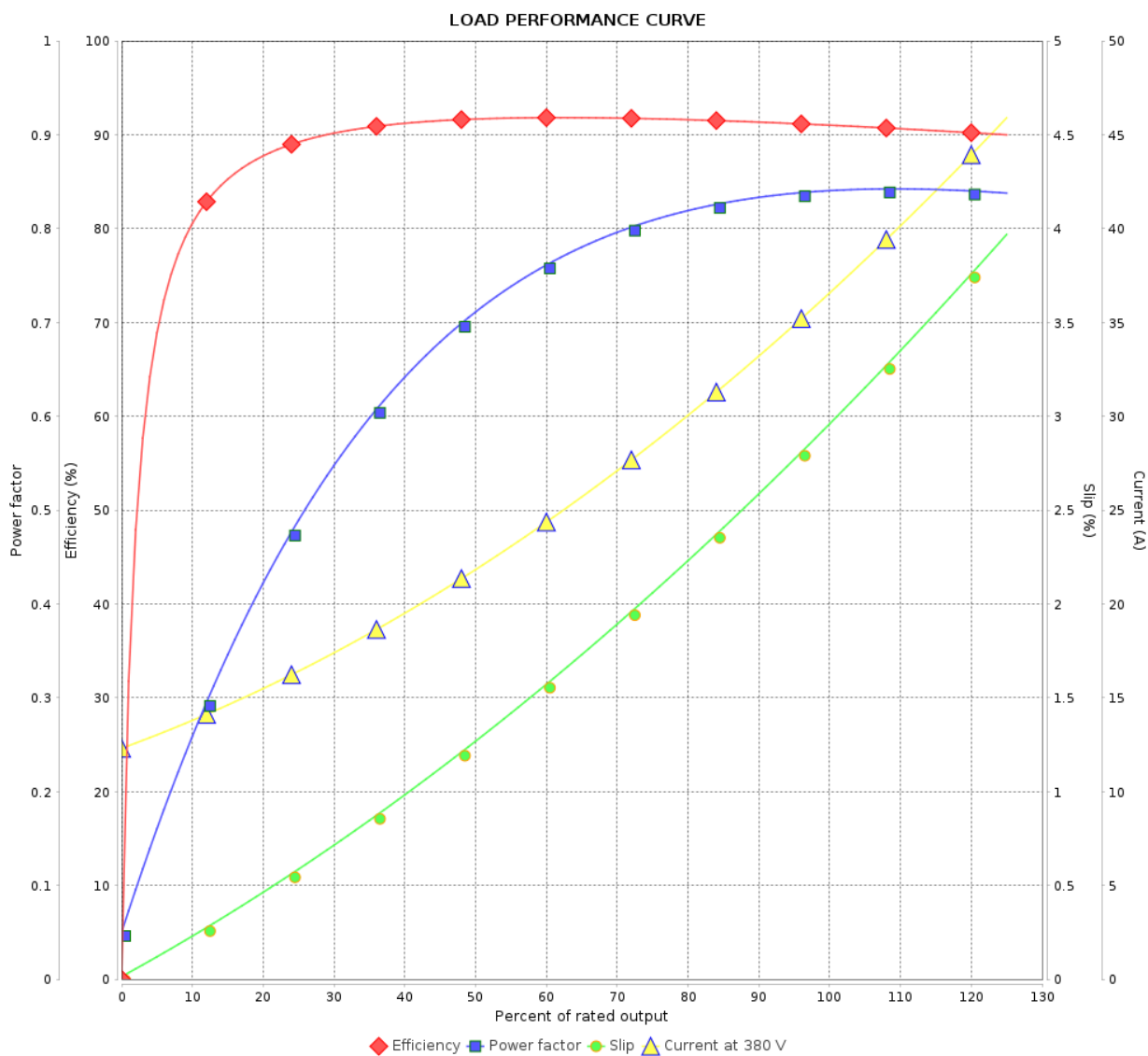
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 IEEE 841 NEMA Premium
Efficiency Three-Phase

Product code : 11941736



Performance : 380 V 50 Hz 6P IE2

Rated current : 36.8 A
LRC : 5.0
Rated torque : 18.7 kgfm
Locked rotor torque : 160 %
Breakdown torque : 200 %
Rated speed : 970 rpm

Moment of inertia (J) : 0.4843 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.00
Temperature rise : 80 K
Design : B

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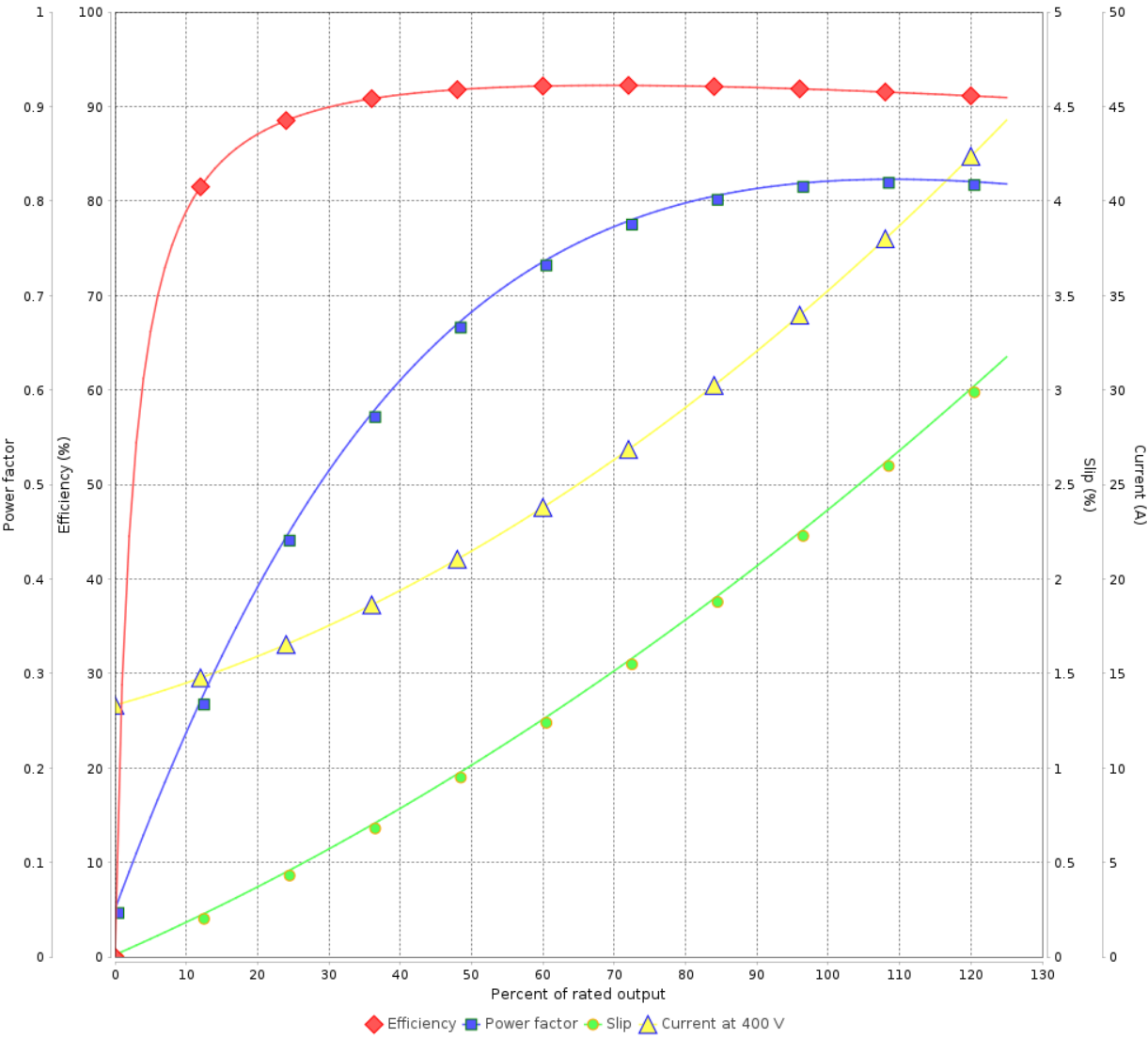
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 IEEE 841 NEMA Premium Efficiency Three-Phase Product code : 11941736

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Performance : 400 V 50 Hz 6P IE3			
Rated current	: 35.5 A	Moment of inertia (J)	: 0.4843 kgm²
LRC	: 5.4	Duty cycle	: Cont.(S1)
Rated torque	: 18.6 kgfm	Insulation class	: F
Locked rotor torque	: 180 %	Service factor	: 1.15
Breakdown torque	: 220 %	Temperature rise	: 80 K
Rated speed	: 976 rpm	Design	: B

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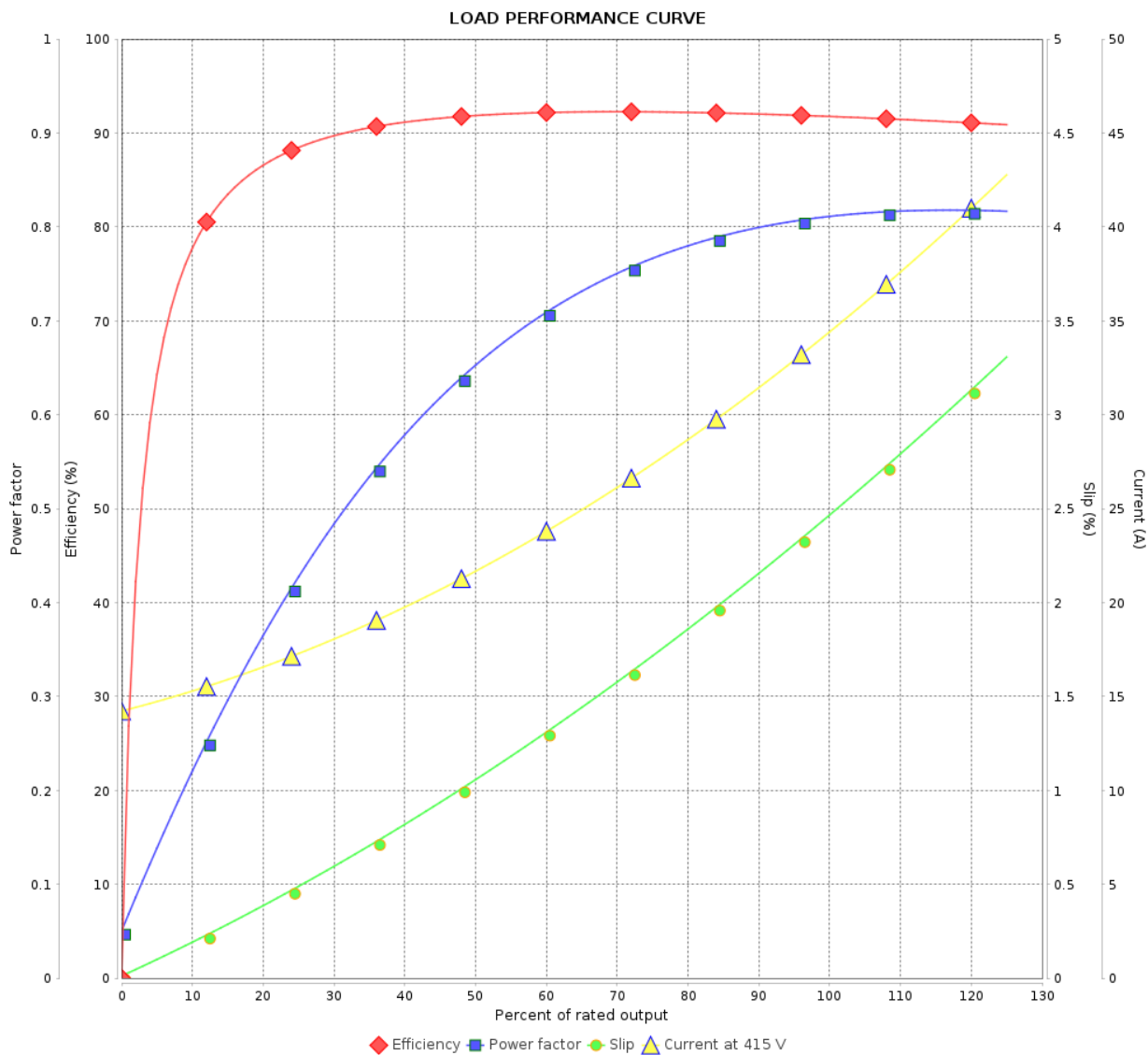
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 IEEE 841 NEMA Premium
Efficiency Three-Phase

Product code : 11941736



Performance : 415 V 50 Hz 6P IE3

Rated current : 34.6 A
LRC : 5.8
Rated torque : 18.6 kgfm
Locked rotor torque : 190 %
Breakdown torque : 240 %
Rated speed : 975 rpm

Moment of inertia (J) : 0.4843 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.15
Temperature rise : 80 K
Design : B

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