

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase Product code : 11456704

Frame	: 254/6T	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	: 133 kg
Protection degree	: IP55	Moment of inertia (J)	: 0.1867 kgm ²
Design	: B		

Output [HP]	7.5	5.5	5.5	5.5	7.5	7.5	7.5
Poles	8	8	8	8	8	8	8
Frequency [Hz]	60	50	50	50	50	50	50
Rated voltage [V]	230/460	380	400	415	380	400	415
Rated current [A]	22.2/11.1	10.4	10.5	10.4	13.1	12.5	12.4
L. R. Amperes [A]	118/58.8	56.1	58.7	62.5	56.3	58.7	62.0
LRC [A]	5.3x(Code H)	5.4x(Code H)	5.6x(Code J)	6.0x(Code K)	4.3x(Code F)	4.7x(Code F)	5.0x(Code G)
No load current [A]	13.0/6.50	6.40	6.90	7.30	6.40	6.90	7.30
Rated speed [RPM]	880	730	730	735	720	725	730
Slip [%]	2.22	2.67	2.67	2.00	4.00	3.33	2.67
Rated torque [kgfm]	6.19	5.45	5.43	5.42	7.56	7.51	7.48
Locked rotor torque [%]	200	210	229	260	150	170	190
Breakdown torque [%]	250	260	290	320	190	210	229
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	105 K	105 K	105 K
Locked rotor time	59s (cold) 33s (hot)	45s (cold) 25s (hot)	45s (cold) 25s (hot)	45s (cold) 25s (hot)	45s (cold) 25s (hot)	45s (cold) 25s (hot)	45s (cold) 25s (hot)
Noise level ²	54.0 dB(A)	51.0 dB(A)	51.0 dB(A)	51.0 dB(A)	51.0 dB(A)	51.0 dB(A)	51.0 dB(A)
Efficiency (%)	25%						
	50%	85.5	84.1	81.6	81.4	85.5	84.0
	75%	87.5	85.7	84.5	84.5	85.5	85.5
	100%	87.5	85.5	85.5	85.5	84.0	85.5
Power Factor	25%						
	50%	0.50	0.47	0.44	0.42	0.57	0.51
	75%	0.63	0.60	0.56	0.54	0.69	0.64
	100%	0.71	0.69	0.65	0.63	0.76	0.72

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

Losses (%)	P1 (0,9;1,0)	13.8	13.8	13.8	13.8	13.8	13.8	13.8
	P2 (0,5;1,0)	11.7	11.7	11.7	11.7	11.7	11.7	11.7
	P3 (0,25;1,0)	11.4	11.4	11.4	11.4	11.4	11.4	11.4
	P4 (0,9;0,5)	7.8	7.8	7.8	7.8	7.8	7.8	7.8
	P5 (0,5;0,5)	5.7	5.7	5.7	5.7	5.7	5.7	5.7
	P6 (0,5;0,25)	4.4	4.4	4.4	4.4	4.4	4.4	4.4
	P7 (0,25;0,25)	3.4	3.4	3.4	3.4	3.4	3.4	3.4

Bearing type	: 6309 C3	Non drive end	6209 C3	Foundation loads	
Sealing	: V'Ring		V'Ring	Max. traction	: 203 kgf
Lubrication interval	: 20000 h		20000 h	Max. compression	: 336 kgf
Lubricant amount	: 13 g		9 g		
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 :

Notes
USABLE @208V 24.5A SF 1.15 SFA 28.2A

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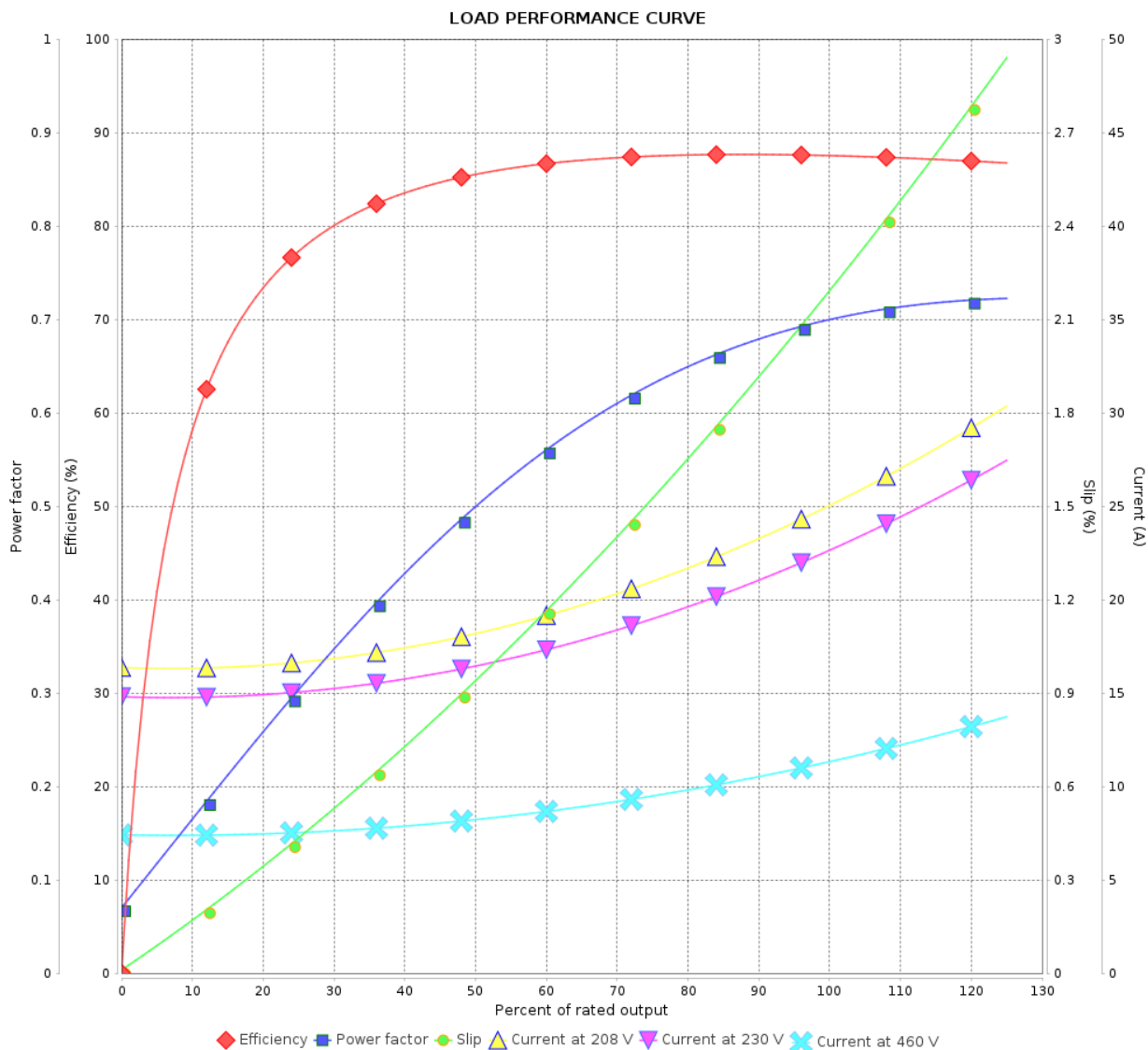
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency
Three-Phase

Product code : 11456704



Performance : 230/460 V 60 Hz 8P

Rated current : 22.2/11.1 A
LRC : 5.3
Rated torque : 6.19 kgfm
Locked rotor torque : 200 %
Breakdown torque : 250 %
Rated speed : 880 rpm

Moment of inertia (J) : 0.1867 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.25
Temperature rise : 80 K
Design : B

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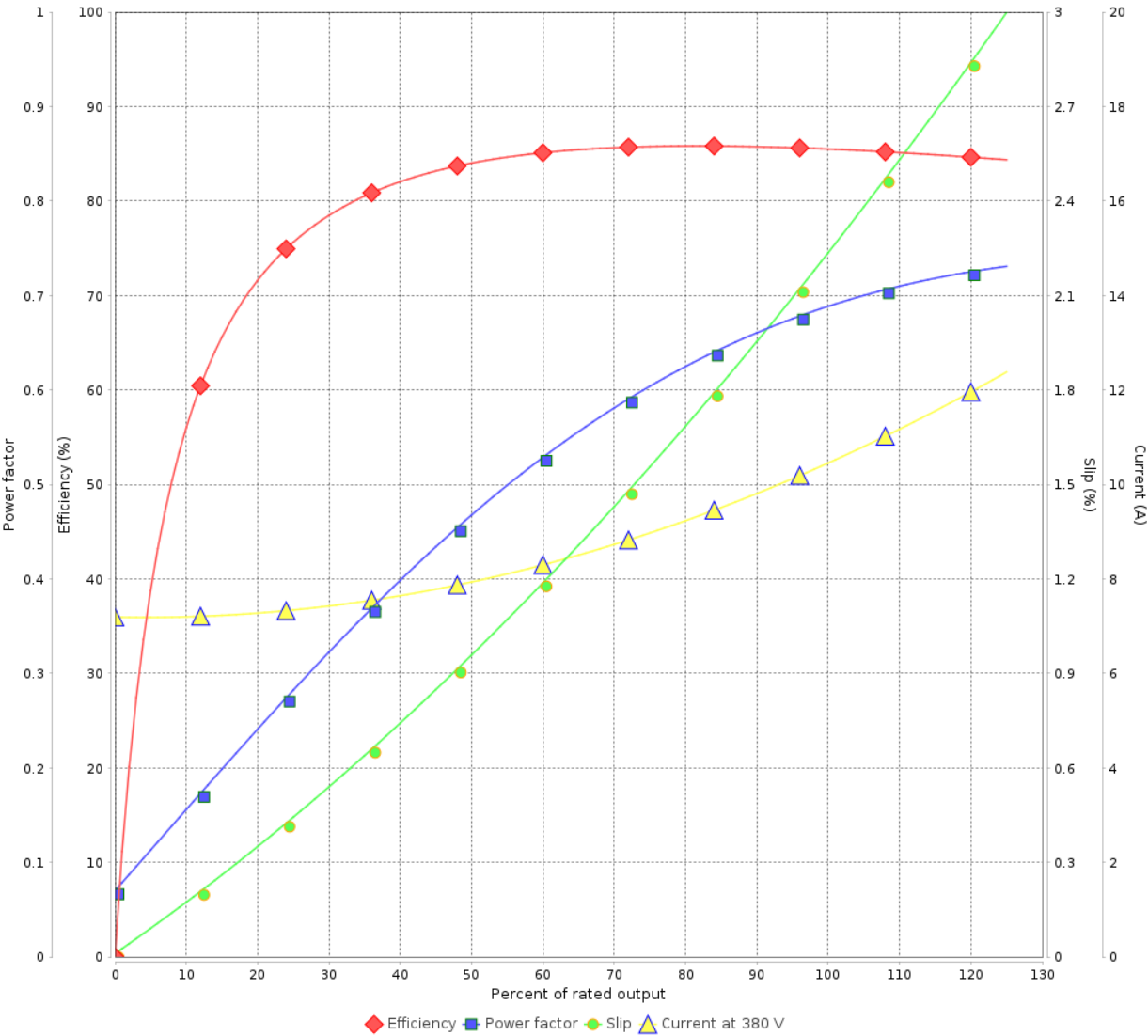
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase Product code : 11456704

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Performance : 380 V 50 Hz 8P IE3			
Rated current	: 10.4 A	Moment of inertia (J)	: 0.1867 kgm²
LRC	: 5.4	Duty cycle	: Cont.(S1)
Rated torque	: 5.45 kgfm	Insulation class	: F
Locked rotor torque	: 210 %	Service factor	: 1.00
Breakdown torque	: 260 %	Temperature rise	: 80 K
Rated speed	: 730 rpm	Design	: B

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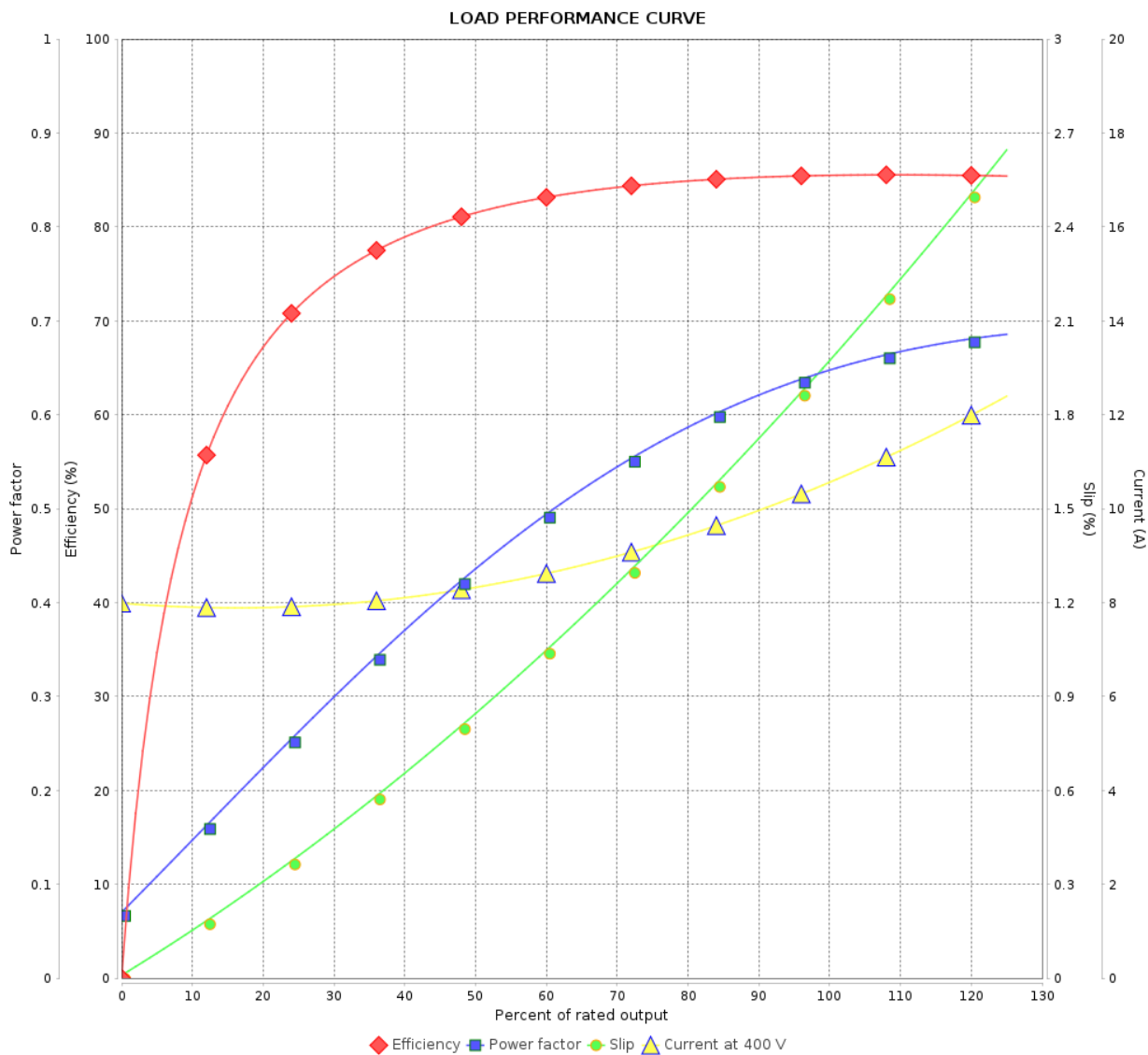
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency
Three-Phase

Product code : 11456704



Performance : 400 V 50 Hz 8P IE3

Rated current : 10.5 A
LRC : 5.6
Rated torque : 5.43 kgfm
Locked rotor torque : 229 %
Breakdown torque : 290 %
Rated speed : 730 rpm

Moment of inertia (J) : 0.1867 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.15
Temperature rise : 80 K
Design : B

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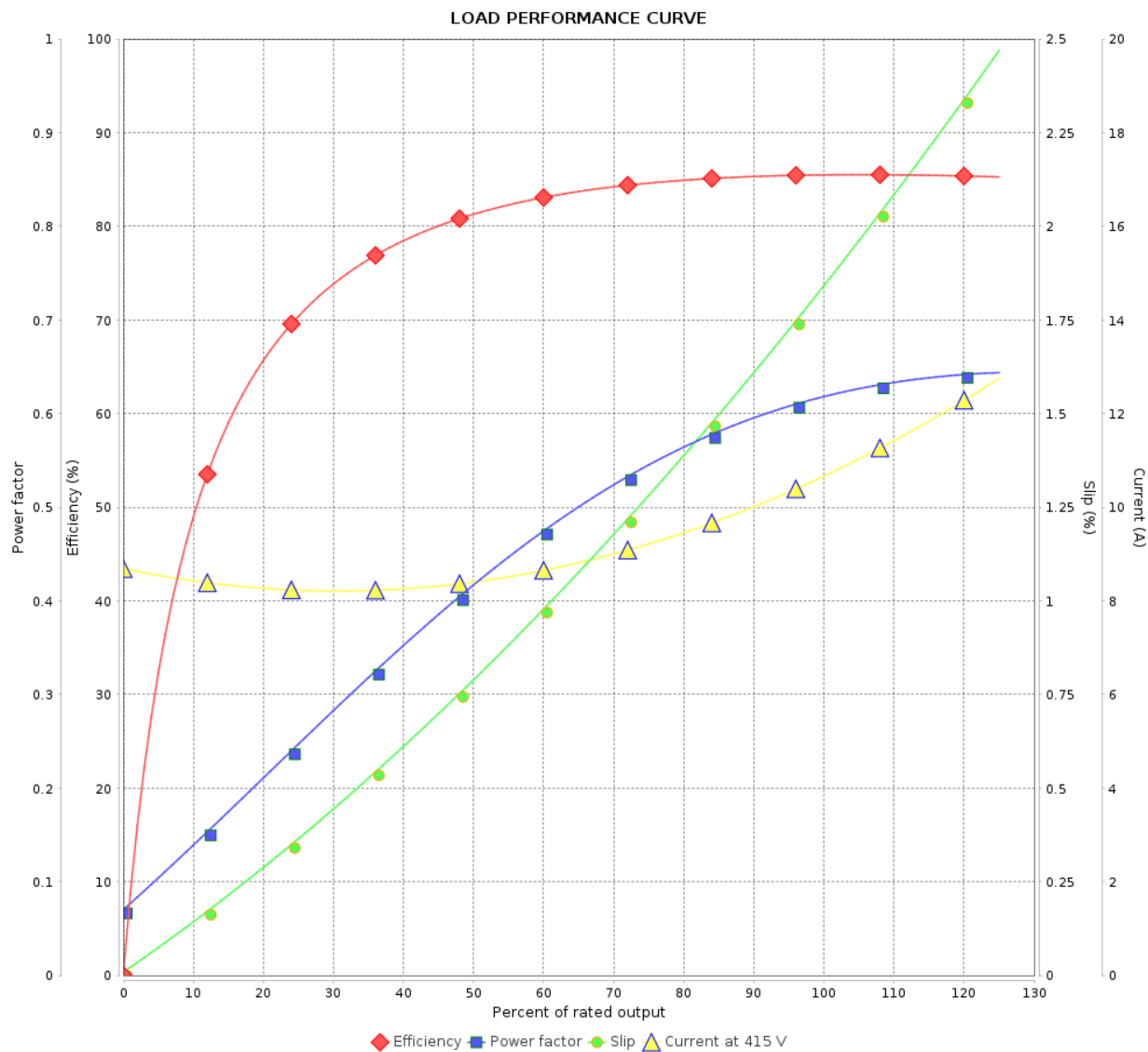
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency
Three-Phase

Product code : 11456704



Performance : 415 V 50 Hz 8P IE3

Rated current : 10.4 A
LRC : 6.0
Rated torque : 5.42 kgfm
Locked rotor torque : 260 %
Breakdown torque : 320 %
Rated speed : 735 rpm

Moment of inertia (J) : 0.1867 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.15
Temperature rise : 80 K
Design : B

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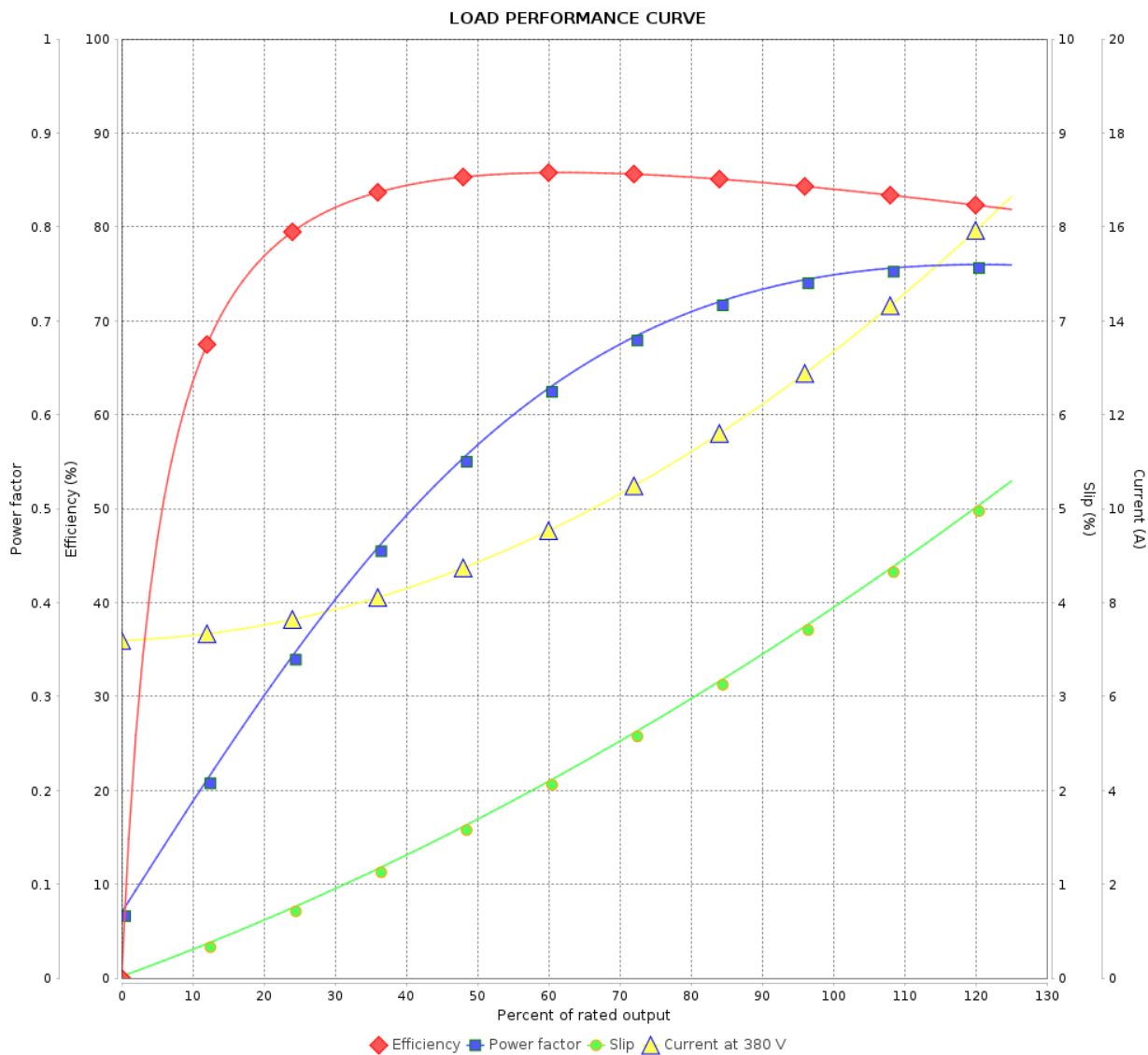
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency
Three-Phase

Product code : 11456704



Performance : 380 V 50 Hz 8P IE2

Rated current : 13.1 A
LRC : 4.3
Rated torque : 7.56 kgfm
Locked rotor torque : 150 %
Breakdown torque : 190 %
Rated speed : 720 rpm

Moment of inertia (J) : 0.1867 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.00
Temperature rise : 105 K
Design : B

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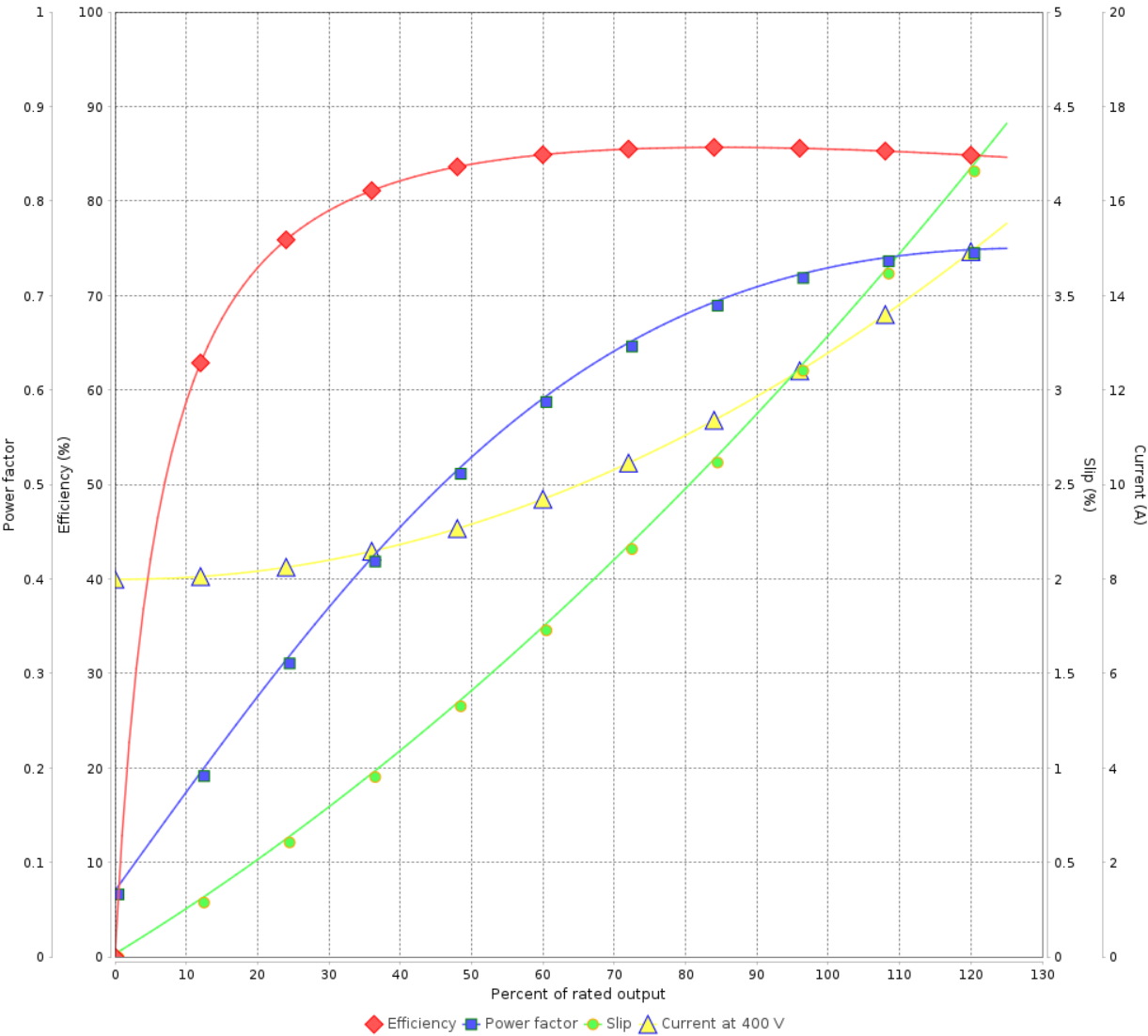
Three Phase Induction Motor - Squirrel Cage



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Product line : W22 NEMA Premium Efficiency Three-Phase Product code : 11456704

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Performance : 400 V 50 Hz 8P IE2			
Rated current	: 12.5 A	Moment of inertia (J)	: 0.1867 kgm ²
LRC	: 4.7	Duty cycle	: Cont.(S1)
Rated torque	: 7.51 kgfm	Insulation class	: F
Locked rotor torque	: 170 %	Service factor	: 1.15
Breakdown torque	: 210 %	Temperature rise	: 105 K
Rated speed	: 725 rpm	Design	: B

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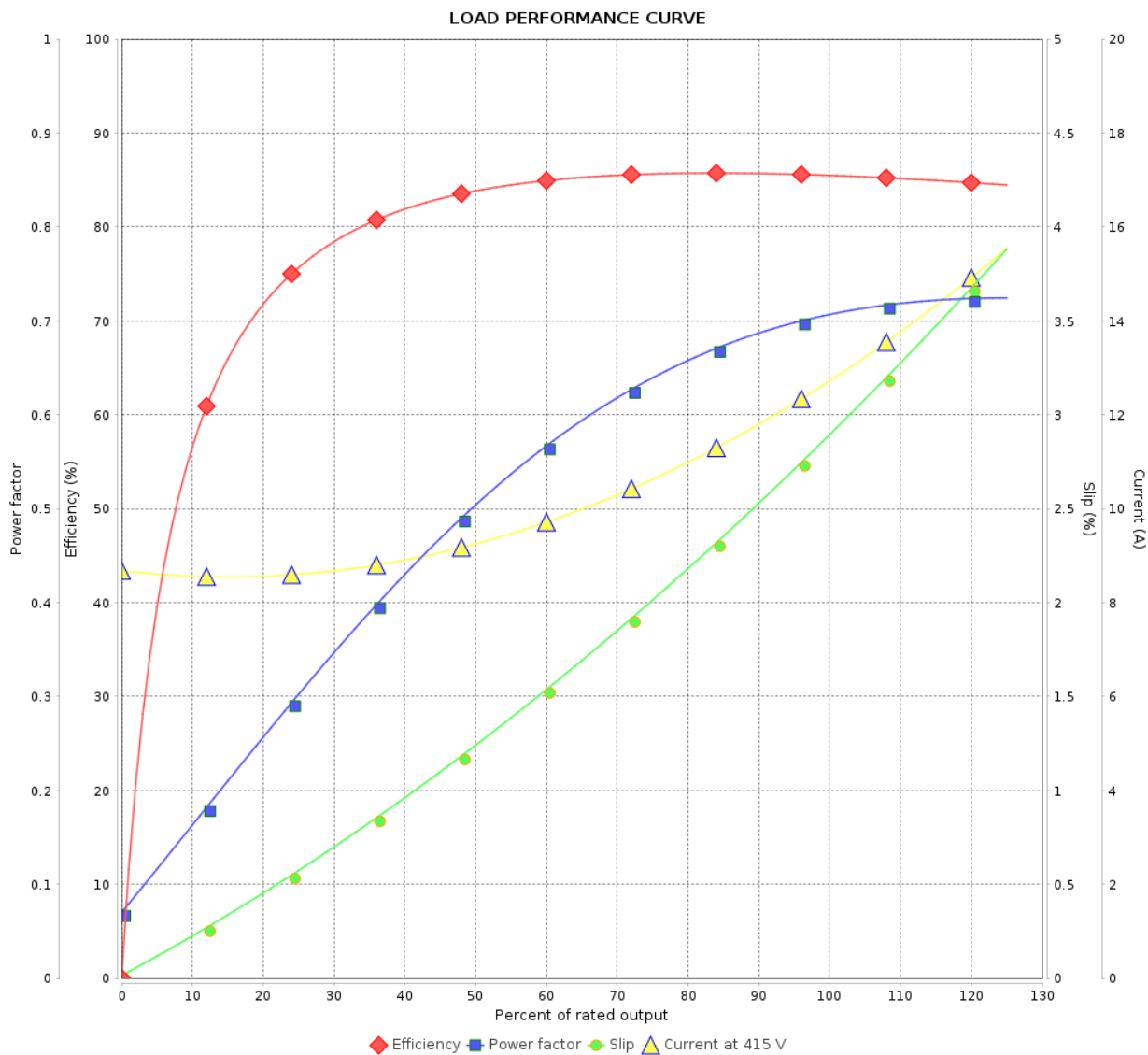
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency
Three-Phase

Product code : 11456704



Performance : 415 V 50 Hz 8P IE2

Rated current : 12.4 A
LRC : 5.0
Rated torque : 7.48 kgfm
Locked rotor torque : 190 %
Breakdown torque : 229 %
Rated speed : 730 rpm

Moment of inertia (J) : 0.1867 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.15
Temperature rise : 105 K
Design : B

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