

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase Product code : 11611958

Frame	: 444/5TS	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	: 741 kg
Protection degree	: IP55	Moment of inertia (J)	: 1.41 kgm ²
Design	: B		

Output [HP]	125	100	100	100	125	125	125
Poles	2	2	2	2	2	2	2
Frequency [Hz]	60	50	50	50	50	50	50
Rated voltage [V]	230/460	380	400	415	380	400	415
Rated current [A]	267/134	135	128	125	163	154	148
L. R. Amperes [A]	1764/882	879	938	988	894	927	1007
LRC [A]	6.6x(Code G)	6.5x(Code G)	7.3x(Code H)	7.9x(Code J)	5.5x(Code E)	6.0x(Code F)	6.8x(Code G)
No load current [A]	62.0/31.0	31.0	33.0	35.0	31.0	33.0	35.0
Rated speed [RPM]	3575	2975	2977	2980	2965	2970	2970
Slip [%]	0.69	0.83	0.77	0.67	1.17	1.00	1.00
Rated torque [kgfm]	25.4	24.4	24.4	24.4	30.6	30.5	30.5
Locked rotor torque [%]	200	200	210	240	160	170	190
Breakdown torque [%]	250	250	280	300	200	220	240
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	52s (cold) 29s (hot)	36s (cold) 20s (hot)	36s (cold) 20s (hot)	36s (cold) 20s (hot)	36s (cold) 20s (hot)	36s (cold) 20s (hot)	36s (cold) 20s (hot)
Noise level ²	81.0 dB(A)	77.0 dB(A)	77.0 dB(A)	77.0 dB(A)	77.0 dB(A)	77.0 dB(A)	77.0 dB(A)
Efficiency (%)	25%						
	50%	93.6	93.2	93.2	92.8	94.0	94.0
	75%	94.5	94.3	94.3	94.3	94.5	94.5
	100%	95.0	94.7	94.7	94.8	94.5	94.5
Power Factor	25%						
	50%	0.82	0.79	0.77	0.75	0.85	0.84
	75%	0.87	0.87	0.87	0.85	0.88	0.88
	100%	0.89	0.89	0.89	0.88	0.89	0.89

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

Losses (%)	P1 (0,9;1,0)	4.8	5.1	5.1	5.0	5.3	5.3	4.8
	P2 (0,5;1,0)	2.9	3.1	3.1	3.1	3.3	3.3	2.9
	P3 (0,25;1,0)	2.3	2.5	2.5	2.4	2.6	2.6	2.3
	P4 (0,9;0,5)	3.2	3.4	3.4	3.3	3.5	3.5	3.2
	P5 (0,5;0,5)	1.4	1.5	1.5	1.5	1.6	1.6	1.4
	P6 (0,5;0,25)	1.1	1.1	1.1	1.1	1.2	1.2	1.1
	P7 (0,25;0,25)	0.5	0.5	0.5	0.5	0.5	0.5	0.5

Bearing type	Drive end	Non drive end	Foundation loads
	: 6314 C3	: 6314 C3	
	Sealing	WSeal	
	Lubrication interval	4000 h	
	Lubricant amount	27 g	
Lubricant type		Mobil Polyrex EM	Max. traction : 271 kgf
			Max. compression : 1011 kgf

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 296A SF 1.00 SFA 296A

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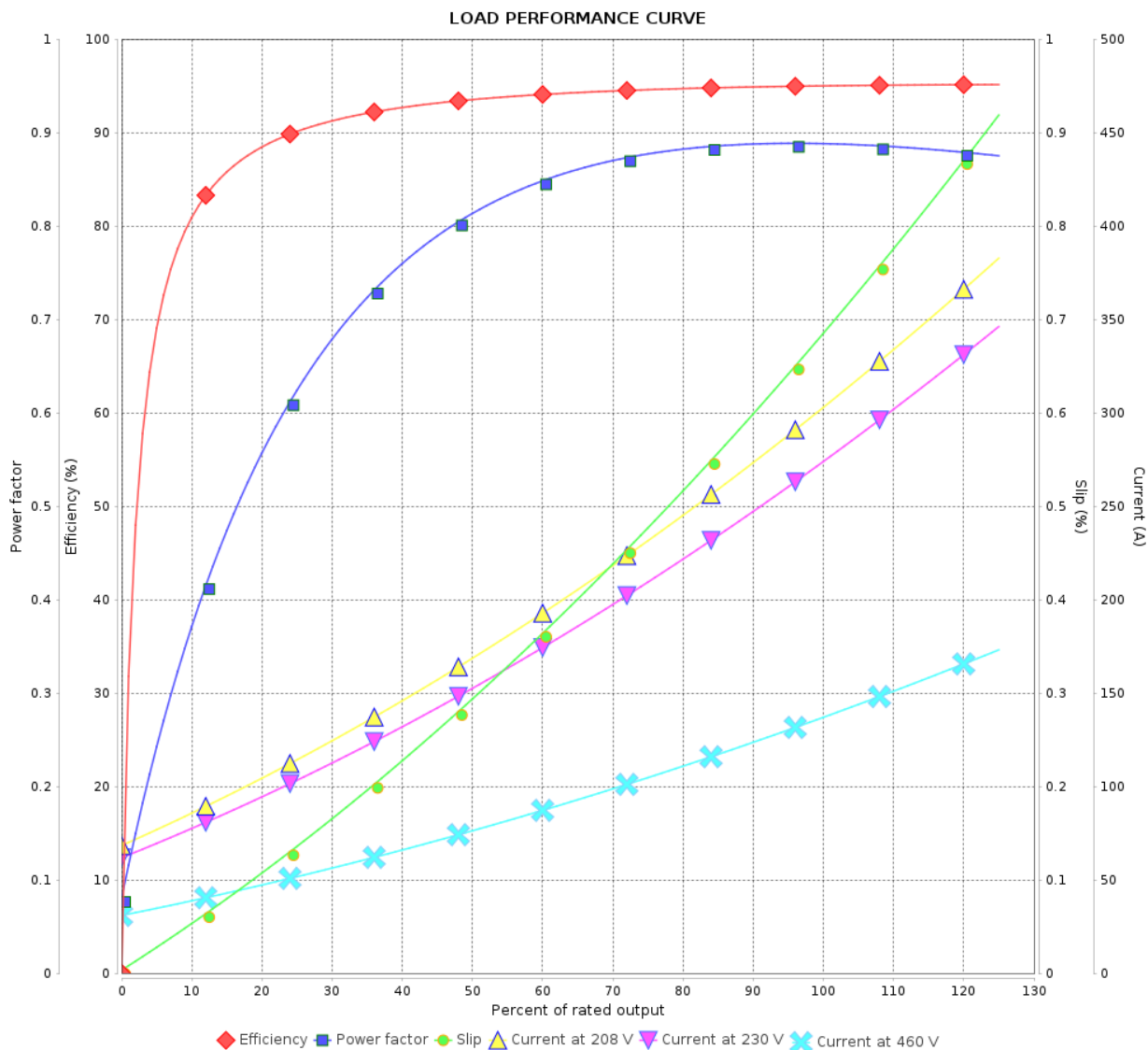
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency
Three-Phase

Product code : 11611958



Performance : 230/460 V 60 Hz 2P

Rated current : 267/134 A
LRC : 6.6
Rated torque : 25.4 kgfm
Locked rotor torque : 200 %
Breakdown torque : 250 %
Rated speed : 3575 rpm

Moment of inertia (J) : 1.41 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.15
Temperature rise : 80 K
Design : B

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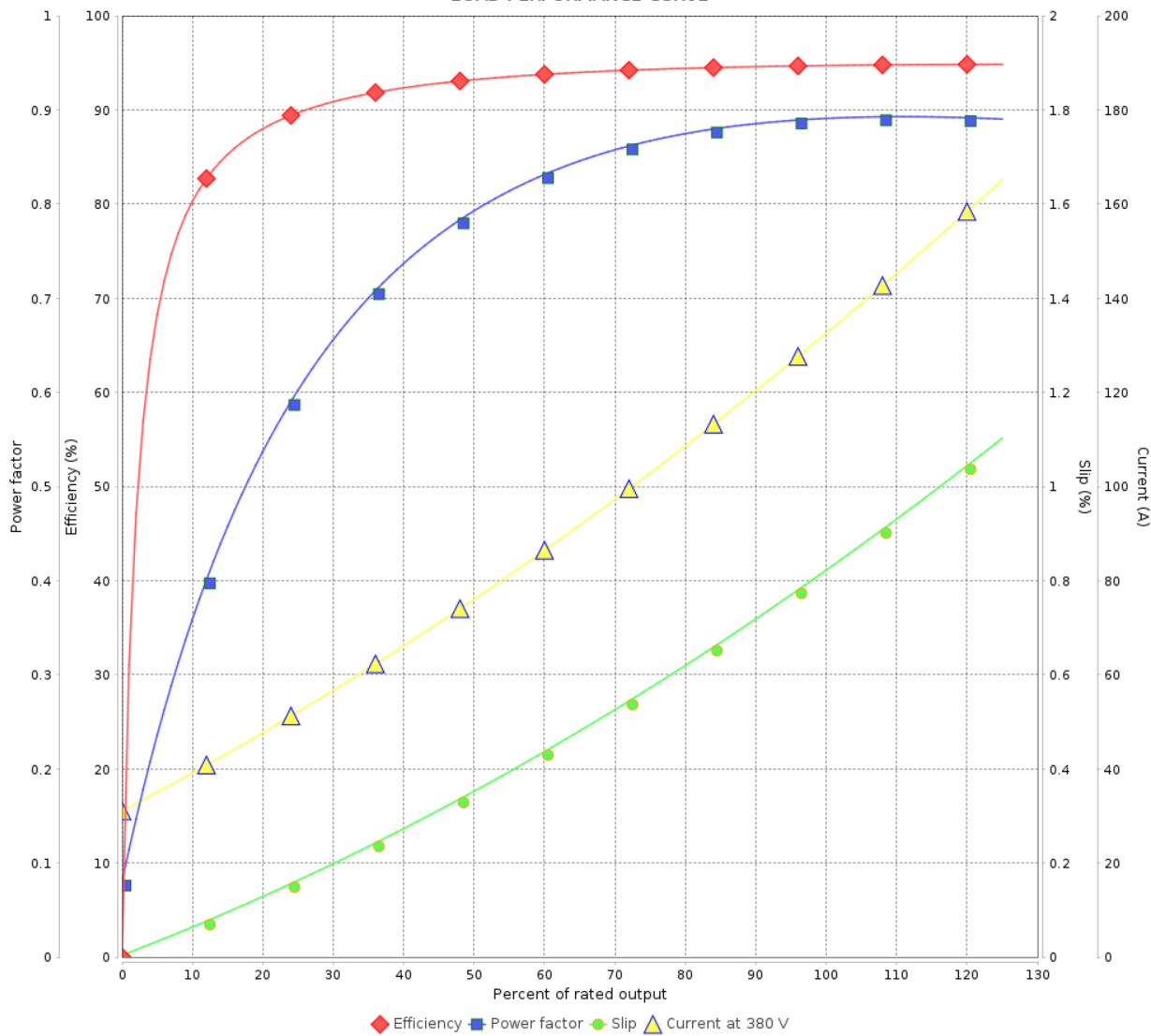
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase Product code : 11611958

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Performance : 380 V 50 Hz 2P IE3

Rated current	: 135 A	Moment of inertia (J)	: 1.41 kgm ²
LRC	: 6.5	Duty cycle	: Cont.(S1)
Rated torque	: 24.4 kgfm	Insulation class	: F
Locked rotor torque	: 200 %	Service factor	: 1.00
Breakdown torque	: 250 %	Temperature rise	: 80 K
Rated speed	: 2975 rpm	Design	: B

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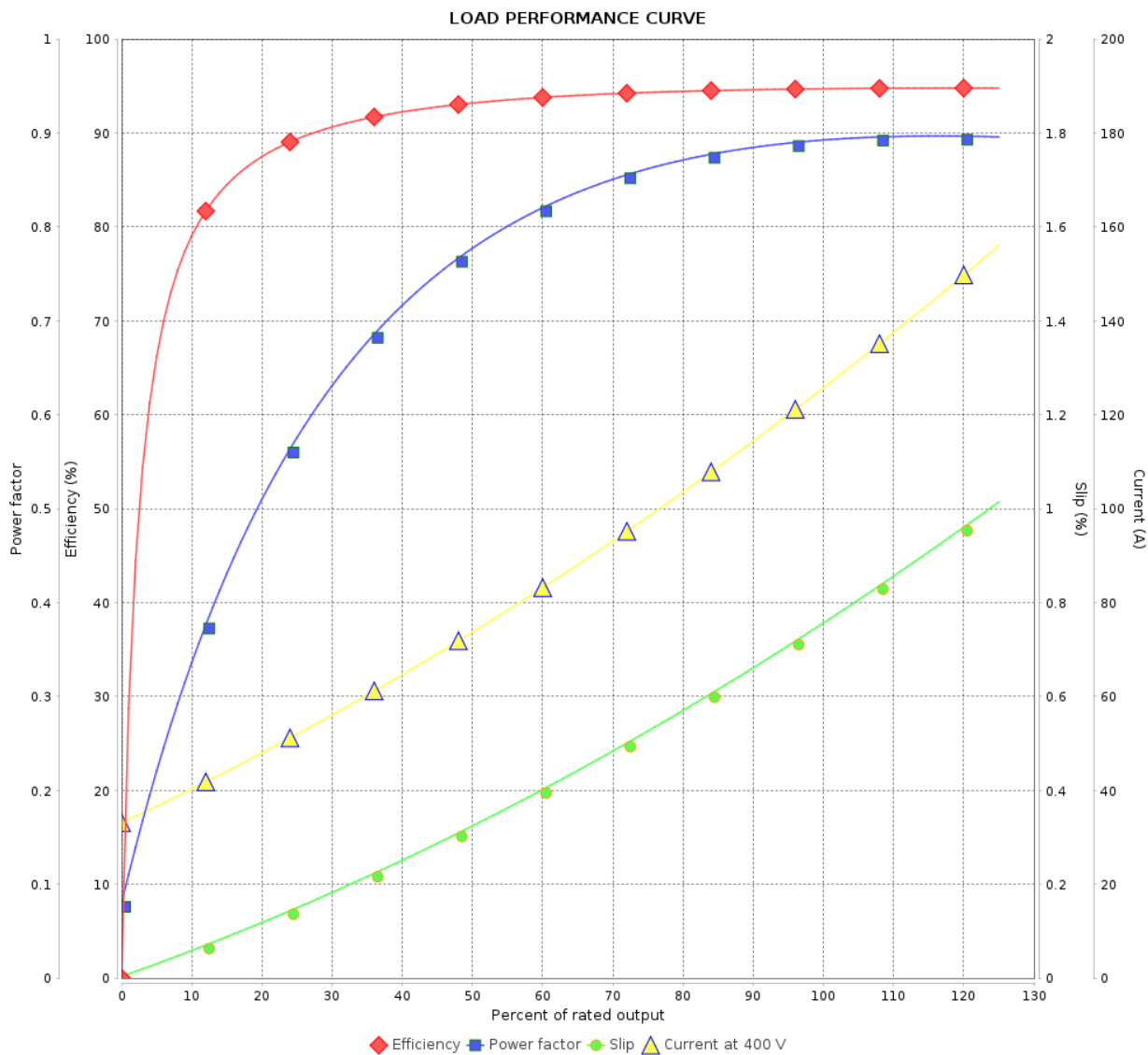
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency
Three-Phase

Product code : 11611958



Performance : 400 V 50 Hz 2P IE3

Rated current : 128 A
LRC : 7.3
Rated torque : 24.4 kgfm
Locked rotor torque : 210 %
Breakdown torque : 280 %
Rated speed : 2977 rpm

Moment of inertia (J) : 1.41 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.00
Temperature rise : 80 K
Design : B

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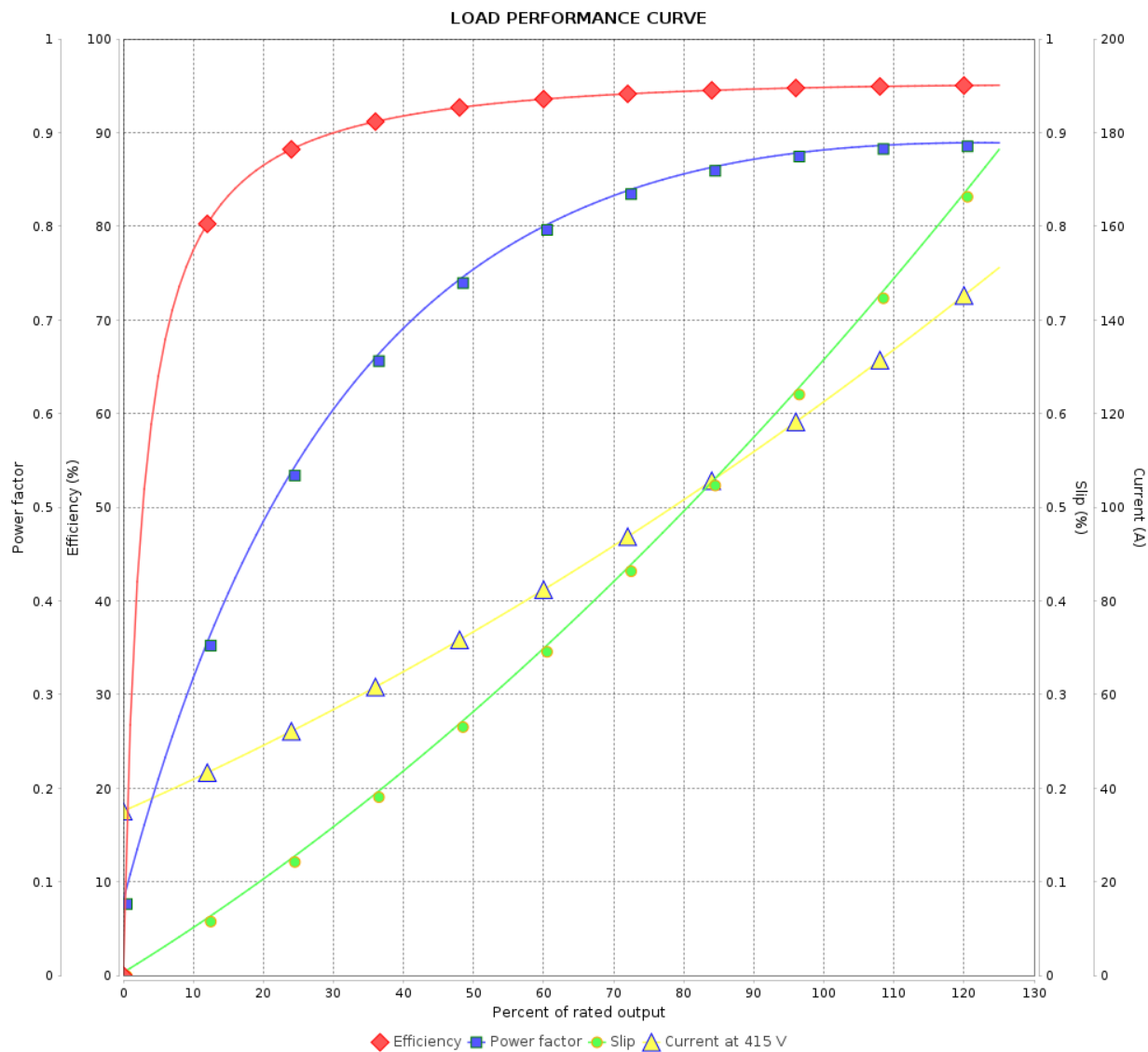
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency
Three-Phase

Product code : 11611958



Performance : 415 V 50 Hz 2P IE3

Rated current : 125 A
LRC : 7.9
Rated torque : 24.4 kgfm
Locked rotor torque : 240 %
Breakdown torque : 300 %
Rated speed : 2980 rpm

Moment of inertia (J) : 1.41 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.00
Temperature rise : 80 K
Design : B

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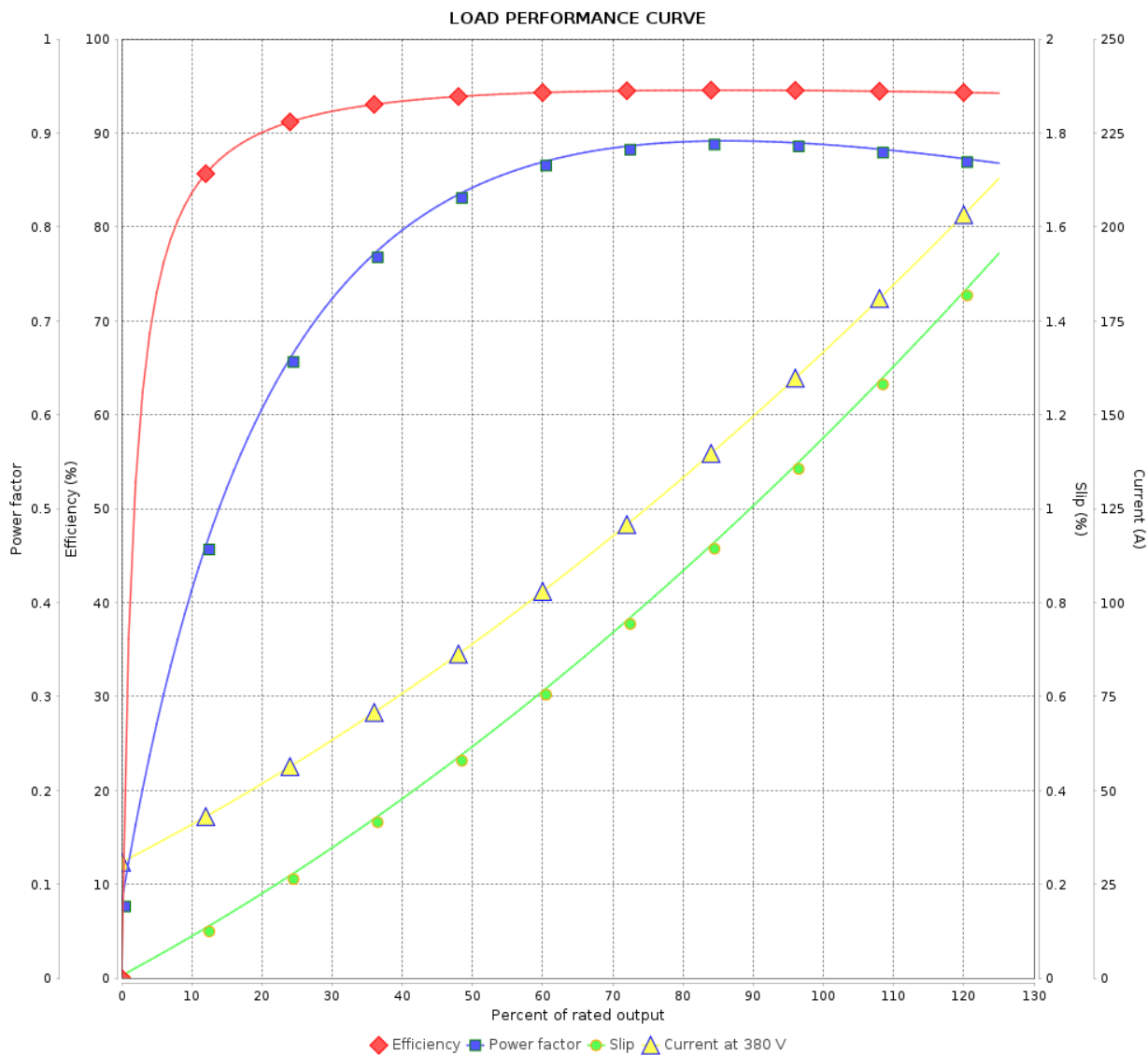
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency
Three-Phase

Product code : 11611958



Performance : 380 V 50 Hz 2P IE2

Rated current : 163 A
LRC : 5.5
Rated torque : 30.6 kgfm
Locked rotor torque : 160 %
Breakdown torque : 200 %
Rated speed : 2965 rpm

Moment of inertia (J) : 1.41 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.00
Temperature rise : 80 K
Design : B

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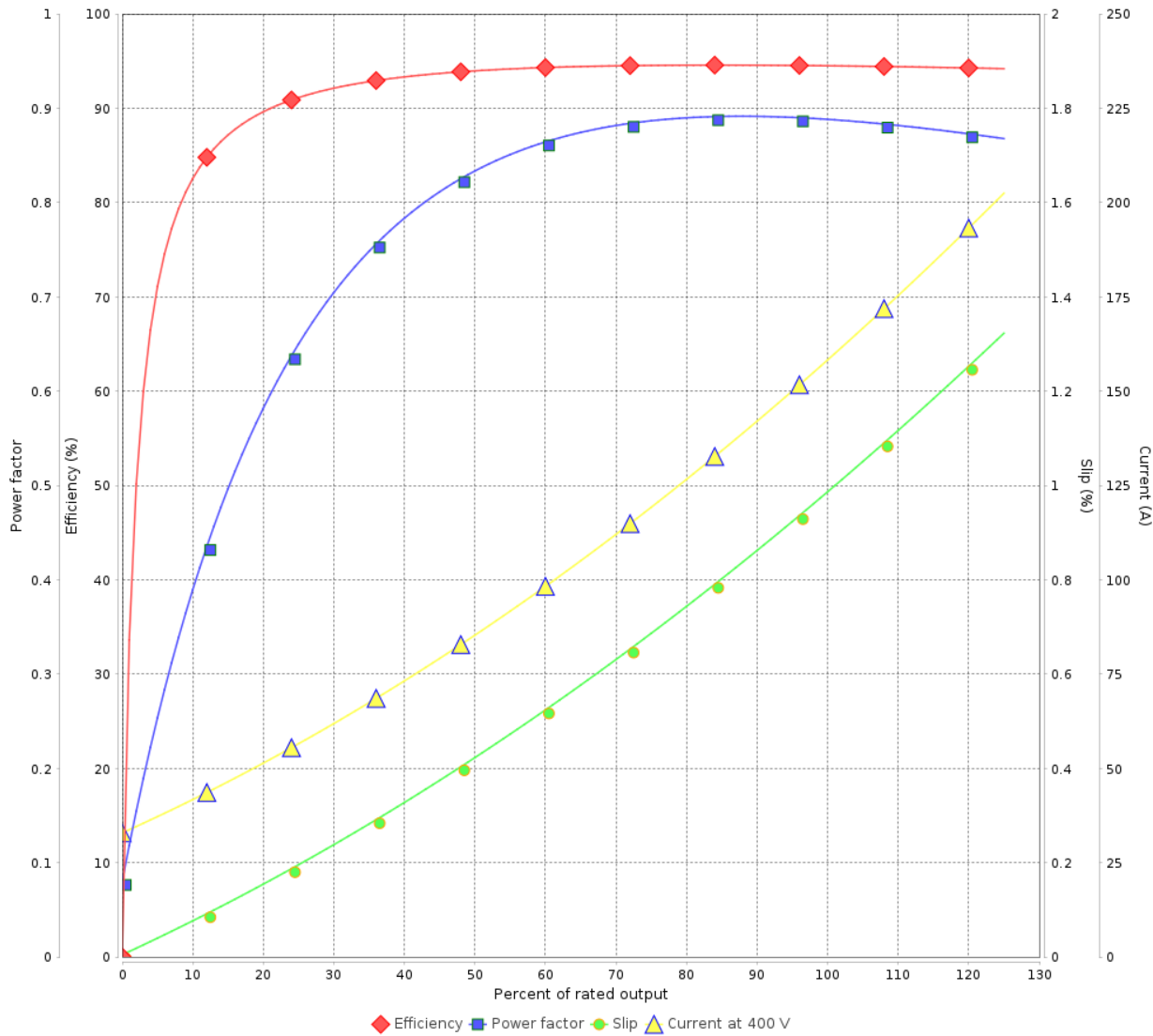
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase Product code : 11611958

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Performance : 400 V 50 Hz 2P IE2			
Rated current	: 154 A	Moment of inertia (J)	: 1.41 kgm ²
LRC	: 6.0	Duty cycle	: Cont.(S1)
Rated torque	: 30.5 kgfm	Insulation class	: F
Locked rotor torque	: 170 %	Service factor	: 1.00
Breakdown torque	: 220 %	Temperature rise	: 80 K
Rated speed	: 2970 rpm	Design	: B

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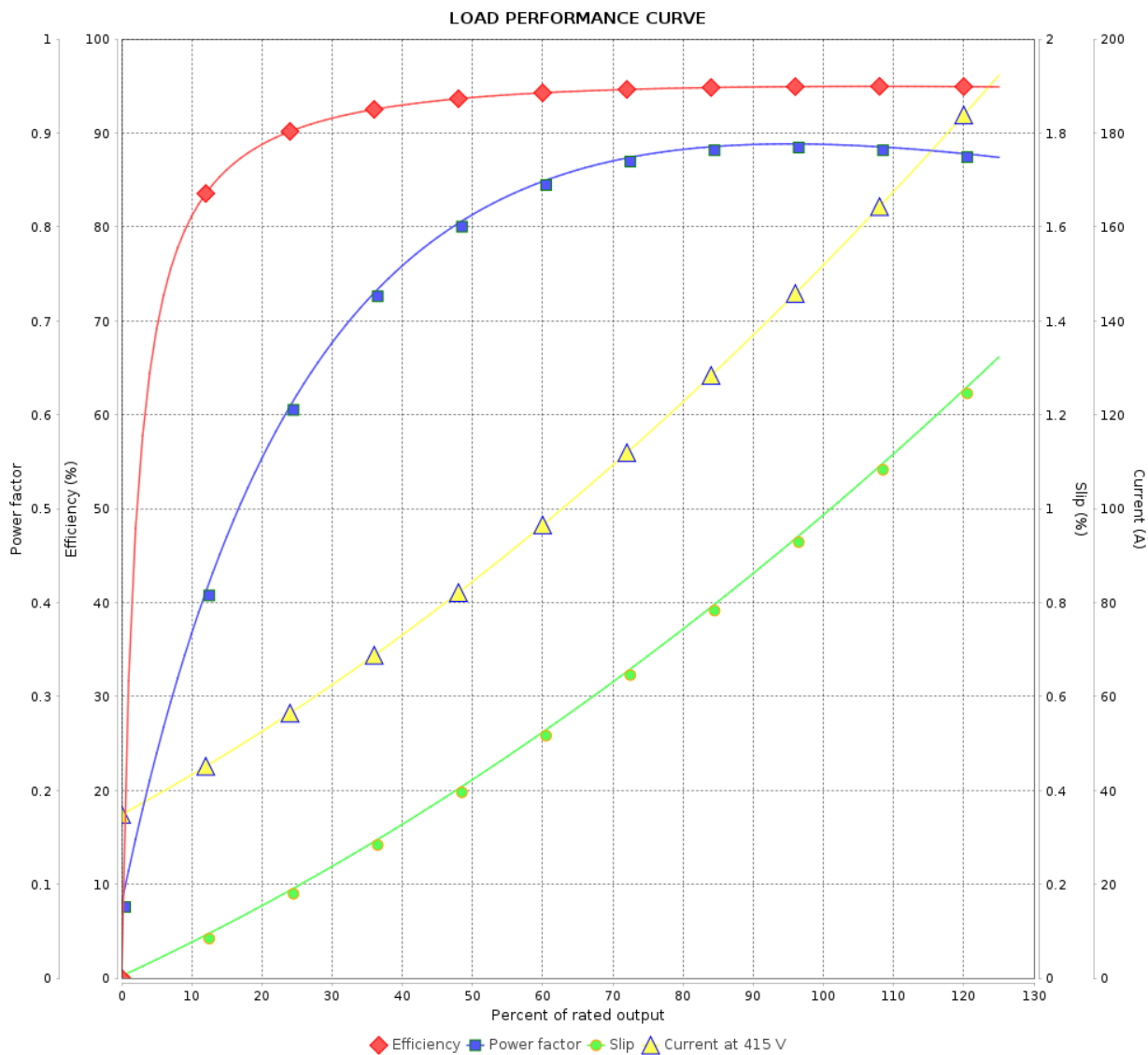
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency
Three-Phase

Product code : 11611958



Performance : 415 V 50 Hz 2P IE3

Rated current : 148 A
LRC : 6.8
Rated torque : 30.5 kgfm
Locked rotor torque : 190 %
Breakdown torque : 240 %
Rated speed : 2970 rpm

Moment of inertia (J) : 1.41 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.00
Temperature rise : 80 K
Design : B

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