

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase Product code : 13025627

Frame	: 324/6TC	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	: 259 kg
Protection degree	: IP55	Moment of inertia (J)	: 0.5023 kgm ²
Design	: B		

Output [HP]	25	20	20	20	25	25	25
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]	71.8/35.9	35.3	35.6	36.4	42.3	41.4	41.1
L. R. Amperes [A]	373/187	177	192	200	178	190	197
LRC [A]	5.2x(Code G)	5.0x(Code G)	5.4x(Code H)	5.5x(Code J)	4.2x(Code E)	4.6x(Code F)	4.8x(Code G)
No load current [A]	40.0/20.0	19.6	22.2	24.6	19.6	22.2	24.6
Rated speed [RPM]	880	730	730	735	725	725	730
Slip [%]	2.22	2.67	2.67	2.00	3.33	3.33	2.67
Rated torque [kgfm]	20.6	19.9	19.9	19.7	25.0	25.0	24.9
Locked rotor torque [%]	200	190	210	240	150	170	190
Breakdown torque [%]	229	229	250	280	180	200	220
Service factor	1.25	1.15	1.15	1.15	1.15	1.15	1.15
Temperature rise	80 K	80 K	80 K	80 K	105 K	80 K	80 K
Locked rotor time	41s (cold) 23s (hot)	30s (cold) 17s (hot)	30s (cold) 17s (hot)	30s (cold) 17s (hot)	30s (cold) 17s (hot)	30s (cold) 17s (hot)	30s (cold) 17s (hot)
Noise level ²	56.0 dB(A)	56.0 dB(A)	56.0 dB(A)	56.0 dB(A)	56.0 dB(A)	56.0 dB(A)	56.0 dB(A)
Efficiency (%)	25%						
	50%	89.5	89.3	87.2	86.2	89.5	87.5
	75%	91.0	90.1	89.1	88.6	90.2	89.5
	100%	91.0	89.6	89.6	89.6	88.5	89.5
Power Factor	25%						
	50%	0.51	0.51	0.46	0.42	0.58	0.49
	75%	0.64	0.64	0.59	0.55	0.70	0.62
	100%	0.71	0.71	0.67	0.64	0.75	0.70

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

Losses (%)	P1 (0,9;1,0)	9.5	9.5	9.5	9.5	9.5	9.5
	P2 (0,5;1,0)	7.4	7.4	7.4	7.4	7.4	7.4
	P3 (0,25;1,0)	6.5	6.5	6.5	6.5	6.5	6.5
	P4 (0,9;0,5)	5.8	5.8	5.8	5.8	5.8	5.8
	P5 (0,5;0,5)	3.9	3.9	3.9	3.9	3.9	3.9
	P6 (0,5;0,25)	3.1	3.1	3.1	3.1	3.1	3.1
	P7 (0,25;0,25)	2.2	2.2	2.2	2.2	2.2	2.2

Bearing type	: 6312 C3	Non drive end	6212 C3	Foundation loads	
Sealing	: V'Ring		V'Ring	Max. traction	: 559 kgf
Lubrication interval	: 20000 h		20000 h	Max. compression	: 818 kgf
Lubricant amount	: 21 g		13 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 79.4A SF 1.15 SFA 91.3A

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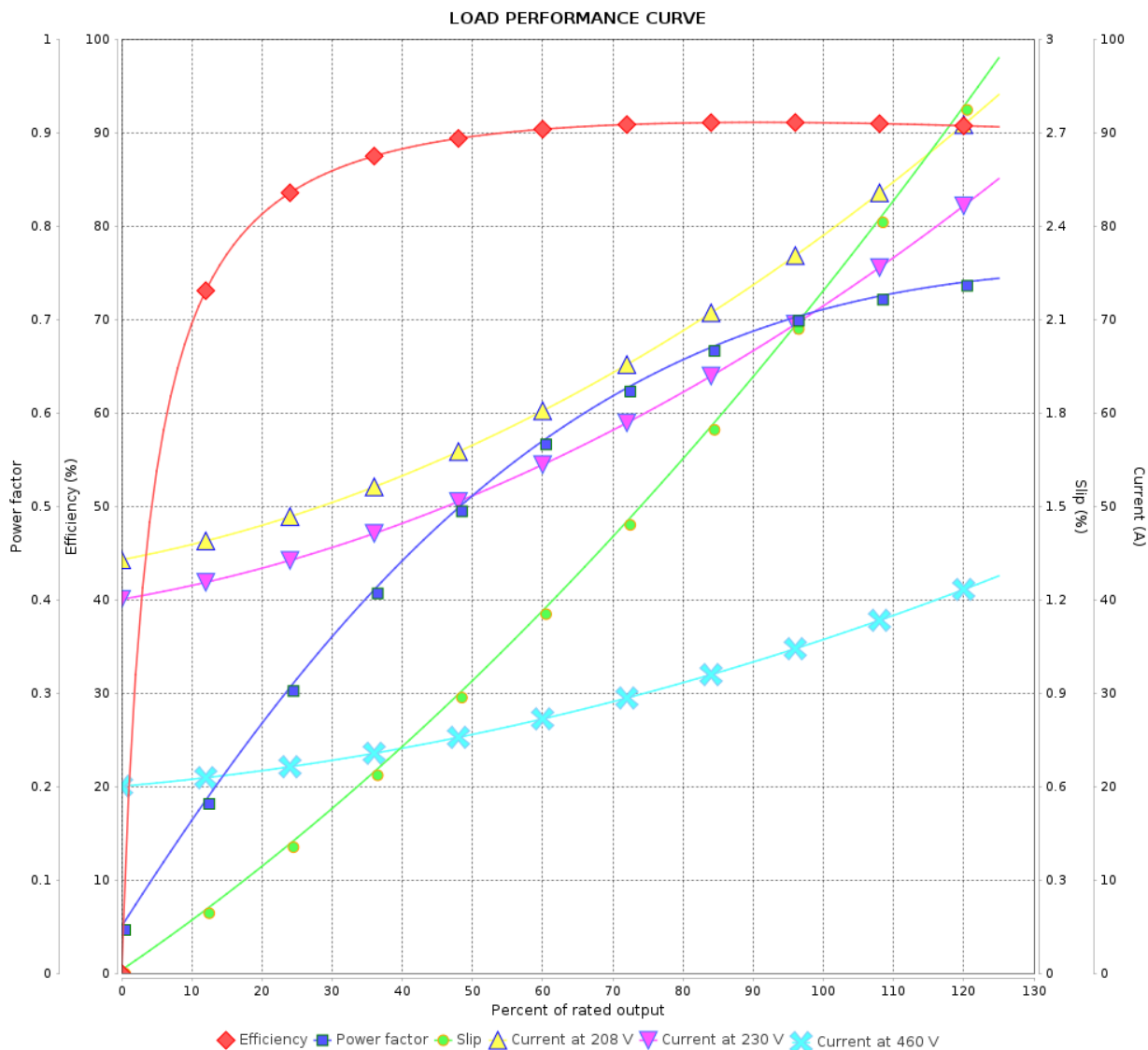
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency
Three-Phase

Product code : 13025627



Performance : 230/460 V 60 Hz 8P

Rated current : 71.8/35.9 A
LRC : 5.2
Rated torque : 20.6 kgfm
Locked rotor torque : 200 %
Breakdown torque : 229 %
Rated speed : 880 rpm

Moment of inertia (J) : 0.5023 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.25
Temperature rise : 80 K
Design : B

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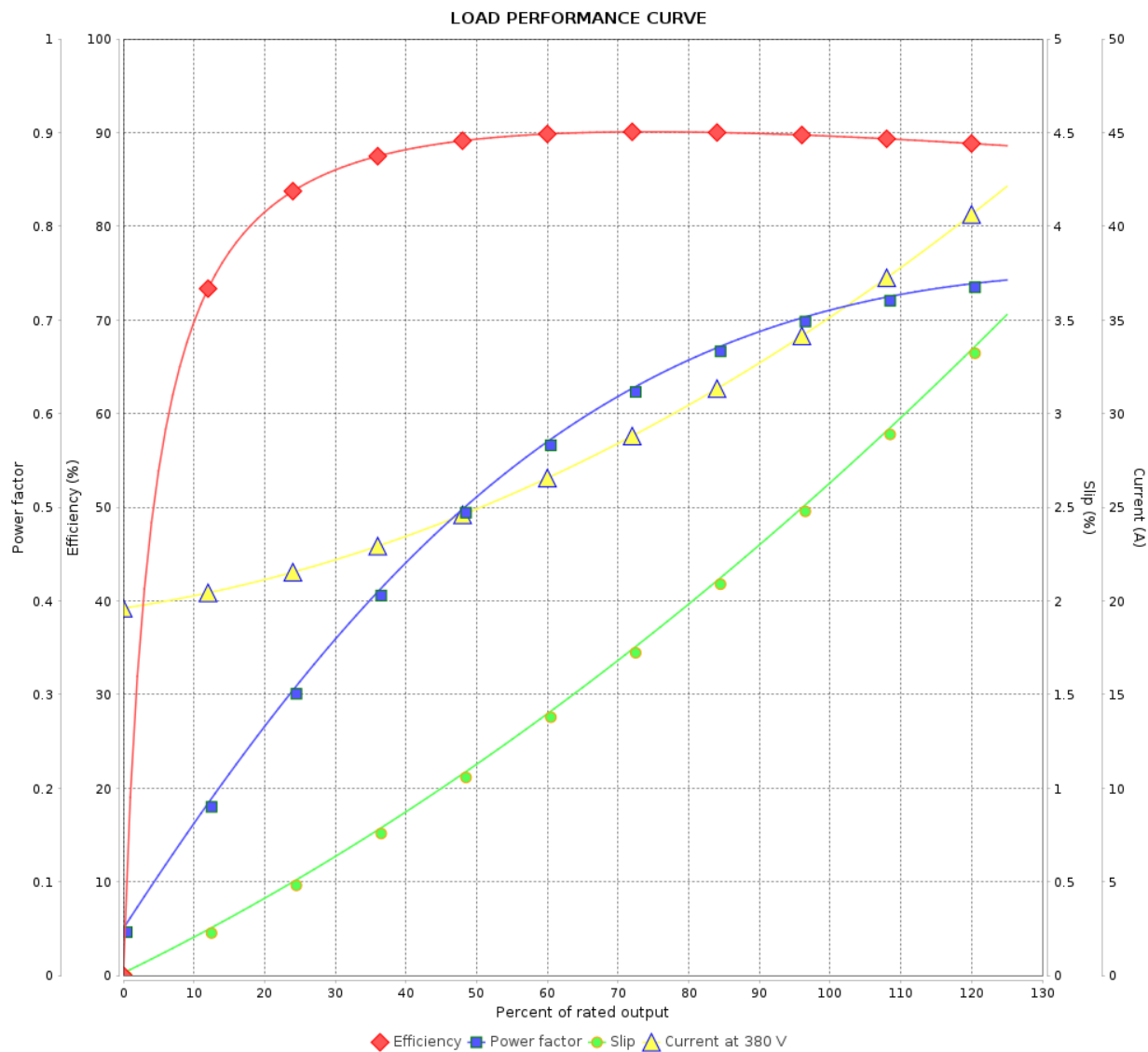
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency
Three-Phase

Product code : 13025627



Performance : 380 V 50 Hz 8P IE3

Rated current : 35.3 A
LRC : 5.0
Rated torque : 19.9 kgfm
Locked rotor torque : 190 %
Breakdown torque : 229 %
Rated speed : 730 rpm

Moment of inertia (J) : 0.5023 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.15
Temperature rise : 80 K
Design : B

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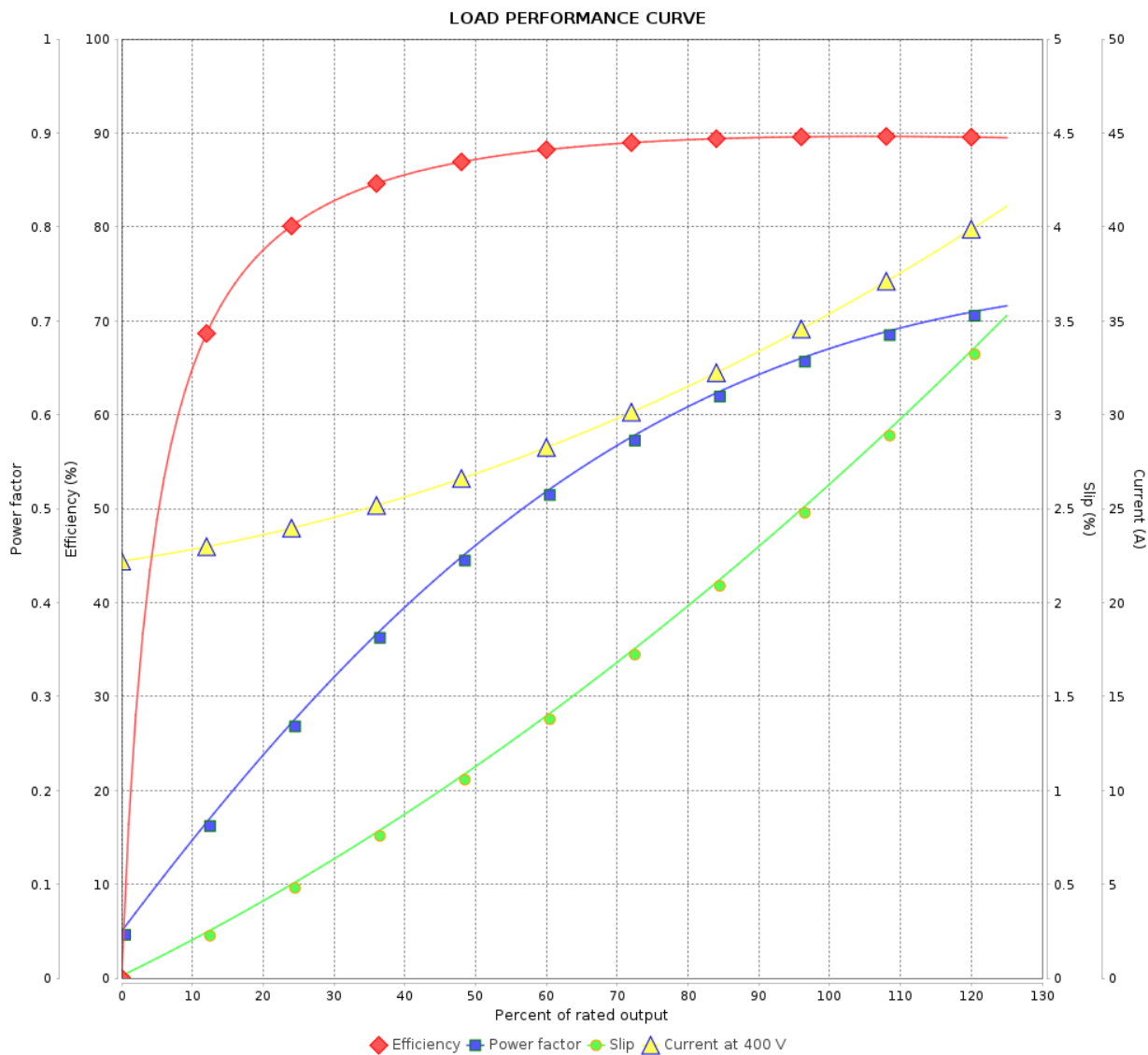
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency
Three-Phase

Product code : 13025627



Performance : 400 V 50 Hz 8P IE3

Rated current : 35.6 A
LRC : 5.4
Rated torque : 19.9 kgfm
Locked rotor torque : 210 %
Breakdown torque : 250 %
Rated speed : 730 rpm

Moment of inertia (J) : 0.5023 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.15
Temperature rise : 80 K
Design : B

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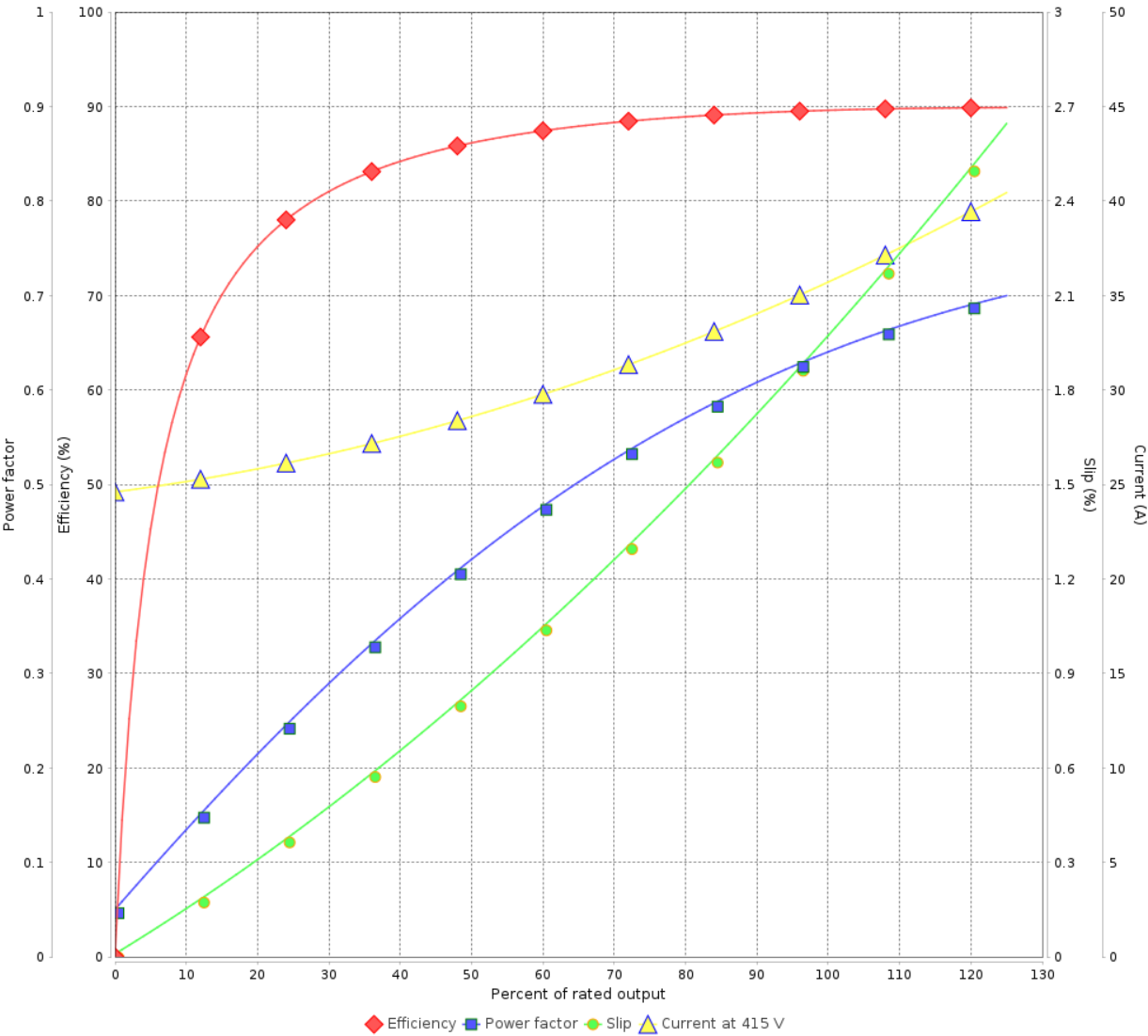
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase Product code : 13025627

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Performance : 415 V 50 Hz 8P IE3			
Rated current	: 36.4 A	Moment of inertia (J)	: 0.5023 kgm²
LRC	: 5.5	Duty cycle	: Cont.(S1)
Rated torque	: 19.7 kgfm	Insulation class	: F
Locked rotor torque	: 240 %	Service factor	: 1.15
Breakdown torque	: 280 %	Temperature rise	: 80 K
Rated speed	: 735 rpm	Design	: B

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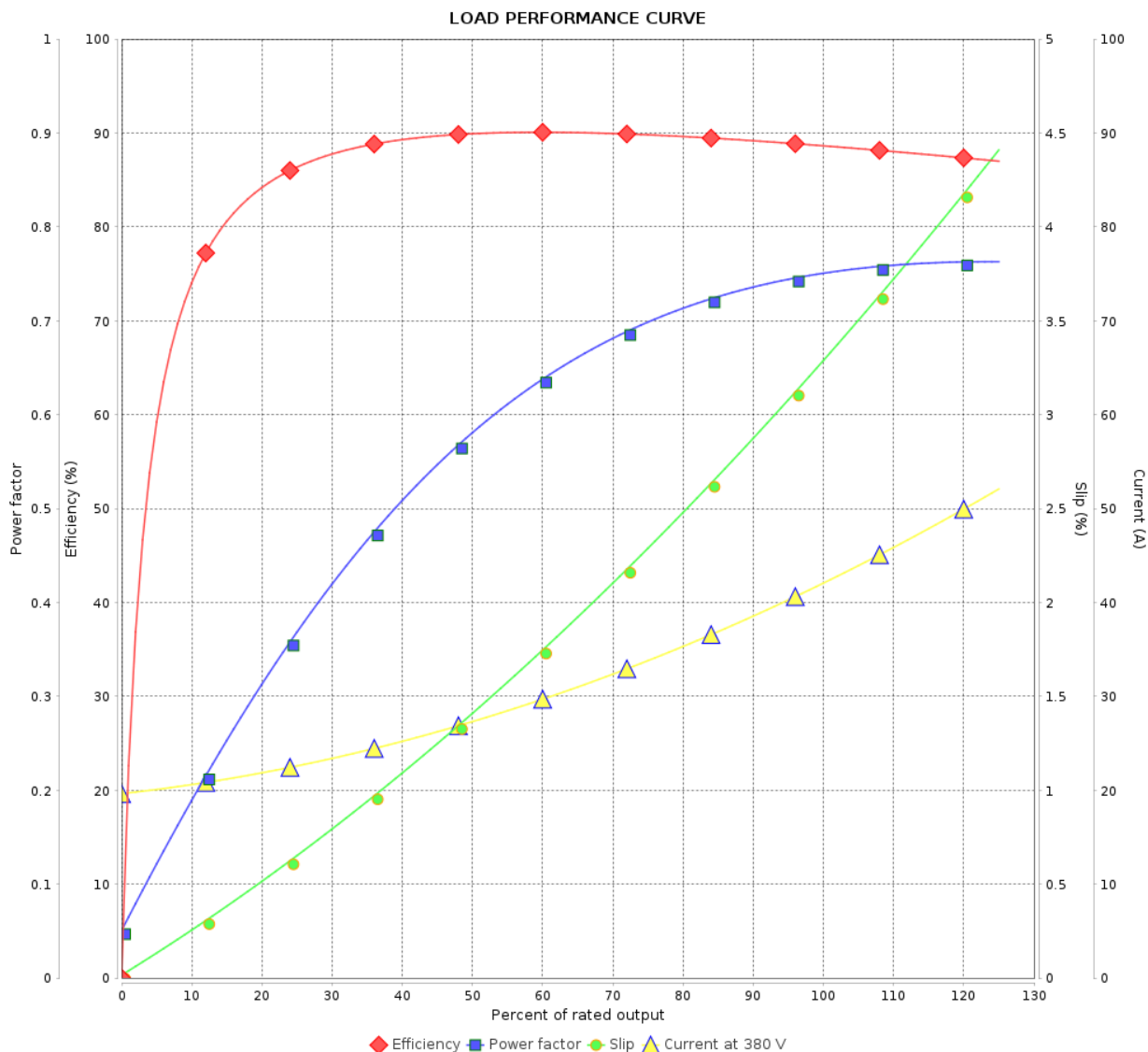
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency
Three-Phase

Product code : 13025627



Performance : 380 V 50 Hz 8P IE1

Rated current : 42.3 A
LRC : 4.2
Rated torque : 25.0 kgfm
Locked rotor torque : 150 %
Breakdown torque : 180 %
Rated speed : 725 rpm

Moment of inertia (J) : 0.5023 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.15
Temperature rise : 105 K
Design : B

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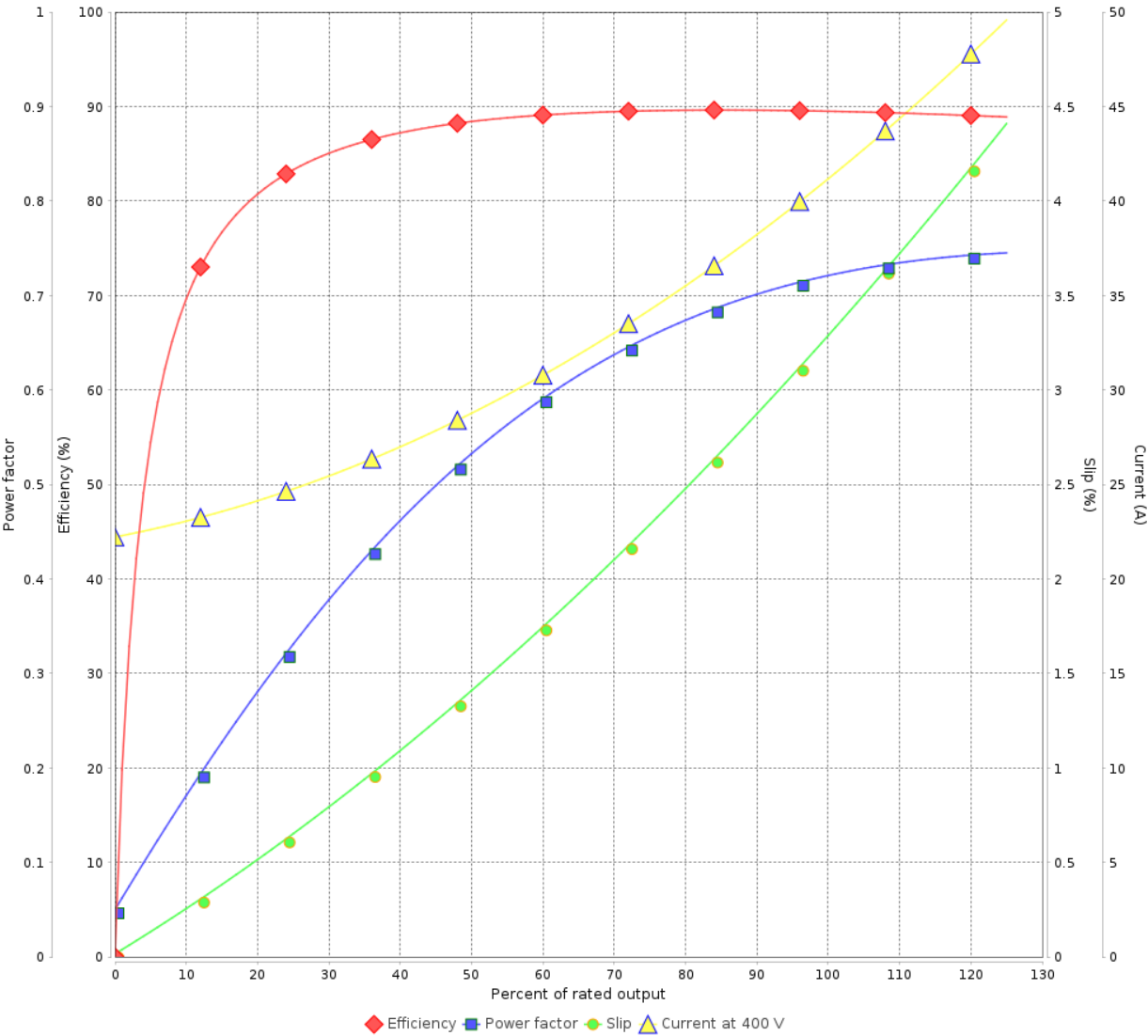
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase Product code : 13025627

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Performance : 400 V 50 Hz 8P IE2

Rated current	: 41.4 A	Moment of inertia (J)	: 0.5023 kgm ²
LRC	: 4.6	Duty cycle	: Cont.(S1)
Rated torque	: 25.0 kgfm	Insulation class	: F
Locked rotor torque	: 170 %	Service factor	: 1.15
Breakdown torque	: 200 %	Temperature rise	: 80 K
Rated speed	: 725 rpm	Design	: B

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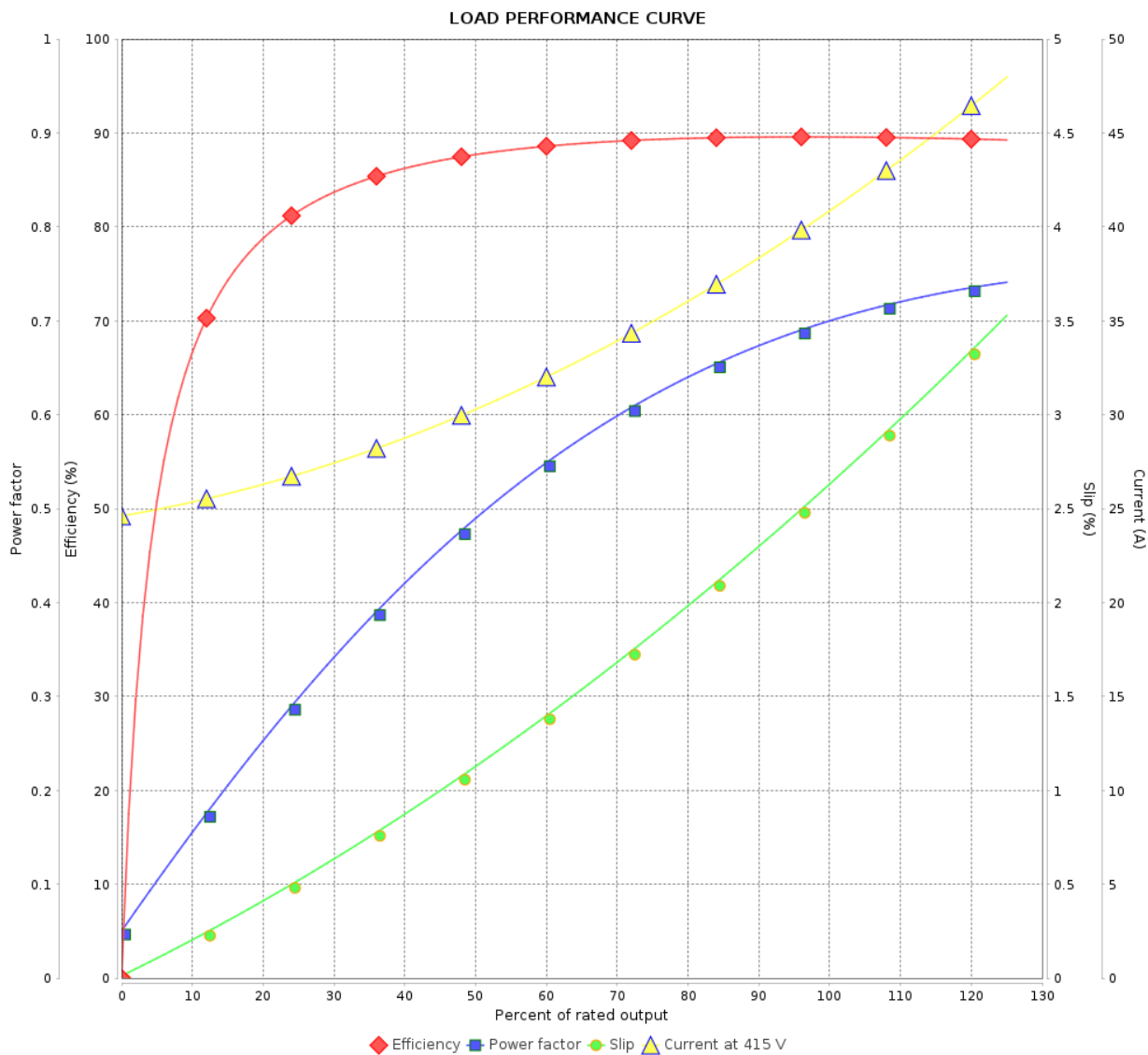
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency
Three-Phase

Product code : 13025627



Performance : 415 V 50 Hz 8P IE2

Rated current : 41.1 A
LRC : 4.8
Rated torque : 24.9 kgfm
Locked rotor torque : 190 %
Breakdown torque : 220 %
Rated speed : 730 rpm

Moment of inertia (J) : 0.5023 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.15
Temperature rise : 80 K
Design : B

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