

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase Product code : 12717787

Frame	: 213/5T	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	: 66.9 kg
Protection degree	: IP55	Moment of inertia (J)	: 0.0197 kgm ²
Design	: B		

Output [HP]	7.5	5.5	5.5	5.5	7.5	7.5	7.5
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]	17.5/8.76	7.83	7.60	7.49	10.6	10.2	9.82
L. R. Amperes [A]	126/63.1	60.3	57.8	62.2	60.4	65.3	67.8
LRC [A]	7.2x(Code H)	7.7x(Code J)	7.6x(Code J)	8.3x(Code K)	5.7x(Code F)	6.4x(Code G)	6.9x(Code H)
No load current [A]	6.00/3.00	2.90	3.15	3.30	2.90	3.15	3.30
Rated speed [RPM]	3530	2940	2950	2955	2900	2915	2925
Slip [%]	1.94	2.00	1.67	1.50	3.33	2.83	2.50
Rated torque [kgfm]	1.54	1.36	1.35	1.35	1.88	1.87	1.86
Locked rotor torque [%]	210	220	250	270	170	180	200
Breakdown torque [%]	300	310	350	370	229	260	280
Service factor	1.25	1.25	1.25	1.25	1.25	1.25	1.25
Temperature rise	80 K	80 K	80 K	80 K	80 K	80 K	80 K
Locked rotor time	36s (cold) 20s (hot)	37s (cold) 21s (hot)	37s (cold) 21s (hot)	37s (cold) 21s (hot)	27s (cold) 15s (hot)	27s (cold) 15s (hot)	27s (cold) 15s (hot)
Noise level ²	68.0 dB(A)	63.0 dB(A)	63.0 dB(A)	63.0 dB(A)	63.0 dB(A)	63.0 dB(A)	63.0 dB(A)
Efficiency (%)	25%						
	50%	87.5	86.7	86.4	86.1	88.5	87.5
	75%	89.5	88.2	88.3	88.5	88.5	88.5
	100%	89.5	88.2	88.3	88.5	87.5	88.5
Power Factor	25%						
	50%	0.75	0.74	0.70	0.67	0.80	0.77
	75%	0.84	0.83	0.81	0.78	0.87	0.86
	100%	0.88	0.88	0.86	0.84	0.90	0.88

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

Losses (%)	P1 (0,9;1,0)	11.3	11.3	11.3	11.3	11.3	11.3	11.3
	P2 (0,5;1,0)	9.1	9.1	9.1	9.1	9.1	9.1	9.1
	P3 (0,25;1,0)	8.4	8.4	8.4	8.4	8.4	8.4	8.4
	P4 (0,9;0,5)	5.9	5.9	5.9	5.9	5.9	5.9	5.9
	P5 (0,5;0,5)	3.6	3.6	3.6	3.6	3.6	3.6	3.6
	P6 (0,5;0,25)	2.4	2.4	2.4	2.4	2.4	2.4	2.4
	P7 (0,25;0,25)	1.5	1.5	1.5	1.5	1.5	1.5	1.5

Bearing type	: 6308 ZZ	Non drive end	6207 ZZ	Foundation loads	
Sealing	: V'Ring		V'Ring	Max. traction	: 63 kgf
Lubrication interval	: -		-	Max. compression	: 130 kgf
Lubricant amount	: -		-		
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



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Notes
USABLE @208V 19.4A SF 1.15 SFA 22.3A

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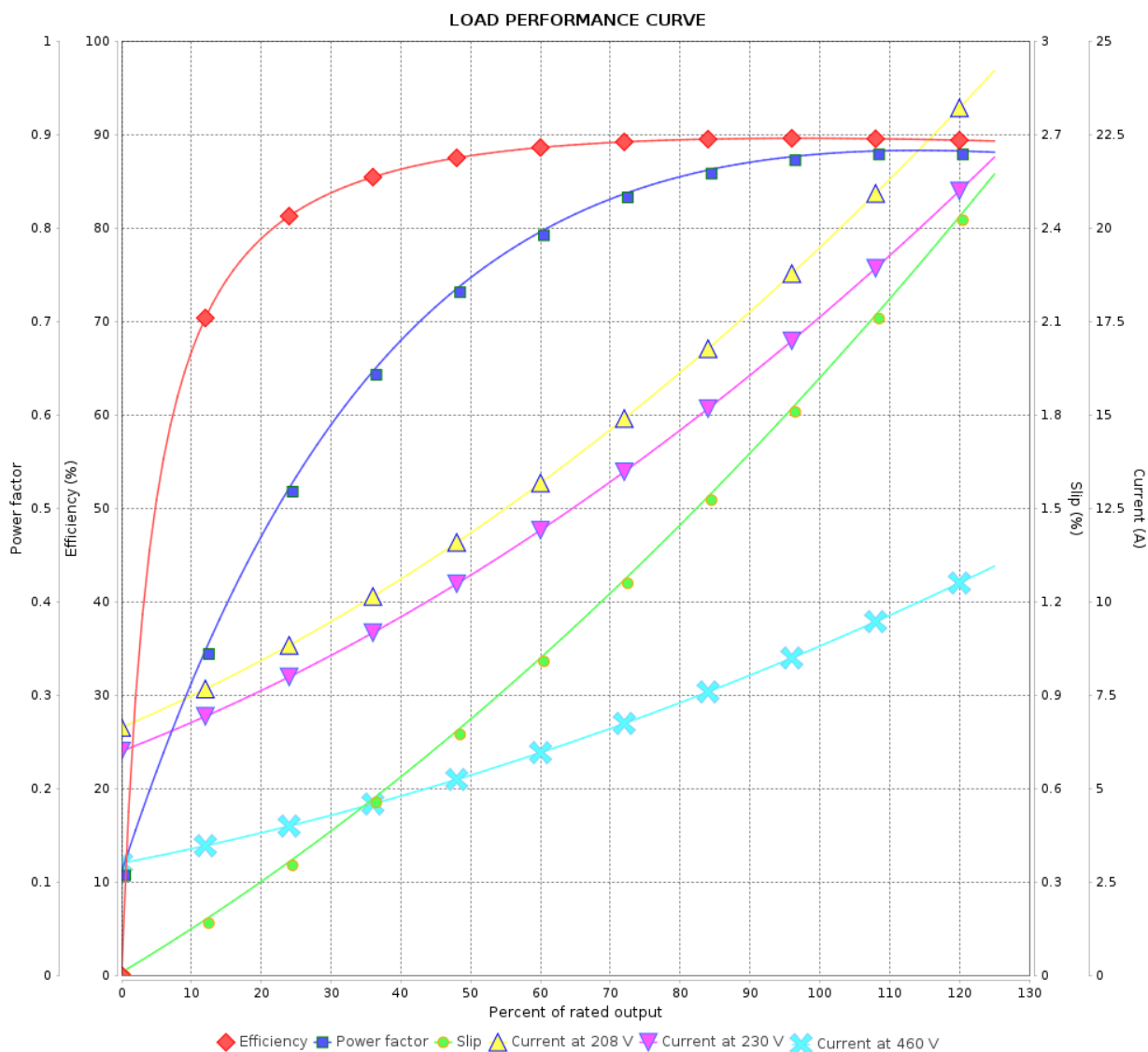
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency
Three-Phase

Product code : 12717787



Performance : 230/460 V 60 Hz 2P

Rated current : 17.5/8.76 A
LRC : 7.2
Rated torque : 1.54 kgfm
Locked rotor torque : 210 %
Breakdown torque : 300 %
Rated speed : 3530 rpm

Moment of inertia (J) : 0.0197 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.25
Temperature rise : 80 K
Design : B

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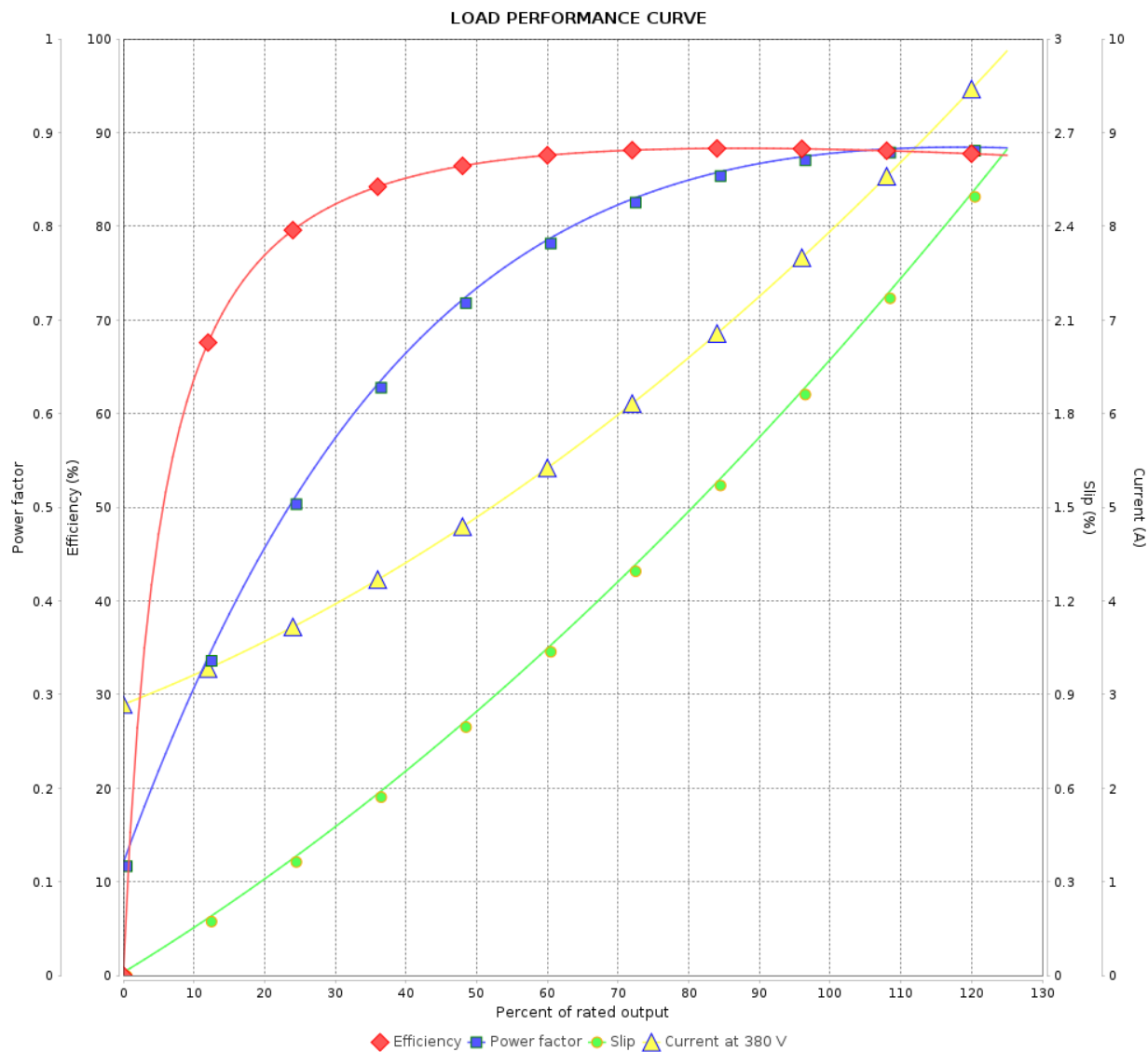
Three Phase Induction Motor - Squirrel Cage



Customer :

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Three-Phase

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Performance : 380 V 50 Hz 2P IE3

Rated current : 7.83 A
LRC : 7.7
Rated torque : 1.36 kgfm
Locked rotor torque : 220 %
Breakdown torque : 310 %
Rated speed : 2940 rpm

Moment of inertia (J) : 0.0197 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.25
Temperature rise : 80 K
Design : B

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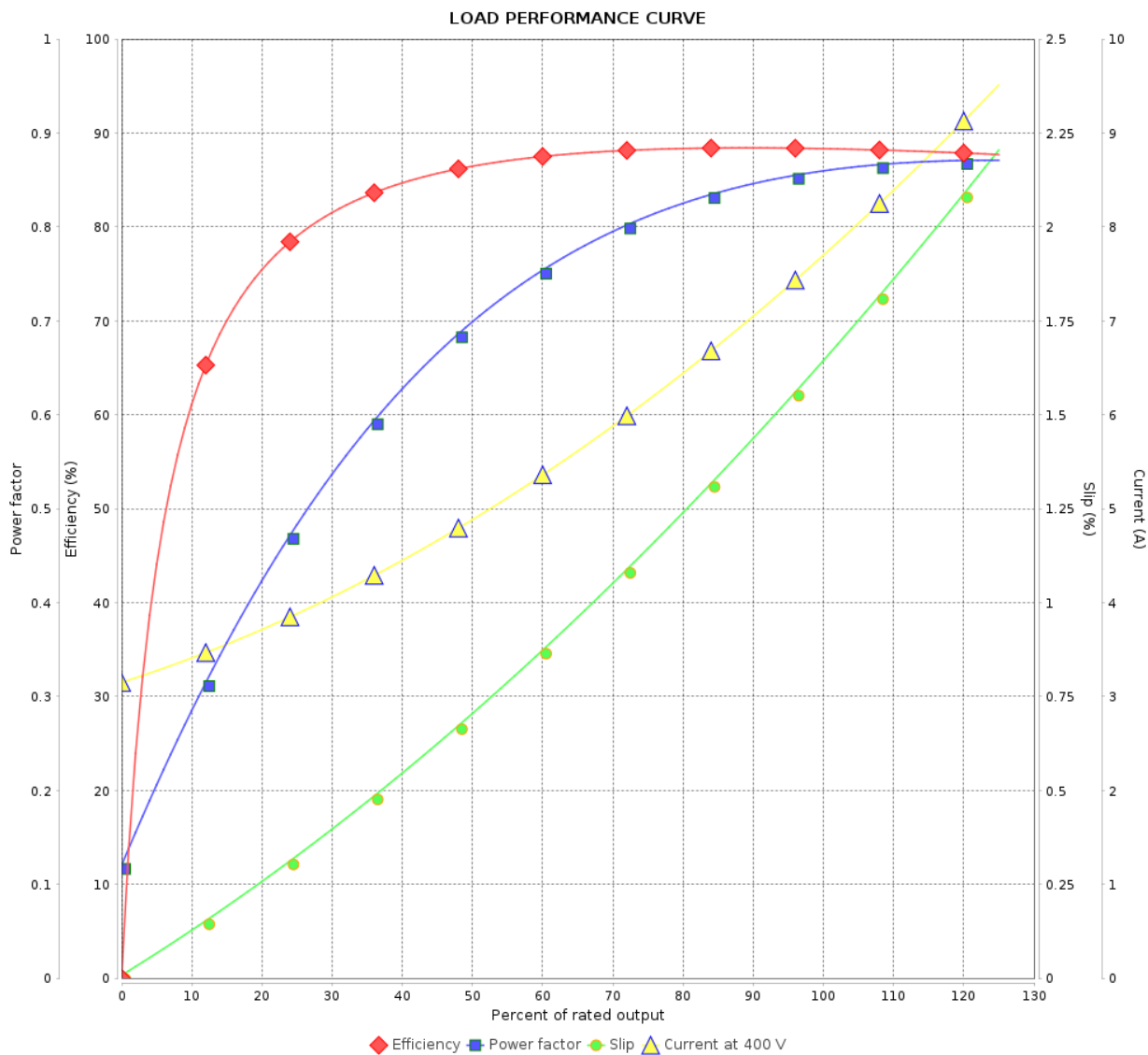
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency
Three-Phase

Product code : 12717787



Performance : 400 V 50 Hz 2P IE3

Rated current : 7.60 A
LRC : 7.6
Rated torque : 1.35 kgfm
Locked rotor torque : 250 %
Breakdown torque : 350 %
Rated speed : 2950 rpm

Moment of inertia (J) : 0.0197 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.25
Temperature rise : 80 K
Design : B

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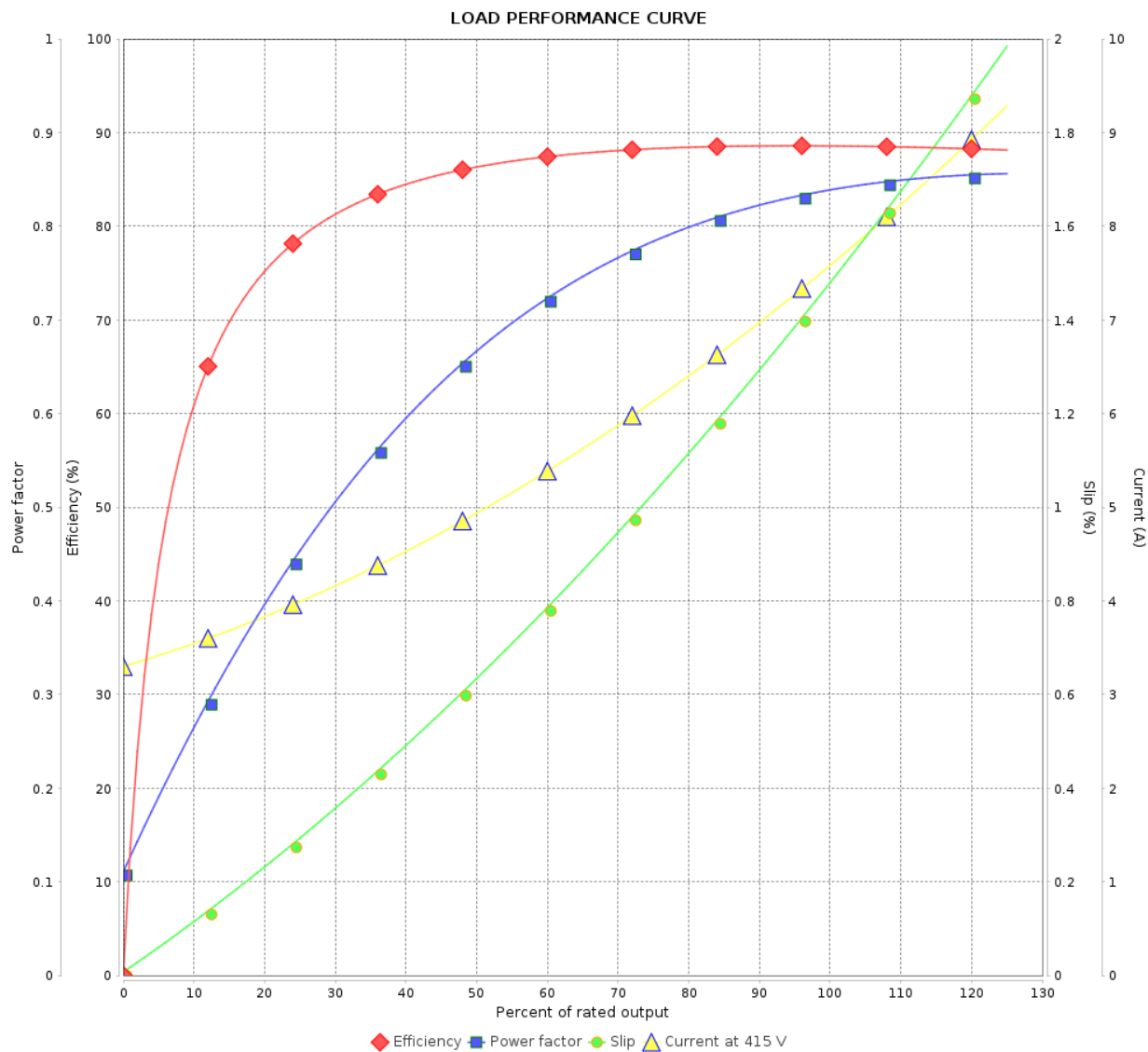
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency
Three-Phase

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Performance : 415 V 50 Hz 2P IE3

Rated current : 7.49 A
LRC : 8.3
Rated torque : 1.35 kgfm
Locked rotor torque : 270 %
Breakdown torque : 370 %
Rated speed : 2955 rpm

Moment of inertia (J) : 0.0197 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.25
Temperature rise : 80 K
Design : B

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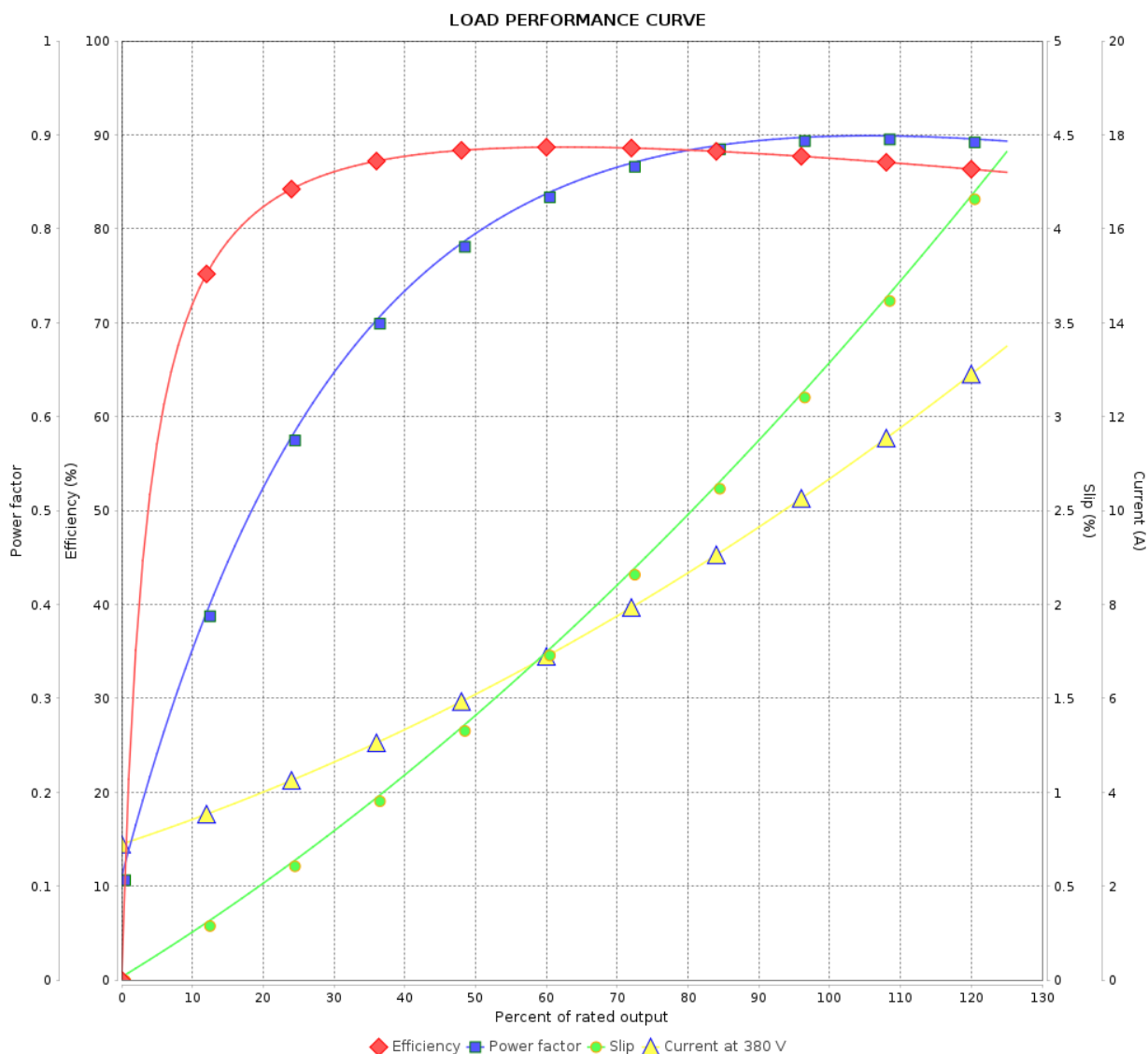
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency
Three-Phase

Product code : 12717787



Performance : 380 V 50 Hz 2P IE2

Rated current : 10.6 A
LRC : 5.7
Rated torque : 1.88 kgfm
Locked rotor torque : 170 %
Breakdown torque : 229 %
Rated speed : 2900 rpm

Moment of inertia (J) : 0.0197 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.25
Temperature rise : 80 K
Design : B

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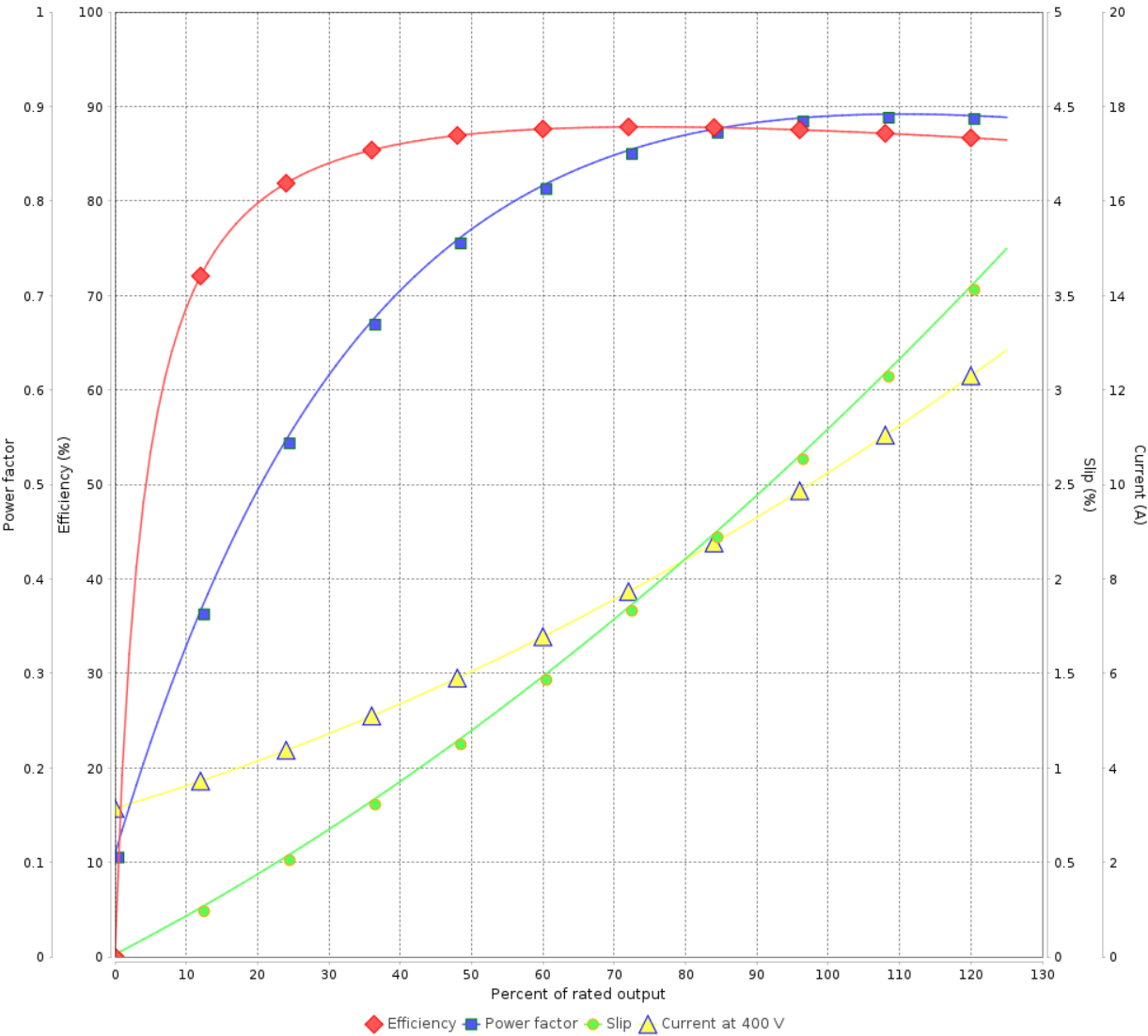
Three Phase Induction Motor - Squirrel Cage



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Product line : W22 NEMA Premium Efficiency Three-Phase Product code : 12717787

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Performance : 400 V 50 Hz 2P IE2

Rated current	: 10.2 A	Moment of inertia (J)	: 0.0197 kgm ²
LRC	: 6.4	Duty cycle	: Cont.(S1)
Rated torque	: 1.87 kgfm	Insulation class	: F
Locked rotor torque	: 180 %	Service factor	: 1.25
Breakdown torque	: 260 %	Temperature rise	: 80 K
Rated speed	: 2915 rpm	Design	: B

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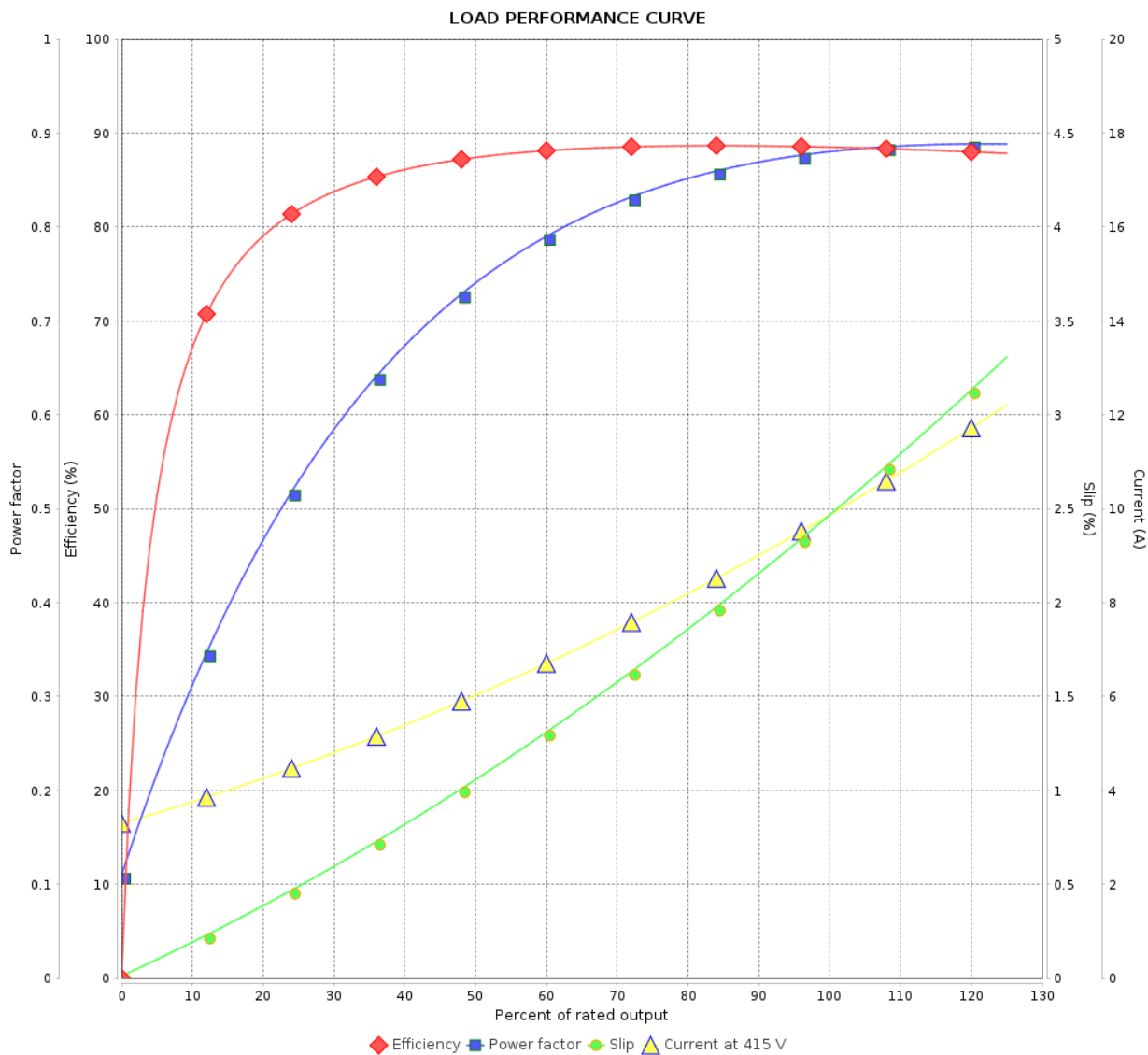
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency
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Performance : 415 V 50 Hz 2P IE2

Rated current : 9.82 A
LRC : 6.9
Rated torque : 1.86 kgfm
Locked rotor torque : 200 %
Breakdown torque : 280 %
Rated speed : 2925 rpm

Moment of inertia (J) : 0.0197 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.25
Temperature rise : 80 K
Design : B

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