

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase Product code : 13201564

Frame	: 447/9T	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	: 1395 kg
Protection degree	: IP55	Moment of inertia (J)	: 6.09 kgm ²
Design	: A		

Output [HP]	300	250	250	250
Poles	6	6	6	6
Frequency [Hz]	60	50	50	50
Rated voltage [V]	460	380	400	415
Rated current [A]	356	362	357	349
L. R. Amperes [A]	2741	2679	2785	2862
LRC [A]	7.7x(Code J)	7.4x(Code H)	7.8x(Code J)	8.2x(Code K)
No load current [A]	170	170	185	200
Rated speed [RPM]	1189	988	990	990
Slip [%]	0.92	1.20	1.00	1.00
Rated torque [kgfm]	183	184	183	183
Locked rotor torque [%]	270	229	260	290
Breakdown torque [%]	300	250	270	290
Service factor	1.15	1.00	1.00	1.00
Temperature rise	80 K	80 K	80 K	80 K
Locked rotor time	18s (cold) 10s (hot)	14s (cold) 8s (hot)	14s (cold) 8s (hot)	14s (cold) 8s (hot)
Noise level ²	70.0 dB(A)			
Efficiency (%)	25%			
	50%	95.4	95.0	94.5
	75%	95.8	95.4	95.4
	100%	95.8	95.8	95.8
Power Factor	25%			
	50%	0.63	0.61	0.59
	75%	0.75	0.75	0.71
	100%	0.81	0.81	0.78

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

Losses (%)	P1 (0,9;1,0)	5.2	5.2	5.2	5.2
	P2 (0,5;1,0)	4.3	4.3	4.3	4.3
	P3 (0,25;1,0)	3.7	3.7	3.7	3.7
	P4 (0,9;0,5)	3.0	3.0	3.0	3.0
	P5 (0,5;0,5)	2.3	2.3	2.3	2.3
	P6 (0,5;0,25)	1.8	1.8	1.8	1.8
	P7 (0,25;0,25)	1.1	1.1	1.1	1.1

	<u>Drive end</u>	<u>Non drive end</u>	Foundation loads	
Bearing type	: 6322 C3	6319 C3	Max. traction	: 3952 kgf
Sealing	: WSeal	WSeal	Max. compression	: 5347 kgf
Lubrication interval	: 11000 h	13000 h		
Lubricant amount	: 60 g	45 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.
- (2) Measured at 1m and with tolerance of +3dB(A).
- (3) Approximate weight subject to changes after manufacturing process.

These are average values based on tests with sinusoidal power supply, subject to the tolerances stipulated in NEMA MG-1.

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Customer :

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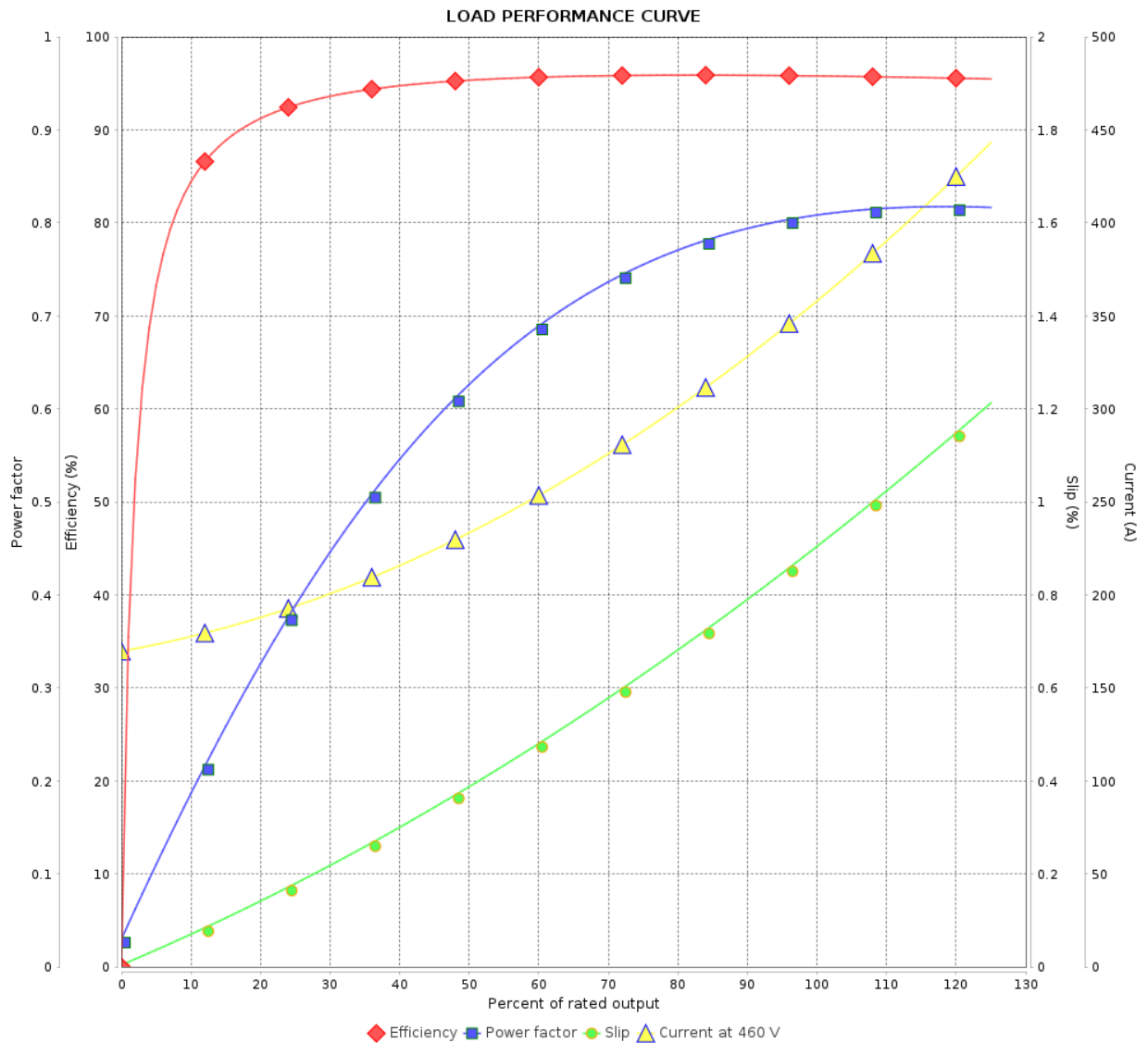
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency
Three-Phase

Product code : 13201564



Performance : 460 V 60 Hz 6P

Rated current	: 356 A	Moment of inertia (J)	: 6.09 kgm ²
LRC	: 7.7	Duty cycle	: Cont.(S1)
Rated torque	: 183 kgfm	Insulation class	: F
Locked rotor torque	: 270 %	Service factor	: 1.15
Breakdown torque	: 300 %	Temperature rise	: 80 K
Rated speed	: 1189 rpm	Design	: A

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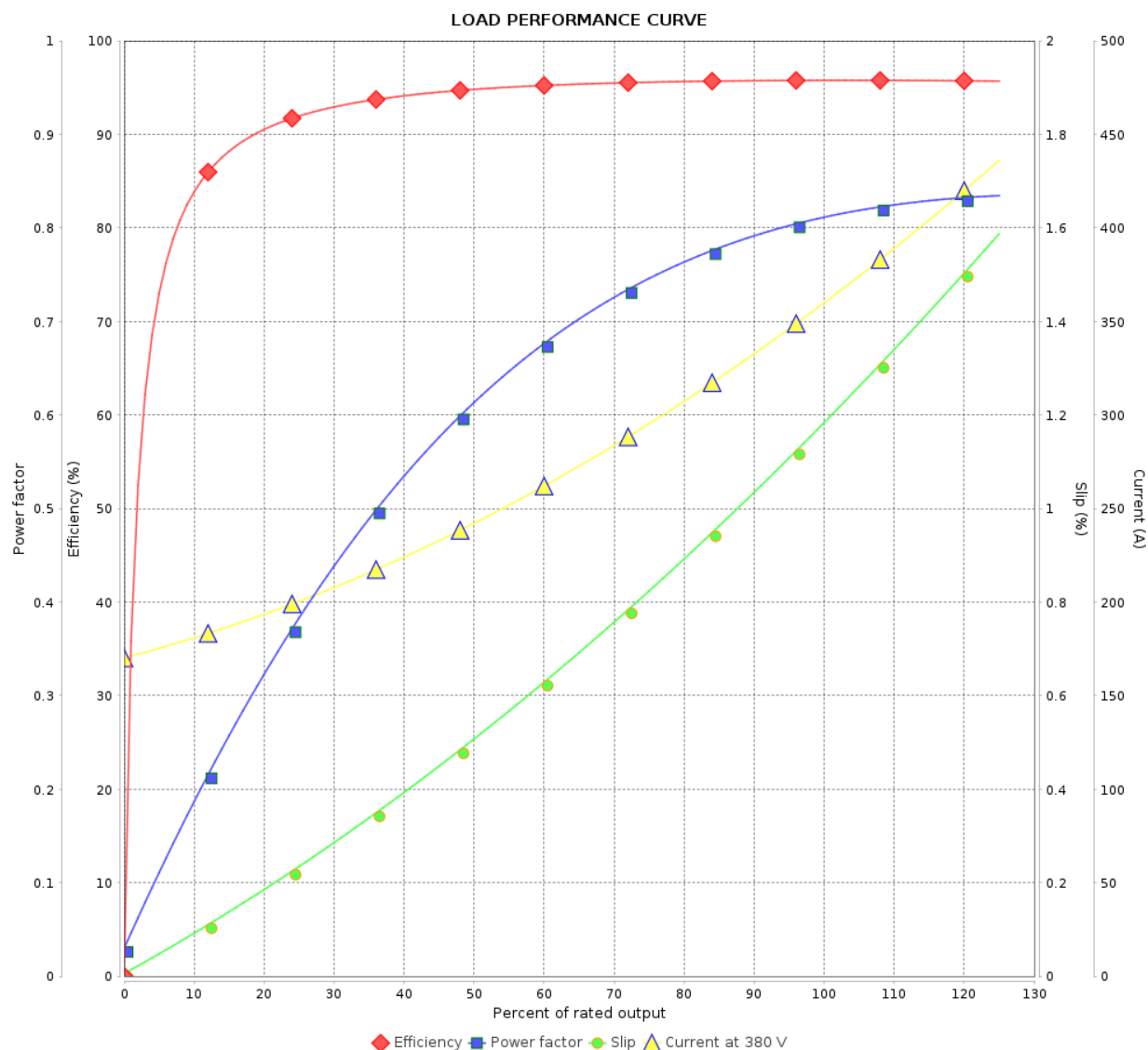
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency
Three-Phase

Product code : 13201564



Performance : 380 V 50 Hz 6P IE3

Rated current : 362 A
LRC : 7.4
Rated torque : 184 kgfm
Locked rotor torque : 229 %
Breakdown torque : 250 %
Rated speed : 988 rpm

Moment of inertia (J) : 6.09 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.00
Temperature rise : 80 K
Design : A

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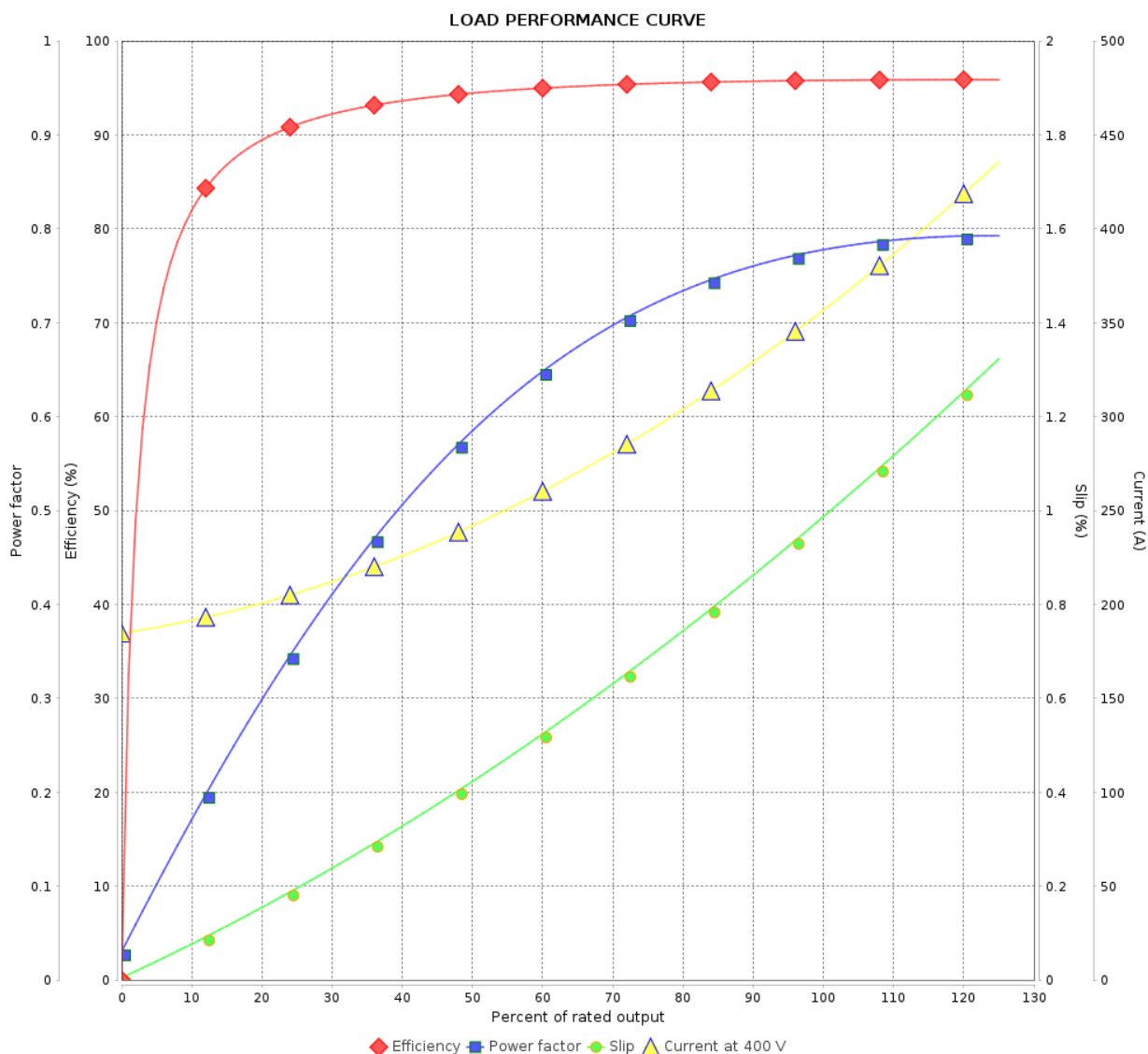
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency
Three-Phase

Product code : 13201564



Performance : 400 V 50 Hz 6P IE3

Rated current : 357 A
LRC : 7.8
Rated torque : 183 kgfm
Locked rotor torque : 260 %
Breakdown torque : 270 %
Rated speed : 990 rpm

Moment of inertia (J) : 6.09 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.00
Temperature rise : 80 K
Design : A

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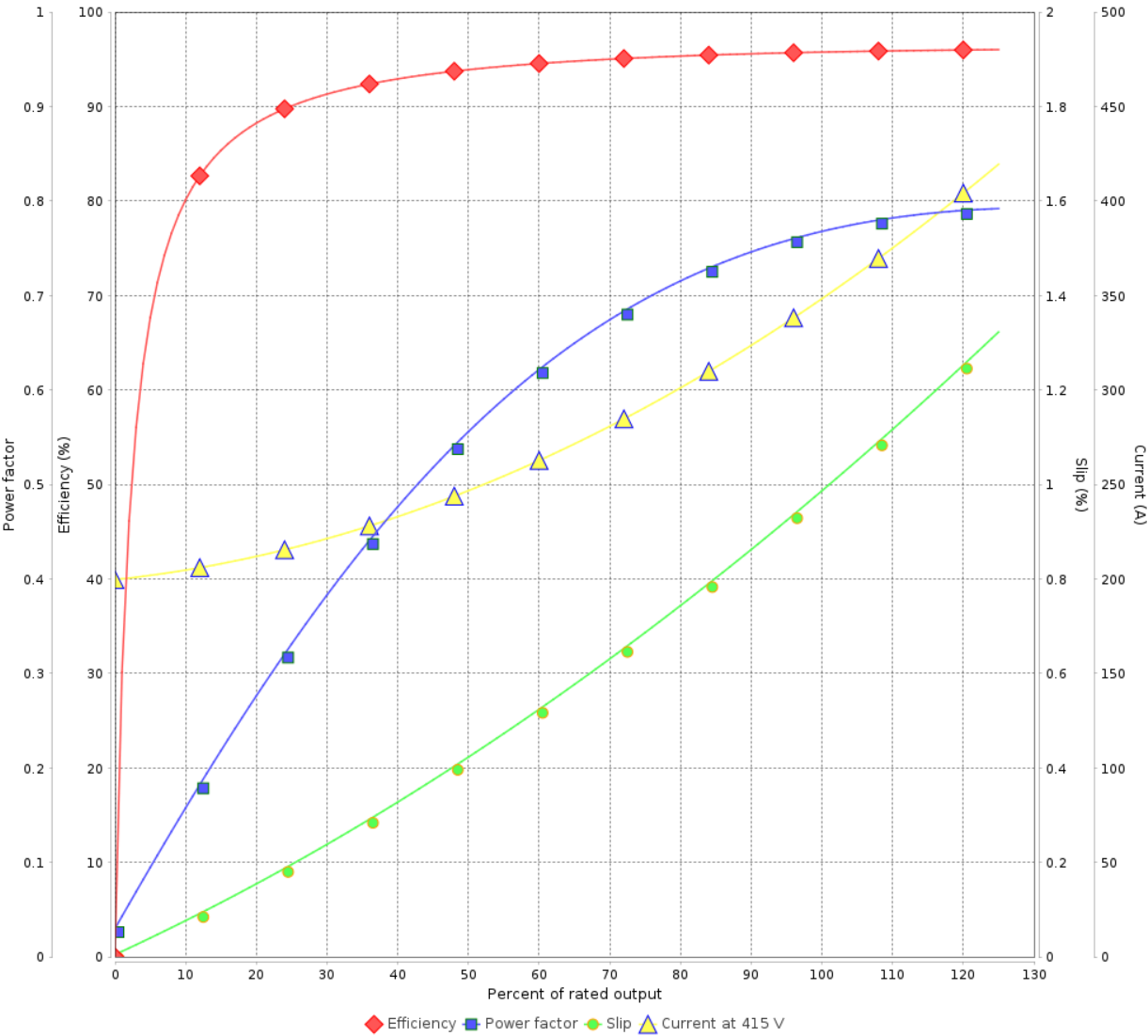
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase Product code : 13201564

LOAD PERFORMANCE CURVE



Performance : 415 V 50 Hz 6P IE3

Rated current	: 349 A	Moment of inertia (J)	: 6.09 kgm ²
LRC	: 8.2	Duty cycle	: Cont.(S1)
Rated torque	: 183 kgfm	Insulation class	: F
Locked rotor torque	: 290 %	Service factor	: 1.00
Breakdown torque	: 290 %	Temperature rise	: 80 K
Rated speed	: 990 rpm	Design	: A

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