

# DATA SHEET



## Three Phase Induction Motor - Squirrel Cage

Customer :					
Product line	: W22 IEEE 841 NEMA Premium Efficiency Three-Phase	Product code :	11432051		
Frame	: 213/5T	Cooling method	: IC411 - TEFC		
Insulation class	: F	Mounting	: F-1		
Duty cycle	: Cont.(S1)	Rotation <sup>1</sup>	: Both (CW and CCW)		
Ambient temperature	: -20°C to +40°C	Starting method	: Direct On Line		
Altitude	: 1000 m.a.s.l.	Approx. weight <sup>3</sup>	: 81.4 kg		
Protection degree	: IP56	Moment of inertia (J)	: 0.0620 kgm <sup>2</sup>		
Design	: B				
Output [HP]	5	5	5	5	
Poles	6	6	6	6	
Frequency [Hz]	60	50	50	50	
Rated voltage [V]	460	380	400	415	
Rated current [A]	6.83	8.20	7.82	7.65	
L. R. Amperes [A]	46.4	45.1	47.7	49.7	
LRC [A]	6.8x(Code J)	5.5x(Code G)	6.1x(Code H)	6.5x(Code J)	
No load current [A]	3.45	3.41	3.68	3.90	
Rated speed [RPM]	1170	960	965	970	
Slip [%]	2.50	4.00	3.50	3.00	
Rated torque [kgfm]	3.10	3.78	3.76	3.74	
Locked rotor torque [%]	170	150	160	190	
Breakdown torque [%]	260	215	220	250	
Service factor	1.25	1.00	1.00	1.00	
Temperature rise	80 K	80 K	80 K	80 K	
Locked rotor time	102s (cold) 57s (hot)	54s (cold) 30s (hot)	54s (cold) 30s (hot)	54s (cold) 30s (hot)	
Noise level <sup>2</sup>	55.0 dB(A)	53.0 dB(A)	53.0 dB(A)	53.0 dB(A)	
Efficiency (%)	25%				
	50%	88.5	88.5	88.5	
	75%	89.5	88.5	88.5	
	100%	89.5	86.8	87.5	
Power Factor	25%				
	50%	0.58	0.65	0.61	
	75%	0.70	0.75	0.73	
	100%	0.76	0.79	0.78	
Losses at normative operating points (speed;torque), in percentage of rated output power					
Losses (%)	P1 (0,9;1,0)	11.1	14.4	13.5	12.3
	P2 (0,5;1,0)	9.1	11.8	11.1	10.1
	P3 (0,25;1,0)	8.8	11.4	10.8	9.8
	P4 (0,9;0,5)	5.8	7.5	7.1	6.4
	P5 (0,5;0,5)	4.0	5.2	4.9	4.5
	P6 (0,5;0,25)	2.9	3.7	3.5	3.2
	P7 (0,25;0,25)	2.1	2.7	2.6	2.3
Bearing type	: Drive end : 6308 C3 Non drive end : 6207 C3	Foundation loads			
Sealing	: Inpro/Seal Inpro/Seal	Max. traction	: 132 kgf		
Lubrication interval	: 20000 h 20000 h	Max. compression	: 213 kgf		
Lubricant amount	: 11 g 7 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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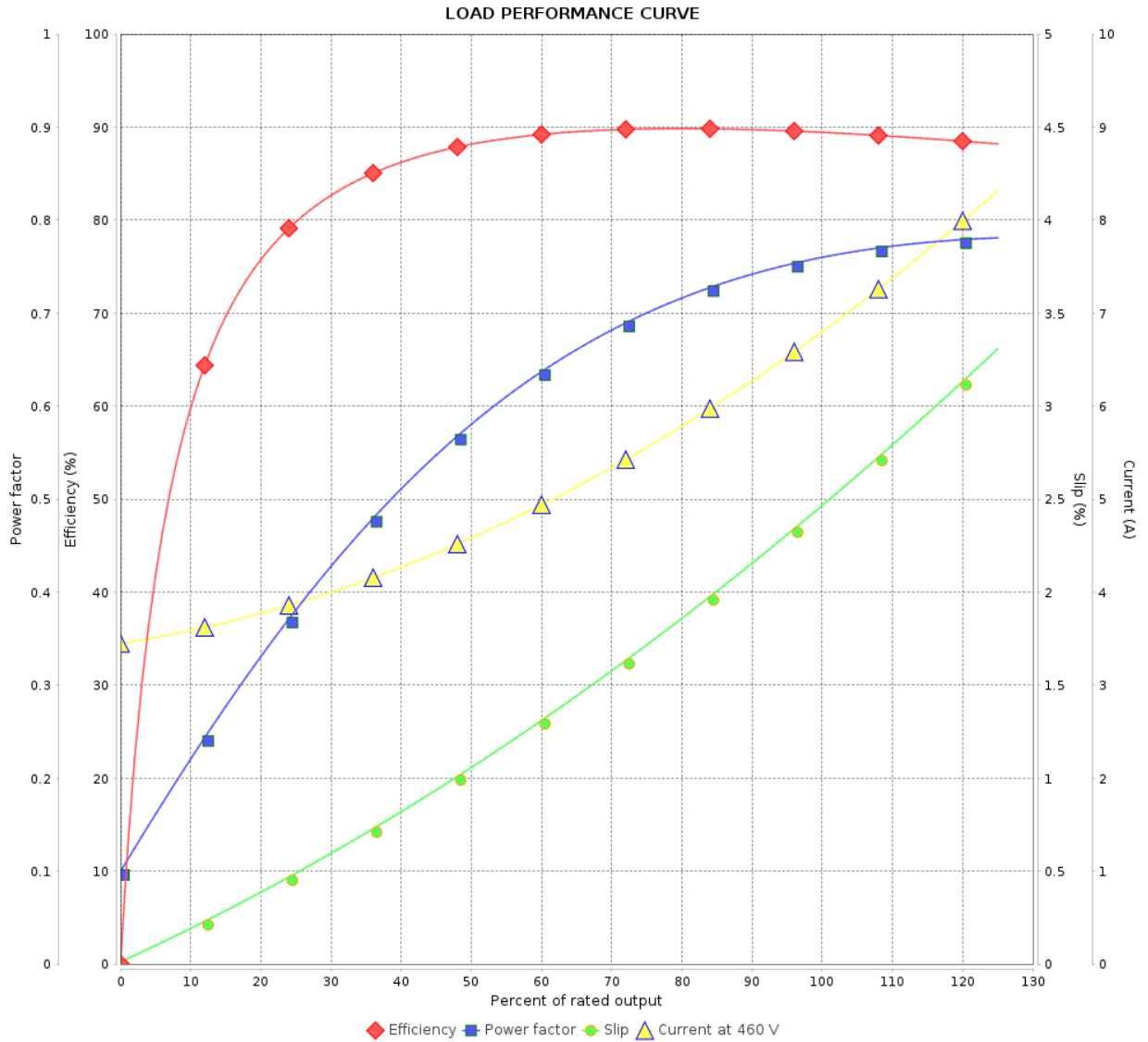
## Three Phase Induction Motor - Squirrel Cage



Customer : \_\_\_\_\_

Product line : W22 IEEE 841 NEMA Premium Efficiency Three-Phase

Product code : 11432051



Performance : 460 V 60 Hz 6P

Rated current : 6.83 A  
 LRC : 6.8  
 Rated torque : 3.10 kgfm  
 Locked rotor torque : 170 %  
 Breakdown torque : 260 %  
 Rated speed : 1170 rpm

Moment of inertia (J) : 0.0620 kgm<sup>2</sup>  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.25  
 Temperature rise : 80 K  
 Design : B

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# LOAD PERFORMANCE CURVE

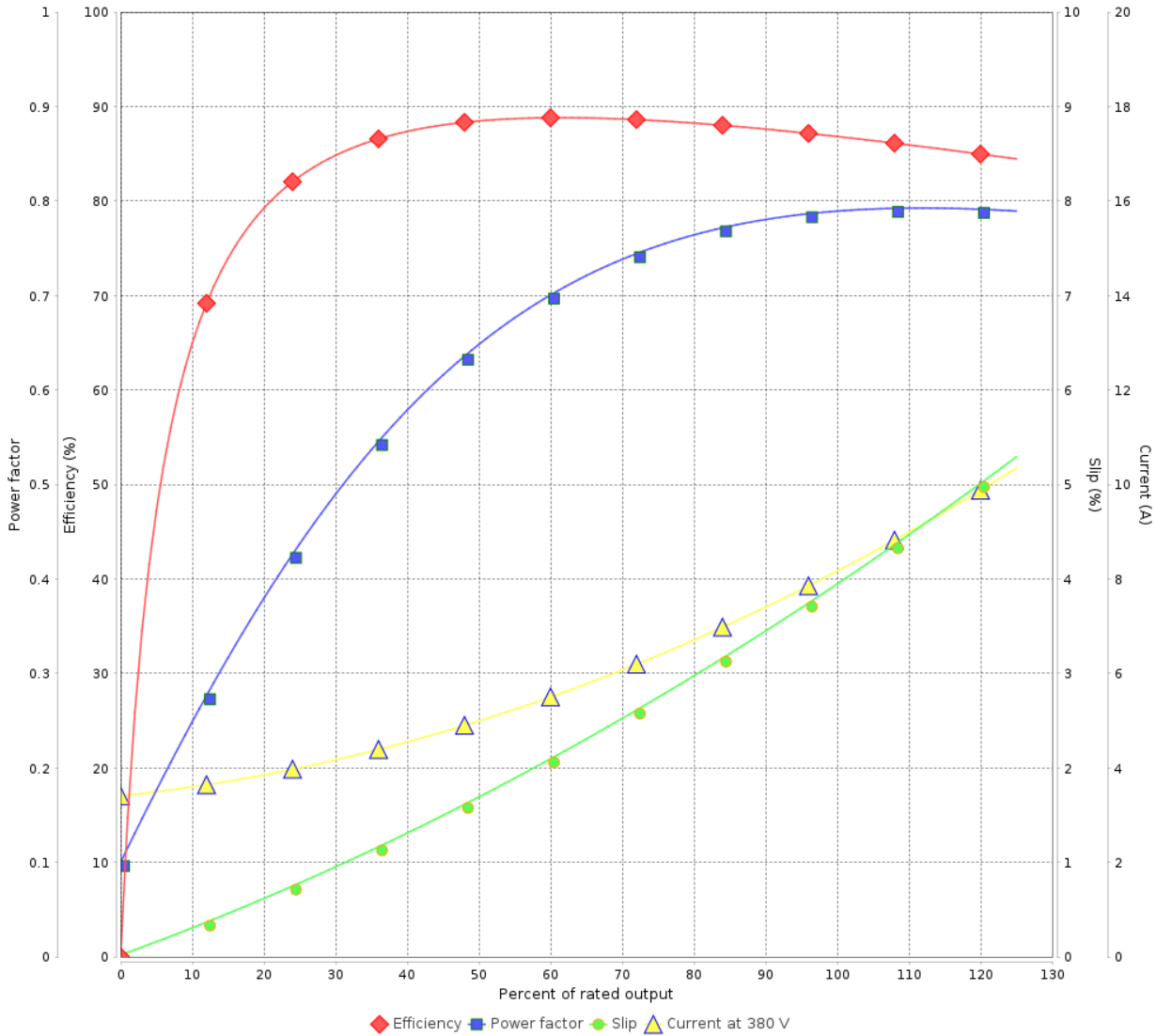
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 IEEE 841 NEMA Premium Efficiency Three-Phase      Product code : 11432051

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Performance : 380 V 50 Hz 6P IE3

Rated current	: 8.20 A	Moment of inertia (J)	: 0.0620 kgm <sup>2</sup>
LRC	: 5.5	Duty cycle	: Cont.(S1)
Rated torque	: 3.78 kgfm	Insulation class	: F
Locked rotor torque	: 150 %	Service factor	: 1.00
Breakdown torque	: 215 %	Temperature rise	: 80 K
Rated speed	: 960 rpm	Design	: B

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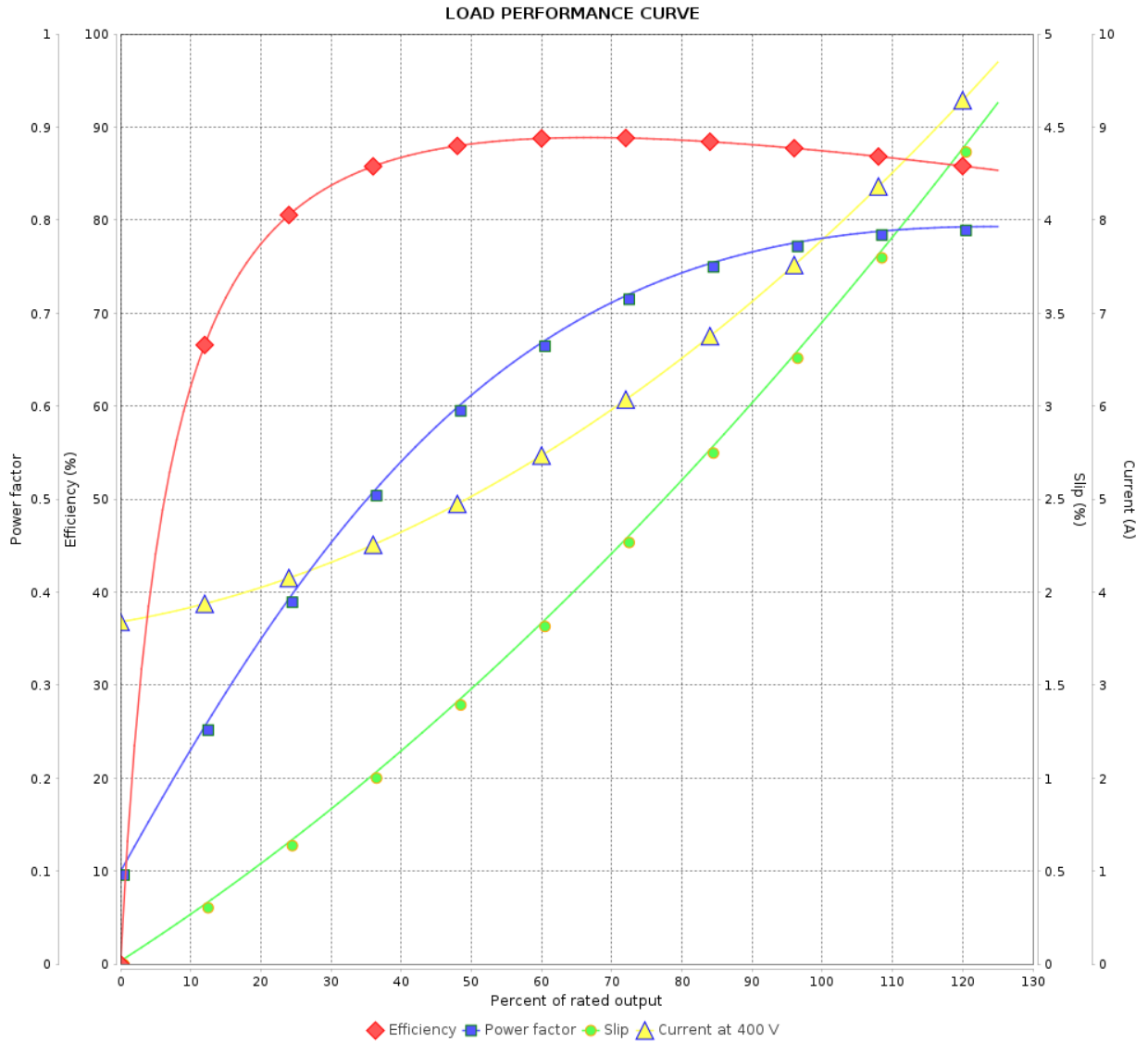
## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 IEEE 841 NEMA Premium Efficiency Three-Phase

Product code : 11432051



Performance : 400 V 50 Hz 6P IE3

Rated current : 7.82 A  
 LRC : 6.1  
 Rated torque : 3.76 kgfm  
 Locked rotor torque : 160 %  
 Breakdown torque : 220 %  
 Rated speed : 965 rpm

Moment of inertia (J) : 0.0620 kgm<sup>2</sup>  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.00  
 Temperature rise : 80 K  
 Design : B

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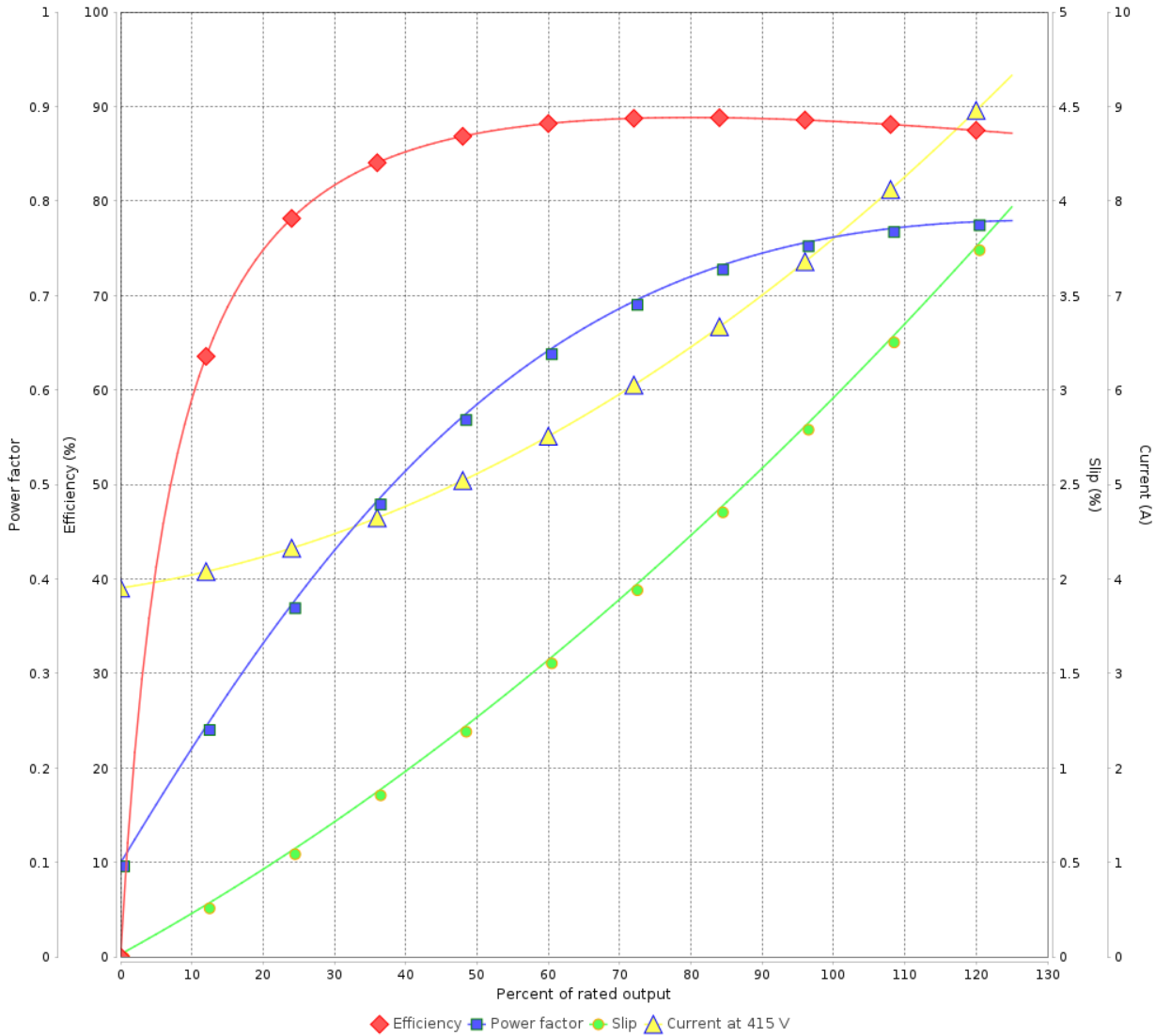
Three Phase Induction Motor - Squirrel Cage



Customer : \_\_\_\_\_

Product line : W22 IEEE 841 NEMA Premium Efficiency Three-Phase      Product code : 11432051

LOAD PERFORMANCE CURVE



Performance : 415 V 50 Hz 6P IE3

Rated current : 7.65 A	Moment of inertia (J) : 0.0620 kgm <sup>2</sup>
LRC : 6.5	Duty cycle : Cont.(S1)
Rated torque : 3.74 kgfm	Insulation class : F
Locked rotor torque : 190 %	Service factor : 1.00
Breakdown torque : 250 %	Temperature rise : 80 K
Rated speed : 970 rpm	Design : B

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