

# DATA SHEET



## Three Phase Induction Motor - Squirrel Cage

Customer :					
Product line : W22 NEMA Premium Efficiency Three-Phase		Product code : 12717287			
Frame : 284/6TC Insulation class : F Duty cycle : Cont.(S1) Ambient temperature : -20°C to +40°C Altitude : 1000 m.a.s.l. Protection degree : IP55 Design : B		Cooling method : IC411 - TEFC Mounting : F-1 Rotation <sup>1</sup> : Both (CW and CCW) Starting method : Direct On Line Approx. weight <sup>3</sup> : 169 kg Moment of inertia (J) : 0.3034 kgm <sup>2</sup>			
Output [HP]	10	10	10	10	
Poles	8	8	8	8	
Frequency [Hz]	60	50	50	50	
Rated voltage [V]	230/460	380	400	415	
Rated current [A]	26.8/13.4	16.1	15.3	15.1	
L. R. Amperes [A]	150/75.0	70.8	75.0	78.5	
LRC [A]	5.6x(Code G)	4.4x(Code E)	4.9x(Code F)	5.2x(Code G)	
No load current [A]	13.0/6.50	6.40	6.90	7.35	
Rated speed [RPM]	880	725	725	730	
Slip [%]	2.22	3.33	3.33	2.67	
Rated torque [kgfm]	8.25	10.0	10.0	9.94	
Locked rotor torque [%]	200	150	170	190	
Breakdown torque [%]	240	190	210	229	
Service factor	1.25	1.00	1.15	1.15	
Temperature rise	80 K	105 K	105 K	105 K	
Locked rotor time	57s (cold) 32s (hot)	45s (cold) 25s (hot)	45s (cold) 25s (hot)	45s (cold) 25s (hot)	
Noise level <sup>2</sup>	54.0 dB(A)	52.0 dB(A)	52.0 dB(A)	52.0 dB(A)	
Efficiency (%)	25%				
	50%	89.5	89.5	88.5	
	75%	90.2	88.5	88.5	
	100%	90.2	87.5	88.5	
Power Factor	25%				
	50%	0.61	0.68	0.64	
	75%	0.72	0.77	0.74	
	100%	0.78	0.81	0.80	
Losses at normative operating points (speed;torque), in percentage of rated output power					
Losses (%)	P1 (0,9;1,0)	10.3	10.3	10.3	10.3
	P2 (0,5;1,0)	8.5	8.5	8.5	8.5
	P3 (0,25;1,0)	8.4	8.4	8.4	8.4
	P4 (0,9;0,5)	5.4	5.4	5.4	5.4
	P5 (0,5;0,5)	3.7	3.7	3.7	3.7
	P6 (0,5;0,25)	2.6	2.6	2.6	2.6
	P7 (0,25;0,25)	1.8	1.8	1.8	1.8
Bearing type : <u>Drive end</u> 6311 C3 <u>Non drive end</u> 6211 C3 Sealing : V'Ring V'Ring Lubrication interval : 20000 h 20000 h Lubricant amount : 18 g 11 g Lubricant type : Mobil Polyrex EM		Foundation loads Max. traction : 243 kgf Max. compression : 411 kgf			
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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## Three Phase Induction Motor - Squirrel Cage



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

Notes  
USABLE @208V 29.6A SF 1.15 SFA 34.1A

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# LOAD PERFORMANCE CURVE

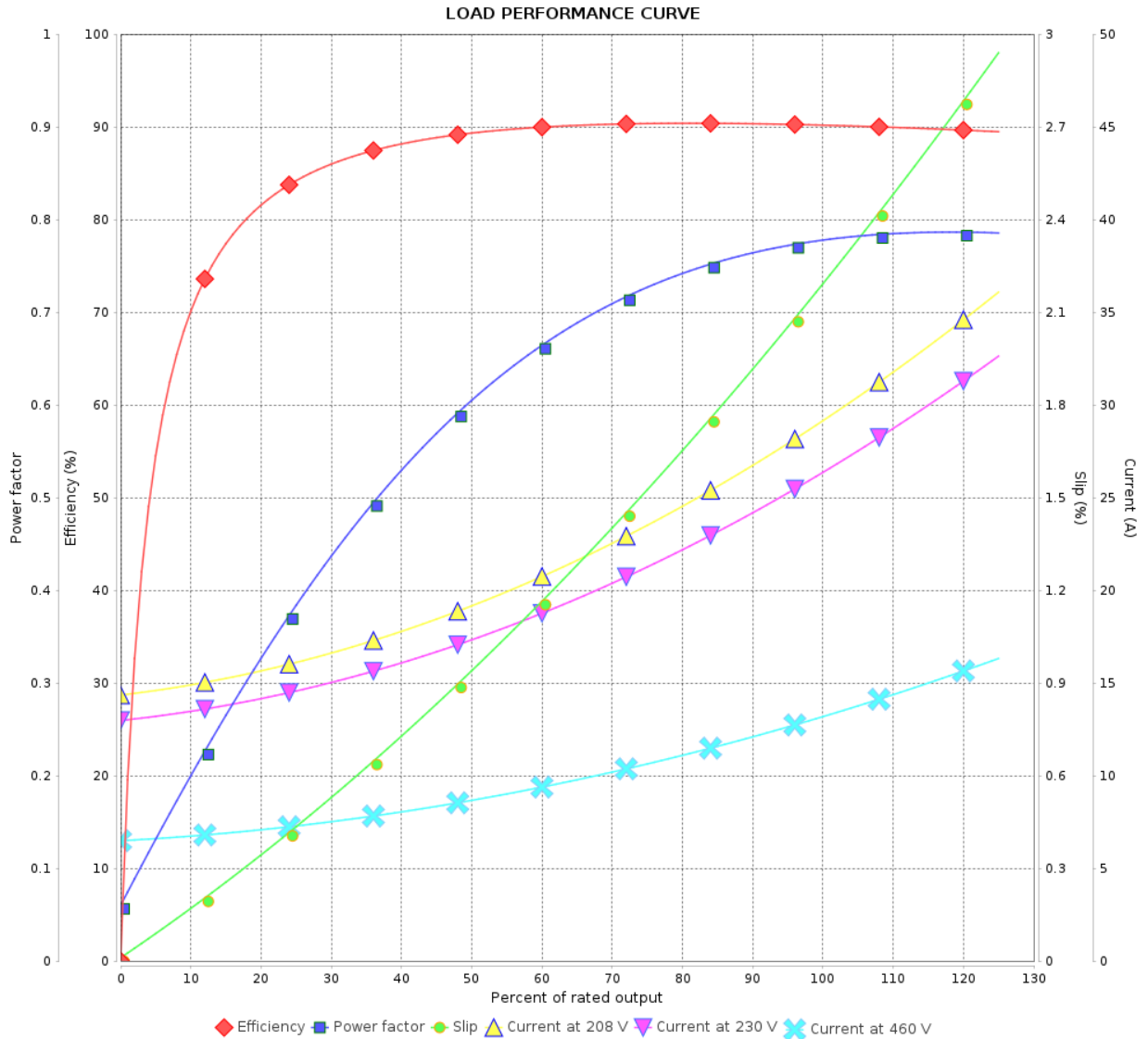
## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 12717287



Performance : 230/460 V 60 Hz 8P

Rated current : 26.8/13.4 A  
 LRC : 5.6  
 Rated torque : 8.25 kgfm  
 Locked rotor torque : 200 %  
 Breakdown torque : 240 %  
 Rated speed : 880 rpm

Moment of inertia (J) : 0.3034 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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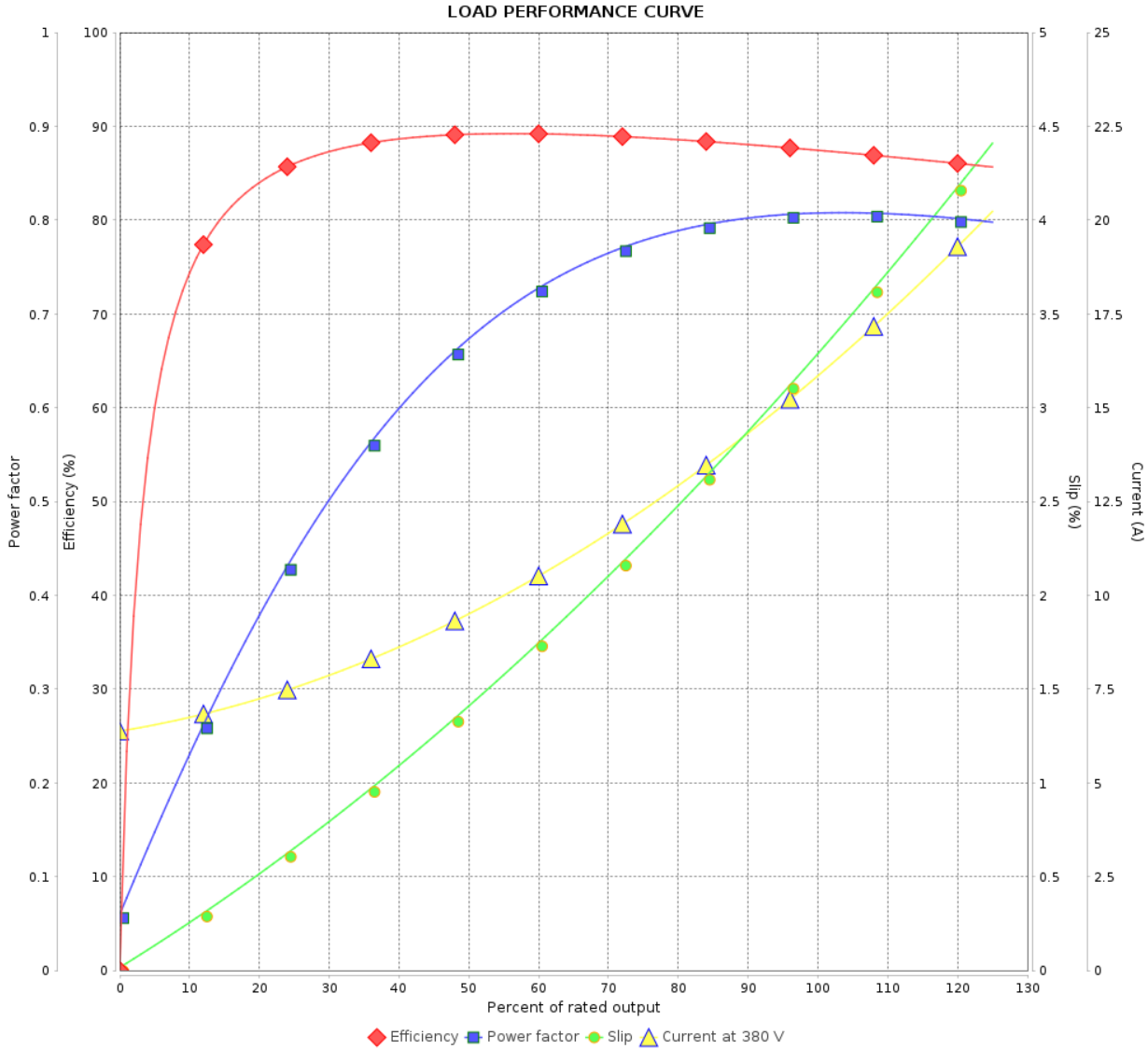
Three Phase Induction Motor - Squirrel Cage



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

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 12717287



Performance : 380 V 50 Hz 8P IE3

Rated current : 16.1 A  
 LRC : 4.4  
 Rated torque : 10.0 kgfm  
 Locked rotor torque : 150 %  
 Breakdown torque : 190 %  
 Rated speed : 725 rpm

Moment of inertia (J) : 0.3034 kgm<sup>2</sup>  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.00  
 Temperature rise : 105 K  
 Design : B

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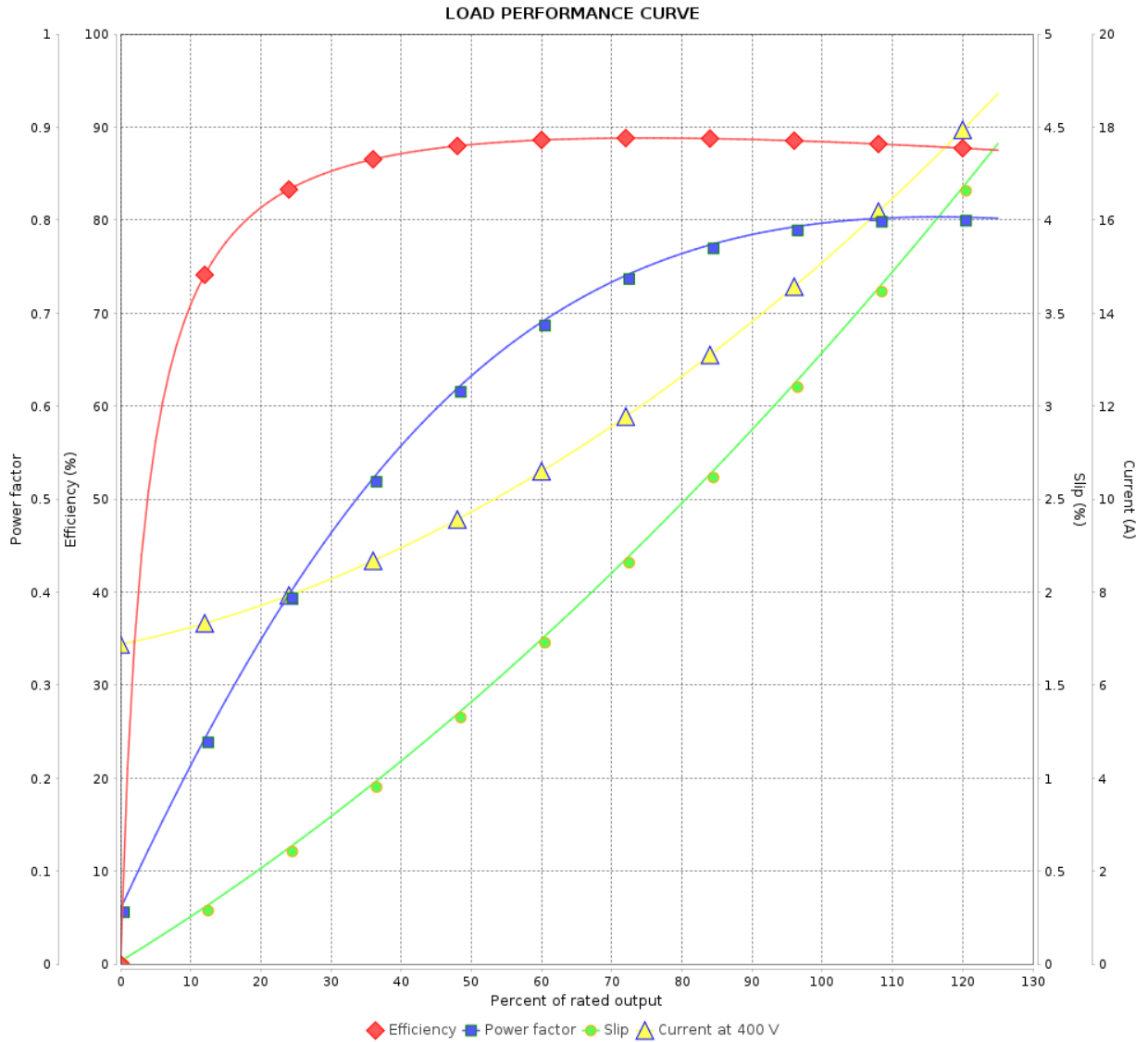
## Three Phase Induction Motor - Squirrel Cage



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

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 12717287



Performance : 400 V 50 Hz 8P IE3

Rated current : 15.3 A  
 LRC : 4.9  
 Rated torque : 10.0 kgfm  
 Locked rotor torque : 170 %  
 Breakdown torque : 210 %  
 Rated speed : 725 rpm

Moment of inertia (J) : 0.3034 kgm<sup>2</sup>  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.15  
 Temperature rise : 105 K  
 Design : B

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# LOAD PERFORMANCE CURVE

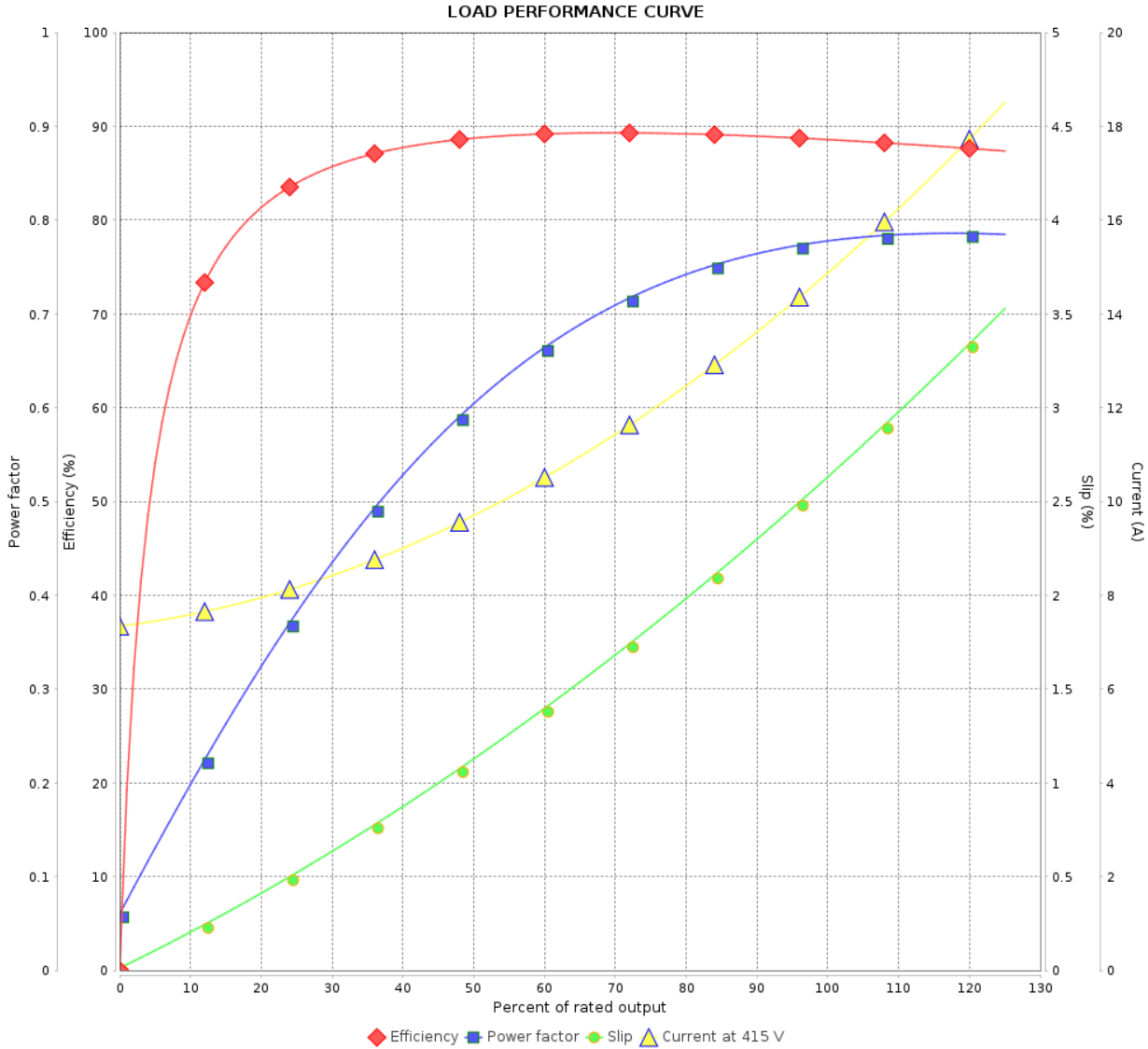
Three Phase Induction Motor - Squirrel Cage



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

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 12717287



Performance : 415 V 50 Hz 8P IE3

Rated current : 15.1 A  
 LRC : 5.2  
 Rated torque : 9.94 kgfm  
 Locked rotor torque : 190 %  
 Breakdown torque : 229 %  
 Rated speed : 730 rpm

Moment of inertia (J) : 0.3034 kgm<sup>2</sup>  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.15  
 Temperature rise : 105 K  
 Design : B

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