

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :					
Product line	: W22 NEMA Premium Efficiency Three-Phase	Product code :	12446748		
Frame	: 284/6T	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>	: 165 kg		
Protection degree	: IP55	Moment of inertia (J)	: 0.3034 kgm <sup>2</sup>		
Design	: B				
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	: Drive end : 6311 C3 Non drive end : 6211 C3	Foundation loads			
Sealing	: V'Ring V'Ring	Max. traction	: 244 kgf		
Lubrication interval	: 20000 h 20000 h	Max. compression	: 409 kgf		
Lubricant amount	: 18 g 11 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 : \_\_\_\_\_

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

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# LOAD PERFORMANCE CURVE

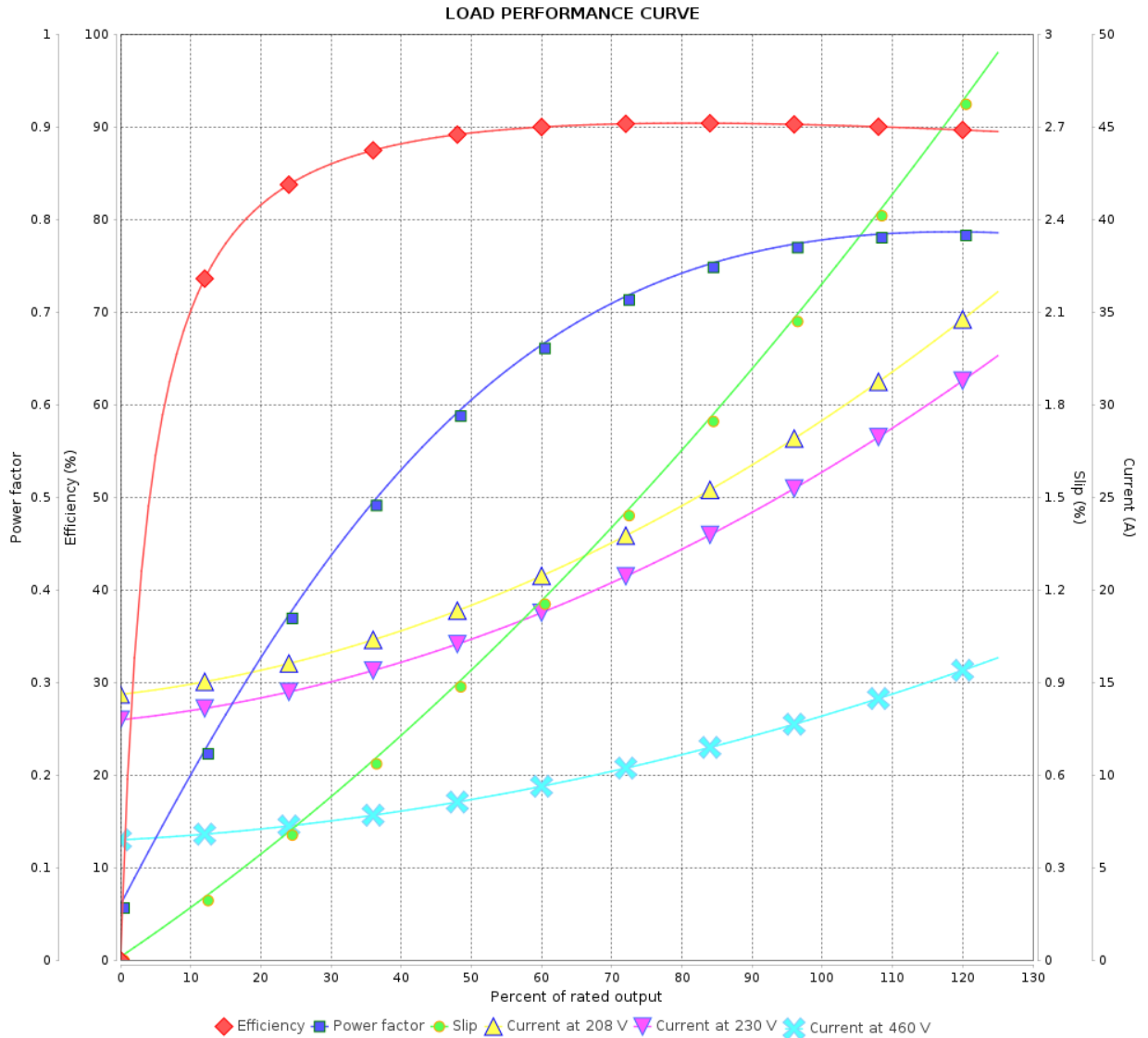
## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 12446748



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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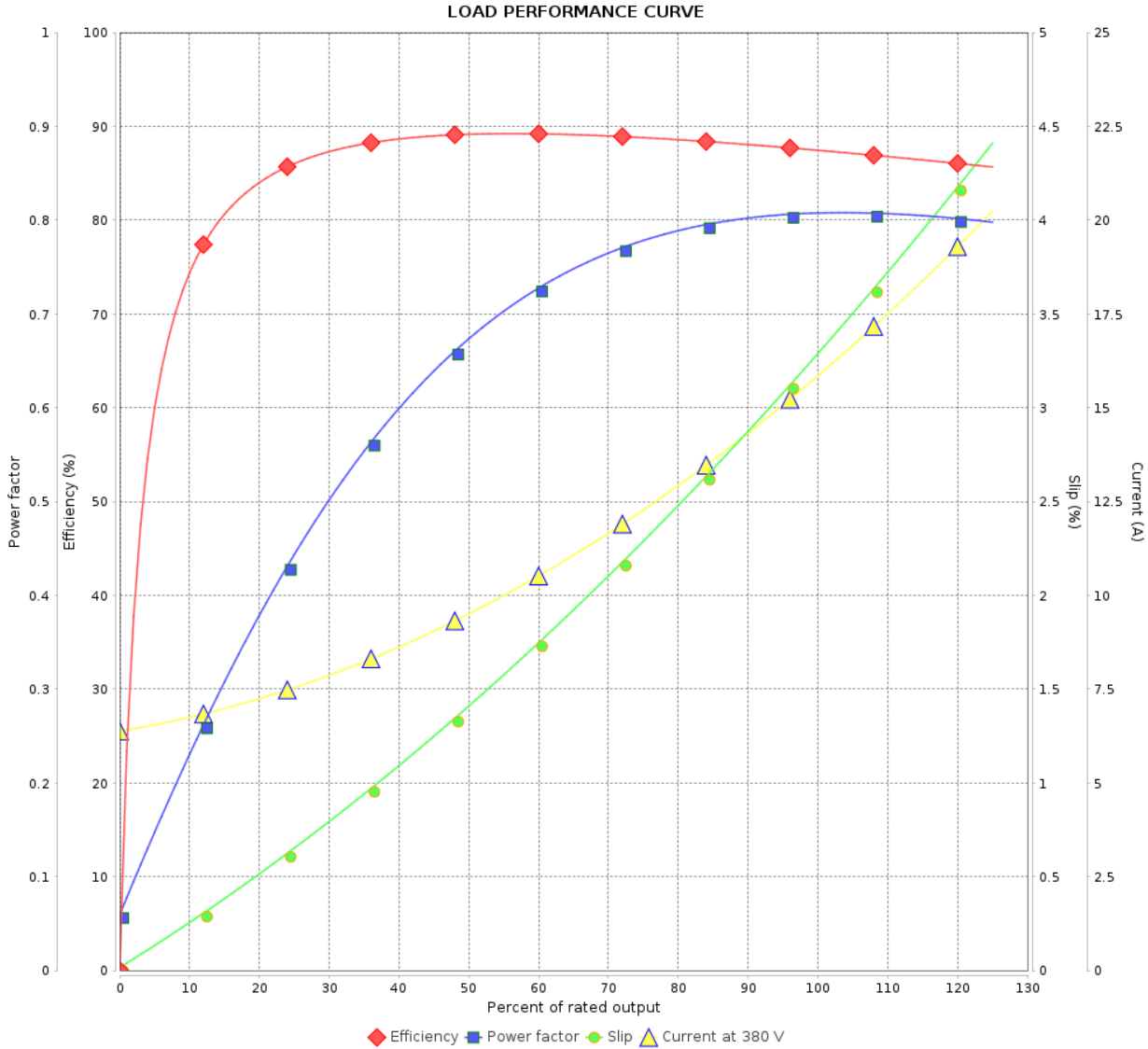
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 12446748



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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# LOAD PERFORMANCE CURVE

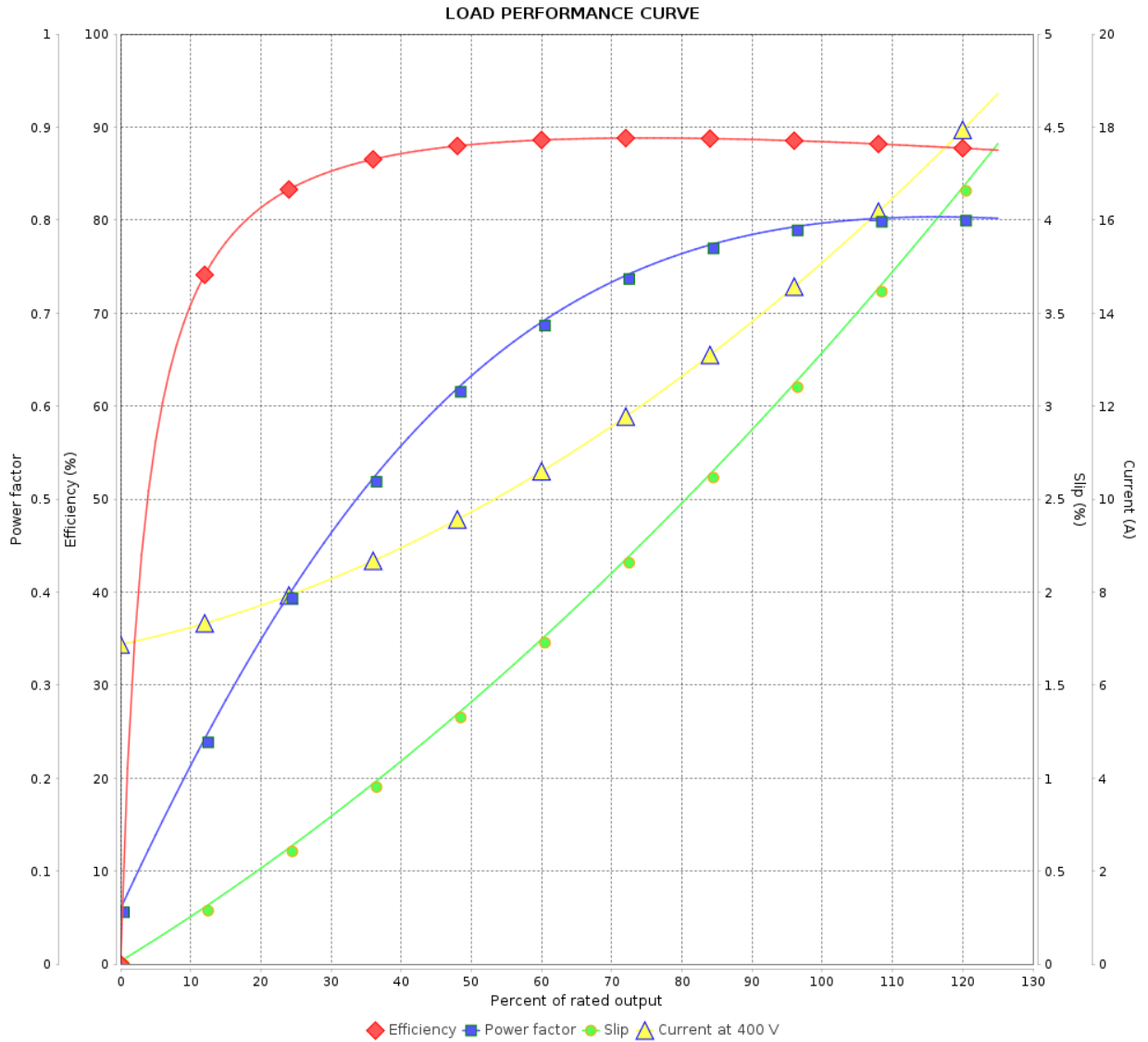
## Three Phase Induction Motor - Squirrel Cage



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

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 12446748



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

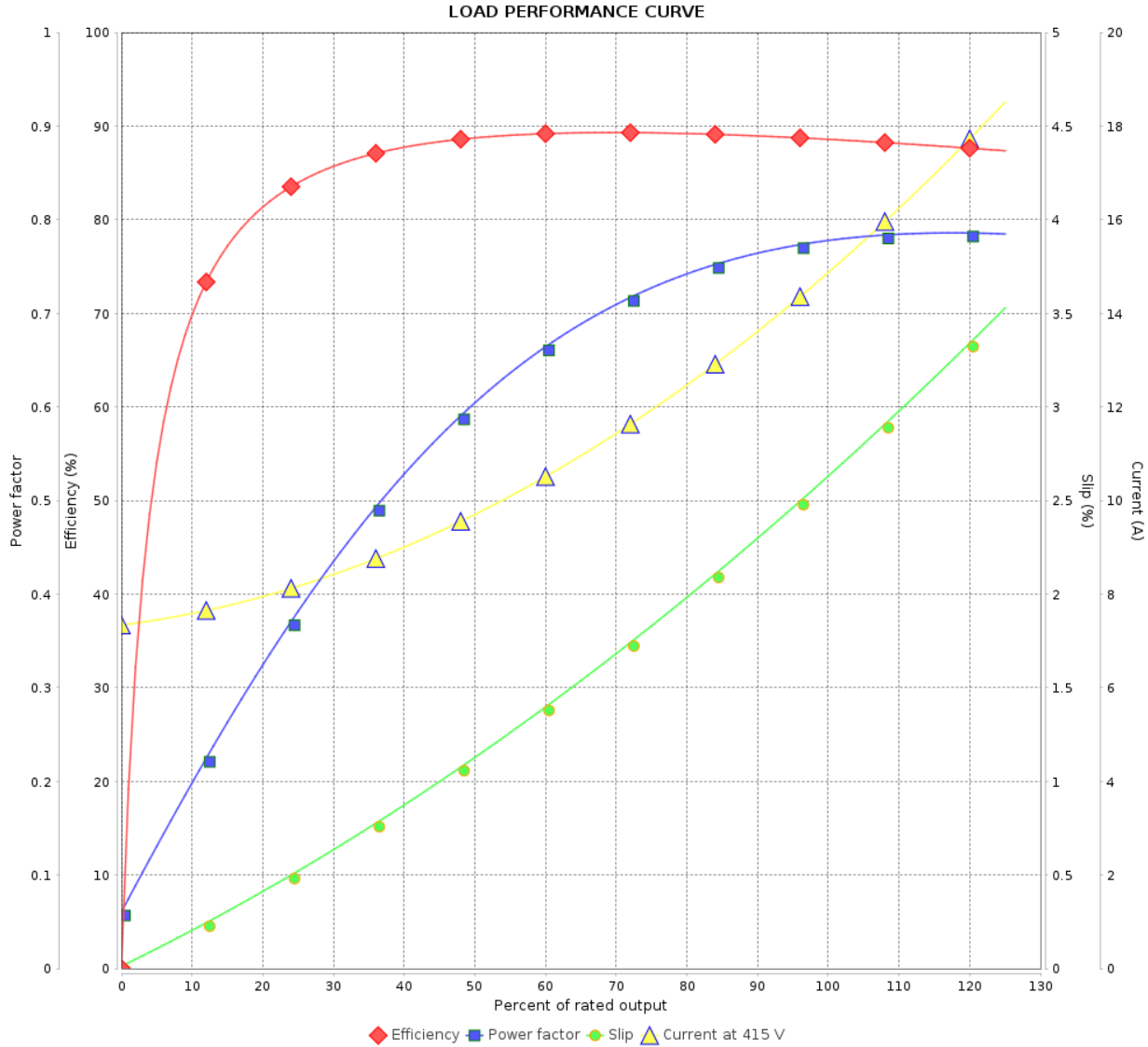
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 12446748



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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