

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :					
Product line	: W22 Close Coupled Pump JM NEMA Premium Efficiency Three-Phase	Product code :	12941830		
Frame	: 254/6JM	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>	: 139 kg		
Protection degree	: IP55	Moment of inertia (J)	: 0.1867 kgm <sup>2</sup>		
Design	: B				
Output [HP]	10	10	10	10	
Poles	6	6	6	6	
Frequency [Hz]	60	50	50	50	
Rated voltage [V]	230/460	380	400	415	
Rated current [A]	26.6/13.3	15.4	14.8	14.4	
L. R. Amperes [A]	173/86.5	78.5	84.4	87.8	
LRC [A]	6.5x(Code H)	5.1x(Code F)	5.7x(Code G)	6.1x(Code H)	
No load current [A]	12.0/6.00	6.40	6.80	7.20	
Rated speed [RPM]	1175	965	970	975	
Slip [%]	2.08	3.50	3.00	2.50	
Rated torque [kgfm]	6.18	7.52	7.48	7.44	
Locked rotor torque [%]	229	170	200	220	
Breakdown torque [%]	280	220	240	260	
Service factor	1.25	1.00	1.15	1.15	
Temperature rise	80 K	105 K	105 K	80 K	
Locked rotor time	46s (cold) 26s (hot)	39s (cold) 22s (hot)	39s (cold) 22s (hot)	39s (cold) 22s (hot)	
Noise level <sup>2</sup>	59.0 dB(A)	57.0 dB(A)	57.0 dB(A)	57.0 dB(A)	
Efficiency (%)	25%	90.0	90.4	90.6	89.9
	50%	90.2	90.2	90.2	89.5
	75%	91.0	89.5	90.2	90.2
	100%	91.0	89.1	89.5	89.5
Power Factor	25%	0.38	0.41	0.38	0.36
	50%	0.63	0.66	0.63	0.60
	75%	0.74	0.79	0.77	0.75
	100%	0.78	0.83	0.82	0.81
Losses at normative operating points (speed;torque), in percentage of rated output power					
Losses (%)	P1 (0,9;1,0)	9.8	9.8	9.8	9.8
	P2 (0,5;1,0)	8.4	8.4	8.4	8.4
	P3 (0,25;1,0)	7.8	7.8	7.8	7.8
	P4 (0,9;0,5)	5.0	5.0	5.0	5.0
	P5 (0,5;0,5)	3.6	3.6	3.6	3.6
	P6 (0,5;0,25)	2.5	2.5	2.5	2.5
	P7 (0,25;0,25)	1.8	1.8	1.8	1.8
Bearing type	: Drive end : 6309 C3 Non drive end : 6209 C3	Foundation loads			
Sealing	: V'Ring V'Ring	Max. traction : 235 kgf			
Lubrication interval	: 20000 h 20000 h	Max. compression : 374 kgf			
Lubricant amount	: 13 g 9 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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## Three Phase Induction Motor - Squirrel Cage



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

Notes  
USABLE @208V 28.5A SF 1.15 SFA 32.8A

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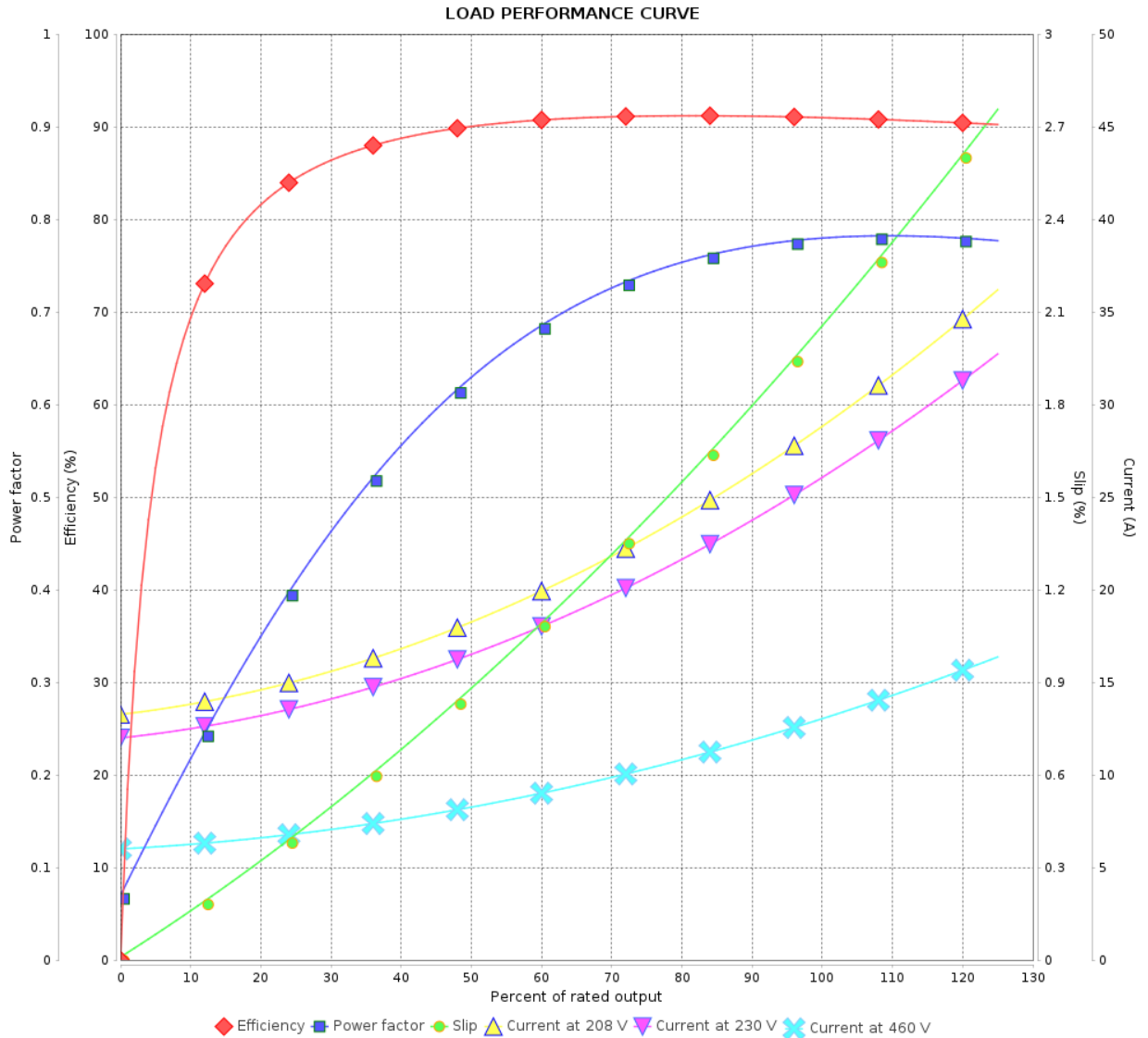
## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 Close Coupled Pump JM NEMA  
Premium Efficiency Three-Phase

Product code : 12941830



Performance : 230/460 V 60 Hz 6P

Rated current : 26.6/13.3 A  
 LRC : 6.5  
 Rated torque : 6.18 kgfm  
 Locked rotor torque : 229 %  
 Breakdown torque : 280 %  
 Rated speed : 1175 rpm

Moment of inertia (J) : 0.1867 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

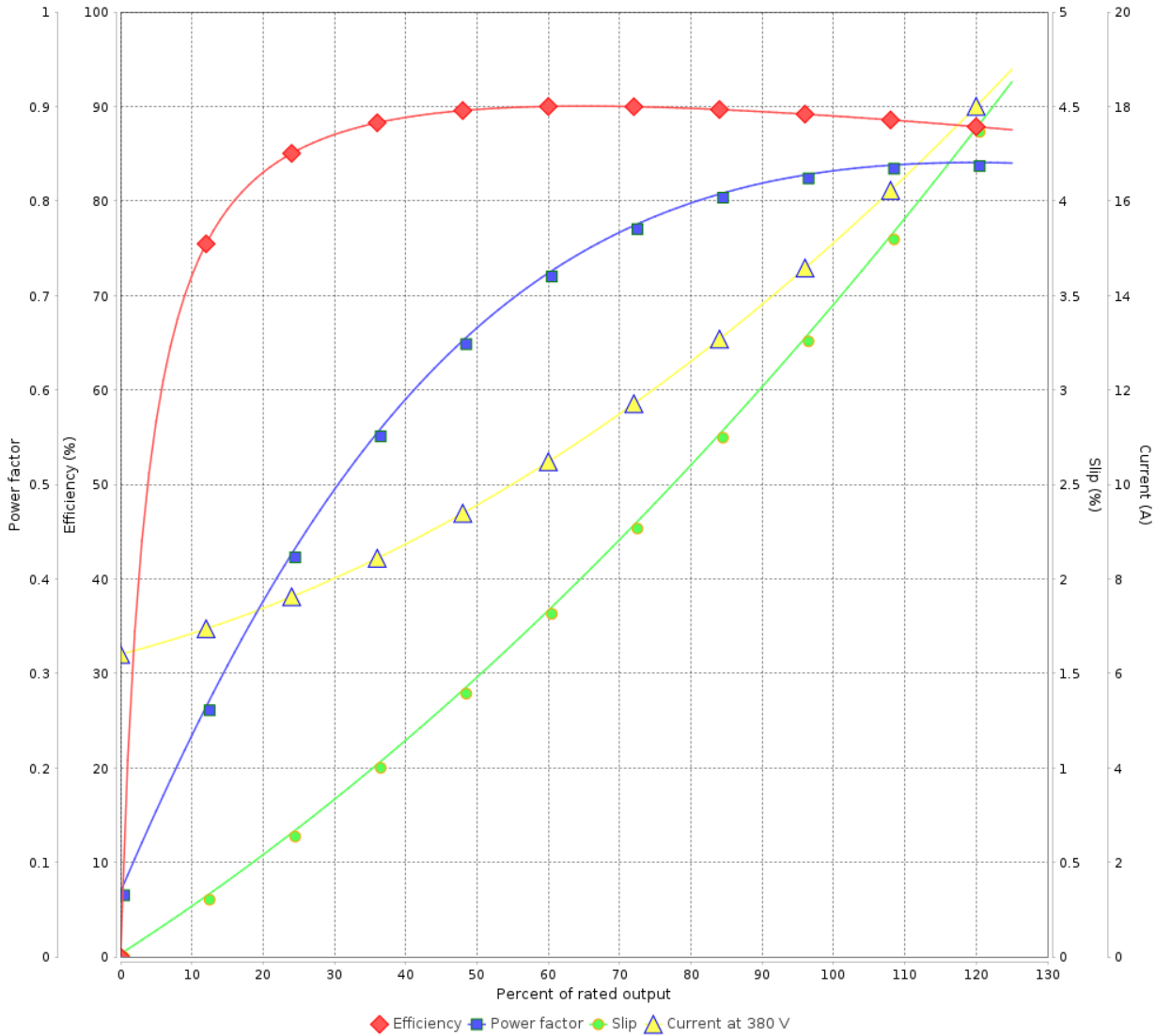


Customer : \_\_\_\_\_

Product line : W22 Close Coupled Pump JM NEMA  
Premium Efficiency Three-Phase

Product code : 12941830

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Performance : 380 V 50 Hz 6P IE3

Rated current : 15.4 A  
LRC : 5.1  
Rated torque : 7.52 kgfm  
Locked rotor torque : 170 %  
Breakdown torque : 220 %  
Rated speed : 965 rpm

Moment of inertia (J) : 0.1867 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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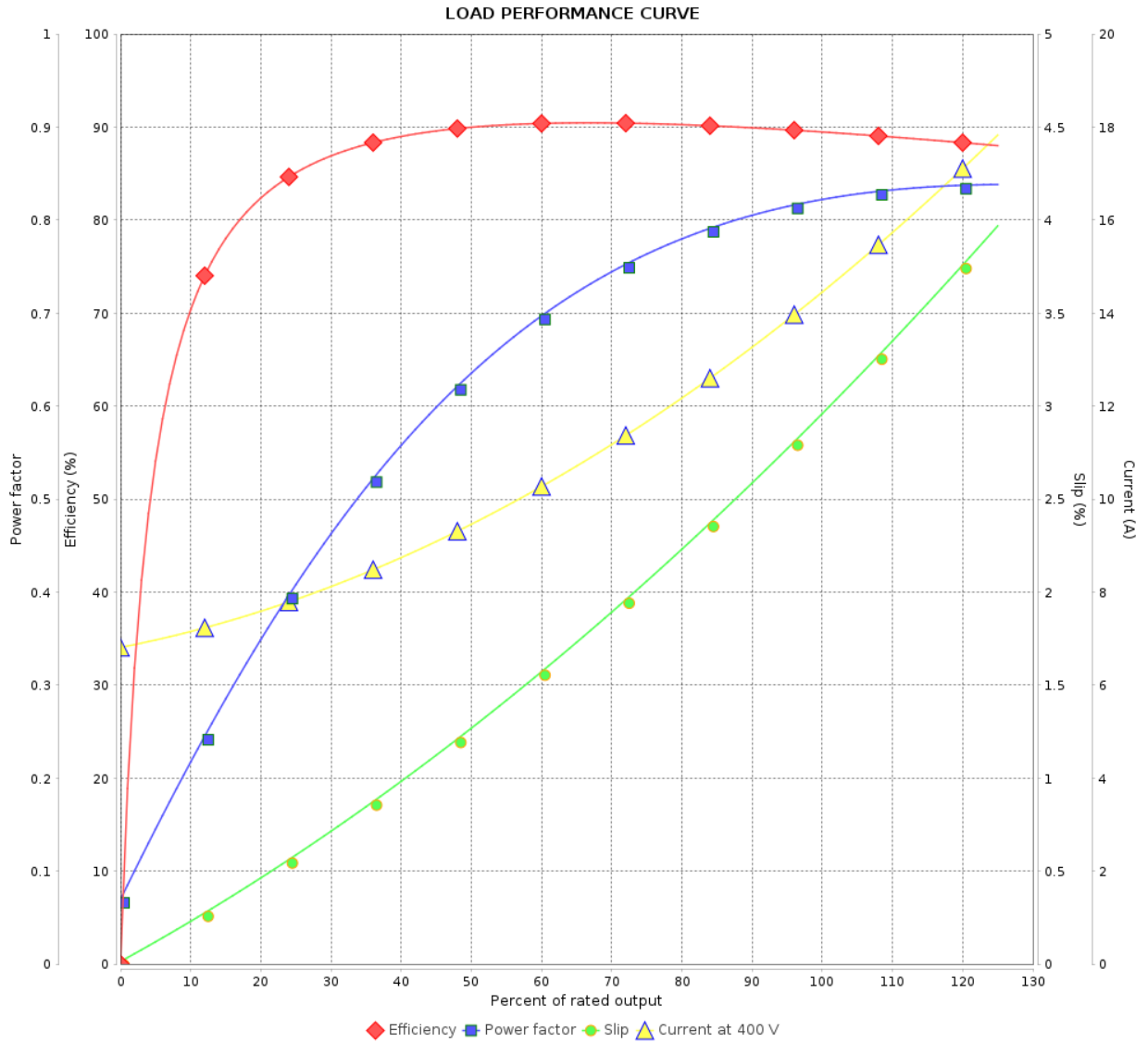
## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 Close Coupled Pump JM NEMA  
Premium Efficiency Three-Phase

Product code : 12941830



Performance : 400 V 50 Hz 6P IE3

Rated current : 14.8 A  
LRC : 5.7  
Rated torque : 7.48 kgfm  
Locked rotor torque : 200 %  
Breakdown torque : 240 %  
Rated speed : 970 rpm

Moment of inertia (J) : 0.1867 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

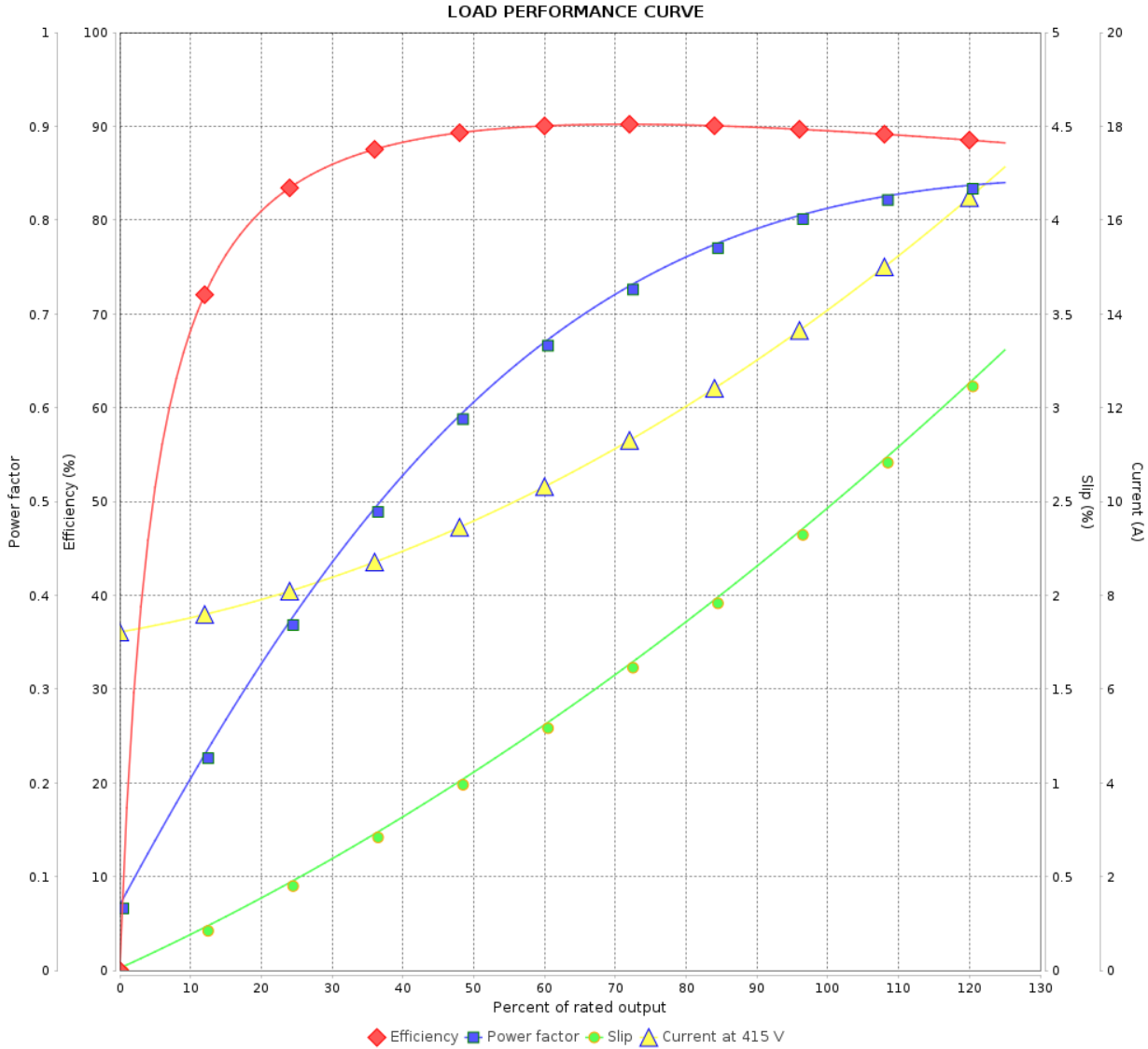
## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 Close Coupled Pump JM NEMA  
Premium Efficiency Three-Phase

Product code : 12941830



Performance : 415 V 50 Hz 6P IE3

Rated current : 14.4 A  
LRC : 6.1  
Rated torque : 7.44 kgfm  
Locked rotor torque : 220 %  
Breakdown torque : 260 %  
Rated speed : 975 rpm

Moment of inertia (J) : 0.1867 kgm<sup>2</sup>  
Duty cycle : Cont.(S1)  
Insulation class : F  
Service factor : 1.15  
Temperature rise : 80 K  
Design : B

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