

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :					
Product line	: W22 Close Coupled Pump JM NEMA Premium Efficiency Three-Phase	Product code :	11523675		
Frame	: 143/5JM	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>2</sup>	: 25.3 kg		
Protection degree	: IP55	Moment of inertia (J)	: 0.0060 kgm <sup>2</sup>		
Design	: B				
Output [HP]	1.5	1.5	1.5	1.5	
Poles	4	4	4	4	
Frequency [Hz]	60	50	50	50	
Rated voltage [V]	230/460	380	400	415	
Rated current [A]	4.04/2.02	2.42	2.33	2.30	
L. R. Amperes [A]	33.9/17.0	15.5	16.3	17.0	
LRC [A]	8.4x(Code L)	6.4x(Code J)	7.0x(Code K)	7.4x(Code K)	
No load current [A]	2.20/1.10	1.10	1.20	1.30	
Rated speed [RPM]	1755	1440	1445	1450	
Slip [%]	2.50	4.00	3.67	3.33	
Rated torque [kgfm]	0.620	0.756	0.751	0.751	
Locked rotor torque [%]	290	220	250	280	
Breakdown torque [%]	350	250	290	320	
Service factor	1.25	1.25	1.25	1.25	
Temperature rise	80 K	80 K	80 K	80 K	
Locked rotor time	25s (cold) 14s (hot)	25s (cold) 14s (hot)	25s (cold) 14s (hot)	25s (cold) 14s (hot)	
Noise level <sup>2</sup>	51.0 dB(A)	49.0 dB(A)	49.0 dB(A)	49.0 dB(A)	
Efficiency (%)	25%				
	50%	82.5	82.5	82.5	
	75%	85.5	84.0	84.0	
	100%	86.5	84.1	84.1	
Power Factor	25%				
	50%	0.60	0.67	0.63	
	75%	0.70	0.76	0.74	
	100%	0.79	0.82	0.81	
Losses at normative operating points (speed;torque), in percentage of rated output power					
Losses (%)	P1 (0,9;1,0)	14.6	14.6	14.6	14.6
	P2 (0,5;1,0)	12.1	12.1	12.1	12.1
	P3 (0,25;1,0)	12.2	12.2	12.2	12.2
	P4 (0,9;0,5)	8.2	8.2	8.2	8.2
	P5 (0,5;0,5)	5.7	5.7	5.7	5.7
	P6 (0,5;0,25)	4.3	4.3	4.3	4.3
	P7 (0,25;0,25)	3.2	3.2	3.2	3.2
Bearing type	: Drive end : 6206 ZZ Non drive end : 6204 ZZ	Foundation loads			
Sealing	: V'Ring V'Ring	Max. traction	: 56 kgf		
Lubrication interval	: - -	Max. compression	: 81 kgf		
Lubricant amount	: - -				
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).		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 4.36A SF 1.15 SFA 5.01A

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# LOAD PERFORMANCE CURVE

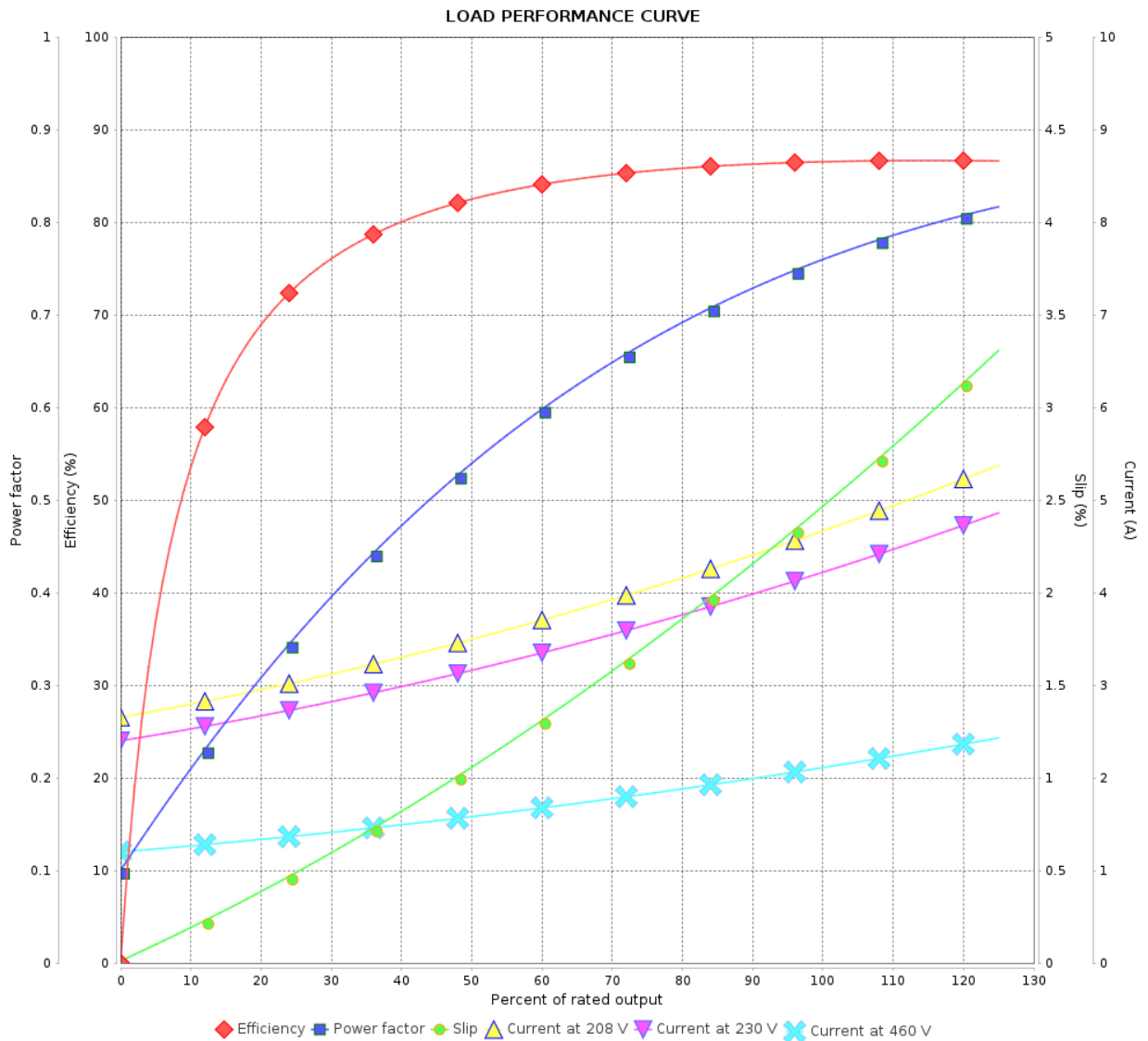
## Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 11523675



Performance : 230/460 V 60 Hz 4P

Rated current : 4.04/2.02 A  
LRC : 8.4  
Rated torque : 0.620 kgfm  
Locked rotor torque : 290 %  
Breakdown torque : 350 %  
Rated speed : 1755 rpm

Moment of inertia (J) : 0.0060 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

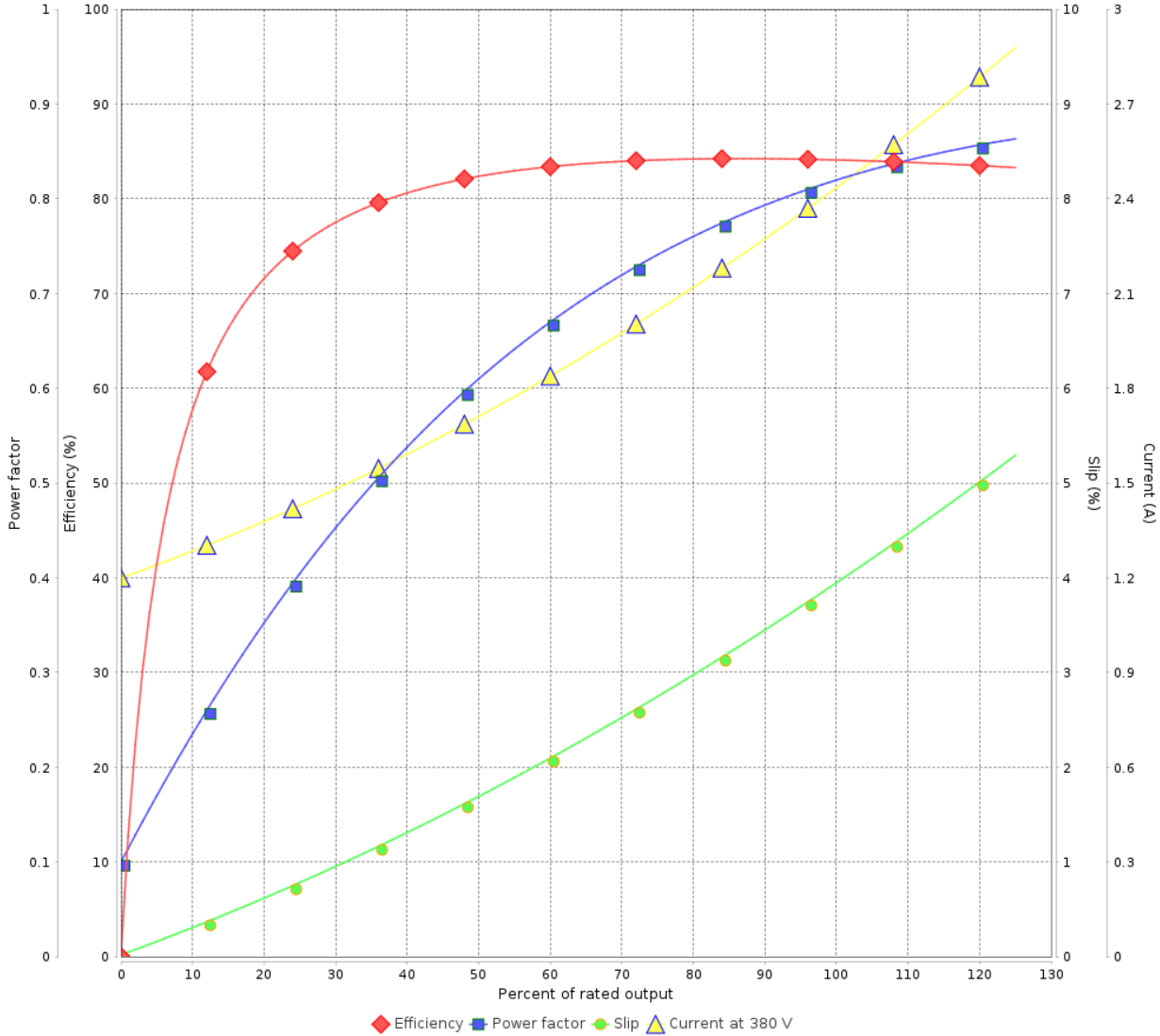
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 Close Coupled Pump JM  
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Performance : 380 V 50 Hz 4P IE3

Rated current	: 2.42 A	Moment of inertia (J)	: 0.0060 kgm <sup>2</sup>
LRC	: 6.4	Duty cycle	: Cont.(S1)
Rated torque	: 0.756 kgfm	Insulation class	: F
Locked rotor torque	: 220 %	Service factor	: 1.25
Breakdown torque	: 250 %	Temperature rise	: 80 K
Rated speed	: 1440 rpm	Design	: B

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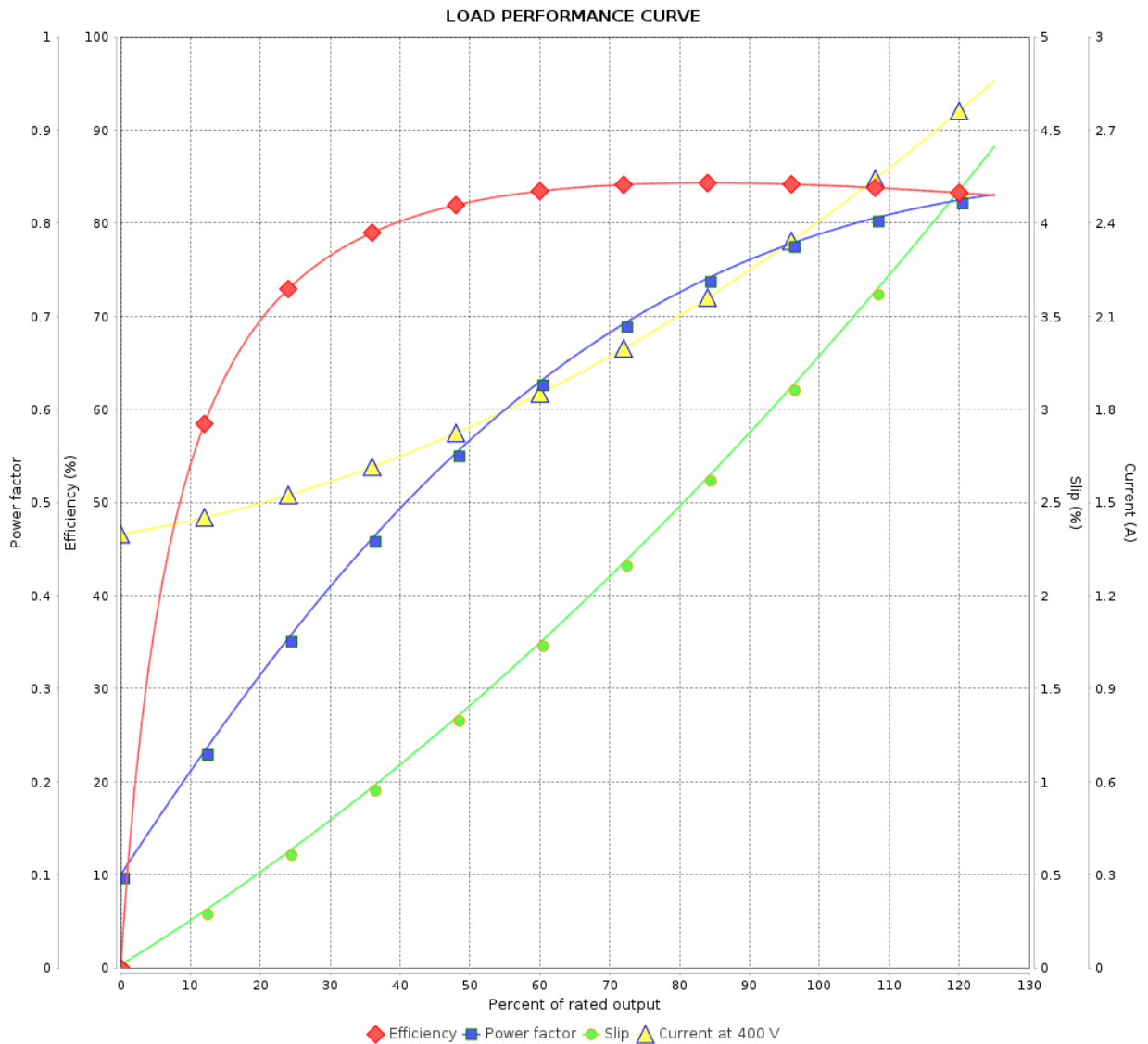
## Three Phase Induction Motor - Squirrel Cage



Customer :

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NEMA Premium Efficiency Three-Phase

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Performance : 400 V 50 Hz 4P IE3

Rated current : 2.33 A  
LRC : 7.0  
Rated torque : 0.751 kgfm  
Locked rotor torque : 250 %  
Breakdown torque : 290 %  
Rated speed : 1445 rpm

Moment of inertia (J) : 0.0060 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

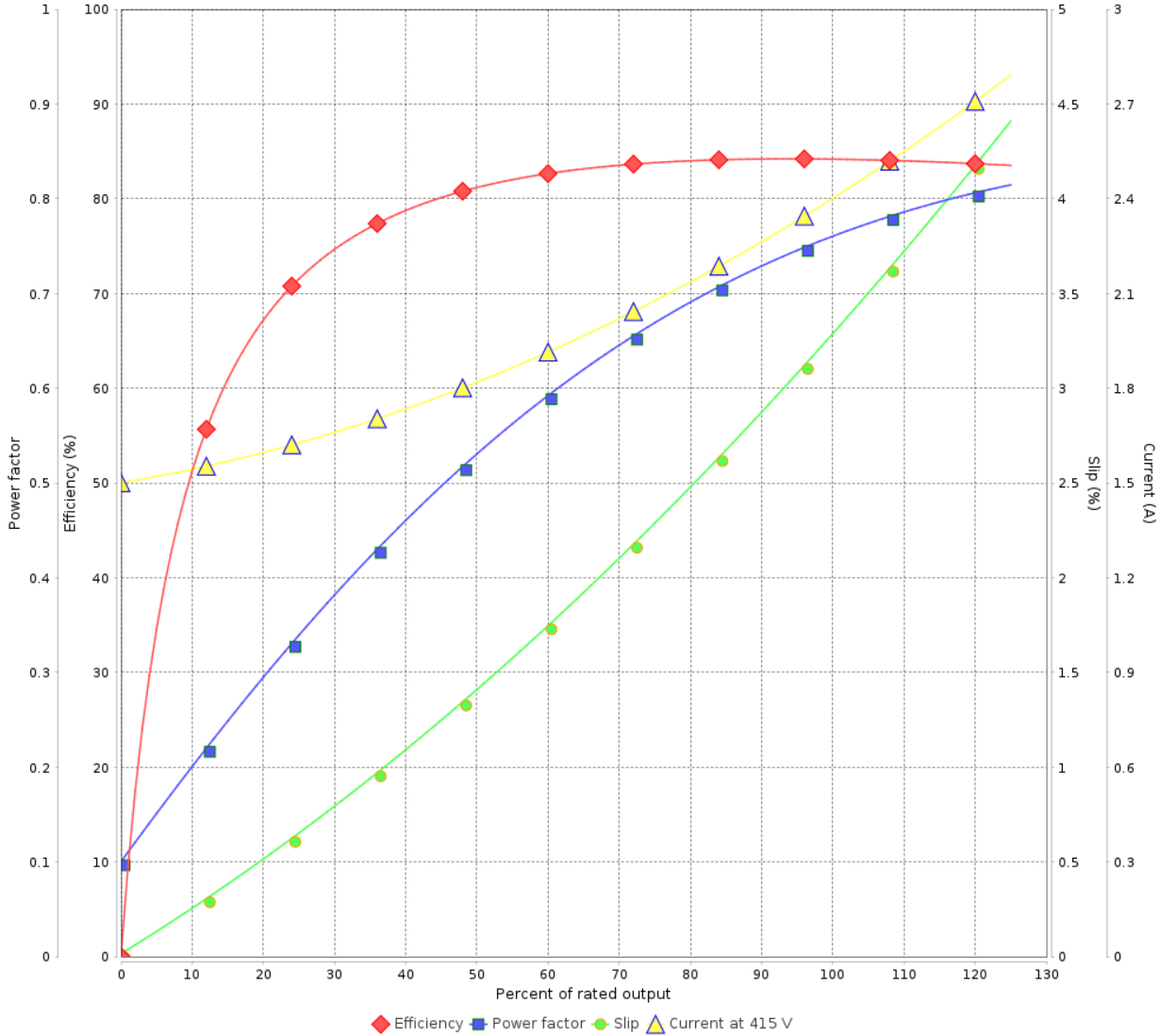
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 Close Coupled Pump JM  
 NEMA Premium Efficiency Three-Phase  
 Product code : 11523675

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Performance : 415 V 50 Hz 4P IE3

Rated current	: 2.30 A	Moment of inertia (J)	: 0.0060 kgm <sup>2</sup>
LRC	: 7.4	Duty cycle	: Cont.(S1)
Rated torque	: 0.751 kgfm	Insulation class	: F
Locked rotor torque	: 280 %	Service factor	: 1.25
Breakdown torque	: 320 %	Temperature rise	: 80 K
Rated speed	: 1450 rpm	Design	: B

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