

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :					
Product line	: W22 NEMA Premium Efficiency Three-Phase	Product code :	11456826		
Frame	: 182/4TC	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>	: 46.8 kg		
Protection degree	: IP55	Moment of inertia (J)	: 0.0262 kgm <sup>2</sup>		
Design	: B				
Output [HP]	2	2	2	2	2
Poles	6	6	6	6	6
Frequency [Hz]	60	50	50	50	50
Rated voltage [V]	230/460	380	400	415	415
Rated current [A]	6.44/3.22	3.66	3.61	3.58	3.58
L. R. Amperes [A]	48.3/24.2	22.0	24.2	25.4	25.4
LRC [A]	7.5x(Code L)	6.0x(Code J)	6.7x(Code K)	7.1x(Code L)	7.1x(Code L)
No load current [A]	3.80/1.90	1.90	2.05	2.15	2.15
Rated speed [RPM]	1170	960	965	965	965
Slip [%]	2.50	4.00	3.50	3.50	3.50
Rated torque [kgfm]	1.24	1.51	1.50	1.50	1.50
Locked rotor torque [%]	300	229	280	310	310
Breakdown torque [%]	350	260	310	340	340
Service factor	1.25	1.00	1.00	1.00	1.00
Temperature rise	80 K	80 K	80 K	80 K	80 K
Locked rotor time	55s (cold) 31s (hot)	36s (cold) 20s (hot)	36s (cold) 20s (hot)	36s (cold) 20s (hot)	36s (cold) 20s (hot)
Noise level <sup>2</sup>	52.0 dB(A)	49.0 dB(A)	49.0 dB(A)	49.0 dB(A)	49.0 dB(A)
Efficiency (%)	25%				
	50%	86.5	85.5	85.5	85.0
	75%	87.5	86.0	86.5	86.5
	100%	88.5	86.5	87.0	87.0
Power Factor	25%				
	50%	0.46	0.53	0.49	0.46
	75%	0.58	0.65	0.62	0.59
	100%	0.66	0.72	0.69	0.67
Losses at normative operating points (speed;torque), in percentage of rated output power					
Losses (%)	P1 (0,9;1,0)	12.3	12.3	12.3	12.3
	P2 (0,5;1,0)	9.8	9.8	9.8	9.8
	P3 (0,25;1,0)	9.2	9.2	9.2	9.2
	P4 (0,9;0,5)	7.4	7.4	7.4	7.4
	P5 (0,5;0,5)	5.0	5.0	5.0	5.0
	P6 (0,5;0,25)	3.9	3.9	3.9	3.9
	P7 (0,25;0,25)	2.9	2.9	2.9	2.9
Bearing type	: Drive end : 6207 ZZ	Non drive end : 6206 ZZ	Foundation loads		
Sealing	: V'Ring	V'Ring	Max. traction : 83 kgf		
Lubrication interval	: -	-	Max. compression : 130 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). (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 7.13A SF 1.15 SFA 8.20A

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# LOAD PERFORMANCE CURVE

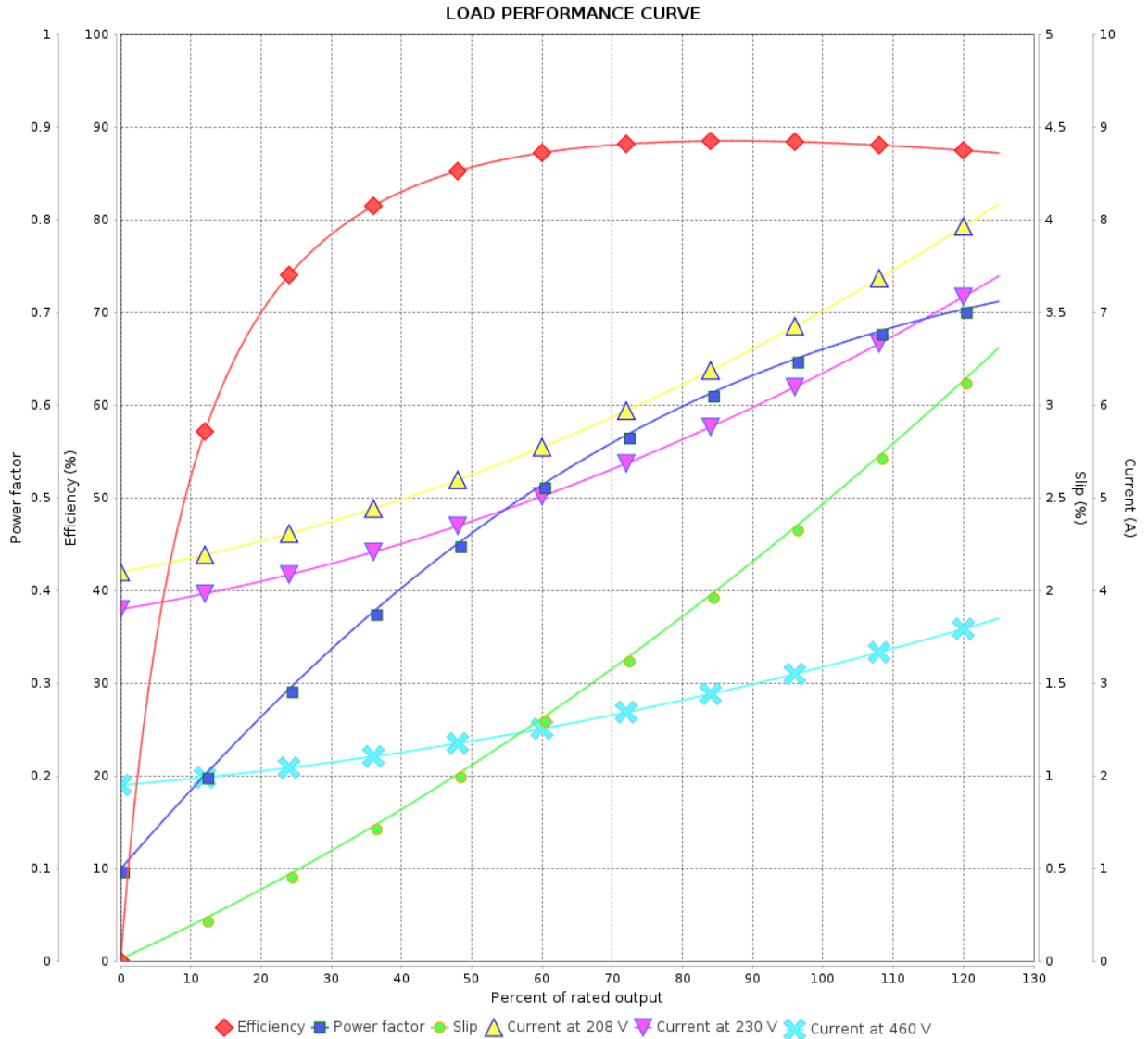
## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 11456826



Performance : 230/460 V 60 Hz 6P

Rated current : 6.44/3.22 A  
 LRC : 7.5  
 Rated torque : 1.24 kgfm  
 Locked rotor torque : 300 %  
 Breakdown torque : 350 %  
 Rated speed : 1170 rpm

Moment of inertia (J) : 0.0262 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

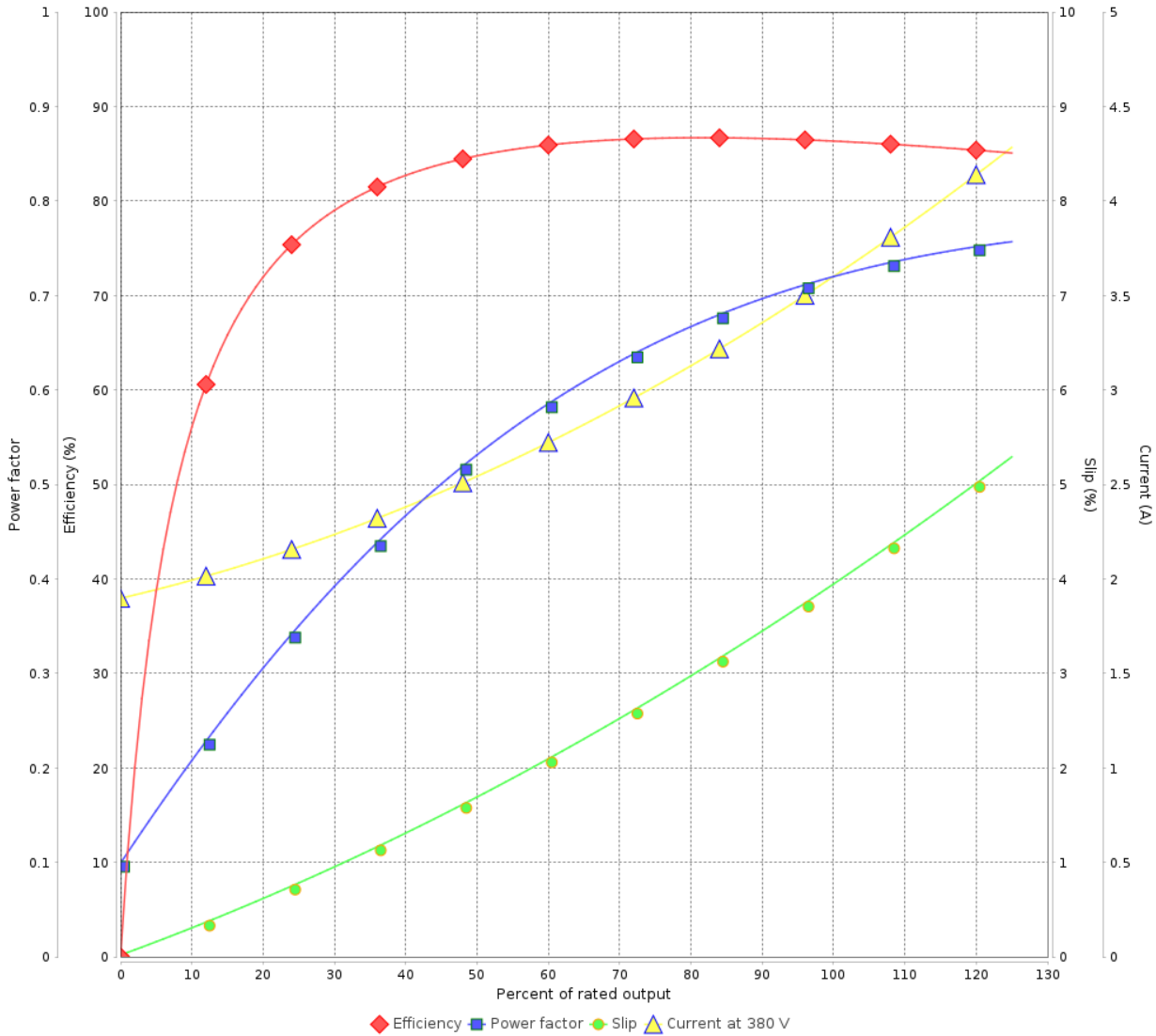
Three Phase Induction Motor - Squirrel Cage



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

Product line : W22 NEMA Premium Efficiency Three-Phase      Product code : 11456826

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Performance : 380 V 50 Hz 6P IE4

Rated current	: 3.66 A	Moment of inertia (J)	: 0.0262 kgm <sup>2</sup>
LRC	: 6.0	Duty cycle	: Cont.(S1)
Rated torque	: 1.51 kgfm	Insulation class	: F
Locked rotor torque	: 229 %	Service factor	: 1.00
Breakdown torque	: 260 %	Temperature rise	: 80 K
Rated speed	: 960 rpm	Design	: B

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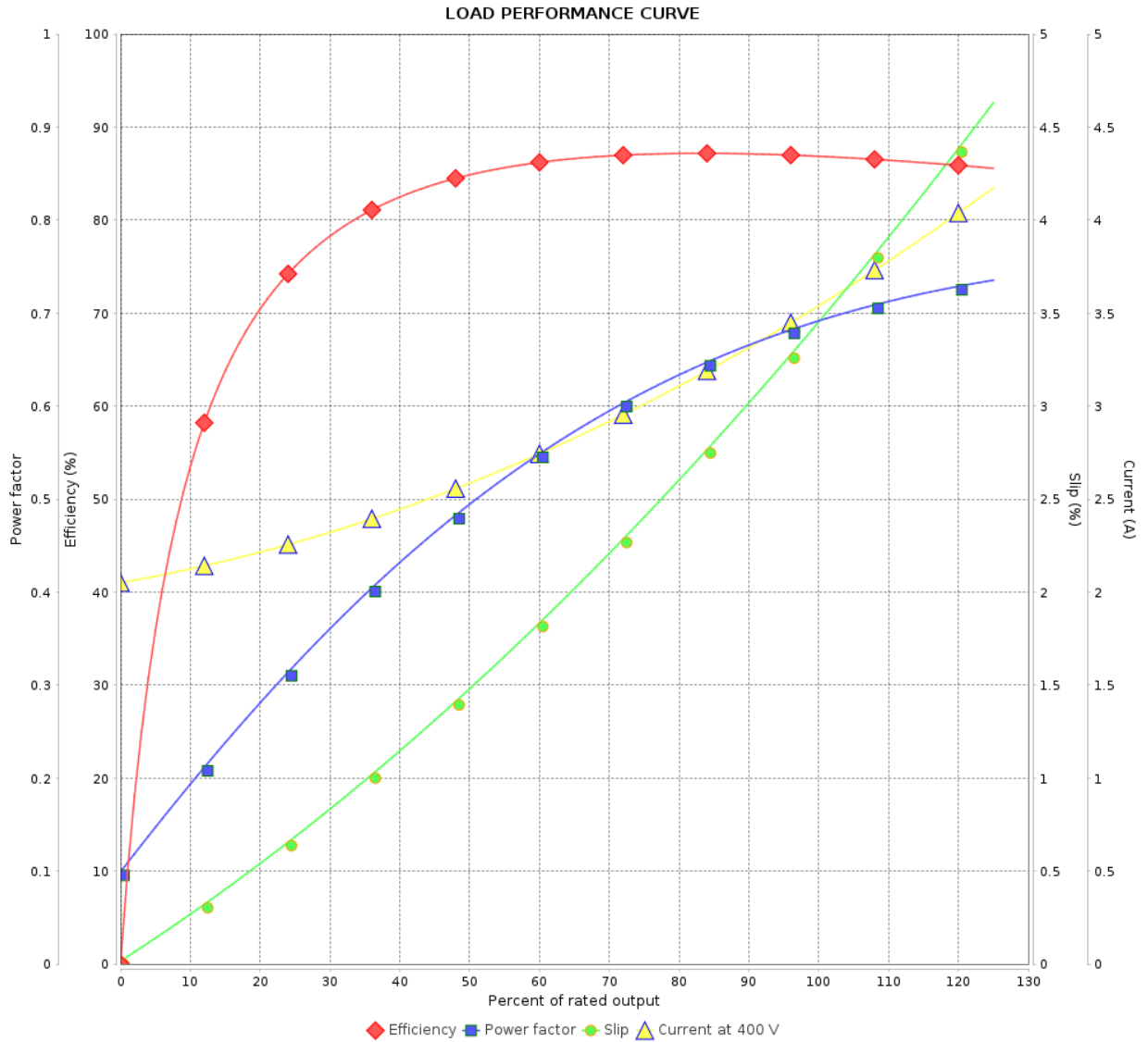
## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 11456826



Performance : 400 V 50 Hz 6P IE4

Rated current : 3.61 A  
 LRC : 6.7  
 Rated torque : 1.50 kgfm  
 Locked rotor torque : 280 %  
 Breakdown torque : 310 %  
 Rated speed : 965 rpm

Moment of inertia (J) : 0.0262 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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# LOAD PERFORMANCE CURVE

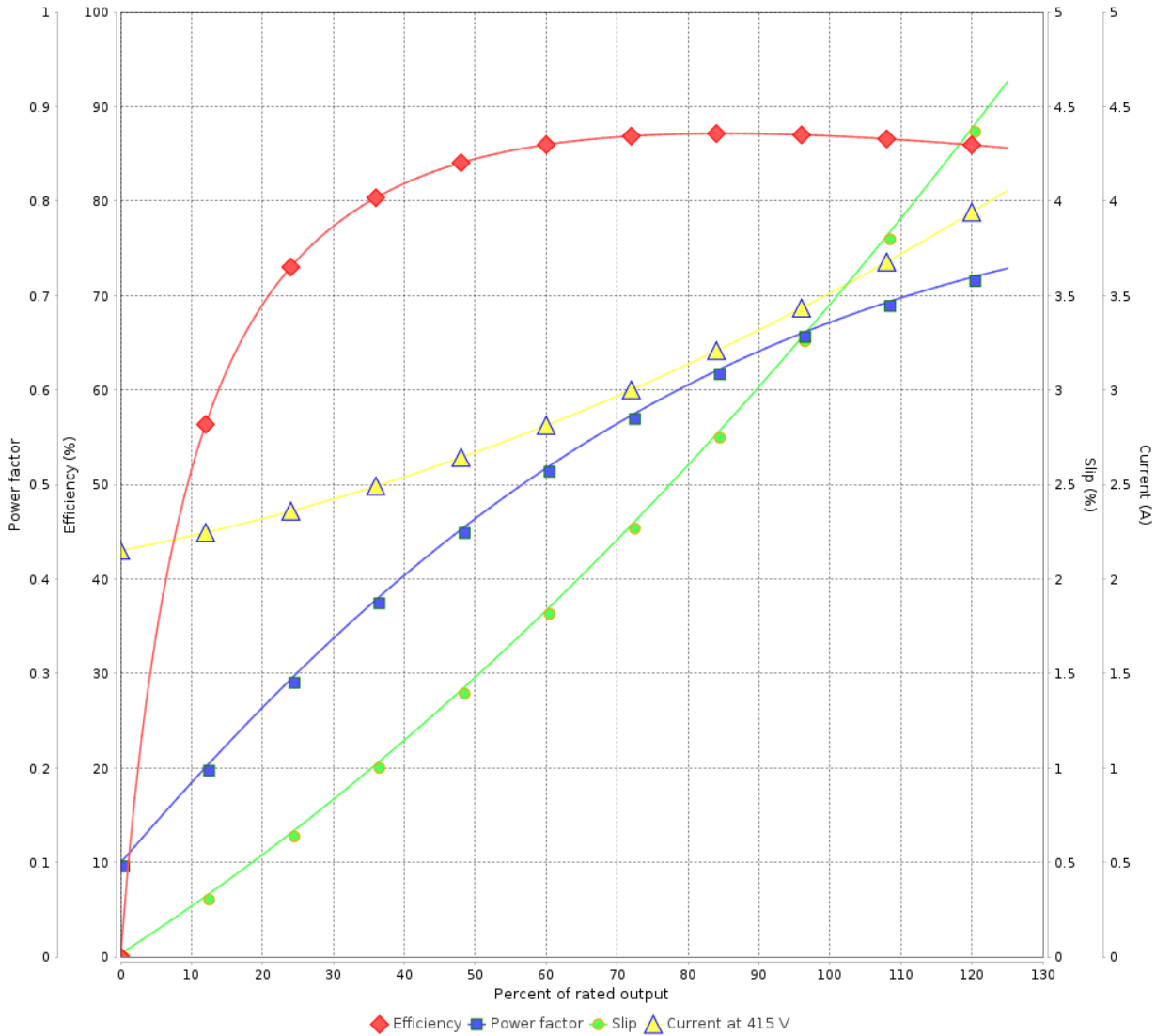
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase      Product code : 11456826

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Performance : 415 V 50 Hz 6P IE4

Rated current	: 3.58 A	Moment of inertia (J)	: 0.0262 kgm <sup>2</sup>
LRC	: 7.1	Duty cycle	: Cont.(S1)
Rated torque	: 1.50 kgfm	Insulation class	: F
Locked rotor torque	: 310 %	Service factor	: 1.00
Breakdown torque	: 340 %	Temperature rise	: 80 K
Rated speed	: 965 rpm	Design	: B

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