

# DATA SHEET



## Three Phase Induction Motor - Squirrel Cage

Customer :				
Product line		: W22 NEMA Premium Efficiency Three-Phase	Product code :	11442104
Frame	: 145TC	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>	: 23.4 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]	4.20/2.10	2.42	2.39	2.39
L. R. Amperes [A]	35.3/17.6	16.2	17.4	17.9
LRC [A]	8.4x(Code L)	6.7x(Code J)	7.3x(Code K)	7.5x(Code K)
No load current [A]	2.40/1.20	1.20	1.40	1.50
Rated speed [RPM]	1755	1440	1450	1450
Slip [%]	2.50	4.00	3.33	3.33
Rated torque [kgfm]	0.620	0.756	0.751	0.751
Locked rotor torque [%]	290	250	250	280
Breakdown torque [%]	350	280	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	81.0
	75%	85.5	84.0	84.0
	100%	86.5	84.1	84.1
Power Factor	25%			
	50%	0.54	0.61	0.53
	75%	0.67	0.74	0.67
	100%	0.76	0.82	0.76
Losses at normative operating points (speed;torque), in percentage of rated output power				
Losses (%)	P1 (0,9;1,0)	14.7	17.8	17.8
	P2 (0,5;1,0)	12.1	14.6	14.6
	P3 (0,25;1,0)	12.0	14.5	14.5
	P4 (0,9;0,5)	8.7	10.6	10.6
	P5 (0,5;0,5)	6.1	7.4	7.4
	P6 (0,5;0,25)	4.9	5.9	5.9
	P7 (0,25;0,25)	3.6	4.4	4.4
Bearing type	: Drive end : 6205 ZZ Non drive end : 6204 ZZ	Foundation loads		
Sealing	: V'Ring V'Ring	Max. traction	: 57 kgf	
Lubrication interval	: - -	Max. compression	: 80 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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Customer : \_\_\_\_\_

Notes  
USABLE @208V 4.36A SF 1.15 SFA 5.01A

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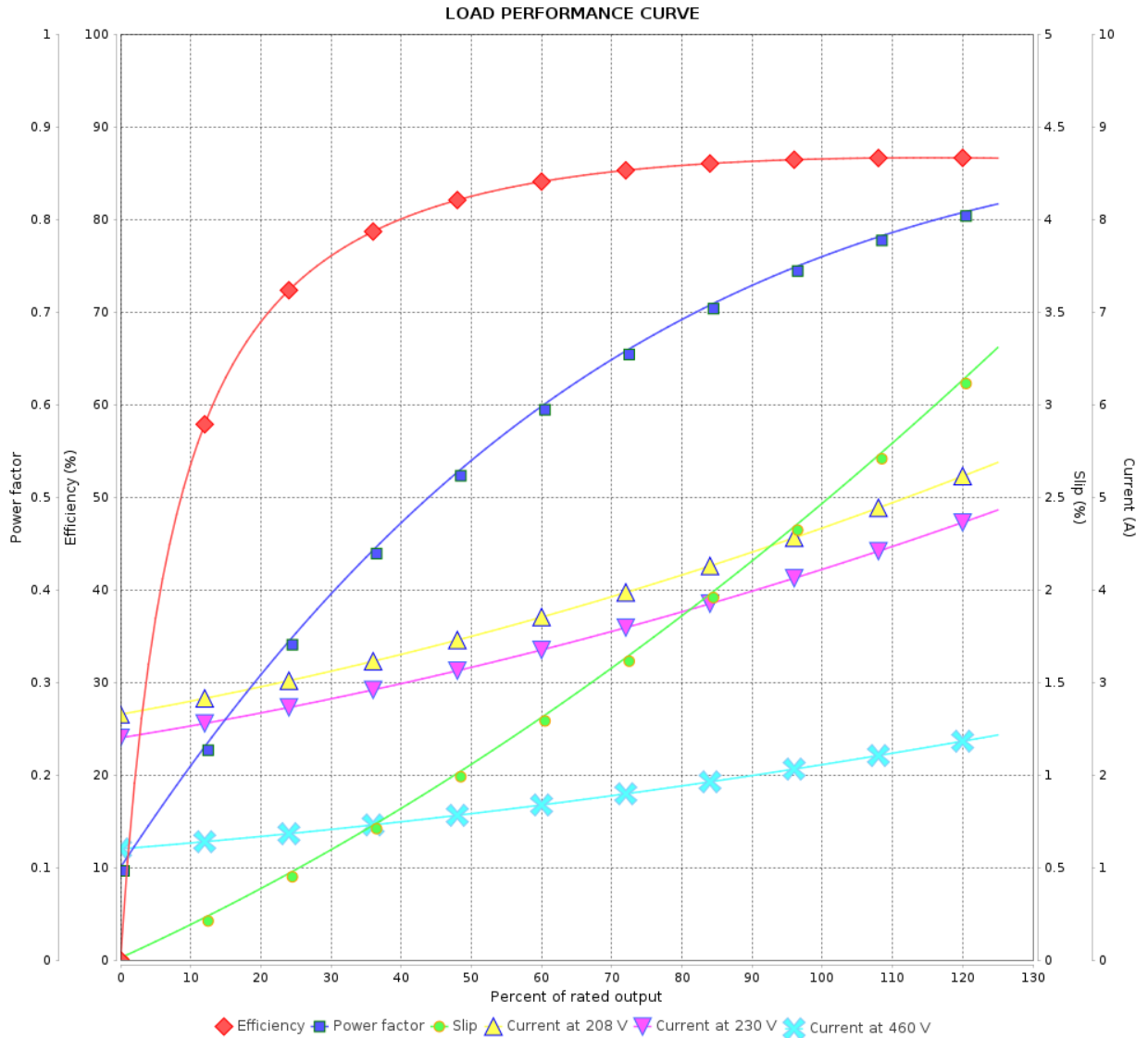
## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 11442104



Performance : 230/460 V 60 Hz 4P

Rated current : 4.20/2.10 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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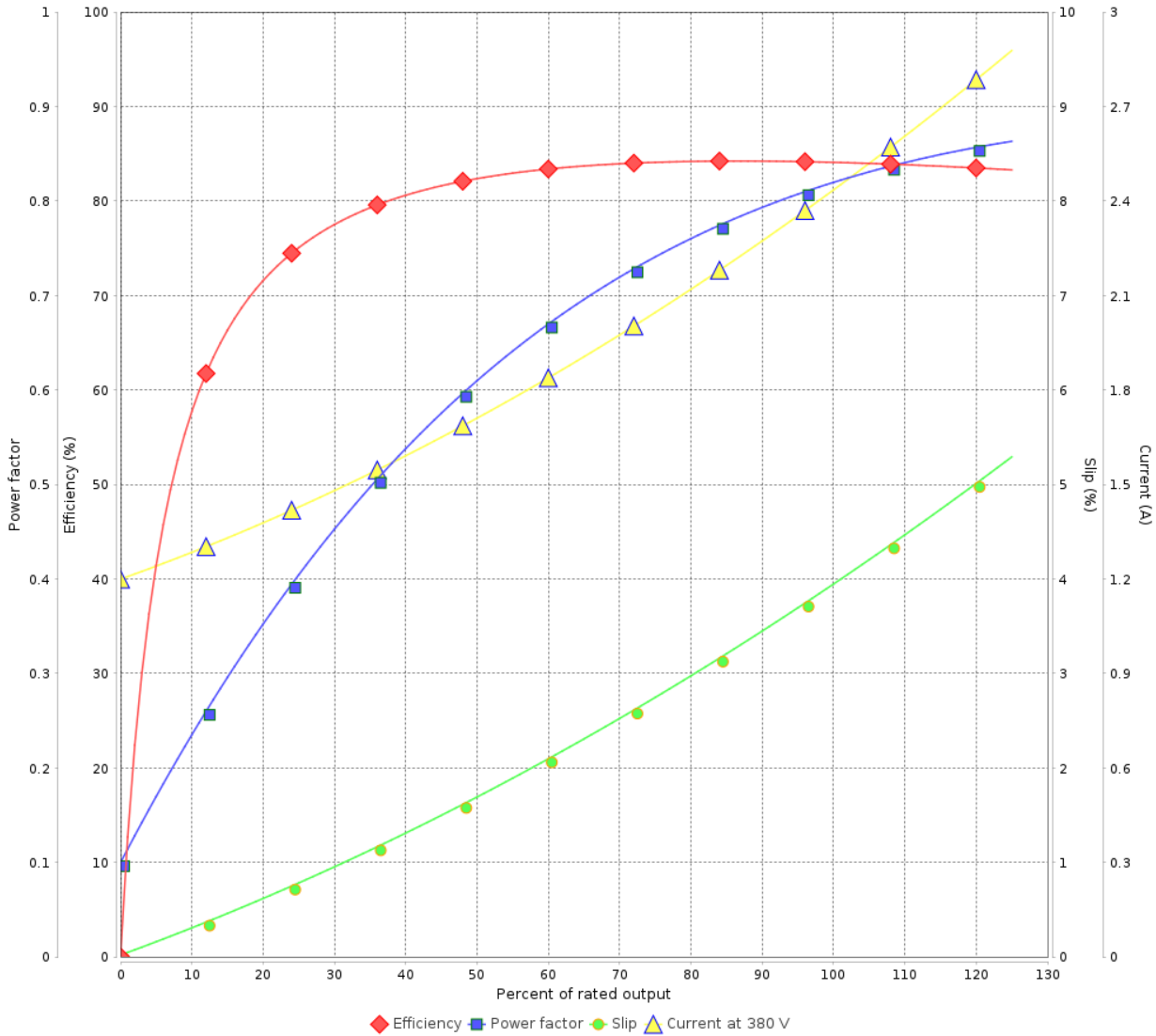
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase      Product code : 11442104

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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 : 6.7	Duty cycle : Cont.(S1)
Rated torque : 0.756 kgfm	Insulation class : F
Locked rotor torque : 250 %	Service factor : 1.25
Breakdown torque : 280 %	Temperature rise : 80 K
Rated speed : 1440 rpm	Design : B

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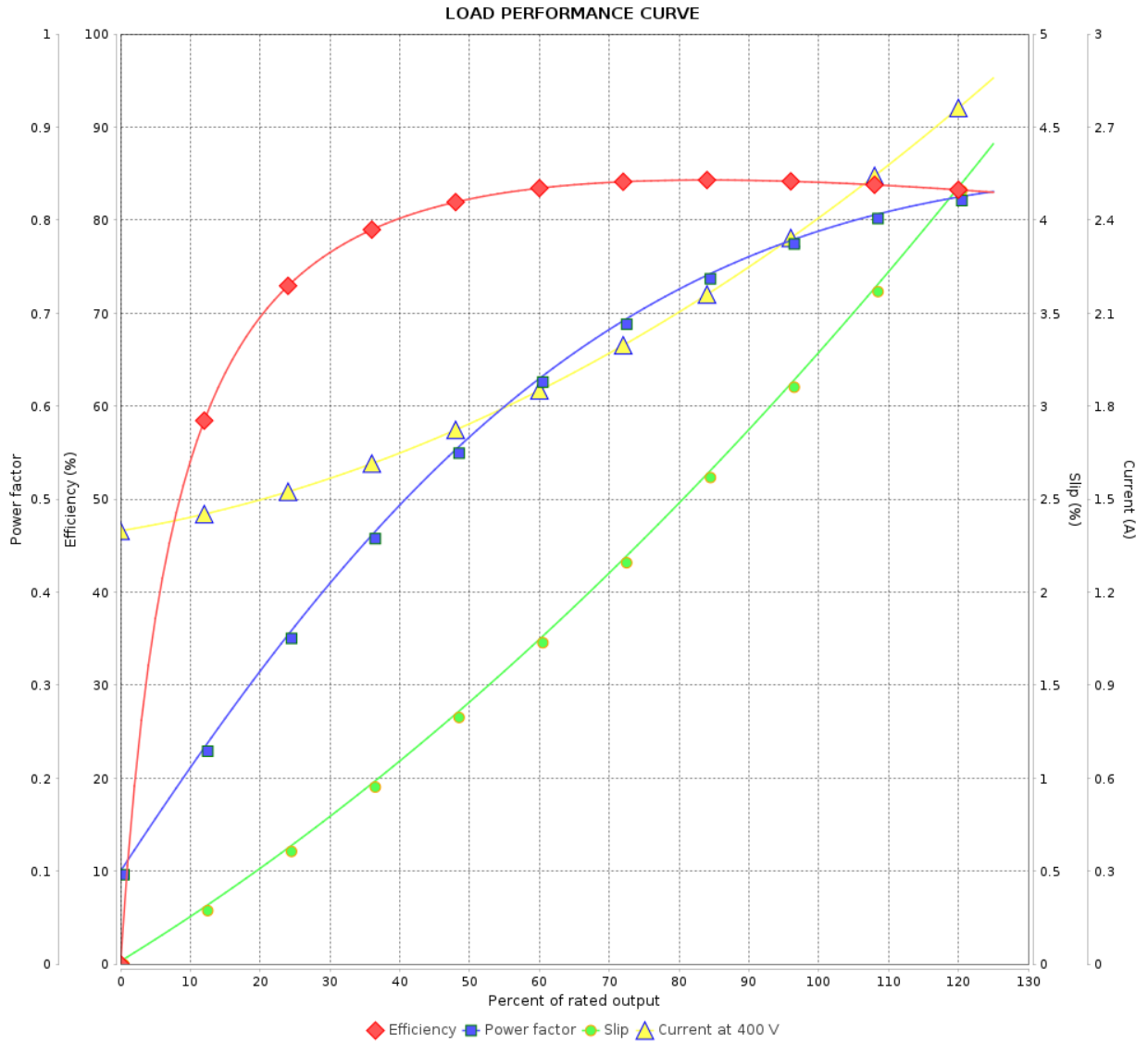
## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency  
Three-Phase

Product code : 11442104



Performance : 400 V 50 Hz 4P IE3

Rated current : 2.39 A  
 LRC : 7.3  
 Rated torque : 0.751 kgfm  
 Locked rotor torque : 250 %  
 Breakdown torque : 290 %  
 Rated speed : 1450 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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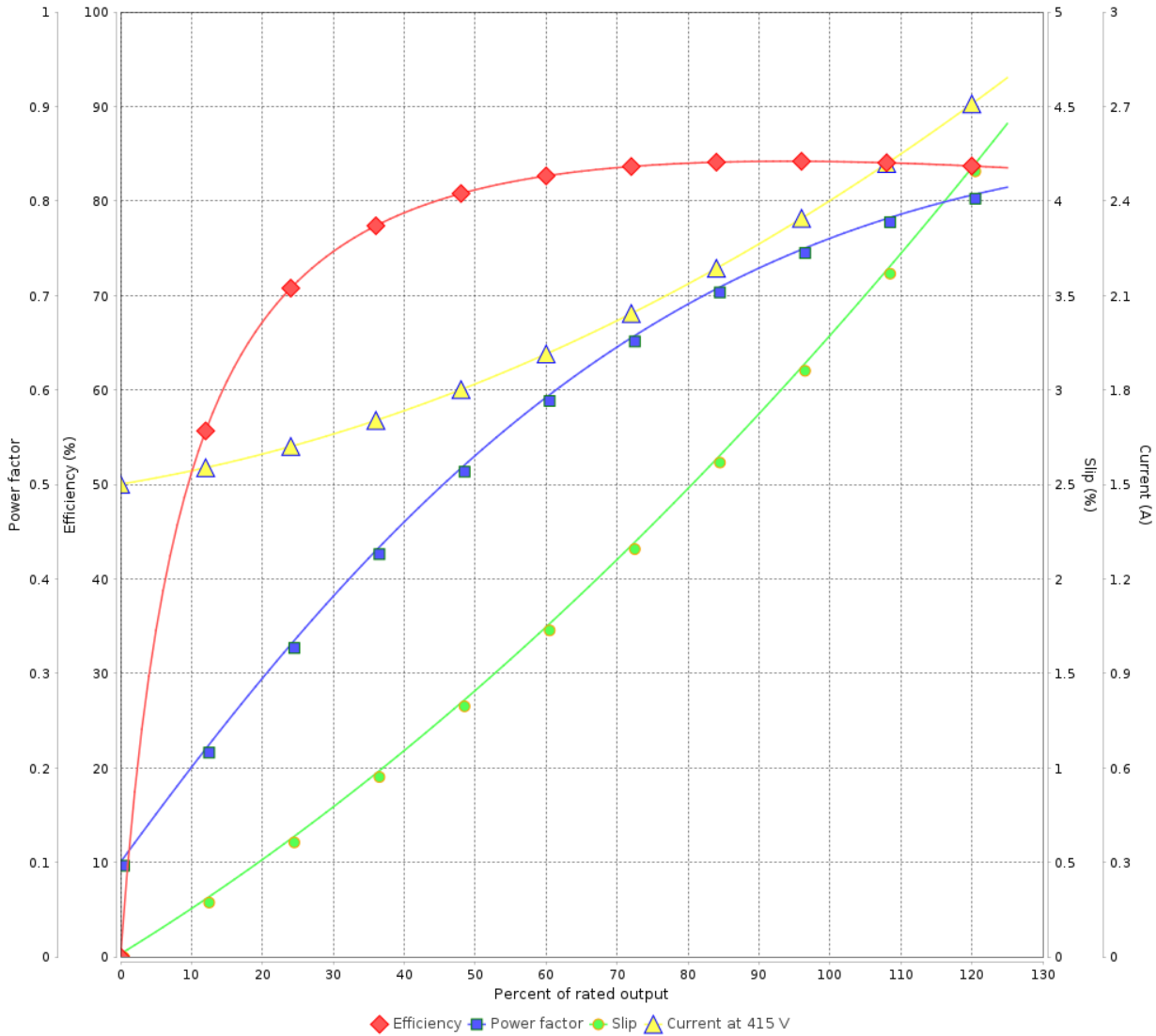
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase      Product code : 11442104

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Performance : 415 V 50 Hz 4P IE3

Rated current	: 2.39 A	Moment of inertia (J)	: 0.0060 kgm <sup>2</sup>
LRC	: 7.5	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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