

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 P Base NEMA Premium Efficiency Three-Phase Product code : 13016466

Frame : 145HP	Cooling method : IC411 - TEFC
Insulation class : F	Mounting : W-6
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> : 26.5 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	81.0
	75%	85.5	84.0	84.0
	100%	86.5	84.1	84.1
Power Factor	25%			
	50%	0.60	0.67	0.60
	75%	0.70	0.76	0.70
	100%	0.79	0.82	0.79

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

	<u>Drive end</u>	<u>Non drive end</u>	Foundation loads
Bearing type :	6307 ZZ	6204 ZZ	Max. traction
Sealing :	V'Ring	V'Ring	Max. compression
Lubrication interval :	-	-	
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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Revision

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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

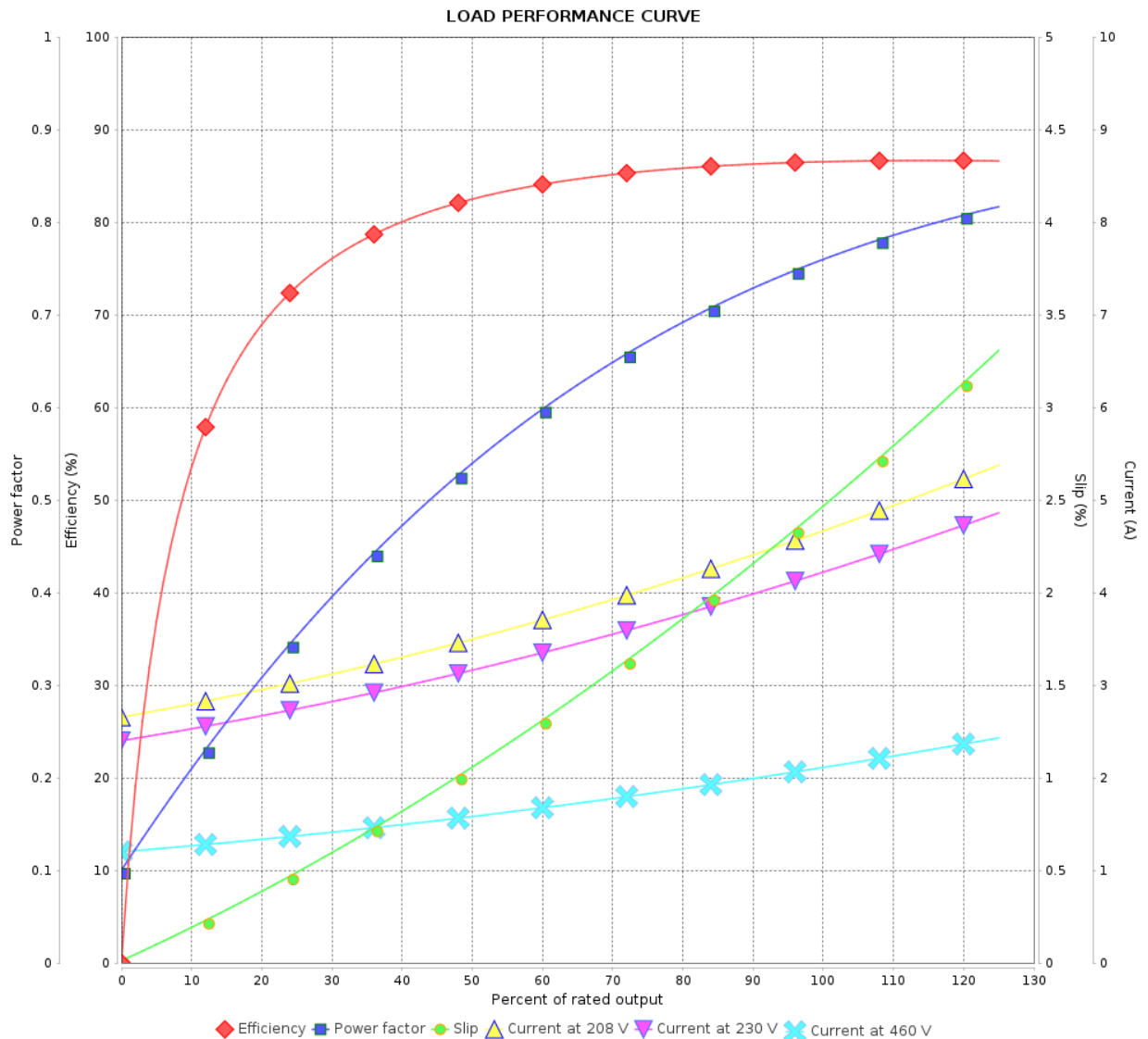
## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 P Base NEMA Premium  
Efficiency Three-Phase

Product code : 13016466



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

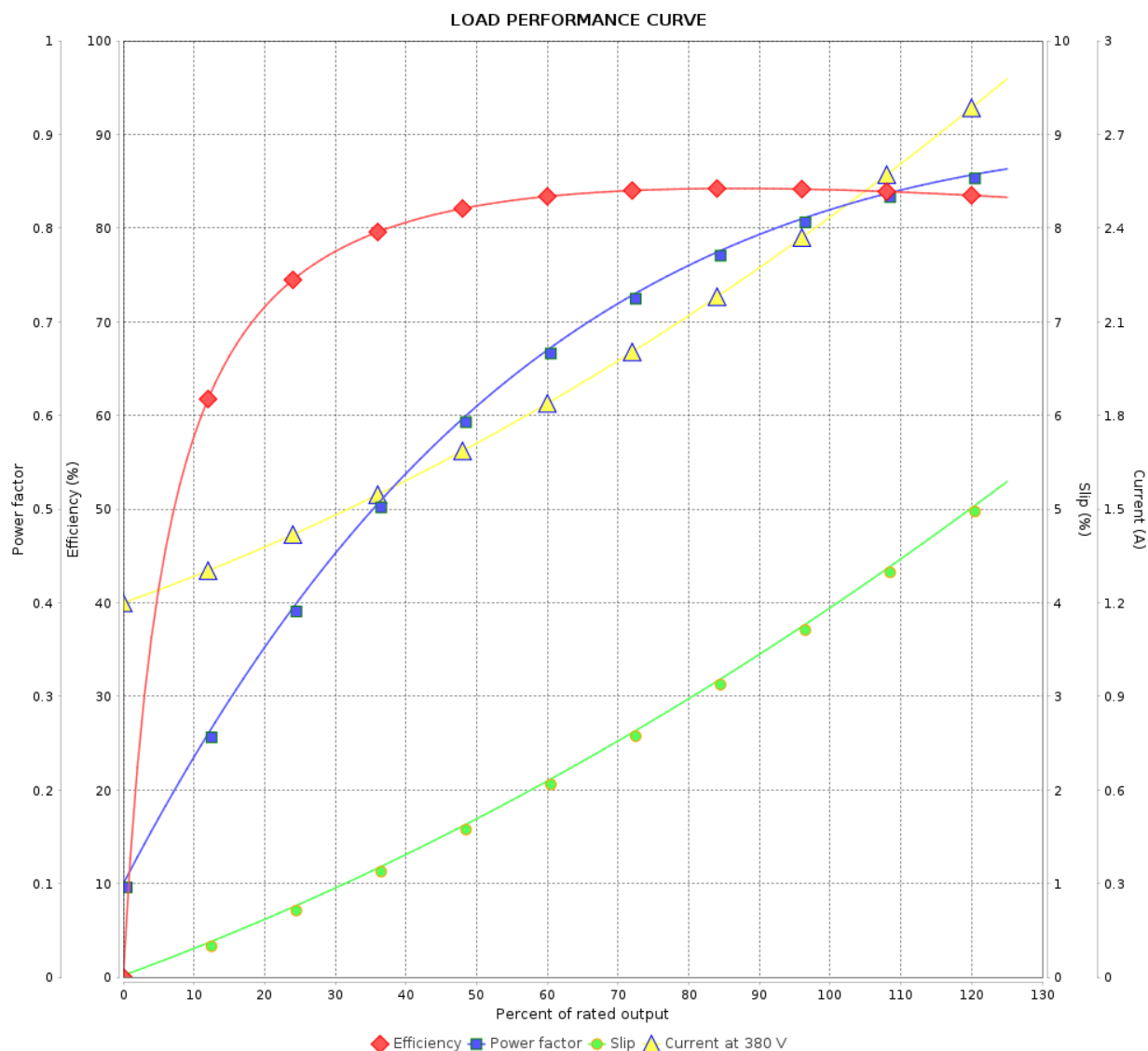
## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 P Base NEMA Premium  
Efficiency Three-Phase

Product code : 13016466



Performance : 380 V 50 Hz 4P IE3

Rated current : 2.42 A  
LRC : 6.4  
Rated torque : 0.756 kgfm  
Locked rotor torque : 220 %  
Breakdown torque : 250 %  
Rated speed : 1440 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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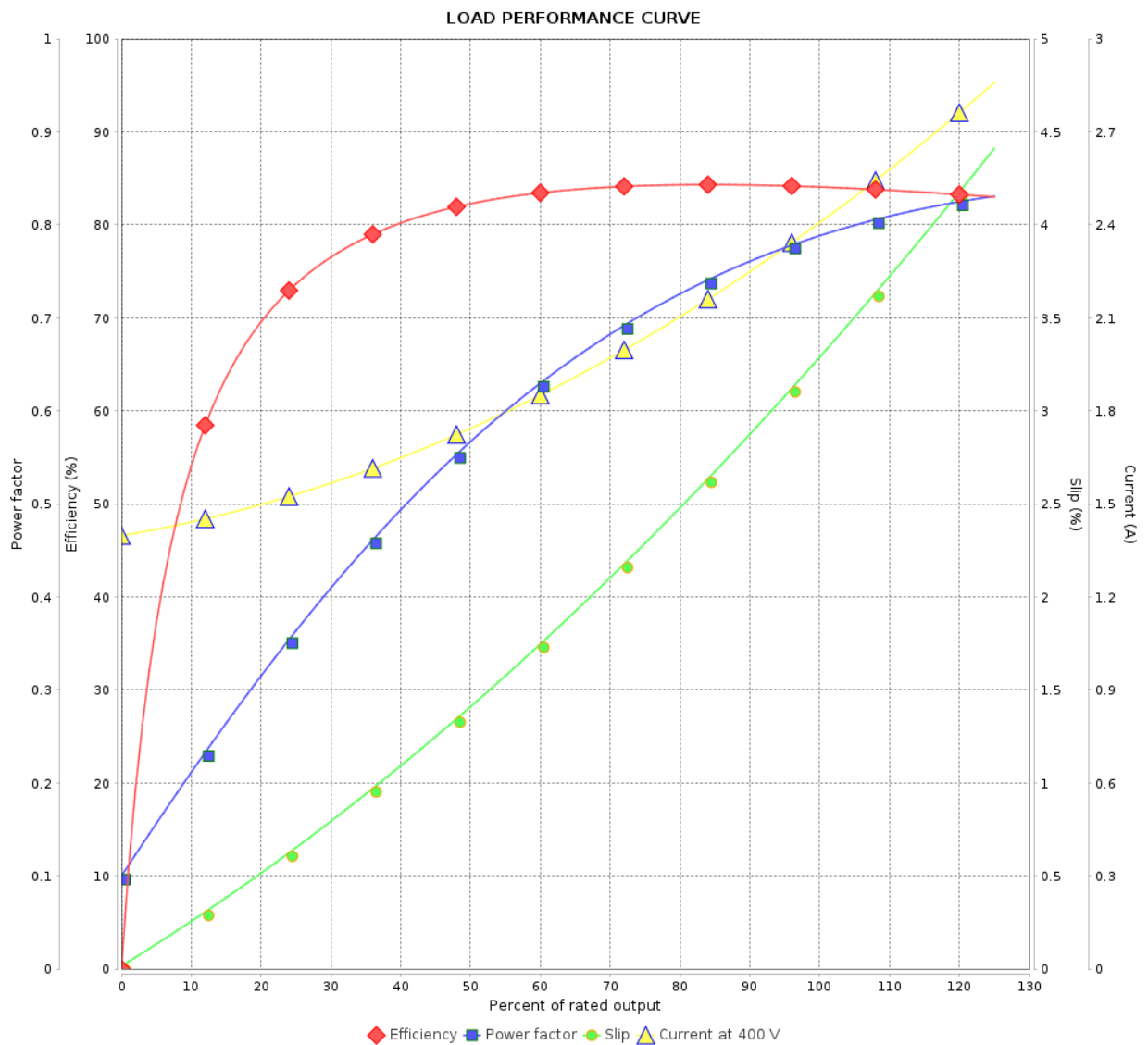
## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 P Base NEMA Premium  
Efficiency Three-Phase

Product code : 13016466



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

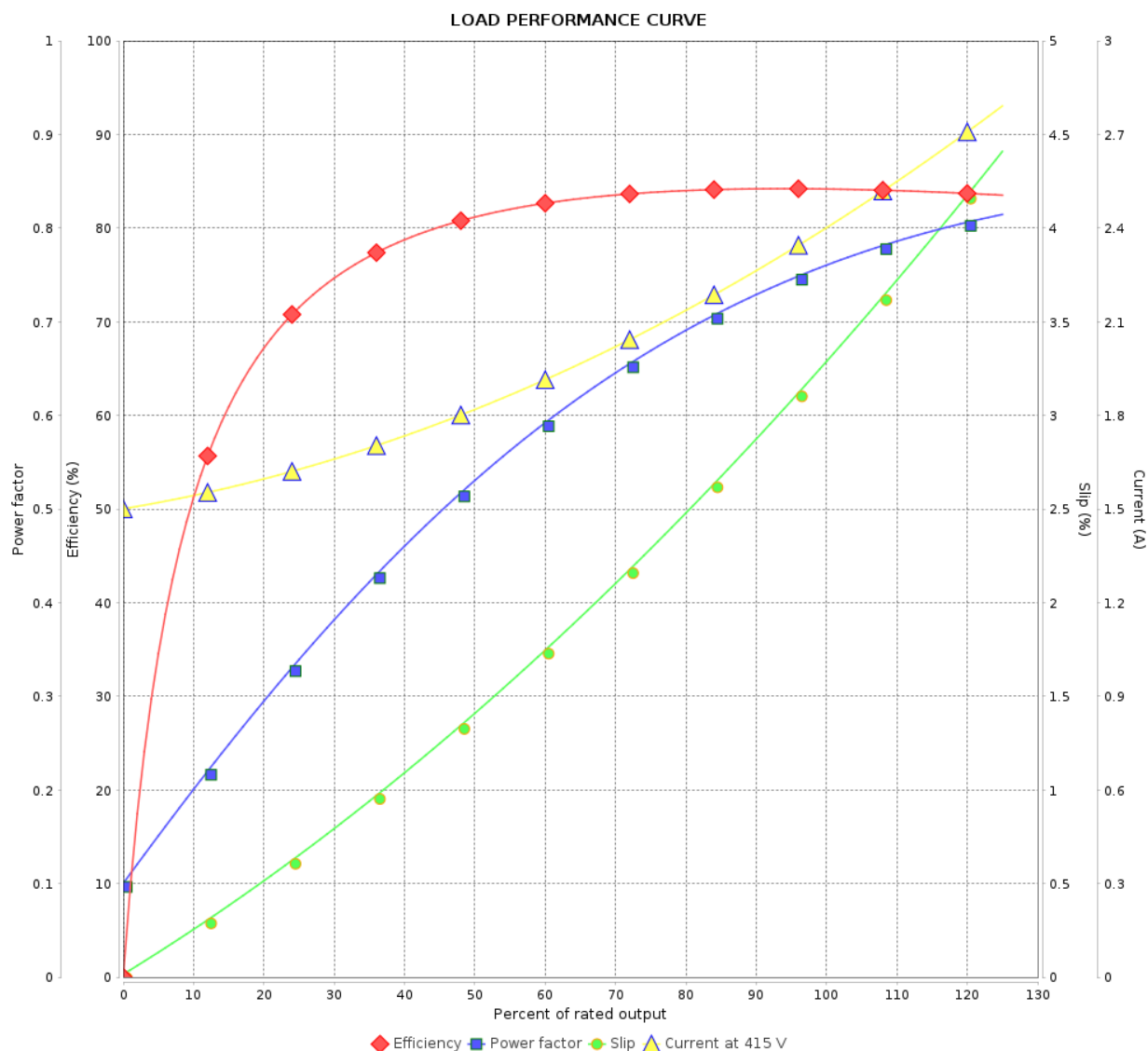
## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 P Base NEMA Premium  
Efficiency Three-Phase

Product code : 13016466



Performance : 415 V 50 Hz 4P IE3

Rated current : 2.30 A  
LRC : 7.4  
Rated torque : 0.751 kgfm  
Locked rotor torque : 280 %  
Breakdown torque : 320 %  
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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