

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase Product code : 14562090

Frame : 213/5TC	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> : 72.2 kg
Protection degree : IP55	Moment of inertia (J) : 0.0753 kgm <sup>2</sup>
Design : B	

Output [HP]	2	2	2	2
Poles	8	8	8	8
Frequency [Hz]	60	50	50	50
Rated voltage [V]	230/460	380	400	415
Rated current [A]	6.78/3.39	3.91	3.80	3.78
L. R. Amperes [A]	46.8/23.4	23.5	24.7	27.2
LRC [A]	6.9x(Code L)	6.0x(Code J)	6.5x(Code K)	7.2x(Code L)
No load current [A]	4.60/2.30	2.30	2.42	2.54
Rated speed [RPM]	875	715	720	725
Slip [%]	2.78	4.67	4.00	3.33
Rated torque [kgfm]	1.66	2.03	2.02	2.00
Locked rotor torque [%]	220	170	210	240
Breakdown torque [%]	290	210	250	280
Service factor	1.25	1.00	1.00	1.00
Temperature rise	80 K	80 K	80 K	80 K
Locked rotor time	70s (cold) 39s (hot)	70s (cold) 39s (hot)	70s (cold) 39s (hot)	70s (cold) 39s (hot)
Noise level <sup>2</sup>	52.0 dB(A)	48.0 dB(A)	48.0 dB(A)	48.0 dB(A)
Efficiency (%)	25%			
	50%	82.5	81.5	81.5
	75%	84.0	82.0	82.5
	100%	85.5	82.0	82.5
Power Factor	25%			
	50%	0.45	0.52	0.49
	75%	0.55	0.62	0.59
	100%	0.65	0.71	0.69

Losses at normative operating points (speed;torque), in percentage of rated output power

Losses (%)	P1 (0,9;1,0)	16.1	20.8	20.1	20.1
	P2 (0,5;1,0)	13.5	17.5	16.9	16.9
	P3 (0,25;1,0)	13.2	17.1	16.5	16.5
	P4 (0,9;0,5)	9.6	12.4	12.0	12.0
	P5 (0,5;0,5)	7.0	9.0	8.7	8.7
	P6 (0,5;0,25)	5.6	7.2	7.0	7.0
	P7 (0,25;0,25)	4.4	5.7	5.5	5.5

	<u>Drive end</u>	<u>Non drive end</u>	Foundation loads
Bearing type :	6308 ZZ	6207 ZZ	Max. traction : 67 kgf
Sealing :	V'Ring	V'Ring	Max. compression : 139 kgf
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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## Three Phase Induction Motor - Squirrel Cage



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

Notes  
USABLE @208V 7.49A SF 1.15 SFA 8.62A

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# LOAD PERFORMANCE CURVE

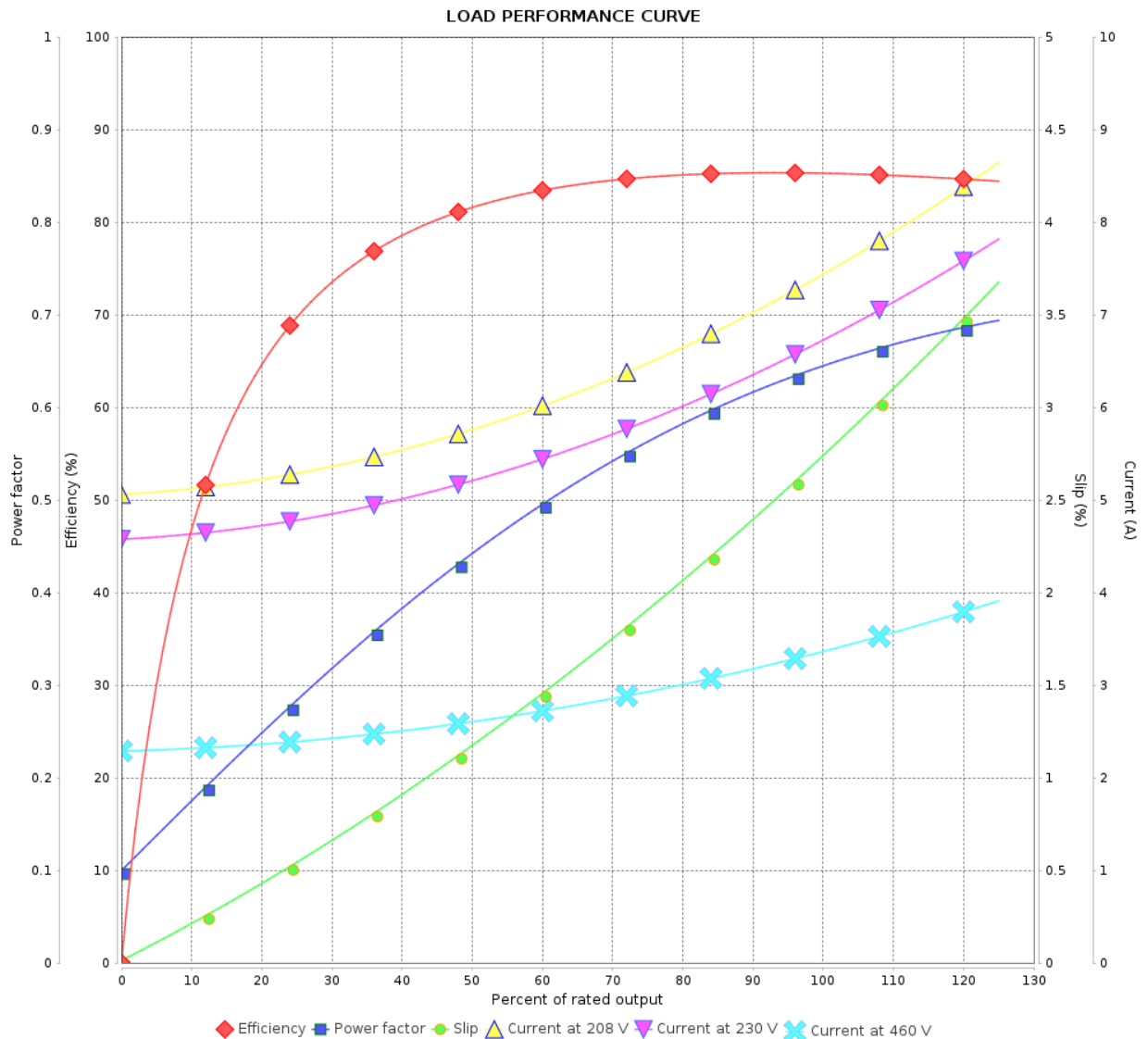
## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency  
Three-Phase

Product code : 14562090



Performance : 230/460 V 60 Hz 8P

Rated current : 6.78/3.39 A  
LRC : 6.9  
Rated torque : 1.66 kgfm  
Locked rotor torque : 220 %  
Breakdown torque : 290 %  
Rated speed : 875 rpm

Moment of inertia (J) : 0.0753 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

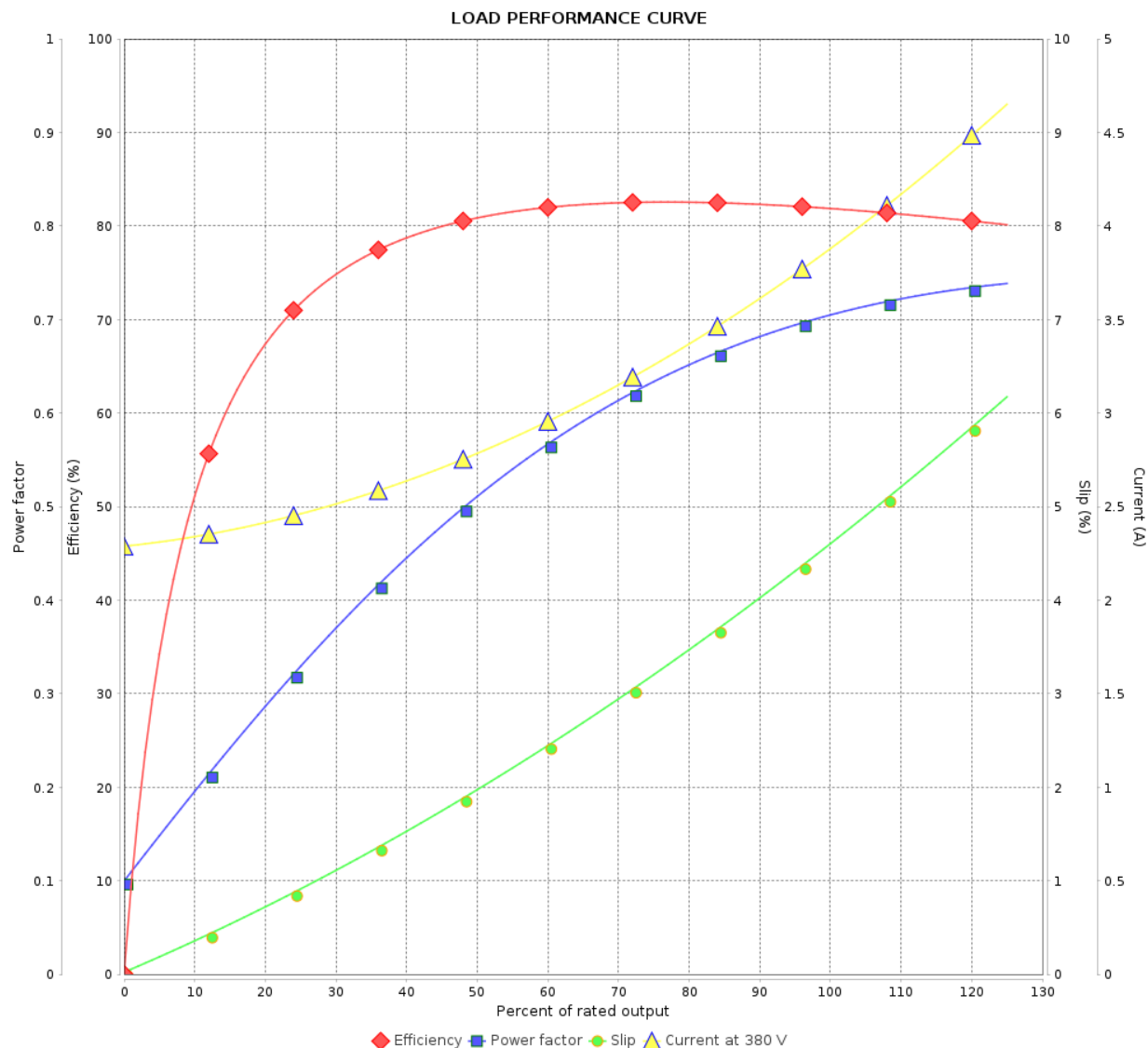
## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency  
Three-Phase

Product code : 14562090



Performance : 380 V 50 Hz 8P IE3

Rated current : 3.91 A  
LRC : 6.0  
Rated torque : 2.03 kgfm  
Locked rotor torque : 170 %  
Breakdown torque : 210 %  
Rated speed : 715 rpm

Moment of inertia (J) : 0.0753 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

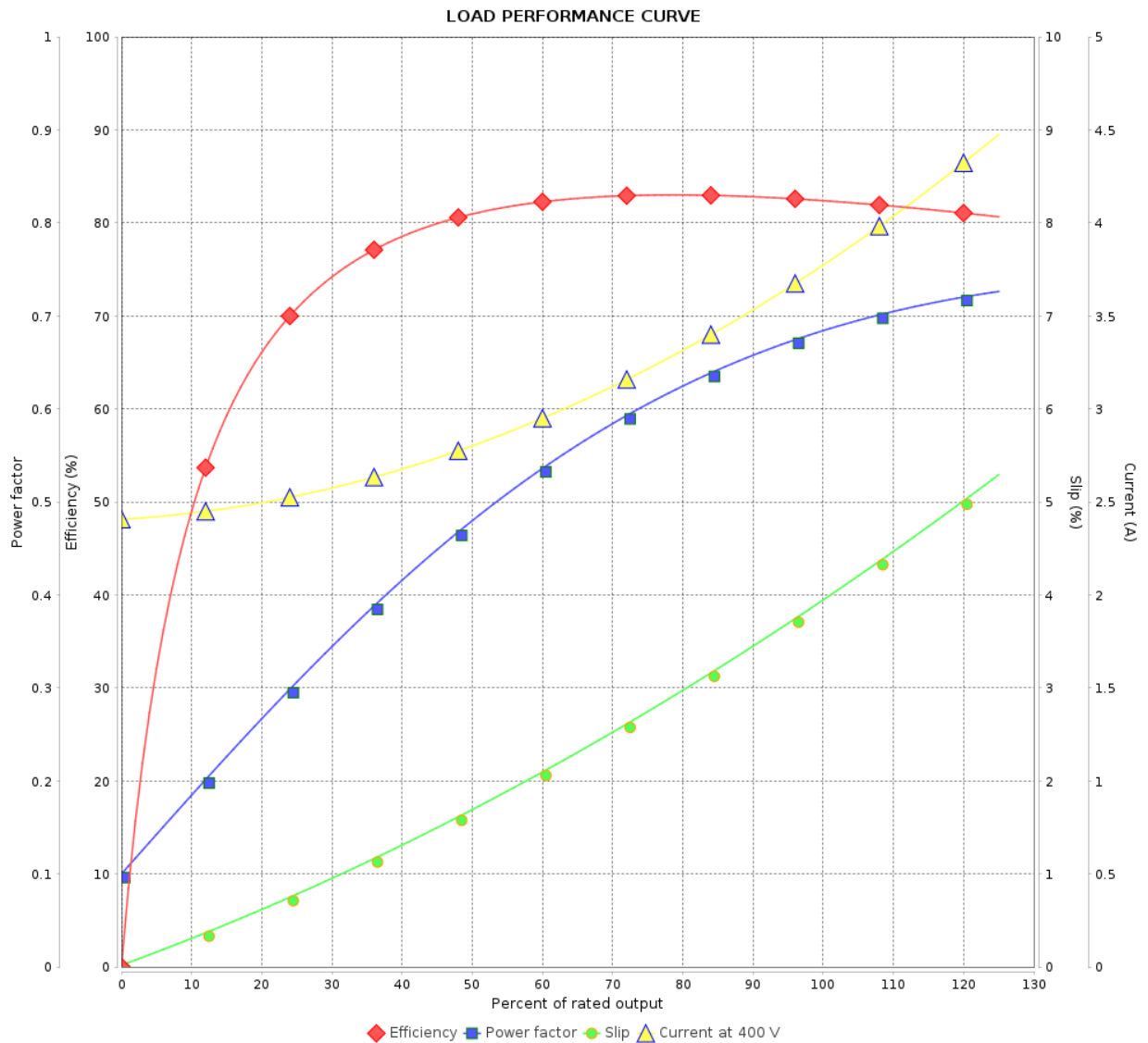
## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency  
Three-Phase

Product code : 14562090



Performance : 400 V 50 Hz 8P IE3

Rated current : 3.80 A  
LRC : 6.5  
Rated torque : 2.02 kgfm  
Locked rotor torque : 210 %  
Breakdown torque : 250 %  
Rated speed : 720 rpm

Moment of inertia (J) : 0.0753 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

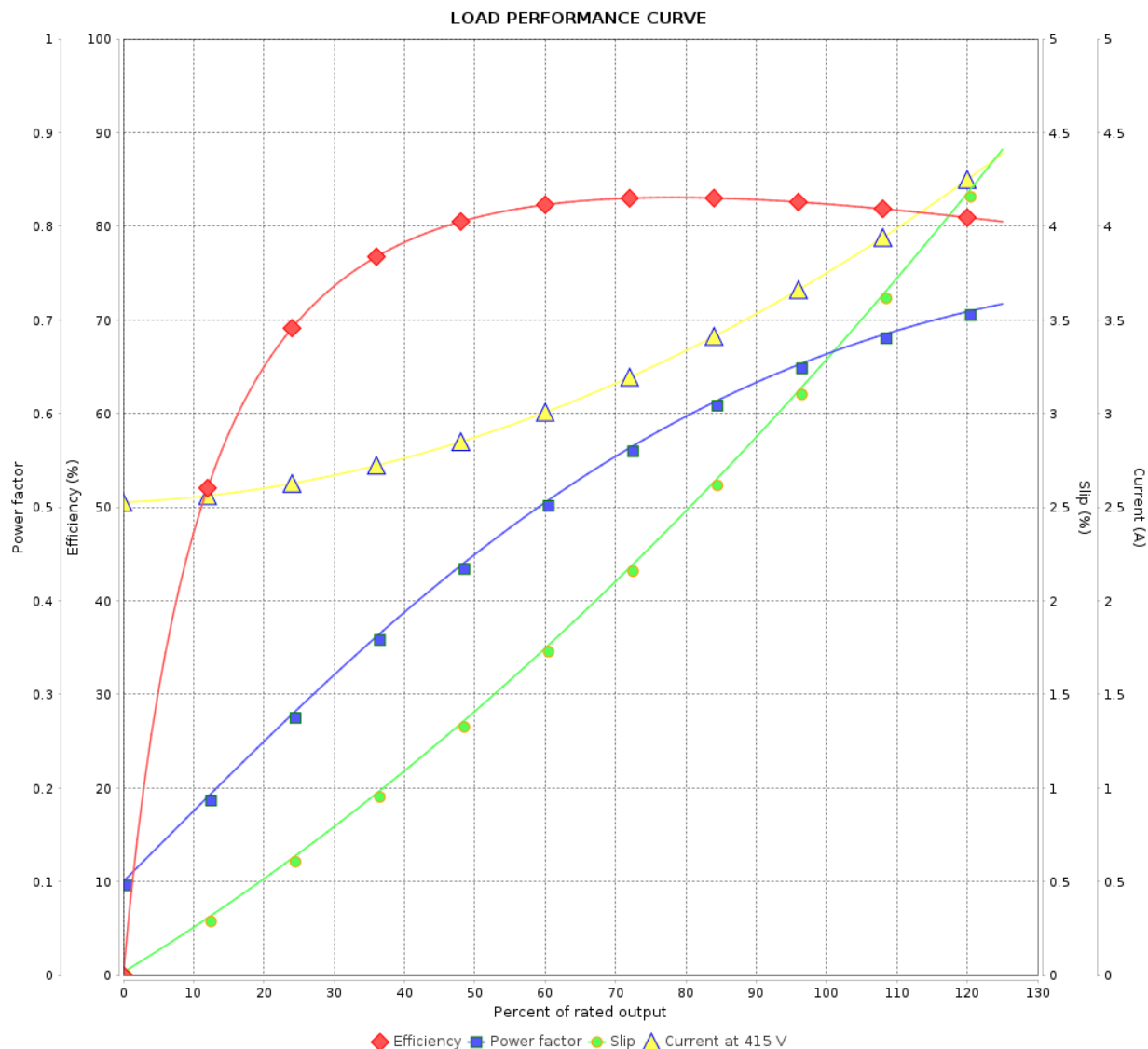
## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency  
Three-Phase

Product code : 14562090



Performance : 415 V 50 Hz 8P IE3

Rated current : 3.78 A  
LRC : 7.2  
Rated torque : 2.00 kgfm  
Locked rotor torque : 240 %  
Breakdown torque : 280 %  
Rated speed : 725 rpm

Moment of inertia (J) : 0.0753 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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