

# DATA SHEET



## Three Phase Induction Motor - Squirrel Cage

Customer :					
Product line : W40 NEMA Premium Efficiency Three-Phase		Product code : 14429704			
Frame : 364/5T	Insulation class : F	Duty cycle : Cont.(S1)	Ambient temperature : -20°C to +40°C	Altitude : 1000 m.a.s.l.	
Protection degree : IP23	Design : B	Cooling method : IC01 - ODP	Mounting : F-1	Rotation <sup>1</sup> : Both (CW and CCW)	
		Starting method : Direct On Line	Approx. weight <sup>3</sup> : 350 kg	Moment of inertia (J) : 0.7059 kgm <sup>2</sup>	
Output [HP]	75	60	60	60	
Poles	4	4	4	4	
Frequency [Hz]	60	50	50	50	
Rated voltage [V]	230/460	380	400	415	
Rated current [A]	171/85.5	84.4	82.1	80.1	
L. R. Amperes [A]	1163/581	599	591	609	
LRC [A]	6.8x(Code G)	7.1x(Code H)	7.2x(Code H)	7.6x(Code J)	
No load current [A]	61.0/30.5	28.5	33.7	36.1	
Rated speed [RPM]	1780	1480	1482	1484	
Slip [%]	1.11	1.33	1.20	1.07	
Rated torque [kgfm]	30.6	29.4	29.4	29.3	
Locked rotor torque [%]	220	200	229	250	
Breakdown torque [%]	260	240	260	280	
Service factor	1.25	1.00	1.00	1.00	
Temperature rise	80 K	80 K	80 K	80 K	
Locked rotor time	25s (cold) 14s (hot)	23s (cold) 13s (hot)	23s (cold) 13s (hot)	23s (cold) 13s (hot)	
Noise level <sup>2</sup>	69.0 dB(A)				
Efficiency (%)	25%				
	50%	94.5	93.8	93.8	
	75%	95.0	94.2	94.2	
	100%	95.0	94.2	94.2	
Power Factor	25%				
	50%	0.73	0.73	0.69	
	75%	0.82	0.82	0.80	
	100%	0.85	0.86	0.84	
Bearing type	: <u>Drive end</u> 6314 C3	<u>Non drive end</u> 6212 Z C3	Foundation loads		
Sealing	: Without	Without	Max. traction	: 749 kgf	
	Bearing Seal	Bearing Seal	Max. compression	: 1099 kgf	
Lubrication interval	: 20000 h	20000 h			
Lubricant amount	: 27 g	13 g			
Lubricant type	: Mobil Polyrex EM				
Notes USABLE @208V 189A SF 1.15 SFA 217A					
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. (4) At 100% of full load.			These are average values based on tests with sinusoidal power supply, subject to the tolerances stipulated in NEMA MG-1.		
Rev.	Changes Summary		Performed	Checked	Date
Performed by					
Checked by				Page	Revision
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# LOAD PERFORMANCE CURVE

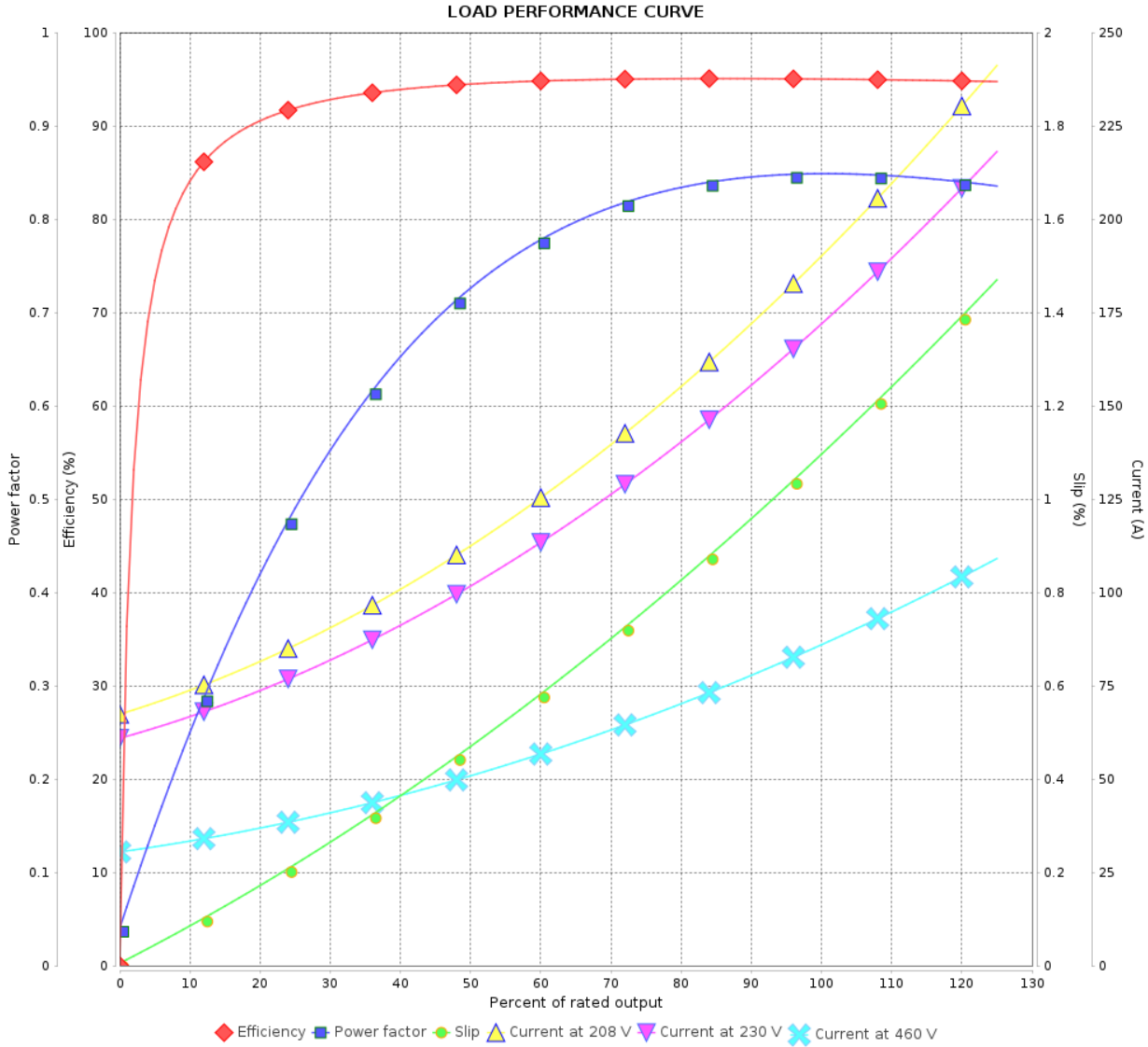
Three Phase Induction Motor - Squirrel Cage



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

Product line : W40 NEMA Premium Efficiency Three-Phase

Product code : 14429704



Performance : 230/460 V 60 Hz 4P

Rated current : 171/85.5 A  
 LRC : 6.8  
 Rated torque : 30.6 kgfm  
 Locked rotor torque : 220 %  
 Breakdown torque : 260 %  
 Rated speed : 1780 rpm

Moment of inertia (J) : 0.7059 kgm<sup>2</sup>  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.25  
 Temperature rise : 80 K  
 Design : B

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page	Revision
Checked by				
Date				

# LOAD PERFORMANCE CURVE

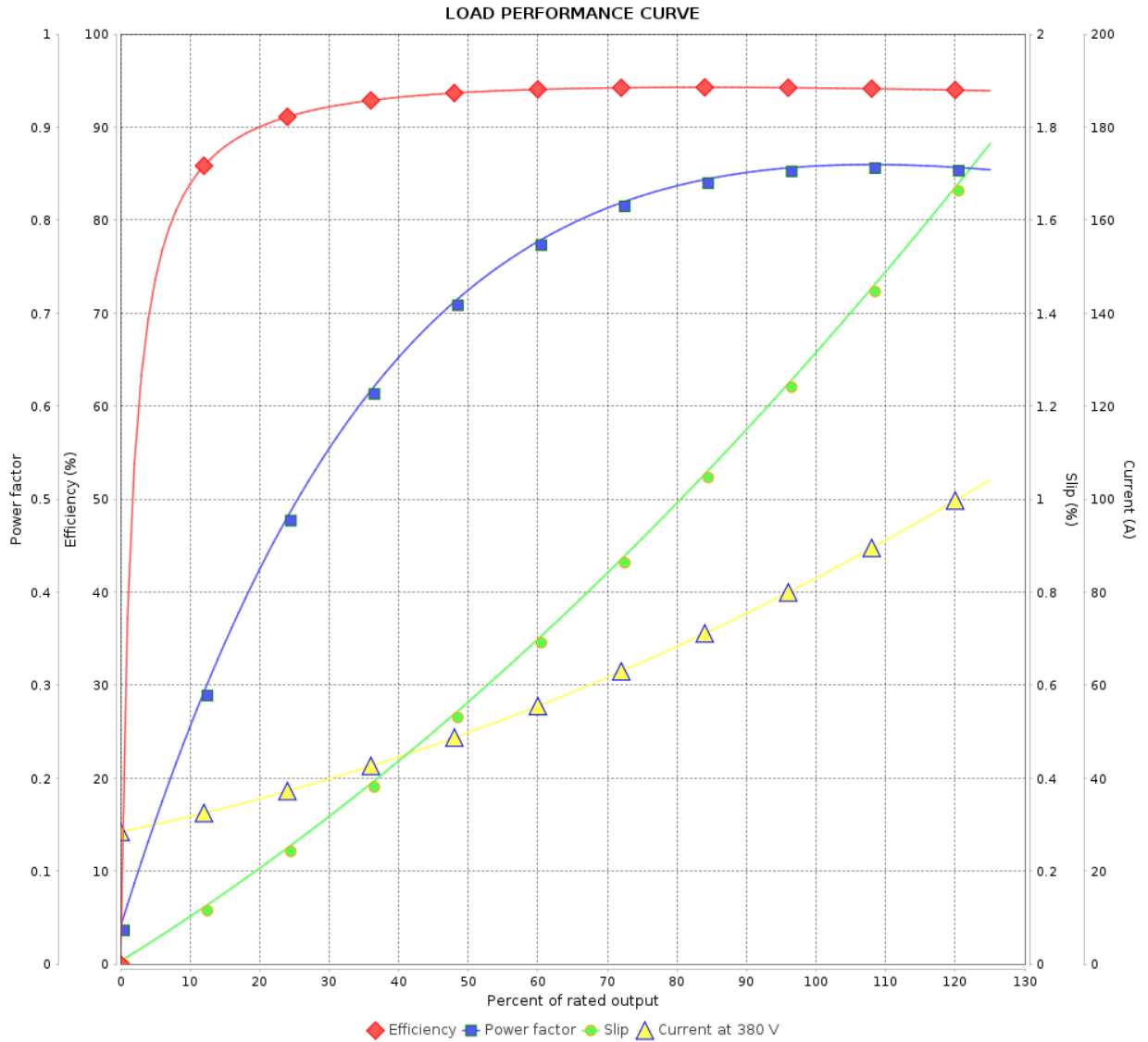
## Three Phase Induction Motor - Squirrel Cage



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

Product line : W40 NEMA Premium Efficiency Three-Phase

Product code : 14429704



Performance : 380 V 50 Hz 4P IE3

Rated current : 84.4 A  
 LRC : 7.1  
 Rated torque : 29.4 kgfm  
 Locked rotor torque : 200 %  
 Breakdown torque : 240 %  
 Rated speed : 1480 rpm

Moment of inertia (J) : 0.7059 kgm<sup>2</sup>  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.00  
 Temperature rise : 80 K  
 Design : B

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page	Revision
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Date				

# LOAD PERFORMANCE CURVE

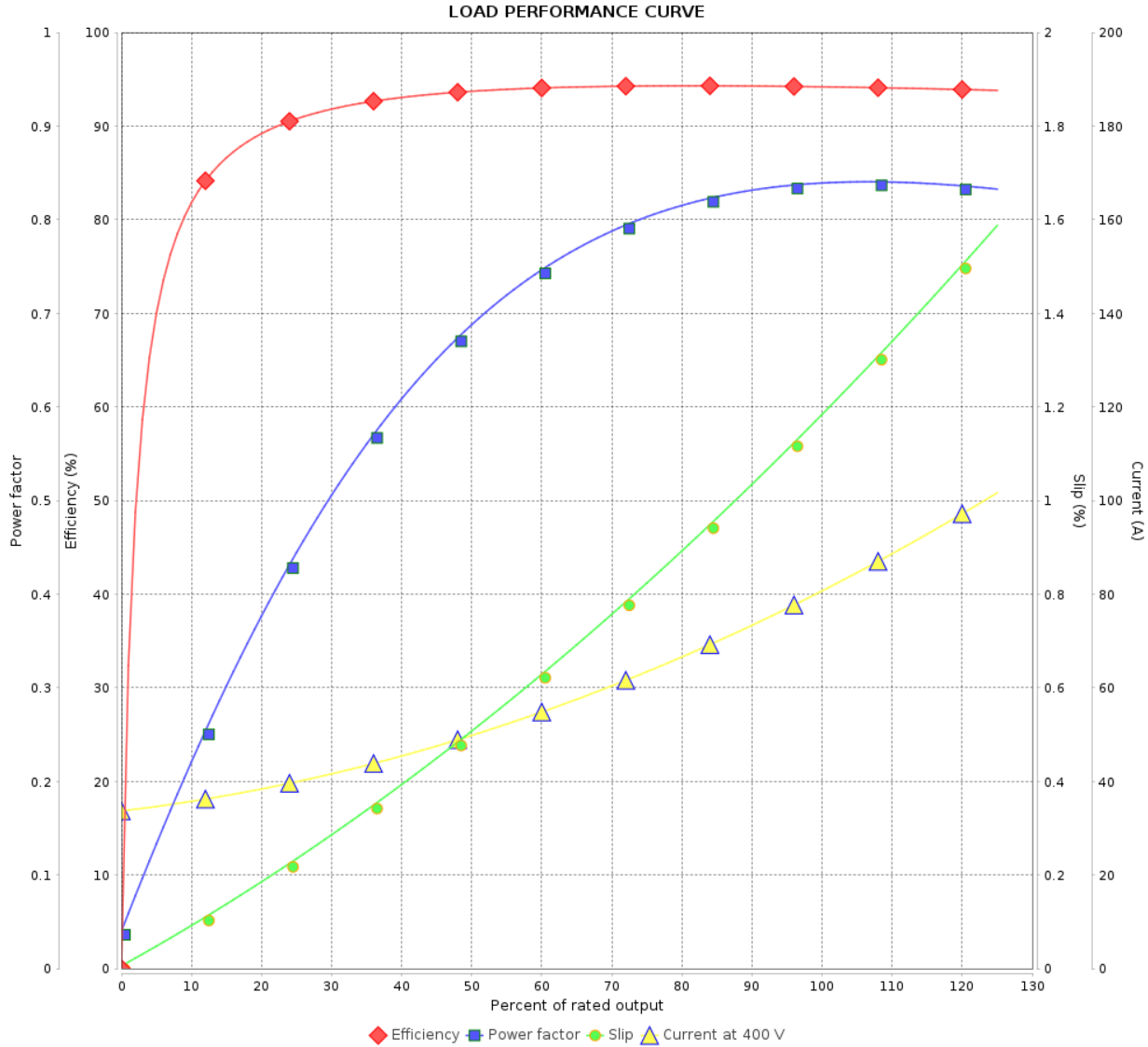
Three Phase Induction Motor - Squirrel Cage



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

Product line : W40 NEMA Premium Efficiency Three-Phase

Product code : 14429704



Performance : 400 V 50 Hz 4P IE3

Rated current : 82.1 A  
 LRC : 7.2  
 Rated torque : 29.4 kgfm  
 Locked rotor torque : 229 %  
 Breakdown torque : 260 %  
 Rated speed : 1482 rpm

Moment of inertia (J) : 0.7059 kgm<sup>2</sup>  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.00  
 Temperature rise : 80 K  
 Design : B

Rev.	Changes Summary	Performed	Checked	Date
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Date				

# LOAD PERFORMANCE CURVE

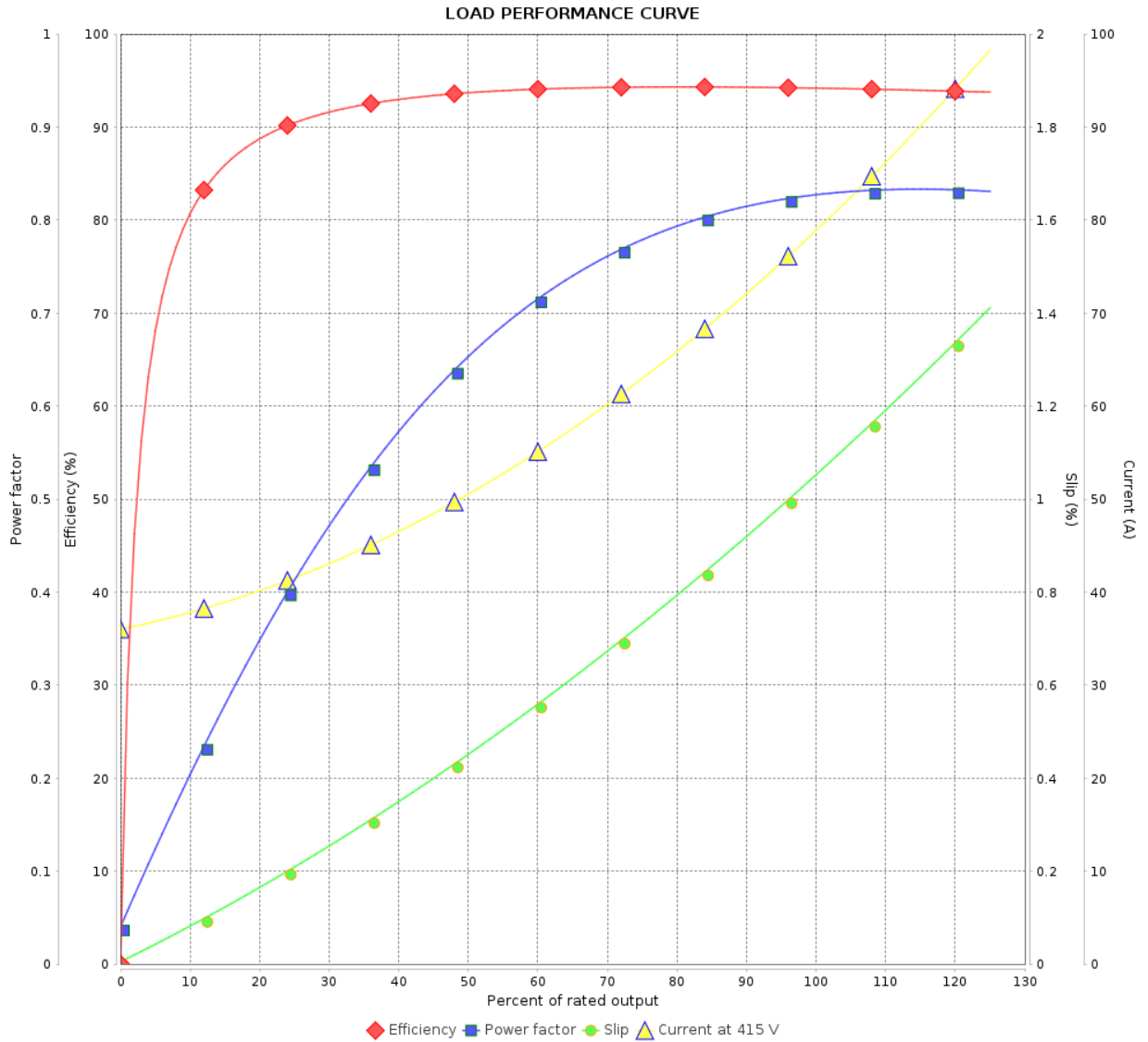
## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W40 NEMA Premium Efficiency Three-Phase

Product code : 14429704



Performance : 415 V 50 Hz 4P IE3

Rated current : 80.1 A  
 LRC : 7.6  
 Rated torque : 29.3 kgfm  
 Locked rotor torque : 250 %  
 Breakdown torque : 280 %  
 Rated speed : 1484 rpm

Moment of inertia (J) : 0.7059 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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