

# DATA SHEET



## Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase      Product code : 11627303

Frame : 445/7T	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> : 1135 kg
Protection degree : IP55	Moment of inertia (J) : 6.09 kgm <sup>2</sup>
Design : B	

Output [HP]	200	150	150	150	200	200	200
Poles	6	6	6	6	6	6	6
Frequency [Hz]	60	50	50	50	50	50	50
Rated voltage [V]	230/460	380	400	415	380	400	415
Rated current [A]	474/237	214	209	204	289	273	265
L. R. Amperes [A]	2983/1492	1393	1503	1568	1443	1527	1588
LRC [A]	6.3x(Code G)	6.5x(Code G)	7.2x(Code H)	7.7x(Code J)	5.0x(Code E)	5.6x(Code F)	6.0x(Code G)
No load current [A]	188/94.0	93.0	106	111	93.0	106	111
Rated speed [RPM]	1188	990	985	985	981	980	980
Slip [%]	1.00	1.00	1.50	1.50	1.90	2.00	2.00
Rated torque [kgfm]	122	110	111	111	148	148	148
Locked rotor torque [%]	229	229	250	270	180	200	220
Breakdown torque [%]	240	260	280	310	190	210	229
Service factor	1.15	1.15	1.15	1.15	1.00	1.00	1.00
Temperature rise	80 K	80 K	80 K	80 K	105 K	105 K	105 K
Locked rotor time	27s (cold) 15s (hot)	21s (cold) 12s (hot)	21s (cold) 12s (hot)	21s (cold) 12s (hot)	18s (cold) 10s (hot)	18s (cold) 10s (hot)	18s (cold) 10s (hot)
Noise level <sup>2</sup>	69.0 dB(A)						
Efficiency (%)	25%						
	50%	95.0	94.5	94.5	94.5	94.5	94.0
	75%	95.4	95.1	95.1	95.1	94.5	94.5
	100%	95.8	95.1	95.1	95.1	94.0	94.5
Power Factor	25%						
	50%	0.68	0.65	0.62	0.59	0.74	0.68
	75%	0.79	0.76	0.74	0.71	0.82	0.79
	100%	0.83	0.82	0.80	0.79	0.84	0.83

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

Losses (%)	P1 (0,9;1,0)	4.7	5.6	5.6	5.6	6.9	6.3	5.7
	P2 (0,5;1,0)	4.0	4.7	4.7	4.7	5.8	5.3	4.8
	P3 (0,25;1,0)	3.6	4.3	4.3	4.3	5.3	4.8	4.4
	P4 (0,9;0,5)	2.4	2.8	2.8	2.8	3.5	3.2	2.9
	P5 (0,5;0,5)	1.7	2.0	2.0	2.0	2.5	2.3	2.1
	P6 (0,5;0,25)	1.2	1.4	1.4	1.4	1.7	1.6	1.4
	P7 (0,25;0,25)	0.8	0.9	0.9	0.9	1.1	1.0	0.9

Bearing type : Sealing : Lubrication interval : Lubricant amount : Lubricant type :	Drive end	6319 C3	Non drive end	6316 C3	Foundation loads Max. traction : 2412 kgf Max. compression : 3547 kgf
	WSeal	WSeal			
	13000 h	16000 h			
	45 g	34 g			
	Mobil Polyrex EM				

This revision replaces and cancel the previous one, which must be eliminated.

(1) Looking the motor from the shaft end.

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
Date	13/01/2024		1 / 9	

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



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

Notes  
USABLE @208V 524A SF 1.00 SFA 524A

Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by			Page	Revision
Date	13/01/2024		2 / 9	

# LOAD PERFORMANCE CURVE

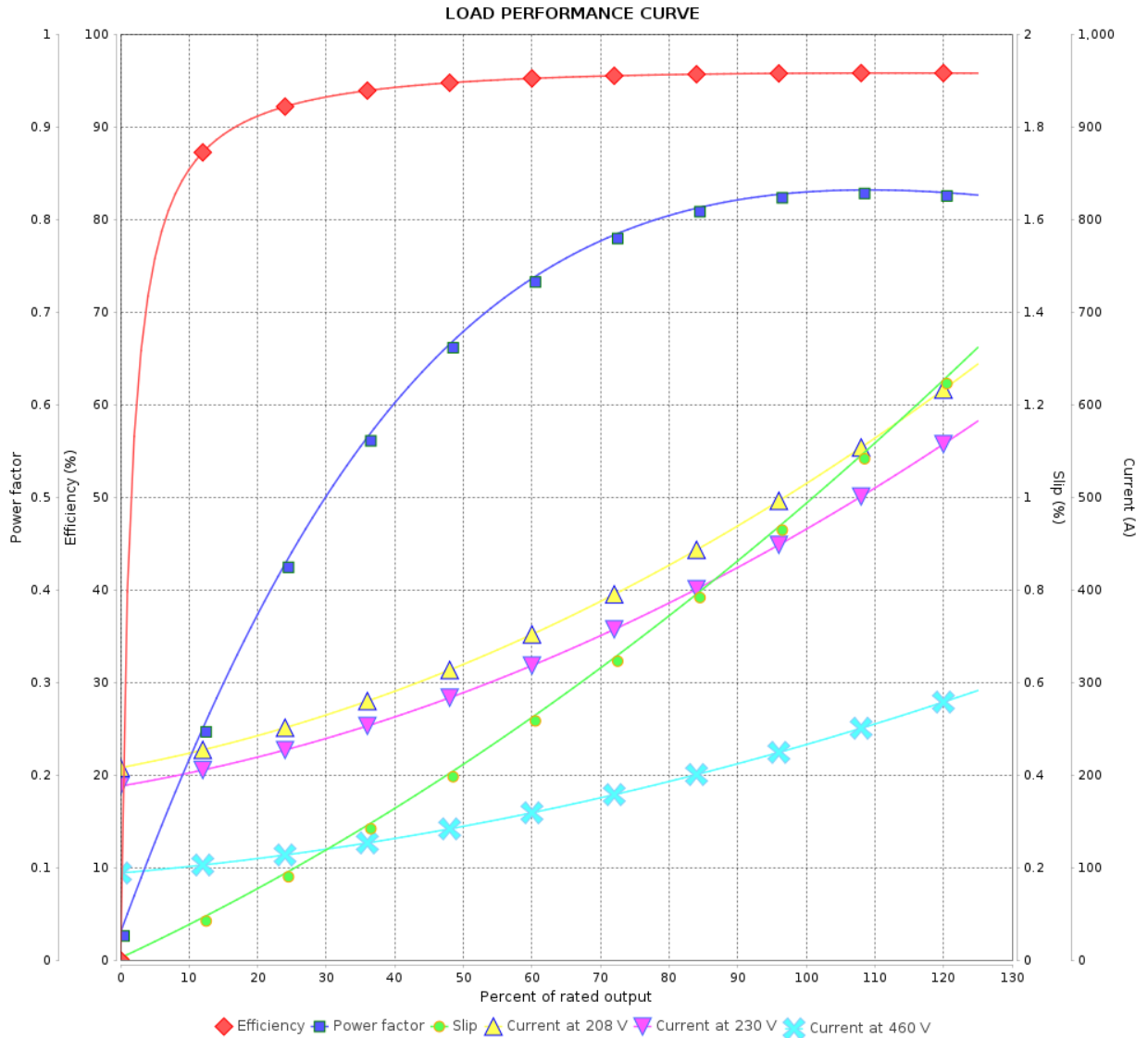
## Three Phase Induction Motor - Squirrel Cage



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

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 11627303



Performance : 230/460 V 60 Hz 6P

Rated current : 474/237 A  
 LRC : 6.3  
 Rated torque : 122 kgfm  
 Locked rotor torque : 229 %  
 Breakdown torque : 240 %  
 Rated speed : 1188 rpm

Moment of inertia (J) : 6.09 kgm<sup>2</sup>  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.15  
 Temperature rise : 80 K  
 Design : B

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

# LOAD PERFORMANCE CURVE

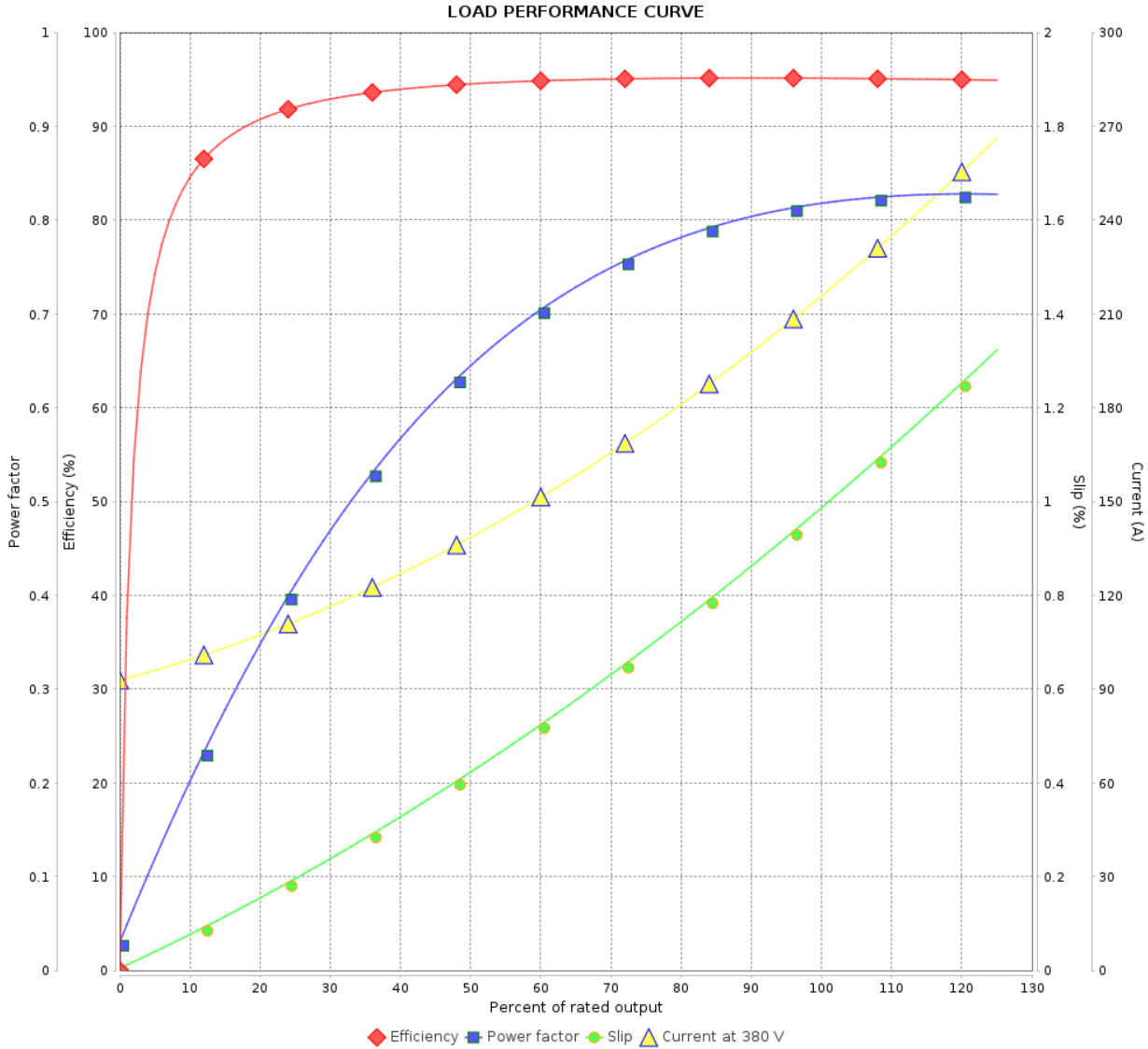
Three Phase Induction Motor - Squirrel Cage



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

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 11627303



Performance : 380 V 50 Hz 6P IE3

Rated current : 214 A  
 LRC : 6.5  
 Rated torque : 110 kgfm  
 Locked rotor torque : 229 %  
 Breakdown torque : 260 %  
 Rated speed : 990 rpm

Moment of inertia (J) : 6.09 kgm<sup>2</sup>  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.15  
 Temperature rise : 80 K  
 Design : B

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 4 / 9	Revision
Checked by				
Date	13/01/2024			

# LOAD PERFORMANCE CURVE

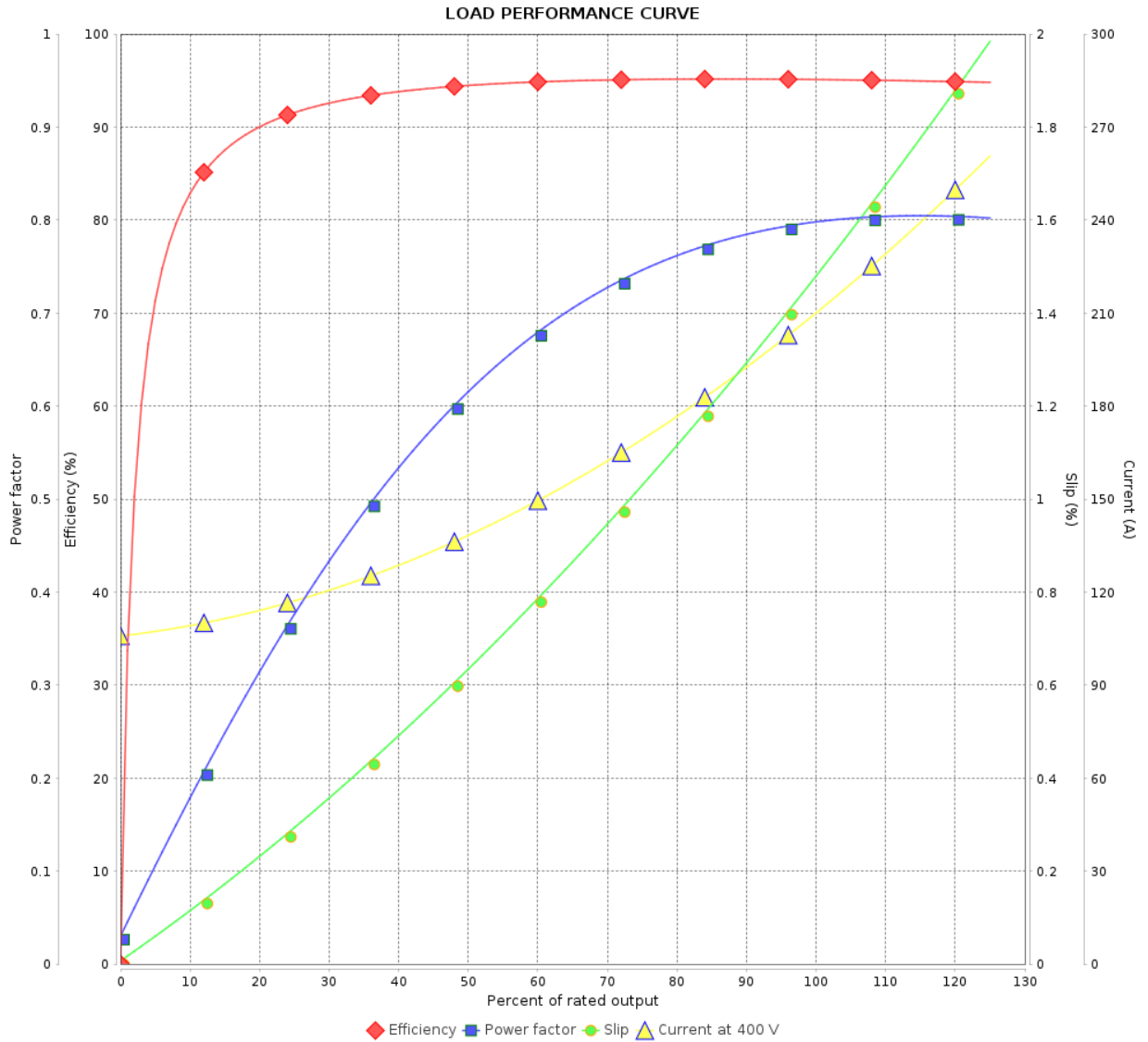
## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 11627303



Performance : 400 V 50 Hz 6P IE3

Rated current : 209 A  
 LRC : 7.2  
 Rated torque : 111 kgfm  
 Locked rotor torque : 250 %  
 Breakdown torque : 280 %  
 Rated speed : 985 rpm

Moment of inertia (J) : 6.09 kgm<sup>2</sup>  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.15  
 Temperature rise : 80 K  
 Design : B

Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by				
Date				
			Page	Revision
			5 / 9	

# LOAD PERFORMANCE CURVE

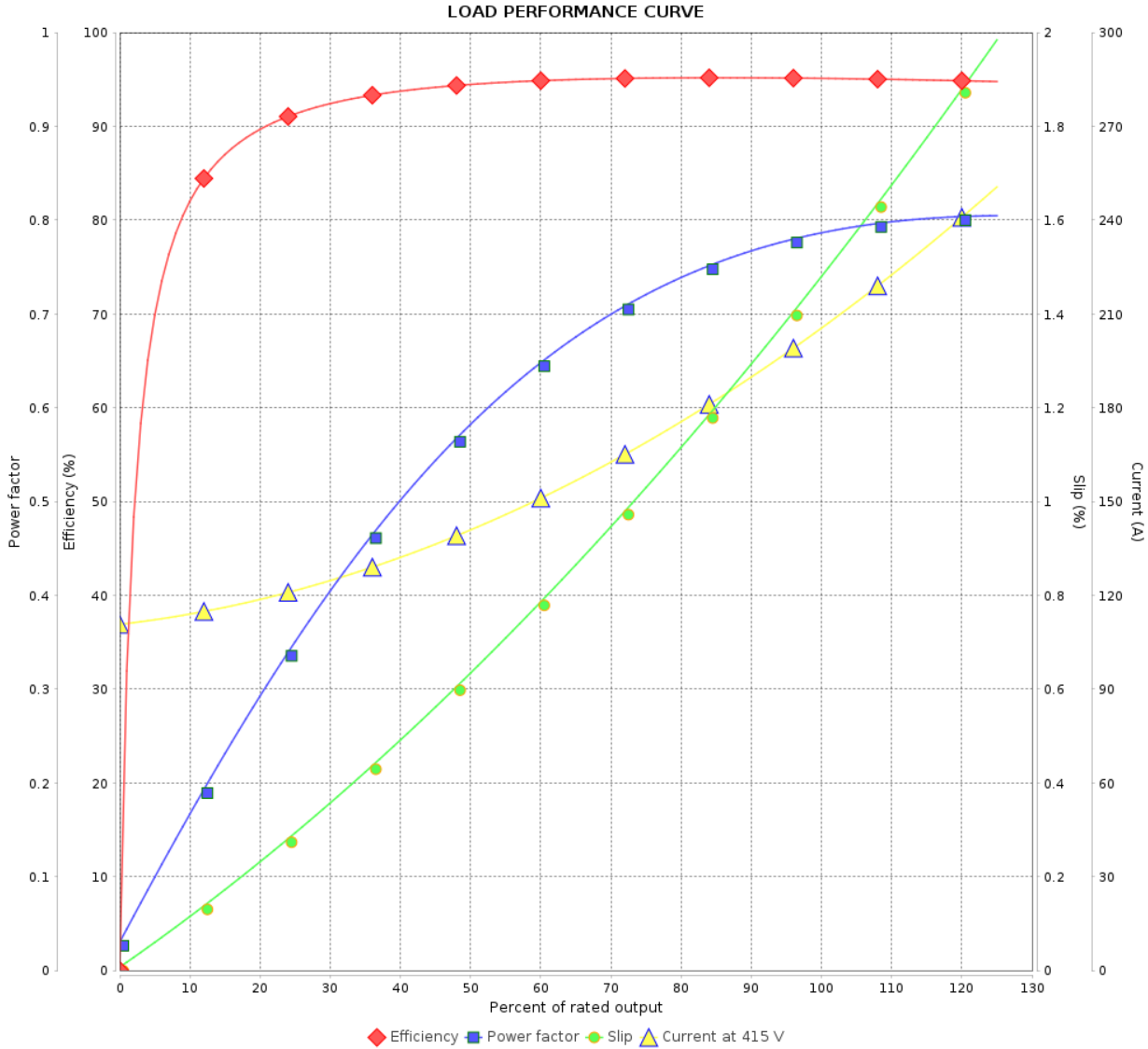
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 11627303



Performance : 415 V 50 Hz 6P IE3

Rated current : 204 A  
 LRC : 7.7  
 Rated torque : 111 kgfm  
 Locked rotor torque : 270 %  
 Breakdown torque : 310 %  
 Rated speed : 985 rpm

Moment of inertia (J) : 6.09 kgm<sup>2</sup>  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.15  
 Temperature rise : 80 K  
 Design : B

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 6 / 9	Revision
Checked by				
Date	13/01/2024			

# LOAD PERFORMANCE CURVE

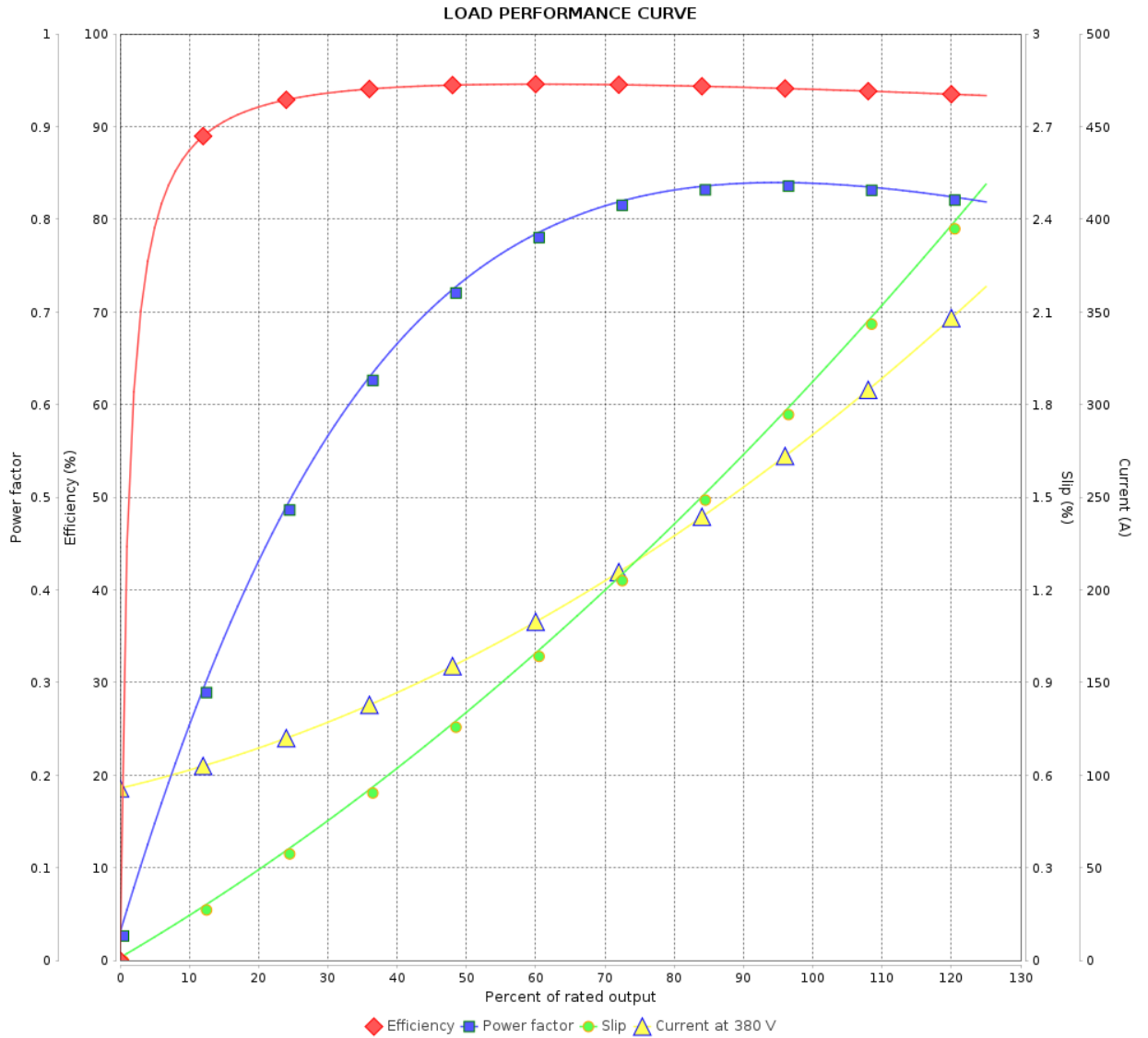
## Three Phase Induction Motor - Squirrel Cage



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

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 11627303



Performance : 380 V 50 Hz 6P IE1

Rated current : 289 A  
 LRC : 5.0  
 Rated torque : 148 kgfm  
 Locked rotor torque : 180 %  
 Breakdown torque : 190 %  
 Rated speed : 981 rpm

Moment of inertia (J) : 6.09 kgm<sup>2</sup>  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.00  
 Temperature rise : 105 K  
 Design : B

Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page		Revision
Checked by		7 / 9		
Date		13/01/2024		

# LOAD PERFORMANCE CURVE

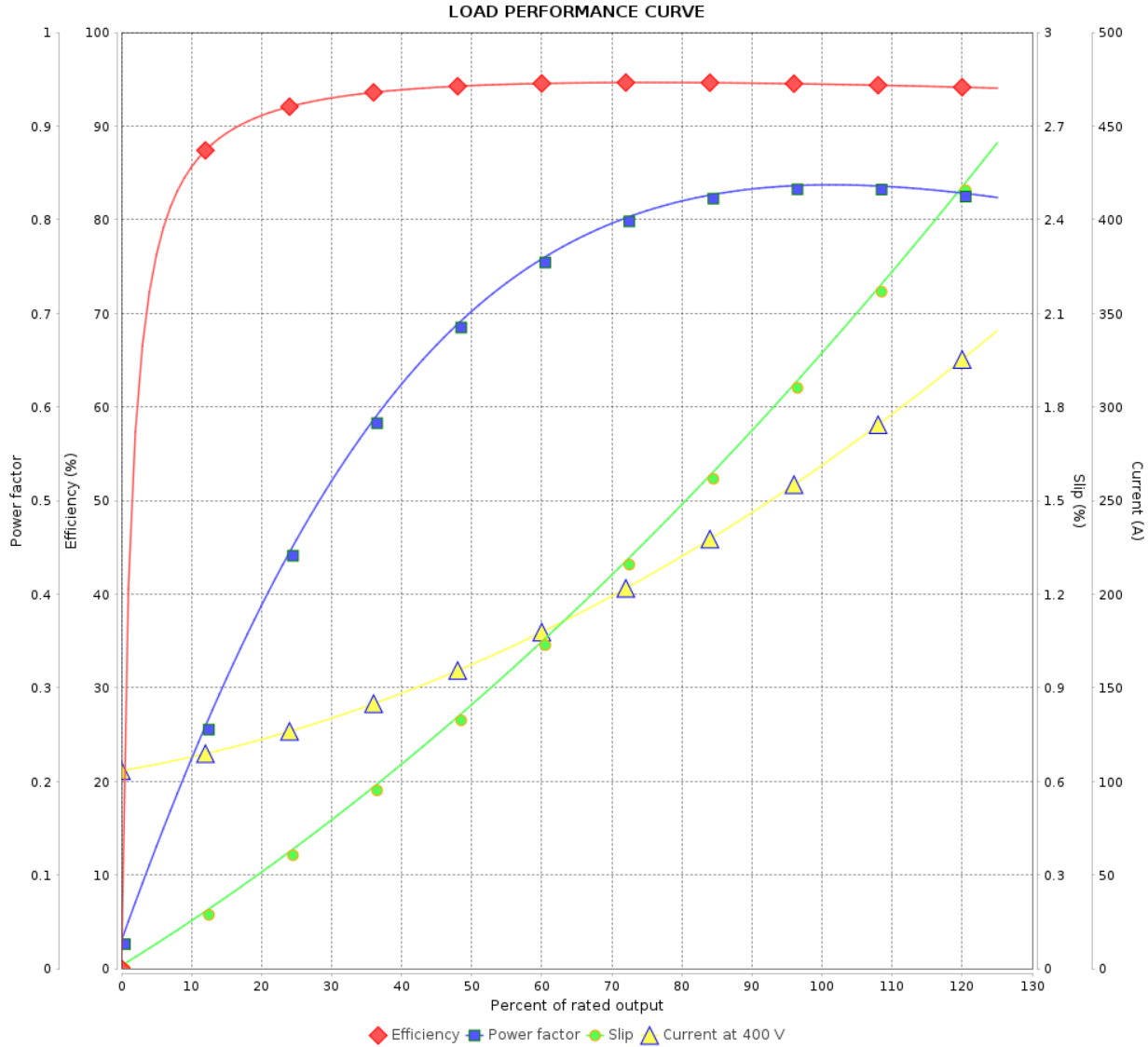
Three Phase Induction Motor - Squirrel Cage



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

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 11627303



Performance : 400 V 50 Hz 6P IE1

Rated current : 273 A  
 LRC : 5.6  
 Rated torque : 148 kgfm  
 Locked rotor torque : 200 %  
 Breakdown torque : 210 %  
 Rated speed : 980 rpm

Moment of inertia (J) : 6.09 kgm<sup>2</sup>  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.00  
 Temperature rise : 105 K  
 Design : B

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 8 / 9	Revision
Checked by				
Date	13/01/2024			



# LOAD PERFORMANCE CURVE

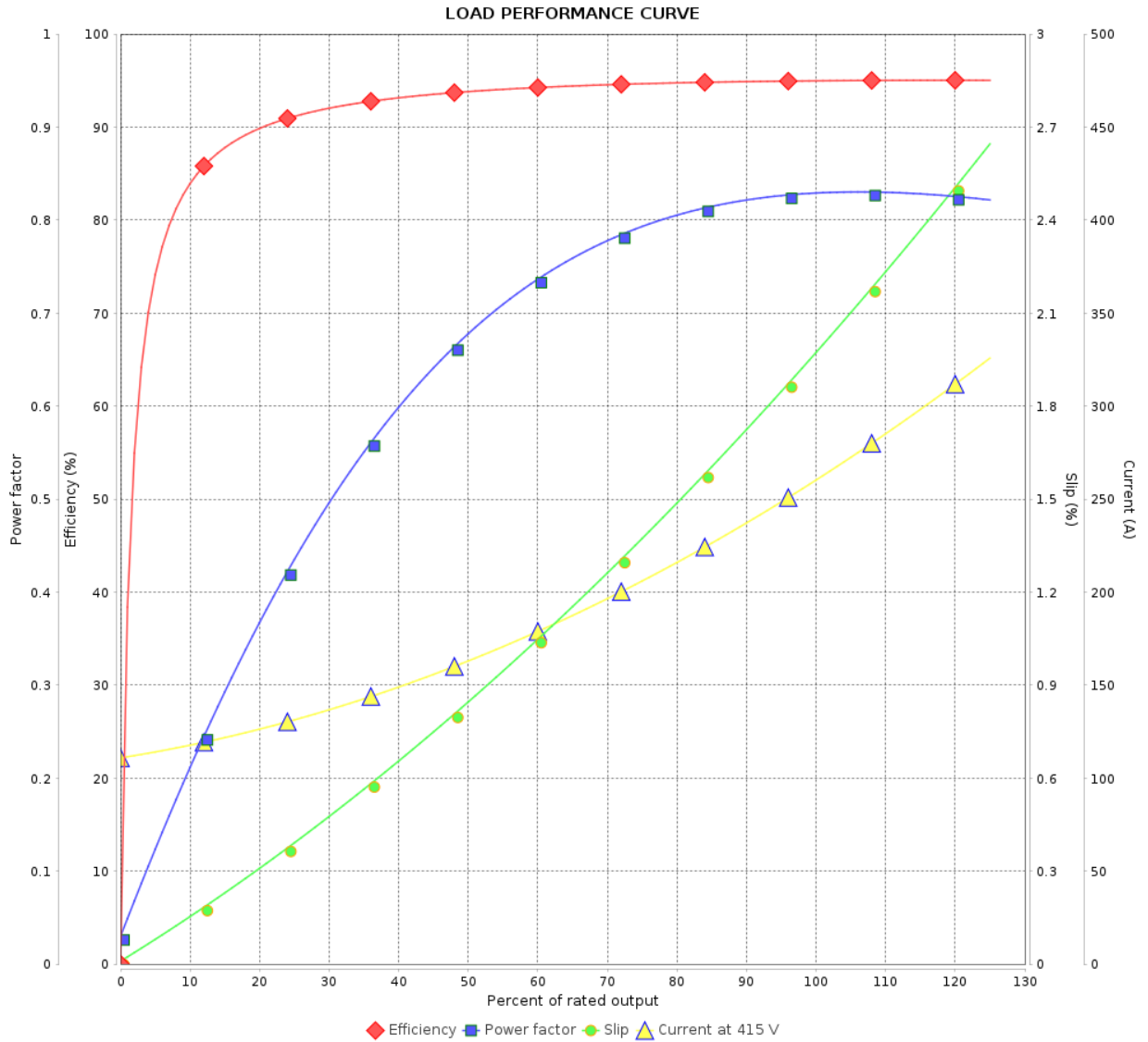
## Three Phase Induction Motor - Squirrel Cage



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

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 11627303



Performance : 415 V 50 Hz 6P IE2

Rated current : 265 A  
 LRC : 6.0  
 Rated torque : 148 kgfm  
 Locked rotor torque : 220 %  
 Breakdown torque : 229 %  
 Rated speed : 980 rpm

Moment of inertia (J) : 6.09 kgm<sup>2</sup>  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.00  
 Temperature rise : 105 K  
 Design : B

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