

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :					
Product line	: W22 NEMA Premium Efficiency Three-Phase	Product code :	12762729		
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>	: 1003 kg		
Protection degree	: IP55	Moment of inertia (J)	: 5.29 kgm <sup>2</sup>		
Design	: B				
Output [HP]	150	125	125	125	
Poles	8	8	8	8	
Frequency [Hz]	60	50	50	50	
Rated voltage [V]	230/460	380	400	415	
Rated current [A]	370/185	183	177	175	
L. R. Amperes [A]	2220/1110	1025	1097	1138	
LRC [A]	6.0x(Code G)	5.6x(Code F)	6.2x(Code G)	6.5x(Code H)	
No load current [A]	150/75.0	78.9	83.3	86.8	
Rated speed [RPM]	890	740	740	740	
Slip [%]	1.11	1.33	1.33	1.33	
Rated torque [kgfm]	122	123	123	123	
Locked rotor torque [%]	190	170	200	220	
Breakdown torque [%]	210	200	229	250	
Service factor	1.15	1.15	1.15	1.15	
Temperature rise	80 K	105 K	80 K	80 K	
Locked rotor time	27s (cold) 15s (hot)	27s (cold) 15s (hot)	27s (cold) 15s (hot)	27s (cold) 15s (hot)	
Noise level <sup>2</sup>	63.0 dB(A)				
Efficiency (%)	25%				
	50%	94.5	94.5	94.1	
	75%	94.5	94.1	94.1	
	100%	94.5	93.6	94.1	
Power Factor	25%				
	50%	0.64	0.65	0.61	
	75%	0.74	0.75	0.72	
	100%	0.79	0.80	0.78	
Losses at normative operating points (speed;torque), in percentage of rated output power					
Losses (%)	P1 (0,9;1,0)	5.9	5.9	5.9	5.9
	P2 (0,5;1,0)	4.8	4.8	4.8	4.8
	P3 (0,25;1,0)	4.4	4.4	4.4	4.4
	P4 (0,9;0,5)	2.9	2.9	2.9	2.9
	P5 (0,5;0,5)	2.0	2.0	2.0	2.0
	P6 (0,5;0,25)	1.4	1.4	1.4	1.4
	P7 (0,25;0,25)	1.0	1.0	1.0	1.0
Bearing type	: Drive end : 6319 C3	Non drive end : 6316 C3	Foundation loads		
Sealing	: WSeal	WSeal	Max. traction	: 2179 kgf	
Lubrication interval	: 17000 h	20000 h	Max. compression	: 3182 kgf	
Lubricant amount	: 45 g	34 g			
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.		
Rev.	Changes Summary		Performed	Checked	Date
Performed by					
Checked by				Page	Revision
Date	13/01/2024			1 / 6	

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



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

Notes  
USABLE @208V 409A SF 1.00 SFA 409A

Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by			Page	Revision
Date	13/01/2024		2 / 6	

# LOAD PERFORMANCE CURVE

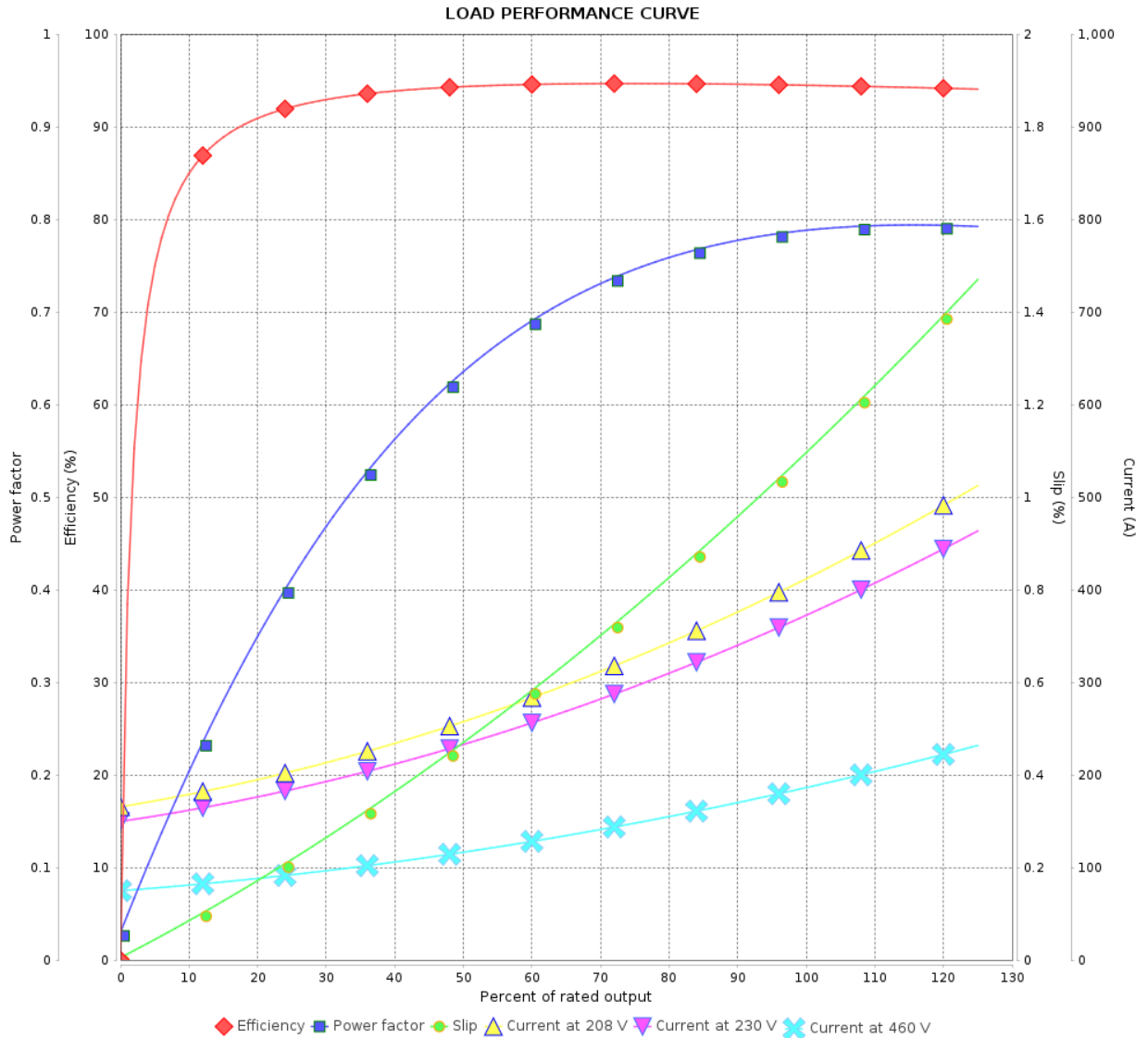
## Three Phase Induction Motor - Squirrel Cage



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

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 12762729



Performance : 230/460 V 60 Hz 8P

Rated current : 370/185 A  
 LRC : 6.0  
 Rated torque : 122 kgfm  
 Locked rotor torque : 190 %  
 Breakdown torque : 210 %  
 Rated speed : 890 rpm

Moment of inertia (J) : 5.29 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

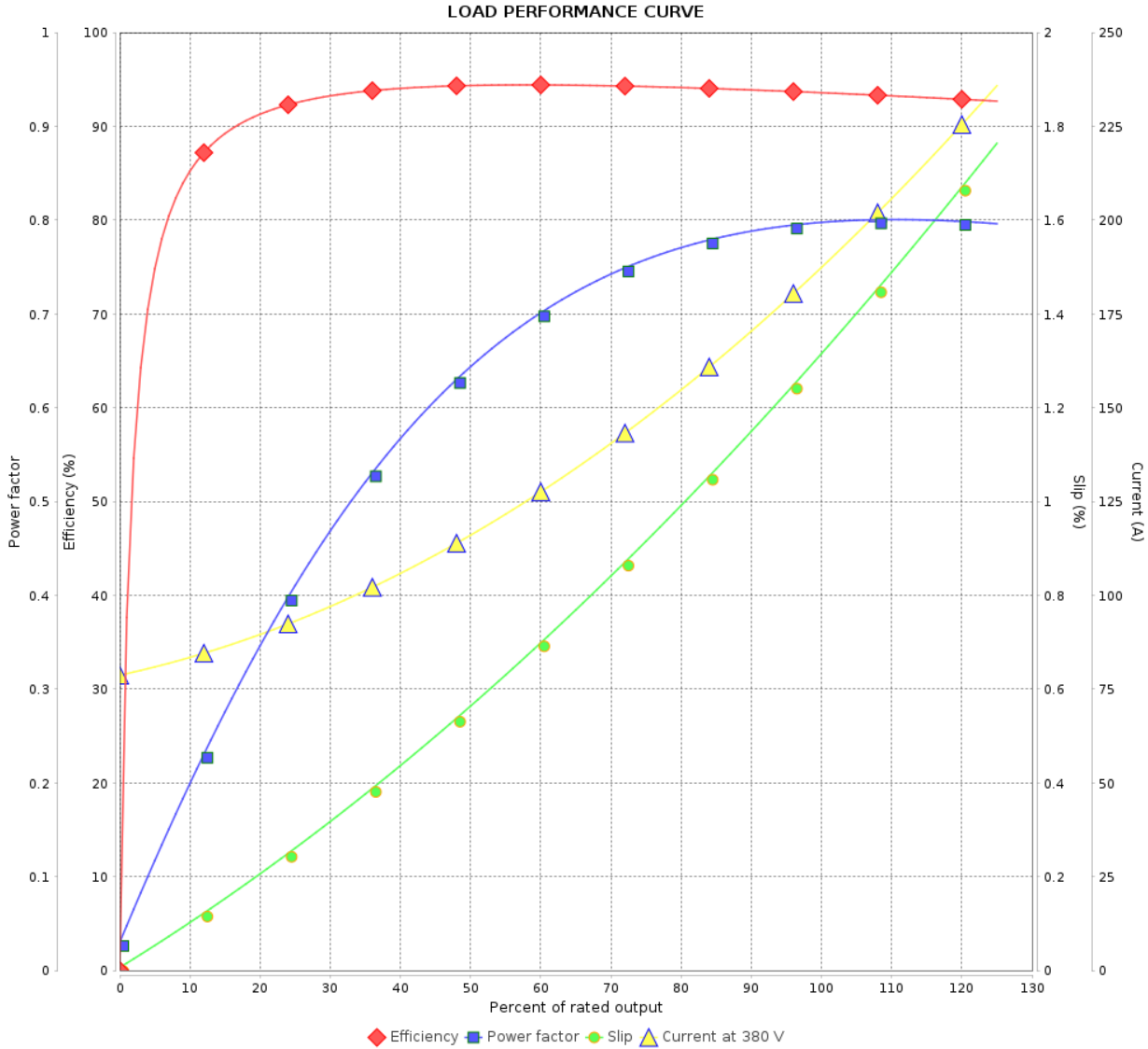
Three Phase Induction Motor - Squirrel Cage



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

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 12762729



Performance : 380 V 50 Hz 8P IE3

Rated current	: 183 A	Moment of inertia (J)	: 5.29 kgm <sup>2</sup>
LRC	: 5.6	Duty cycle	: Cont.(S1)
Rated torque	: 123 kgfm	Insulation class	: F
Locked rotor torque	: 170 %	Service factor	: 1.15
Breakdown torque	: 200 %	Temperature rise	: 105 K
Rated speed	: 740 rpm	Design	: B

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 4 / 6	Revision
Checked by				
Date	13/01/2024			

# LOAD PERFORMANCE CURVE

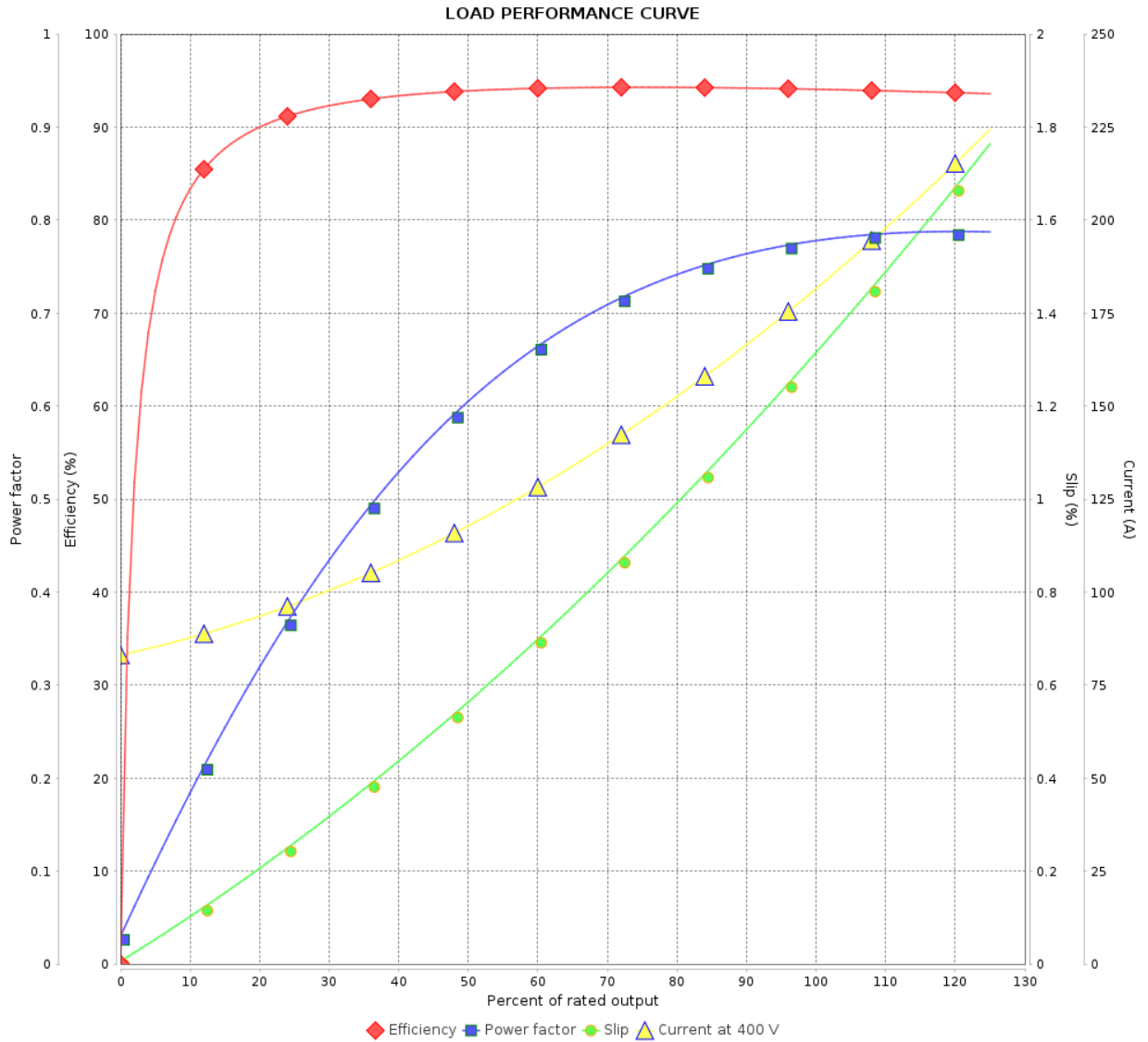
## Three Phase Induction Motor - Squirrel Cage



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

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 12762729



Performance : 400 V 50 Hz 8P IE3

Rated current : 177 A  
 LRC : 6.2  
 Rated torque : 123 kgfm  
 Locked rotor torque : 200 %  
 Breakdown torque : 229 %  
 Rated speed : 740 rpm

Moment of inertia (J) : 5.29 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

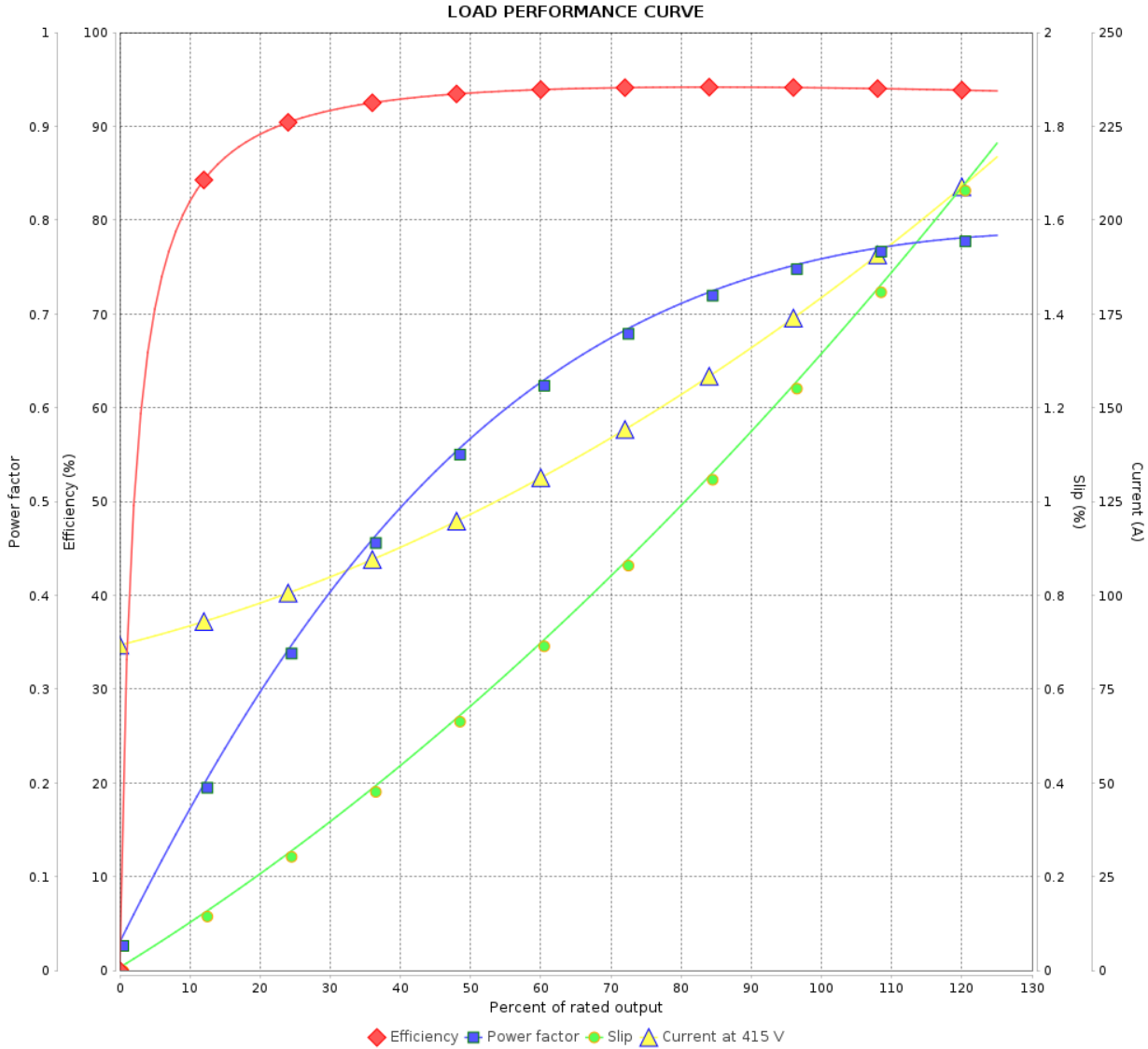
Three Phase Induction Motor - Squirrel Cage



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

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 12762729



Performance : 415 V 50 Hz 8P IE3

Rated current : 175 A  
 LRC : 6.5  
 Rated torque : 123 kgfm  
 Locked rotor torque : 220 %  
 Breakdown torque : 250 %  
 Rated speed : 740 rpm

Moment of inertia (J) : 5.29 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 / 6	Revision
Checked by				
Date	13/01/2024			