

# DATA SHEET



## Three Phase Induction Motor - Squirrel Cage

Customer :	
Product line	: W22 NEMA Premium Efficiency Three-Phase
Product code :	13881423
Frame	: 586/7T
Insulation class	: F
Duty cycle	: Cont.(S1)
Ambient temperature	: -20°C to +40°C
Altitude	: 1000 m.a.s.l.
Protection degree	: IP55
Design	: B
Cooling method	: IC411 - TEFC
Mounting	: F-1
Rotation <sup>1</sup>	: Both (CW and CCW)
Starting method	: Direct On Line
Approx. weight <sup>2</sup>	: 1743 kg
Moment of inertia (J)	: 8.99 kgm <sup>2</sup>
Output [HP]	450
Poles	4
Frequency [Hz]	60
Rated voltage [V]	460
Rated current [A]	507
L. R. Amperes [A]	3194
LRC [A]	6.3x(Code G)
No load current [A]	155
Rated speed [RPM]	1790
Slip [%]	0.56
Rated torque [kgfm]	182
Locked rotor torque [%]	220
Breakdown torque [%]	229
Service factor	1.15
Temperature rise	80 K
Locked rotor time	48s (cold) 27s (hot)
Noise level <sup>2</sup>	81.0 dB(A)
Efficiency (%)	25%
	50%
	75%
	100%
Power Factor	25%
	50%
	75%
	100%
Losses at normative operating points (speed;torque), in percentage of rated output power	
Losses (%)	P1 (0,9;1,0)
	P2 (0,5;1,0)
	P3 (0,25;1,0)
	P4 (0,9;0,5)
	P5 (0,5;0,5)
	P6 (0,5;0,25)
	P7 (0,25;0,25)
Bearing type	Drive end : NU-322 C3 Non drive end : 6319 C3
Sealing	: Taconite Labyrinth Labyrinth
Lubrication interval	: 4000 h 8000 h
Lubricant amount	: 60 g 45 g
Lubricant type	: Mobil Polyrex EM
Foundation loads	
Max. traction : 2463 kgf	
Max. compression : 4206 kgf	
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).	
These are average values based on tests with sinusoidal power supply, subject to the tolerances stipulated in NEMA MG-1.	
Rev.	Changes Summary
Performed by	Performed
Checked by	Checked
Date	15/01/2024
Page	1 / 7
Revision	

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



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

Notes

Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by			Page	Revision
Date	15/01/2024		2 / 7	

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



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

### Space heater information

Voltage: 110-127/200-240 V

Rev.	Changes Summary	Performed	Checked	Date
Performed by				Page 3 / 7
Checked by				
Date	15/01/2024			
			Revision	

# LOAD PERFORMANCE CURVE

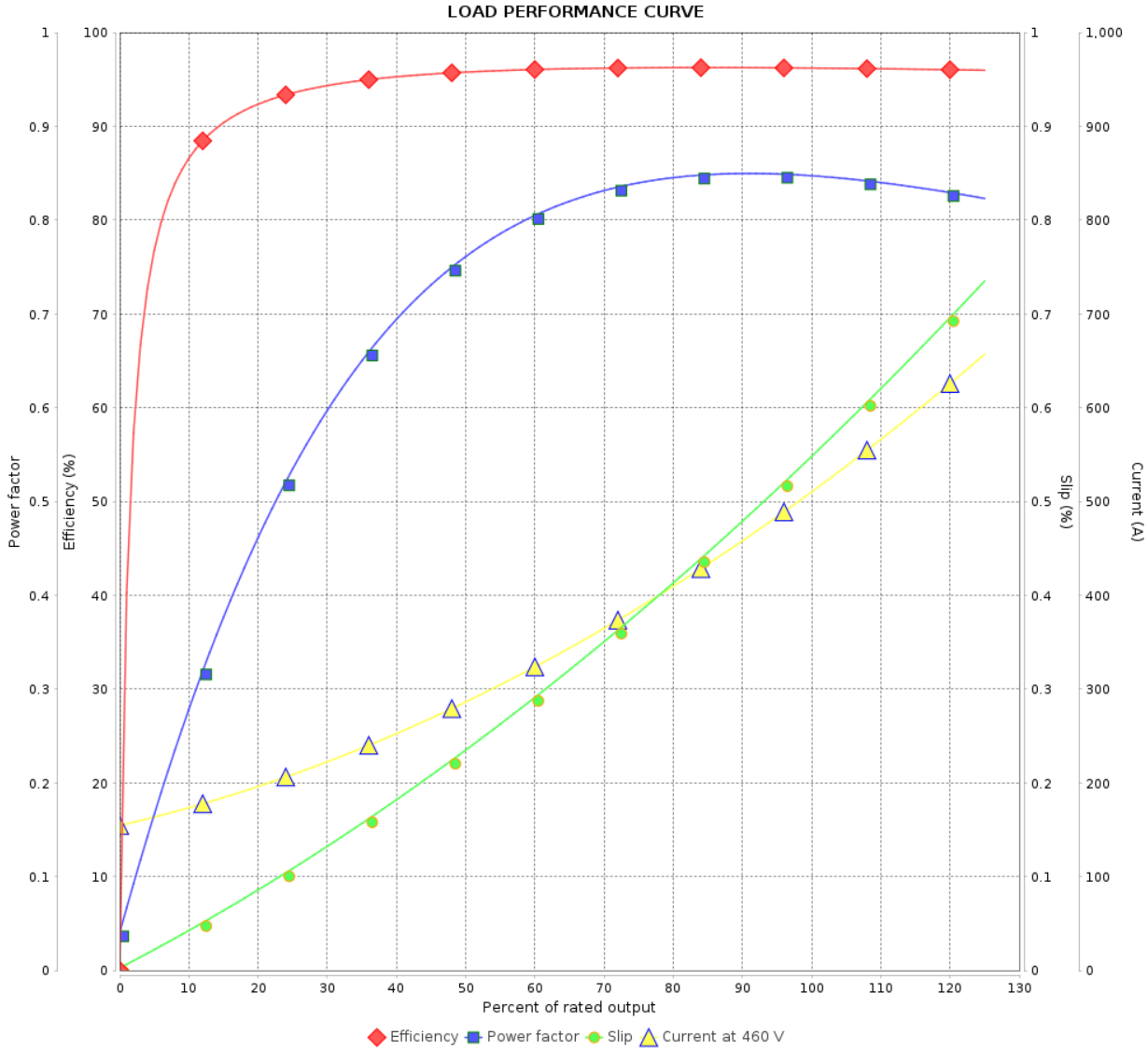
Three Phase Induction Motor - Squirrel Cage



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

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 13881423



Performance : 460 V 60 Hz 4P

Rated current	: 507 A	Moment of inertia (J)	: 8.99 kgm <sup>2</sup>
LRC	: 6.3	Duty cycle	: Cont.(S1)
Rated torque	: 182 kgfm	Insulation class	: F
Locked rotor torque	: 220 %	Service factor	: 1.15
Breakdown torque	: 229 %	Temperature rise	: 80 K
Rated speed	: 1790 rpm	Design	: B

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 4 / 7	Revision
Checked by				
Date	15/01/2024			

# LOAD PERFORMANCE CURVE

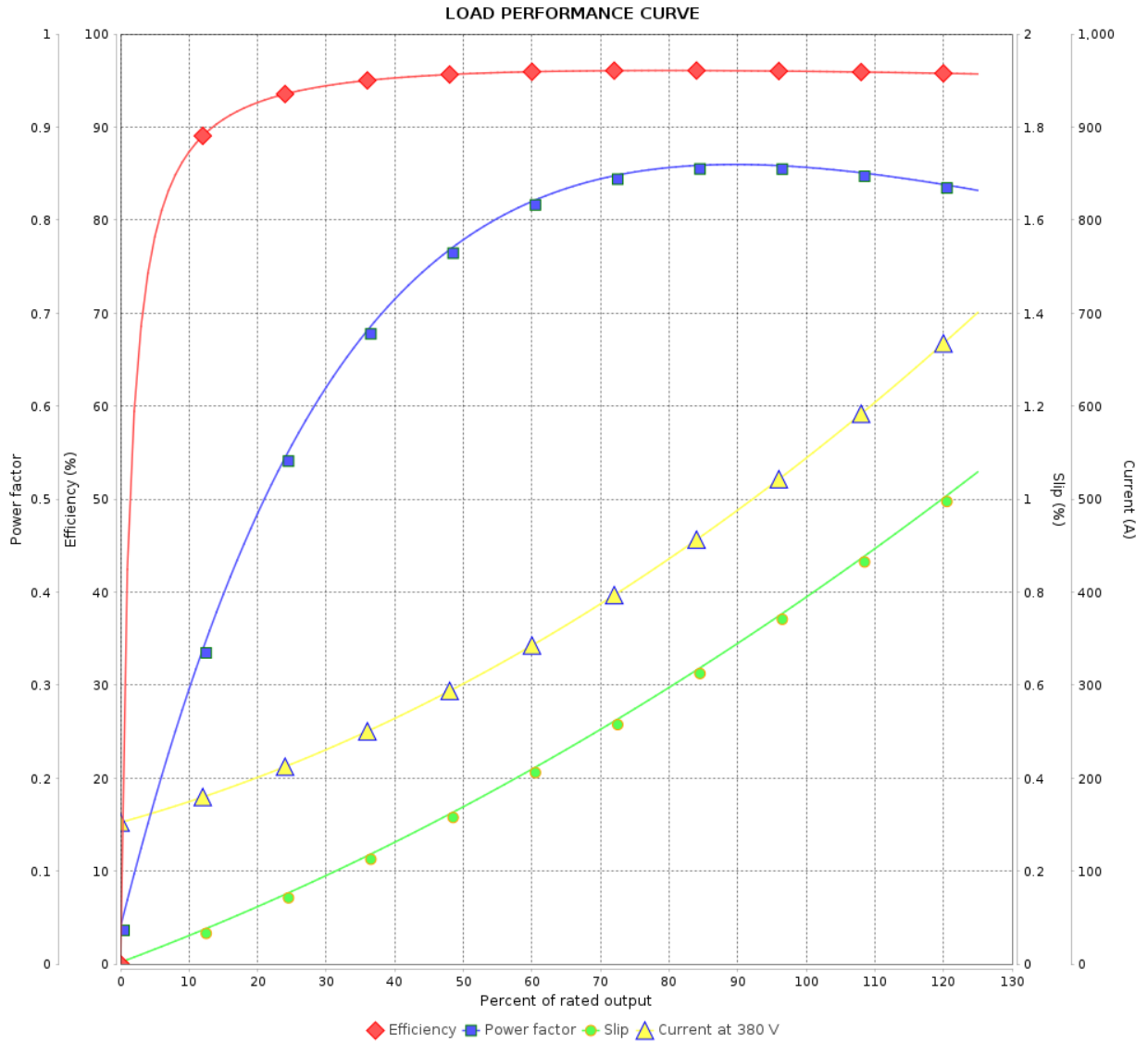
## Three Phase Induction Motor - Squirrel Cage



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

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 13881423



Performance : 380 V 50 Hz 4P IE3

Rated current : 552 A  
 LRC : 5.5  
 Rated torque : 195 kgfm  
 Locked rotor torque : 190 %  
 Breakdown torque : 210 %  
 Rated speed : 1488 rpm

Moment of inertia (J) : 8.99 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				

# LOAD PERFORMANCE CURVE

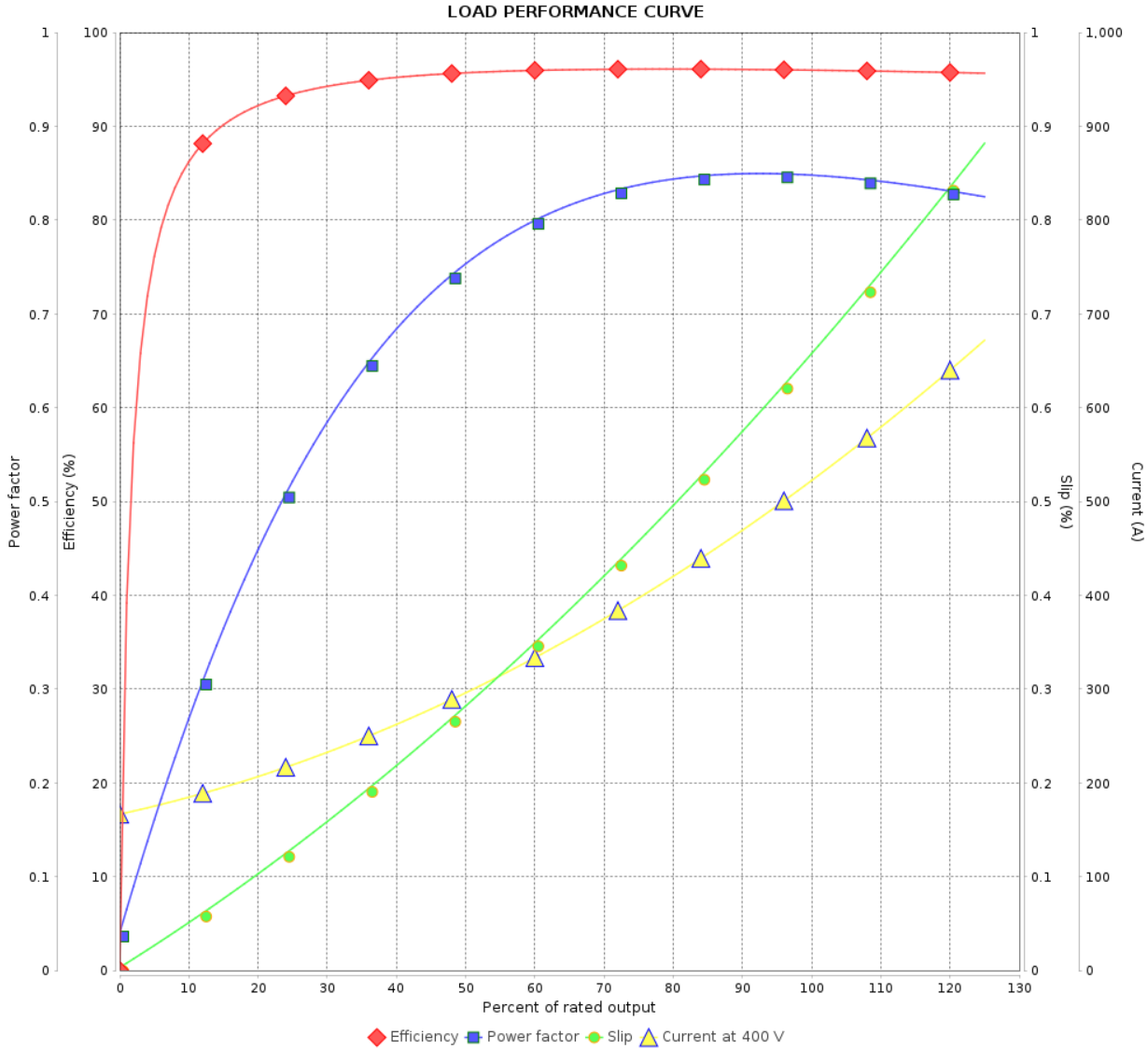
Three Phase Induction Motor - Squirrel Cage



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

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 13881423



Performance : 400 V 50 Hz 4P IE3

Rated current : 531 A  
 LRC : 6.3  
 Rated torque : 195 kgfm  
 Locked rotor torque : 210 %  
 Breakdown torque : 229 %  
 Rated speed : 1490 rpm

Moment of inertia (J) : 8.99 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 6 / 7	Revision
Checked by				
Date	15/01/2024			

# LOAD PERFORMANCE CURVE

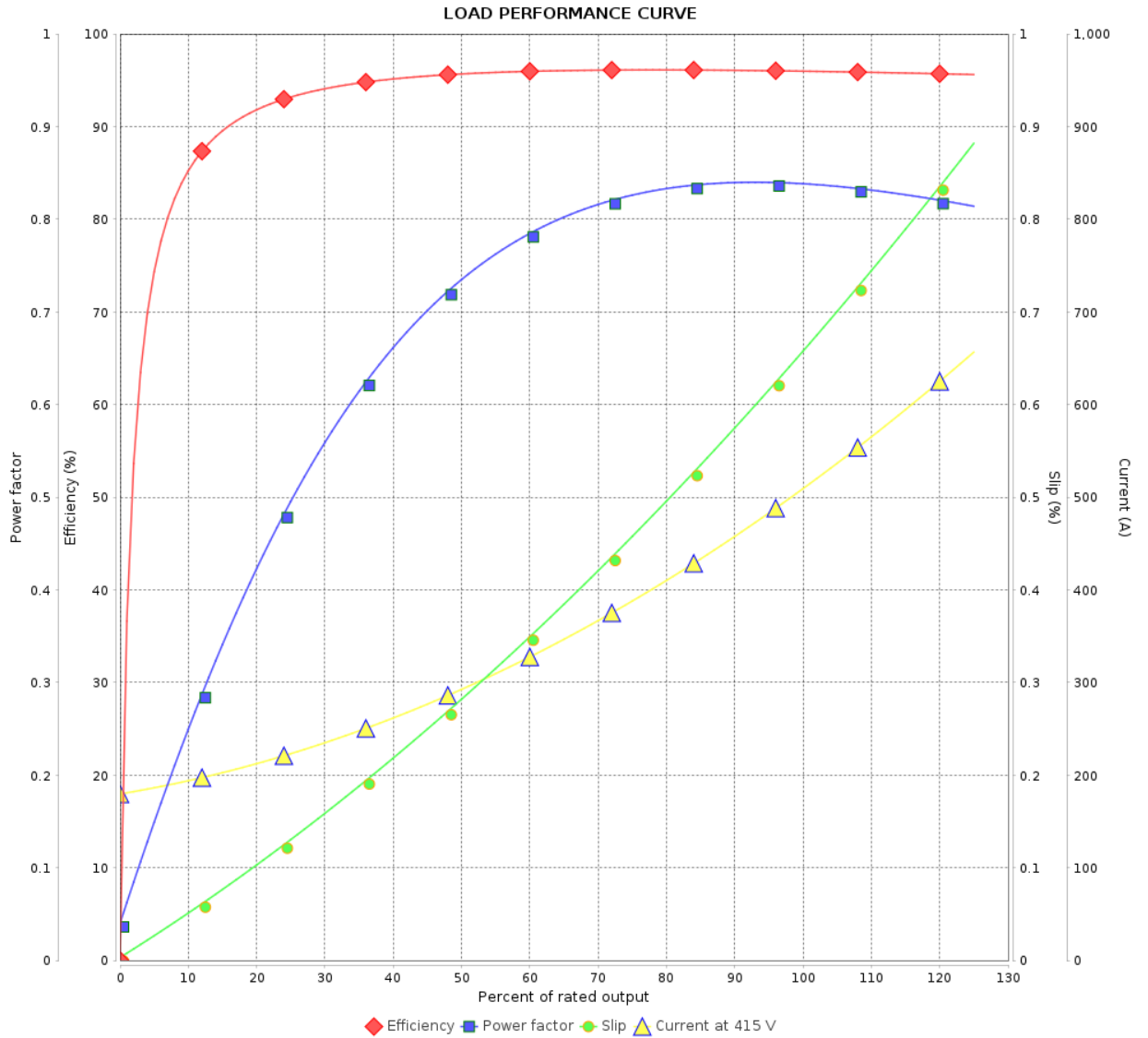
## Three Phase Induction Motor - Squirrel Cage



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

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 13881423



Performance : 415 V 50 Hz 4P IE3

Rated current : 518 A  
 LRC : 6.8  
 Rated torque : 195 kgfm  
 Locked rotor torque : 220 %  
 Breakdown torque : 250 %  
 Rated speed : 1490 rpm

Moment of inertia (J) : 8.99 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				