

# DATA SHEET



## Three Phase Induction Motor - Squirrel Cage

Customer	:		
Product line	: NEMA Premium Efficiency Three-Phase	Product code :	12651247
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>	: 64.8 kg
Protection degree	: IP55	Moment of inertia (J)	: 0.0451 kgm <sup>2</sup>
Design	: B		
Output [HP]	10	7.5	7.5
Poles	4	4	4
Frequency [Hz]	60	50	50
Rated voltage [V]	230/460	190/380	220/415
Rated current [A]	24.4/12.2	22.4/11.2	20.8/11.0
L. R. Amperes [A]	171/85.4	170/85.1	172/91.3
LRC [A]	7.0x(Code H)	7.6x(Code J)	8.3x(Code K)
No load current [A]	11.1/5.54	10.9/5.46	11.3/5.97
Rated speed [RPM]	1760	1465	1470
Slip [%]	2.22	2.33	2.00
Rated torque [kgfm]	4.12	3.72	3.70
Locked rotor torque [%]	250	250	290
Breakdown torque [%]	300	320	360
Service factor	1.15	1.15	1.15
Temperature rise	80 K	80 K	80 K
Locked rotor time	27s (cold) 15s (hot)	0s (cold) 0s (hot)	0s (cold) 0s (hot)
Noise level <sup>2</sup>	60.0 dB(A)	57.0 dB(A)	57.0 dB(A)
Efficiency (%)	25%	90.2	89.3
	50%	91.0	89.4
	75%	91.0	90.5
	100%	91.7	90.3
Power Factor	25%	0.41	0.34
	50%	0.67	0.59
	75%	0.78	0.73
	100%	0.84	0.80
Bearing type	: <u>Drive end</u> 6208 ZZ	<u>Non drive end</u> 6206 ZZ	Foundation loads
Sealing	: V'Ring	Without Bearing Seal	Max. traction : 214 kgf
Lubrication interval	: -	-	Max. compression : 279 kgf
Lubricant amount	: -	-	
Lubricant type	: Mobil Polyrex EM		
Notes USABLE @208V 27.0A SF 1.00 SFA 27.0A			
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
Date	13/05/2022		Revision
			1 / 4

# LOAD PERFORMANCE CURVE

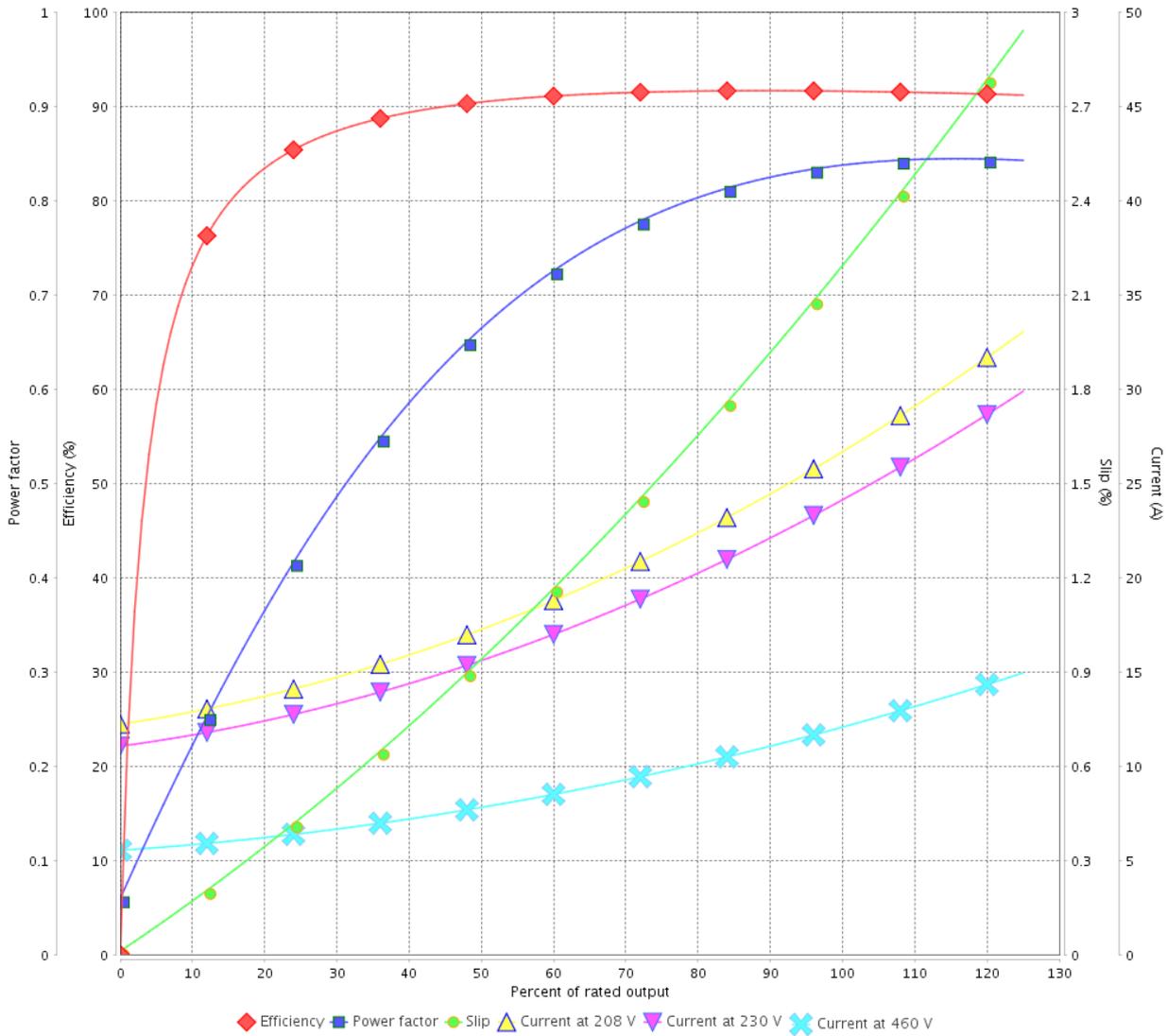
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : NEMA Premium Efficiency Three-Phase      Product code : 12651247

LOAD PERFORMANCE CURVE



Performance : 230/460 V 60 Hz 4P

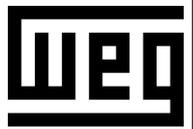
Rated current : 24.4/12.2 A  
 LRC : 7.0  
 Rated torque : 4.12 kgfm  
 Locked rotor torque : 250 %  
 Breakdown torque : 300 %  
 Rated speed : 1760 rpm

Moment of inertia (J) : 0.0451 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				

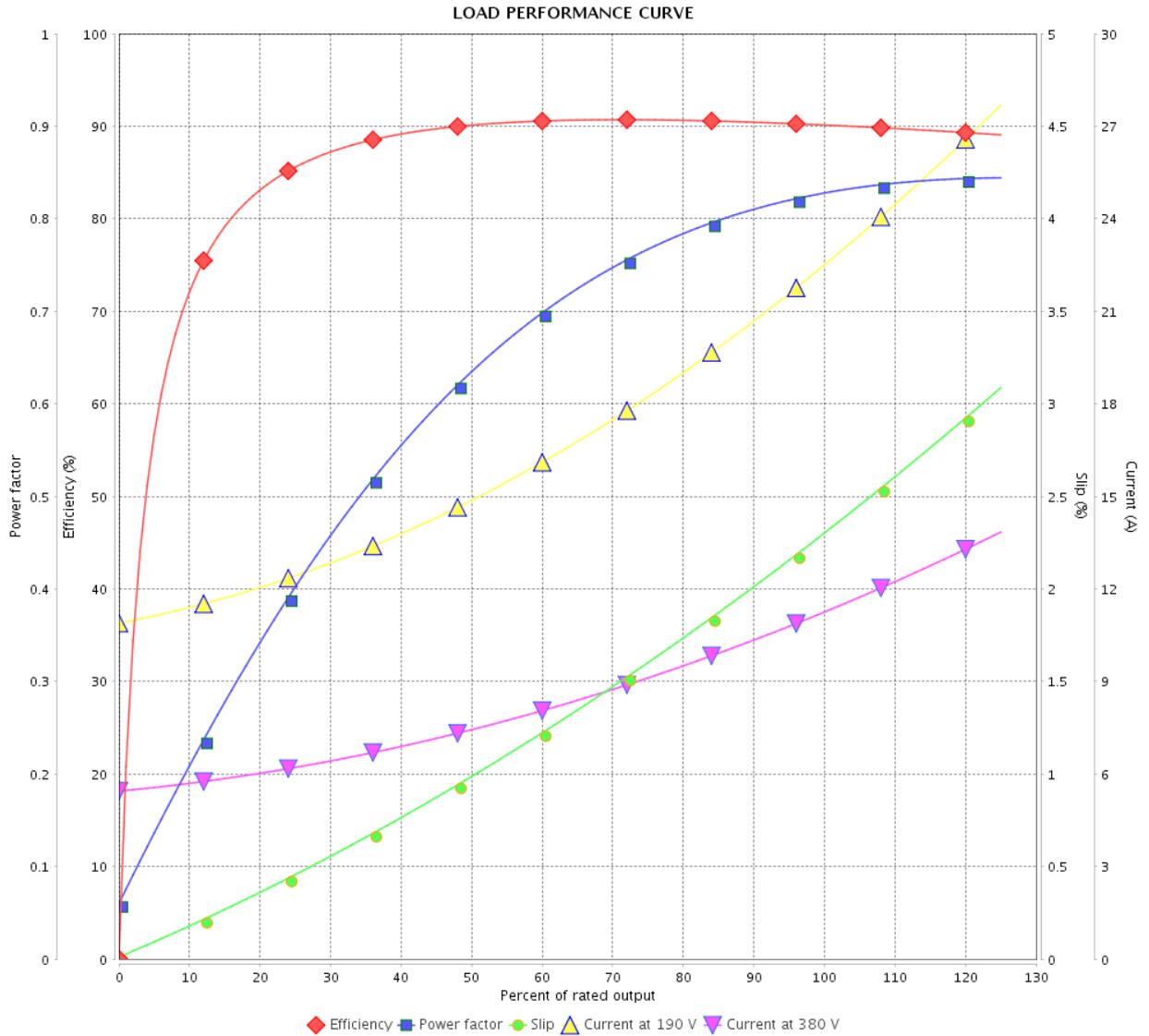
# LOAD PERFORMANCE CURVE

## Three Phase Induction Motor - Squirrel Cage



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

Product line : NEMA Premium Efficiency Three-Phase      Product code : 12651247



Performance : 190/380 V 50 Hz 4P

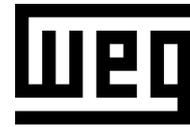
Rated current : 22.4/11.2 A  
 LRC : 7.6  
 Rated torque : 3.72 kgfm  
 Locked rotor torque : 250 %  
 Breakdown torque : 320 %  
 Rated speed : 1465 rpm

Moment of inertia (J) : 0.0451 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

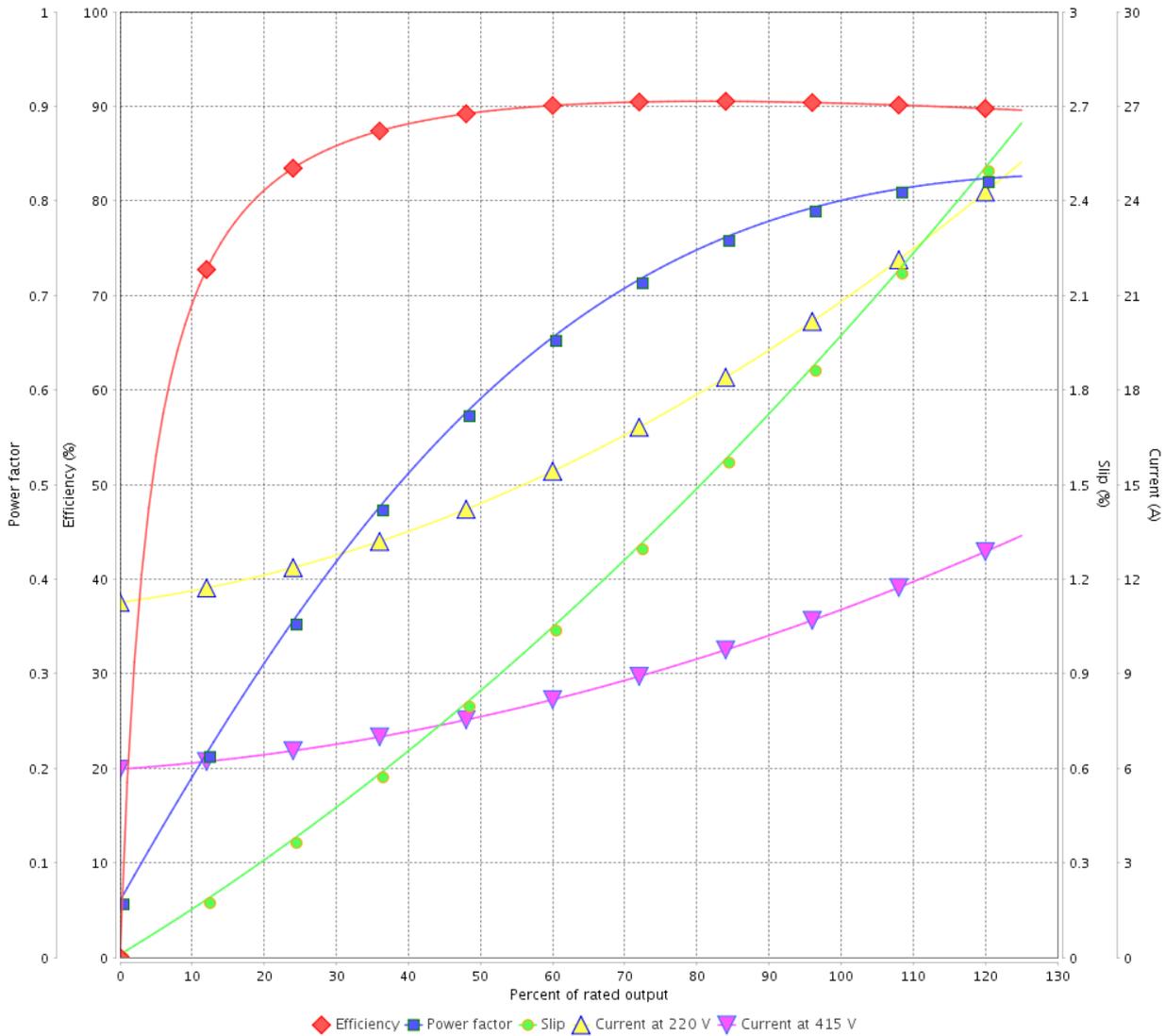
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : NEMA Premium Efficiency Three-Phase      Product code : 12651247

LOAD PERFORMANCE CURVE



Performance : 220/415 V 50 Hz 4P

Rated current : 20.8/11.0 A  
 LRC : 8.3  
 Rated torque : 3.70 kgfm  
 Locked rotor torque : 290 %  
 Breakdown torque : 360 %  
 Rated speed : 1470 rpm

Moment of inertia (J) : 0.0451 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				

