

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :				
Product line		: NEMA Premium Efficiency Three-Phase	Product code :	12651241
Frame	: 213/5TC	Cooling method	: IC01 - ODP	
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>	: 58.8 kg	
Design	: B	Moment of inertia (J)	: 0.0546 kgm <sup>2</sup>	
Output [HP]	10	10	10	
Poles	4	4	4	
Frequency [Hz]	60	50	50	
Rated voltage [V]	230/460	190/380	220/415	
Rated current [A]	24.8/12.4	29.8/14.9	27.2/14.4	
L. R. Amperes [A]	174/86.8	191/95.4	193/102	
LRC [A]	7.0x(Code H)	6.4x(Code G)	7.1x(Code H)	
No load current [A]	12.0/5.99	11.8/5.89	12.2/6.45	
Rated speed [RPM]	1770	1460	1465	
Slip [%]	1.67	2.67	2.33	
Rated torque [kgfm]	4.10	4.97	4.95	
Locked rotor torque [%]	250	200	220	
Breakdown torque [%]	350	250	280	
Service factor	1.15	1.15	1.15	
Temperature rise	80 K	80 K	80 K	
Locked rotor time	25s (cold) 14s (hot)	0s (cold) 0s (hot)	0s (cold) 0s (hot)	
Noise level <sup>2</sup>	59.0 dB(A)	56.0 dB(A)	56.0 dB(A)	
Efficiency (%)	25%	89.4	91.4	90.4
	50%	90.2	90.1	89.6
	75%	91.0	89.7	89.8
	100%	91.7	88.1	88.7
Power Factor	25%	0.38	0.45	0.41
	50%	0.64	0.72	0.68
	75%	0.77	0.82	0.80
	100%	0.83	0.87	0.85
Bearing type	: Drive end 6208 ZZ Non drive end 6206 ZZ	Foundation loads		
Sealing	: Without Without Bearing Seal Bearing Seal	Max. traction	: 227 kgf	
		Max. compression	: 286 kgf	
Lubrication interval	: - -			
Lubricant amount	: - -			
Lubricant type	: Mobil Polyrex EM			
Notes USABLE @208V 27.4A SF 1.00 SFA 27.4A				
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
Performed by				
Checked by			Page	Revision
Date	13/05/2022		1 / 4	

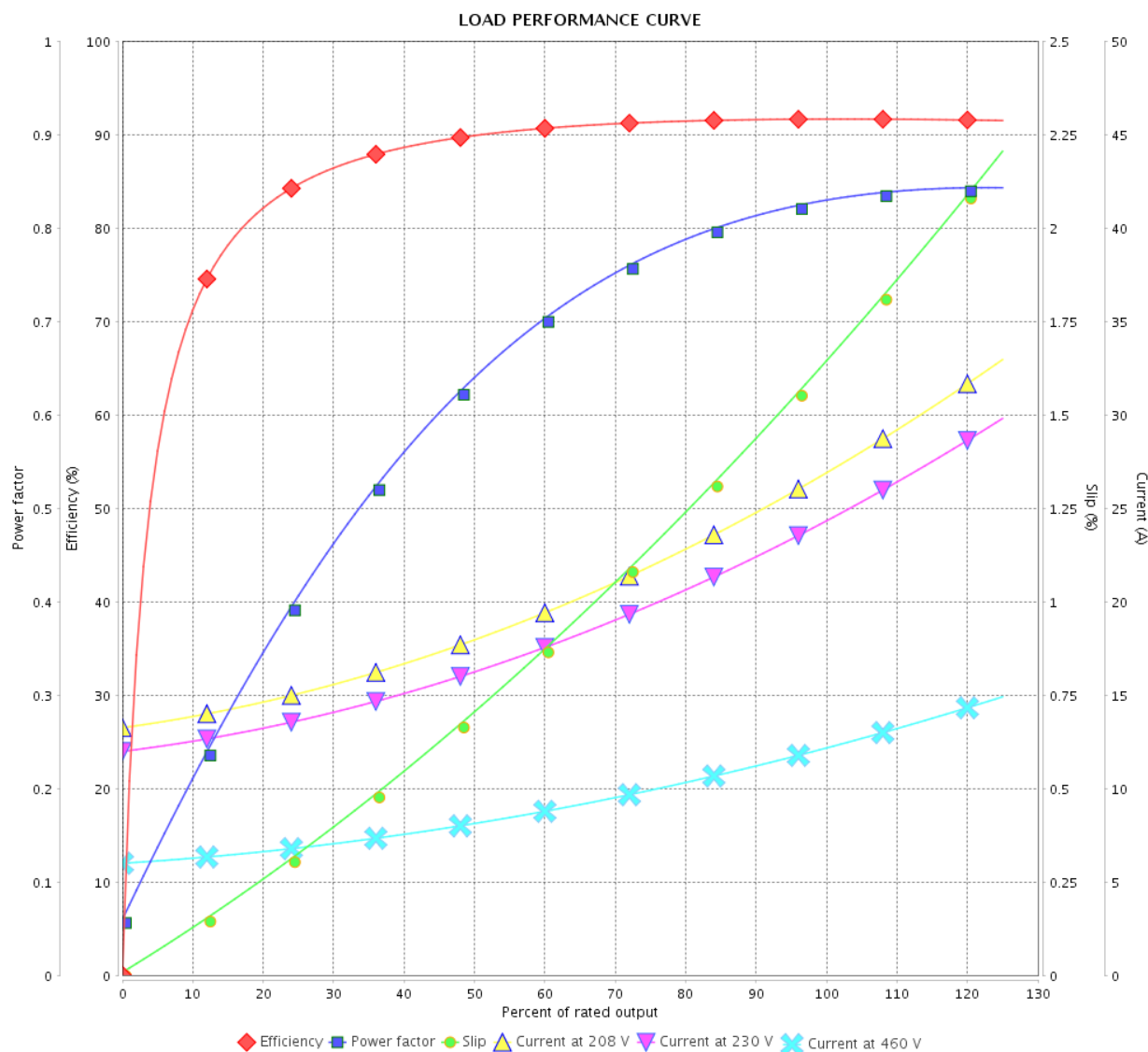
# LOAD PERFORMANCE CURVE

## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : NEMA Premium Efficiency Three-Phase Product code : 12651241



Performance : 230/460 V 60 Hz 4P

Rated current : 24.8/12.4 A  
 LRC : 7.0  
 Rated torque : 4.10 kgfm  
 Locked rotor torque : 250 %  
 Breakdown torque : 350 %  
 Rated speed : 1770 rpm

Moment of inertia (J) : 0.0546 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				2 / 4	
Date					

# LOAD PERFORMANCE CURVE

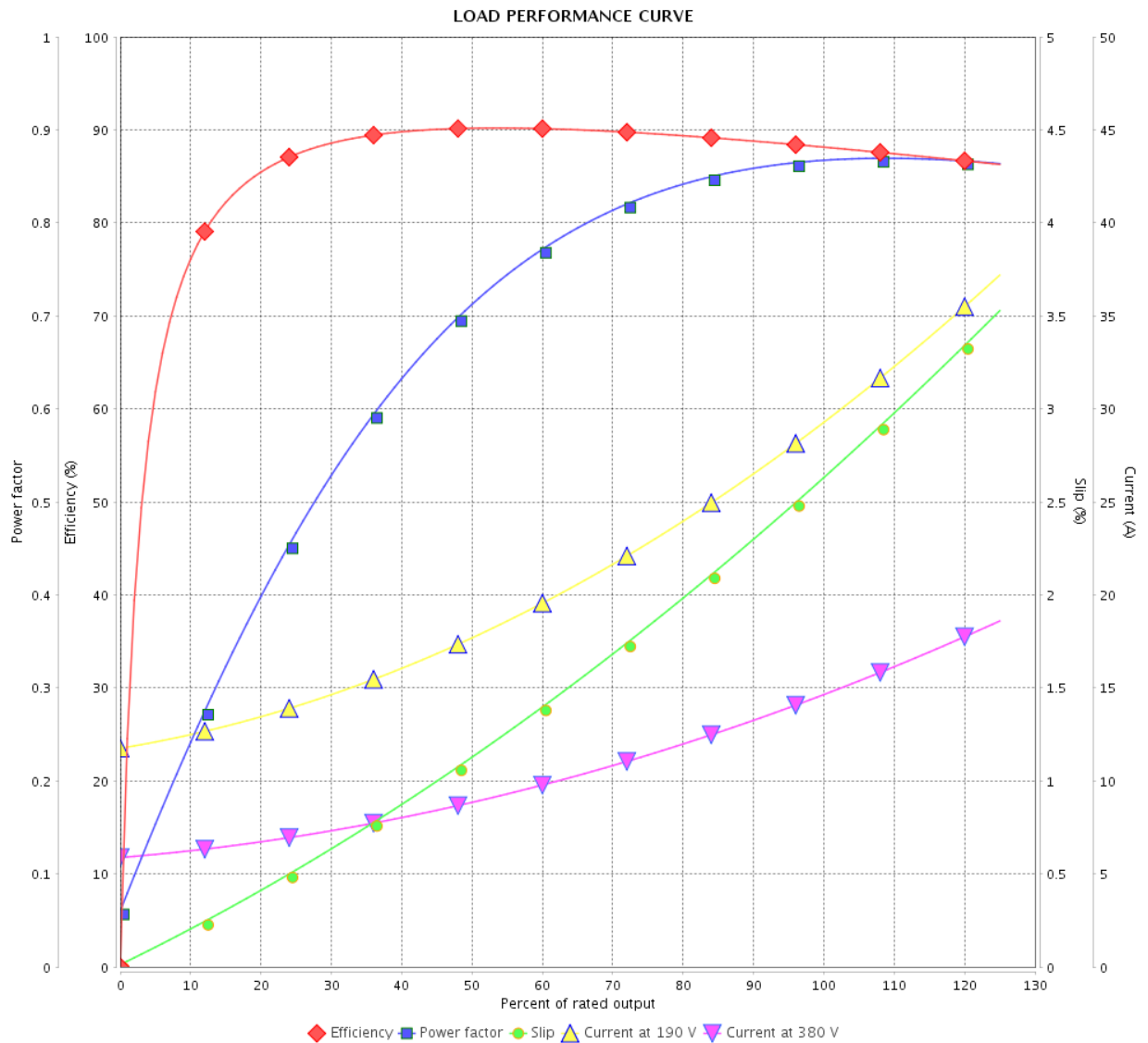
## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12651241



Performance : 190/380 V 50 Hz 4P

Rated current : 29.8/14.9 A  
 LRC : 6.4  
 Rated torque : 4.97 kgfm  
 Locked rotor torque : 200 %  
 Breakdown torque : 250 %  
 Rated speed : 1460 rpm

Moment of inertia (J) : 0.0546 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 3 / 4Revision		
Checked by				
Date	13/05/2022			

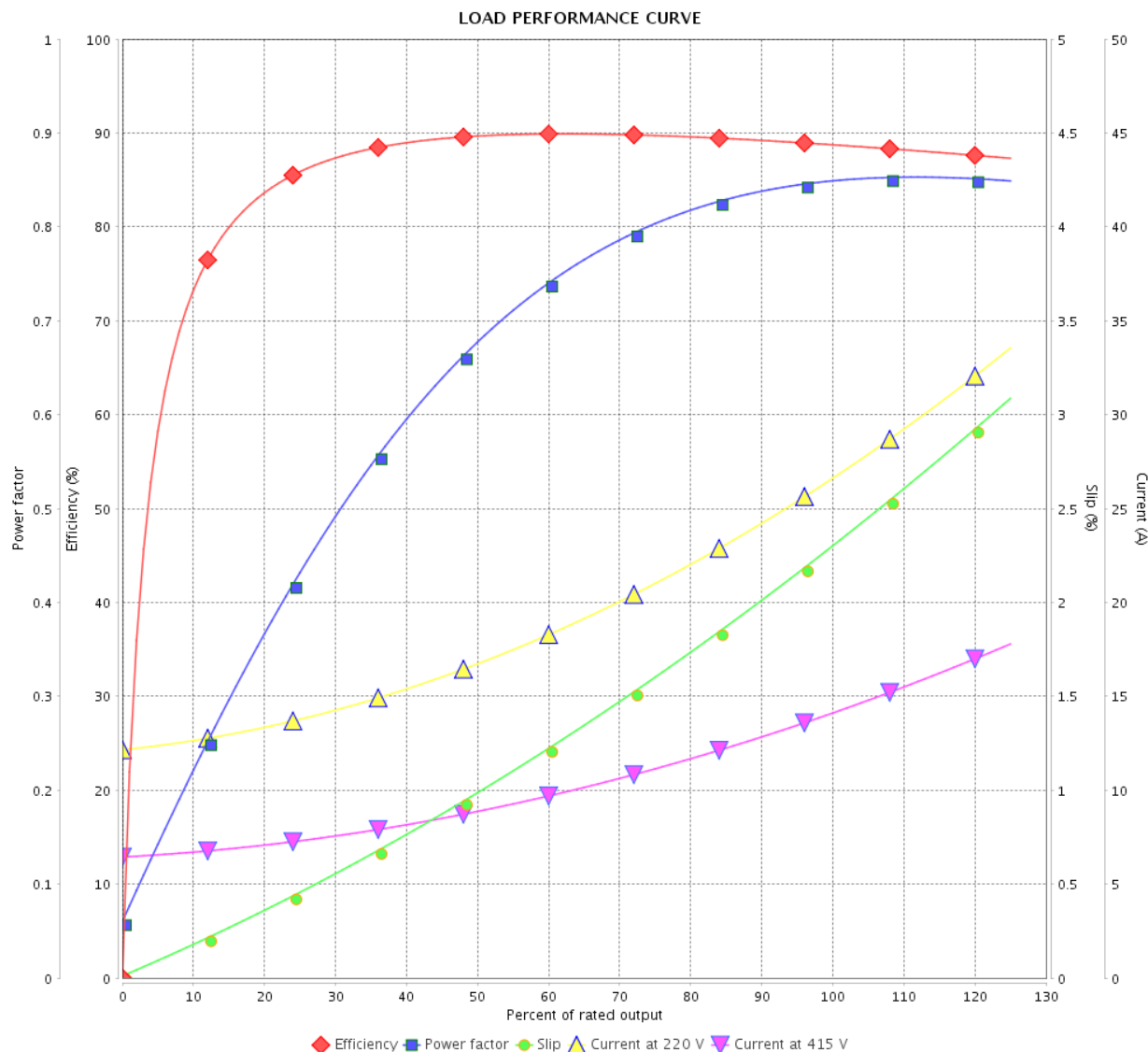
# LOAD PERFORMANCE CURVE

## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : NEMA Premium Efficiency Three-Phase      Product code : 12651241



Performance : 220/415 V 50 Hz 4P

Rated current : 27.2/14.4 A  
LRC : 7.1  
Rated torque : 4.95 kgfm  
Locked rotor torque : 220 %  
Breakdown torque : 280 %  
Rated speed : 1465 rpm

Moment of inertia (J) : 0.0546 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				4 / 4	
Date					

