

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : Rolled Steel NEMA Premium Efficiency Three-Phase Product code : 14802850

Frame	: 143/5TC	Locked rotor time	: 18s (cold) 10s (hot)
Output	: 3 HP (2.2 kW)	Temperature rise	: 80 K
Poles	: 2	Duty cycle	: Cont.(S1)
Frequency	: 60 Hz	Ambient temperature	: -20°C to +40°C
Rated voltage	: 230/460 V	Altitude	: 1000 m.a.s.l.
Rated current	: 7.02/3.51 A	Protection degree	: IP55
L. R. Amperes	: 66.7/33.3 A	Cooling method	: IC411 - TEFC
LRC	: 9.5x(Code K)	Mounting	: F-1
No load current	: 2.56/1.28 A	Rotation ¹	: Both (CW and CCW)
Rated speed	: 3500 rpm	Noise level ²	: 68.0 dB(A)
Slip	: 2.78 %	Starting method	: Direct On Line
Rated torque	: 0.622 kgfm	Approx. weight ³	: 22.8 kg
Locked rotor torque	: 300 %		
Breakdown torque	: 380 %		
Insulation class	: F		
Service factor	: 1.15		
Moment of inertia (J)	: 0.0070 kgm ²		
Design	: B		

Output	50%	75%	100%	Foundation loads	
Efficiency (%)	84.0	86.5	86.5	Max. traction	: 61 kgf
Power Factor	0.78	0.87	0.91	Max. compression	: 84 kgf

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

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)
14.5	10.8	9.9	8.0	4.4	3.0	1.7

		<u>Drive end</u>	<u>Non drive end</u>
Bearing type	:	6205 ZZ	6203 ZZ
Sealing	:	V'Ring	Without Bearing Seal
Lubrication interval	:	-	-
Lubricant amount	:	-	-
Lubricant type	:	Mobil Polyrex EM	

Notes

USABLE @208V 7.76A SF 1.00 SFA 7.76A

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		Page 1 / 2 Revision		
Checked by				
Date	03/09/2025			

LOAD PERFORMANCE CURVE

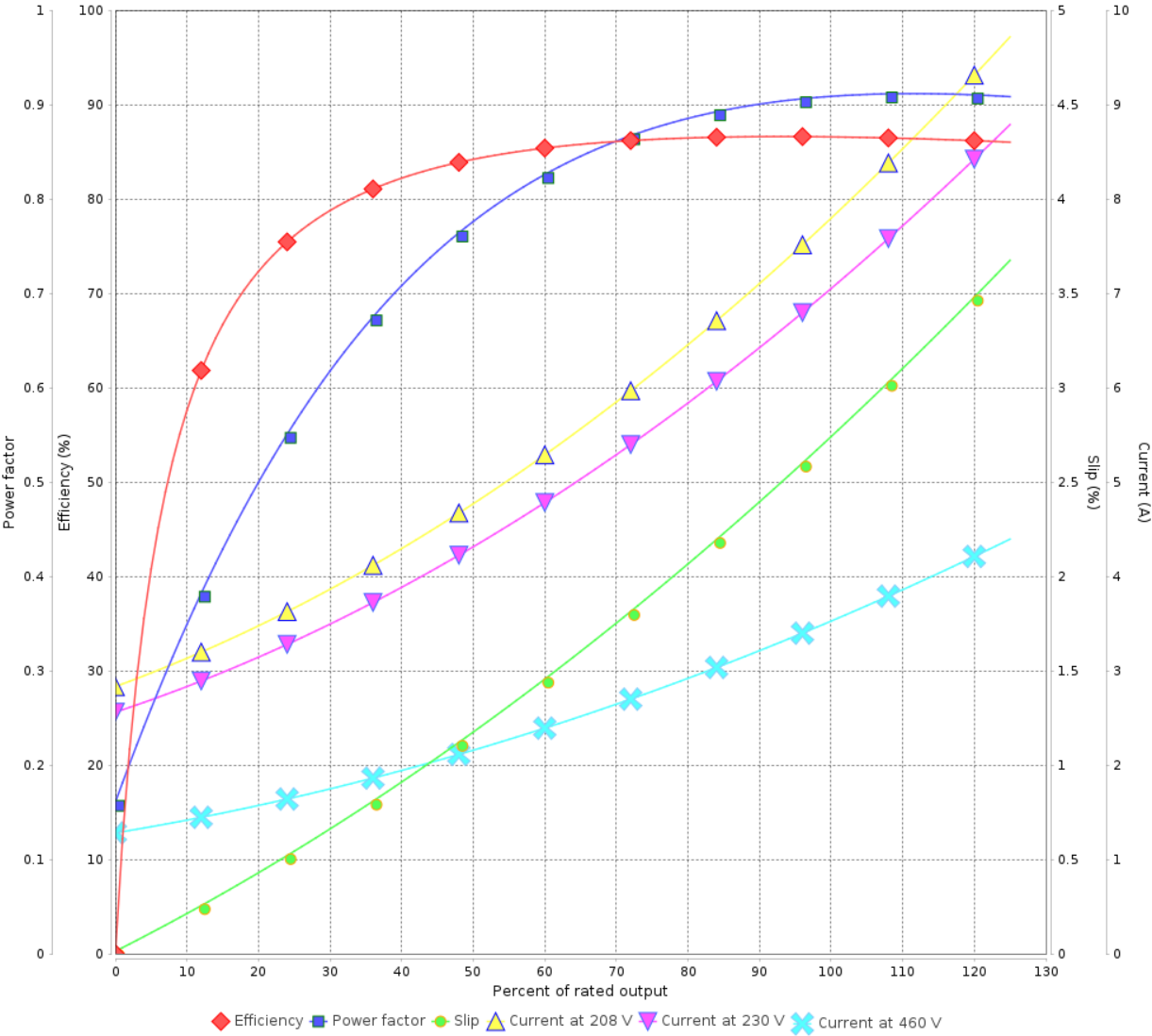
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : Rolled Steel NEMA Premium Efficiency Three-Phase Product code : 14802850

LOAD PERFORMANCE CURVE



Performance : 230/460 V 60 Hz 2P			
Rated current	: 7.02/3.51 A	Moment of inertia (J)	: 0.0070 kgm ²
LRC	: 9.5	Duty cycle	: Cont.(S1)
Rated torque	: 0.622 kgfm	Insulation class	: F
Locked rotor torque	: 300 %	Service factor	:
Breakdown torque	: 380 %	Temperature rise	: 80 K
Rated speed	: 3500 rpm	Design	: B

Rev.	Changes Summary		Performed	Checked	Date
Performed by				Page 2 / 2	Revision
Checked by					
Date	03/09/2025				