

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : Rolled Steel NEMA Premium Efficiency
Three-Phase

Product code : 12837721

Catalog # : 00336ET3E145TC-S

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	: 4.50 ft.lb	Approx. weight ³	: 50.0 lb
Locked rotor torque	: 300 %		
Breakdown torque	: 380 %		
Insulation class	: F		
Service factor	: 1.15		
Moment of inertia (J)	: 0.1663 sq.ft.lb		
Design	: B		

Output	50%	75%	100%
Efficiency (%)	84.0 86.6	86.5 86.4	86.5 84.6
	86.2	87.0	86.0

Foundation loads

Max. traction : 136 lb

Max. compression : 186 lb

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

Losses (%)	P1 (0,9;1,0)	14.5	16.2	15.1
	P2 (0,5;1,0)	10.8	12.2	11.3
	P3 (0,25;1,0)	9.9	11.4	10.3
	P4 (0,9;0,5)	8.0	8.8	8.4
	P5 (0,5;0,5)	4.4	4.7	4.6
	P6 (0,5;0,25)	3.0	3.1	3.1
	P7 (0,25;0,25)	1.7	1.8	1.7

Drive end

Non drive end

Bearing type	:	6205 ZZ	6203 ZZ
Sealing	:	V'Ring	Without Bearing Seal
Lubrication interval	:	-	-
Lubricant amount	:	-	-
Lubricant type	:	Mobil Polyrex EM	

Notes:

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					
Date	27/03/2024				
Page					Revision
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