

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase Product code : 14013945

Frame	: 213TC	Locked rotor time	: 41s (cold) 23s (hot)
Output	: 5 HP (3.7 kW)	Temperature rise	: 80 K
Poles	: 2	Duty cycle	: Cont.(S1)
Frequency	: 50 Hz	Ambient temperature	: -20°C to +40°C
Rated voltage	: 415 V	Altitude	: 1000 m.a.s.l.
Rated current	: 6.84 A	Protection degree	: IP55
L. R. Amperes	: 58.1 A	Cooling method	: IC411 - TEFC
LRC	: 8.5x(Code K)	Mounting	: F-3
No load current	: 2.84 A	Rotation ¹	: Both (CW and CCW)
Rated speed	: 2950 rpm	Noise level ²	: 63.0 dB(A)
Slip	: 1.67 %	Starting method	: Direct On Line
Rated torque	: 8.90 ft.lb	Approx. weight ³	: 121 lb
Locked rotor torque	: 240 %		
Breakdown torque	: 350 %		
Insulation class	: F		
Service factor	: 1.15		
Moment of inertia (J)	: 0.4214 sq.ft.lb		
Design	: B		

Output	50%	75%	100%	Foundation loads	
Efficiency (%)	85.5	87.5	88.5	Max. traction	: 115 lb
Power Factor	0.67	0.78	0.85	Max. compression	: 236 lb

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)
12.3	9.5	8.4	7.2	4.3	3.2	2.1

		<u>Drive end</u>	<u>Non drive end</u>
Bearing type	:	6308 ZZ	6207 ZZ
Sealing	:	V'Ring	V'Ring
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		Page Revision 1 / 1		
Checked by				
Date	28/03/2024			