

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 IEEE 841 NEMA Premium Efficiency Three-Phase Product code : 14325587
Catalog # : 00209ST3QIE213T-W22

Frame	: 213/5T	Locked rotor time	: 70s (cold) 39s (hot)
Output	: 2 HP (1.5 kW)	Temperature rise	: 80 K
Poles	: 8	Duty cycle	: Cont.(S1)
Frequency	: 60 Hz	Ambient temperature	: -20°C to +40°C
Rated voltage	: 460 V	Altitude	: 1000 m.a.s.l.
Rated current	: 3.39 A	Protection degree	: IP56
L. R. Amperes	: 23.4 A	Cooling method	: IC411 - TEFC
LRC	: 6.9x(Code L)	Mounting	: F-1
No load current	: 2.30 A	Rotation ¹	: Both (CW and CCW)
Rated speed	: 875 rpm	Noise level ²	: 52.0 dB(A)
Slip	: 2.78 %	Starting method	: Direct On Line
Rated torque	: 12.0 ft.lb	Approx. weight ³	: 171 lb
Locked rotor torque	: 220 %		
Breakdown torque	: 290 %		
Insulation class	: F		
Service factor	: 1.25		
Moment of inertia (J)	: 1.79 sq.ft.lb		
Design	: B		

Output	25%	50%	75%	100%	Foundation loads					
Efficiency (%)	81.0	81.2	82.5	81.5	84.0	82.0	85.5	82.0	Max. traction	: 143 lb
	81.2	81.2	81.5	81.5	82.5	82.5	82.5	82.5		
Power Factor	0.24	0.29	0.45	0.52	0.55	0.62	0.65	0.71	Max. compression	: 314 lb
	0.27	0.25	0.49	0.46	0.59	0.56	0.69	0.67		

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

Losses (%)	P1 (0,9;1,0)	16.1	20.8	20.1	20.1
	P2 (0,5;1,0)	13.5	17.5	16.9	16.9
	P3 (0,25;1,0)	13.2	17.1	16.5	16.5
	P4 (0,9;0,5)	9.6	12.4	12.0	12.0
	P5 (0,5;0,5)	7.0	9.0	8.7	8.7
	P6 (0,5;0,25)	5.6	7.2	7.0	7.0
	P7 (0,25;0,25)	4.4	5.7	5.5	5.5

		<u>Drive end</u>	<u>Non drive end</u>
Bearing type	:	6308 C3	6207 C3
Sealing	:	Inpro/Seal	Inpro/Seal
Lubrication interval	:	20000 h	20000 h
Lubricant amount	:	11 g	7 g
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	25/03/2024			
			Page	Revision
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