

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 IEEE 841 NEMA Premium Efficiency Three-Phase Product code : 11447364

Frame	: 213T	Locked rotor time	: 104s (cold) 58s (hot)
Output	: 3 HP (2.2 kW)	Temperature rise	: 80 K
Poles	: 6	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	: 4.41 A	Protection degree	: IP55
L. R. Amperes	: 30.9 A	Cooling method	: IC411 - TEFC
LRC	: 7.0x(Code K)	Mounting	: F-1
No load current	: 2.75 A	Rotation ¹	: Both (CW and CCW)
Rated speed	: 1175 rpm	Noise level ²	: 55.0 dB(A)
Slip	: 2.08 %	Starting method	: Direct On Line
Rated torque	: 13.4 ft.lb	Approx. weight ³	: 339 lb
Locked rotor torque	: 200 %		
Breakdown torque	: 280 %		
Insulation class	: F		
Service factor	: 1.25		
Moment of inertia (J)	: 1.20 sq.ft.lb		
Design	: B		

Output	25%	50%	75%	100%	Foundation loads				
Efficiency (%)	85.4	88.0	86.5	87.5	88.5	89.5	87.5	Max. traction	: 78 lb
	86.1	86.1	86.5	86.5	88.5	88.5	88.5		
Power Factor	0.28	0.33	0.50	0.57	0.63	0.70	0.70	Max. compression	: 416 lb
	0.30	0.28	0.53	0.50	0.66	0.64	0.73		

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

Losses (%)	P1 (0,9;1,0)	11.0	11.0	11.0	11.0
	P2 (0,5;1,0)	8.5	8.5	8.5	8.5
	P3 (0,25;1,0)	7.7	7.7	7.7	7.7
	P4 (0,9;0,5)	6.7	6.7	6.7	6.7
	P5 (0,5;0,5)	4.4	4.4	4.4	4.4
	P6 (0,5;0,25)	3.4	3.4	3.4	3.4
	P7 (0,25;0,25)	2.5	2.5	2.5	2.5

		Drive end	Non drive end
Bearing type	:	6308 2RS C3	6207 2RS C3
Sealing	:	Inpro/Seal	Inpro/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	25/03/2024		Page 1 / 1	Revision