

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 IEEE 841 NEMA Premium Efficiency Three-Phase Product code : 11684303
Catalog # : 00309ST3QIE215T-W22

Frame	: 213/5T	Locked rotor time	: 79s (cold) 44s (hot)
Output	: 3 HP (2.2 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	: 4.61 A	Protection degree	: IP56
L. R. Amperes	: 31.3 A	Cooling method	: IC411 - TEFC
LRC	: 6.8x(Code K)	Mounting	: F-1
No load current	: 3.00 A	Rotation ¹	: Both (CW and CCW)
Rated speed	: 870 rpm	Noise level ²	: 52.0 dB(A)
Slip	: 3.33 %	Starting method	: Direct On Line
Rated torque	: 18.1 ft.lb	Approx. weight ³	: 189 lb
Locked rotor torque	: 220 %		
Breakdown torque	: 300 %		
Insulation class	: F		
Service factor	: 1.25		
Moment of inertia (J)	: 2.11 sq.ft.lb		
Design	: B		

Output	50%	75%	100%	Foundation loads	
Efficiency (%)	84.0 82.0	85.5 82.5	85.5 82.5	Max. traction	: 275 lb
	82.0 82.5	82.5 84.0	82.5 84.0		
Power Factor	0.49 0.55	0.62 0.68	0.70 0.74	Max. compression	: 465 lb
	0.51 0.50	0.64 0.63	0.71 0.71		

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

Losses (%)	P1 (0,9;1,0)	19.1	24.0	24.0	21.5
	P2 (0,5;1,0)	18.2	23.0	23.0	20.6
	P3 (0,25;1,0)	17.9	22.9	22.9	20.4
	P4 (0,9;0,5)	9.5	12.1	12.1	10.7
	P5 (0,5;0,5)	7.8	10.0	10.0	8.9
	P6 (0,5;0,25)	5.8	7.6	7.6	6.6
	P7 (0,25;0,25)	4.5	5.9	5.9	5.2

		<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 1 / 1	Revision