

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 16616837

Catalog # : 00712ET3E254T-W22G

Frame	: 254/6T	Locked rotor time	: 54s (cold) 30s (hot)
Output	: 7.5 HP (5.5 kW)	Temperature rise	: 80 K
Poles	: 6	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	: 19.0/9.48 A	Protection degree	: IP55
L. R. Amperes	: 129/64.5 A	Cooling method	: IC411 - TEFC
LRC	: 6.8x(Code H)	Mounting	: F-1
No load current	: 9.00/4.50 A	Rotation ¹	: Both (CW and CCW)
Rated speed	: 1178 rpm	Noise level ²	: 59.0 dB(A)
Slip	: 1.83 %	Starting method	: Direct On Line
Rated torque	: 33.4 ft.lb	Approx. weight ³	: 281 lb
Locked rotor torque	: 250 %		
Breakdown torque	: 300 %		
Insulation class	: F		
Service factor	: 1.25		
Moment of inertia (J)	: 3.92 sq.ft.lb		
Design	: B		

Output	25%	50%	75%	100%	Foundation loads					
Efficiency (%)	88.6	87.2	89.5	87.5	90.2	88.0	91.0	88.0	Max. traction	: 363 lb
	87.3	87.3	87.5	87.5	88.0	88.0	88.0	88.0		
Power Factor	0.38	0.45	0.63	0.70	0.74	0.79	0.80	0.83	Max. compression	: 644 lb
	0.41	0.39	0.66	0.64	0.77	0.75	0.82	0.81		

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

Losses (%)	P1 (0,9;1,0)	9.6	9.6	9.6	9.6
	P2 (0,5;1,0)	8.0	8.0	8.0	8.0
	P3 (0,25;1,0)	7.4	7.4	7.4	7.4
	P4 (0,9;0,5)	5.1	5.1	5.1	5.1
	P5 (0,5;0,5)	3.4	3.4	3.4	3.4
	P6 (0,5;0,25)	2.4	2.4	2.4	2.4
	P7 (0,25;0,25)	1.7	1.7	1.7	1.7

		<u>Drive end</u>	<u>Non drive end</u>
Bearing type	:	6309 C3	6209 C3
Sealing	:	V'Ring	V'Ring
Lubrication interval	:	20000 h	20000 h
Lubricant amount	:	13 g	9 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	26/03/2024			
			Page	Revision
			1 / 1	