

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 12448179

Catalog # : 04036ET3E324TSC-W22

Frame	: 324/6TSC	Locked rotor time	: 39s (cold) 22s (hot)
Output	: 40 HP (30 kW)	Temperature rise	: 80 K
Poles	: 2	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	: 92.6/46.3 A	Protection degree	: IP55
L. R. Amperes	: 584/292 A	Cooling method	: IC411 - TEFC
LRC	: 6.3x(Code G)	Mounting	: F-1
No load current	: 25.0/12.5 A	Rotation ¹	: Both (CW and CCW)
Rated speed	: 3555 rpm	Noise level ²	: 76.0 dB(A)
Slip	: 1.25 %	Starting method	: Direct On Line
Rated torque	: 59.1 ft.lb	Approx. weight ³	: 502 lb
Locked rotor torque	: 250 %		
Breakdown torque	: 240 %		
Insulation class	: F		
Service factor	: 1.25		
Moment of inertia (J)	: 4.90 sq.ft.lb		
Design	: B		

Output	25%	50%	75%	100%	Foundation loads					
Efficiency (%)	0.000	91.7	90.9	92.4	91.8	92.4	92.7	Max. traction	: 377 lb	
	0.000	90.3	90.7	91.7	92.1	92.7	92.7			
		91.7	91.7	91.7	91.7	91.0	91.7			
		91.7		92.4		91.7				
Power Factor	0.00	0.00	0.80	0.77	0.86	0.85	0.88	0.88	Max. compression	: 879 lb
			0.74	0.71	0.83	0.80	0.86	0.85		
			0.84	0.81	0.88	0.86	0.89	0.88		
			0.78		0.85		0.87			

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

Losses (%)	P1 (0,9;1,0)	7.4	7.1	7.1	7.1	8.9	8.2	8.2
	P2 (0,5;1,0)	4.7	4.5	4.5	4.5	5.7	5.2	5.2
	P3 (0,25;1,0)	3.8	3.6	3.6	3.6	4.6	4.2	4.2
	P4 (0,9;0,5)	4.6	4.4	4.4	4.4	5.5	5.0	5.0
	P5 (0,5;0,5)	2.2	2.1	2.1	2.1	2.7	2.4	2.4
	P6 (0,5;0,25)	1.7	1.6	1.6	1.6	2.0	1.8	1.8
	P7 (0,25;0,25)	0.8	0.8	0.8	0.8	1.0	0.9	0.9

		<u>Drive end</u>	<u>Non drive end</u>
Bearing type	:	6312 C3	6212 C3
Sealing	:	V'Ring	V'Ring
Lubrication interval	:	12000 h	15000 h
Lubricant amount	:	21 g	13 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	28/03/2024			
			Page	Revision
			1 / 1	