

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 High Efficiency Three-Phase Product code : 13126112

Frame	: 324TSC	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	: 93.4/46.7 A	Protection degree	: IP55
L. R. Amperes	: 588/294 A	Cooling method	: IC411 - TEFC
LRC	: 6.3x(Code G)	Mounting	: W-6
No load current	: 24.0/12.0 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	: 498 lb
Locked rotor torque	: 240 %		
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 (%)	90.8	92.3	91.0	91.7	91.0	91.7	90.2	Max. traction	: 379 lb
	91.6	92.2	91.0	91.7	91.0	91.7	90.2		
Power Factor	0.58	0.62	0.81	0.83	0.87	0.87	0.88	Max. compression	: 877 lb
	0.60	0.58	0.83	0.82	0.88	0.86	0.89		

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

Losses (%)	P1 (0,9;1,0)	8.6	10.3	10.3	9.4
	P2 (0,5;1,0)	6.6	8.0	8.0	7.2
	P3 (0,25;1,0)	5.8	7.0	7.0	6.4
	P4 (0,9;0,5)	4.3	5.2	5.2	4.7
	P5 (0,5;0,5)	2.5	3.0	3.0	2.7
	P6 (0,5;0,25)	1.5	1.8	1.8	1.7
	P7 (0,25;0,25)	0.9	1.1	1.1	1.0

		<u>Drive end</u>	<u>Non drive end</u>
Bearing type	:	6312 C3	6212 C3
Sealing	:	V'Ring	V'Ring
Lubrication interval	:	6000 h	7000 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		Page 1 / 1		
Checked by				
Date	29/03/2024			
			Revision	