

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W40 NEMA Premium Efficiency Three-Phase

Product code : 14504153

Catalog # : 05036OT3E324TS-W40G

Frame	: 324TS	Locked rotor time	: 25s (cold) 14s (hot)
Output	: 50 HP (37 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	: 119/59.5 A	Protection degree	: IP23
L. R. Amperes	: 749/375 A	Cooling method	: IC01 - ODP
LRC	: 6.3x(Code G)	Mounting	: F-1
No load current	: 39.0/19.5 A	Rotation ¹	: Both (CW and CCW)
Rated speed	: 3555 rpm	Noise level ²	: 75.0 dB(A)
Slip	: 1.25 %	Starting method	: Direct On Line
Rated torque	: 73.9 ft.lb	Approx. weight ³	: 521 lb
Locked rotor torque	: 200 %		
Breakdown torque	: 220 %		
Insulation class	: F		
Service factor	: 1.25		
Moment of inertia (J)	: 3.02 sq.ft.lb		
Design	: B		

Output	25%		50%		75%		100%	
Efficiency (%)	91.5	88.3	91.7	90.0	93.0	91.6	93.0	93.3
	88.4	88.5	90.0	90.1	91.7	91.7	93.3	93.3
Power Factor	0.48	0.50	0.72	0.73	0.81	0.82	0.84	0.85
	0.44	0.38	0.67	0.60	0.77	0.73	0.82	0.79

Foundation loads
Max. traction
Max. compression

		<u>Drive end</u>	<u>Non drive end</u>
Bearing type	:	6312 Z C3	6211 Z C3
Sealing	:	Without Bearing Seal	Without Bearing Seal
Lubrication interval	:	19658 h	20000 h
Lubricant amount	:	21 g	11 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	