

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 High Efficiency Three-Phase

Product code : 12822485

Frame	: 254TC	Locked rotor time	: 32s (cold) 18s (hot)
Output	: 15 HP (11 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	: 34.8/17.4 A	Protection degree	: IP55
L. R. Amperes	: 216/108 A	Cooling method	: IC411 - TEFC
LRC	: 6.2x(Code G)	Mounting	: W-6
No load current	: 9.20/4.60 A	Rotation ¹	: Both (CW and CCW)
Rated speed	: 3525 rpm	Noise level ²	: 72.0 dB(A)
Slip	: 2.08 %	Starting method	: Direct On Line
Rated torque	: 22.3 ft.lb	Approx. weight ³	: 253 lb
Locked rotor torque	: 200 %		
Breakdown torque	: 250 %		
Insulation class	: F		
Service factor	: 1.25		
Moment of inertia (J)	: 1.26 sq.ft.lb		
Design	: B		

Output	25%		50%		75%		100%		Foundation loads	
Efficiency (%)	89.3	90.9	89.5	90.2	90.2	89.5	90.2	88.5	Max. traction	: 184 lb
	90.6	90.6	90.2	90.2	90.2	90.2	89.5	89.5		
Power Factor	0.56	0.63	0.78	0.84	0.86	0.89	0.88	0.90	Max. compression	: 437 lb
	0.59	0.57	0.82	0.80	0.88	0.87	0.90	0.89		

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

Losses (%)	P1 (0,9;1,0)	10.3	12.3	11.1	11.1
	P2 (0,5;1,0)	8.3	9.9	8.9	8.9
	P3 (0,25;1,0)	7.6	9.0	8.2	8.2
	P4 (0,9;0,5)	5.1	6.1	5.5	5.5
	P5 (0,5;0,5)	3.0	3.6	3.2	3.2
	P6 (0,5;0,25)	1.8	2.2	2.0	2.0
	P7 (0,25;0,25)	1.1	1.3	1.2	1.2

		<u>Drive end</u>	<u>Non drive end</u>
Bearing type	:	6309 C3	6209 C3
Sealing	:	V'Ring	V'Ring
Lubrication interval	:	9000 h	11000 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		Page 1 / 1 Revision		
Checked by				
Date	28/03/2024			