

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : Multimounting IE3 Three-Phase

Product code : 13983021
Catalog # : 7509ET3EAL100L-W22

Frame	: 100L	Locked rotor time	: 54s (cold) 30s (hot)
Output	: 1 HP (0.75 kW)	Temperature rise	: 80 K
Poles	: 8	Duty cycle	: S1
Frequency	: 50 Hz	Ambient temperature	: -20°C to +40°C
Rated voltage	: 380 V	Altitude	: 1000 m.a.s.l.
Rated current	: 2.30 A	Protection degree	: IP55
L. R. Amperes	: 10.6 A	Cooling method	: IC411 - TEFC
LRC	: 4.6	Mounting	: B3L(E)
No load current	: 1.50 A	Rotation ¹	: Both (CW and CCW)
Rated speed	: 710 rpm	Noise level ²	: 50.0 dB(A)
Slip	: 5.33 %	Starting method	: Direct On Line
Rated torque	: 7.40 ft.lb	Approx. weight ³	: 57.9 lb
Locked rotor torque	: 160 %		
Breakdown torque	: 200 %		
Insulation class	: F		
Service factor	: 1.25		
Moment of inertia (J)	: 0.3014 sq.ft.lb		
Design	: N		

Output	25%	50%	75%	100%	Foundation loads					
Efficiency (%)	74.3	70.1	73.9	71.1	76.1	74.8	75.1	75.5	Max. traction	: 95 lb
	68.4		70.0		74.0		75.5			
Power Factor	0.25	0.21	0.44	0.38	0.57	0.50	0.66	0.59	Max. compression	: 153 lb
	0.21		0.38		0.50		0.59			

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

Losses (%)	P1 (0,9;1,0)	31.5	30.9	30.9
	P2 (0,5;1,0)	26.8	26.2	26.2
	P3 (0,25;1,0)	26.1	25.5	25.5
	P4 (0,9;0,5)	20.9	20.4	20.4
	P5 (0,5;0,5)	16.3	16.0	16.0
	P6 (0,5;0,25)	14.2	13.9	13.9
	P7 (0,25;0,25)	11.6	11.3	11.3

		<u>Drive end</u>	<u>Non drive end</u>
Bearing type	:	6206 ZZ	6205 ZZ
Sealing	:	V'Ring	V'Ring
Lubrication interval	:	-	-
Lubricant amount	:	-	-
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	26/03/2024			
			Revision	