

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 Close Coupled Pump JM High Efficiency Three-Phase

Product code : 12598481

Frame	: 182/4JM	Locked rotor time	: 32s (cold) 18s (hot)
Output	: 3 HP (2.2 kW)	Temperature rise	: 80 K
Poles	: 4	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	: 8.10/4.05 A	Protection degree	: IP55
L. R. Amperes	: 64.0/32.0 A	Cooling method	: IC411 - TEFC
LRC	: 7.9x(Code K)	Mounting	: F-1
No load current	: 4.40/2.20 A	Rotation ¹	: Both (CW and CCW)
Rated speed	: 1760 rpm	Noise level ²	: 56.0 dB(A)
Slip	: 2.22 %	Starting method	: Direct On Line
Rated torque	: 8.95 ft.lb	Approx. weight ³	: 86.1 lb
Locked rotor torque	: 220 %		
Breakdown torque	: 280 %		
Insulation class	: F		
Service factor	: 1.25		
Moment of inertia (J)	: 0.2636 sq.ft.lb		
Design	: B		

Output	25%	50%	75%	100%	Foundation loads					
Efficiency (%)	86.3	84.4	86.5	84.0	87.5	86.5	87.5	85.5	Max. traction	: 150 lb
	83.6	84.8	84.0	85.5	86.5	86.0	86.5	86.5		
Power Factor	0.35	0.41	0.61	0.67	0.72	0.77	0.78	0.81	Max. compression	: 237 lb
	0.38	0.34	0.64	0.60	0.74	0.72	0.78	0.77		

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

Losses (%)	P1 (0,9;1,0)	13.7	16.2	14.9	14.9
	P2 (0,5;1,0)	11.3	13.4	12.4	12.4
	P3 (0,25;1,0)	10.6	12.5	11.5	11.5
	P4 (0,9;0,5)	7.7	9.2	8.5	8.5
	P5 (0,5;0,5)	5.3	6.3	5.8	5.8
	P6 (0,5;0,25)	4.1	4.8	4.4	4.4
	P7 (0,25;0,25)	3.0	3.6	3.3	3.3

		<u>Drive end</u>	<u>Non drive end</u>
Bearing type	:	6307 ZZ	6206 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	29/03/2024			
			Revision	