

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 Close Coupled Pump JM High Efficiency Three-Phase Product code : 12598636

Frame	: 182/4JM	Locked rotor time	: 50s (cold) 28s (hot)
Output	: 3 HP (2.2 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	: 7.34/3.67 A	Protection degree	: IP55
L. R. Amperes	: 58.0/29.0 A	Cooling method	: IC411 - TEFC
LRC	: 7.9x(Code J)	Mounting	: F-1
No load current	: 2.60/1.30 A	Rotation ¹	: Both (CW and CCW)
Rated speed	: 3510 rpm	Noise level ²	: 70.0 dB(A)
Slip	: 2.50 %	Starting method	: Direct On Line
Rated torque	: 4.49 ft.lb	Approx. weight ³	: 88.0 lb
Locked rotor torque	: 210 %		
Breakdown torque	: 340 %		
Insulation class	: F		
Service factor	: 1.25		
Moment of inertia (J)	: 0.1644 sq.ft.lb		
Design	: B		

Output	25%	50%	75%	100%	Foundation loads		
Efficiency (%)	82.1	84.1	82.5	84.0	85.5	84.0	Max. traction : 60 lb
	83.6	83.7	84.0	84.0	85.5	85.5	
Power Factor	0.50	0.57	0.76	0.81	0.84	0.87	Max. compression : 148 lb
	0.54	0.52	0.78	0.76	0.86	0.84	

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

Losses (%)	P1 (0,9;1,0)	15.4	17.3	15.4	15.4
	P2 (0,5;1,0)	10.3	11.6	10.3	10.3
	P3 (0,25;1,0)	8.8	9.9	8.8	8.8
	P4 (0,9;0,5)	9.5	10.7	9.5	9.5
	P5 (0,5;0,5)	4.6	5.1	4.6	4.6
	P6 (0,5;0,25)	3.3	3.7	3.3	3.3
	P7 (0,25;0,25)	1.7	1.9	1.7	1.7

		<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 Revision 1 / 1		
Checked by				
Date	29/03/2024			