

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 11524019

Frame	: 143/5JM	Locked rotor time	: 28s (cold) 16s (hot)
Output	: 2 HP (1.5 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	: 5.28/2.64 A	Protection degree	: IP55
L. R. Amperes	: 39.1/19.5 A	Cooling method	: IC411 - TEFC
LRC	: 7.4x(Code J)	Mounting	: F-1
No load current	: 2.10/1.05 A	Rotation ¹	: Both (CW and CCW)
Rated speed	: 3450 rpm	Noise level ²	: 68.0 dB(A)
Slip	: 4.17 %	Starting method	: Direct On Line
Rated torque	: 3.04 ft.lb	Approx. weight ³	: 54.4 lb
Locked rotor torque	: 250 %		
Breakdown torque	: 300 %		
Insulation class	: F		
Service factor	: 1.25		
Moment of inertia (J)	: 0.0427 sq.ft.lb		
Design	: B		

Output	25%	50%	75%	100%	Foundation loads					
Efficiency (%)	81.0	79.1	81.5	78.5	84.0	81.5	84.0	80.0	Max. traction	: 63 lb
	79.5	79.5	80.0	80.0	81.5	81.5	81.5	81.5		
Power Factor	0.44	0.50	0.69	0.73	0.80	0.82	0.85	0.87	Max. compression	: 117 lb
	0.46	0.43	0.69	0.68	0.79	0.78	0.85	0.85		

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

Losses (%)	P1 (0,9;1,0)	18.3	24.0	21.8	21.8
	P2 (0,5;1,0)	15.1	19.8	18.0	18.0
	P3 (0,25;1,0)	13.4	17.6	16.0	16.0
	P4 (0,9;0,5)	9.1	11.9	10.8	10.8
	P5 (0,5;0,5)	5.7	7.4	6.8	6.8
	P6 (0,5;0,25)	3.7	4.8	4.4	4.4
	P7 (0,25;0,25)	2.4	3.2	2.9	2.9

		<u>Drive end</u>	<u>Non drive end</u>
Bearing type	:	6206 ZZ	6204 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				
Checked by				
Date	29/03/2024			
			Page	Revision
			1 / 1	