

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 11524440

Frame : 324/6JM
Output : 50 HP (37 kW)
Poles : 2
Frequency : 60 Hz
Rated voltage : 230/460 V
Rated current : 113/56.5 A
L. R. Amperes : 701/350 A
LRC : 6.2x(Code F)
No load current : 28.0/14.0 A
Rated speed : 3555 rpm
Slip : 1.25 %
Rated torque : 73.9 ft.lb
Locked rotor torque : 240 %
Breakdown torque : 240 %
Insulation class : F
Service factor : 1.25
Moment of inertia (J) : 5.32 sq.ft.lb
Design : B

Locked rotor time : 32s (cold) 18s (hot)
Temperature rise : 80 K
Duty cycle : Cont.(S1)
Ambient temperature : -20°C to +40°C
Altitude : 1000 m.a.s.l.
Protection degree : IP55
Cooling method : IC411 - TEFC
Mounting : F-1
Rotation¹ : Both (CW and CCW)
Noise level² : 76.0 dB(A)
Starting method : Direct On Line
Approx. weight³ : 555 lb

Output	25%		50%		75%		100%	
Efficiency (%)	91.5	91.5	91.7	91.0	92.4	91.0	92.4	90.2
	92.2	91.6	91.7	91.7	91.7	91.7	91.0	91.7
Power Factor	0.59	0.66	0.82	0.86	0.87	0.89	0.89	0.89
	0.63	0.59	0.84	0.82	0.88	0.87	0.89	0.89

Foundation loads
Max. traction : 475 lb
Max. compression : 1030 lb

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

Losses (%)	P1 (0,9;1,0)	7.9	10.4	9.5	8.7
	P2 (0,5;1,0)	6.2	8.2	7.5	6.9
	P3 (0,25;1,0)	5.5	7.3	6.6	6.1
	P4 (0,9;0,5)	3.8	5.0	4.5	4.1
	P5 (0,5;0,5)	2.2	3.0	2.7	2.5
	P6 (0,5;0,25)	1.3	1.8	1.6	1.5
	P7 (0,25;0,25)	0.8	1.1	1.0	0.9

		<u>Drive end</u>	<u>Non drive end</u>
Bearing type	:	6312 C3	6212 C3
Sealing	:	V'Ring	V'Ring
Lubrication interval	:	12000 h	15000 h
Lubricant amount	:	21 g	13 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				
Checked by				
Date	29/03/2024			

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