

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 11800215

Frame	: 324/6JM	Locked rotor time	: 25s (cold) 14s (hot)
Output	: 60 HP (45 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	: 142/71.0 A	Protection degree	: IP55
L. R. Amperes	: 852/426 A	Cooling method	: IC411 - TEFC
LRC	: 6.0x(Code G)	Mounting	: F-1
No load current	: 52.0/26.0 A	Rotation ¹	: Both (CW and CCW)
Rated speed	: 1770 rpm	Noise level ²	: 69.0 dB(A)
Slip	: 1.67 %	Starting method	: Direct On Line
Rated torque	: 178 ft.lb	Approx. weight ³	: 616 lb
Locked rotor torque	: 210 %		
Breakdown torque	: 240 %		
Insulation class	: F		
Service factor	: 1.15		
Moment of inertia (J)	: 9.16 sq.ft.lb		
Design	: B		

Output	25%		50%		75%		100%		Foundation loads	
Efficiency (%)	92.8	91.5	93.0	91.7	93.6	92.4	93.6	92.4	Max. traction	: 1584 lb
	92.2	92.8	92.4	93.0	93.0	93.6	93.0	93.6		
Power Factor	0.47	0.54	0.73	0.78	0.81	0.84	0.85	0.86	Max. compression	: 2200 lb
	0.49	0.46	0.75	0.72	0.82	0.80	0.86	0.85		

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

Losses (%)	P1 (0,9;1,0)	6.5	7.9	7.2	6.5
	P2 (0,5;1,0)	5.5	6.6	6.0	5.5
	P3 (0,25;1,0)	5.3	6.4	5.8	5.3
	P4 (0,9;0,5)	3.1	3.7	3.4	3.1
	P5 (0,5;0,5)	2.1	2.5	2.3	2.1
	P6 (0,5;0,25)	1.3	1.6	1.4	1.3
	P7 (0,25;0,25)	0.9	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	:	20000 h	20000 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		Page 1 / 1 Revision		
Checked by				
Date	29/03/2024			