

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 12598386

Frame : 143/5JM
Output : 1.5 HP (1.1 kW)
Poles : 2
Frequency : 60 Hz
Rated voltage : 230/460 V
Rated current : 3.98/1.99 A
L. R. Amperes : 27.1/13.5 A
LRC : 6.8x(Code J)
No load current : 1.60/0.800 A
Rated speed : 3480 rpm
Slip : 3.33 %
Rated torque : 2.26 ft.lb
Locked rotor torque : 250 %
Breakdown torque : 300 %
Insulation class : F
Service factor : 1.25
Moment of inertia (J) : 0.0370 sq.ft.lb
Design : B

Locked rotor time : 23s (cold) 13s (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 : 68.0 dB(A)
Starting method : Direct On Line
Approx. weight³ : 50.0 lb

Output	25%		50%		75%		100%	
Efficiency (%)	78.0	80.8	78.5	80.0	82.5	81.5	82.5	80.0
	80.9	78.0	80.0	78.5	81.5	81.5	80.0	81.5
Power Factor	0.44	0.50	0.68	0.75	0.78	0.83	0.84	0.88
	0.46	0.43	0.71	0.67	0.80	0.78	0.86	0.85

Foundation loads
Max. traction : 37 lb
Max. compression : 87 lb

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

Losses (%)	P1 (0,9;1,0)	20.1	23.7	23.7	21.5
	P2 (0,5;1,0)	16.2	19.1	19.1	17.3
	P3 (0,25;1,0)	14.6	17.2	17.2	15.6
	P4 (0,9;0,5)	10.6	12.5	12.5	11.4
	P5 (0,5;0,5)	6.3	7.5	7.5	6.8
	P6 (0,5;0,25)	4.3	5.0	5.0	4.6
	P7 (0,25;0,25)	2.8	3.3	3.3	3.0

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