

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase
Product code : 11990828

Frame	: 182T	Locked rotor time	: 73s (cold) 41s (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	: 7.26/3.63 A	Protection degree	: IP55
L. R. Amperes	: 62.4/31.2 A	Cooling method	: IC411 - TEFC
LRC	: 8.6x(Code K)	Rotation ¹	: Both (CW and CCW)
No load current	: 2.60/1.30 A	Noise level ²	: 66.0 dB(A)
Rated speed	: 3510 rpm	Starting method	: Direct On Line
Slip	: 2.50 %	Approx. weight ³	: 91.8 lb
Rated torque	: 4.49 ft.lb		
Locked rotor torque	: 250 %		
Breakdown torque	: 380 %		
Insulation class	: F		
Service factor	: 1.25		
Moment of inertia (J)	: 0.1889 sq.ft.lb		
Design	: B		

Output	25%	50%	75%	100%	Foundation loads					
Efficiency (%)	82.0	79.5	82.5	81.0	86.5	84.5	86.5	85.8	Max. traction	: 75 lb
	79.1	77.8	80.6	79.7	84.5	84.1	85.8	85.9		
	84.4	84.4	84.0	84.0	86.5	86.5	85.5	85.5		
	84.4	84.0	86.5	85.5						
Power Factor	0.50	0.44	0.75	0.68	0.84	0.79	0.88	0.86	Max. compression	: 167 lb
	0.41	0.39	0.65	0.63	0.77	0.75	0.84	0.82		
	0.56	0.52	0.80	0.77	0.87	0.86	0.90	0.89		
	0.50	0.75	0.84	0.88						

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

Losses (%)	P1 (0,9;1,0)								
	P2 (0,5;1,0)	14.1	14.1	14.1	14.1	14.1	14.1	14.1	14.1
	P3 (0,25;1,0)	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5
	P4 (0,9;0,5)	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5
	P5 (0,5;0,5)	8.7	8.7	8.7	8.7	8.7	8.7	8.7	8.7
	P6 (0,5;0,25)	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
	P7 (0,25;0,25)	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
		1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7

		<u>Drive end</u>	<u>Non drive end</u>
Bearing type	:	6207 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				
Checked by				
Date	28/03/2024			
			Page	Revision
			1 / 1	