

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 High Efficiency Three-Phase Product code : 11354954

Frame	: 404/5T	Locked rotor time	: 21s (cold) 12s (hot)
Output	: 50 HP (37 kW)	Temperature rise	: 80 K
Poles	: 8	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	: 122/61.0 A	Protection degree	: IP55
L. R. Amperes	: 756/378 A	Cooling method	: IC411 - TEFC
LRC	: 6.2x(Code G)	Mounting	: F-1
No load current	: 48.0/24.0 A	Rotation ¹	: Both (CW and CCW)
Rated speed	: 875 rpm	Noise level ²	: 60.0 dB(A)
Slip	: 2.78 %	Starting method	: Direct On Line
Rated torque	: 300 ft.lb	Approx. weight ³	: 1144 lb
Locked rotor torque	: 170 %		
Breakdown torque	: 240 %		
Insulation class	: F		
Service factor	: 1.25		
Moment of inertia (J)	: 34.6 sq.ft.lb		
Design	: B		

Output	50%	75%	100%	Foundation loads	
Efficiency (%)	91.7 90.5	91.7 91.0	91.7 91.0	Max. traction	: 2019 lb
	90.5 90.5	91.0 91.0	91.0 91.0		
Power Factor	0.70 0.74	0.79 0.82	0.83 0.85	Max. compression	: 3163 lb
	0.70 0.67	0.80 0.78	0.84 0.83		

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

Losses (%)	P1 (0,9;1,0)	8.9	9.7	9.7	9.7
	P2 (0,5;1,0)	8.0	8.7	8.7	8.7
	P3 (0,25;1,0)	7.4	8.1	8.1	8.1
	P4 (0,9;0,5)	3.4	3.7	3.7	3.7
	P5 (0,5;0,5)	2.6	2.8	2.8	2.8
	P6 (0,5;0,25)	1.4	1.5	1.5	1.5
	P7 (0,25;0,25)	1.0	1.1	1.1	1.1

		<u>Drive end</u>	<u>Non drive end</u>
Bearing type	:	6316 C3	6314 C3
Sealing	:	WSeal	WSeal
Lubrication interval	:	20000 h	20000 h
Lubricant amount	:	34 g	27 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			