

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase Product code : 11804412

Frame	: 326T	Locked rotor time	: 27s (cold) 15s (hot)
Output	: 50 HP (37 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	: 118/59.2 A	Protection degree	: IP55
L. R. Amperes	: 734/367 A	Cooling method	: IC411 - TEFC
LRC	: 6.2x(Code G)	Mounting	: F-3
No load current	: 47.0/23.5 A	Rotation ¹	: Both (CW and CCW)
Rated speed	: 1775 rpm	Noise level ²	: 70.0 dB(A)
Slip	: 1.39 %	Starting method	: Direct On Line
Rated torque	: 148 ft.lb	Approx. weight ³	: 596 lb
Locked rotor torque	: 229 %		
Breakdown torque	: 270 %		
Insulation class	: F		
Service factor	: 1.25		
Moment of inertia (J)	: 9.16 sq.ft.lb		
Design	: B		

Output	25%	50%	75%	100%	Foundation loads				
Efficiency (%)	0.000	93.0	92.5	94.1	93.1	94.5	93.6	Max. traction	: 1485 lb
		91.5	91.5	92.8	93.0	93.6	93.6		
		93.0	92.4	93.0	93.0	92.4	93.0		
		92.4		93.0		93.5			
Power Factor	0.00	0.66	0.64	0.77	0.77	0.83	0.83	Max. compression	: 2080 lb
		0.60	0.57	0.73	0.70	0.81	0.79		
		0.72	0.68	0.81	0.79	0.85	0.84		
		0.65		0.76		0.83			

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

Losses (%)	P1 (0,9;1,0)	5.7	5.7	5.7	5.7	5.7	5.7	5.7
	P2 (0,5;1,0)	4.9	4.9	4.9	4.9	4.9	4.9	4.9
	P3 (0,25;1,0)	4.7	4.7	4.7	4.7	4.7	4.7	4.7
	P4 (0,9;0,5)	2.7	2.7	2.7	2.7	2.7	2.7	2.7
	P5 (0,5;0,5)	1.9	1.9	1.9	1.9	1.9	1.9	1.9
	P6 (0,5;0,25)	1.2	1.2	1.2	1.2	1.2	1.2	1.2
	P7 (0,25;0,25)	0.9	0.9	0.9	0.9	0.9	0.9	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				
Checked by				
Date	29/03/2024			

Page 1 / 2
Revision

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Thermal protection

ID	Application	Type	Quantity	Sensing Temperature
1	Winding	Thermostat - 2 wires	1 x Phase	155 °C

Rev.	Changes Summary		Performed	Checked	Date
Performed by				Page	Revision
Checked by					
Date	29/03/2024			2 / 2	