

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 12546171

Catalog # : 02512ET3E324TC-W22

Frame	: 324/6TC	Locked rotor time	: 46s (cold) 26s (hot)
Output	: 25 HP (18.5 kW)	Temperature rise	: 80 K
Poles	: 6	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	: 61.6/30.8 A	Protection degree	: IP55
L. R. Amperes	: 382/191 A	Cooling method	: IC411 - TEFC
LRC	: 6.2x(Code G)	Mounting	: F-1
No load current	: 28.0/14.0 A	Rotation ¹	: Both (CW and CCW)
Rated speed	: 1180 rpm	Noise level ²	: 62.0 dB(A)
Slip	: 1.67 %	Starting method	: Direct On Line
Rated torque	: 111 ft.lb	Approx. weight ³	: 560 lb
Locked rotor torque	: 210 %		
Breakdown torque	: 260 %		
Insulation class	: F		
Service factor	: 1.25		
Moment of inertia (J)	: 11.5 sq.ft.lb		
Design	: B		

Output	50%	75%	100%	Foundation loads	
Efficiency (%)	92.4 91.1 91.1 91.1 91.7 91.7 91.7	93.0 91.8 92.2 92.2 92.4 92.4 92.4	93.0 91.6 92.2 92.2 91.0 91.7 91.7	Max. traction	: 1005 lb
Power Factor	0.65 0.63 0.60 0.57 0.71 0.68 0.65	0.76 0.76 0.74 0.71 0.80 0.78 0.77	0.81 0.82 0.80 0.78 0.84 0.83 0.82	Max. compression	: 1565 lb

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

Losses (%)	P1 (0,9;1,0)	7.3	8.8	8.2	8.2	9.5	8.7	8.7
	P2 (0,5;1,0)	6.1	7.4	6.8	6.8	8.0	7.3	7.3
	P3 (0,25;1,0)	5.9	7.2	6.7	6.7	7.8	7.1	7.1
	P4 (0,9;0,5)	3.7	4.5	4.1	4.1	4.8	4.4	4.4
	P5 (0,5;0,5)	2.5	3.1	2.9	2.9	3.3	3.1	3.1
	P6 (0,5;0,25)	1.7	2.1	2.0	2.0	2.3	2.1	2.1
	P7 (0,25;0,25)	1.2	1.5	1.4	1.4	1.6	1.5	1.5

		<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	28/03/2024			
			Page	Revision
			1 / 1	