

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 12977510

Catalog # : 20009ET3G449T-W22

Frame	: 447/9T	Locked rotor time	: 23s (cold) 13s (hot)
Output	: 200 HP (150 kW)	Temperature rise	: 80 K
Poles	: 8	Duty cycle	: Cont.(S1)
Frequency	: 60 Hz	Ambient temperature	: -20°C to +40°C
Rated voltage	: 460 V	Altitude	: 1000 m.a.s.l.
Rated current	: 254 A	Protection degree	: IP55
L. R. Amperes	: 1626 A	Cooling method	: IC411 - TEFC
LRC	: 6.4x(Code H)	Mounting	: F-1
No load current	: 115 A	Rotation ¹	: Both (CW and CCW)
Rated speed	: 890 rpm	Noise level ²	: 66.0 dB(A)
Slip	: 1.11 %	Starting method	: Direct On Line
Rated torque	: 1180 ft.lb	Approx. weight ³	: 3056 lb
Locked rotor torque	: 200 %		
Breakdown torque	: 220 %		
Insulation class	: F		
Service factor	: 1.15		
Moment of inertia (J)	: 161 sq.ft.lb		
Design	: B		

Output	25%	50%	75%	100%	Foundation loads					
Efficiency (%)	94.4	94.0	94.5	94.1	95.0	94.5	95.0	94.5	Max. traction	: 6928 lb
	93.4	92.5	93.6	93.0	94.5	94.1	94.5	94.5		
Power Factor	0.38	0.35	0.62	0.59	0.73	0.71	0.78	0.77	Max. compression	: 9984 lb
	0.31	0.28	0.54	0.50	0.67	0.63	0.74	0.71		

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

Losses (%)	P1 (0,9;1,0)	5.4	5.4	5.4	5.4
	P2 (0,5;1,0)	4.3	4.3	4.3	4.3
	P3 (0,25;1,0)	3.8	3.8	3.8	3.8
	P4 (0,9;0,5)	2.9	2.9	2.9	2.9
	P5 (0,5;0,5)	2.0	2.0	2.0	2.0
	P6 (0,5;0,25)	1.5	1.5	1.5	1.5
	P7 (0,25;0,25)	1.0	1.0	1.0	1.0

		<u>Drive end</u>	<u>Non drive end</u>
Bearing type	:	6322 C3	6319 C3
Sealing	:	WSeal	WSeal
Lubrication interval	:	14000 h	17000 h
Lubricant amount	:	60 g	45 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	