

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 11356741

Catalog # : 30012ET3G449T-W22

Frame	: 447/9T	Locked rotor time	: 18s (cold) 10s (hot)
Output	: 300 HP (220 kW)	Temperature rise	: 80 K
Poles	: 6	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	: 356 A	Protection degree	: IP55
L. R. Amperes	: 2741 A	Cooling method	: IC411 - TEFC
LRC	: 7.7x(Code J)	Mounting	: F-1
No load current	: 170 A	Rotation ¹	: Both (CW and CCW)
Rated speed	: 1189 rpm	Noise level ²	: 70.0 dB(A)
Slip	: 0.92 %	Starting method	: Direct On Line
Rated torque	: 1320 ft.lb	Approx. weight ³	: 3052 lb
Locked rotor torque	: 270 %		
Breakdown torque	: 300 %		
Insulation class	: F		
Service factor	: 1.00		
Moment of inertia (J)	: 145 sq.ft.lb		
Design	: A		

Output	25%		50%		75%		100%		Foundation loads	
Efficiency (%)	95.3	94.5	95.4	95.0	95.8	95.4	95.8	95.8	Max. traction	: 8726 lb
	94.0	93.3	94.5	94.1	95.4	95.0	95.8	95.8		
Power Factor	0.38	0.37	0.63	0.61	0.75	0.75	0.81	0.81	Max. compression	: 11778 lb
	0.35	0.32	0.59	0.56	0.71	0.69	0.78	0.77		

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

Losses (%)	P1 (0,9;1,0)	5.2	5.2	5.2	5.2
	P2 (0,5;1,0)	4.3	4.3	4.3	4.3
	P3 (0,25;1,0)	3.7	3.7	3.7	3.7
	P4 (0,9;0,5)	3.0	3.0	3.0	3.0
	P5 (0,5;0,5)	2.3	2.3	2.3	2.3
	P6 (0,5;0,25)	1.8	1.8	1.8	1.8
	P7 (0,25;0,25)	1.1	1.1	1.1	1.1

		<u>Drive end</u>	<u>Non drive end</u>
Bearing type	:	6322 C3	6319 C3
Sealing	:	WSeal	WSeal
Lubrication interval	:	11000 h	13000 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		Page 1 / 1		
Checked by				
Date	28/03/2024			
			Revision	